

# Catálogo 2024-26



Nuevas instalaciones con un nuevo catálogo en el que hemos querido plasmar toda nuestra ilusión con más productos y marcas con el fin de poder ofrecer la mayor variedad de productos y servicios.

Nuestras nuevas instalaciones desde el pasado abril de 2023, en las cuales llevamos poco más de 1 año y que nos ha permitido ampliar hasta los más de 5500m<sup>2</sup> de stock, 300 m<sup>2</sup> de oficinas, 150m<sup>2</sup> de área de mantenimiento/ reparaciones/montaje y los más de 200m<sup>2</sup> de showroom. Todo ello para ofrecer un servicio puntero en el ámbito de la distribución industrial.

Es un paso mas en poder ser el proveedor global de todo tipo de productos del ámbito de herramienta de amarre, herramienta de corte y todos sus complementos relativos. Desde la broca o plato de fresado, hasta el destornillador o guantes de seguridad necesarios para el trabajo del día a día.

En todas nuestras líneas de producto hay novedades, pero queremos destacar nuevas líneas de portaberramientas (BRIGHT-TOOLS), nuevos amarres en (OZKAYALY), nuevos rangos de fresas y brocas de metal duro (NIXA), nueva marca (SLOKY) de destornilladores de par, nuevas líneas de mobiliario (POLAK) y la incorporación de los productos más destacados de nuestra marca de protección laboral (ADON)

Esperamos que este nuevo catálogo siga siendo de vuestro agrado y sigáis depositando vuestra confianza en nuestra empresa y productos desde hace ya 18 años.








**Visítanos en Internet:**  
**[www.basemetalurgica.com](http://www.basemetalurgica.com)**














**NOTA:**  
No nos hacemos responsables de posibles fallos tipográficos, ni de cambios en la fabricación por parte de proveedor.  
En la medida de lo posible hemos intentado reflejar fielmente la información de los proveedores.





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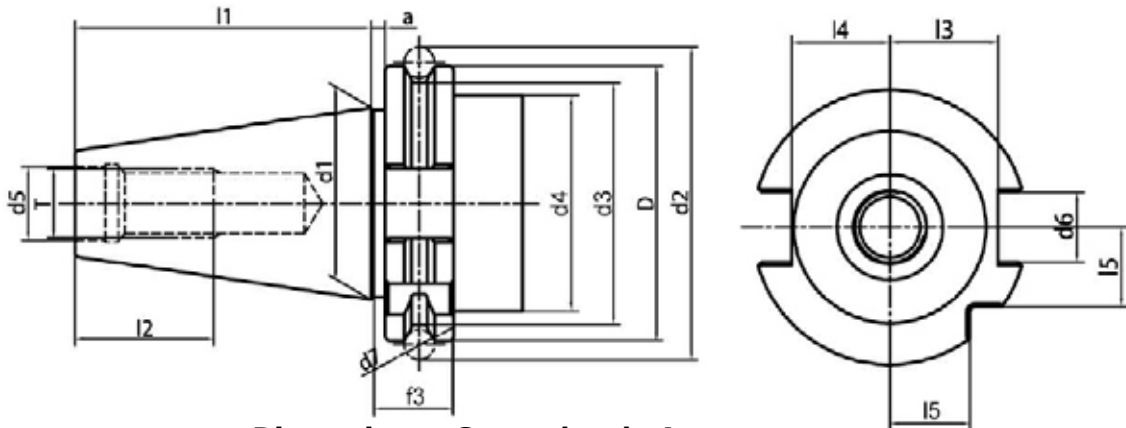
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# Bright-tools



# DIN 69871



Dimensiones Generales de Amarre

f3= 19.1mm | a=3.2mm

Modelo	D	d1	d2	d3	d4	d5	d6	d7	l1	l2	l3	l4	l5	e1	e2
SK30	50	31.75	59.30	44.30	45	13	16.10	7	47.80	24	18.80	16.30	15	21	5
SK40	63.55	44.45	72.30	56.25	50	17	16.10	7	58.40	32	25	22.70	18.50	27	5
SK50	97.50	68.85	107.36	91.25	80	25	25.70	7	101.80	47	37.70	35.50	30	42	7

## Portapinzas Tipo OZ - DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral - Excepto SK30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S01.302.16	SK 30	2-16 (OZ 16)	60	43
S01.302.25	SK 30	2-25 (OZ 25)	80	60
S01.403.16	SK 40	2-16 (OZ 16)	70	43
S01.403.25	SK 40	2-25 (OZ 25)	70	60
S01.403.32	SK 40	3-32 (OZ 32)	90	72
S01.403.16.1	SK 40	2-16 (OZ 16)	100	43
S01.403.25.1	SK 40	2-25 (OZ 25)	100	60
S01.503.25	SK 50	2-25 (OZ 25)	70	60
S01.503.32	SK 50	3-32 (OZ 32)	80	72
S01.503.32.1	SK 50	3-32 (OZ 32)	100	72



## Portapinzas Tipo HKS - DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S64.403.20	SK 40	20 - HKS 20	90	53
S64.403.32	SK 40	32 - HKS 32	105	68
S64.503.20	SK 50	20 - HKS 20	90	53
S64.503.32	SK 50	32 - HKS 32	90	68



## Portapinzas Tipo ER Mini - DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S03.403.07.1	SK 40	1-7 (ER11)	100	16
S03.403.07.2	SK 40	1-7 (ER11)	160	16
S03.403.10.1	SK 40	1-10 (ER16)	100	22
S03.403.10.2	SK 40	1-10 (ER16)	160	22
S03.503.10.1	SK 50	1-10 (ER16)	100	22
S03.503.10.2	SK 50	1-10 (ER16)	160	22





**Portapinzas Tipo ER – DIN 69871**

- Sistema AD - Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S02.302.10	SK 30	1-10 (ER 16)	70	32
S02.302.16	SK 30	2-16 (ER 25)	70	42
S02.302.20	SK 30	2-20 (ER 32)	70	50
S02.302.26	SK 30	3-26 (ER 40)	70	63
S02.302.10.1	SK 30	1-10 (ER 16)	100	32
S02.302.16.1	SK 30	2-16 (ER 25)	100	42
S02.302.20.1	SK 30	2-20 (ER 32)	100	50


**Portapinzas Tipo ER – DIN 69871**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto SK30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S02.403.10	SK 40	1-10 (ER 16)	63	32
S02.403.16	SK 40	2-16 (ER 25)	60	42
S02.403.20	SK 40	2-20 (ER 32)	70	50
S02.403.26	SK 40	3-26 (ER 40)	80	63
S02.403.10.1	SK 40	1-10 (ER 16)	100	32
S02.403.16.1	SK 40	2-16 (ER 25)	100	42
S02.403.20.1	SK 40	2-20 (ER 32)	100	50
S02.403.26.1	SK 40	3-26 (ER 40)	100	63
S02.403.10.2	SK 40	1-10 (ER 16)	160	32
S02.403.16.2	SK 40	2-16 (ER 25)	160	42
S02.403.20.2	SK 40	2-20 (ER 32)	160	50
S02.403.26.2	SK 40	3-26 (ER 40)	160	63
S02.403.10.3	SK 40	1-10 (ER 16)	200	32
S02.403.16.3	SK 40	2-16 (ER 25)	200	42
S02.403.20.3	SK 40	2-20 (ER 32)	200	50
S02.403.26.3	SK 40	3-26 (ER 40)	200	63
S02.503.16	SK 50	2-16 (ER 25)	60	42
S02.503.20	SK 50	2-20 (ER 32)	70	50
S02.503.26	SK 50	3-26 (ER 40)	80	63
S02.503.34	SK 50	6-34 (ER 50)	100	78
S02.503.10.1	SK 50	1-10 (ER 16)	100	32
S02.503.16.1	SK 50	2-16 (ER 25)	100	42
S02.503.20.1	SK 50	2-20 (ER 32)	100	50
S02.503.26.1	SK 50	3-26 (ER 40)	100	63
S02.503.10.2	SK 50	1-10 (ER 16)	160	32
S02.503.16.2	SK 50	2-16 (ER 25)	160	42
S02.503.20.2	SK 50	2-20 (ER 32)	160	50
S02.503.26.2	SK 50	3-26 (ER 40)	160	63
S02.503.34.2	SK 50	6-34 (ER 50)	160	78
S02.503.10.3	SK 50	1-10 (ER 16)	200	32
S02.503.10.3	SK 50	1-10 (ER 16)	200	32
S02.503.16.3	SK 50	2-16 (ER 25)	200	42
S02.503.20.3	SK 50	2-20 (ER 32)	200	50
S02.503.26.3	SK 50	3-26 (ER 40)	200	63


**Portafresas Tipo Weldon DIN 69871**

- Sistema AD - Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	D
S04.302.06*	SK 30	6	50	25
S04.302.08*	SK 30	8	50	28
S04.302.10*	SK 30	10	50	35
S04.302.12*	SK 30	12	50	42
S04.302.14*	SK 30	14	63	44
S04.302.16*	SK 30	16	63	48
S04.302.18*	SK 30	18	63	50
S04.302.20*	SK 30	20	70	52

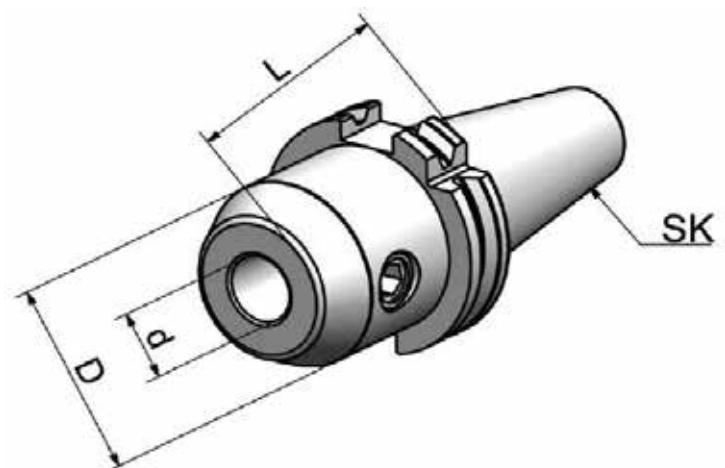


**Portafresas Tipo Weldon – DIN 69871**

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	D
S04.403.16.0	SK 40	16	35	45
S04.403.20.0	SK 40	20	35	45
S04.403.25.0	SK 40	25	35	50
S04.403.32.0	SK 40	32	65	50
S04.403.06	SK 40	6	50	25
S04.403.08	SK 40	8	50	28
S04.403.10	SK 40	10	50	35
S04.403.12	SK 40	12	50	42
S04.403.14	SK 40	14	50	44
S04.403.16	SK 40	16	63	48
S04.403.18	SK 40	18	63	50
S04.403.20	SK 40	20	63	52
S04.403.25	SK 40	25	100	65
S04.403.32	SK 40	32	100	72
S04.403.40	SK 40	40	120	80
S04.403.06	SK 40	6	100	25
S04.403.08.1	SK 40	8	100	28
S04.403.10.1	SK 40	10	100	35
S04.403.12.1	SK 40	12	100	42
S04.403.14.1	SK 40	14	100	44
S04.403.16.1	SK 40	16	100	48
S04.403.18.1	SK 40	18	100	50
S04.403.20.1	SK 40	20	100	52
S04.403.06.2	SK 40	6	160	25
S04.403.08.2	SK 40	8	160	28
S04.403.10.2	SK 40	10	160	35
S04.403.12.2	SK 40	12	160	42
S04.403.14.2	SK 40	14	160	44
S04.403.16.2	SK 40	16	160	48
S04.403.18.2	SK 40	18	160	50
S04.403.20.2	SK 40	20	160	52
S04.403.25.2	SK 40	25	160	65
S04.403.32.2	SK 40	32	160	72
S04.403.06.3	SK 40	6	200	25
S04.403.08.3	SK 40	8	200	28
S04.403.10.3	SK 40	10	200	35
S04.403.12.3	SK 40	12	200	42
S04.403.14.3	SK 40	14	200	44
S04.403.16.3	SK 40	16	200	48
S04.403.18.3	SK 40	18	200	50
S04.403.20.3	SK 40	20	200	52

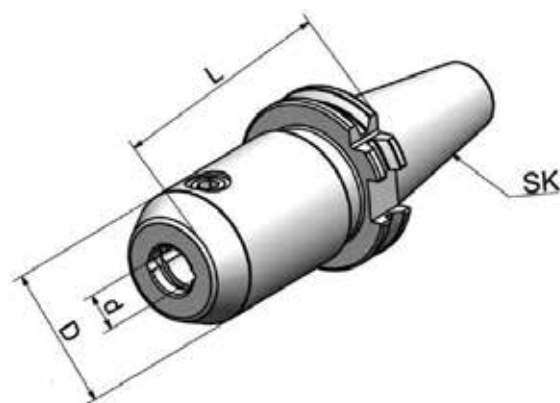
Referencia	SK	d	L	D
S04.503.06	SK 50	6	63	25
S04.503.08	SK 50	8	63	28
S04.503.10	SK 50	10	63	35
S04.503.12	SK 50	12	63	42
S04.503.14	SK 50	14	63	44
S04.503.16	SK 50	16	63	48
S04.503.18	SK 50	18	63	50
S04.503.20	SK 50	20	63	52
S04.503.25	SK 50	25	80	65
S04.503.32	SK 50	32	100	72
S04.503.40	SK 50	40	100	80
S04.503.50	SK 50	50	130	50
S04.503.06.1	SK 50	6	100	25
S04.503.08.1	SK 50	8	100	28
S04.503.10.1	SK 50	10	100	35
S04.503.12.1	SK 50	12	100	42
S04.503.14.1	SK 50	14	100	44
S04.503.16.1	SK 50	16	100	48
S04.503.18.1	SK 50	18	100	50
S04.503.20.1	SK 50	20	100	52
S04.503.25.1	SK 50	25	120	65
S04.503.06.2	SK 50	6	160	25
S04.503.08.2	SK 50	8	160	28
S04.503.10.2	SK 50	10	160	35
S04.503.12.2	SK 50	12	160	42
S04.503.14.2	SK 50	14	160	44
S04.503.16.2	SK 50	16	160	48
S04.503.18.2	SK 50	18	160	50
S04.503.20.2	SK 50	20	160	52
S04.503.25.2	SK 50	25	160	65
S04.503.32.2	SK 50	32	160	72
S04.503.40.2	SK 50	40	160	80
S04.503.08.3	SK 50	8	200	28
S04.503.10.3	SK 50	10	200	35
S04.503.12.3	SK 50	12	200	42
S04.503.14.3	SK 50	14	200	44
S04.503.16.3	SK 50	16	200	48
S04.503.18.3	SK 50	18	200	50
S04.503.20.3	SK 50	20	200	52
S04.503.25.3	SK 50	25	200	65
S04.503.32.3	SK 50	32	200	72
S04.503.40.3	SK 50	40	200	80
S04.503.20.4	SK 50	20	250	52
S04.503.25.4	SK 50	25	250	65
S04.503.32.4	SK 50	32	250	72



**Portafresas Tipo Weldon Orificios – DIN 69871**

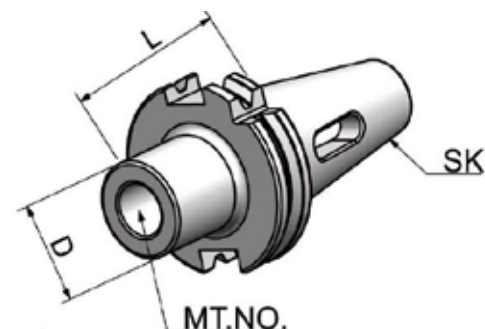
- Portaherramientas con dos orificios de refrigeración en el diámetro de la herramienta en la zona de amarre.
- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	D
S04.403.06.K	SK 40	6	50	25
S04.403.08.K	SK 40	8	50	28
S04.403.10.K	SK 40	10	50	35
S04.403.12.K	SK 40	12	50	42
S04.403.14.K	SK 40	14	50	44
S04.403.16.K	SK 40	16	63	48
S04.403.18.K	SK 40	18	63	50
S04.403.20.K	SK 40	20	63	52
S04.403.25.K	SK 40	25	100	65
S04.403.32.K	SK 40	32	100	72
S04.403.40.K	SK 40	40	120	80
S04.403.06.1.K	SK 40	6	100	25
S04.403.08.1.K	SK 40	8	100	28
S04.403.10.1.K	SK 40	10	100	35
S04.403.12.1.K	SK 40	12	100	42
S04.403.14.1.K	SK 40	14	100	44
S04.403.16.1.K	SK 40	16	100	48
S04.403.18.1.K	SK 40	18	100	50
S04.403.20.1.K	SK 40	20	100	52
S04.503.06.K	SK 50	6	63	25
S04.503.08.K	SK 50	8	63	28
S04.503.10.K	SK 50	10	63	35
S04.503.12.K	SK 50	12	63	42
S04.503.14.K	SK 50	14	63	44
S04.503.16.K	SK 50	16	63	48
S04.503.18.K	SK 50	18	63	50
S04.503.20.K	SK 50	20	63	52
S04.503.25.K	SK 50	25	80	65
S04.503.32.K	SK 50	32	100	72
S04.503.40.K	SK 50	40	100	80


**Adaptador Cono Morse DIN 228 – DIN 69871**

- Sistema AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	MK   CM	L	D
S07.302.01	SK 30	1	50	25
S07.302.02	SK 30	2	65	32
S07.302.03	SK 30	3	80	40
S07.403.01	SK 40	1	50	25
S07.403.02	SK 40	2	50	32
S07.403.03	SK 40	3	70	40
S07.403.04	SK 40	4	95	48
S07.403.02.1	SK 40	2	117	32
S07.403.03.1	SK 40	3	133	40
S07.403.04.1	SK 40	4	156	48
S07.503.01	SK 50	1	45	25
S07.503.02	SK 50	2	60	32
S07.503.03	SK 50	3	65	40
S07.503.04	SK 50	4	95	48
S07.503.05	SK 50	5	105	63
S07.503.02.1	SK 50	2	117	32
S07.503.03.1	SK 50	3	137	40
S07.503.04.1	SK 50	4	167	48
S07.503.05.1	SK 50	5	197	63

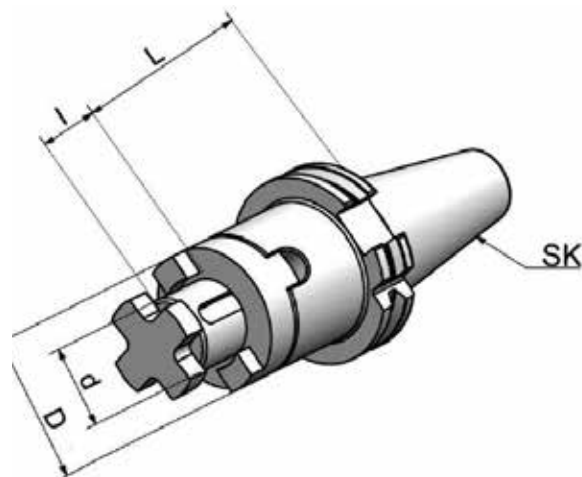




### Eje Portafresas Combinado - DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral - Excepto SK30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	I	D
S10.302.16	SK 30	16	50	17	32
S10.302.22	SK 30	22	50	19	40
S10.302.27	SK 30	27	55	21	48
S10.302.32	SK 30	32	60	24	58
S10.403.16	SK 40	16	55	17	32
S10.403.22	SK 40	22	55	19	40
S10.403.27	SK 40	27	55	21	48
S10.403.32	SK 40	32	60	24	58
S10.403.40	SK 40	40	60	27	70
S10.403.16.1	SK 40	16	100	17	32
S10.403.22.1	SK 40	22	100	19	40
S10.403.27.1	SK 40	27	100	21	48
S10.403.32.1	SK 40	32	100	24	58
S10.403.40.1	SK 40	40	100	27	70
S10.403.16.2	SK 40	16	160	17	32
S10.403.22.2	SK 40	22	160	19	40
S10.403.27.2	SK 40	27	160	21	48
S10.403.32.2	SK 40	32	160	24	58
S10.403.40.2	SK 40	40	160	27	70
S10.403.16.3	SK 40	16	200	17	32
S10.403.22.3	SK 40	22	200	19	40
S10.403.27.3	SK 40	27	200	21	48
S10.403.32.3	SK 40	32	200	24	58
S10.403.40.3	SK 40	40	200	27	70
S10.503.16	SK 50	16	55	17	32
S10.503.22	SK 50	22	55	19	40
S10.503.27	SK 50	27	55	21	48
S10.503.32	SK 50	32	55	24	58
S10.503.40	SK 50	40	55	27	70
S10.503.16.1	SK 50	16	100	17	32
S10.503.22.1	SK 50	22	100	19	40
S10.503.27.1	SK 50	27	100	21	48
S10.503.32.1	SK 50	32	100	24	58
S10.503.40.1	SK 50	40	100	27	70
S10.503.16.2	SK 50	16	160	17	32
S10.503.22.2	SK 50	22	160	19	40
S10.503.27.2	SK 50	27	160	21	48
S10.503.32.2	SK 50	32	160	24	58
S10.503.40.2	SK 50	40	160	27	70



### Eje Portafresas Corto - DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral - Excepto SK30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	H	D
S11.302.16	SK 30	16	40	17	38
S11.302.22	SK 30	22	40	19	48
S11.302.27	SK 30	27	50	21	58
S11.302.32	SK 30	32	50	24	78
S11.403.16	SK 40	16	35	17	38
S11.403.22	SK 40	22	35	19	48
S11.403.27	SK 40	27	40	21	58
S11.403.32	SK 40	32	50	24	78
S11.403.40	SK 40	40	50	27	88
S11.503.22	SK 50	22	35	19	38
S11.503.27	SK 50	27	40	21	48
S11.503.32	SK 50	32	50	24	58
S11.503.40	SK 50	40	50	27	78
S11.503.60	SK 50	60	70	40	88



**Eje Portafresas Serie Larga – DIN 69871**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto modelos "L" mayor a 200mm que son modelos AD
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	H	D
S11.403.16.1	SK 40	16	100	17	38
S11.403.16.2	SK 40	16	160	17	38
S11.403.16.3	SK 40	16	200	17	38
S11.403.22.1	SK 40	22	100	19	48
S11.403.22.2	SK 40	22	160	19	48
S11.403.22.3	SK 40	22	200	19	48
S11.403.22.4	SK 40	22	250	19	48
S11.403.22.5	SK 40	22	300	19	48
S11.403.27.1	SK 40	27	100	21	58
S11.403.27.2	SK 40	27	160	21	58
S11.403.27.3	SK 40	27	200	21	58
S11.403.27.4	SK 40	27	250	21	58
S11.403.27.5	SK 40	27	300	21	58
S11.403.32.1	SK 40	32	100	24	78
S11.403.32.2	SK 40	32	160	24	78
S11.403.32.3	SK 40	32	200	24	78
S11.403.32.4	SK 40	32	250	24	78
S11.403.32.5	SK 40	32	300	24	78
S11.403.40.1	SK 40	40	100	27	88
S11.403.40.2	SK 40	40	160	27	88
S11.403.40.3	SK 40	40	200	27	88
S11.403.40.4	SK 40	40	250	27	88
S11.403.40.5	SK 40	40	300	27	88
S11.503.16.1	SK 50	16	100	17	38
S11.503.16.2	SK 50	16	160	17	38
S11.503.16.3	SK 50	16	200	17	38
S11.503.16.4	SK 50	16	250	17	38
S11.503.16.5	SK 50	16	300	17	38
S11.503.16.6	SK 50	16	350	17	38
S11.503.22.1	SK 50	22	100	19	48
S11.503.22.2	SK 50	22	160	19	48
S11.503.22.3	SK 50	22	200	19	48
S11.503.22.4	SK 50	22	250	19	48
S11.503.22.5	SK 50	22	300	19	48
S11.503.22.6	SK 50	22	350	19	48
S11.503.40.5	SK 50	40	300	27	88

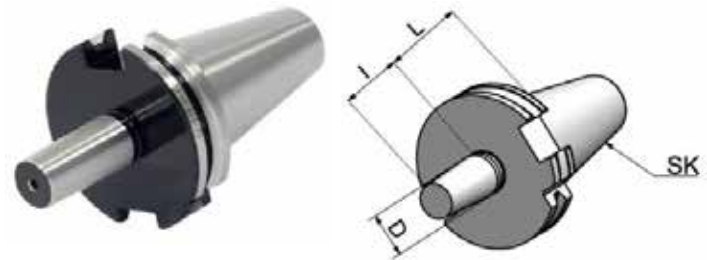


Referencia	SK	d	L	H	D
S11.503.27.1	SK 50	27	100	21	58
S11.503.27.2	SK 50	27	160	21	58
S11.503.27.3	SK 50	27	200	21	58
S11.503.27.4	SK 50	27	250	21	58
S11.503.27.5	SK 50	27	300	21	58
S11.503.27.6	SK 50	27	350	21	58
S11.503.32.1	SK 50	32	100	24	78
S11.503.32.2	SK 50	32	160	24	78
S11.503.32.3	SK 50	32	200	24	78
S11.503.32.4	SK 50	32	250	24	78
S11.503.32.5	SK 50	32	300	24	78
S11.503.32.6	SK 50	32	350	24	78
S11.503.40.1	SK 50	40	100	27	88
S11.503.40.2	SK 50	40	160	27	88
S11.503.40.3	SK 50	40	200	27	88
S11.503.40.4	SK 50	40	250	27	88

**Espiga Adaptador – DIN 238 - DIN 69871**

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	I
S14.302.12	SK 30	B12	25	18.5
S14.302.16	SK 30	B16	25	24
S14.402.12	SK 40	B12	25	18.5
S14.402.16	SK 40	B16	25	24
S14.402.18	SK 40	B18	25	32
S14.502.16	SK 50	B16	25	24
S14.502.18	SK 50	B18	25	24


**Reductor SK – DIN 69871**

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	SK Int	L	D
S09.402.30	SK 40	SK30	50	50
S09.402.40	SK 40	SK40	100	63
S09.502.40	SK 50	SK40	70	70
S09.502.50	SK 50	SK50	120	97



### Eje Portafresas Roscado – DIN 69871

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

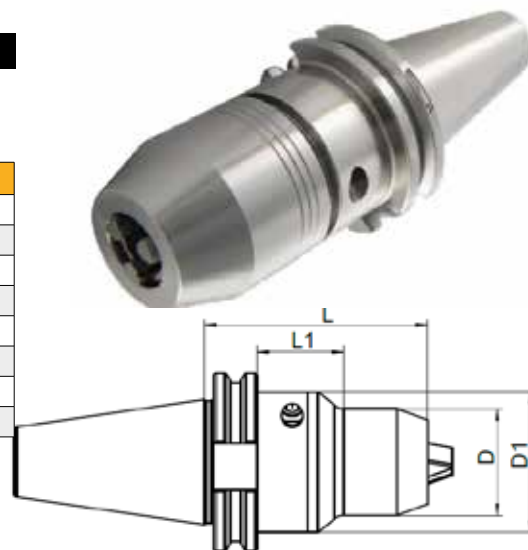
Referencia	SK	Rosca	D	d1	d2	A	L
S19.403.08	SK 40	M-8	23	8,5	14,5	69	50
S19.403.08.1	SK 40	M-8	23	8,5	14,5	119	100
S19.403.08.2	SK 40	M-8	25	8,5	14,5	169	150
S19.403.10	SK 40	M-10	23	10,5	18	69	50
S19.403.10.1	SK 40	M-10	32	10,5	18	119	100
S19.403.10.2	SK 40	M-10	36,5	10,5	18	169	150
S19.403.12	SK 40	M-12	24	12,5	21	69	50
S19.403.12.1	SK 40	M-10	33	12,5	21	119	100
S19.403.12.2	SK 40	M-12	40	12,5	21	169	150
S19.403.16	SK 40	M-16	34	17	29	69	50
S19.403.16.1	SK 40	M-16	36	17	29	119	100
S19.403.16.2	SK 40	M-16	42,5	17	29	169	150
S19.503.08	SK 50	M-8	23	8,5	14,5	69	50
S19.503.08.1	SK 50	M-8	25	8,5	14,5	119	100
S19.503.08.2	SK 50	M-10	30	8,5	14,5	169	150
S19.503.10	SK 50	M-10	23	10,5	18	69	50
S19.503.10.1	SK 50	M-12	32	10,5	18	119	100
S19.503.10.2	SK 50	M-8	36,5	10,5	18	169	150
S19.503.12	SK 50	M-12	24	12,5	21	69	50
S19.503.12.1	SK 50	M-10	33	12,5	21	119	100
S19.503.12.2	SK 50	M-12	40	12,5	21	169	150
S19.503.16	SK 50	M-16	34	17	29	69	50
S19.503.16.1	SK 50	M-16	36	17	29	119	100
S19.503.16.2	SK 50	M-16	42,5	17	29	169	150



### Portabrocas CNC – DIN 69871

- Sistemas: AD Refrigeración Interior y AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm
- Llave Incluida

Referencia AD	Referencia AD/B	SK	Capacidad	L	D
S15.302.08	-	SK 30	0-8	70	36
S15.302.13	-	SK 30	1,0-13	111	50
S15.302.16	-	SK 30	2,5-16	116	50
S15.402.08	S15.403.08	SK 40	0-8	70	36
S15.402.13	S15.403.13	SK 40	1,0-13	90	50
S15.402.16	S15.403.16	SK 40	2,5-16	95	50
S15.502.13	S15.503.13	SK 50	1,0-13	90	50
S15.502.16	S15.503.16	SK 50	2,5-16	95	50



### Eje Adaptador Pinzas Roscado – DIN 69871

- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm) y Serie 3 (48 mm).
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

Referencia	SK	Capacidad	Serie	A	D	D	C	T
S16.302.12	SK 30	M3-M14	1	65	38	19	7	7
S16.302.20	SK 30	M5-M22	2	99	54	31	12	12
S16.402.12	SK 40	M3-M14	1	59	38	19	7	7
S16.402.20	SK 40	M5-M22	2	97	54	31	12	12
S16.402.36	SK 40	M14-M36	3	156	78	48	17,5	17,58
S16.502.12	SK 50	M3-M14	1	63	38	19	7	7
S16.502.20	SK 50	M5-M22	2	97	54	31	12	12
S16.502.36	SK 50	M14-M36	3	140	78	48	17,5	17,5



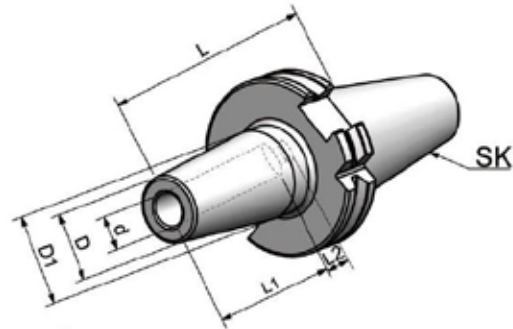
**Portabrocas – DIN 69871**

- Sistemas: AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia AD	SK	Capacidad	L	D
S17.403.13	SK 40	1-13	90	48
S17.503.13	SK 50	1-13	115	50
S17.503.16	SK 50	3-16	115	53


**Portaherramientas Térmicos 4.5° – DIN 69871**

- Sistemas: AD/B Refrigeración Interior y Lateral
- Equilibrado: G2.3 - 25.000 Rpm
- Necesario máquina de amarre térmico para su uso



Referencia	SK	d	L	D	D1
S04.443.03	SK 40	3	80	15	20
S04.443.04	SK 40	4	80	15	20
S04.443.05	SK 40	5	80	15	20
S04.443.06	SK 40	6	80	20	27
S04.443.08	SK 40	8	80	20	27
S04.443.10	SK 40	10	80	24	32
S04.443.12	SK 40	12	80	24	32
S04.443.14	SK 40	14	80	27	34
S04.443.16	SK 40	16	80	27	34
S04.443.18	SK 40	18	80	33	42
S04.443.20	SK 40	20	80	33	42
S04.443.25	SK 40	25	100	44	53
S04.443.32	SK 40	32	100	44	53
S04.443.06.1	SK 40	6	120	20	27
S04.443.08.1	SK 40	8	120	20	27
S04.443.10.1	SK 40	10	120	24	32
S04.443.12.1	SK 40	12	120	24	32
S04.443.14.1	SK 40	14	120	27	34
S04.443.16.1	SK 40	16	120	27	34
S04.443.18.1	SK 40	18	120	33	42
S04.443.20.1	SK 40	20	120	33	42
S04.443.25.1	SK 40	25	120	44	53
S04.443.32.1	SK 40	32	120	44	53

Referencia	SK	d	L	D	D1
S04.553.03	SK 50	3	80	15	20
S04.553.04	SK 50	4	80	15	20
S04.553.05	SK 50	5	80	15	20
S04.553.06	SK 50	6	80	20	27
S04.553.08	SK 50	8	80	20	27
S04.553.10	SK 50	10	80	24	32
S04.553.12	SK 50	12	80	24	32
S04.553.14	SK 50	14	80	27	34
S04.553.16	SK 50	16	80	27	34
S04.553.18	SK 50	18	80	33	42
S04.553.20	SK 50	20	80	33	42
S04.553.25	SK 50	25	100	44	53
S04.553.32	SK 50	32	100	44	53
S04.553.06.1	SK 50	6	160	21	27
S04.553.08.1	SK 50	8	160	21	27
S04.553.10.1	SK 50	10	160	24	32
S04.553.12.1	SK 50	12	160	24	32
S04.553.14.1	SK 50	14	160	27	34
S04.553.16.1	SK 50	16	160	27	34
S04.553.18.1	SK 50	18	160	33	42
S04.553.20.1	SK 50	20	160	33	42
S04.553.25.1	SK 50	25	160	44	53
S04.553.32.1	SK 50	32	160	44	53

**Alargador Térmico 4.5° - Para Portaherramientas Térmicos**

- Tipo AD y precisión de 0.003 - I1: longitud máxima de amarre | I2: profundidad máxima del diámetro
- Modelos de medida 6-8-10-12 con tope de herramienta interior
- Válido para herramientas de metal duro

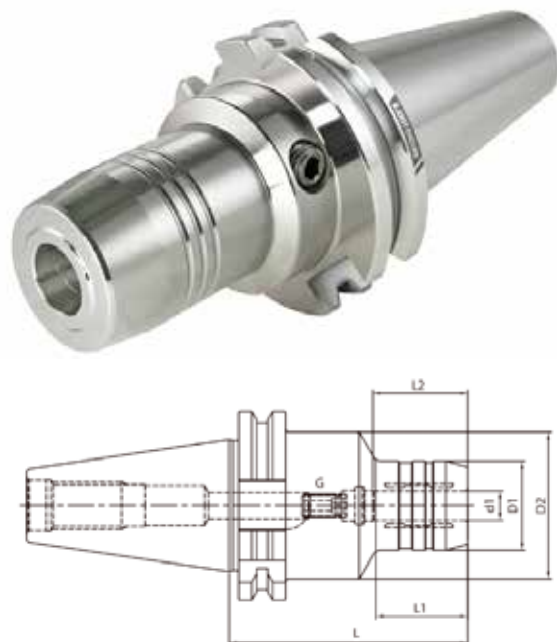
Referencia	D	d	D1	A	I1	I2
S07.107.03	20	3	10	150	15	5
S07.107.04	20	4	10	150	20	5
S07.107.05	20	5	10	150	20	5
S07.107.06	20	6	10	150	36	10
S07.107.08	20	8	12	150	36	10
S07.107.10	20	10	14	150	42	10
S07.107.12	20	12	16	150	47	10



### Portaherramientas Hidráulico - DIN 69871

- Sistemas: AD/B Refrigeración Interior y Lateral
- Equilibrado: G2.3 - 25.000 Rpm

Referencia	SK	d1	D1	D2	L	L1	L2
S04H.403.06	SK 40	6	26	49.5	80.5	30	27
S04H.403.08	SK 40	8	28	49.5	80.5	30	27
S04H.403.10	SK 40	10	30	49.5	80.5	31	32
S04H.403.12	SK 40	12	32	49.5	80.5	31.5	37
S04H.403.16	SK 40	16	38	49.5	80.5	33	42
S04H.403.20	SK 40	20	42	49.5	80.5	34	42
S04H.403.25	SK 40	25	55	66	80.5	22	48
S04H.403.32	SK 40	32	63	80	80.5	25.5	55
S04H.403.06.1	SK 40	6	26	49.5	110	29.5	27
S04H.403.08.1	SK 40	8	28	49.5	110	30	27
S04H.403.10.1	SK 40	10	30	49.5	110	31	32
S04H.403.12.1	SK 40	12	32	49.5	110	31.5	37
S04H.403.16.1	SK 40	16	38	49.5	110	33	42
S04H.403.20.1	SK 40	20	42	49.5	110	34	42
S04H.503.06	SK 50	6	26	49.5	80.5	30	27
S04H.503.08	SK 50	8	28	49.5	80.5	30	27
S04H.503.10	SK 50	10	30	49.5	80.5	32	32
S04H.503.12	SK 50	12	32	49.5	80.5	35	37
S04H.503.16	SK 50	16	38	49.5	80.5	40	42
S04H.503.20	SK 50	20	42	49.5	80.5	40	42



### Porta SK - Eje Mecanizable

- Sistema SK de eje para mecanizado a medida.

Referencia	SK	D	L
S90.SK40.50	SK 40	50	200
S90.SK40.50.1	SK 40	50	250
S90.SK40.63	SK 40	63	250
S90.SK50.100	SK 50	100	160
S90.SK50.10.1	SK 50	100	250



### Porta SK - Eje Verificador Centrado

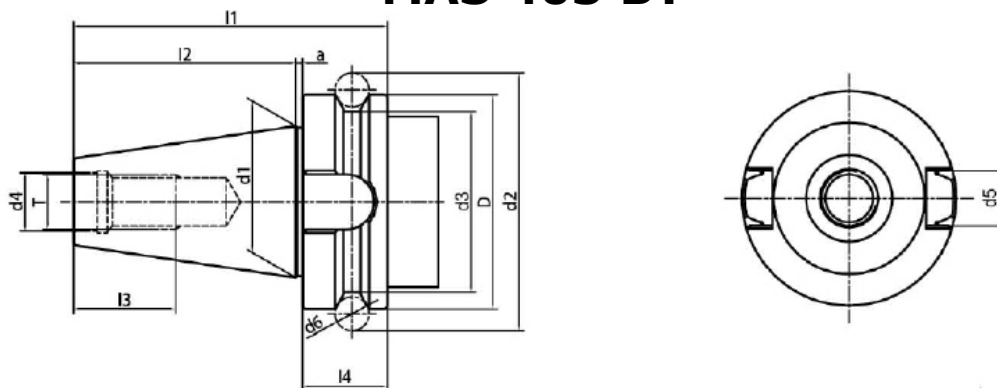
- Sistema SK para verificación en máquina.
- Equilibrado a +/-0.002

Referencia	SK	D	L
S99.SK30.32	SK 30	32	250
S99.SK40.40	SK 40	40	300
S99.SK50.50	SK 50	50	300





## MAS 403 BT


**Dimensiones Generales de Amarre**

Modelo	D	d1	d2	d3	d4	d5	d6	d7	l1	l2	l3	l4	d	T
BT30	46	31.75	56.14	38	12.5	16.1	8	70.40	70.40	48.40	24	20	2	M12x1.75
BT40	63	44.45	75.674	53	17	16	10	92.40	92.40	65.40	30	25	2	M16x2
BT50	100	68.85	119.01	85	25	25.7	15	139.80	139.80	101.80	45	35	3	M24x3

### Portapinzas Tipo OZ – MAS 403 BT

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

Referencia	SK	Capacidad	L	D
S01.305.16	BT 30	2-16 (OZ 16)	60	43
S01.305.25	BT 30	2-25 (OZ 25)	80	60
S01.406.16	BT 40	2-16 (OZ 16)	70	43
S01.406.25	BT 40	2-25 (OZ 25)	70	60
S01.406.32	BT 40	3-32 (OZ 32)	90	72
S01.506.25	BT 50	2-25 (OZ 25)	85	60
S01.506.32	BT 50	3-32 (OZ 32)	90	72



### Portapinzas Tipo HKS – MAS 403 BT

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (ver sección accesorios)

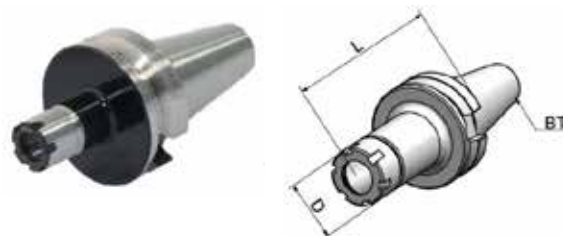
Referencia	SK	Capacidad	L	D
S64.406.20	BT 40	20 – HKS 20	90	50
S64.406.32	BT 40	32 – HKS 32	90	70
S64.506.20	BT 50	20 – HKS 20	105	50
S64.506.32	BT 50	32 – HKS 32	110	70



### Portapinzas Tipo ER Mini – MAS 403 BT

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

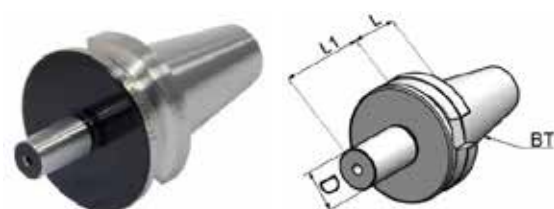
Referencia	SK	Capacidad	L	D
S03.406.07.1	BT 40	1-7 (ER11)	100	16
S03.406.07.2	BT 40	1-7 (ER11)	160	16
S03.406.10.1	BT 40	1-10 (ER 16)	100	22
S03.406.10.2	BT 40	1-10 (ER 16)	160	22
S03.506.10.1	BT 50	1-10 (ER 16)	100	22
S03.506.10.2	BT 50	1-10 (ER 16)	160	22



### Eje Adaptador DIN – MAS 403 BT

- Sistema A Refrigeración Exterior • Equilibrado: G6.3 - 15.000 Rpm

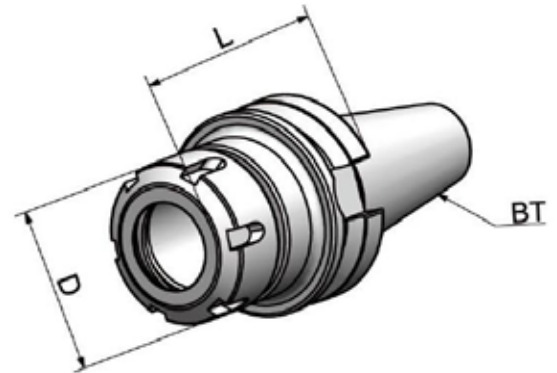
Referencia	BT	D	L	L1
S14.305.12	BT 30	B12	25	18.5
S14.305.16	BT 30	B16	25	24
S14.405.12	BT 40	B12	32	18.5
S14.405.16	BT 40	B16	32	24
S14.405.18	BT 40	B18	32	32
S14.505.16	BT 50	B16	45	24
S14.505.18	BT 50	B18	45	32



**Portapinzas Tipo ER – MAS 403 BT**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

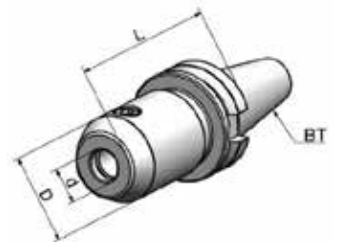
Referencia	BT	Capacidad	L	D
S02.305.10	BT 30	1-10 (ER 16)	70	32
S02.305.16	BT 30	2-16 (ER 25)	70	42
S02.305.20	BT 30	2-20 (ER 32)	70	50
S02.305.26	BT 30	3-26 (ER 40)	70	63
S02.305.10.1	BT 30	1-10 (ER 16)	100	32
S02.406.10	BT 40	1-10 (ER 16)	63	32
S02.406.16	BT 40	2-16 (ER 25)	60	42
S02.406.20	BT 40	2-20 (ER 32)	70	50
S02.406.26	BT 40	3-26 (ER 40)	80	63
S02.406.34	BT 40	6-34 (ER-50)	78	85
S02.406.10.1	BT 40	1-10 (ER 16)	100	32
S02.406.16.1	BT 40	2-16 (ER 25)	100	42
S02.406.20.1	BT 40	2-20 (ER 32)	100	50
S02.406.26.1	BT 40	3-26 (ER 40)	100	63
S02.406.10.2	BT 40	1-10 (ER 16)	160	32
S02.406.16.2	BT 40	2-16 (ER 25)	160	42
S02.406.20.2	BT 40	2-20 (ER 32)	160	50
S02.406.26.2	BT 40	3-26 (ER 40)	160	63
S02.406.10.3	BT 40	1-10 (ER 16)	200	32
S02.406.16.3	BT 40	2-16 (ER 25)	200	42
S02.406.20.3	BT 40	2-20 (ER 32)	200	50
S02.406.26.3	BT 40	3-26 (ER 40)	200	63
S02.506.16	BT 50	2-16 (ER 25)	70	42
S02.506.20	BT 50	2-20 (ER 32)	70	50
S02.506.26	BT 50	3-26 (ER 40)	80	63
S02.506.34	BT 50	6-34 (ER 50)	100	78
S02.506.10.1	BT 50	1-10 (ER 16)	100	32
S02.506.16.1	BT 50	2-16 (ER 25)	100	42
S02.506.20.1	BT 50	2-20 (ER 32)	100	50
S02.506.26.1	BT 50	3-26 (ER 40)	100	63
S02.506.10.2	BT 50	1-10 (ER 16)	160	32
S02.506.16.2	BT 50	2-16 (ER 25)	160	42
S02.506.20.2	BT 50	2-20 (ER 32)	160	50
S02.506.26.2	BT 50	3-26 (ER 40)	160	63
S02.506.34.2	BT 50	6-34 (ER 50)	160	63
S02.506.10.3	BT 50	1-10 (ER 16)	200	32
S02.506.16.3	BT 50	2-16 (ER 25)	200	42
S02.506.20.3	BT 50	2-20 (ER 32)	200	50
S02.506.26.3	BT 50	3-26 (ER 40)	200	63



**Portafresas Tipo Weldon – MAS 403 BT 30**

- Sistema AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm

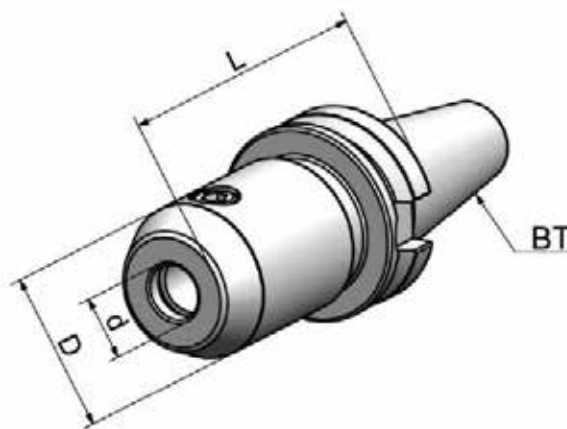
Referencia	BT	d	L	D
S04.305.06	BT 30	6	50	25
S04.305.08	BT 30	8	50	28
S04.305.10	BT 30	10	50	35
S04.305.12	BT 30	12	50	42
S04.305.14	BT 30	14	50	44
S04.305.16	BT 30	16	63	48
S04.305.18	BT 30	18	63	50
S04.305.20	BT 30	20	63	52



**Portafresas Tipo Weldon – MAS 403 BT 40**

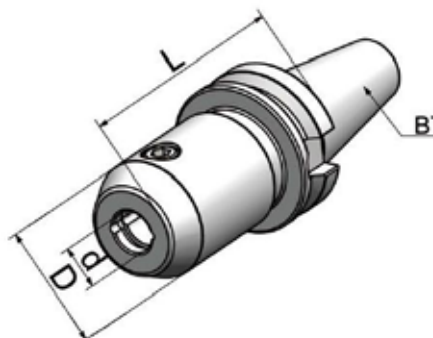
- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	d	L	D
S04.406.16.0	BT 40	16	35	45
S04.406.20.0	BT 40	20	35	45
S04.406.25.0	BT 40	25	35	55
S04.406.32.0	BT 40	32	65	50
S04.406.06	BT 40	6	50	25
S04.406.08	BT 40	8	50	28
S04.406.10	BT 40	10	63	35
S04.406.12	BT 40	12	63	42
S04.406.14	BT 40	14	63	44
S04.406.16	BT 40	16	63	48
S04.406.18	BT 40	18	63	50
S04.406.20	BT 40	20	63	52
S04.406.25	BT 40	25	90	65
S04.406.32	BT 40	32	100	72
S04.406.40	BT 40	40	120	80
S04.406.06.1	BT 40	6	100	25
S04.406.08.1	BT 40	8	100	28
S04.406.10.1	BT 40	10	100	35
S04.406.12.1	BT 40	12	100	42
S04.406.14.1	BT 40	14	100	44
S04.406.16.1	BT 40	16	100	48
S04.406.18.1	BT 40	18	100	50
S04.406.20.1	BT 40	20	100	52
S04.406.06.2	BT 40	6	160	25
S04.406.08.2	BT 40	8	160	28
S04.406.10.2	BT 40	10	160	35
S04.406.12.2	BT 40	12	160	42
S04.406.14.2	BT 40	14	160	44
S04.406.16.2	BT 40	16	160	48
S04.406.18.2	BT 40	18	160	50
S04.406.20.2	BT 40	20	160	52
S04.406.25.2	BT 40	25	160	65
S04.406.32.2	BT 40	32	160	72
S04.406.40.2	BT 40	40	160	80


**Portafresas Tipo Weldon Orificios – MAS 403 BT 40**

- Portaherramientas con dos orificios de refrigeración en el diámetro de la herramienta en la zona de amarre.
- Sistema AD/B Refrigeración Interior con orificios centrales y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	SK	d	L	D
S04.406.06.K	BT 40	6	50	25
S04.406.08.K	BT 40	8	50	28
S04.406.10.K	BT 40	10	63	35
S04.406.12.K	BT 40	12	63	42
S04.406.14.K	BT 40	14	63	44
S04.406.16.K	BT 40	16	63	48
S04.406.18.K	BT 40	18	63	50
S04.406.20.K	BT 40	20	63	52
S04.406.25.K	BT 40	25	90	65
S04.406.32.K	BT 40	32	100	72
S04.406.40.K	BT 40	40	120	80
S04.406.06.1.K	BT 40	6	100	25
S04.406.08.1.K	BT 40	8	100	28
S04.406.10.1.K	BT 40	10	100	35
S04.406.12.1.K	BT 40	12	100	42
S04.406.14.1.K	BT 40	14	100	44
S04.406.16.1.K	BT 40	16	100	48
S04.406.18.1.K	BT 40	18	100	50
S04.406.20.1.K	BT 40	20	100	52

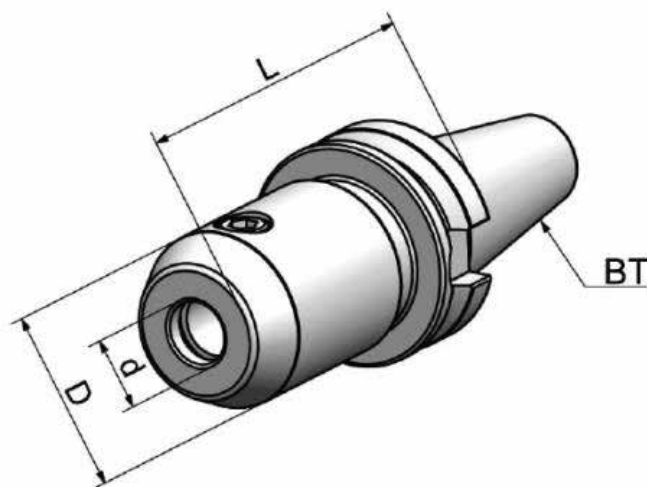




### Portafresas Tipo Weldon – MAS 403 BT 50

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

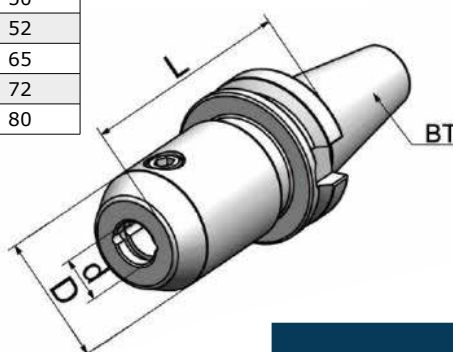
Referencia	BT	d	L	D
S04.506.06	BT 50	6	63	25
S04.506.08	BT 50	8	63	28
S04.506.10	BT 50	10	63	32
S04.506.12	BT 50	12	80	42
S04.506.14	BT 50	14	80	44
S04.506.16	BT 50	16	80	48
S04.506.18	BT 50	18	80	50
S04.506.20	BT 50	20	80	52
S04.506.25	BT 50	25	100	65
S04.506.32	BT 50	32	105	72
S04.506.40	BT 50	40	110	80
S04.506.06.1	BT 50	6	100	25
S04.506.08.1	BT 50	8	100	28
S04.506.10.1	BT 50	10	100	32
S04.506.12.1	BT 50	12	100	42
S04.506.14.1	BT 50	14	100	44
S04.506.16.1	BT 50	16	100	48
S04.506.18.1	BT 50	18	100	50
S04.506.20.1	BT 50	20	100	52
S04.506.06.2	BT 50	6	160	25
S04.506.08.2	BT 50	8	160	28
S04.506.10.2	BT 50	10	160	32
S04.506.12.2	BT 50	12	160	42
S04.506.14.2	BT 50	14	160	44
S04.506.16.2	BT 50	16	160	48
S04.506.18.2	BT 50	18	160	50
S04.506.20.2	BT 50	20	160	52
S04.506.25.2	BT 50	25	160	65
S04.506.06.3	BT 50	6	200	25
S04.506.08.3	BT 50	8	200	28
S04.506.10.3	BT 50	10	200	32
S04.506.12.3	BT 50	12	200	42
S04.506.14.3	BT 50	14	200	44
S04.506.16.3	BT 50	16	200	48
S04.506.18.3	BT 50	18	200	50
S04.506.20.3	BT 50	20	200	52
S04.506.25.3	BT 50	25	200	65
S04.506.32.3	BT 50	32	200	72



### Portafresas Tipo Weldon Orificios – MAS 403 BT 50

- Portaherramientas con dos orificios de refrigeración en el diámetro de la herramienta en la zona de amarre.
- Sistema AD/B Refrigeración Interior con orificios centrales y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

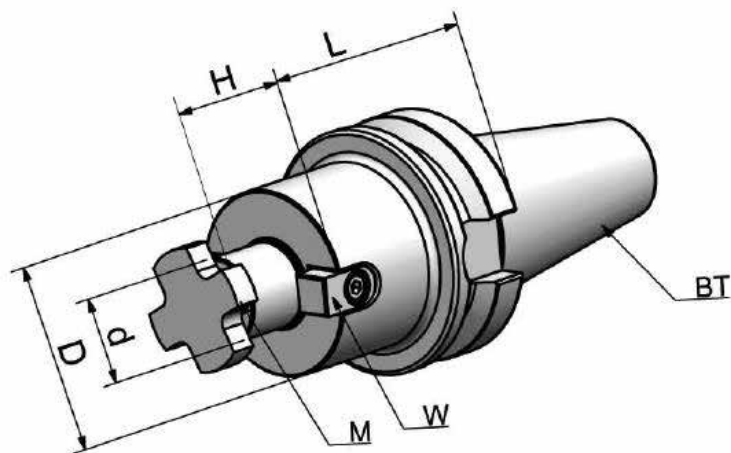
Referencia	SK	d	L	D
S04.506.06.K	BT 50	6	63	25
S04.506.08.K	BT 50	8	63	28
S04.506.10.K	BT 50	10	63	35
S04.506.12.K	BT 50	12	80	42
S04.506.14.K	BT 50	14	80	44
S04.506.16.K	BT 50	16	80	48
S04.506.18.K	BT 50	18	80	50
S04.506.20.K	BT 50	20	80	52
S04.506.25.K	BT 50	25	100	65
S04.506.32.K	BT 50	32	105	72
S04.506.40.K	BT 50	40	110	80



**Eje Portafresas – MAS 403 BT**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 y modelos "L" mayor a 200mm que son modelos AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	d	L	H	D
S11.305.16	BT 30	16	40	17	38
S11.305.22	BT 30	22	40	19	48
S11.305.27	BT 30	27	40	21	58
S11.305.32	BT 30	32	50	24	78
S11.406.16	BT 40	16	40	17	38
S11.406.16.1	BT 40	16	100	17	38
S11.406.16.2	BT 40	16	160	17	38
S11.406.16.3	BT 40	16	200	17	38
S11.406.22	BT 40	22	40	19	48
S11.406.22.1	BT 40	22	100	19	48
S11.406.22.2	BT 40	22	160	19	48
S11.406.22.3	BT 40	22	200	19	48
S11.406.22.4	BT 40	22	250	19	48
S11.406.22.5	BT 40	22	300	19	48
S11.406.27	BT 40	27	40	21	58
S11.406.27.1	BT 40	27	100	21	58
S11.406.27.2	BT 40	27	160	21	58
S11.406.27.3	BT 40	27	200	21	58
S11.406.27.4	BT 40	27	250	21	58
S11.406.27.5	BT 40	27	300	21	58
S11.406.32	BT 40	32	50	24	78
S11.406.32.1	BT 40	32	100	24	78
S11.406.32.2	BT 40	32	160	24	78
S11.406.32.3	BT 40	32	200	24	78
S11.406.32.4	BT 40	32	250	24	78
S11.406.32.5	BT 40	32	300	24	78
S11.406.40	BT 40	40	50	27	88
S11.406.40.1	BT 40	40	100	27	88
S11.406.40.2	BT 40	40	160	27	88
S11.406.40.3	BT 40	40	200	27	88
S11.406.40.4	BT 40	40	250	27	88
S11.406.40.5	BT 40	40	300	27	88
S11.506.16	BT 50	16	38	17	48
S11.506.16.1	BT 50	16	100	16	38
S11.506.16.2	BT 50	16	160	17	48
S11.506.16.3	BT 50	16	200	17	48
S11.506.16.4	BT 50	16	250	17	48
S11.506.22	BT 50	22	40	19	48
S11.506.22.1	BT 50	22	100	19	48
S11.506.22.2	BT 50	22	160	19	48
S11.506.22.3	BT 50	22	200	19	48
S11.506.22.4	BT 50	22	250	19	48
S11.506.22.5	BT 50	22	300	19	48
S11.506.27	BT 50	27	50	21	58
S11.506.27.1	BT 50	27	100	21	58
S11.506.27.2	BT 50	27	160	21	58
S11.506.27.3	BT 50	27	200	21	58
S11.506.27.3	BT 50	27	200	21	58
S11.506.27.4	BT 50	27	250	21	58
S11.506.27.5	BT 50	27	300	21	58
S11.506.27.6	BT 50	27	350	21	58

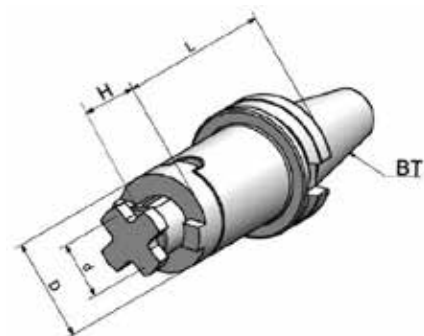


Referencia	BT	d	L	H	D
S11.506.32	BT 50	32	50	24	78
S11.506.32.1	BT 50	32	100	24	78
S11.506.32.2	BT 50	32	160	24	78
S11.506.32.3	BT 50	32	200	24	78
S11.506.32.4	BT 50	32	250	24	78
S11.506.32.5	BT 50	32	300	24	78
S11.506.32.6	BT 50	32	350	24	78
S11.506.40	BT 50	40	50	27	88
S11.506.40.1	BT 50	40	100	27	88
S11.506.40.2	BT 50	40	160	27	88
S11.506.40.3	BT 50	40	200	27	88
S11.506.40.4	BT 50	40	250	27	88
S11.506.40.5	BT 50	40	250	27	88

**Eje Portafresas Combinado – MAS 403 BT**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 que son modelos AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	d	L	H	D
S10.305.16	BT 30	16	45	17	32
S10.305.22	BT 30	22	47	19	40
S10.305.27	BT 30	27	49	21	48
S10.406.16	BT 40	16	55	17	32
S10.406.22	BT 40	22	55	19	40
S10.406.27	BT 40	27	55	21	48
S10.406.32	BT 40	32	60	24	58
S10.406.40	BT 40	40	60	27	70
S10.406.16.1	BT 40	16	100	17	32
S10.406.22.1	BT 40	22	100	19	40
S10.406.27.1	BT 40	27	100	21	48
S10.406.32.1	BT 40	32	100	24	58
S10.406.40.1	BT 40	40	100	27	70
S10.406.16.2	BT 40	16	160	17	32
S10.406.22.2	BT 40	22	160	19	40
S10.406.27.2	BT 40	27	160	21	48
S10.406.32.2	BT 40	32	160	24	58
S10.406.40.2	BT 40	40	160	27	70
S10.406.16.3	BT 40	16	200	17	32
S10.406.22.3	BT 40	22	200	19	40
S10.406.27.3	BT 40	27	200	21	48
S10.406.32.3	BT 40	32	200	24	58
S10.406.40.3	BT 40	40	200	27	70
S10.506.16	BT 50	16	70	17	32
S10.506.22	BT 50	22	70	19	40
S10.506.27	BT 50	27	70	21	48
S10.506.32	BT 50	32	70	24	58
S10.506.40	BT 50	40	70	27	70
S10.506.16.2	BT 50	16	160	17	32
S10.506.22.2	BT 50	22	160	19	40
S10.506.27.2	BT 50	27	160	21	48
S10.506.32.2	BT 50	32	160	24	58
S10.506.40.2	BT 50	40	160	27	70
S10.506.16.3	BT 50	16	200	17	32
S10.506.22.3	BT 50	22	200	19	40
S10.506.27.3	BT 50	27	200	21	48
S10.506.32.3	BT 50	32	200	24	58
S10.506.40.3	BT 50	40	200	27	70



**Porta Reductor Cono Morse DIN 228 – MAS 403 BT**

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	MK	L	D
S07.305.01	BT 30	1	45	25
S07.305.02	BT 30	2	60	32
S07.305.03	BT 30	3	75	40
S07.406.01	BT 40	1	50	25
S07.406.02	BT 40	2	50	32
S07.406.03	BT 40	3	70	40
S07.406.04	BT 40	4	95	48
S07.506.01	BT 50	1	45	25
S07.506.02	BT 50	2	60	32
S07.506.03	BT 50	3	65	40
S07.506.04	BT 50	4	95	48
S07.506.05	BT 50	5	105	63



**Portabrocas CNC – MAS 403 BT**

- Sistemas: AD Refrigeración Interior y AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm
- Llave Incluida

Referencia AD	Referencia AD/B	BT	Capacidad	L	D
S15.305.08	-	BT 30	0-8	70	36
S15.305.13	-	BT 30	1,0-13	111	50
S15.305.16	-	BT 30	2,5-16	116	50
S15.405.08	S15.406.08	BT 40	0-8	70	36
S15.405.13	S15.406.13	BT 40	1,0-13	90	50
S15.405.16	S15.406.16	BT 40	2,5-16	95	50
S15.505.13	S15.506.13	BT 50	1,0-13	90	50
S15.505.16	S15.506.16	BT 50	2,5-16	95	50


**Eje Adaptador Pinzas de Roscado - MAS 403 BT**

- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm) y Serie 3 (48 mm).
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

Referencia	BT	Capacidad	Serie	L	D
S16.305.12	BT 30	M3 - M14	1	70	38
S16.305.20	BT 30	M5 - M22	2	95	54
S16.405.12	BT 40	M3 - M14	1	65	38
S16.405.20	BT 40	M5 - M22	2	93	53
S16.405.36	BT 40	M14 - M36	3	166	78
S16.505.12	BT 50	M3 - M14	1	100	38
S16.505.20	BT 50	M5 - M22	2	100	53
S16.505.36	BT 50	M14 - M36	3	142	78


**Portabrocas AD – MAS 403 BT**

- Sistemas: AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia AD	BT	Capacidad	L	D
S17.406.13	BT 40	1-13	105	48
S17.506.13	BT 50	1-13	115	48
S17.506.16	BT 50	3-16	115	53


**Portaherramientas Cabeza Roscada – MAS 403 BT**

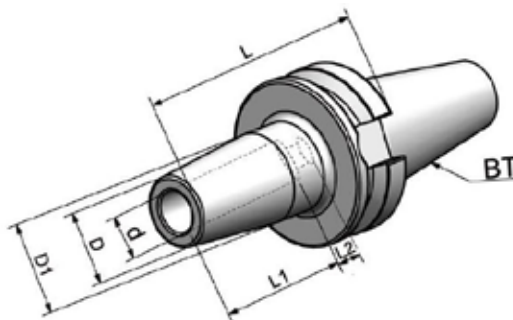
- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	Rosca	D	d1	d2	A	L
S19.406.08	BT 40	M-8	15	8.5	14.5	77	50
S19.406.08.1	BT 40	M-8	23	8.5	14.5	127	100
S19.406.08.2	BT 40	M-8	25	8.5	14.5	177	150
S19.406.10	BT 40	M-10	23	10.5	18	77	50
S19.406.10.1	BT 40	M-10	32	10.5	18	127	100
S19.406.10.2	BT 40	M-10	36.5	10.5	18	177	150
S19.406.12	BT 40	M-12	24	12.5	21	77	50
S19.406.12.1	BT 40	M-12	31	12.5	21	127	100
S19.406.12.2	BT 40	M-12	38	12.5	21	177	150
S19.406.16	BT 40	M-16	34	17	29	77	50
S19.406.16.1	BT 40	M-16	36	17	29	127	100
S19.406.16.2	BT 40	M-16	42.5	17	29	177	150
S19.506.08.0	BT 50	M-8	23	8.5	14.5	88	50
S19.506.08	BT 50	M-8	25	8.5	14.5	138	100
S19.506.08.2	BT 50	M-8	30	8.5	14.5	188	150
S19.506.10.0	BT 50	M-10	23	10.5	18	88	50
S19.506.10	BT 50	M-10	32	10.5	18	138	100
S19.506.10.2	BT 50	M-10	36.5	10.5	18	188	150
S19.506.12.0	BT 50	M-12	24	12.5	21	88	50
S19.506.12	BT 50	M-12	33	12.5	21	138	100
S19.506.12.2	BT 50	M-12	40	12.5	21	188	150
S19.506.16.0	BT 50	M-16	34	17	29	88	50
S19.506.16	BT 50	M-16	36	17	29	138	100
S19.506.16.2	BT 50	M-16	42.5	17	29	188	150



**Portaherramientas Térmicos 4.5° – MAS 403 BT**

- Sistemas: AD/B Refrigeración Interior y Lateral
- Equilibrado: G2.5 - 25.000 Rpm
- Necesario máquina de amarre térmico para su uso



Referencia	BT	d	L	D	D1
S04.446.03	BT 40	3	80	15	20
S04.446.04	BT 40	4	80	15	20
S04.446.05	BT 40	5	80	15	20
S04.446.06	BT 40	6	80	20	27
S04.446.08	BT 40	8	90	20	27
S04.446.10	BT 40	10	90	24	32
S04.446.12	BT 40	12	90	24	32
S04.446.14	BT 40	14	90	27	34
S04.446.16	BT 40	16	90	27	34
S04.446.18	BT 40	18	90	33	42
S04.446.20	BT 40	20	90	33	42
S04.446.25	BT 40	25	100	44	53
S04.446.32	BT 40	32	100	44	53
S04.446.06.1	BT 40	6	120	20	27
S04.446.08.1	BT 40	8	120	20	27
S04.446.10.1	BT 40	10	120	24	32
S04.446.12.1	BT 40	12	120	24	32
S04.446.14.1	BT 40	14	120	27	34
S04.446.16.1	BT 40	16	120	27	34
S04.446.18.1	BT 40	18	120	33	42
S04.446.20.1	BT 40	20	120	33	42
S04.446.25.1	BT 40	25	120	44	53

Referencia	BT	d	L	D	D1
S04.556.03	BT 50	3	100	15	20
S04.556.04	BT 50	4	100	15	20
S04.556.05	BT 50	5	100	15	20
S04.556.06	BT 50	6	100	20	27
S04.556.08	BT 50	8	100	20	27
S04.556.10	BT 50	10	100	24	32
S04.556.12	BT 50	12	100	24	32
S04.556.14	BT 50	14	100	27	34
S04.556.16	BT 50	16	100	27	34
S04.556.18	BT 50	18	100	33	42
S04.556.20	BT 50	20	100	33	42
S04.556.25	BT 50	25	100	44	53
S04.556.32	BT 50	32	120	44	53
S04.556.06.1	BT 50	6	160	21	27
S04.556.08.1	BT 50	8	160	21	27
S04.556.10.1	BT 50	10	160	24	32
S04.556.12.1	BT 50	12	160	24	32
S04.556.14.1	BT 50	14	160	27	34
S04.556.16.1	BT 50	16	160	27	34
S04.556.18.1	BT 50	18	160	33	42
S04.556.20.1	BT 50	20	160	33	42
S04.556.25.1	BT 50	25	160	44	53
S04.556.32.1	BT 50	32	160	44	53

**Alargador Térmico 4.5° - Para Portaherramientas Térmicos**

- Tipo AD y precisión de 0.003 - l1: longitud máxima de amarre | l2: profundidad máxima del diámetro
- Modelos de medida 6-8-10-12 con tope de herramienta interior
- Válido para herramientas de metal duro

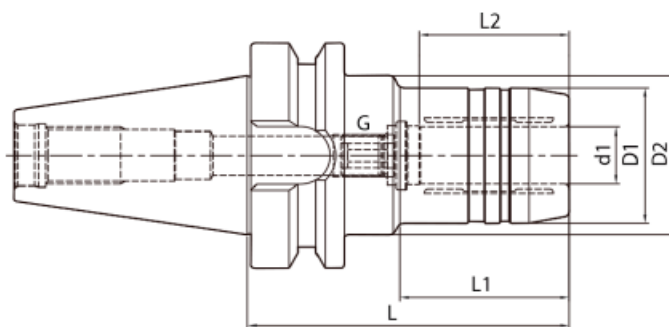
Referencia	D	d	D1	A	l1	l2
S07.107.03	20	3	10	150	15	5
S07.107.04	20	4	10	150	20	5
S07.107.05	20	5	10	150	20	5
S07.107.06	20	6	10	150	36	10
S07.107.08	20	8	12	150	36	10
S07.107.10	20	10	14	150	42	10
S07.107.12	20	12	16	150	47	10





**Portaherramienta Hidráulico - MAS 403 BT**

- Sistemas: AD/B Refrigeración Interior y Lateral
- Equilibrado: G2.3 - 25.000 Rpm



Referencia	BT	D1	D2	D3	D4	L1	L2	L3	L4	L5
S04H.406.06	BT 40	6	26	44.5	22	90	38	10	43	48
S04H.406.08	BT 40	8	28	44.5	24	90	38	10	44.5	63
S04H.406.10	BT 40	10	30	44.5	26	90	42	10	44.5	63
S04H.406.12	BT 40	12	32	44.5	28	90	47	10	44.5	63
S04H.406.16	BT 40	16	38	50	30	90	47	10	44.5	63
S04H.406.20	BT 40	20	42	50	38	90	52	10	47.5	63
S04H.406.25	BT 40	25	57	62	53	100	58	10	55	73
S04H.406.32	BT 40	32	62	-	58	105	62	10	-	78
S04H.506.06	BT 50	6	26	44.5	90	34	27	-	-	-
S04H.506.08	BT 50	8	28	44.5	90	34	27	-	-	-
S04H.506.10	BT 50	10	30	44.5	90	34	32	-	-	-
S04H.506.12	BT 50	12	32	44.5	90	34	37	-	-	-
S04H.506.14	BT 50	14	34	44.5	90	34	37	-	-	-
S04H.506.16	BT 50	16	38	44.5	90	34	42	-	-	-
S04H.506.18	BT 50	18	40	44.5	90	34	42	-	-	-
S04H.506.20	BT 50	20	42	44.5	90	34	42	-	-	-
S04H.506.25	BT 50	25	57	63	105	52	48	-	-	-
S04H.506.32	BT 50	32	64	75	115	62	55	-	-	-
S04H.506.06.1	BT 50	6	26	44.5	120	34	27	-	-	-
S04H.506.08.1	BT 50	8	28	44.5	120	34	27	-	-	-
S04H.506.10.1	BT 50	10	30	44.5	120	34	32	-	-	-
S04H.506.12.1	BT 50	12	32	44.5	120	34	37	-	-	-
S04H.506.14.1	BT 50	14	34	44.5	120	34	37	-	-	-
S04H.506.16.1	BT 50	16	38	44.5	120	34	42	-	-	-
S04H.506.18.1	BT 50	18	40	44.5	120	34	42	-	-	-
S04H.506.20.1	BT 50	20	42	44.5	120	34	42	-	-	-
S04H.506.25.1	BT 50	25	57	63	150	97	48	-	-	-
S04H.506.32.1	BT 50	32	64	75	150	97	55	-	-	-

**Porta BT - Eje Mecanizable**

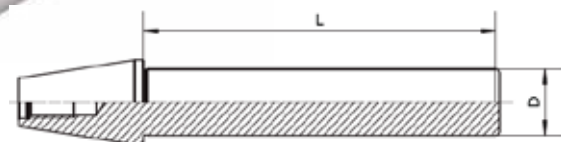
- Sistema SK de eje para mecanizado a medida.

Referencia	SK	D	L
S90.BT40.50	BT 40	50	160
S90.BT40.63	BT 40	63	160
S90.BT40.63.1	BT 40	63	250
S90.BT50.100	BT 50	100	160
S90.BT50.10.1	BT 50	100	250

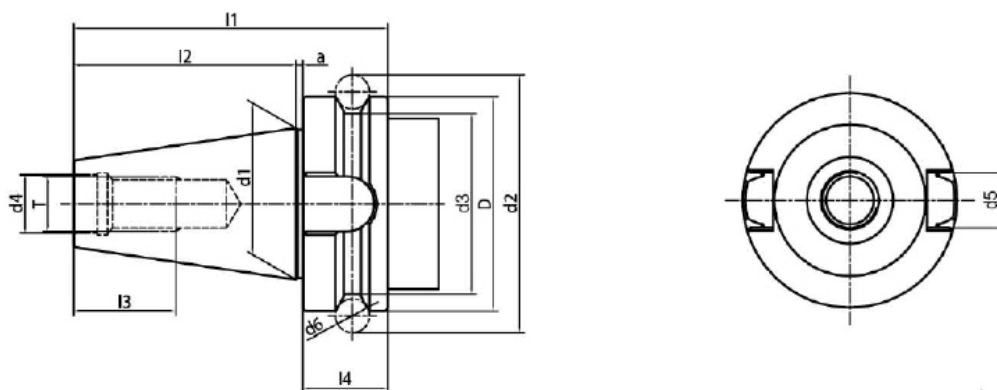

**Porta BT - Eje Verificador Centrado**

- Sistema SK para verificación en máquina.
- Equilibrado a +/-0.002

Referencia	SK	D	L
S99.BT30.32	BT 30	32	250
S99.BT40.40	BT 40	40	300
S99.BT50.50	BT 50	50	300



## MAS 403 BBT – Doble Contacto



**Dimensiones Generales de Amarre**

Modelo	D	d1	d2	d3	d4	d5	d6	l1	l2	l3	l4	d	T
BT30	46	31.75	56.14	38	12.5	16.1	8	70.40	48.40	24	20	2	M12x1.75
BT40	63	44.45	75.67	53	17	16	10	92.40	65.40	30	25	2	M16x2
BT50	100	68.85	119.01	85	25	25.7	15	139.80	101.80	45	35	3	M24x3

### Portapinzas Tipo HKS Doble Contacto – MAS 403

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	BT	Capacidad	L	D
S64.409.20	BBT 40	20 – HKS 20	90	53
S64.409.25	BBT 40	25 – HKS 25	90	53
S64.409.32	BBT 40	32 – HKS 32	90	53



### Portapinzas Tipo ER Doble Contacto – MAS 403 BBT

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BT30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

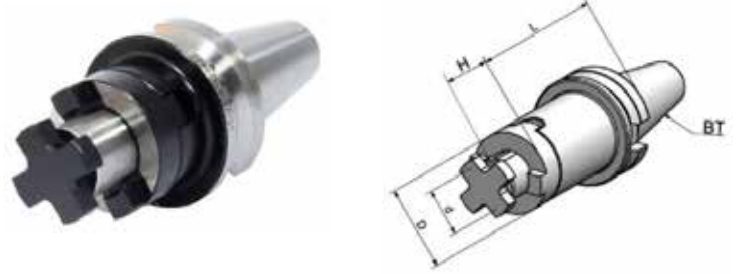
Referencia	BT	Capacidad	L	D
S02.329.10	BBT 30	1-10 (ER 16)	70	32
S02.329.16	BBT 30	2-16 (ER 25)	70	42
S02.329.20	BBT 30	2-20 (ER 32)	70	50
S02.329.26	BBT 30	3-26 (ER 40)	70	63
S02.429.10	BBT 40	1-10 (ER 16)	63	32
S02.429.16	BBT 40	2-16 (ER 25)	60	42
S02.429.20	BBT 40	2-20 (ER 32)	70	50
S02.429.26	BBT 40	3-26 (ER 40)	80	63
S02.429.10.1	BBT 40	1-10 (ER 16)	100	32
S02.429.16.1	BBT 40	2-16 (ER 25)	100	42
S02.429.20.1	BBT 40	2-20 (ER 32)	100	50
S02.429.26.1	BBT 40	3-26 (ER 40)	100	63
S02.429.10.2	BBT 40	1-10 (ER 16)	160	32
S02.429.16.2	BBT 40	2-16 (ER 25)	160	42
S02.429.20.2	BBT 40	2-20 (ER 32)	160	50
S02.429.26.2	BBT 40	3-26 (ER 40)	160	63
S02.529.10	BBT 50	1-10 (ER 16)	70	32
S02.529.16	BBT 50	2-16 (ER 25)	70	42
S02.529.20	BBT 50	2-20 (ER 32)	70	50
S02.529.26	BBT 50	3-26 (ER 40)	80	63



**Eje Portafresas Combinado Doble Contacto – MAS 403 BBT**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BBT30
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	d h6	A	H	D
S10.309.16	BBT 30	16	45	47	32
S10.309.22	BBT 30	22	47	19	40
S10.309.27	BBT 30	27	49	21	48
S10.409.16	BBT 40	16	55	17	32
S10.409.22	BBT 40	22	55	19	40
S10.409.27	BBT 40	27	55	21	48
S10.509.16	BBT 50	16	55	17	38
S10.509.22	BBT 50	22	55	19	48
S10.509.27	BBT 50	27	55	21	58
S10.509.32	BBT 50	32	55	24	78
S10.509.40	BBT 50	40	80	27	88


**Portafresas Tipo Weldon Doble Contacto – MAS 403 BBT**

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BBT30
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	d	L	D
S04.309.06	BBT 30	6	50	25
S04.309.08	BBT 30	8	50	28
S04.309.10	BBT 30	10	50	35
S04.309.12	BBT 30	12	50	42
S04.309.14	BBT 30	14	50	44
S04.309.16	BBT 30	16	63	48
S04.309.18	BBT 30	18	63	50
S04.309.20	BBT 30	20	63	52
S04.409.06	BBT 40	6	50	25
S04.409.08	BBT 40	8	50	28
S04.409.10	BBT 40	10	63	35
S04.409.12	BBT 40	12	63	42
S04.409.14	BBT 40	14	63	44
S04.409.16	BBT 40	16	63	48
S04.409.18	BBT 40	18	63	50
S04.409.20	BBT 40	20	63	52
S04.409.25	BBT 40	25	90	65
S04.409.32	BBT 40	32	100	72
S04.409.40	BBT 40	40	120	80
S04.409.06.1	BBT 40	6	100	25
S04.409.08.1	BBT 40	8	100	28
S04.409.10.1	BBT 40	10	100	35
S04.409.12.1	BBT 40	12	100	42
S04.409.14.1	BBT 40	14	100	44
S04.409.16.1	BBT 40	16	100	48
S04.409.18.1	BBT 40	18	100	50
S04.409.20.1	BBT 40	20	100	52
S04.509.06	BBT 50	6	63	25
S04.509.08	BBT 50	8	63	28
S04.509.10	BBT 50	10	63	35
S04.509.12	BBT 50	12	80	42
S04.509.14	BBT 50	14	80	44
S04.509.16	BBT 50	16	80	48
S04.509.18	BBT 50	18	80	50
S04.509.20	BBT 50	20	80	52
S04.509.25	BBT 50	25	100	65
S04.509.32	BBT 50	32	105	72
S04.509.40	BBT 50	40	110	80





### Eje Portafresas Doble Contacto – MAS 403 BBT

- Sistema AD/B Refrigeración Interior y Lateral - Excepto BBT30
- Equilibrado: G6.3 - 15.000 Rpm

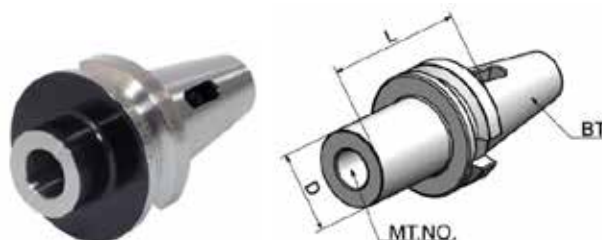
Referencia	BT	d	L	H	D
S11.309.16	BBT 30	16	40	17	38
S11.309.22	BBT 30	22	40	19	48
S11.309.27	BBT 30	27	40	21	58
S11.309.32	BBT 30	32	50	24	78
S11.409.16	BBT 40	16	40	17	38
S11.409.22	BBT 40	22	40	19	48
S11.409.27	BBT 40	27	40	21	58
S11.409.32	BBT 40	32	50	24	78
S11.409.40	BBT 40	40	50	24	78
S11.409.16.1	BBT 40	32	100	24	78
S11.409.22.1	BBT 40	32	100	24	78
S11.409.27.1	BBT 40	32	100	24	78
S11.509.16	BBT 50	16	55	17	38
S11.509.22	BBT 50	22	55	19	48
S11.509.27	BBT 50	27	55	21	58
S11.509.32	BBT 50	32	55	24	78
S11.509.40	BBT 50	40	55	27	88



### Porta Reductor Cono Morse DIN 228 Doble Contacto – MAS 403 BBT

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	MK	L	D
S07.329.01	BBT 30	1	45	25
S07.329.02	BBT 30	2	60	32
S07.329.03	BBT 30	3	75	40
S07.429.01	BBT 40	1	50	25
S07.429.02	BBT 40	2	50	32
S07.429.03	BBT 40	3	70	40
S07.429.04	BBT 40	4	90	48



### Eje Adaptador Pinzas Roscado Doble Contacto - MAS 403 BBT

- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm)
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

Referencia	BT	Capacidad	Serie	L	D
S16.429.12	BBT 40	M3-M14	1	65	38
S16.429.20	BBT 40	M5-M22	2	93	53



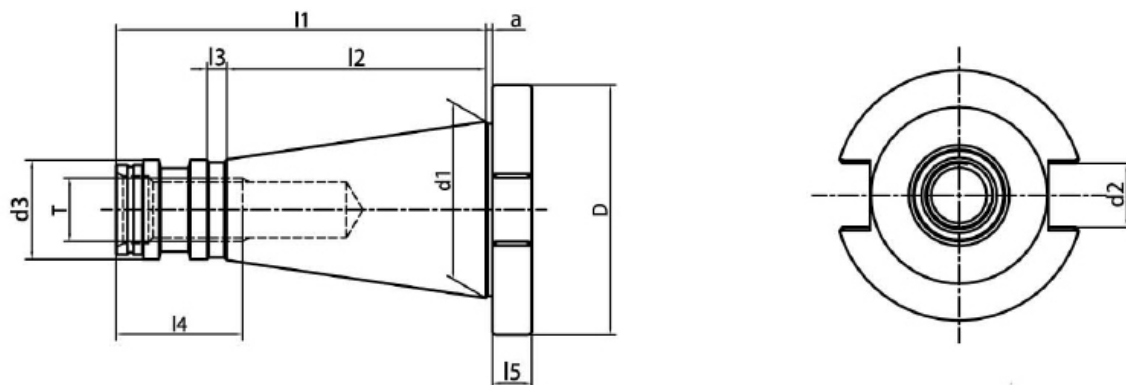
### Portaherramientas Cabeza Roscada Doble Contacto – MAS 403 BBT

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	BT	Rosca	D	d2	L	A
S19.409.12	BBT 40	M-12	24	21	25	52
S19.409.12.1	BBT 40	M-12	31	21	75	102
S19.409.12.2	BBT 40	M-12	33	21	100	127
S19.409.16	BBT 40	M-16	29	29	25	52
S19.409.16.1	BBT 40	M-16	34	29	50	77
S19.409.16.2	BBT 40	M-16	34	29	75	102
S19.409.16.3	BBT 40	M-16	36	29	100	127



## DIN 2080



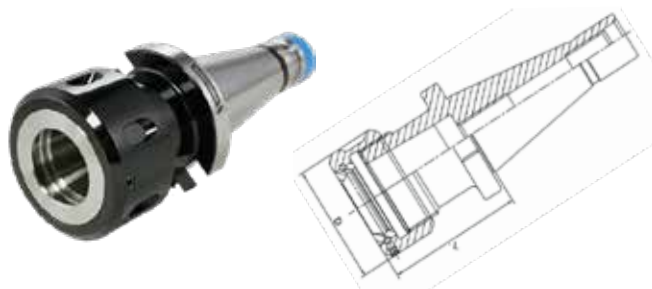
### Dimensiones Generales de Amarre

SK	D	d1	d2	d3	A	I1	I2	I3	I4	I5	T
30	50	31.75	16.1	17.04	1.6	68.4	48.4	3	24	8	M12
40	63	44.45	16.1	24.94	1.6	93.4	65.4	5	32	10	M16
50	97.5	68.85	25.7	39.19	3.2	126.8	101.8	8	47	12	M24

### Portapinzas Tipo OZ – DIN 2080

- Sistema AD/B Refrigeración Interior y Lateral - Excepto ISO 30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

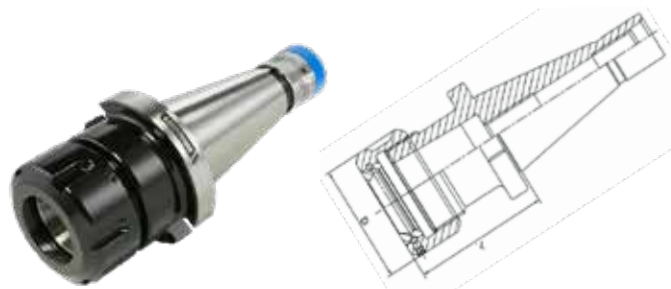
Referencia	ISO	Capacidad	L	D
S01.301.16	ISO 30	2-16 – OZ16	50	43
S01.401.16	ISO 40	2-16 – OZ16	55	43
S01.401.25	ISO 40	2-25 – OZ25	66	60
S01.401.32	ISO 40	3-32 – OZ32	95	72
S01.501.25	ISO 50	2-25 – OZ25	71	60
S01.501.32	ISO 50	3-32 – OZ32	73	72



### Portapinzas Tipo ER – DIN 2080

- Sistema AD/B Refrigeración Interior y Lateral - Excepto ISO 30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	ISO	Capacidad	L	D
S02.301.16	ISO 30	2-16 – ER25	50	42
S02.301.20	ISO 30	2-20 – ER32	50	50
S02.401.16	ISO 40	2-16 – ER25	50	42
S02.401.20	ISO 40	2-20 – ER32	50	50
S02.401.26	ISO 40	3-26 – ER40	80	63
S02.501.20	ISO 50	2-20 – ER32	63	50
S02.501.26	ISO 50	3-26 – ER40	63	63



### Reductor Cono Morse DIN 228 - DIN 2080

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

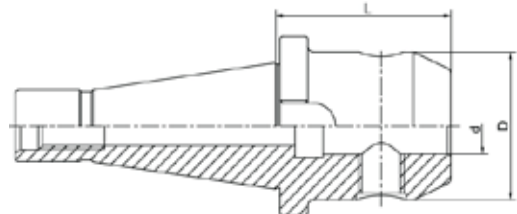
Referencia	ISO	CM/MT	L	D
S07.301.01	ISO 30	1	50	25
S07.301.02	ISO 30	2	50	32
S07.301.03	ISO 30	3	75	40
S07.401.01	ISO 40	1	50	25
S07.401.02	ISO 40	2	50	32
S07.401.03	ISO 40	3	65	40
S07.401.04	ISO 40	4	95	48
S07.501.02	ISO 50	2	60	32
S07.501.03	ISO 50	3	65	40
S07.501.04	ISO 50	4	70	48
S07.501.05	ISO 50	5	105	63



### Portaherramientas Tipo Weldon – DIN 2080

- Sistema AD/B Refrigeración Interior y Lateral - Excepto ISO 30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm

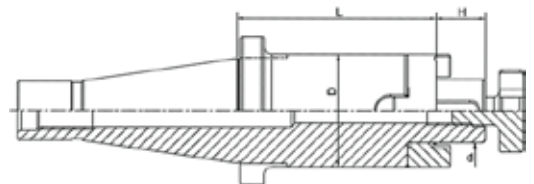
Referencia	ISO	d	L	D
S04.301.06	ISO 30	6	40	25
S04.301.08	ISO 30	8	40	28
S04.301.10	ISO 30	10	40	35
S04.301.12	ISO 30	12	40	42
S04.301.14	ISO 30	14	50	44
S04.301.16	ISO 30	16	50	48
S04.301.18	ISO 30	18	50	50
S04.301.20	ISO 30	20	63	52
S04.401.06	ISO 40	6	50	25
S04.401.08	ISO 40	8	50	28
S04.401.10	ISO 40	10	50	35
S04.401.12	ISO 40	12	50	42
S04.401.14	ISO 40	14	50	44
S04.401.16	ISO 40	16	63	48
S04.401.18	ISO 40	18	63	50
S04.401.20	ISO 40	20	63	52
S04.401.25	ISO 50	25	80	65
S04.401.32	ISO 50	32	80	72
S04.401.40	ISO 50	40	90	80
S04.501.06	ISO 50	6	63	25
S04.501.08	ISO 50	8	63	28
S04.501.10	ISO 50	10	63	35
S04.501.12	ISO 50	12	63	42
S04.501.14	ISO 50	14	63	44
S04.501.16	ISO 50	16	63	48
S04.501.18	ISO 50	18	63	50
S04.501.20	ISO 50	20	80	52
S04.501.25	ISO 50	25	80	65
S04.501.32	ISO 50	32	80	72
S04.501.40	ISO 50	40	90	80



### Eje Portafresas Combinado – DIN 2080

- Sistema AD/B Refrigeración Interior y Lateral - Excepto ISO 30 Tipo AD
- Equilibrado: G6.3 - 15.000 Rpm

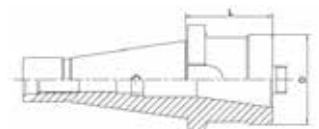
Referencia	ISO	d	L	H	D
S10.301.16	ISO 30	16	35	25	32
S10.301.22	ISO 30	22	35	25	40
S10.301.27	ISO 30	27	35	25	48
S10.301.32	ISO 30	32	50	40	58
S10.401.16	ISO 40	16	52	40	32
S10.401.22	ISO 40	22	52	40	40
S10.401.27	ISO 40	27	52	40	48
S10.401.32	ISO 40	32	52	40	58
S10.401.40	ISO 40	40	52	40	70
S10.501.16	ISO 50	16	55	40	32
S10.501.22	ISO 50	22	55	40	40
S10.501.27	ISO 50	27	55	40	48
S10.501.32	ISO 50	32	55	40	58
S10.501.40	ISO 50	40	55	40	48



### Porta Reductor – DIN 2080

- Sistema A Refrigeración Exterior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	ISO	Reductor	L	D
S09.401.30	ISO 40	30	50	42
S09.401.40	ISO 40	40	100	50
S09.501.40	ISO 50	40	50	42
S09.501.50	ISO 50	50	125	50



**Eje Portafresas – DIN 2080**

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	ISO	d	H	L	D
S11.401.16	ISO 40	16	17	30	38
S11.401.22	ISO 40	22	19	30	48
S11.401.27	ISO 40	27	21	30	58
S11.401.32	ISO 40	32	24	30	78
S11.401.40	ISO 40	40	27	30	55
S11.501.22	ISO 50	22	19	35	48
S11.501.27	ISO 50	27	21	35	58
S11.501.32	ISO 50	32	24	40	78
S11.501.40	ISO 50	40	27	33	88
S11.501.60	ISO 50	60	40	55	129

**Eje Adaptador DIN – DIN 2080**

- Sistema AD/B Refrigeración Interior y Lateral
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	ISO	D	L	I
S14.301.12	ISO 30	B12	15	18.5
S14.301.16	ISO 30	B16	17	24
S14.401.12	ISO 40	B12	15	18.5
S14.401.16	ISO 40	B16	17	24
S14.401.18	ISO 40	B18	17	32
S14.501.16	ISO 50	B16	20	24
S14.501.18	ISO 50	B18	20	32

**Portabrocas Industrial – DIN 2080**

- Sistemas: AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave Incluida

Referencia	ISO	Capacidad	A	D
S15.301.08	ISO 30	0-8	60	36
S15.301.13	ISO 30	1-13	90	50
S15.301.16	ISO 30	2.5-16	95	50
S15.401.08	ISO 40	0-8	63	36
S15.401.13	ISO 40	1-13	83	50
S15.401.16	ISO 40	2.5-16	88	50
S15.501.13	ISO 50	1-13	85	50
S15.501.16	ISO 50	2.5-16	90	50

**Portabrocas DIN 2080**

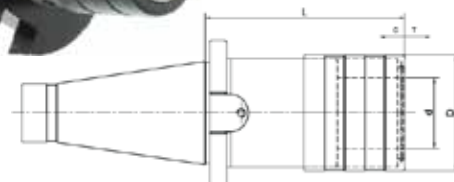
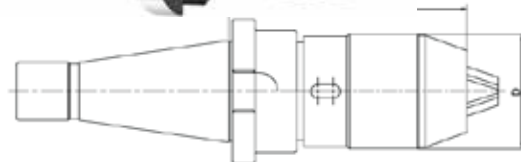
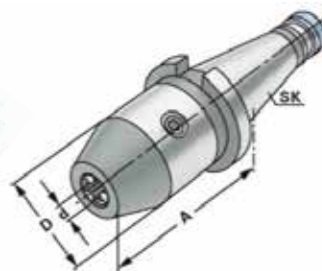
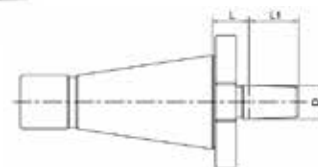
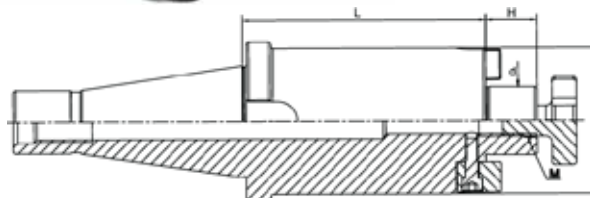
- Sistemas: AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	ISO	Capacidad	L	D
S17.401.13	ISO 40	1-13	110	48
S17.401.16	ISO 40	1-16	105	53
S17.501.13	ISO 50	1-13	100	48
S17.501.16	ISO 50	1-16	110	53

**Eje Adaptador Pinzas Roscado – DIN 2080**

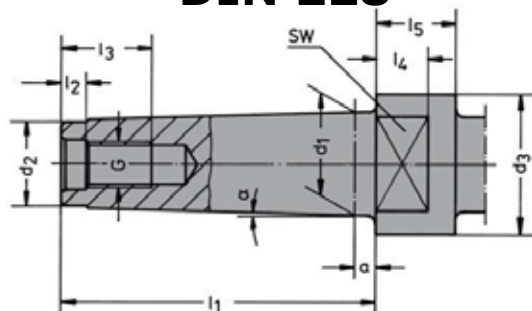
- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm) y Serie 3 (48 mm).
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

Referencia	ISO	Capacidad	Serie	A	D
S16.301.12	ISO 30	M3 - M14	1	55	38
S16.301.20	ISO 30	M5 - M22	2	86	48
S16.401.12	ISO 40	M3 - M14	1	55	58
S16.401.20	ISO 40	M5 - M22	2	86	78
S16.401.36	ISO 40	M14 - M36	3	132	55
S16.501.12	ISO 50	M3 - M14	1	62	48
S16.501.20	ISO 50	M5 - M22	2	90	58
S16.501.36	ISO 50	M14 - M36	3	117	78





## DIN 228



Dimensiones Generales de Amarre

SK	Grados	G	A	D1	D2 Max	D3	SW	L1	L2	L3	L4	L5
1	1°25´43"	M-6	3.5	12.065	9	-	-	-	4	16	-	-
2	1°25´50"	M-10	5	17.780	14	-	-	-	5	24	-	-
3	1°26´16"	M-12	5	23.825	19	36	24	86	5.5	24	12	18
4	1°29´15"	M-16	6.5	31.267	25	43	32	109	8.2	32	15	23
5	1°30´26"	M-20	6.5	44.399	35.7	60	45	136	10	40	18	28
6	1°29´36"	M-24	8	63.348	51	84	65	190	11.5	47	25	39

### Portapinzas OZ - Cono Morse – DIN 228 - 1A

• Llave no incluida (Ver sección accesorios)

Referencia	CM	Capacidad	L	D
S01.102.25	2	3-25 - OZ25	60	70
S01.103.25	3	3-25 - OZ25	60	70
S01.104.25	4	3-25 - OZ25	60	70



### Portapinzas ER - Cono Morse – DIN 228 - 1A

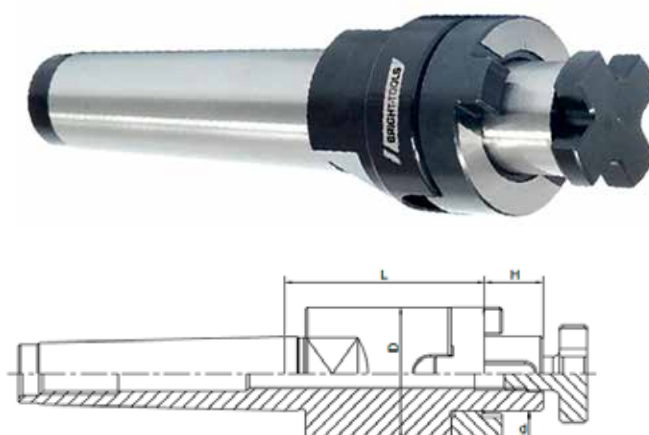
• Llave no incluida (Ver sección accesorios)

Referencia	CM	Capacidad	L	D
S02.108.01	2	1.10 – ER16	45	32
S02.108.01.1	2	2.16 – ER25	50	42
S02.108.02	3	2.16 – ER25	56	42
S02.108.03	3	2.20 – ER32	70	50
S02.108.03.1	3	3.26 – ER40	80	63
S02.108.04	4	2.16 – ER25	63	42
S02.108.05	4	2.20 – ER32	65	50
S02.108.05.1	4	3.26 – ER40	96	78
S02.108.06	5	3.26 – ER40	86	63
S02.108.06.1	5	6.36 – ER50	91	78



### Eje Portafresas Combi - Cono Morse – DIN 228 - 1A

Referencia	CM	d	L	H	D
S10.108.20	2	16	43	17	32
S10.108.21	2	22	43	19	40
S10.108.30	3	16	48	17	32
S10.108.31	3	22	48	19	40
S10.108.32	3	27	48	21	48
S10.108.33	3	32	48	24	58
S10.108.40	4	16	55	17	32
S10.108.41	4	22	55	19	40
S10.108.42	4	27	55	21	48
S10.108.43	4	32	55	24	58
S10.108.50	5	16	75	17	32
S10.108.51	5	22	75	19	40
S10.108.52	5	27	75	21	48
S10.108.53	5	32	75	24	58



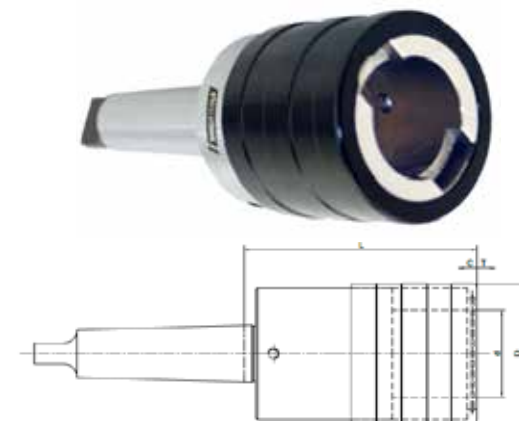
**Eje Portafresas Tipo Cono Morse – DIN 228 - 1A**

Referencia	CM	d	D	L	H	M
S11.102.16	2	16	38	30	17	M8
S11.102.22	2	22	48	30	19	M10
S11.102.27	2	27	58	30	21	M12
S11.103.16	3	16	38	30	17	M8
S11.103.22	3	22	48	30	19	M10
S11.103.27	3	27	58	30	21	M12
S11.103.32	3	32	78	30	24	M16
S11.104.16	4	16	38	32	17	M8
S11.104.22	4	22	48	32	19	M10
S11.104.27	4	27	58	32	21	M12
S11.104.32	4	32	78	32	24	M16
S11.104.40	4	40	88	32	27	M20


**Eje Adaptador Pinzas de Roscado DIN 228 – 1B**

- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm) y Serie 3 (48 mm).
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

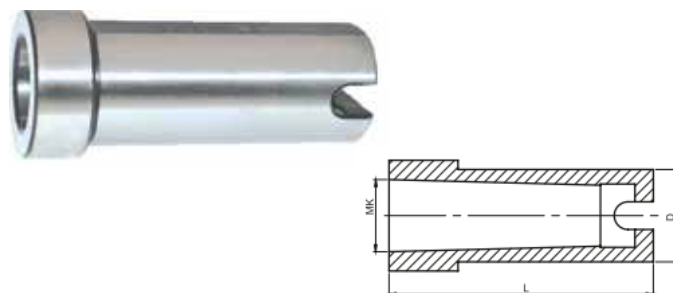
Referencia	CM	Capacidad	Serie	L
S16.107.212	2	M3 – M14	1	46
S16.107.320	3	M5 – M22	2	70
S16.107.410	4	M3 – M14	1	85
S16.107.420	4	M5 – M22	2	85
S16.107.430	4	M14 – M36	3	85
S16.107.450	5	M14 – M36	3	103


**Eje de Amarre DIN – DIN 228 - 1B**

Referencia	CM	Amarre	L
S14.106.00	1	B.10	92
S14.106.01	1	B.12	102
S14.106.02	2	B.12	102
S14.107.02	2	B.16	112
S14.107.03	3	B.16	134
S14.107.03.2	3	B.18	140
S14.107.04	4	B.16	158
S14.107.04.2	4	B.18	166
S14.107.05	5	B.18	193


**Casquillo Adaptador Cono Morse**

Referencia	Ø Exterior	Cono Morse	Longitud
S09.CM321	32	1	85
S09.CM322	32	2	85
S09.CM323	32	3	85
S09.CM401	40	1	90
S09.CM402	40	2	90
S09.CM403	40	3	90
S09.CM404	40	4	115


**Portabrocas Cono Morse – DIN 228 - 1B**

- Llave no incluida (Ver sección accesorios)

Referencia	CM	Campo de Amarre
S16.CM2	2	1-16
S16.CM3	3	1-16
S16.CM4	4	1-16



### Casquillo Reductor Cono Morse DIN 2185 – DIN 228 - 1B

Referencia	CM Exterior	CM Interior	L
S07.107.21	2	1	92
S07.107.31	3	1	96
S07.107.32	3	2	98
S07.107.42	4	2	124
S07.107.43	4	3	132
S07.107.53	5	3	156
S07.107.54	5	4	171
S07.107.64	6	4	218
S07.107.65	6	5	218



### Casquillo Cono Morse - DIN6328 - Eje cilíndrico con apriete



Referencia	CM	Diametros Interiores disponibles	Diámetro exterior	Longitud total
S06.CM1.(*)	CM-1	2.5 / 2.8 / 3.5 / 4 / 4.5 / 4.5 / 5 / 5.5 / 6 / 7 / 8 mm	12.2	65.5
S06.CM2.(*)	CM-2	4.5 / 5.5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 12.5 mm	18	78.5
S06.CM3.(*)	CM-3	8 / 9 / 10 / 11 / 12 / 12.5 / 14 / 16 mm	24	98
S06.CM4.(*)	CM-4	12 / 14 / 16 / 18 / 20 / 22 / 25 mm	31.5	123
S06.CM5. (*)	CM-5	22 / 25 / 28 / 30 / 32 / 36 mm	44.7	156

(\*) - Cambiar \* por el diámetro interior necesario. Ejemplo Para Diámetro 4.5 del modelo S06.CM2, el código a pedir sería: S06CM245

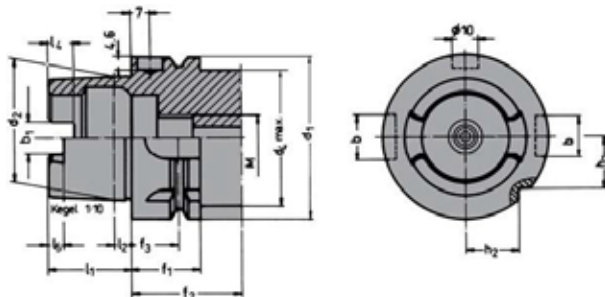
### Casquillo Extensión Cono Morse

• Según Norma DIN 2187 - Completamente templado y rectificado.

Referencia	CM Exterior	CM Interior	D	L1	L2
S17.0101	1	1	20	83	145
S17.0102	1	2	30	98	160
S17.0201	2	1	20	85	160
S17.0202	2	2	30	100	175
S17.0203	2	3	36	121	196
S17.0204	2	4	48	145	220
S17.0301	3	1	20	81	175
S17.0302	3	2	30	100	194
S17.0303	3	3	36	112	215
S17.0304	3	4	48	146	240
S17.0401	4	1	20	82,5	200
S17.0102	4	2	30	97,5	215
S17.0403	4	3	36	122,5	240
S17.0404	4	4	48	147,5	265
S17.0405	4	5	63	182,5	300
S17.0501	5	1	20	82,5	232
S17.0502	5	2	30	97,5	247
S17.0503	5	3	36	118,5	268
S17.0504	5	4	48	150,5	300
S17.0505	5	5	63	182,5	335
S17.0506	5	6	82	247	396
S17.0603	6	3	36	120	330
S17.0604	6	4	48	180	355
S17.0605	6	5	63	180	390
S17.0606	6	6	82	241	451



## DIN 69893 – HSK

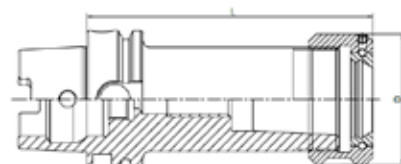

**Dimensiones Generales de Amarre - Forma A**

D1	D2	D4	L1	L2	L4	L5	M	F1	F2	F3	B1	B2	B3
32	24	26	16	3.2	5.0	3.0	M10X1	20	35	16	7.05	7	9
40	30	34	20	4.0	6.0	3.5	M12X1	26	35	16	8.05	9	11
50	38	42	25	5.0	7.5	4.5	M16X1	26	42	18	10.54	12	14
63	48	53	32	6.3	10.0	6.0	M18X1	26	42	18	12.54	16	18
80	60	67	40	8.0	12.0	8.0	M20X1.5	26	42	18	16.04	18	20
100	75	85	50	10.0	15.0	10.0	M24X1.5	29	45	20	20.02	22	20

### HSK - Forma A - Porta-Pinzas OZ

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Llave no incluida (Ver sección accesorios)

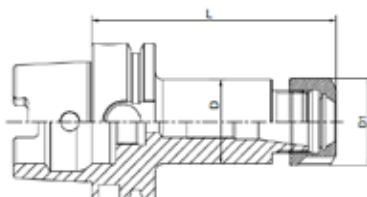
Referencia	HSK	Capacidad	A	D
S01.A63.16	A-63	2-16 (OZ16)	100	43
S01.A63.25	A-63	2-25 (OZ25)	100	60
S01.A63.32	A-63	3-32 (OZ32)	120	72
S01.A100.16	A-100	2-16 (OZ16)	110	43
S01.A100.25	A-100	2-25 (OZ25)	120	60
S01.A100.32	A-100	3-32 (OZ32)	130	72



### HSK - Forma A - Porta-Pinzas ER

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	HSK	Capacidad	L	D1
S02.A63.10	A-63	1-10 (ER11)	63	32
S02.A63.10	A-63	1-10 (ER16)	100	32
S02.A63.16	A-63	2-16 (ER25)	100	42
S02.A63.20	A-63	2-20 (ER32)	100	50
S02.A63.26	A-63	3-26 (ER40)	120	63
S02.A63.10.1	A-63	1-10 (ER16)	160	32
S02.A63.16.1	A-63	2-16 (ER25)	160	42
S02.A63.20.1	A-63	2-20 (ER32)	160	50
S02.A63.26.1	A-63	3-26 (ER40)	160	63
S02.A63.10.2	A-63	1-10 (ER16)	200	32
S02.A63.16.2	A-63	2-16 (ER25)	200	42
S02.A63.20.2	A-63	2-20 (ER32)	200	50
S02.A100.16	A-100	2-16 (ER25)	100	42
S02.A100.20	A-100	2-20 (ER32)	100	50
S02.A100.26	A-100	3-26 (ER40)	120	63
S02.A100.16.2	A-100	2-16 (ER25)	160	42
S02.A100.20.2	A-100	2-20 (ER32)	160	50
S02.A100.26.2	A-100	3-26 (ER40)	160	63
S02.A100.16.3	A-100	2-16 (ER25)	200	42
S02.A100.20.3	A-100	2-20 (ER32)	200	50
S02.A100.26.3	A-100	3-26 (ER40)	200	63

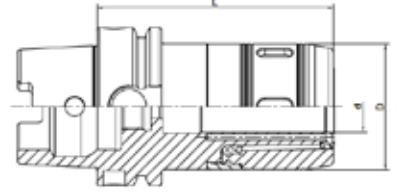




### HSK - Forma A - Porta-Pinzas Gran Apriete HKS

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Llave no incluida (Ver sección accesorios)

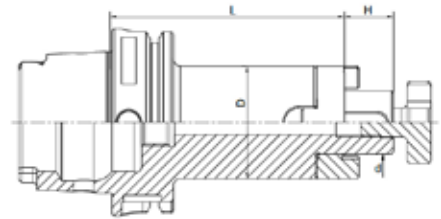
Referencia	HSK	Capacidad	A	D
S64.A63.20	A-63	20 (HKS20)	95	53
S64.A63.32	A-63	32 (HKS32)	110	68
S64.A100.20	A-100	20 (HKS20)	105	53
S64.A100.32	A-100	32 (HKS32)	105	68



### HSK - Forma A - Eje Portafresas Combinado

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

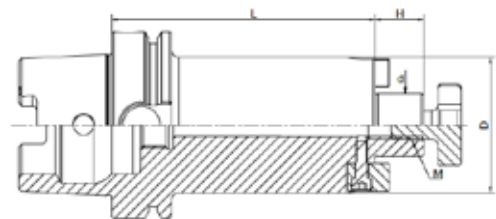
Referencia	HSK	d	D	H	L1
S10.A63.16	A-63	16	32	60	17
S10.A63.22	A-63	22	40	60	19
S10.A63.27	A-63	27	48	60	21
S10.A63.32	A-63	32	58	60	24
S10.A63.40	A-63	40	70	70	27
S10.A63.16.1	A-63	16	32	100	17
S10.A63.22.1	A-63	22	40	100	19
S10.A63.27.1	A-63	27	48	100	21
S10.A63.32.1	A-63	32	58	100	24
S10.A100.16	A-100	16	32	60	17
S10.A100.22	A-100	22	40	60	19
S10.A100.27	A-100	27	48	60	21
S10.A100.32	A-100	32	58	60	24
S10.A100.40	A-100	40	70	70	27



### HSK - Forma A - Eje Portafresas DIN 6357

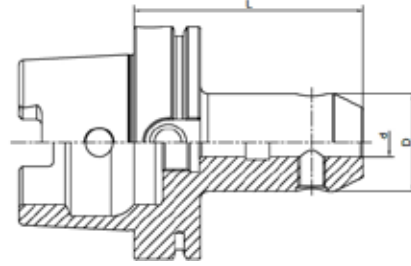
- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

Referencia	HSK	d	D	H	L
S11.A63.16	A-63	16	38	17	50
S11.A63.22	A-63	22	48	19	50
S11.A63.27	A-63	27	58	21	60
S11.A63.32	A-63	32	78	24	60
S11.A63.40	A-63	40	88	24	60
S11.A63.16.1	A-63	16	38	17	100
S11.A63.22.1	A-63	22	48	19	100
S11.A63.27.1	A-63	27	58	21	100
S11.A63.32.1	A-63	32	78	24	100
S11.A63.40.1	A-63	40	88	24	100
S11.A63.16.2	A-63	16	38	17	100
S11.A63.22.2	A-63	22	48	19	160
S11.A63.27.2	A-63	27	58	21	160
S11.A63.32.2	A-63	32	78	24	160
S11.A63.40.2	A-63	40	88	24	160
S11.A100.22	A-100	22	48	19	50
S11.A100.27	A-100	27	58	21	50
S11.A100.32	A-100	32	78	24	50
S11.A100.40	A-100	40	88	27	50
S11.A100.22.1	A-100	22	48	19	100
S11.A100.27.1	A-100	27	58	21	100
S11.A100.32.1	A-100	32	78	24	100
S11.A100.40.1	A-100	40	88	27	160
S11.A100.22.2	A-100	22	48	19	160
S11.A100.27.2	A-100	27	58	21	160
S11.A100.32.2	A-100	32	78	24	160
S11.A100.40.2	A-100	40	88	27	160



**HSK - Forma A - Portafresas Tipo Weldon DIN 1835-B**

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm



Referencia	HFK	d	L	D
S04.A63.06	A-63	6	65	28
S04.A63.08	A-63	8	65	28
S04.A63.10	A-63	10	65	35
S04.A63.12	A-63	12	80	42
S04.A63.14	A-63	14	80	44
S04.A63.16	A-63	16	80	48
S04.A63.18	A-63	18	80	50
S04.A63.20	A-63	20	80	52
S04.A63.25	A-63	25	110	65
S04.A63.32	A-63	32	110	72
S04.A63.40	A-63	40	125	80
S04.A63.06.1	A-63	6	100	25
S04.A63.08.1	A-63	8	100	28
S04.A63.10.1	A-63	10	100	35
S04.A63.12.1	A-63	12	100	35
S04.A63.14.1	A-63	14	100	44
S04.A63.16.1	A-63	16	100	48
S04.A63.18.1	A-63	18	100	50
S04.A63.20.1	A-63	20	100	52
S04.A63.06.2	A-63	6	160	25
S04.A63.08.2	A-63	8	160	28
S04.A63.10.2	A-63	10	160	35
S04.A63.12.2	A-63	12	160	35
S04.A63.14.2	A-63	14	160	44
S04.A63.16.2	A-63	16	160	48
S04.A63.18.2	A-63	18	160	50
S04.A63.20.2	A-63	20	160	52

Referencia	HFK	d	L	D
S04.A100.06	A-100	6	80	25
S04.A100.08	A-100	8	80	28
S04.A100.10	A-100	10	80	35
S04.A100.12	A-100	12	80	42
S04.A100.14	A-100	14	80	44
S04.A100.16	A-100	16	100	48
S04.A100.18	A-100	18	100	50
S04.A100.20	A-100	20	100	52
S04.A100.25	A-100	25	100	65
S04.A100.32	A-100	32	100	72
S04.A100.40	A-100	40	105	80
S04.A100.50	A-100	50	130	100
S04.A100.08.1	A-100	8	160	28
S04.A100.10.1	A-100	10	160	35
S04.A100.12.1	A-100	12	160	42
S04.A100.14.1	A-100	14	160	44
S04.A100.16.1	A-100	16	160	48
S04.A100.18.1	A-100	18	160	50
S04.A100.20.1	A-100	20	160	52
S04.A100.25.1	A-100	25	160	65
S04.A100.32.1	A-100	32	160	72
S04.A100.40.1	A-100	40	165	80

**HSK - Forma A - Eje Reductor Cono Morse DIN 6383**

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

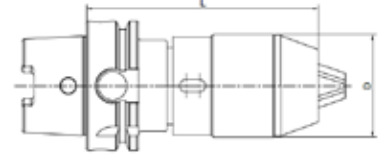
Referencia	HSK	MK	L	D
S07.A63.01	A-63	1	100	25
S07.A63.02	A-63	2	120	32
S07.A63.03	A-63	3	140	40
S07.A63.04	A-63	4	160	48
S07.A100.01	A-100	1	110	25
S07.A100.02	A-100	2	120	32
S07.A100.03	A-100	3	150	40
S07.A100.04	A-100	4	170	48
S07.A100.05	A-100	5	200	63



### HSK - Forma A - Portabrocas CNC

- Sistema A Refrigeración Exterior
- Equilibrado: G2.5 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

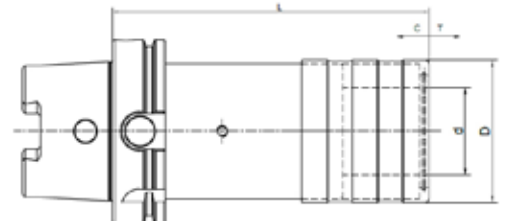
Referencia	HSK	Capacidad	D	L
S15.A63.13	A-63	1-13	48	130
S15.A63.16	A-63	3-16	53	140
S15.A100.13	A-100	1-13	48	140
S15.A100.16	A-100	3-16	53	150



### HSK - Forma A - Eje Adaptador Pinza de Roscado con Embrague

- Eje Adaptador Pinzas de Roscado con Sistema de Embrague.
- Disponible para la Serie 1 (19 mm), Serie 2 (31 mm) y Serie 3 (48 mm).
- Sistema A Sin Refrigeración
- Equilibrado: G6.3
- Con sistema de compensación

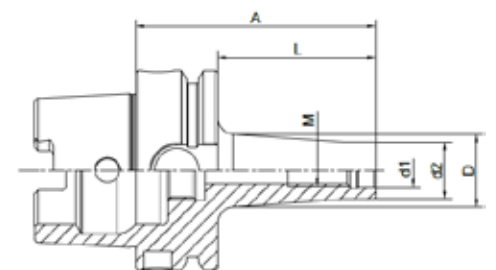
Referencia	HSK	Capacidad	L	D
S16.A63.12	A-63	M3 - M14 (Serie 1 ø16)	102	38
S16.A63.20	A-63	M5 - M22 (Serie 2 ø31)	140	54
S16.A63.36	A-63	M14 - M36 (Serie 3 ø48)	141	86
S16.A100.12	A-100	M3 - M14 (Serie 1 ø16)	112	38
S16.A100.20	A-100	M5 - M22 (Serie 2 ø31)	148	54
S16.A100.36	A-100	M14 - M36 (Serie 3 ø48)	144	86



### HSK - Forma A - Eje Portafresas Cabeza Roscada

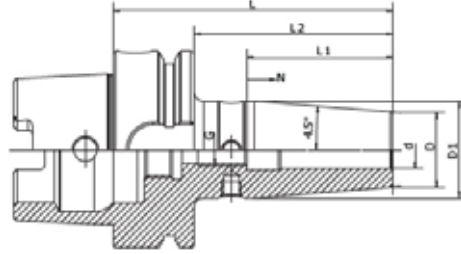
- Sistema AD Refrigeración Interior
- Equilibrado: G6.3 - 15.000 Rpm

Referencia	HSK	M	d1	d2	A	L	D
S19.A63.M8	A-63	M-8	8.5	14.5	51	25	15
S19.A63.M8.1	A-63	M-8	8.5	14.5	76	50	23
S19.A63.M8.3	A-63	M-8	8.5	14.5	101	75	23
S19.A63.M10	A-63	M-10	10.5	18	51	25	20
S19.A63.M10.1	A-63	M-10	10.5	18	76	50	23
S19.A63.M10.2	A-63	M-10	10.5	18	126	100	32
S19.A63.M10.3	A-63	M-10	10.5	18	176	150	36.5
S19.A63.12	A-63	M-12	12.5	21	51	25	24
S19.A63.M12.1	A-63	M-12	12.5	21	76	50	34
S19.A63.M12.2	A-63	M-12	12.5	21	101	75	31
S19.A63.M12.3	A-63	M-12	12.5	21	126	100	33
S19.A63.M12.4	A-63	M-12	12.5	21	176	150	40
S19.A63.M16	A-63	M-16	17	29	51	25	29
S19.A63.M16.1	A-63	M-16	17	29	76	50	34
S19.A63.M16.2	A-63	M-16	17	29	101	75	34
S19.A63.M16.3	A-63	M-16	17	29	126	100	36
S19.A63.M16.4	A-63	M-16	17	29	176	150	42.5
S19.A100.M8	A-100	M-8	8.5	14.5	49	50	23
S19.A100.M10	A-100	M-10	10.5	18	79	50	23
S19.A100.M10.1	A-100	M-10	10.5	18	129	100	32
S19.A100.M10.2	A-100	M-10	10.5	18	179	150	36.5
S19.A100.M12	A-100	M-12	12.5	21	79	50	24
S19.A100.M12.1	A-100	M-12	12.5	21	129	100	33
S19.A100.M12.2	A-100	M-12	12.5	21	179	150	40
S19.A100.M16	A-100	M-16	17	29	79	50	34
S19.A100.M16.1	A-100	M-16	17	29	129	100	36
S19.A100.M16.2	A-100	M-16	17	29	179	150	42.5



**HSK - Forma A - Portaherramientas Térmicos 4.5°**

- Sistemas: AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Necesario máquina de amarre térmico para su uso



Referencia	HSK	d	A	D	D1
S046.A63.03	A-63	3	80	11	15
S046.A63.04	A-63	4	80	14	22
S046.A63.05	A-63	5	80	16	22
S046.A63.06	A-63	6	80	21	27
S046.A63.08	A-63	8	80	21	27
S046.A63.10	A-63	10	85	24	32
S046.A63.12	A-63	12	90	24	32
S046.A63.14	A-63	14	90	27	34
S046.A63.16	A-63	16	95	27	34
S046.A63.18	A-63	18	95	33	42
S046.A63.20	A-63	20	100	33	42
S046.A63.25	A-63	25	115	44	53
S046.A63.32	A-63	32	120	44	53
S046.A63.03.1	A-63	3	120	11	15
S046.A63.04.1	A-63	4	120	14	22
S046.A63.05.1	A-63	5	120	16	22
S046.A63.06.1	A-63	6	120	21	27
S046.A63.08.1	A-63	8	120	21	27
S046.A63.10.1	A-63	10	120	24	32
S046.A63.12.1	A-63	12	120	24	32
S046.A63.14.1	A-63	14	120	27	34
S046.A63.16.1	A-63	16	120	27	34
S046.A63.18.1	A-63	18	120	33	42
S046.A63.20.1	A-63	20	120	33	42
S046.A63.25.1	A-63	25	120	44	53

Referencia	HSK	d	A	D	D1
S046.A100.04	A-100	4	85	14	22
S046.A100.05	A-100	5	85	16	22
S046.A100.06	A-100	6	85	21	27
S046.A100.08	A-100	8	85	21	27
S046.A100.10	A-100	10	90	24	32
S046.A100.12	A-100	12	95	24	32
S046.A100.14	A-100	14	95	27	34
S046.A100.16	A-100	16	100	27	34
S046.A100.18	A-100	18	100	33	42
S046.A100.20	A-100	20	105	33	42
S046.A100.25	A-100	25	120	44	53
S046.A100.32	A-100	32	120	44	53
S046.A100.40	A-100	40	150	78	90
S046.A100.50	A-100	50	150	78	90
S046.A100.06.1	A-100	6	120	21	27
S046.A100.08.1	A-100	8	120	21	27
S046.A100.10.1	A-100	10	120	24	32
S046.A100.12.1	A-100	12	120	24	32
S046.A100.14.1	A-100	14	120	27	34
S046.A100.16.1	A-100	16	120	27	34
S046.A100.18.1	A-100	18	120	33	42
S046.A100.20.1	A-100	20	120	33	42

**Alargador Térmico 4.5° - Para Portaherramientas Térmicos**

- Tipo AD y precisión de 0.003
- Modelos de medida 6-8-10-12 con tope de herramienta interior
- Válido para herramientas de metal duro

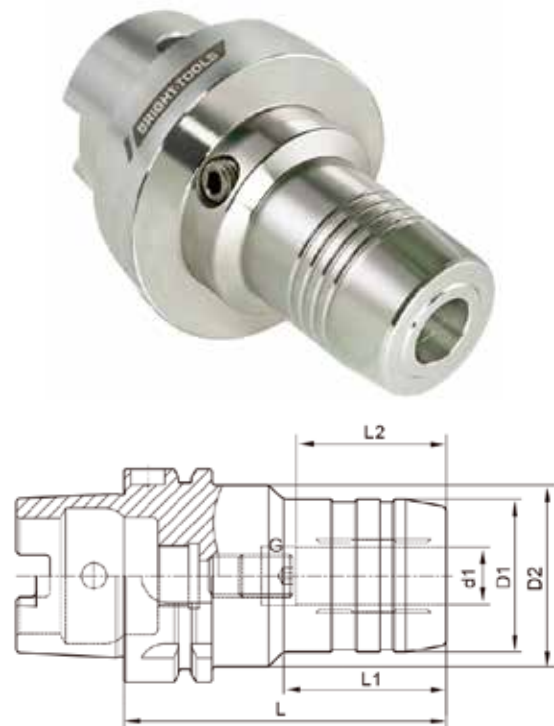
Referencia	D	d	D1	A	I1	I2
S07.107.03	20	3	10	150	15	5
S07.107.04	20	4	10	150	20	5
S07.107.05	20	5	10	150	20	5
S07.107.06	20	6	10	150	36	10
S07.107.08	20	8	12	150	36	10
S07.107.10	20	10	14	150	42	10
S07.107.12	20	12	16	150	47	10



### HSK - Forma A - Portaherramientas Hidráulico

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

Referencia	HSK	d1	D1	D2	L	L1	L2
S04H.A63.06	A-63	6	26	50	70	24	27
S04H.A63.08	A-63	8	28	50	70	25	27
S04H.A63.10	A-63	10	30	50	80	35	32
S04H.A63.12	A-63	12	32	50	85	40	37
S04H.A63.14	A-63	14	34	50	85	40	37
S04H.A63.16	A-63	16	38	50	90	46	42
S04H.A63.18	A-63	18	40	50	90	47	42
S04H.A63.20	A-63	20	42	50	90	48	42
S04H.A63.25	A-63	25	57	63	120	59	48
S04H.A63.32	A-63	32	64	75	125	63	55
S04H.A100.06	A-100	6	26	50	75	26	27
S04H.A100.08	A-100	8	28	50	75	26	27
S04H.A100.10	A-100	10	30	50	90	42	32
S04H.A100.12	A-100	12	32	50	95	47	37
S04H.A100.14	A-100	14	34	50	95	47	37
S04H.A100.16	A-100	16	38	50	100	53	42
S04H.A100.18	A-100	18	40	50	100	53	42
S04H.A100.20	A-100	20	42	50	105	59	42
S04H.A100.25	A-100	25	57	63	110	62	48
S04H.A100.32	A-100	32	64	75	110	62	55



### HSK - Forma A - Eje Mecanizable

- Sistema HSK-A de eje para mecanizado a medida.

Referencia	HSK	D	L
S90.A63.65.1	A-63	65	210
S90.A63.65.3	A-63	65	300
S90.A63.80.1	A-63	80	210
S90.A63.80.2	A-63	80	250
S90.A63.80.3	A-63	80	300
S90.A63.100.1	A-63	100	210
S90.A63.100.2	A-63	100	250
S90.A63.100.3	A-63	100	300
S90.A63.120.2	A-63	120	250
S90.A63.120.3	A-63	120	300
S90.A100.80.2	A-100	80	250
S90.A100.80.3	A-100	80	300
S90.A100.100.1	A-100	100	210
S90.A100.100.2	A-100	100	250
S90.A100.100.3	A-100	100	300
S90.A100.120.2	A-100	120	210
S90.A100.120.3	A-100	120	250
S90.A100.120.4	A-100	120	300



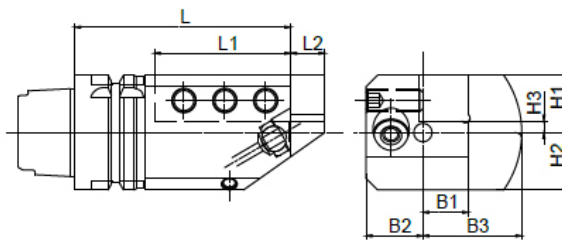
### HSK - Forma A - Eje Verificador Centrado

- Sistema HSK-A para verificación en máquina.
- Equilibrado a +/-0.002

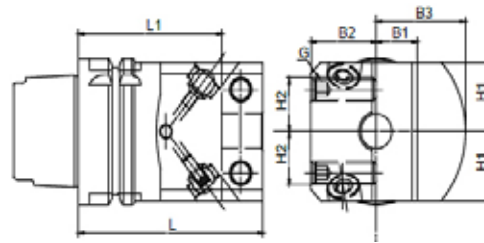
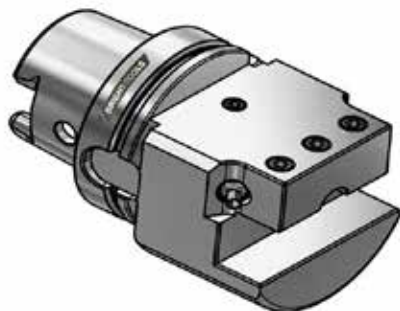
Referencia	HSK	D	L
S99.A63.40	A-63	40	300
S99.A100.50	A-100	50	300



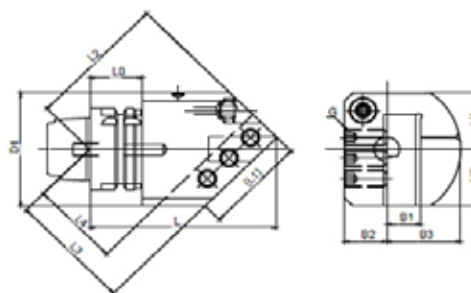


**HSK-T - Porta SBV - Refrentado**


Referencia	L	L1	L2	B1	B2	B3	H1	H2	H3	G
ST-A63-SBV2020R-105	105	60	15	20	32	43.5	33	32	13	M10
ST-A63-SBV2020L-105	105	60	15	20	32	43.5	33	32	13	M10
ST-A63-SBV2525R-115	115	70	20	25	32	45	30	30	5	M12
ST-A63-SBV2525L-115	115	70	20	25	32	45	30	30	5	M12
ST-A100-SBV2525R-160	160	110	20	25	37	59	48	43	23	M12
ST-A100-SBV2525L-160	160	110	20	25	37	59	48	43	23	M12
ST-A100-SBV3232R-160	160	110	20	32	40	68.5	45	43	15	M14
ST-A100-SBV3232L-160	160	110	20	32	40	68.5	45	43	15	M14

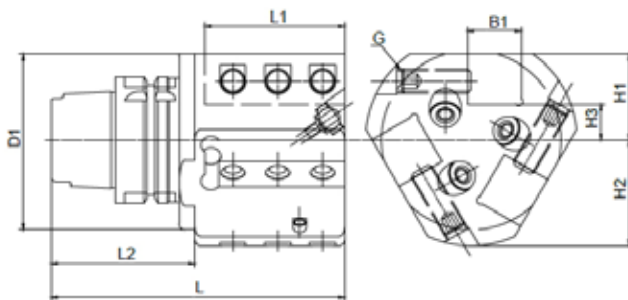
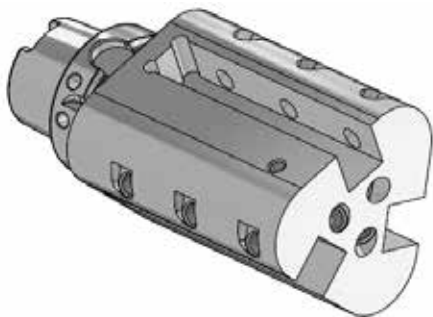
**HSK-T - Porta SBH - Torneado y Refrentado**


Referencia	L	L1	B1	B2	B3	H1	H2	G
ST-A63-SBH2020N-100	100	80	20	32	43.5	30	-	M10
ST-A63-SBH2525N-100	100	75	25	32	53	40.5	29.5	M12
ST-A63-SBH2525N-130	130	105	25	32	53	40.5	29.5	M12
ST-A100-SBH2525N-160	115	90	25	32	59	48	37	M12
ST-A100-SBH2525N-115	160	135	25	32	59	48	37	M12
ST-A100-SBH3232N-115	115	85	32	40	68.5	57	43	M14

**HSK-T - Porta SBN - Torneado Exterior y Ranura**


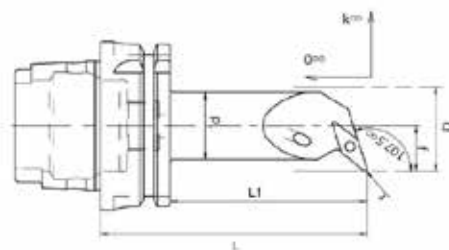
Referencia	L	L1	L2	L3	L4	D1	B1	B2	B3	H1	H2	G
ST-A63-SBN2020R-120	120	60	83.1	72.8	52.8	-	20	32	43.5	35	35	M10
ST-A63-SBN2020L-120	120	60	83.1	72.8	52.8	-	20	32	43.5	35	35	M10
ST-A63-SBN2525R-120	120	70	85.2	70.8	45.8	90	25	32	53	39	39	M12
ST-A63-SBN2525L-120	120	70	85.2	70.8	45.8	90	25	32	53	39	39	M12
ST-A100-SBN2525R-145	145	70	102.9	88.5	63.5	-	25	32	59	43	43	M12
ST-A100-SBN2525L-145	145	70	102.9	88.5	63.5	-	25	32	59	43	43	M12
ST-A100-SBN3232R-150	150	85	109.9	89	59	-	32	37	68.5	48	43	M14
ST-A100-SBN3232L-150	150	85	109.9	89	59	-	32	37	68.5	48	43	M14

**HSK-T - Porta SBT - Torneado Exterior y Frontal**



Referencia	L	L1	L2	D1	B1	H1	H2	H3	G
ST-A63-SBT2020R-105	105	60	-	-	20	35	43.5	15	M10
ST-A63-SBT2020L-105	105	60	-	-	20	35	43.5	15	M10
ST-A63-SBT2525R-125	125	70	40	90	25	43	53	18	M12
ST-A63-SBT2525L-125	125	70	40	90	25	43	53	18	M12
ST-A100-SBT2525R-160	160	110	-	-	25	48	59	23	M12
ST-A100-SBT2525L-160	160	110	-	-	25	48	59	23	M12

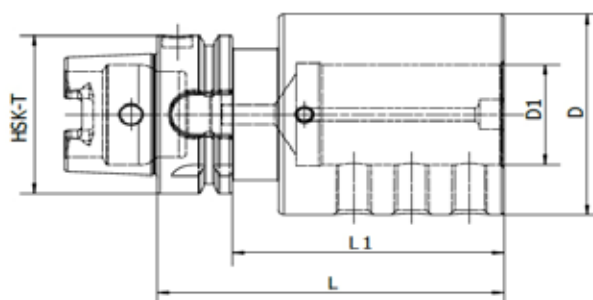
**HSK-T - Porta Torneado Interior SVQBR**



Referencia	Para Placa	d	L	L1	f	k°	D	r
ST-A63-SVQBR11-85	VB..1102	20	85	59	13	-8	25	0.4
ST-A63-SVQBL11-85	VB..1102	20	85	59	13	-8	25	0.4
ST-A63-SVQBR11-100	VB..1102	25	100	74	17	-5	32	0.4
ST-A63-SVQBL11-100	VB..1102	25	100	74	17	-5	32	0.4
ST-A63-SVQBR16-120	VB..1604	32	120	94	22	-10	40	0.8
ST-A63-SVQBL16-120	VB..1604	32	120	94	22	-10	40	0.8
ST-A63-SVQBR16-140	VB..1604	40	140	114	27	-10	50	0.8
ST-A63-SVQBL16-140	VB..1604	40	140	114	27	-10	50	0.8

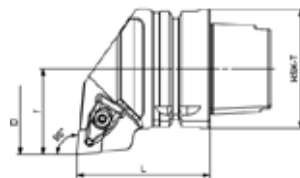
**HSK-T - Porta Amarre Cilíndrico Interior**

Referencia	D1	D	L	L1
ST-A63-E2-06	6	34	60	34
ST-A63-E2-08	8	34	60	34
ST-A63-E2-10	10	34	60	34
ST-A63-E2-12	12	36	60	34
ST-A63-E2-16	16	40	75	49
ST-A63-E2-20	20	44	75	49
ST-A63-E2-25	25	50	75	49
ST-A63-E2-32	32	56	90	64
ST-A63-E2-40	40	63	90	64
ST-A100-E2-06	6	34	70	41
ST-A100-E2-08	8	34	70	41
ST-A100-E2-10	10	34	70	41
ST-A100-E2-12	12	36	70	41
ST-A100-E2-16	16	40	85	56
ST-A100-E2-20	20	44	85	56
ST-A100-E2-25	25	50	85	56
ST-A100-E2-32	32	56	100	71
ST-A100-E2-40	40	63	100	71
ST-A100-E2-50	50	-	100	71

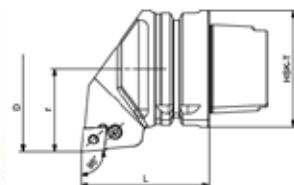


**HSK-T - Porta Tornado DCLNR/L - 95°**

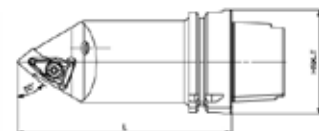
Referencia	f	D	L	Placa
ST-A63-DCLNR12-70-45	45	80	70	CN...1204
ST-A63-DCLNL12-70-45	45	80	70	CN...1204
ST-A63-DCLNR16-70-45	45	80	70	CN...1204
ST-A63-DCLNL16-70-45	45	80	70	CN...1606
ST-A100-DCLNR12-100-63	63	120	100	CN...1204
ST-A100-DCLNL12-100-63	63	120	100	CN...1204
ST-A100-DCLNR16-100-63	63	120	100	CN...1606
ST-A100-DCLNL16-100-63	63	120	100	CN...1606


**HSK-T - Porta Tornado PCLNR/L - 95°**

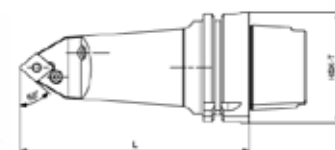
Referencia	f	D	L	Placa
ST-A63-PCLNR12-70-45	45	80	70	CN...1204
ST-A63-PCLNL12-70-45	45	80	70	CN...1204
ST-A63-PCLNR16-70-45	45	80	70	CN...1606
ST-A63-PCLNL16-70-45	45	80	70	CN...1606
ST-A100-PCLNR12-100-63	63	120	100	CN...1204
ST-A100-PCLNL12-100-63	63	120	100	CN...1204
ST-A100-PCLNR16-100-63	63	120	100	CN...1606
ST-A100-PCLNL16-100-63	63	120	100	CN...1606
ST-A100-PCLNR19-100-63	63	120	100	CN...1906
ST-A100-PCLNL19-100-63	63	120	100	CN...1906


**HSK-T - Porta Tornado DCMNN - 50°**

Referencia	f	L	A°	Placa
ST-A63-DCMNN12-100	-	100	50°	CN...1204
ST-A63-DCMNN12-130	-	130	50°	CN...1204
ST-A63-DCMNN16-100	-	100	50°	CN...1606
ST-A63-DCMNN16-130	-	130	50°	CN...1606
ST-A100-DCMNN12-125	-	125	50°	CN...1204
ST-A100-DCMNN16-125	-	125	50°	CN...1606

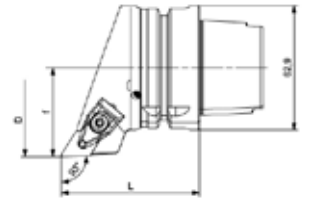

**HSK-T - Porta Tornado PCMNN - 50°**

Referencia	f	L	A°	Placa
ST-A63-PCMNN12-100	-	100	50°	CN...1204
ST-A63-PCMNN12-130	-	130	50°	CN...1204
ST-A63-PCMNN16-100	-	100	50°	CN...1606
ST-A63-PCMNN16-130	-	130	50°	CN...1606
ST-A100-PCMNN12-125	-	125	50°	CN...1204
ST-A100-PCMNN16-125	-	125	50°	CN...1606



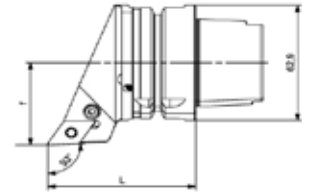
**HSK-T - Porta Tornado DDJNR/L - 55°**

Referencia	f	L	Placa
ST-A63-DDJNR15-75-45	45	70	DN..1506..
ST-A63-DDJNL15-75-45	45	70	DN..1506..
ST-A100-DDJNR15-100-63	63	100	DN..1506..
ST-A100-DDJNL15-100-63	63	100	DN..1506..



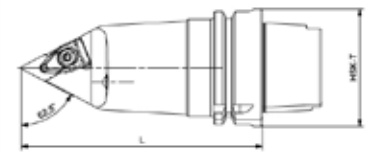
**HSK-T - Porta Tornado PDJNR/L - 55°**

Referencia	f	L	Placa
ST-A63-PDJNR15-75-45	45	70	DN..1506..
ST-A63-PDJNL15-75-45	45	70	DN..1506..
ST-A100-PDJNR15-100-63	63	100	DN..1506..
ST-A100-PDJNL15-100-63	63	100	DN..1506..



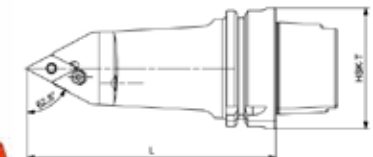
**HSK-T - Porta Tornado DDNNN - 62.5°**

Referencia	f	L	Placa
ST-A63-DDNNN15-100-0	-	100	DN..1506..
ST-A63-DDNNN15-130-0	-	130	DN..1506..
ST-A100-DDNNN15-125-0	-	125	DN..1506..



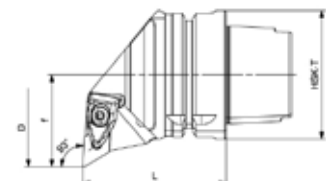
**HSK-T - Porta Tornado PDNNN - 62.5°**

Referencia	f	L	Placa
ST-A63-PDNNN15-100-0	-	100	DN..1506..
ST-A63-PDNNN15-130-0	-	130	DN..1506..
ST-A100-PDNNN15-125-0	-	125	DN..1506..



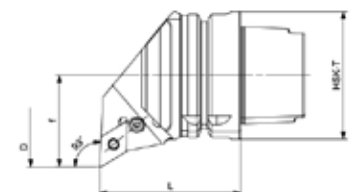
**HSK-T - Porta Tornado DDUNR - 93°**

Referencia	f	L	A°	Placa
ST-A63-DDUNR15-70-45	45	80	70	DN..1506..
ST-A63-DDUNL15-70-45	45	80	70	DN..1506..
ST-A100-DDUNR15-100-63	63	120	100	DN..1506..
ST-A100-DDUNL15-100-63	63	120	100	DN..1506..



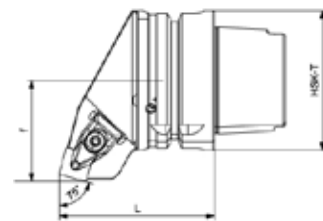
**HSK-T - Porta Tornado PDUNR - 93°**

Referencia	f	L	A°	Placa
ST-A63-PDUNR15-70-45	45	80	70	DN..1506..
ST-A63-PDUNL15-70-45	45	80	70	DN..1506..
ST-A100-PDUNR15-100-63	63	120	100	DN..1506..
ST-A100-PDUNL15-100-63	63	120	100	DN..1506..

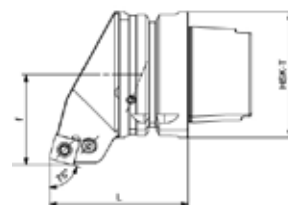


**HSK-T - Porta Tornado DSBNR/L - 75°**

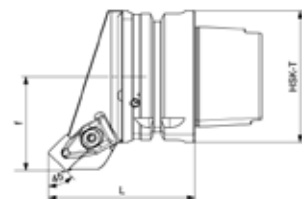
Referencia	f	L	Placa
ST-A63-DSBNR12-70-45	45	70	SN..1204..
ST-A63-DSBNL12-70-45	45	70	SN..1204..
ST-A100-DSBNR12-100-63	63	100	SN..1204..
ST-A100-DSBNL12-100-63	63	100	SN..1204..


**HSK-T - Porta Tornado PSBNR/L - 75°**

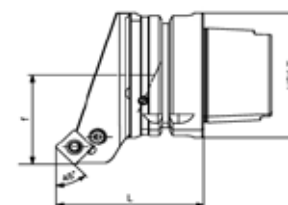
Referencia	f	L	Placa
ST-A63-PSBNR12-70-45	45	70	SN..1204..
ST-A63-PSBNL12-70-45	45	70	SN..1204..
ST-A100-PSBNR12-100-63	63	100	SN..1204..
ST-A100-PSBNL12-100-63	63	100	SN..1204..


**HSK-T - Porta Tornado DSSNR/L - 45°**

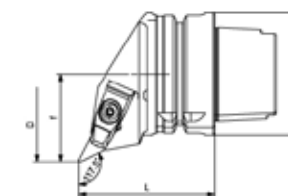
Referencia	f	L	Placa
HSK63T-DSSNR12-70-45	45	70	SN..1204..
HSK63T-DSSNL12-70-45	45	70	SN..1204..
HSK100T-DSSNR12-100-63	63	100	SN..1204..
HSK100T-DSSNL12-100-63	63	100	SN..1204..


**HSK-T - Porta Tornado PSSNR/L - 45°**

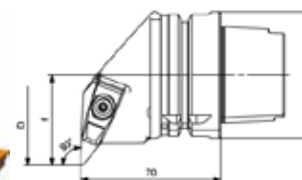
Referencia	f	L	Placa
HSK63T-PSSNR12-70-45	45	70	SN..1204..
HSK63T-PSSNL12-70-45	45	70	SN..1204..
HSK100T-PSSNR12-100-63	63	100	SN..1204..
HSK100T-PSSNL12-100-63	63	100	SN..1204..


**HSK-T - Porta Tornado DVPNR/L - 117.5°**

Referencia	f	L	A°	Placa
HSK63T-DVPNR16-70-45	45	80	70	VN..1604..
HSK63T-DVPNL16-70-45	45	80	70	VN..1604..
HSK100T-DVPNR16-100-63	63	120	100	VN..1604..
HSK100T-DVPNL16-100-63	63	120	100	VN..1604..


**HSK-T - Porta Tornado DVUNR/L - 93°**

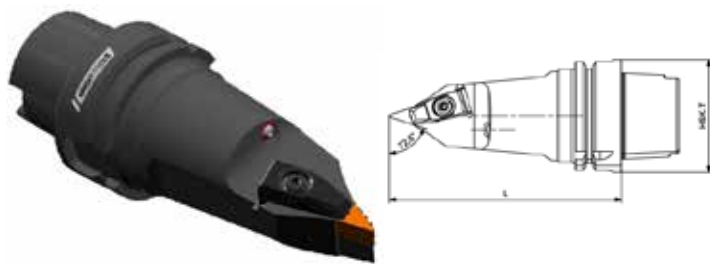
Referencia	f	L	A°	Placa
HSK63T-DVUNR16-70-45	45	80	70	VN..1604..
HSK63T-DVUNL16-70-45	45	80	70	VN..1604..
HSK100T-DVUNR16-100-63	63	120	100	VN..1604..
HSK100T-DVUNL16-100-63	63	120	100	VN..1604..





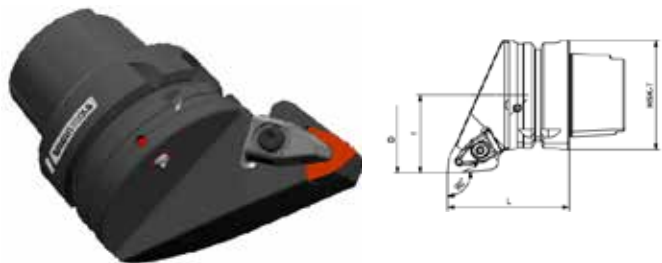
**HSK-T - Porta Tornado DVVNN - 72.5°**

Referencia	f	L	Placa
HSK63T-DVVNN16-100-0	-	100	VN..1604..
HSK63T-DVVNN16-130-0	-	130	VN..1604..
HSK100T-DVVNN16-125-0	-	125	VN..1604..



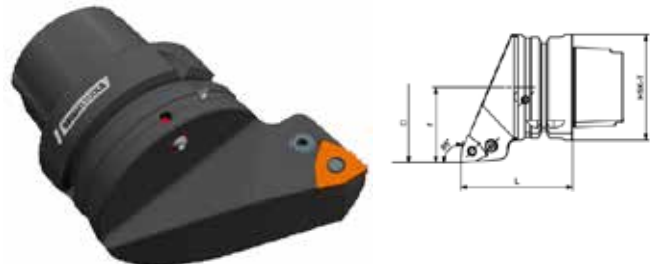
**HSK-T - Porta Tornado DWLNR/L - 95°**

Referencia	f	L	A°	Placa
HSK63T-DWLNR8-70-45	45	80	70	WN..0804..
HSK63T-DWLNL8-70-45	45	80	70	WN..0804..
HSK100T-DWLNR8-100-63	63	120	100	WN..0804..
HSK100T-DWLNL8-100-63	63	120	100	WN..0804..



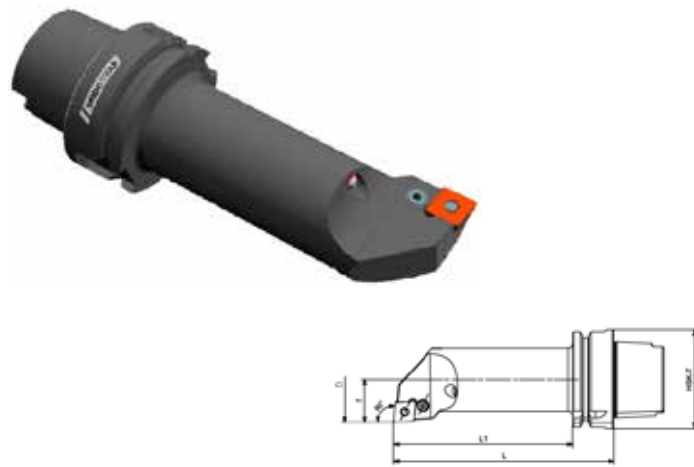
**HSK-T - Porta Tornado PWLNR/L - 95°**

Referencia	f	L	A°	Placa
HSK63T-PWLNR8-70-45	45	80	70	WN..0804..
HSK63T-PWLNL8-70-45	45	80	70	WN..0804..
HSK100T-PWLNR8-100-63	63	120	100	WN..0804..
HSK100T-PWLNL8-100-63	63	120	100	WN..0804..



**HSK-T - Porta Tornado PCLNR/L Serie Larga - 95°**

Referencia	f	L	L	L1	Placa
HSK63T-PCLNR12-140-27	27	50	140	114	CN..1204..
HSK63T-PCLNL12-140-27	27	50	140	114	CN..1204..
HSK63T-PCLNR12-180-27	27	50	180	154	CN..1204..
HSK63T-PCLNL12-180-27	27	50	180	154	CN..1204..
HSK100T-PCLNR12-150-27	27	50	150	121	CN..1204..
HSK100T-PCLNL12-150-27	27	50	150	121	CN..1204..
HSK100T-PCLNR12-200-27	27	50	200	171	CN..1204..
HSK100T-PCLNL12-200-27	27	50	200	171	CN..1204..
HSK100T-PCLNR12-150-35	35	63	150	121	CN..1204..
HSK100T-PCLNL12-150-35	35	63	150	121	CN..1204..
HSK100T-PCLNR12-200-35	35	63	200	171	CN..1204..
HSK100T-PCLNL12-200-35	35	63	200	171	CN..1204..



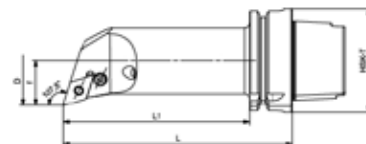
**HSK-T - Porta Tornado DDQNR/L 107.5°**

Referencia	f	L	L	L1	Placa
HSK63T-DDQNR15-140-27	27	50	140	114	DN..1506..
HSK63T-DDQNL15-140-27	27	50	140	114	DN..1506..
HSK63T-DDQNR15-180-27	27	50	180	154	DN..1506..
HSK63T-DDQNL15-180-27	27	50	180	154	DN..1506..
HSK100T-DDQNR15-150-27	27	50	150	121	DN..1506..
HSK100T-DDQNL15-150-27	27	50	150	121	DN..1506..
HSK100T-DDQNR15-200-27	27	50	200	171	DN..1506..
HSK100T-DDQNL15-200-27	27	50	200	171	DN..1506..
HSK100T-DDQNR15-150-35	35	63	150	121	DN..1506..
HSK100T-DDQNL15-150-35	35	63	150	121	DN..1506..
HSK100T-DDQNR15-200-35	35	63	200	171	DN..1506..
HSK100T-DDQNL15-200-35	35	63	200	171	DN..1506..

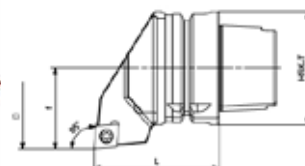


**HSK-T - Porta Tornado PDQNR/L 107.5°**

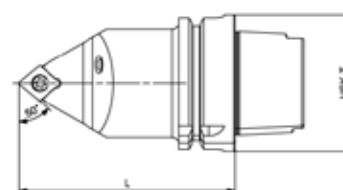
Referencia	f	L	L	L1	Placa
HSK63T-PDQNR15-140-27	27	50	140	114	DN..1506..
HSK63T-PDQNL15-140-27	27	50	140	114	DN..1506..
HSK63T-PDQNR15-180-27	27	50	180	154	DN..1506..
HSK63T-PDQNL15-180-27	27	50	180	154	DN..1506..
HSK100T-PDQNR15-150-27	27	50	150	121	DN..1506..
HSK100T-PDQNL15-150-27	27	50	150	121	DN..1506..
HSK100T-PDQNR15-200-27	27	50	200	171	DN..1506..
HSK100T-PDQNL15-200-27	27	50	200	171	DN..1506..
HSK100T-PDQNR15-150-35	35	63	150	121	DN..1506..
HSK100T-PDQNL15-150-35	35	63	150	121	DN..1506..
HSK100T-PDQNR15-200-35	35	63	200	171	DN..1506..
HSK100T-PDQNL15-200-35	35	63	200	171	DN..1506..


**HSK-T - Porta Tornado SCLCR/L - 95°**

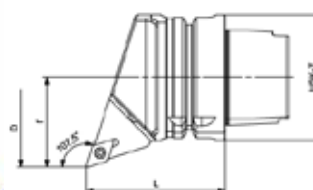
Referencia	f	D	L	Placa
HSK63T-SCLCR12-70-45	45	80	70	CC..1204..
HSK63T-SCLCL12-70-45	45	80	70	CC..1204..
HSK100T-SCLCR12-100-63	63	120	100	CC..1204..
HSK100T-SCLCL12-100-63	63	120	100	CC..1204..


**HSK-T - Porta Tornado SCMCN - 50°**

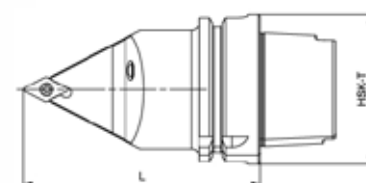
Referencia	f	L	Placa
HSK63T-SCMCN12-100-0	-	100	CC..1204..
HSK63T-SCMCN12-130-0	-	130	CC..1204..
HSK100T-SCMCN12-125-0	-	125	CC..1204..


**HSK-T - Porta Tornado SDHCR/L - 107.5°**

Referencia	f	D	L	Placa
HSK63T-SDHCR11-70-45	45	80	70	DC..11T3
HSK63T-SDHCL11-70-45	45	80	70	DC..11T3
HSK100T-SDHCR11-100-63	63	120	100	DC..11T3
HSK100T-SDHCL11-100-63	63	120	100	DC..11T3

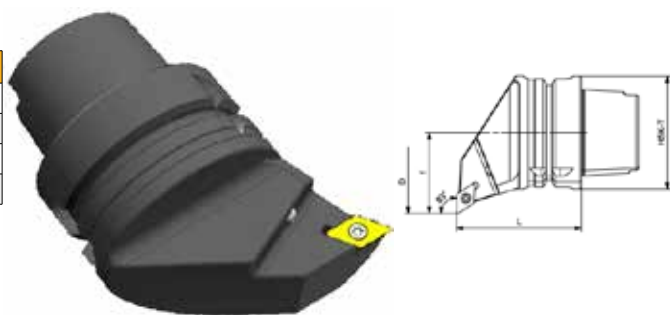

**HSK-T - Porta Tornado SDNCN - 62.5°**

Referencia	f	L	Placa
HSK63T-SDNCN11-100-0	-	100	DC..11T3
HSK63T-SDNCN11-130-0	-	130	DC..11T3
HSK100T-SDNCN11-125-0	-	125	DC..11T3



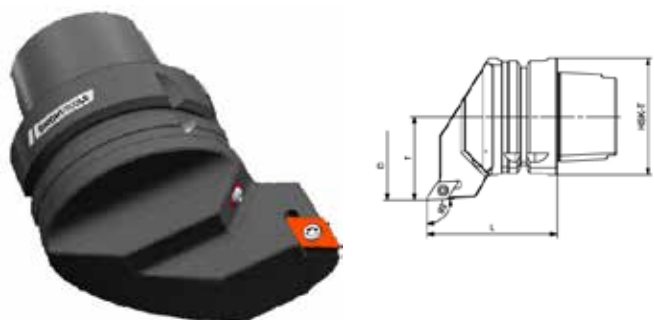
**HSK-T - Porta Torneado SDJCR/L - 93°**

Referencia	f	D	L	Placa
HSK63T-SDJCR11-70-45	45	80	70	DC..11T3
HSK63T-SDJCL11-70-45	45	80	70	DC..11T3
HSK100T-SDJCR11-100-63	63	120	100	DC..11T3
HSK100T-SDJCL11-100-63	63	120	100	DC..11T3



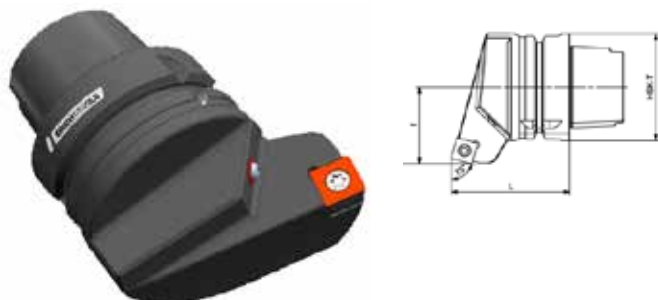
**HSK-T - Porta Torneado SDUCR/L - 93°**

Referencia	f	D	L	Placa
HSK63T-SDUCR11-70-45	45	80	70	DC..11T3
HSK63T-SDUCL11-70-45	45	80	70	DC..11T3
HSK100T-SDUCR11-100-63	63	120	100	DC..11T3
HSK100T-SDUCL11-100-63	63	120	100	DC..11T3



**HSK-T - Porta Torneado SSBCR/L - 75°**

Referencia	f	L	Placa
HSK63T-SSBCR12-70-45	45	70	SC..1204..
HSK63T-SSBCL12-70-45	45	70	SC..1204..
HSK100T-SSBCR12-100-63	63	100	SC..1204..
HSK100T-SSBCL12-100-63	63	100	SC..1204..



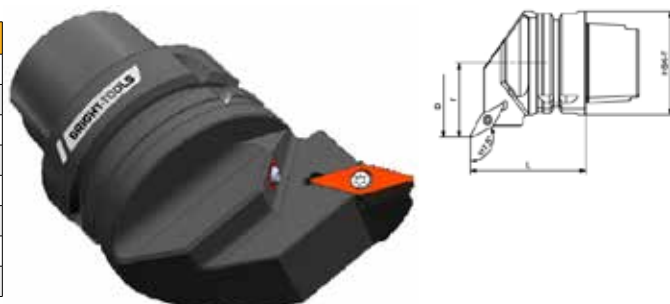
**HSK-T - Porta Torneado SSSCR/L - 75°**

Referencia	f	L	Placa
HSK63T-SSSCR12-70-45	45	70	SC..1204..
HSK63T-SSSCL12-70-45	45	70	SC..1204..
HSK100T-SSSCR12-100-63	63	100	SC..1204..
HSK100T-SSSCL12-100-63	63	100	SC..1204..



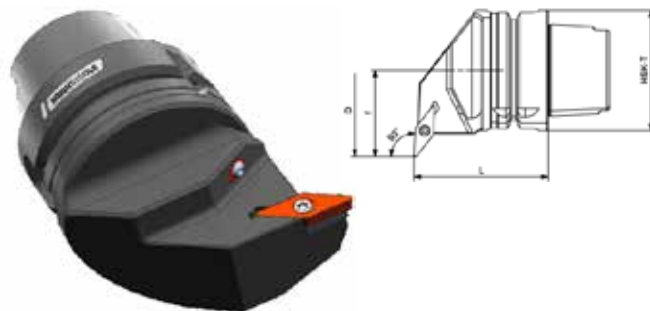
**HSK-T - Porta Torneado SVPBR/L - SVPCR - 117.5°**

Referencia	f	D	L	Placa
HSK63T-SVPBR16-70-45	45	80	70	VB..1604..
HSK63T-SVPBL16-70-45	45	80	70	VB..1604..
HSK100T-SVPBR16-100-63	63	120	100	VB..1604..
HSK100T-SVPBL16-100-63	63	120	100	VB..1604..
HSK63T-SVPCR16-70-45	45	80	70	VC..1604..
HSK63T-SVPCL16-70-45	45	80	70	VC..1604..
HSK100T-SVPCR16-100-63	63	120	100	VC..1604..
HSK100T-SVPCL16-100-63	63	120	100	VC..1604..



**HSK-T - Porta Tornado SVUBR/L - SVUCR - 93°**

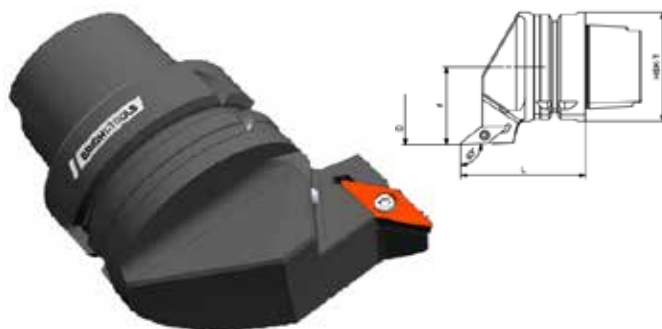
Referencia	f	D	L	Placa
HSK63T-SVUBR16-70-45	45	80	70	VB..1604..
HSK63T-SVUBL16-70-45	45	80	70	VB..1604..
HSK100T-SVUBR16-100-63	63	120	100	VB..1604..
HSK100T-SVUBL16-100-63	63	120	100	VB..1604..
HSK63T-SVUCR16-70-45	45	80	70	VC..1604..
HSK63T-SVUCL16-70-45	45	80	70	VC..1604..
HSK100T-SVUCR16-100-63	63	120	100	VC..1604..
HSK100T-SVUCL16-100-63	63	120	100	VC..1604..


**HSK-T - Porta Tornado SVVBN / SVVCN - 75°**

Referencia	f	L	Placa
HSK63T-SVVBN16-100-0	-	100	VB..1604..
HSK63T-SVVBN16-130-0	-	130	VB..1604..
HSK100T-SVVBN16-125-0	-	125	VB..1604..
HSK63T-SVVCN16-100-0	-	100	VC..1604..
HSK63T-SVVCN16-130-0	-	130	VC..1604..
HSK100T-SVVCN16-125-0	-	125	VC..1604..


**HSK-T - Porta Tornado SVUBR/L - SVUCR/L - 93°**

Referencia	f	D	L	Placa
HSK63T-SVJBR16-72-45	45	80	71.5	VB..1604..
HSK63T-SVJBL16-72-45	45	80	71.5	VB..1604..
HSK100T-SVJBR16-100-63	63	120	100	VB..1604..
HSK100T-SVJBL16-100-63	63	120	100	VB..1604..
HSK63T-SVJCR16-72-45	45	80	71.5	VC..1604..
HSK63T-SVJCL16-72-45	45	80	71.5	VC..1604..
HSK100T-SVJCR16-100-63	63	120	100	VC..1604..
HSK100T-SVJCL16-100-63	63	120	100	VC..1604..


**HSK-T - Porta Tornado SCLCR/L - 95°**

Referencia	f	L	L	L1	Placa
HSK63T-SCLCR12-125-22	22	40	125	99	CC..1204..
HSK63T-SCLCL12-125-22	22	40	125	99	CC..1204..
HSK63T-SCLCR12-160-22	22	40	160	134	CC..1204..
HSK63T-SCLCL12-160-22	22	40	160	134	CC..1204..
HSK63T-SCLCR12-140-27	27	50	140	114	CC..1204..
HSK63T-SCLCL12-140-27	27	50	140	114	CC..1204..
HSK63T-SCLCR12-180-27	27	50	180	154	CC..1204..
HSK63T-SCLCL12-180-27	27	50	180	154	CC..1204..



**HSK-T - Porta Tornado SDQCR/L - 107.5°**

Referencia	f	D	L	Placa
HSK63T-SDQCR11-70-45	45	80	70	DC..11T3..
HSK63T-SDQCL11-70-45	45	80	70	DC..11T3..
HSK100T-SDQCR11-100-63	63	120	100	DC..11T3..
HSK100T-SDQCL11-100-63	63	120	100	DC..11T3..

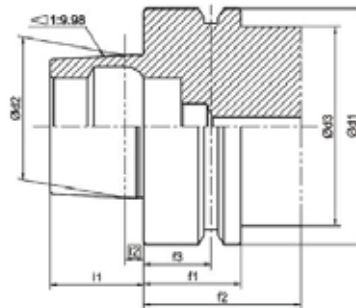


**HSK-T - Porta Tornado SVQCR/L - 107.5°**

Referencia	f	L	L	L1	Placa
HSK63T-SVQCR16-125-22	22	40	125	99	VB..T16T3
HSK63T-SVQCL16-125-22	22	40	125	99	VB..T16T3
HSK63T-SVQCR16-160-22	22	40	160	134	VB..T16T3
HSK63T-SVQCL16-160-22	22	40	160	134	VB..T16T3
HSK63T-SVQCR16-140-27	27	50	140	114	VB..T16T3
HSK63T-SVQCL16-140-27	27	50	140	114	VB..T16T3
HSK63T-SVQCR16-180-27	27	50	180	154	VB..T16T3
HSK63T-SVQCL16-180-27	27	50	180	154	VB..T16T3



**Dimensiones Generales de Amarre HSK - Forma F**

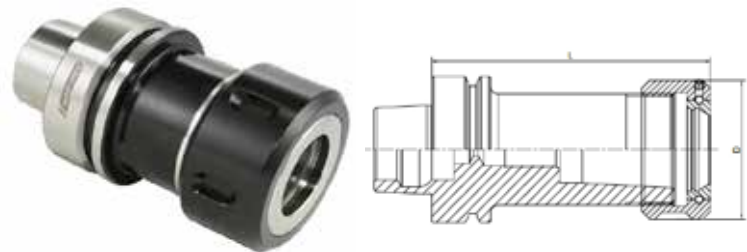


Modelo	d1	d2	d3	l1	l2	f1	f2	f3
HSK-F63	63	38.009	53	25	5	26	42	18

**HSK - Forma F - Porta-Pinzas OZ**

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	HSK	Capacidad	A	D
S01.F63.25	F-63	3-25 (OZ25)	60	90



**HSK - Forma F - Porta-Pinzas ER**

- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	HSK	Capacidad	D	L
S02.F63.16	F-63	2-16 (ER25)	42	70
S02.F63.20	F-63	2-20 (ER32)	50	75
S02.F63.26	F-63	3-26 (ER40)	63	80

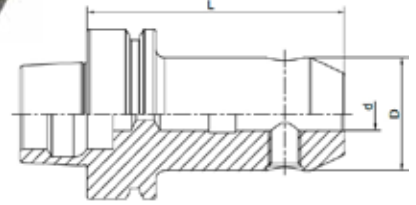




**HSK - Forma F - Portafresas Weldon DIN 1835-B**

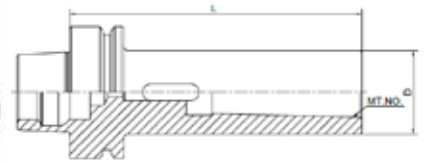
- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

Referencia	HKF	d	D	L
S04.F63.06	F-63	6	25	65
S04.F63.08	F-63	8	28	65
S04.F63.10	F-63	10	35	65
S04.F63.12	F-63	12	42	80
S04.F63.14	F-63	14	44	80
S04.F63.16	F-63	16	48	80
S04.F63.18	F-63	18	50	80
S04.F63.20	F-63	20	52	80
S04.F63.25	F-63	25	65	110
S04.F63.32	F-63	32	72	110


**HSK - Forma F - Eje Reductor Cono Morse DIN 6383**

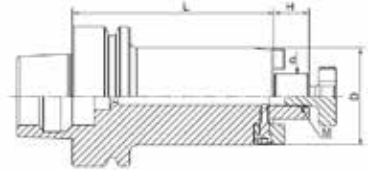
- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

Referencia	HSK	MK	D	L
S07.F63.01	F-63	1	25	100
S07.F63.02	F-63	2	32	120
S07.F63.03	F-63	3	40	140
S07.F63.04	F-63	4	48	160


**HSK - Forma F - Eje Portafresas DIN 6357**

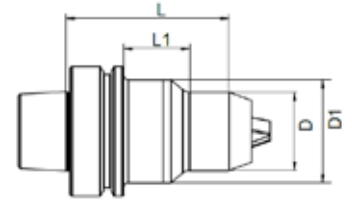
- Sistema AD Refrigeración Interior
- Equilibrado: G2.5 - 25.000 Rpm

Referencia	HSK	d	D	L	H
S11.F63.16	F-63	16	38	50	17
S11.F63.22	F-63	22	48	60	19
S11.F63.27	F-63	27	58	60	21
S11.F63.32	F-63	32	78	60	24


**HSK - Forma F - Portabrocas CNC**

- Sistema A Refrigeración Exterior
- Equilibrado: G2.5 - 15.000 Rpm
- Llave no incluida (Ver sección accesorios)

Referencia	HSK	D	L	Capacidad
S15.F63.16	F-63	50	100	1-16


**HSK - Forma F - Eje Mecanizable**

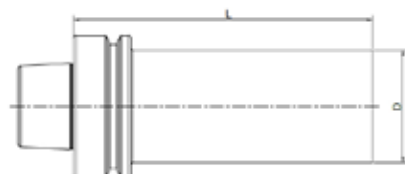
- Sistema HSK-F de eje para mecanizado a medida.

Referencia	HSK	D	L
S90.F63.65.1	F-63	65	160
S90.F63.65.2	F-63	65	250


**HSK - Forma F - Eje Verificador Centrado**

- Sistema HSK-F para verificación en máquina.
- Equilibrado a +/-0.002

Referencia	HSK	D	L
S99.F63.40	F-63	40	300



### Limpiador de conos Automático

- Limpiador de conos es una forma sencilla de eliminar la suciedad, el óxido y el ligero desgaste del cono de su portapinzas.
- Una manera fácil de alargar la vida útil de tus portaherramientas, con un pequeño mantenimiento rutinario.



- Cada Set incluye:
  - Cuerpo de máquina y un Adaptador Cabezal según el modelo seleccionado.
  - Bote aceite WD40
  - Adaptador energía
  - Correas de repuesto



Referencia SET	Para Modelos	Base	Cabezal	Cabezal Dø
TCD-30	BT/SK/CAT30	TCD-BU	TCD-30-BH	50
TCD-40	BT/SK/CAT40	TCD-BU	TCD-40-BH	63.55
TCD-50	BT/SK/CAT50	TCD-BU	TCD-50-BH	100
TCD-HSK63	HSK63	TCD-BU	TCD-HSK63-BH	63

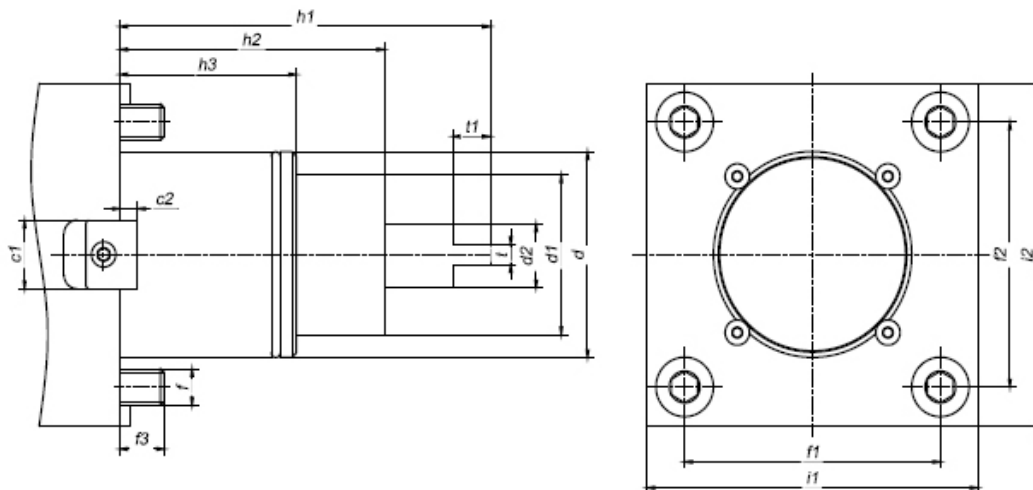
### Máquina Térmica para Portaherramientas



- Máquina Térmica para portaherramientas.
- Sin Refrigeración

Referencia SET	Para Modelos
MBT-30	BT/SK/CAT30
MBT-40	BT/SK/CAT40
MBT-50	BT/SK/CAT50
MBT-HSK	HSK63

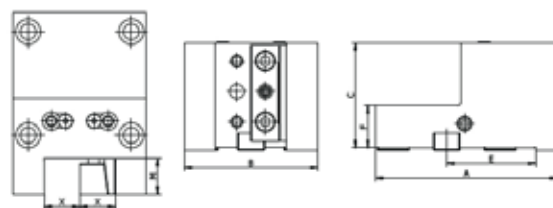
## PORTAHERRAMIENTAS BMT



Modelo	c1	c2	d	d1	d2	f	f1	f2	f3	h1	h2	h3	i1 / i2	t	t1
BMT45	15	4	45	35	14	M8	58	58	10	84	60	40	75	6	8.5
BMT55	15	4	55	40	16	M10	64	64	14	104	75	30	85	8	8.5
BMT65	18	5	65	45	18	M12	70	73	15	112	83	32	94	10	14
BMT75	25	5	75	55	23	M12	90	90	15	110	80	43	112	14	15
BMT85	25	5	85	65	33.5	M12	100	100	18	140	100	43	125	16	20

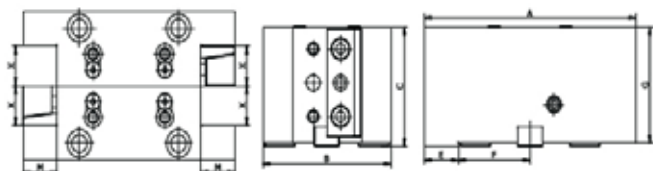
### Portaherramientas BMT - OD

Referencia	X	A	B	C	E	F	M
BMT45-OD20-60	20	105	75	60	-	30	20
BMT45-OD20-65	20	105	75	65		30	20
BMT55-OD20-60	20	120	85	60		30	20
BMT55-OD25-75	25	126	85	75		30	25
BMT65-OD20-75	20	131	96	75		30	20
BMT65-OD25-75	25	131	96	75		30	25
BMT75-OD25-85	25	145.5	112	85		35	25
BMT75-OD25-100	25	145.5	112	100		35	25
BMT75-OD32-85	32	153	112	85		35	32
BMT75-OD32-100	32	153	112	100		35	32
BMT85-OD32-75	32	174	130	75		40	32
BMT85-OD32-90	32	168.5	130	90		40	32
BMT85-OD32-120	32	168.5	130	120		50	32

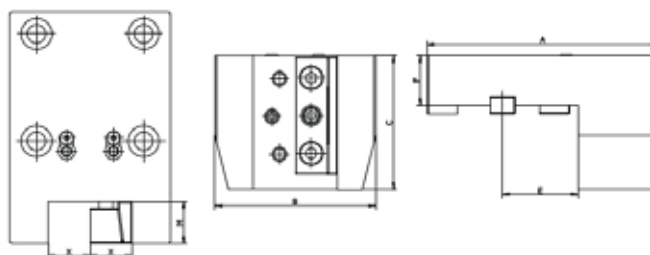


### Portaherramientas BMT - OD Doble

Referencia	X	A	B	F	M
BMT45-OD20D-60	20	124	75	60	20
BMT55-OD20D-65	20	152	85	65	20
BMT55-OD25D-65	25	152	85	65	25
BMT65-OD25D-75	25	149	96	75	25
BMT75-OD32D-85	32	185	112	85	32

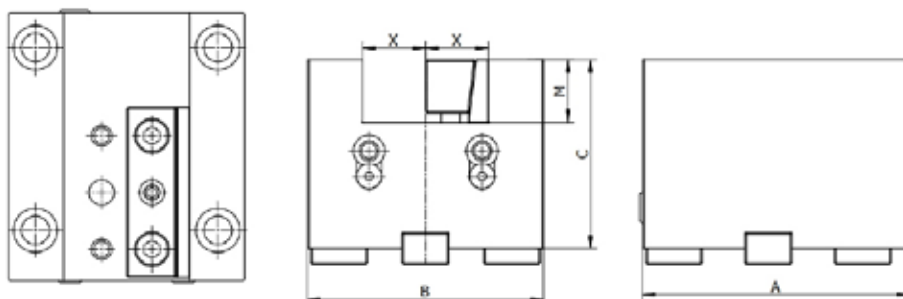


**Portaherramientas BMT - Frontal**



Referencia	X	A	B	C	E	F	M
BMT45-ODS20-65-E41	20	127	75	65	41	30	20
BMT55-ODS25-80-E46	25	138	85	80	46	30	25
BMT55-ODS25-80-E51	25	138	85	80	51	30	25
BMT65-ODS25-80-E56	25	146	96	80	56	40	25
BMT75-ODS25-100-E58	25	168	112	100	58.5	50	25
BMT75-ODS32-100-E58	32	1668	112	100	58.5	50	32
BMT85-ODS32-110-E71	32	190	130	110	71	50	32

**Portaherramientas BMT - Refrentado**

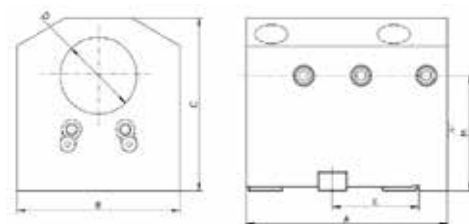


Referencia	X	A	B	C	M
BMT45-F20-65	20	86	75	65	20
BMT45-F20-80	20	86	75	80	20
BMT55-F20-70	20	95	85	70	20
BMT55-F25-70	25	105	85	70	25
BMT65-F25-82	25	100	96	82.5	25
BMT65-F25-120	25	100	96	120	25
BMT75-F25-70	25	120	112	70	25
BMT75-F25-135	25	120	112	135	25
BMT75-F25-122	25	120	112	122	25
BMT75-F32-100	32	120	112	100	32
BMT75-F32-122	32	120	112	122	32
BMT85-F32-105	32	168.5	130	105	32
BMT85-F32-140	32	168.5	130	140	32

**Portaherramientas BMT - Interiores**

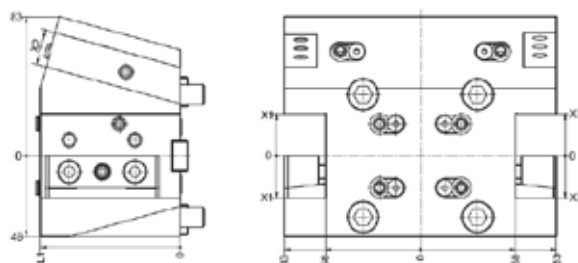
• Refrigeración Interior/Exterior

Referencia	D	A	B	C	M
BMT45-ID25-H65-95	25	95	75	95	65
BMT45-ID32-H65-95	32	95	75	95	65
BMT45-ID40-H65-95	40	95	75	95	65
BMT45-ID32-H85-115	32	95	75	115	85
BMT45-ID40-H85-115	40	95	75	115	85
BMT55-ID25-H100-130	25	105	85	130	100
BMT55-ID32-H60-90	32	105	85	90	60
BMT55-ID32-H70-100	32	105	85	100	70
BMT55-ID32-H85-115	32	105	85	115	85
BMT55-ID32-H100-130	32	105	85	130	100
BMT55-ID40-H60-90	40	105	85	90	60
BMT55-ID40-H70-100	40	105	85	100	70
BMT55-ID40-H85-115	40	105	85	115	85
BMT55-ID40-H100-130	40	105	85	130	100
BMT65-ID32-H72-107	32	126	95	107	72
BMT65-ID32-H100-135	32	126	95	135	100
BMT65-ID40-H72-107	40	126	95	107	72
BMT65-ID40-H85-120	40	126	95	120	85
BMT65-ID40-H100-135	40	126	95	135	100
BMT65-ID40-H115-150	40	126	95	150	115
BMT65-ID50-H72-112	50	126	95	112	72
BMT65-ID50-H90-130	50	126	95	130	90
BMT65-ID50-H100-140	50	126	95	140	100
BMT75-ID40-H60-105	40	135	112	105	60
BMT75-ID40-H90-135	40	135	112	135	90
BMT75-ID50-H60-105	50	165	112	105	60
BMT75-ID50-H90-135	50	165	112	135	90
BMT75-ID50-H110-155	50	165	112	155	110
BMT75-ID50-H125-170	50	165	112	170	125
BMT75-ID60-H60-105	60	165	112	105	60
BMT75-ID60-H90-135	60	165	112	135	90
BMT75-ID60-H110-155	60	165	112	155	110
BMT75-ID60-H125-170	60	165	112	170	125
BMT75-ID63-H110-155	63	165	112	155	110
BMT85-ID50-H85-132	50	161.5	130	132	85
BMT85-ID60-H85-132	60	161.5	130	132	85
BMT85-ID80-H85-137	80	161.5	130	137	85
BMT85-ID50-H110-157	50	161.5	130	157	110
BMT85-ID60-H110-157	60	161.5	130	157	110
BMT85-ID80-H110-162	80	161,5	130	162	110


**Portaherramientas BMT Medio - Torneado**

• Refrigeración Exterior

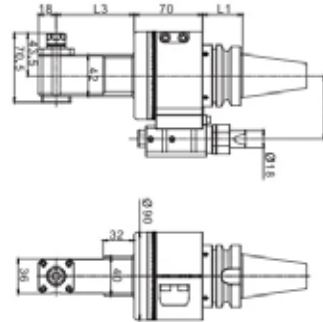
Referencia	X1	X2	L1
BMT65-MOD24-25	25	20	85





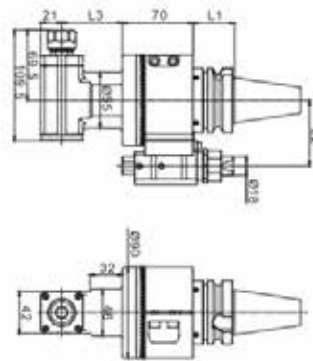
**Cabezal Angular AG90 - ER 11**

Referencia	Salida	L1	L2	L3	Kw	RPM
AG90-ER11-80	ER11	41/48	65/80	80	1	4500
AG90-ER11-140	ER11	41/48	65/80	140	1	4500
AG90-ER11-200	ER11	41/48	65/80	200	1	4500



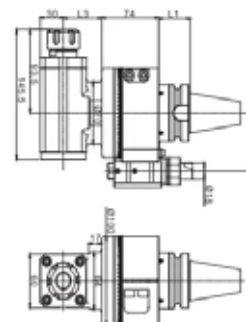
**Cabezal Angular AG90 - ER 16**

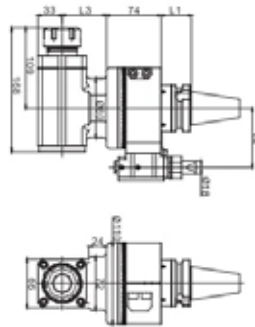
Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-ER16-60	ER16	41/48	65/80	60	1.5	4500	12	1:01
AG90-ER16-120	ER16	41/48	65/80	120	1.5	4500	12	1:01
AG90-ER16-180	ER16	41/48	65/80	180	1.5	4500	12	1:01



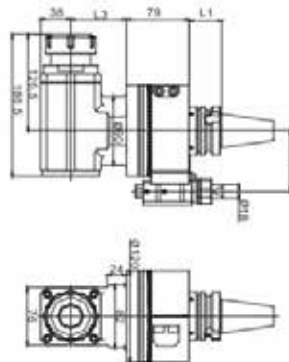
**Cabezal Angular AG90 - ER 25**

Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-ER25-50	ER25	41/48	65/80	50	3	4000	32	1:01
AG90-ER25-110	ER25	41/48	65/80	110	3	4000	32	1:01
AG90-ER25-170	ER25	41/48	65/80	170	3	4000	32	1:01

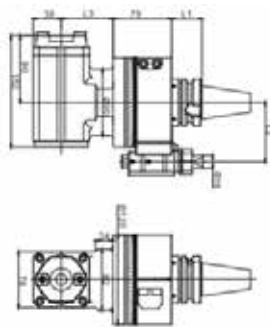


**Cabezal Angular AG90 - ER 32**


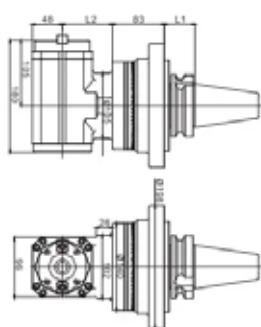
Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-ER32-60	ER32	41/48	80/110	60	4	3500	40	1:01
AG90-ER32-130	ER32	41/48	80/110	130	4	3500	40	1:01
AG90-ER32-200	ER32	41/48	80/110	200	4	3500	40	1:01

**Cabezal Angular AG90 - ER 40**


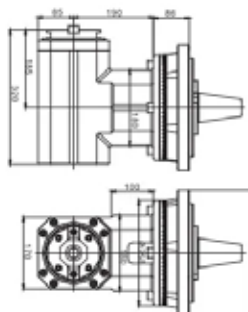
Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-ER40-70	ER32	41/48	80/110	70	6	3000	75	1:01
AG90-ER40-150	ER32	41/48	80/110	150	6	3000	75	1:01
AG90-ER40-230	ER32	41/48	80/110	230	6	3000	75	1:01

**Cabezal Angular AG90 - BT 30 / BT40 / BT50**


Modelo BT30



Modelo BT40

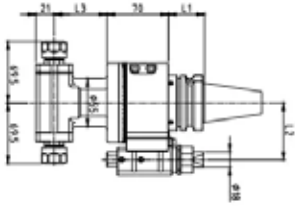


Modelo BT50

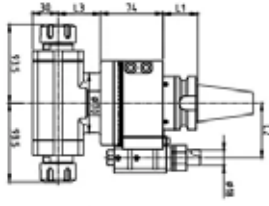


Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-BT30-70	BT30	41/48	80/110	70	6	3500	75	1:1
AG90-BT30-150	BT30	41/48	80/110	150	6	3500	75	1:1
AG90-BT30-230	BT30	41/48	80/110	230	6	3500	75	1:1
AG90-BT40-80	BT40	41/48	80	-	6	3000	100	1:01
AG90-BT40-160	BT40	41/48	160	-	6	3000	100	1:01
AG90-BT40-240	BT40	41/48	240	-	6	3000	100	1:01
AG90-BT50	BT50	-	-	-	12	2000	200	1:01

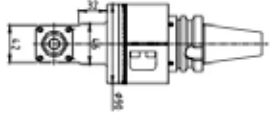
**Cabezal Angular AG90 - ER - Doble Salida**



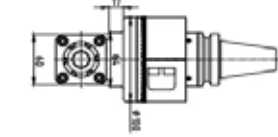
Modelo ER16



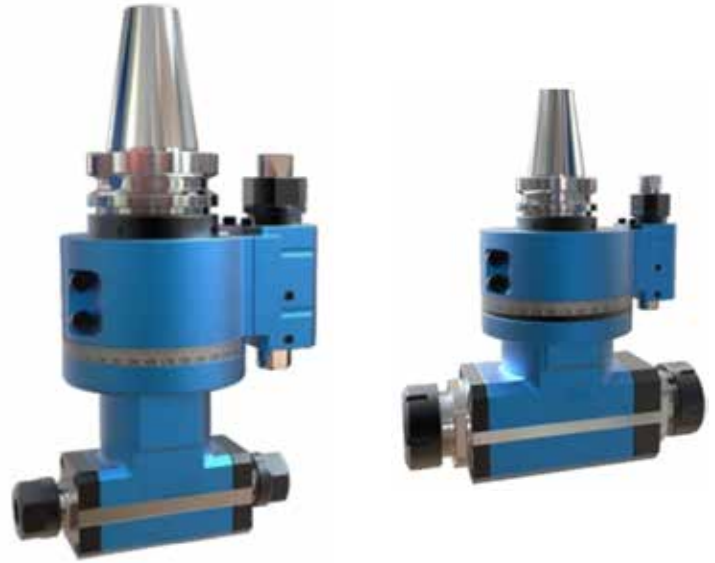
Modelo ER25



Modelo ER32

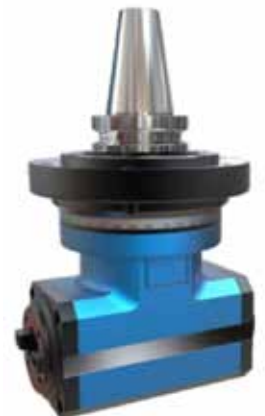
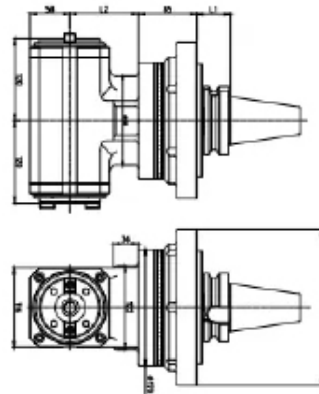


Modelo ER40



Referencia	Salida	L1	L2	L3	Kw	RPM	NM	L(rev.)
AG90-ER16x2-60	ER16	41/48	65/80	60	1.5	4500	12	1:01
AG90-ER16x2-120	ER16	41/48	65/80	120	1.5	4500	12	1:01
AG90-ER16x2-180	ER16	41/48	65/80	180	1.5	4500	12	1:01
AG90-ER25x2-50	ER25	41/48	65/80	50	3	4000	32	1:01
AG90-ER25x2-110	ER25	41/48	65/80	110	3	4000	32	1:01
AG90-ER25x2-170	ER25	41/48	65/80	170	3	4000	32	1:01
AG90-ER32x2-60	ER32	41/48	80/110	60	4	3500	40	1:01
AG90-ER32x2-130	ER32	41/48	80/110	130	4	3500	40	1:01
AG90-ER32x2-200	ER32	41/48	80/110	200	4	3500	40	1:01
AG90-ER40x2-70	ER32	41/48	80/110	70	6	3000	75	1:01
AG90-ER40x2-150	ER32	41/48	80/110	150	6	3000	75	1:01
AG90-ER40x2-230	ER32	41/48	80/110	230	6	3000	75	1:01

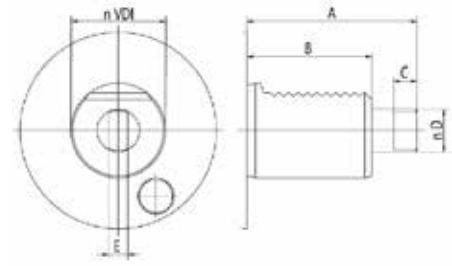
**Cabezal Angular AG90 - BT40 - Doble Salida**



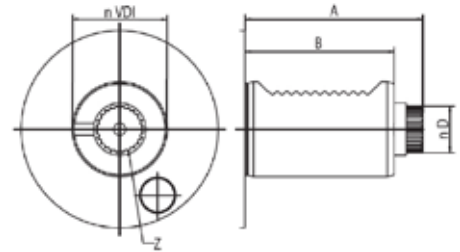
Referencia	Salida	L1	L2	Kw	RPM	NM	L(rev.)
AG90-BT40x2-80	BT40	41/48	80	6	3000	100	1:01
AG90-BT40x2-160	BT40	41/48	160	6	3000	100	1:01
AG90-BT40x2-240	BT40	41/48	240	6	3000	100	1:01

**Norma DIN 1809**

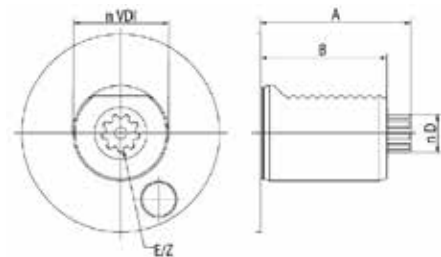
VDI	A	B	C	D	E
30	62	45	8	12	6
40	72	53	10	18	8
50	91	78	13	24	13


**Norma DIN 5480**

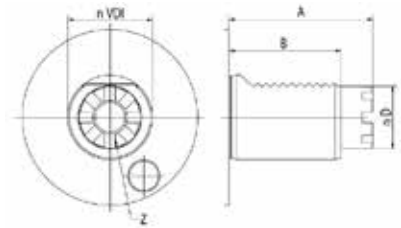
VDI	A	B	D	Z
30	67	55	15.8	18
40	75	63	19.8	24
50	93	78	23.8	18


**Norma DIN 5482**

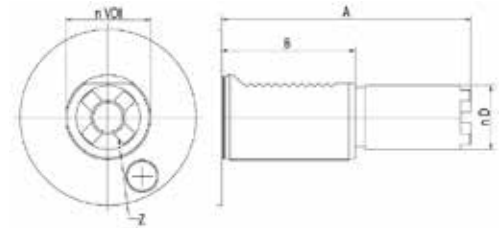
VDI	A	B	D	E	Z
30	55	45	14.5	B15X12	8
40	63	53	16.5	B17X14	9
50	93	78	19.5	B20X17	11


**Norma TOEM BARUFFALDI**

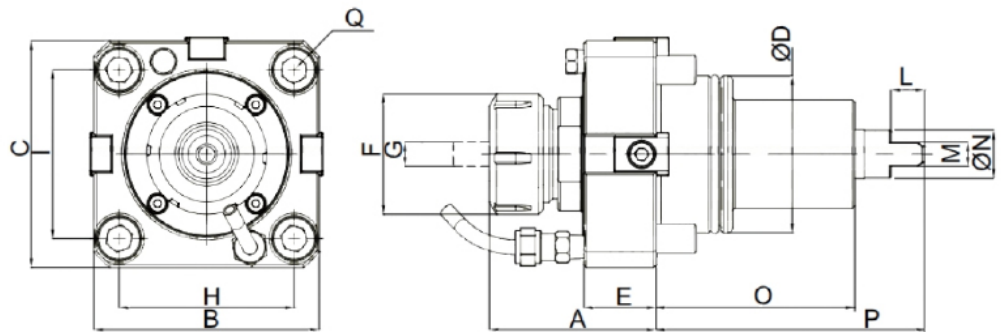
VDI	A	B	D	Z
30	59	45/53	24	6
40	68	53	32	8
50	84	70	40	8


**Norma HASS**

VDI	A	B	D	Z	TIPE
30	104.85	63	30.2	4	1
40	117.5	63	30.2	4	2
50	130.25	63	30.2	4	3


**Cabezal BMT Axial - DIN 1809**

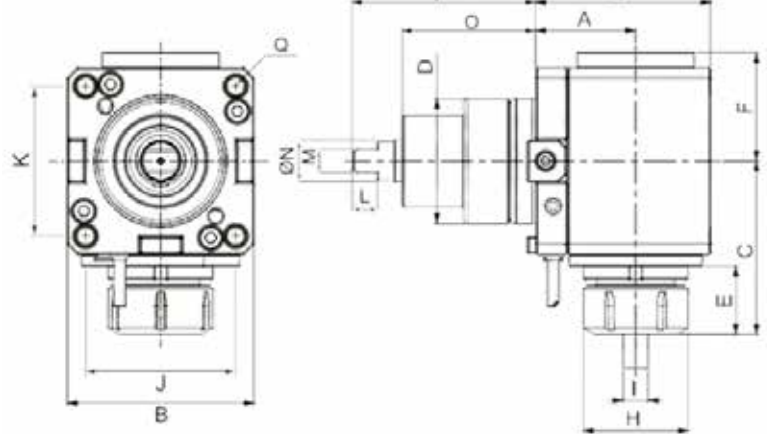
- RPM: 6000 - I (rev) 1:1
- Refrigeración Exterior
- Dirección Axial: 0°



Referencia	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q
BMT55-DAER25-56.7	56.7	85	85	55	29	42	ER25	64	64	10	8	17	75	103.5	M10
BMT65-DAER32-68.4	68.5	94	94	65	30	50	ER32	73	70	14	10	20	81	111.5	M12
BMT75-DAER40-78	78	112	112	75	30	63	ER40	90	90	15	14	23	80	110	M12
BMT85-DAER50-108	108	125	125	85	44	78	ER50	100	100	20	16	27.5	96	136	M12

### Cabezal BMT Radial - DIN 1809

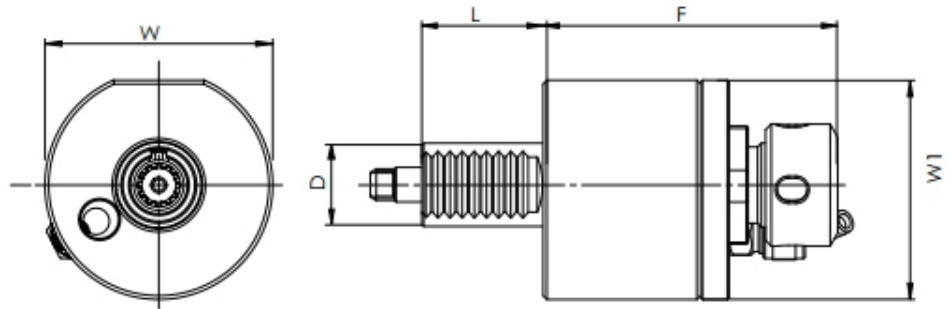
- RPM: 6000 - I (rev) 1:1
- Refrigeración Exterior
- Dirección Axial: 90°



Referencia	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
BMT55-DRER25-60	60	85	78.5	55	27.5	50	86	42	ER25	64	64	10	8	17	75	103.5	M10
BMT55-DRER25-70	70	85	78.5	55	27.5	50	86	42	ER25	64	64	10	8	17	75	103.5	M10
BMT55-DRER25-85	85	85	78.5	55	27.5	50	86	42	ER25	64	64	10	8	17	75	103.5	M10
BMT65-DRER32-72	72	94	92	65	36	54.5	108	50	ER32	73	70	14	10	20	81	111.5	M12
BMT65-DRER32-100	100	94	92	65	36	54.5	136	50	ER32	73	70	14	10	20	81	111.5	M12
BMT75-DRER40-60	60	112	104	75	41	65	105	63	ER40	90	90	15	14	23	80	110	M12
BMT75-DRER40-90	90	112	104	75	41	65	135	63	ER40	90	90	15	14	23	80	110	M12
BMT75-DRER40-125	125	112	104	75	41	65	170	63	ER40	90	90	15	14	23	80	110	M12
BMT85-DRER40-110	110	125	134.8	85	54.3	75.5	160	78	ER50	100	100	20	16	27.5	96	136	M12

### Cabezal VDI Axial - DIN 1809

- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 0°

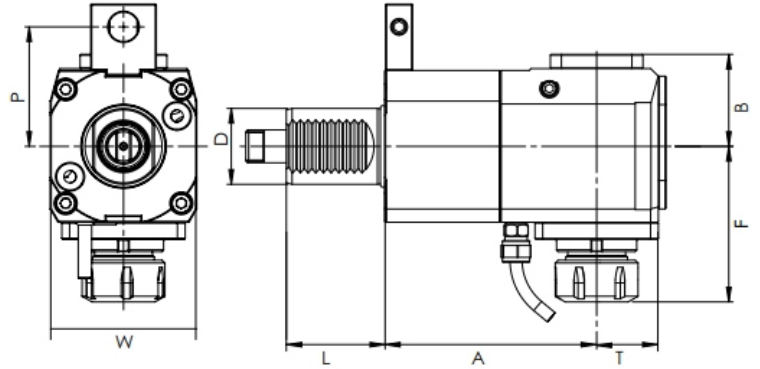


Referencia	VDI	PINZA	F	L	W	W1	Nm	REFRIGERACIÓN
VDI30-DAER25-87	30	ER25	87	45	64	68	28	Exterior
VDI30-DAER25K-87	30	ER25	87	45	64	68	28	Interior
VDI40-DAER25-105	40	ER25	105	53	80	86	50	Exterior
VDI40-DAER25K-105	40	ER25	105	53	80	86	50	Interior
VDI40-DAER32-108	40	ER32	108	53	80	86	50	Exterior
VDI40-DAER32K-108	40	ER32	108	53	80	86	50	Interior
VDI40-DAER32-95	40	ER32	95	53	80	86	50	Exterior
VDI40-DAER32K-95	40	ER32	95	53	80	86	50	Interior



**Cabezal VDI Radial - DIN 1809**

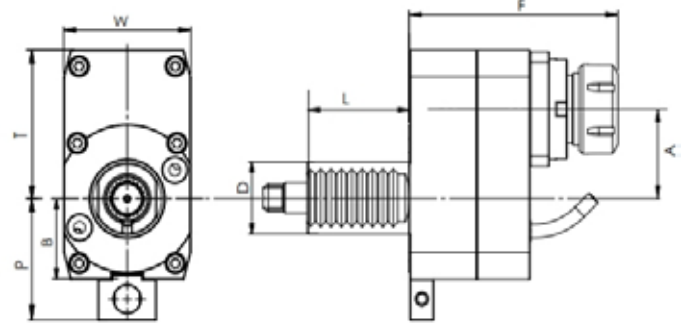
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM	Refrigeración	Dirección
VDI30-DRER25-55	30	ER25	55	48	63	45	48	29	64	28	6000	Exterior	Derecha
VDI30-DRER25K-55	30	ER25	55	51	63	45	48	29	64	28	6000	Interior	Derecha
VDI40-DRER25-80	40	ER25	80	59	70	53	71	36	75	50	6000	Exterior	Derecha
VDI40-DRER25K-80	40	ER25	80	62	70	53	71	36	75	50	6000	Interior	Derecha
VDI40-DRER32-80	40	ER32	80	59	74	53	71	36	75	50	6000	Exterior	Derecha
VDI40-DRER32K-80	40	ER32	80	62	74	53	71	36	75	50	6000	Interior	Derecha
VDI40-DRER25-100	40	ER25	100	59	70	53	-	36	75	50	6000	Exterior	Izquierda
VDI40-DRER25K-100	40	ER25	100	62	70	53	-	36	75	50	6000	Interior	Izquierda
VDI40-DRER32-100	40	ER32	100	59	74	53	-	36	75	50	6000	Exterior	Izquierda
VDI40-DRER32K-100	40	ER32	100	62	74	53	-	36	75	50	6000	Interior	Izquierda

**Cabezal VDI Axial Desplazado - DIN 1809**

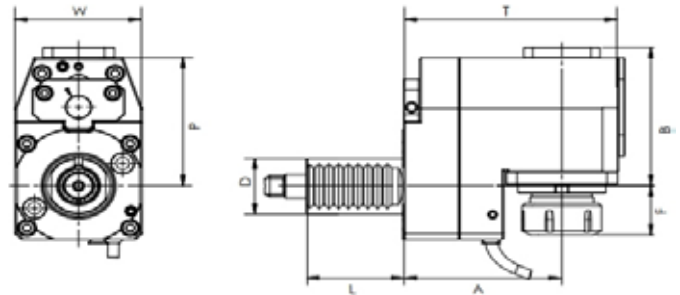
- RPM: 12000 - I (rev) 1:2
- Refrigeración: Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM
VDI30-DOAER25-50-106	30	ER25	50	40	106	45	48	90	78	14	12000

**Cabezal VDI Radial Lateral - DIN 1809**

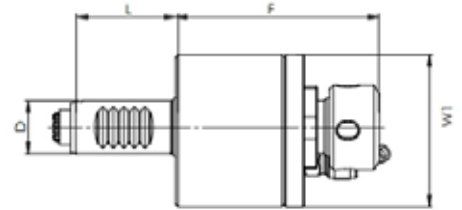
- RPM: 6000 a 4000 - I (rev) 1:1
- Refrigeración: Exterior / Interior
- Dirección: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM	Refrigeración
VDI30-DORER25-75-40	30	ER25	75	71	40	45	48	101	64	28	6000	Exterior
VDI30-DORER25K-75-40	30	ER25	75	74	40	45	48	101	64	28	6000	Interior
VDI40-DORER25-120-37	40	ER25	120	92	37	53	71	120	75	60	4000	Exterior
VDI40-DORER25K-120-37	40	ER25	120	95	37	53	71	120	75	60	4000	Interior
VDI40-DORER32-120-41	40	ER32	120	92	41	53	71	120	75	60	4000	Exterior
VDI40-DORER32K-120-41	40	ER32	120	95	41	53	71	120	75	60	4000	Interior

### Cabezal VDI Axial - DIN 5480

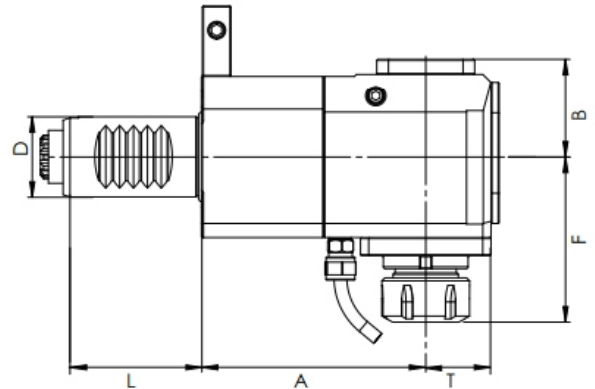
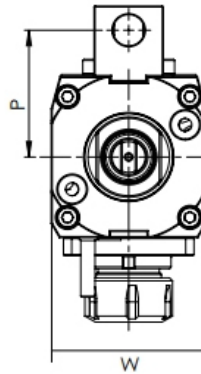
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 0°



Referencia	VDI	PINZA	F	L	W	W1	Nm	Refrigeración
5480-VDI30-DAER25-87	30	ER25	87	55	62	69	28	Exterior
5480-VDI30-DAER25K-87	30	ER25	87	55	62	69	28	Interior
5480-VDI40-DAER25-105	40	ER25	105	63	76	94	50	Exterior
5480-VDI40-DAER25K-105	40	ER25	105	63	76	94	50	Interior
5480-VDI40-DAER32-108	40	ER32	108	63	76	94	50	Exterior
5480-VDI40-DAER32K-108	40	ER32	108	63	76	94	50	Interior

### Cabezal VDI Radial - DIN 5480

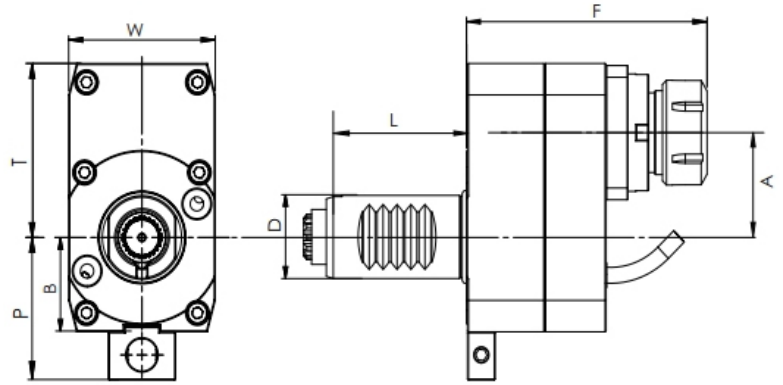
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	Refrigeración
5480-VDI30-DRER25-55	30	ER25	55	48	63	55	56	26	64	28	Exterior
5480-VDI30-DRER25K-55	30	ER25	55	51	63	55	56	26	64	28	Interior
5480-VDI30-DRER25-85	30	ER25	85	48	63	55	56	26	64	28	Exterior
5480-VDI30-DRER25K-85	30	ER25	85	51	63	55	56	26	64	28	Interior
5480-VDI30-DRER25-100	30	ER25	100	48	63	55	56	29	64	28	Exterior
5480-VDI30-DRER25K-100	30	ER25	100	51	63	55	56	29	64	28	Interior
5480-VDI40-DRER25-80	40	ER25	80	59	70	63	65	33	75	50	Exterior
5480-VDI40-DRER25K-80	40	ER25	80	62	70	63	65	33	75	50	Interior
5480-VDI40-DRER25-100	40	ER25	100	59	70	63	65	33	75	50	Exterior
5480-VDI40-DRER25K-100	40	ER25	100	62	70	63	65	33	75	50	Interior
5480-VDI40-DRER32-80	40	ER32	80	59	74	63	65	33	75	50	Exterior
5480-VDI40-DRER32K-80	40	ER32	80	62	74	63	65	33	75	50	Interior
5480-VDI40-DRER32-100	40	ER32	100	59	74	63	65	33	75	50	Exterior
5480-VDI40-DRER32K-100	40	ER32	100	62	74	63	65	33	75	50	Interior

**Cabezal VDI Axial Desplazado - DIN 5480**

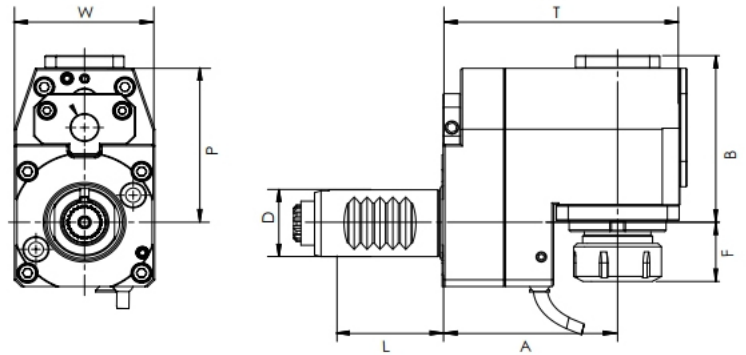
- RPM: 12000 - I (rev) 1:2
- Refrigeración: Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM
5480-VDI30-DOAER25-50-102	30	ER25	50	47	102	55	56	90	78	14	12000

**Cabezal VDI Radial Lateral - DIN 5480**

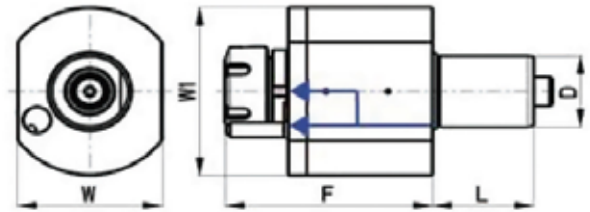
- RPM: 6000 - I (rev) 1:1
- Refrigeración: Exterior / Interior
- Dirección: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	Refrigeración
5480-VDI30-DORER25-75-39	30	ER25	75	71	39.8	55	56	101	64	28	Exterior
5480-VDI30-DORER25K-75-39	30	ER25	75	73.5	39.8	55	56	101	64	28	Exterior+Interior
5480-VDI40-DORER25-120-36	40	ER25	120	92.2	36.6	63	65	153	75	50	Exterior
5480-VDI40-DORER25K-120-36	40	ER25	120	95.2	36.6	63	65	153	75	50	Exterior+Interior
5480-VDI40-DORER32-120-40	40	ER32	120	92.2	40.6	63	65	153	75	50	Exterior
5480-VDI40-DORER32K-120-40	40	ER32	120	95.2	40.6	63	65	153	75	50	Exterior+Interior

### Cabezal VDI Axial - DIN 5482

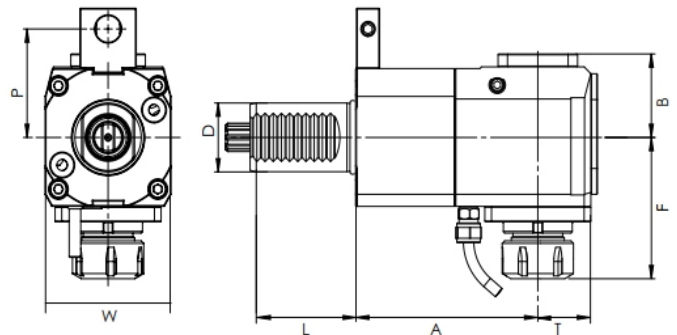
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 0°



Referencia	VDI	PINZA	F	L	W	W1	Nm	Refrigeración
5482-VDI30-DAER25-87	30	ER25	87	45	62	69	28	Exterior
5482-VDI30-DAER25K-87	30	ER25	87	45	62	69	28	Interior
5482-VDI40-DAER25-105	40	ER25	105	53	76	94	50	Exterior
5482-VDI40-DAER25K-105	40	ER25	105	53	76	94	50	Interior
5482-VDI40-DAER32-108	40	ER32	108	53	76	94	50	Exterior
5482-VDI40-DAER32K-108	40	ER32	108	53	76	94	50	Interior

### Cabezal VDI Radial - DIN 5482

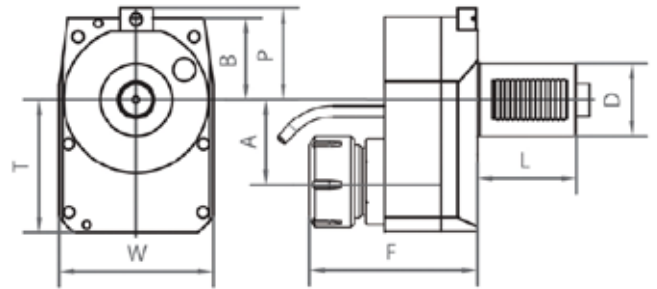
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 90° Derecha



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	Refrigeración
5482-VDI30-DRER25-55	30	ER25	55	48	63	45	48	26	64	28	Exterior
5482-VDI30-DRER25K-55	30	ER25	55	51	63	45	48	26	64	28	Interior
5482-VDI40-DRER25-80	40	ER25	80	59	70	53	71	33	75	50	Exterior
5482-VDI40-DRER25K-80	40	ER25	80	62	70	53	71	33	75	50	Interior
5482-VDI40-DRER32-80	40	ER32	80	59	74	53	71	33	75	50	Exterior
5482-VDI40-DRER32K-80	40	ER32	80	62	74	53	71	33	75	50	Interior

**Cabezal VDI Axial Desplazado - DIN 5482**

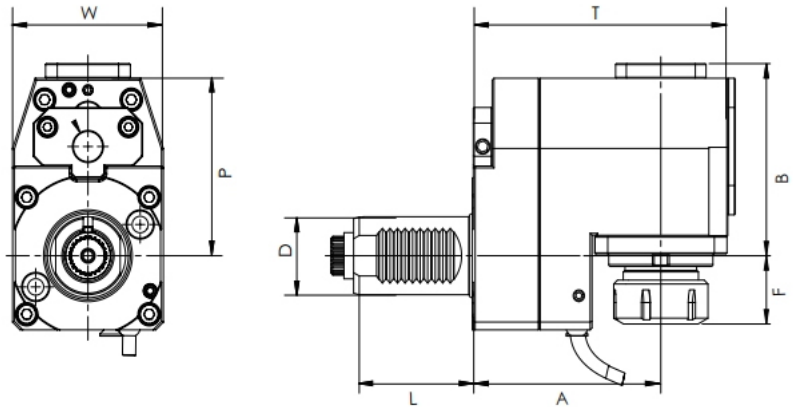
- RPM: 12000 - I (rev) 1:2
- Refrigeración: Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM
5482-VDI30-DOAER25-50-102	30	ER25	50	47	102	55	56	90	78	14	12000

**Cabezal VDI Radial Lateral - DIN 5482**

- RPM: 6000 a 4000 - I (rev) 1:1
- Refrigeración: Exterior / Interior
- Dirección: 90°

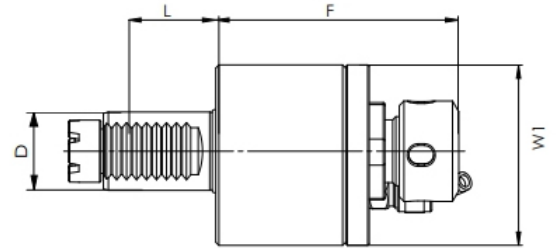
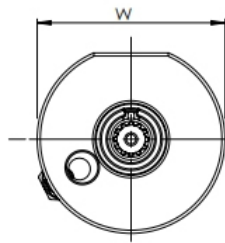


Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM	Refrigeración
5482-VDI30-DORER25-75-40	30	ER25	75	71	40	45	48	101	64	28	6000	Exterior
5482-VDI30-DORER25K-75-40	30	ER25	75	74	40	45	48	101	64	28	6000	Interior
5482-VDI40-DORER25-120-37	40	ER25	120	92	37	53	71	125.5	75	60	4000	Exterior
5482-VDI40-DORER25K-120-37	40	ER25	120	95	37	53	71	125.5	75	60	4000	Interior
5482-VDI40-DORER32-120-41	40	ER32	120	92	41	53	71	125.5	75	60	4000	Exterior
5482-VDI40-DORER32K-120-41	40	ER32	120	95	41	53	71	125.5	75	60	4000	Interior



### Cabezal VDI Axial - TOEM BARUFFALDI

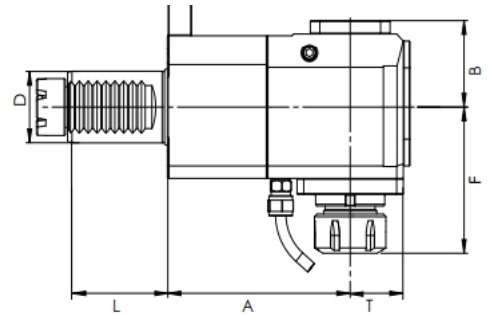
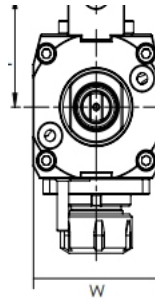
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 0°



Referencia	VDI	PINZA	F	L	W	W1	Nm	Refrigeración	Z
TOEM-VDI30-DAER25-87	30	ER25	87	45	64	68	28	Exterior	6
TOEM-VDI30-DAER25K-87	30	ER25	87	45	64	68	28	Interior	6
TOEM-VDI40-DAER25-105	40	ER25	105	53	80	86	50	Exterior	8
TOEM-VDI40-DAER25K-105	40	ER25	105	53	80	86	50	Interior	8
TOEM-VDI40-DAER32-108	40	ER32	108	53	80	86	50	Exterior	8
TOEM-VDI40-DAER32K-108	40	ER32	108	53	80	86	50	Interior	8

### Cabezal VDI Radial - DIN TOEM BARUFFALDI

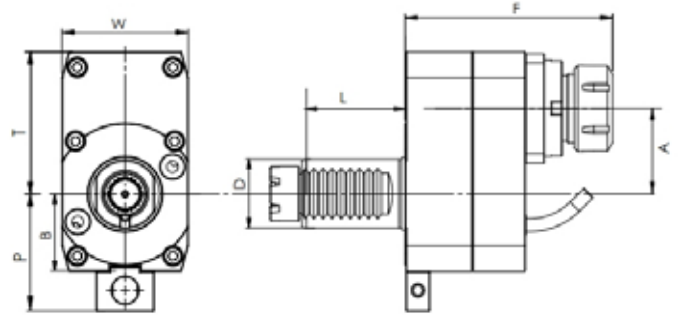
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 90° Derecha



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	Refrigeración	Z
TOEM-VDI30-DRER25-55	30	ER25	55	48	63	45	48	29	64	28	Exterior	6
TOEM-VDI30-DRER25K-55	30	ER25	55	51	63	45	48	29	64	28	Interior	6
TOEM-VDI40-DRER25-80	40	ER25	80	59	70	53	71	36	75	50	Exterior	8
TOEM-VDI40-DRER25K-80	40	ER25	80	62	70	53	71	36	75	50	Interior	8
TOEM-VDI40-DRER32-80	40	ER32	80	59	74	53	71	36	75	50	Exterior	8
TOEM-VDI40-DRER32K-80	40	ER32	80	62	74	53	71	36	75	50	Interior	8

**Cabezal VDI Axial Desplazado - TOEM**

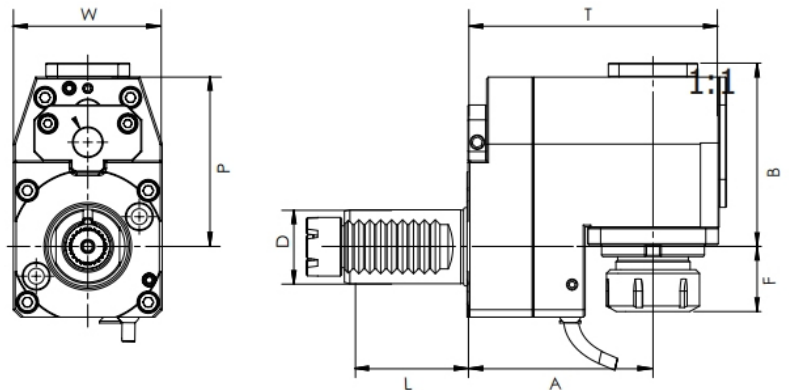
- RPM: 12000 - I (rev) 1:2
- Refrigeración: Exterior
- Dirección Axial: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	Z
TOEM-VDI30-DOAER25-50-106	30	ER25	50	40	106	45	48	90	78	14	6

**Cabezal VDI Radial Lateral - TOEM**

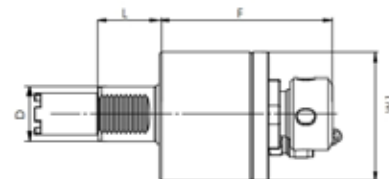
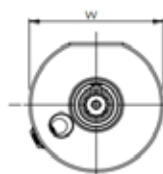
- RPM: 6000
- Refrigeración: Exterior / Interior
- Dirección: 90°



Referencia	VDI	Pinza	A	B	F	L	P	T	W	Nm	RPM	Refrigeración
TOEM-VDI30-DORER25-75-40	30	ER25	75	71	40	45	48	101	64	28	6000	Exterior
TOEM-VDI30-DORER25K-75-40	30	ER25	75	74	40	45	48	101	64	28	6000	Interior
TOEM-VDI40-DORER25-120-37	40	ER25	120	92	37	53	71	125.5	75	60	4000	Exterior
TOEM-VDI40-DORER25K-120-37	40	ER25	120	95	37	53	71	125.5	75	60	4000	Interior
TOEM-VDI40-DORER32-120-41	40	ER32	120	92	41	53	71	125.5	75	60	4000	Exterior
TOEM-VDI40-DORER32K-120-41	40	ER32	120	95	41	53	71	125.5	75	60	4000	Interior

### Cabezal VDI Axial - HASS

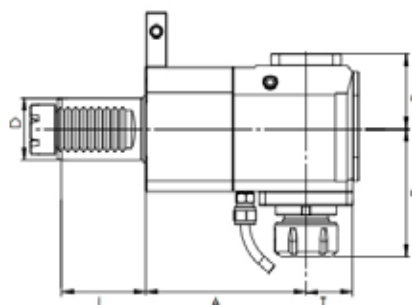
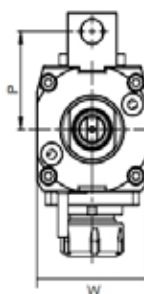
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 0°



Referencia	VDI	PINZA	F	L	L1	W	W1	Nm	Z
HASS-VDI40-DAER25-105	40	ER25	105	63	104.85	76	94	50	Exterior
HASS-VDI40-DAER25K-105	40	ER25	105	63	104.85	76	94	50	Interior
HASS-VDI40-DAER32-108	40	ER32	108	63	104.85	76	94	50	Exterior
HASS-VDI40-DAER32K-108	40	ER32	108	63	104.85	76	94	50	Interior
HASS-VDI40-DAER25-105L	40	ER25	105	63	117.55	76	94	50	Exterior
HASS-VDI40-DAER25K-105L	40	ER25	105	63	117.55	76	94	50	Interior
HASS-VDI40-DAER32-108L	40	ER32	108	63	117.55	76	94	50	Exterior
HASS-VDI40-DAER32K-108L	40	ER32	108	63	117.55	76	94	50	Interior
HASS-VDI40-DAER25-105EL	40	ER25	105	63	130.25	76	94	50	Exterior
HASS-VDI40-DAER25K-105EL	40	ER25	105	63	130.25	76	94	50	Interior
HASS-VDI40-DAER32-108EL	40	ER32	108	63	130.25	76	94	50	Exterior
HASS-VDI40-DAER32K-108EL	40	ER32	108	63	130.25	76	94	50	Interior

### Cabezal VDI Radial - HASS

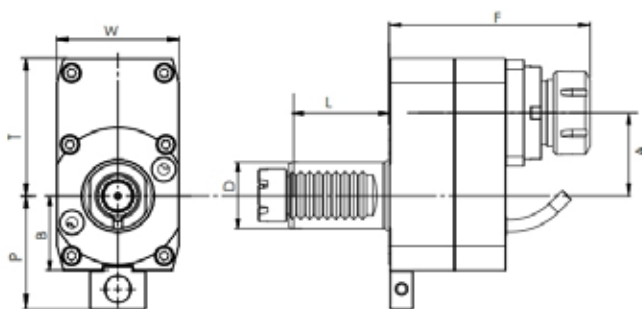
- RPM: 6000 - I (rev) 1:1
- Refrigeración Interior/Exterior
- Dirección Axial: 90° Izquierda



Referencia	VDI	Pinza	A	B	F	L	L1	P	T	W	Nm	Refrigeración
HASS-VDI40-DRER25-69	40	ER25	69	59	70	63	104.85	82	36	75	60	Exterior
HASS-VDI40-DRER25K-69	40	ER25	69	62	70	63	104.85	82	36	75	50	Interior
HASS-VDI40-DRER32-69	40	ER32	69	59	74	63	104.85	82	36	75	50	Exterior
HASS-VDI40-DRER32K-69	40	ER32	69	62	74	63	104.85	82	36	75	50	Interior
HASS-VDI40-DRER25-69L	40	ER25	69	59	70	63	117.55	82	36	75	50	Exterior
HASS-VDI40-DRER25K-69L	40	ER25	69	62	70	63	117.55	82	36	75	50	Interior
HASS-VDI40-DRER32-69L	40	ER32	69	59	74	63	117.55	82	36	75	50	Exterior
HASS-VDI40-DRER32K-69L	40	ER32	69	62	74	63	117.55	82	36	75	50	Interior
HASS-VDI40-DRER25-69EL	40	ER32	69	59	70	63	130.25	82	36	75	50	Exterior
HASS-VDI40-DRER25K-69EL	40	ER25	69	62	70	63	130.25	82	36	75	50	Interior
HASS-VDI40-DRER32-69EL	40	ER25	69	59	74	63	130.25	82	36	75	50	Exterior
HASS-VDI40-DRER32K-69EL	40	ER32	69	62	74	63	130.25	82	36	75	50	Interior
HASS-VDI40-DRER25-80	40	ER25	80	59	70	63	104.85	82	33	75	50	Exterior
HASS-VDI40-DRER25K-80	40	ER25	80	62	70	63	104.85	82	33	75	50	Interior
HASS-VDI40-DRER32-80	40	ER32	80	59	74	63	104.85	82	33	75	50	Exterior
HASS-VDI40-DRER32K-80	40	ER32	80	62	74	63	104.85	82	33	75	50	Interior
HASS-VDI40-DRER25-80L	40	ER25	80	59	70	63	117.55	82	33	75	50	Exterior
HASS-VDI40-DRER25K-80L	40	ER25	80	62	70	63	117.55	82	33	75	50	Interior
HASS-VDI40-DRER32-80L	40	ER32	80	59	74	63	117.55	82	33	75	50	Exterior
HASS-VDI40-DRER32K-80L	40	ER32	80	62	74	63	117.55	82	33	75	50	Interior
HASS-VDI40-DRER25-80EL	40	ER25	80	59	70	63	130.25	82	33	75	50	Exterior
HASS-VDI40-DRER25K-80EL	40	ER25	80	62	70	63	130.25	82	33	75	50	Interior
HASS-VDI40-DRER32-80EL	40	ER32	80	59	74	63	130.25	82	33	75	50	Exterior
HASS-VDI40-DRER32K-80EL	40	ER32	80	62	74	63	130.25	82	33	75	50	Interior

**Cabezal VDI Axial Desplazado - HASS**

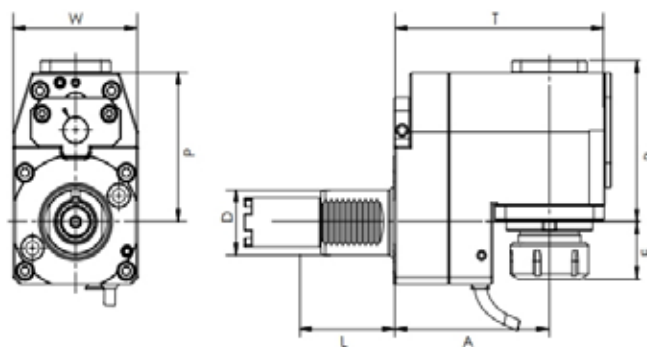
- RPM: 12000 - I (rev) 1:2
- Refrigeración: Exterior / Interior
- Dirección Axial: 90° Izquierda



Referencia	VDI	Pinza	A	F	L	L1	P	T	W	Refrigeración
HASS-VDI40-DOAER25-50-63	40	ER25	50	106	63	140.85	82	90	78	Exterior
HASS-VDI40-DOAER25K-50-63	40	ER25	50	106	63	140.85	82	90	78	Interior
HASS-VDI40-DOAER25-50-63L	40	ER25	50	106	63	117.55	82	90	78	Exterior
HASS-VDI40-DOAER25K-50-63L	40	ER25	50	106	63	117.55	82	90	78	Interior
HASS-VDI40-DOAER25-50-63EL	40	ER25	50	106	63	130.25	82	90	78	Exterior
HASS-VDI40-DOAER25K-50-63EL	40	ER25	50	106	63	130.25	82	90	78	Interior

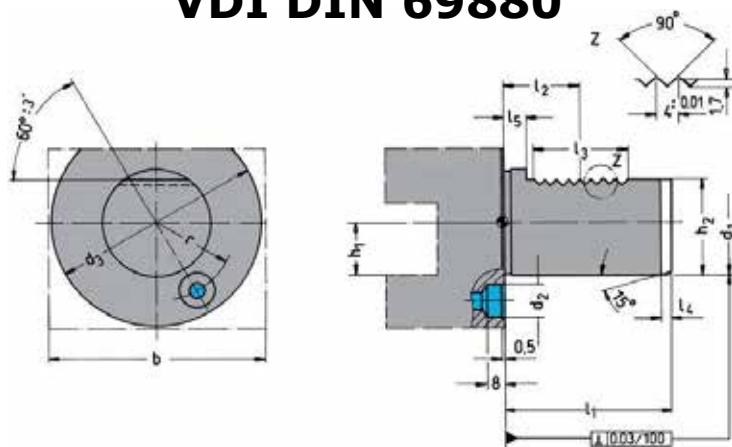
**Cabezal VDI Radial Lateral - HASS**

- RPM: 6000
- Refrigeración: Exterior / Interior
- Dirección: 90° Izquierda



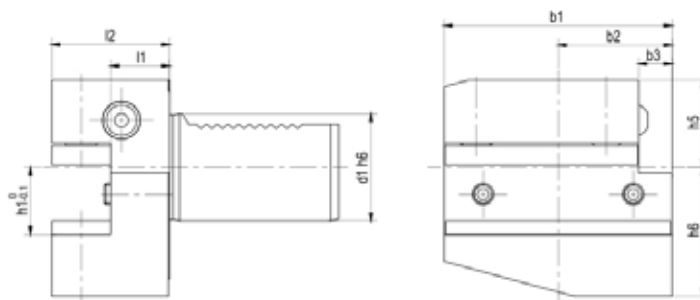
Referencia	VDI	Pinza	A	B	F	L	L1	P	T	W	Refrigeración
HASS-VDI40-DORER25-120-37	40	ER25	120	92	37	63	104.85	82	33	75	Exterior
HASS-VDI40-DORER25K-120-37	40	ER25	120	95	37	63	104.85	82	33	75	Interior
HASS-VDI40-DORER32-120-37	40	ER32	120	92	41	63	104.85	82	33	75	Exterior
HASS-VDI40-DORER32K-120-37	40	ER32	120	95	41	63	104.85	82	33	75	Interior
HASS-VDI40-DORER25-120-37L	40	ER25	120	92	37	63	117.55	82	33	75	Exterior
HASS-VDI40-DORER25K-120-37L	40	ER25	120	95	37	63	117.55	82	33	75	Interior
HASS-VDI40-DORER32-120-37L	40	ER32	120	92	41	63	117.55	82	33	75	Exterior
HASS-VDI40-DORER32K-120-37L	40	ER32	120	95	41	63	117.55	82	33	75	Interior
HASS-VDI40-DORER25-120-37EL	40	ER25	120	92	37	63	130.25	82	33	75	Exterior
HASS-VDI40-DORER25K-120-37EL	40	ER25	120	95	37	63	130.25	82	33	75	Interior
HASS-VDI40-DORER32-120-37EL	40	ER32	120	92	41	63	130.25	82	33	75	Exterior
HASS-VDI40-DORER32K-120-37EL	40	ER32	120	95	41	63	130.25	82	33	75	Interior

### VDI DIN 69880



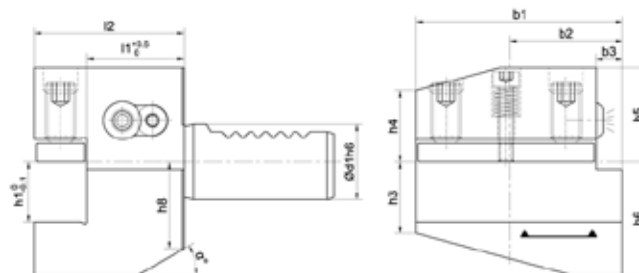
D1/h6	B	H1	D2	D3	H2	R	H	L2	L3	L4	L5
16	42	12	8	40	15.0	14.5	32	12.7	16	2	3.8
20	52	16	10	50	18.0	18.0	40	21.7	24	2	7.0
25	60	16	10	58	23.5	21.0	48	21.7	24	2	7.0
30	70	20	14	68	27.0	25.0	55	29.7	40	2	7.0
40	85	25	14	83	36.0	32.0	63	29.7	40	3	7.0
50	100	32	16	98	45.0	37.0	78	35.7	48	3	8.0

### Portaherramientas VDI - B1 Derecha



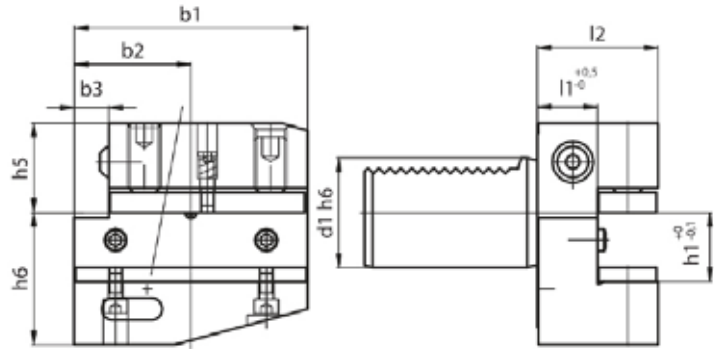
Referencia	Dimensiones	D1	d1	b1	b2	b3	h1	h5	h6	I1	I2
S31.169.12	Ø 16 - 16x12x24	16	16	42	23	5	12	20	22	13	24
S31.209.16	Ø 20 - 20x16x30	20	20	55	30	7	16/12	25	30	16	30
S31.309.20	Ø 30 - 30x20x40	30	30	70	35	10	20/16	28	38	22	40
S31.409.25	Ø 40 - 40x25x44	40	40	85	42.5	12.5	25/20	32.5	48	22	44
S31.509.32	Ø 50 - 50x32x55	50	50	100	50	16	32/25	35	60	30	55

### Portaherramientas VDI Refrigerado - B1 Derecha

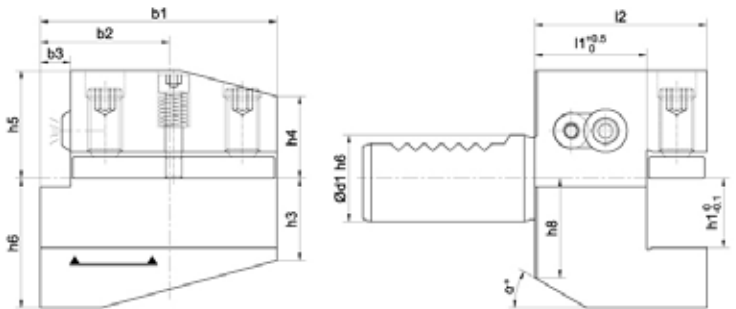


Referencia	Dimensiones	b1	b2	b3	I1	h3	h4	h5	h6	h8	a
S31K.309.20	Ø 30 - 30x20x40	70	35	10	22	26	22	28	38	30	25°
S31K.409.25	Ø 40 - 40x25x44	85	42.5	12.5	22	35	30	32.5	48	-	-
S31K.509.32	Ø 50 - 50x32x55	85	42.5	12.5	22	35	30	32.5	48	-	-

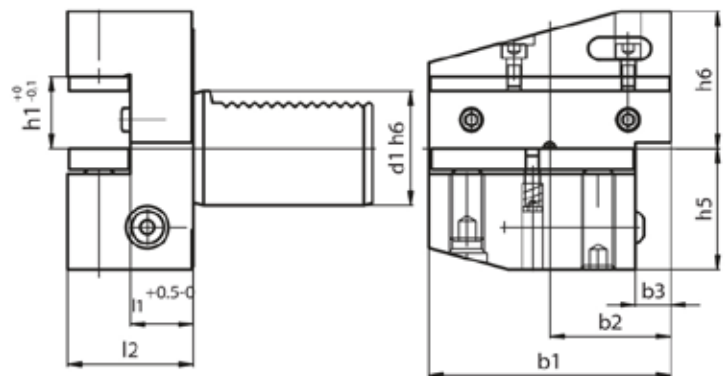


**Portaherramientas VDI – B2 Izquierda**


Referencia	Dimensiones	D1	d1	b1	b2	b3	h1	h5	h6	l1	l2
S32.169.12	Ø 16 – 16x12x24	16	16	42	23	5	12	20	22	13	24
S32.209.16	Ø 20 – 20x16x30	20	20	55	30	7	16/12	25	30	16	30
S32.309.20	Ø 30 – 30x20x40	30	30	70	35	10	20/16	28	38	22	40
S32.409.25	Ø 40 – 40x25x44	40	40	85	42.5	12.5	25/20	32.5	48	22	44
S32.509.32	Ø 50 – 50x32x55	50	50	100	50	16	32/25	35	60	30	55

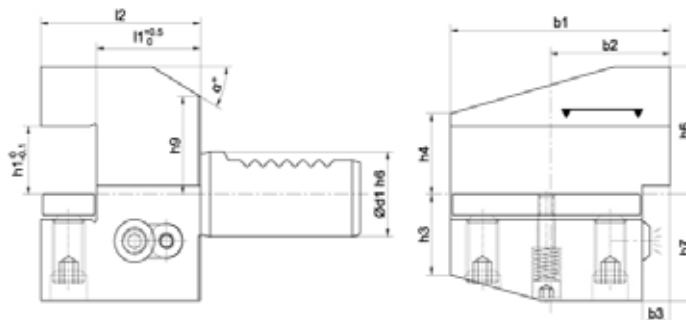
**Portaherramientas VDI Refrigerado – B2 Izquierda**


Referencia	Dimensiones	b1	b2	b3	l1	h3	h4	h5	h6	h8	a
S32K.309.20	Ø 30 – 30x20x40	70	35	10	22	26	22	28	38	30	25°
S32K.409.25	Ø 40 – 40x25x44	85	42.5	12.5	22	35	30	32.5	48	-	-
S32K.509.32	Ø 50 – 50x32x55	85	42.5	12.5	22	35	30	32.5	48	-	-

**Portaherramientas VDI - B3 Derecha**


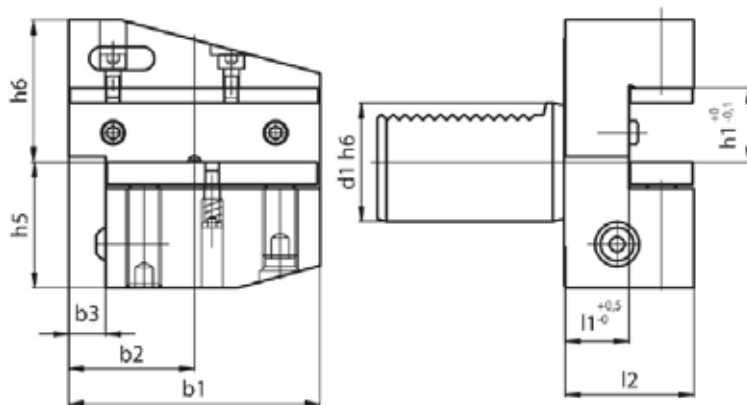
Referencia	Dimensiones	D1	d1	b1	b2	b3	h1	h5	h6	l1	l2
S33.169.12	Ø 16 – 16x12x24	16	16	42	23	5	12	20	22	13	24
S33.209.16	Ø 20 – 20x16x30	20	20	55	30	7	16/12	25	30	16	30
S33.309.20	Ø 30 – 30x20x40	30	30	70	35	10	20/16	28	38	22	40
S33.409.25	Ø 40 – 40x25x44	40	40	85	42.5	12.5	25/20	32.5	48	22	44
S33.509.32	Ø 50 – 50x32x55	50	50	100	50	16	32/25	35	60	30	55

**Portaherramientas VDI Refrigerado - B3 Derecha**



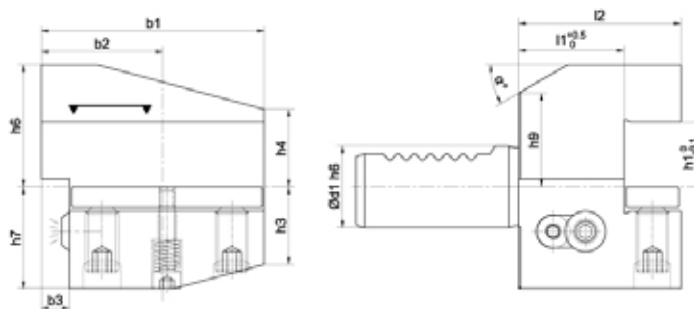
Referencia	Dimensiones	b1	b2	b3	l1	h3	h4	h5	h6	h8	a
S33K.309.20	Ø 30 - 30x20x40	70	35	10	22	26	22	38	35	28	25°
S33K.409.25	Ø 40 - 40x25x44	85	42.5	12.5	22	35	30	48	42.5	-	-
S33K.509.32	Ø 50 - 50x32x55	85	42.5	12.5	22	35	30	48	42.5	-	-

**Portaherramientas VDI - B4 Izquierda**

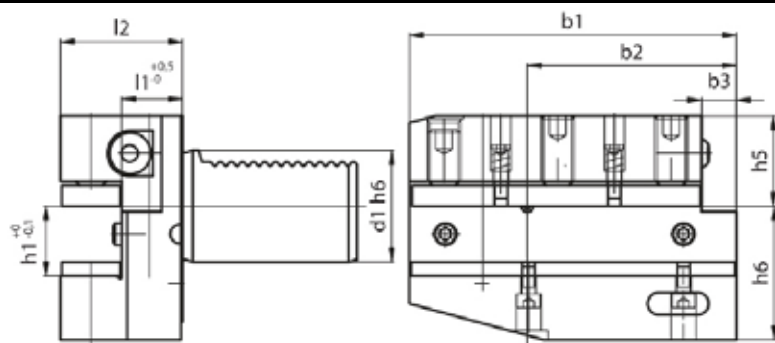


Referencia	Dimensiones	D1	d1	b1	b2	b3	h1	h5	h6	l1	l2
S34.169.12	Ø 16 - 16x12x24	16	16	42	23	5	12	20	22	13	24
S34.209.16	Ø 20 - 20x16x30	20	20	55	30	7	16/12	25	30	16	30
S34.309.20	Ø 30 - 30x20x40	30	30	70	35	10	20/16	28	38	22	40
S34.409.25	Ø 40 - 40x25x44	40	40	85	42.5	12.5	25/20	32.5	48	22	44
S34.509.32	Ø 50 - 50x32x55	50	50	100	50	16	32/25	35	60	30	55

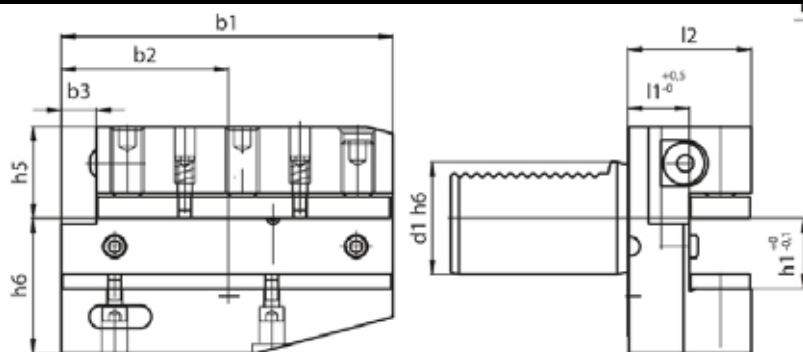
**Portaherramientas VDI Refrigerado - B4 Izquierda**



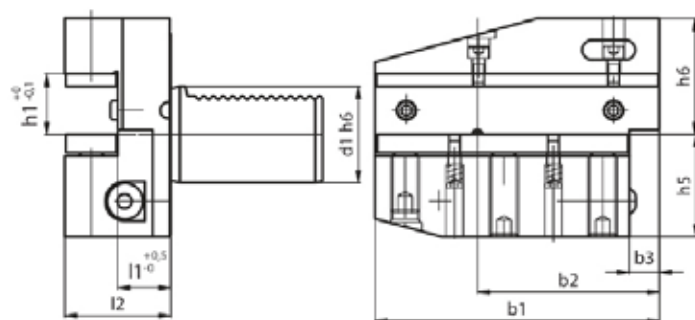
Referencia	Dimensiones	b1	b2	b3	l1	h3	h4	h5	h6	h8	a
S34K.309.20	Ø 30 - 30x20x40	70	35	10	22	26	22	38	35	28	25
S34K.409.25	Ø 40 - 40x25x44	85	42.5	12.5	22	35	30	48	42.5	-	-
S34K.509.32	Ø 50 - 50x32x55	82	42.5	12.5	22	35	30	48	42.5	-	-

**Portaherramientas VDI – B5 Derecha**


Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2
S35.169.12	Ø 16 - 16x12x24	16	58	39	5	12	20	22	23	34
S35.209.16	Ø 20 - 20x16x30	20	75	50	7	16/12	25	30	16	30
S35.309.20	Ø 30 - 30x20x40	30	100	65	10	20/16	28	38	22	40
S35.409.25	Ø 40 - 40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
S35.509.32	Ø 50 - 50x32x55	50	130	80	16	32/25	35	60	30	55

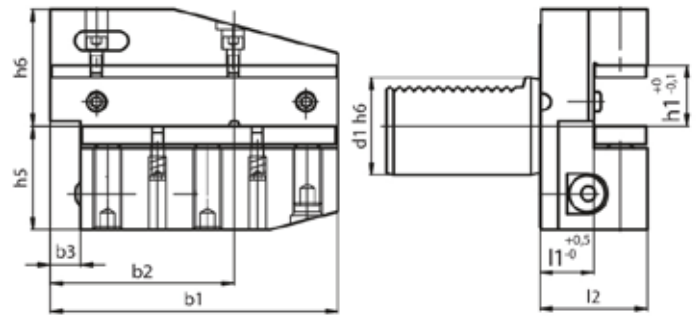
**Portaherramientas VDI – B6 Izquierda**


Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2
S36.169.12	Ø 16 - 16x12x24	16	58	39	5	12	20	22	23	34
S36.209.16	Ø 20 - 20x16x30	20	75	50	7	16/12	25	30	16	30
S36.309.20	Ø 30 - 30x20x40	30	100	65	10	20/16	28	38	22	40
S36.409.25	Ø 40 - 40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
S36.509.32	Ø 50 - 50x32x55	50	130	80	16	32/25	35	60	30	55

**Portaherramientas VDI – B7 Derecha**


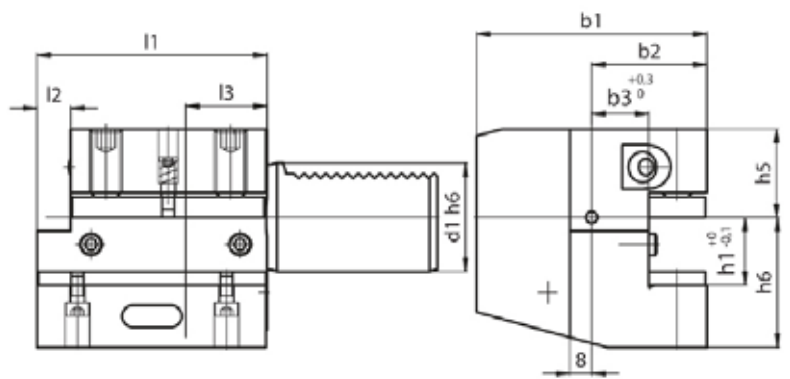
Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2
S37.169.12	Ø 16 - 16x12x24	16	58	39	5	12	20	22	23	34
S37.209.16	Ø 20 - 20x16x30	20	75	50	7	16/12	25	30	16	30
S37.309.20	Ø 30 - 30x20x40	30	100	65	10	20/16	28	38	22	40
S37.409.25	Ø 40 - 40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
S37.509.32	Ø 50 - 50x32x55	50	130	80	16	32/25	35	60	30	55

**Portaherramientas VDI – B8 Izquierda**



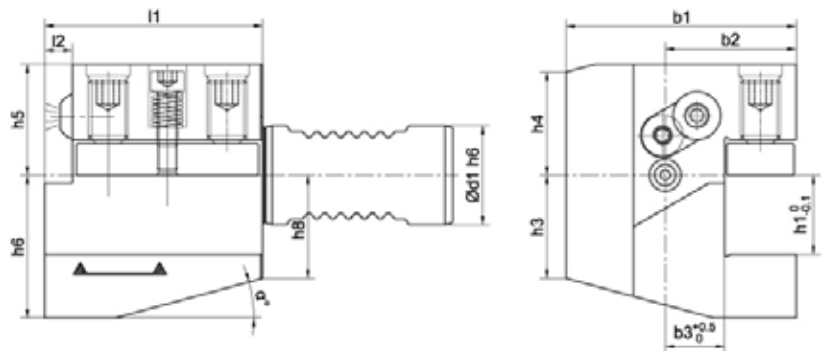
Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2
S38.169.12	Ø 16 - 16x12x24	16	58	39	5	12	20	22	23	34
S38.209.16	Ø 20 - 20x16x30	20	75	50	7	16/12	25	30	16	30
S38.309.20	Ø 30 - 30x20x40	30	100	65	10	20/16	28	38	22	40
S38.409.25	Ø 40 - 40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
S38.509.32	Ø 50 - 50x32x55	50	130	80	16	32/25	35	60	30	55

**Portaherramientas VDI – C1 Derecha**

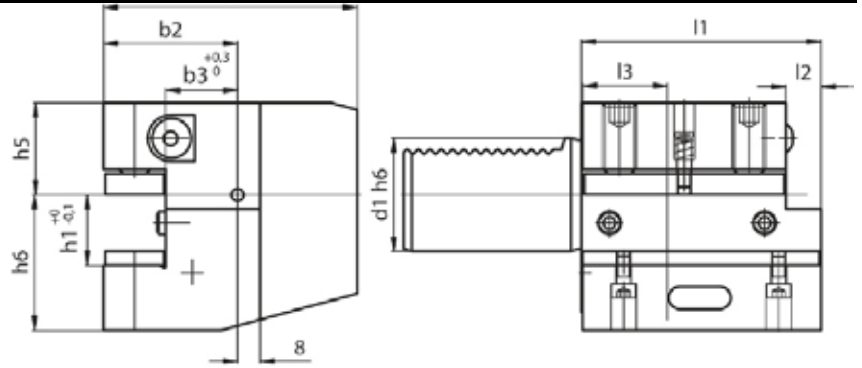


Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S41.169.12	Ø 16 - 16x12	16	43	24	13	12	20	22	44	5	20
S41.209.16	Ø 20 - 20x16	20	65	40	26	16/12	25	30	50	-	30
S41.309.20	Ø 30 - 30x20	30	40	35	17	20/16	28	38	40	10	30
S41.409.25	Ø 40 - 40x25	40	85	42.5	21	25/20	32.5	48	85	12.5	30
S41.509.32	Ø 50 - 50x32	50	100	50	26	32/25	35	60	100	16	40

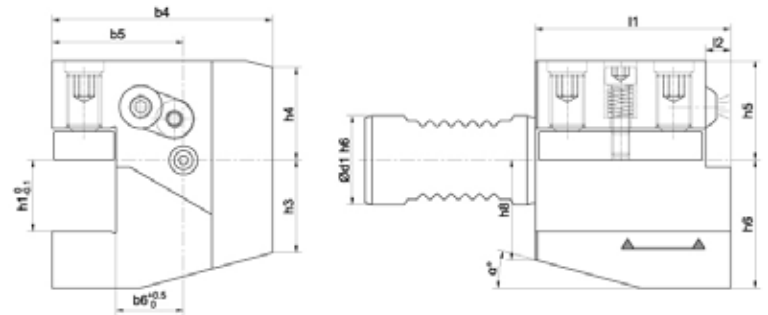
**Portaherramientas VDI Refrigerado – C1 Derecha**



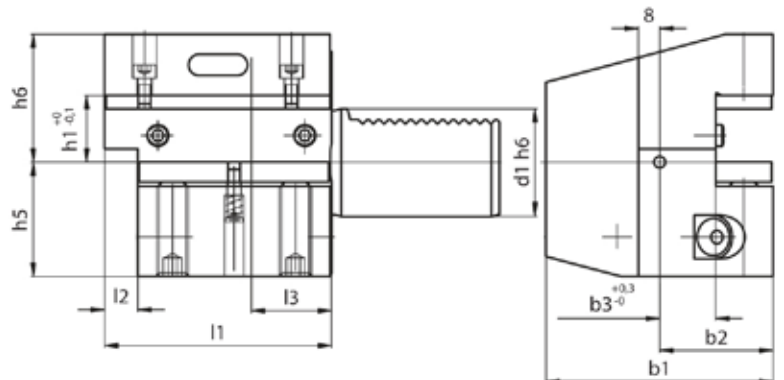
Referencia	Dimensiones	b1	b2	b3	l1	h3	h4	h5	h6	h8	a
S41K.309.20	Ø 30 - 30x20x40	70	35	17	10	26	22	32	38	30	25°
S41K.409.25	Ø 40 - 40x25x44	85	42.5	21	112.5	35	30	38	48	40	15°
S41K.509.32	Ø 50 - 50x32x55	90.5	48	26	12.5	42	35	44	48	-	-

**Portaherramientas VDI – C2 Izquierdada**


Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S42.169.12	Ø 16 - 16x12	16	43	24	13	12	20	22	44	5	20
S42.209.16	Ø 20 - 20x16	20	65	40	26	16/12	25	30	50	-	30
S42.309.20	Ø 30 - 30x20	30	76	41	23	20/16	28	38	70	10	30
S42.409.25	Ø 40 - 40x25	40	90	47.5	25.5	25/20	32.5	48	85	12.5	30
S42.509.32	Ø 50 - 50x32	50	105	55	30.5	32/25	35	60	100	16	40

**Portaherramientas VDI Refrigerado – C2 Izquierdada**


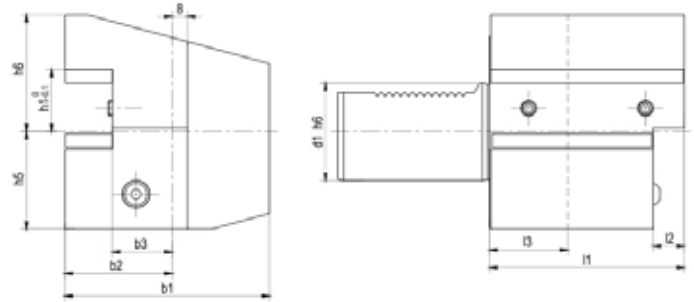
Referencia	Dimensiones	b1	b2	b3	l1	h3	h4	h5	h6	h8	a
S42K.309.20	Ø 30 - 30x20x40	70	35	17	10	26	22	32	38	30	25°
S42K.409.25	Ø 40 - 40x25x44	85	42.5	21	12.5	35	30	38	48	40	15°
S42K.509.32	Ø 50 - 50x32x55	90.5	48	26	12.5	42	35	44	48	-	-

**Portaherramientas VDI – C3 Derecha**


Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S43.169.12	Ø 16 - 16x12	16	43	24	13	12	20	22	44	5	20
S43.209.16	Ø 20 - 20x16	20	65	40	26	16/12	25	30	50	-	30
S43.309.20	Ø 30 - 30x20	30	76	41	23	20/16	28	38	70	10	30
S43.409.25	Ø 40 - 40x25	40	90	47.5	25.5	25/20	32.5	48	85	12.5	30
S43.509.32	Ø 50 - 50x32	50	105	55	30.5	32/25	35	60	100	16	40

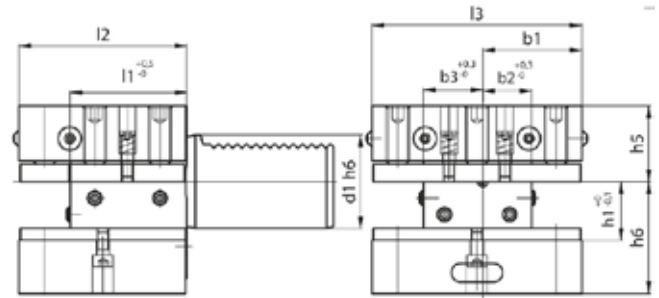


**Portaherramientas VDI – C4 Izquierda**



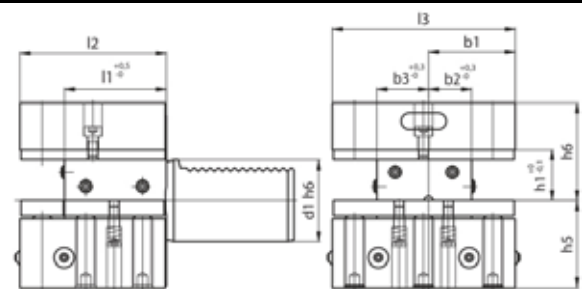
Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S44.169.12	Ø 16 – 16x12x24	16	43	24	13	12	20	22	44	5	20
S44.209.16	Ø 20 – 20x16x30	20	65	40	26	16/12	25	30	50	-	30
S44.309.20	Ø 30 – 30x20x40	30	76	41	23	20/16	28	38	70	10	30
S44.409.25	Ø 40 – 40x25x44	40	90	47.5	25.5	25/20	32.5	48	85	12.5	30
S44.509.32	Ø 50 – 50x32x55	50	105	55	30.5	32/25	35	60	100	16	40

**Portaherramientas VDI – D1**



Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S89.309.12	Ø 30 – 30x20x76	30	35	17	23	20/16	28	28	42	60	76
S89.409.16	Ø 40 – 40x25x90	40	42.5	21	25.5	25/20	32.5	48	50	72	90
S89.509.20	Ø 50 – 50x32x105	50	50	26	30.5	32/25	35	60	60	85	105

**Portaherramientas VDI – D2**

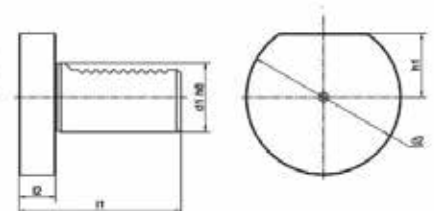


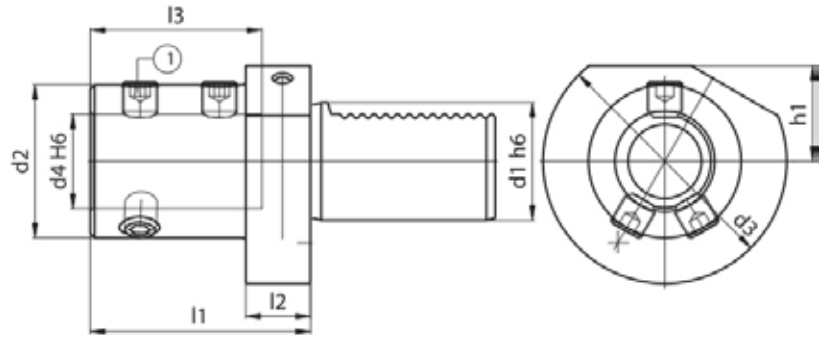
Referencia	Dimensiones	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
S90.309.12	Ø 30 – 30x20x76	30	35	17	23	20/16	28	28	42	60	76
S90.409.16	Ø 40 – 40x25x90	40	42.5	21	25.5	25/20	32.5	48	50	72	90
S90.509.20	Ø 50 – 50x32x105	50	50	26	30.5	32/25	35	60	60	85	105

**Tapa Protección VDI – Z2**

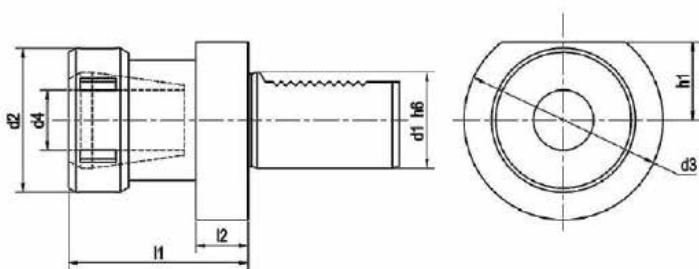
Tapa de Protección para el cierre del portaherramientas cuando no se usa.  
Protección de plástico.

Referencia	Dimensiones	d1	d2	h1	l1	l2
S30.169.13	16 X 13	16	40	18	45	13
S30.209.16	20 x 16	20	50	23	56	16
S30.309.20	30 x 16	30	68	28	71	16
S30.409.20	40 x 20	40	83	32.5	83	20
S30.509.20	50 x 30	50	98	35	98	20



**Portaherramientas VDI – E1**


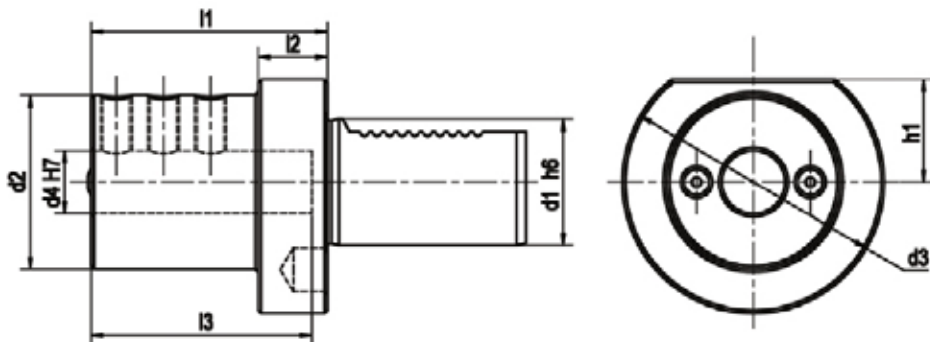
Referencia	Dimensiones	d1	d2	d3	d4	h1	l1	l2	l3
S51.209.16	E1 – 20 X 16	20	36	50	16	-	66	18	54
S51.209.20	E1 – 20 X 20	20	40	50	20	-	67	18	54
S51.209.25	E1 – 20 X 25	20	45	50	25	-	71	18	58
S51.309.16	E1 – 30 X 16	30	36	68	16	28	66	22	54
S51.309.20	E1 – 30 X 20	30	40	68	20	28	67	22	54
S51.309.25	E1 – 30 X 25	30	45	68	25	28	71	22	58
S51.309.32	E1 – 30 X 32	30	52	68	32	28	75	22	61
S51.309.40	E1 – 30 X 40	30	65	68	40	28	90	22	72
S51.409.16	E1 – 40 X 16	40	36	83	16	32.5	66	22	54
S51.409.20	E1 – 40 X 20	40	40	83	20	32.5	67	22	54
S51.409.25	E1 – 40 X 25	40	45	83	25	32.5	75	22	59
S51.409.32	E1 – 40 X 32	40	52	83	32	32.5	75	22	61
S51.409.40	E1 – 40 X 40	40	65	86	40	32.5	90	22	73
S51.509.16	E1 – 50 X 16	50	36	98	16	35	67	30	54
S51.509.20	E1 – 50 X 20	50	40	98	20	35	67	30	54
S51.509.25	E1 – 50 X 25	50	45	98	25	35	80	30	59
S51.509.32	E1 – 50 X 32	50	52	98	32	35	80	30	63
S51.509.40	E1 – 50 X 40	50	65	98	40	35	90	30	73
S51.509.50	E1 – 50 X 50	50	75	98	50	35	100	30	83

**Portaherramientas VDI – E3 Pinzas OZ**


Referencia	Dimensiones	Capacidad (d4)	d1	d2	d3	h1	l1	l2
S01.169.16	E3 – 16 x 2 – 16	OZ16 – 2.16	16	43	40	-	65	13
S01.209.16	E3 – 20 x 2 – 16	OZ16 – 2.16	20	43	50	-	57	18
S01.309.16	E3 – 30 x 2 – 16	OZ16 – 2.16	30	43	68	28	57	22
S01.309.25	E3 – 30 x 2 – 25	OZ25 – 2.25	30	60	68	28	75	22
S01.409.25	E3 – 40 x 2 – 25	OZ25 – 2.25	40	60	83	32.5	75	22
S01.409.32	E3 – 40 x 3 – 32	OZ32 – 3.32	40	72	83	32.5	90	22
S01.509.25	E3 – 50 x 2 – 25	OZ25 – 2.25	50	60	98	35	75	30
S01.509.32	E3 – 50 x 3 – 32	OZ32 – 3.32	50	72	98	35	90	30

\* Llave no incluida

**Portaherramientas VDI – E2**



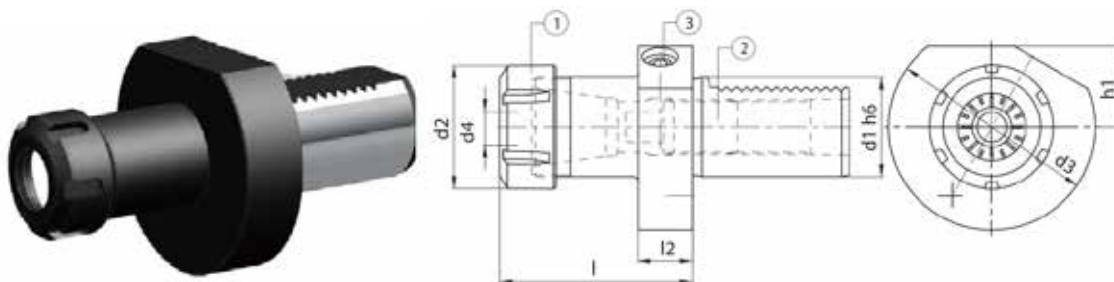
Referencia	Dimensiones	d1	d2	d3	d4	h1	l1	l2	l3
S52.169.06	E2 - 16 X 06	16	32	40	6	18	44	13	34
S52.169.08	E2 - 16 X 08	16	32	40	8	18	44	13	34
S52.169.10	E2 - 16 X 10	16	32	40	10	18	44	13	34
S52.169.12	E2 - 16 X 12	16	40	40	12	18	44	13	34
S52.169.16	E2 - 16 X 16	16	40	40	16	18	44	13	34
S52.209.08	E2 - 20 X 08	20	40	50	8	23	50	18	42
S52.209.10	E2 - 20 X 10	20	40	50	10	23	50	18	42
S52.209.12	E2 - 20 X 12	20	40	50	12	23	50	18	42
S52.209.16	E2 - 20 X 16	20	40	50	16	23	50	18	42
S52.309.08	E2 - 30 X 08	30	55	68	8	32.5	75	22	43
S52.309.10	E2 - 30 X 10	30	55	68	10	32.5	75	22	58
S52.309.12	E2 - 30 X 12	30	55	68	12	32.5	75	22	61
S52.309.16	E2 - 30 X 16	30	55	68	16	32.5	75	22	61
S52.309.20	E2 - 30 X 20	30	55	68	20	32.5	75	22	61
S52.309.25	E2 - 30 X 25	30	55	68	25	32.5	75	22	61
S52.309.32	E2 - 30 X 32	30	67	68	32	32.5	90	22	76
S52.409.08	E2 - 40 X 08	40	55	98	8	32.5	75	22	43
S52.409.10	E2 - 40 X 10	40	55	98	10	32.5	75	22	43
S52.409.12	E2 - 40 X 12	40	55	98	12	32.5	75	22	58
S52.409.16	E2 - 40 X 16	40	55	98	16	32.5	75	22	61
S52.409.20	E2 - 40 X 20	40	55	98	20	32.5	75	22	61
S52.409.25	E2 - 40 X 25	40	55	98	25	32.5	75	22	61
S52.409.32	E2 - 40 X 32	40	82	98	32	32.5	75	22	61
S52.409.40	E2 - 40 X 40	40	82	98	40	32.5	90	22	76
S52.509.12	E2 - 50 X 12	50	68	98	12	35	90	30	71
S52.509.16	E2 - 50 X 16	50	68	98	16	35	90	30	76
S52.509.20	E2 - 50 X 20	50	68	98	20	35	90	30	76
S52.509.25	E2 - 50 X 25	50	68	98	25	35	90	30	76
S52.509.32	E2 - 50 X 32	50	69	98	32	35	90	30	76
S52.509.40	E2 - 50 X 40	50	98	98	40	35	90	-	76
S52.509.50	E2 - 50 X 50	50	98	98	50	35	100	-	86

**Portaherramientas VDI – Portabrocas CNC**

Referencia	d1	d2 - Capacidad	d4	D	l1	l2
S15.209.13	20	1 - 13	50	50	88	18
S15.309.13	30	1 - 13	50	68	93	22
S15.309.16	30	1 - 16	50	68	98	22
S15.409.13	40	1 - 13	50	83	93	22
S15.409.16	40	3 - 16	50	83	98	22
S15.509.13	50	1 - 13	50	98	101	30
S15.509.16	50	3 - 16	50	98	106	30

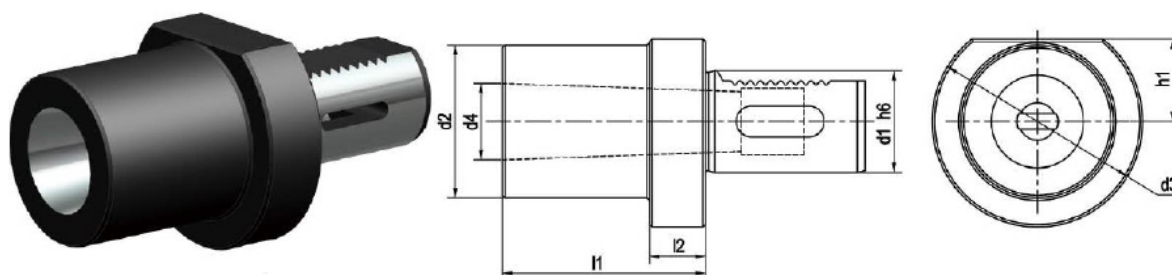
\* Llave incluida



**Portaherramientas VDI – E4 Pinzas ER**


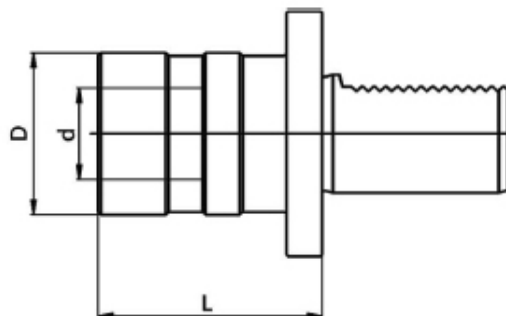
Referencia	Dimensiones	d1	d4 - Capacidad	d2	d3	h1	l1	l2
S02.169.10	E4 – 16 X 1 – 10	16	ER16 – 1.10	32	40	18	40	13
S02.209.10	E4 – 20 X 1 – 10	20	ER16 – 1.10	32	50	-	40	18
S02.209.16	E4 – 20 X 2 – 16	20	ER25 – 2.16	42	50	-	54	18
S02.309.16	E4 – 30 X 2 – 16	30	ER25 – 2.16	42	68	28	57	22
S02.309.20	E4 – 30 X 2 – 20	30	ER32 – 2.20	50	68	28	62	22
S02.309.26	E4 – 30 X 3 – 26	30	ER40 – 3.26	63	68	28	70	22
S02.409.16	E4 – 40 X 2 – 16	40	ER25 – 2.16	42	83	32.5	70	22
S02.409.20	E4 – 40 X 2 – 20	40	ER32 – 2.20	50	83	32.5	84	22
S02.409.26	E4 – 40 X 3 – 26	40	ER40 – 3.26	63	83	32.5	75	22
S02.509.26	E4 – 50 X 3 – 26	50	ER40 – 3.26	63	98	35	90	30

\* Llave no incluida

**Portaherramientas VDI – F1 – Reductor CM**


Referencia	Dimensiones	d1	d2	d3	MK	d4	h1	l1	l2
S07.169.01	F1 – 16 X MK1	16	32	40	1	12.068	18	32	13
S07.209.01	F1 – 20 X MK1	20	40	50	1	12.068	22	23	-
S07.209.02	F1 – 20 X MK2	20	40	50	2	17.78	22	90	-
S07.309.01	F1 – 30 X MK1	30	-	68	1	12.068	28	27	-
S07.309.02	F1 – 30 X MK2	30	55	68	2	17.78	28	36	27
S07.309.03	F1 – 30 X MK3	30	55	68	3	23.825	28	66	41
S07.409.02	F1 – 40 X MK2	40	55	83	2	17.78	32.5	36	22
S07.409.03	F1 – 40 X MK3	40	58	83	3	23.825	32.5	50	22
S07.409.04	F1 – 40 X MK4	40	68	83	4	31.267	32.5	80	22
S07.509.02	F1 – 50 X MK2	50	55	98	2	17.78	42.5	35	30
S07.509.03	F1 – 50 X MK3	50	58	98	3	23.825	42.5	36	30
S07.509.04	F1 – 50 X MK4	50	68	98	4	31.267	42.5	50	30
S07.509.05	F1 – 50 X MK5	50	75	98	5	44.399	42.5	81	30

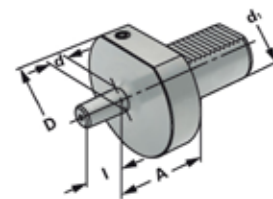
**Portaherramientas VDI – Porta Roscado CNC**



Referencia	∅	Capacidad	Serie	d	D	L	T	C
S16.209.12	20	M3 – M14	1	19	38	70	7.5	7.5
S16.309.12	30	M3 – M14	1	19	38	70	7.5	7.5
S16.309.20	30	M5 – M22	2	31	54	95	12.5	12.5
S16.409.12	40	M3 – M14	1	19	38	65	7.5	7.5
S16.409.20	40	M5 – M22	2	31	53	93	12.5	12.5
S16.509.12	50	M3 – M14	1	19	38	65	7.5	7.5
S16.509.20	50	M5 – M22	2	31	53	93	12.5	12.5

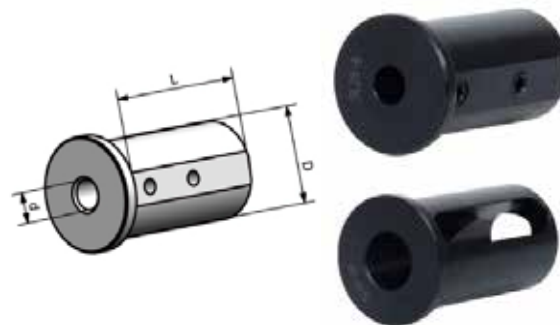
**Portaherramientas VDI – DIN 238**

Referencia	Dimensiones	d1	D	d	A	L
S14.309.16	∅30 - B16	30	B16	68	27	24
S14.409.16	∅40 - B16	40	B16	83	27	24
S14.509.16	∅50 - B16	50	B16	98	35	24



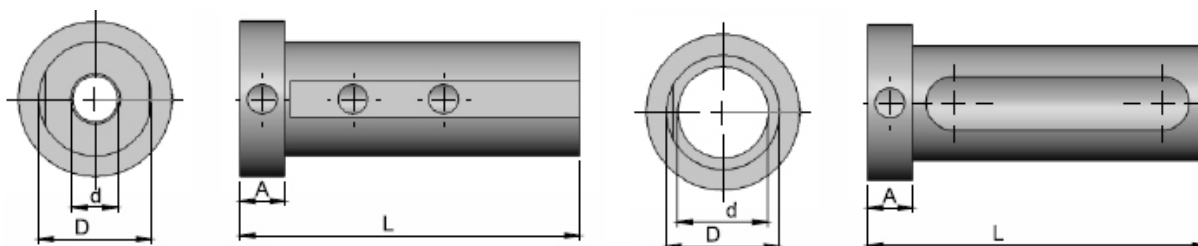
**Casquillos Reductores**

Referencia	Modelo	Diámetro Exterior ∅	Diámetro Interior ∅	L
S25.709.(*)	1 - Prisionero	25	6 - 8 - 10 - 12	46
S25.709.(*)	2 - Ranura	25	16 - 20	46
S32.709.(*)	1 - Prisionero	32	6 - 8 - 10 - 12	56
S32.709.(*)	2 - Ranura	32	16 - 20 - 25	56
S40.709.(*)	1 - Prisionero	40	6 - 8 - 10 - 12	71
S40.709.(*)	2 - Ranura	40	16 - 20 - 25 - 32	71



(\* ) – Cambiar por diámetro disponible

**Casquillos Reductores – Grandes Diámetros**

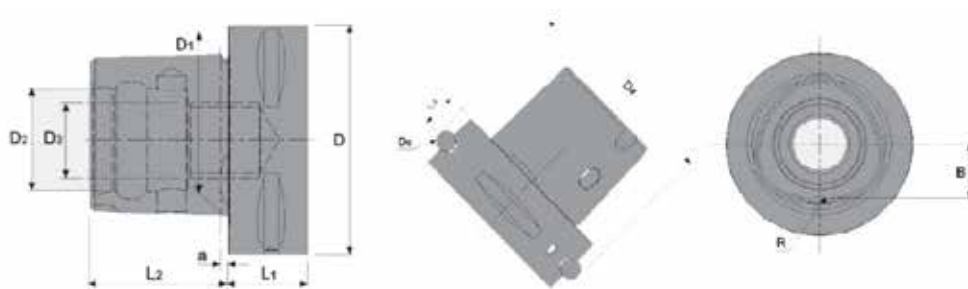


Referencia	Modelo	Diámetro Exterior ∅	Diámetro Interior ∅	L	A
S50.709.(*)	1 - Prisionero	50	8-10-12-16-20-25-32	100	15
S50.709.(*)	2 - Ranura	50	40	100	15
S60.709.(*)	1 - Prisionero	60	12-16-20-25-32-40	110	18
S60.709.(*)	2 - Ranura	60	50	110	18

(\* ) – Cambiar por diámetro disponible



## POLIGONAL ISO 26623-1 (CAPTO)



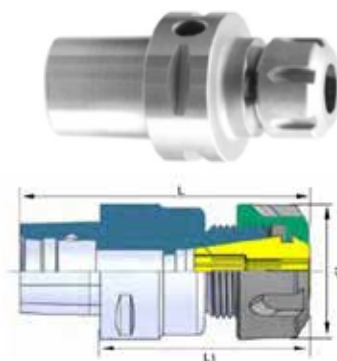
### Dimensiones Generales de Amarre

PSC - CAPTO	D3	D	D1	D2	D4	D5	L1	L2	L3	f3	a	B	R
C-63	M20X2	63	44	28	70.7	7	22	38	12	18	3	18	5

### Portapinzas DIN 6499 – Pinzas ER - G6.3 - 25.000 Rpm

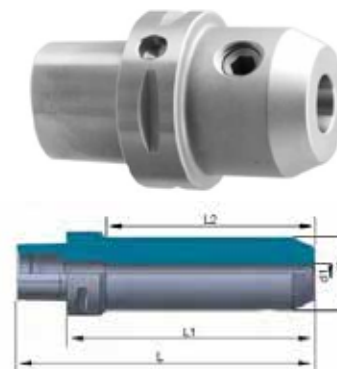
Referencia	Capacidad	L	l1	d1
CPT.ER16	ER16 - 1-10	138	100	28
CPT.ER20	ER20 - 2-13	98	60	34
CPT.ER25	ER25 - 2-16	98	60	42
CPT.ER25.1	ER25 - 2-16	138	100	42
CPT.ER32	ER32 - 3-20	108	70	50
CPT.ER32.1	ER32 - 3-20	138	100	50
CPT.ER40	ER40 - 3-26	103	65	63

\* Llave no incluida



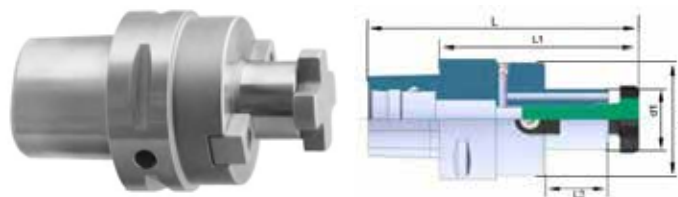
### Porta Weldon - G6.3 - 25.000 Rpm

Referencia	d1	L	l1	L2	d2	T
CPT-W6	6	93	55	25	25	M-6
CPT-W8	8	93	55	26	28	M-8
CPT-W10	10	98	60	30	35	M-10
CPT-W12	12	98	60	33	42	M-12
CPT-W14	14	98	60	33.5	44	M-12
CPT-W16	16	103	65	35.5	48	M-14
CPT-W18	18	103	65	39	50	M-14
CPT-W20	20	103	65	37.5	52	M-16
CPT-W25	25	118	80	58	65	M-18
CPT-W32	32	128	90	68	72	M-20
CPT-W40	40	138	100	77	90	M-20



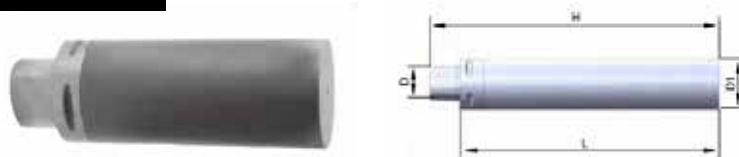
### Eje Portafresas - G6.3 - 25.000 Rpm

Referencia	d1	L	l1	l2	D
CTP-D16	16	90	35	17	38
CPT-D22	22	92	40	19	48
CPT-D27	27	99	40	21	60
CPT-D32	32	102	40	24	78
CPT-D40	40	110	45	27	80



### Barra de Mandrinado - G6.3 - 25.000 Rpm

Referencia	D	D1	H	L
CPT-BL6363	63	63	240	218
CPT-BL63120	63	120	240	218



### Portapinzas ER - Mango Cilíndrico Tuerca Mini

Referencia	Capacidad	Amarre - $\phi$ / C	D	L1	L
S02.120.06.0	1-5 - ER8	8	12	100	124.5
S02.120.06	1-5 - ER8	10	12	100	124.5
S02.120.06.1	1-5 - ER8	10	12	150	174.5
S02.120.07	1-7 - ER11	16	16	100	124.5
S02.120.07.1	1-7 - ER11	16	16	150	174.5
S02.120.07.2	1-7 - ER11	16	16	200	224.5
S02.120.07.4	1-7 - ER11	16	16	300	374.5
S02.120.10	1-10 - ER16	20	22	100	124.5
S02.120.10.1	1-10 - ER16	20	22	150	174.5
S02.120.10.2	1-10 - ER16	20	22	200	224.5
S02.120.10.3	1-10 - ER16	20	22	300	374.5
S02.120.10.6	1-10 - ER16	16	22	100	124.5
S02.120.10.7	1-10 - ER16	16	22	150	174.5
S02.120.13	2-13 - ER20	20	28	100	124.5
S02.120.13.1	2-13 - ER20	20	28	150	174.5
S02.120.13.5	2-13 - ER20	25	28	100	124.5
S02.120.13.6	2-13 - ER20	25	28	150	174.5

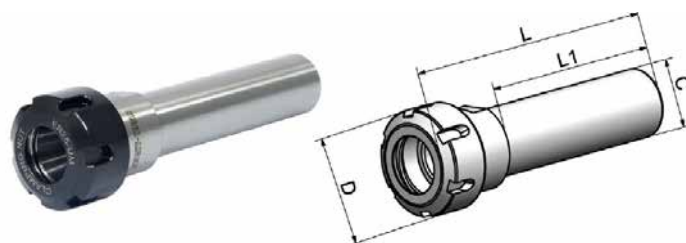
\* Llave no incluida



### Portapinzas ER - Mango Cilíndrico

Referencia	Capacidad	$\phi$ - C	D	L1	L
S02.120.16	2-16 - ER25	25	42	100	144
S02.120.16.1	2-16 - ER25	25	42	150	194
S02.120.16.2	2-16 - ER25	25	42	200	244
S02.120.20	3-20 - ER32	25	50	100	144
S02.120.20.1	3-20 - ER32	25	50	150	194
S02.120.20.2	3-20 - ER32	32	50	100	148
S02.120.20.3	3-20 - ER32	32	50	150	198
S02.120.20.6	3-20 - ER32	40	50	100	148
S02.120.26	4-30 - ER40	25	63	100	198
S02.120.26.1	4-30 - ER40	32	63	100	151
S02.120.26.2	4-30 - ER40	40	63	150	201

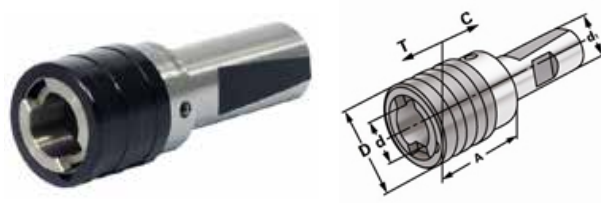
\* Llave no incluida



### Portapinzas Roscado con Embrague - Mango Cilíndrico

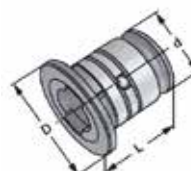
• Porta Mango Cilíndrico para Pinzas de Roscado con Embrague Serie 1 y Serie 2.

Referencia	Capacidad	A	D	d1	d	T	C
S05.120.S1	M3-M14	44	36	25	19	7	7
S05.120.S2	M5-M22	73	53	25	31	12	12



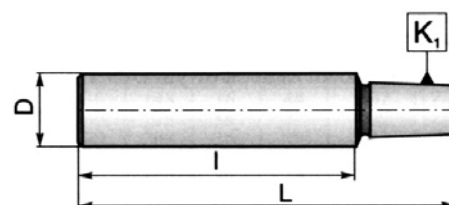
### Reductor Cabecillas de Roscado

Referencia	Amarre	Salida	D	d	L
S13.00.21	Serie 2	Serie 1	19	31	40.4
S13.00.32	Serie 3	Serie 2	31	48	62.6



### Eje de Amarre Cilíndrico - Tipo B

Referencia	$\phi$ Amarre	Longitud Amarre	Cono Amarre	Longitud Total
S15.160.B16	16	50	B16	81
S15.160.B18	16	70	B18	110
S15.200.B16	20	60	B16	93
S15.200.B18	20	60	B18	100
S15.250.B16	25	75	B16	107
S15.300.B16	30	70	B16	106
S15.300.B18	30	70	B18	112



**Pinzas de Roscado – Serie 1**


Referencia CON EMBRAGUE	D2	D1	L1	M	DIN	Diámetro	Cuadrado	Referencia SIN EMBRAGUE
S11.16.1.M3	32	19	25	M3	371	3.5	2.7	S01.16.1.M3
S11.16.1.M3.5	32	19	25	M3.5	371	4	3.0	S01.16.1.M3.5
S11.16.1.M4	32	19	25	M4	371	4.5	3.4	S01.16.1.M4
S11.16.1.M5	32	19	25	M5	371	6.0	4.9	S01.16.1.M5
S11.16.1.M6	32	19	25	M6	371	6.0	4.9	S01.16.1.M6
S11.16.1.M8	32	19	25	M8	371	8.0	6.2	S01.16.1.M8
S11.16.1.M10	32	19	25	M10	371	10.0	8.0	S01.16.1.M10
S11.16.1.M102	32	19	25	M10.2	376	7.0	5.5	S01.16.1.M102
S11.16.1.M12	32	19	25	M12	376	9.0	7.0	S01.16.1.M12
S11.16.1.M14	32	19	25	M14	376	11.0	9.0	S01.16.1.M14

**Pinzas de Roscado – Serie 2**

Referencia CON EMBRAGUE	D2	D1	L1	M	DIN	Diámetro	Cuadrado	Referencia SIN EMBRAGUE
S12.16.2.M5	50	31	31	M5	371	6	4.9	S02.16.2.M5
S12.16.2.M6	50	31	31	M6	371	6	4.9	S02.16.2.M6
S12.16.2.M8	50	31	31	M8	371	8	6.2	S02.16.2.M8
S12.16.2.M102	50	31	31	M10.2	371	10	8.0	S02.16.2.M102
S12.16.2.M10	50	31	31	M10	376	7	5.5	S02.16.2.M10
S12.16.2.M12	50	31	31	M12	376	9	7.0	S02.16.2.M12
S12.16.2.M14	50	31	31	M14	376	11	9.0	S02.16.2.M14
S12.16.2.M16	50	31	31	M16	376	12	9.0	S02.16.2.M16
S12.16.2.M18	50	31	31	M18	376	14	11.0	S02.16.2.M18
S12.16.2.M20	50	31	31	M20	376	16	12.0	S02.16.2.M20
S12.16.2.M22	50	31	31	M22	376	18	14.5	S02.16.2.M22

**Pinzas de Roscado – Serie 3**

Referencia CON EMBRAGUE	D2	D1	L1	M	DIN	Diámetro	Cuadrado	Referencia SIN EMBRAGUE
S13.16.3.M14	72	48	41	M14	376	11	9.0	S03.16.3.M14
S13.16.3.M16	72	48	41	M16	376	12	9.0	S03.16.3.M16
S13.16.3.M18	72	48	41	M18	376	14	11.0	S03.16.3.M18
S13.16.3.M20	72	48	41	M20	376	16	12.0	S03.16.3.M20
S13.16.3.M22	72	48	41	M22	376	18	14.5	S03.16.3.M22
S13.16.3.M24	72	48	41	M24	376	18	14.5	S03.16.3.M24
S13.16.3.M27	72	48	41	M27	376	20	16.0	S03.16.3.M27
S13.16.3.M30	72	48	41	M30	376	22	18.0	S03.16.3.M30
S13.16.3.M33	72	48	41	M33	376	25	20.0	S03.16.3.M33
S13.16.3.M36	72	48	41	M36	376	28	22.0	S03.16.3.M36

**Pinzas de Roscado – Serie 4**

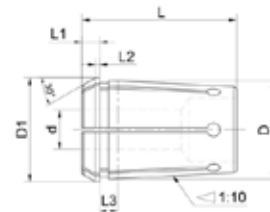
Referencia CON EMBRAGUE	D2	D1	L1	M	DIN	Diámetro	Cuadrado	Referencia SIN EMBRAGUE
S14.16.4.M24	95	60	62.8	M24	376	18	14.5	-
S14.16.4.M27	95	60	62.8	M27	376	20	16	-
S14.16.4.M30	95	60	62.8	M30	376	22	18	-
S14.16.4.M33	95	60	62.8	M33	376	25	20	-
S14.16.4.M36	95	60	62.8	M36	376	28	22	-
S14.16.4.M39	95	60	62.8	M39	376	32	24	-
S14.16.4.M42	95	60	62.8	M42	376	32	24	-
S14.16.4.M45	95	60	62.8	M45	376	36	29	-
S14.16.4.M48	95	60	62.8	M45	376	36	29	-

**PINZAS OZ – 0.015 – DIN 6388B**

- Pinza OZ-16 – 415E > Disponible en Diámetros 2 a 16 mm (cada 1 mm).
- Pinza OZ-20 – 4541E > Disponible en Diámetros 4 a 20 mm (cada 1 mm).
- Pinza OZ-25 – 462E > Disponible en Diámetros 2 a 25 mm (cada 1 mm).
- Pinza OZ-32 – 467E > Disponible en Diámetros 3 a 32 mm (cada 1 mm).

**Datos Técnicos Pinzas OZ**

Referencia	OZ	D Min./Máx.	Campo Apriete	D1	L
415-E	OZ-16	2 - 16	0.5 mm	25.5	40
4541-E	OZ-20	4 - 20	0.5 mm	29.9	45
462-E	OZ-25	2 - 25	0.5 mm	35.05	52
467-E	OZ-32	4 - 32	0.5 mm	43.7	60



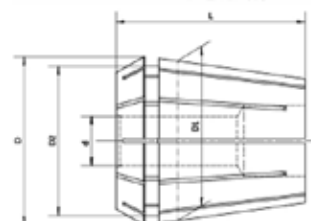
**Set de Pinzas OZ**

Referencia	OZ	Incluye Pinzas de Diámetros
415E-Set	OZ-16	2.3.4.5.6.7.8.9.10.11.12.13.14.15.16
462E-Set	OZ-25	4.5.6.7.8.9.10.11.12.14.16.18.20.22.25
467E-Set	OZ-32	5.6.7.8.10.11.12.14.16.18.20.22.24.25.28.30.32



**PINZAS ER – 0.015 – DIN 6499B**

Referencia	ER	d1 Min/Máx.	Campo Apriete	D	L
4004-E	ER-8	1 - 5	0.5/1 mm	8.5	13.50
4008-E	ER-11	1 - 7	0.5/1 mm	12	18
426-E	ER-16	1 - 10	0.5/1 mm	17	27.50
428-E	ER-20	2 - 13	0.5/1 mm	21	31.50
430-E	ER-25	2 - 16	0.5/1 mm	26	34
470-E	ER-32	2 - 20	0.5/1 mm	33	40
472-E	ER-40	3 - 26	1 mm	41	46
477-E	ER-50	6 - 34	1 mm	52	60



**Diámetros de Pinzas ER Disponibles**

- Pinza ER8 – 4004E > Disponible de 1 a 5 mm (cada 0.5 mm).
- Pinza ER11 – 4008E > Disponible de 1 a 7 mm (cada 0.5 mm).
- Pinza ER16 – 426E > Disponible de 1 a 10 mm (cada 1 mm).
- Pinza ER20 – 428E > Disponible de 2 a 13 mm (cada 1 mm).
- Pinza ER25 – 430E > Disponible de 2 a 16 mm (cada 1 mm).
- Pinza ER32 – 470E > Disponible de 2 a 20 mm (cada 1 mm).
- Pinza ER40 – 472E > Disponible de 3 a 25 mm (cada 1 mm) y ø26 - ø30 mm.
- Pinza ER50 – 477E > Disponible de 6 a 34 mm (cada 1 mm).

**NOTA:** Para pedido. Ejemplo: 426-E05 (Pinza ER16 - ø5 mm).



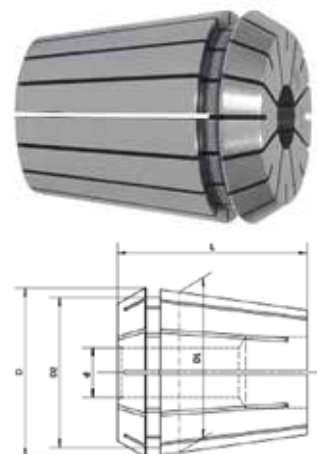
**Set de Pinzas ER**

Referencia	Pinza	Incluye Pinzas de Diámetros
400E-Set	ER-8	1-1.5-2-2.5-3-3.5-4-4.5-5
4008E-Set	ER-11	1-1.5-2-2.5-3-3.5-4-4.5-5-5.5-6-6.5-7
426E-Set	ER-16	1.2.3.4.5.6.7.8.9.10
428E-Set	ER-20	2.3.4.5.6.7.8.9.10.11.12.13
430E-Set	ER-25	2.3.4.5.6.7.8.9.10.11.12.13.14.15.16
470E-Set	ER-32	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20
472E-Set	ER-40	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26

**PINZAS ER (De Precisión) – 0.005 – DIN 6499B**

Referencia	ER	d1 Min/Máx.	Campo Apriete	D	L
4004-EP	ER-8	1 - 5	0.5/1 mm	8.5	13.50
4008-EP	ER-11	1 - 7	0.5/1 mm	12	18
426-EP	ER-16	1 - 10	0.5/1 mm	17	27.50
428-EP	ER-20	2 - 13	0.5/1 mm	21	31.50
430-EP	ER-25	2 - 16	0.5/1 mm	26	34
470-EP	ER-32	2 - 20	0.5/1 mm	33	40
472-EP	ER-40	3 - 26	1 mm	41	46

**NOTA:** Para pedido. Ejemplo: 470EP-10 – Pinza ER32. De Precisión en  $\phi$ 10 mm.


**PINZA DIN 6499 - B - Pinza Estanca (ERX)**

- Pinza estanca de apriete y sellado con gomas en los orificios del diámetro exterior.
- Máxima concentricidad (0.008 mm) con un acabado fino Rz2.8 debido a su acabado y rectificado.
- Presión máxima de hasta 40 bar.

Referencia	Pinza	Diámetros disponibles
426-EX	ER-16	1.2.3.4.5.6.7.8.9.10.12
428-EX	ER-20	3.4.5.6.7.8.9.10.11.12.13.14
430-EX	ER-25	3.4.5.6.7.8.9.10.11.12.13.14.15.16.18
470-EX	ER-32	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.22
472-EX	ER-40	6.7.8.9.10.11.12.13.14.15.16.17.18.20.21.22.23.24.25.26.30

**NOTA:** Para pedido. Ejemplo: 470EX-10 – Pinza ER32. Estanca Gomas  $\phi$ 10 mm.


**Set de Pinzas ERX - Estancas**

- Pinza estanca de apriete y sellado con gomas en los orificios del diámetro exterior.
- Máxima concentricidad (0.008 mm) con un acabado fino Rz2.8 debido a su acabado y rectificado.
- Presión máxima de hasta 40 bar.

Referencia	Pinza	Incluye Pinzas de Diámetros
426EX-Set	ERX-16	3.4.5.6.7.8.9.10
428EX-Set	ERX-20	3.4.5.6.7.8.9.10.11.12.13
430EX-Set	ERX-25	3.4.5.6.7.8.9.10.11.12.13.14.15.16
470EX-Set	ERX-32	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20
472EX-Set	ERX-40	4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26


**PINZA DIN 6499 - B - Pinza Estanca Metálica (ERM)**

- Pinza estanca de apriete y sellado con gomas en los orificios del diámetro exterior.
- Máxima concentricidad (0.008 mm) con un acabado fino Rz2.4 debido a su acabado y rectificado.
- Presión máxima de hasta 120 bar.

Referencia	Pinza	Diámetros disponibles
426-EM	ER-16	1.2.3.4.5.6.7.8.9.10.12
428-EM	ER-20	3.4.5.6.7.8.9.10.11.12.13.14
430-EM	ER-25	3.4.5.6.7.8.9.10.11.12.13.14.15.16.18
470-EM	ER-32	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.22
472-EM	ER-40	6.7.8.9.10.11.12.13.14.15.16.17.18.20.21.22.23.24.25.26.30

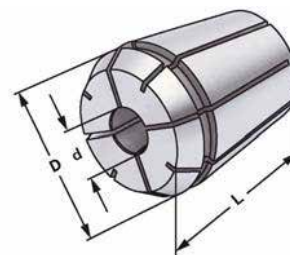
**NOTA:** Para pedido. Ejemplo: 470EM-10 – Pinza ER32. Estanca Metálica  $\phi$ 10 mm.





**PINZA DIN 6499.A – Machos de Roscado**

Referencia	Para Pinza	ø - □	D	L
426G-3527	ER.16	3.5 x 2.7	17	27.5
426G-43	ER.16	4 x 3	17	27.5
426G-4534	ER.16	4.5 x 3.4	17	27.5
426G-649	ER.16	6 x 4.9	17	27.5
426G-755	ER.16	7 x 5.5	17	27.5
426G-862	ER.16	8 x 6.2	17	27.5
428G-3527	ER.20	3.5 x 2.7	21	31.5
428G-43	ER.20	4 x 3	21	31.5
428G-4534	ER.20	4.5 x 3.4	21	31.5
428G-649	ER.20	6 x 4.9	21	31.5
428G-755	ER.20	7 x 5.5	21	31.5
428G-862	ER.20	8 x 6.2	21	31.5
428G-97	ER.20	9 x 7	21	31.5
428G-108	ER.20	10 x 8	21	31.5
430G-43	ER.25	4 x 3	26	34
430G-4534	ER.25	4.5 x 3.4	26	34
430G-649	ER.25	6 x 4.9	26	34
430G-755	ER.25	7 x 5.5	26	34
430G-862	ER.25	8 x 6.2	26	34
430G-97	ER.25	9 x 7	26	34
430G-108	ER.25	10 x 8	26	34
430G-119	ER.25	11 x 9	26	34
430G-129	ER.25	12 x 9	26	34
470G-4534	ER.32	4.5 x 3.4	33	40
470G-649	ER.32	6 x 4.9	33	40
470G-755	ER.32	7 x 5.5	33	40
470G-862	ER.32	8 x 6.2	33	40
470G-97	ER.32	9 x 7	33	40
470G-108	ER.32	10 x 8	33	40
470G-119	ER.32	11 x 9	33	40
470G-129	ER.32	12 x 9	33	40
470G-1411	ER.32	14 X 11	33	40
470G-1612	ER.32	16 X 12	33	40



Referencia	Para Pinza	ø - □	D	L
472G-649	ER.40	6 x 4.9	41	46
472G-755	ER.40	7 x 5.5	41	46
472G-862	ER.40	8 x 6.2	41	46
472G-97	ER.40	9 x 7	41	46
472G-108	ER.40	10 x 8	41	46
472G-119	ER.40	11 x 9	41	46
472G-129	ER.40	12 x 9	41	46
472G-1411	ER.40	14 X 11	41	46
472G-1612	ER.40	16 X 12	41	46
472G-18145	ER.40	18 X 14.5	41	46
472G-2016	ER.40	20 X 16	41	46
477G-862	ER.50	8 x 6.2	52	60
477G-97	ER.50	9 x 7	52	60
477G-108	ER.50	10 x 8	52	60
477G-119	ER.50	11 x 9	52	60
477G-129	ER.50	12 x 9	52	60
477G-1411	ER.50	14 X 11	52	60
477G-1612	ER.50	16 X 12	52	60
477G-18145	ER.50	18 X 14.5	52	60
477G-2016	ER.50	20 X 16	52	60
477G-2218	ER.50	22 X 18	52	60
477G-520	ER.50	25 X 20	52	60
477G-2832	ER.50	28 x 32	52	60
477G-3224	ER.50	32 X 24	52	60

**Pinzas ER – Refrigeración Externa - Orificios Frontales**

- Orificios en el frontal de la pinza para ofrecer refrigeración alrededor de la herramienta

Referencia	Pinza	Diámetros disponibles
ER16-RE	ER-16	3.4.5.6.7
ER20-RE	ER-20	4.5.6.7.8.9.10
ER25-RE	ER-25	3.4.5.6.7.8.9.10.11.12.13.14
ER32-RE	ER-32	3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20
ER40-RE	ER-40	4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25



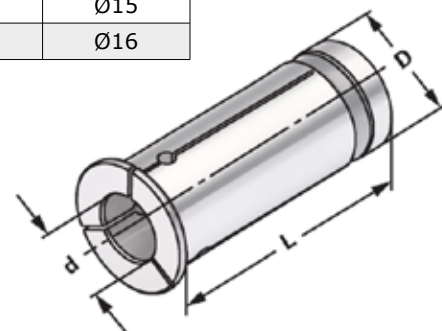
**Maletín Vacío para Pinzas**

Referencia	Número de huecos	Válido para modelos
SVP-10	10	ER-16
SVP-13	13	ER-20
SVP-16	16	ER-25 - OZ16
SVP-20	20	ER32 - OZ20
SVP-25	25	OZ 25
SVP-30	30	ER40 - OZ32



**Pinzas Cilíndricas - Gran Apriete**

Referencia D - ø32	ø d	Referencia D - ø25	ø d	Referencia D - ø20	ø d
HKS32-03	Ø3	HKS25-03	Ø3	HKS20-03	Ø3
HKS32-04	Ø4	HKS25-04	Ø4	HKS20-04	Ø4
HKS32-05	Ø5	HKS25-05	Ø5	HKS20-05	Ø5
HKS32-06	Ø6	HKS25-06	Ø6	HKS20-06	Ø6
HKS32-07	Ø7	HKS25-07	Ø7	HKS20-07	Ø7
HKS32-08	Ø8	HKS25-08	Ø8	HKS20-08	Ø8
HKS32-09	Ø9	HKS25-09	Ø9	HKS20-09	Ø9
HKS32-10	Ø10	HKS25-10	Ø10	HKS20-10	Ø10
HKS32-11	Ø11	HKS25-11	Ø11	HKS20-11	Ø11
HKS32-12	Ø12	HKS25-12	Ø12	HKS20-12	Ø12
HKS32-13	Ø13	HKS25-13	Ø13	HKS20-13	Ø13
HKS32-14	Ø14	HKS25-14	Ø14	HKS20-14	Ø14
HKS32-15	Ø15	HKS25-15	Ø15	HKS20-15	Ø15
HKS32-16	Ø16	HKS25-16	Ø16	HKS20-16	Ø16
HKS32-17	Ø17	HKS25-17	Ø17		
HKS32-18	Ø18	HKS25-18	Ø18		
HKS32-19	Ø19	HKS25-19	Ø19		
HKS32-20	Ø20	HKS25-20	Ø20		
HKS32-21	Ø21				
HKS32-22	Ø22				
HKS32-23	Ø23				
HKS32-24	Ø24				
HKS32-25	Ø25				



**Dimensiones Longitud:** HKS32 - L=64 mm / HKS25 - L=60 mm / HKS20 - L=50 mm.

**Pinzas Cilíndricas - Portaherramientas hidráulicos**

Referencia Standar	Referencia Refrigerado	ø d
HY12-3	HYR12-3	Ø3
HY12-4	HYR12-4	Ø4
HY12-5	HYR12-5	Ø5
HY12-6	HYR12-6	Ø6
HY12-7	HYR12-7	Ø7
HY12-8	HYR12-8	Ø8

**Dimensiones:** D1: 12 | D2:19 | L:47 | L2:2

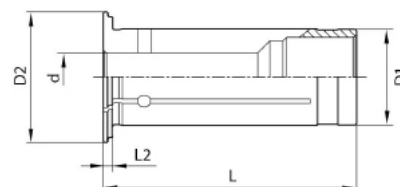


Referencia Standar	Referencia Refrigerado	ø d
HY20-3	HYR20-3	Ø3
HY20-4	HYR20-4	Ø4
HY20-5	HYR20-5	Ø5
HY20-6	HYR20-6	Ø6
HY20-7	HYR20-7	Ø7
HY20-8	HYR20-8	Ø8
HY20-9	HYR20-9	Ø9
HY20-10	HYR20-10	Ø10
HY20-11	HYR20-11	Ø11
HY20-12	HYR20-12	Ø12
HY20-13	HYR20-13	Ø13
HY20-14	HYR20-14	Ø14
HY20-15	HYR20-15	Ø15
HY20-16	HYR20-16	Ø16

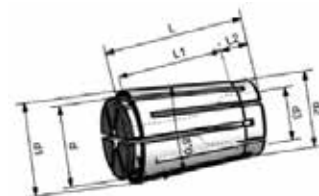
**Dimensiones:** D1: 20 | D2:27 | L:52.5 | L2:2

Referencia Standar	Referencia Refrigerado	ø d
HY32-6	HYR32-6	Ø6
HY32-8	HYR32-8	Ø8
HY32-10	HYR32-10	Ø10
HY32-12	HYR32-12	Ø12
HY32-14	HYR32-14	Ø14
HY32-16	HYR32-16	Ø16
HY32-18	HYR32-18	Ø18
HY32-20	HYR32-20	Ø20
HY32-25	HYR32-25	Ø25

**Dimensiones:** D1: 32 | D2:39 | L:63.5 | L2:3

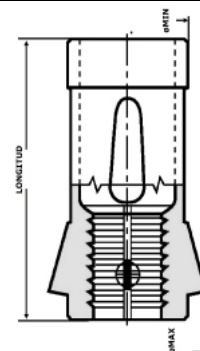

**Pinzas SKS**

Referencia	Pinza	d1	L	Diámetros disponibles
SKS10	SKS10	15.5	30.5	2 a 10 cada 0.5 mm
SKS16	SKS16	24.6	45	4 a 16 cada 0.5 mm



**Pinzas Especiales 161E – 163E – 173E – 185E – 193E**

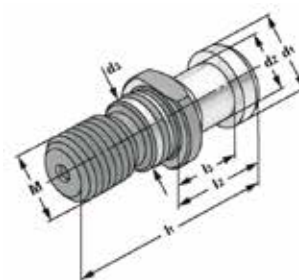
Referencia	DIÁMETROS	FORMA	Longitud	øMax.	øMin.
06-161E-DIÁMETRO	3 A 26 (cada 0.5 mm)	REDONDO	75	45	32
06-163E-DIÁMETRO	2 A 30 (cada 0.5 mm)	REDONDO	80	48	35
06-173E-DIÁMETRO	3 A 42 (cada 0.5mm)	REDONDO	94	60	48
06-173E-CUADRADO	4 A 30 (cada 1 mm)	CUADRADO	94	60	48
06-173E-HEXÁGONO	4 A 36 (cada 1 mm)	HEXÁGONO	94	60	48
06-185E-DIÁMETRO	4 A 60 (cada 1 mm)	REDONDO	110	84	66
06-185E-CUADRADO	10 A 42 (cada 1 mm)	CUADRADO	110	84	66
06-185E-HEXÁGONO	6 A 52 (cada 1 mm)	HEXÁGONO	110	84	66
06-193E-DIÁMETRO	20 A 80 (cada 5 mm)	REDONDO	130	107	90



**NOTA:** Hasta ø8 mm son modelos lisos, a partir de ese diámetro son con ranuras

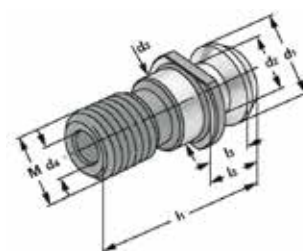
**Tirantes DIN 69872**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.302.12	M-12	44	24	19	13	9	13	3.0
Con agujero y sin junta.								
S20.402.16.B	M-16	54	26	20	19	14	17	7.0
S20.502.24.B	M-24	74	34	25	28	21	25	11.5
Con agujero y con junta.								



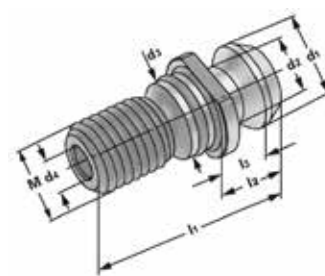
**Tirantes DIN ISO 7388**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.404.16.B	M-16	44.5	16.4	11.15	18.95	12.95	17	7.0
S20.504.24.B	M-24	64.5	25.55	17.95	29.10	19.60	25	11.5
Con agujero y con junta.								



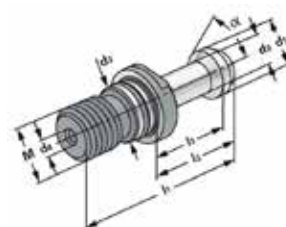
**Tirantes DIN ISO CAT Métrica**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.404.16.21	M-16	41.26	16.26	11.18	18.80	12.45	17.00	7.0
S20.504.24.21	M-24	65.40	25.40	17.80	28.95	20.80	25.00	11.50
Con agujero y con junta.								



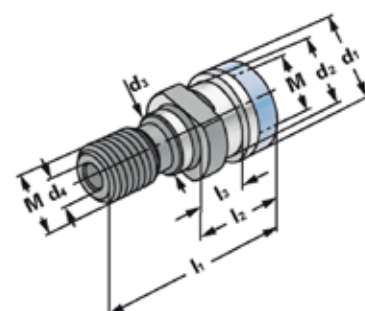
**Tirantes MAS 403 BT (JIS6339) - Ejecución Corta**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.405.45.21	M-16	57	32	25	15	10	17	7
S20.405.60.21	M-16	57	32	25	15	10	17	7
S20.405.90.21	M-16	57	32	25	15	10	17	7
Con agujero y con junta. <b>Top Ventas.</b>								



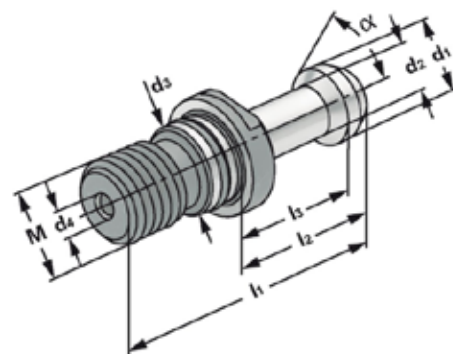
**Tirante DIN 2080**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.401.16	M-16	53.0	25.1	13.6	25.00	21.1	17	7.0
S20.501.24	M-24	65.1	25.1	13.3	39.6	32.0	25	7.0
Con agujero y protección.								



**Tirantes MAS 403 BT (JIS6339) - Sin Agujero y Sin Junta**

Referencia	Métrica	L1	L2	L3	D1	D2	D3
S20.305.45	M-12	43	23	18	11	7	12.5
S20.305.60	M-22	43	23	18	11	7	12.5
S20.405.45	M-16	60	35	28	15	10	17
S20.405.60	M-16	60	35	28	15	10	17
S20.405.90	M-16	60	35	28	15	10	17
S20.505.45	M-24	83	45	35	23	17	25
S20.505.60	M-24	83	45	35	23	17	25
S20.505.90	M-24	83	45	35	23	17	25

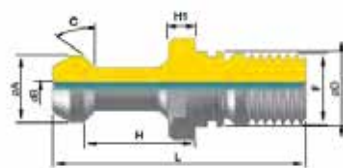

**Tirantes MAS 403 BT (JIS6339) - Con Agujero y Con Junta**

Referencia	Métrica	L1	L2	L3	D1	D2	D3	D4
S20.306.45	M-12	43	23	18	11	7	12.5	2.5
S20.306.60	M-22	43	23	18	11	7	12.5	2.5
S20.406.45	M-16	60	35	28	15	10	17	4
S20.406.60	M-16	60	35	28	15	10	17	4
S20.406.90	M-16	60	35	28	15	10	17	4
S20.506.45	M-24	83	45	35	23	17	25	6.0
S20.506.60	M-24	83	45	35	23	17	25	6.0
S20.506.90	M-24	83	45	35	23	17	25	6.0

**Tirante HURCO**

Referencia	F	C	ØD	øA	H	L
S20.401.HURCO.45	M-16	45°	17	15	25.15	57.15
S20.401.HURCO.60	M-16	60°	17	15	25.15	57.15
S20.401.HURCO.90	M-16	90°	17	15	25.15	57.15

Con agujero y protección anillo.


**Tirante KITAMURA**

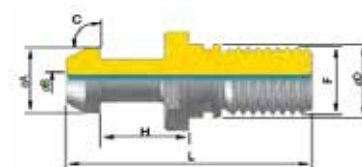
Referencia	F	C	ØD	øA	H	H	Øb
S20.KITAMURA	M-16	15°	17	19	23	54	7

Con agujero y protección anillo.


**Tirante MITSUI SEIKI**

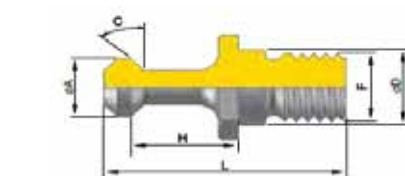
Referencia	F	C	ØD	øA	H	L	Øb
S20.MITSUI.40	M-16	90°	17	15	18	50	3
S20.MITSUI.50	M-24	90°	25	24	23	71	8

Con agujero y protección anillo.


**Tirante CHIRON**

Referencia	F	C	ØD	øA	H	L
S20.CHIRON	M-12	45°	13	10	16	36

Sin agujero.


**Tirante CB FERRARI**

Referencia	F	R	ØD	øA	H	L
S20.FERRARI.0185	M-16	3.7	-	16	-	57
S20.FERRARI.1385	M-16	3.4	13	12	19.5	44
S20.FERRARI.1185	M-16	3.7	17	19	20.31	54
S20.FERRARI.M24	M-24	4.3	25	28	25.5	74

Con agujero.







**Tornillos Amarre Weldon DIN 1835B**


**NOTA:** (Modelo S04.101.12.1)  
No es norma DIN1835B

Referencia	Métrica	Long.	Para Diámetros
S04.101.06	M6	10	6
S04.101.08	M8	10	8
S04.101.10	M10	12	10
S04.101.12	M12	16	12 y 14
S04.101.12.1	M12x1	12	Modelos VDI-E1
S04.101.16	M14x2	16	16 y 18
S04.101.20	M16x2	16	20
S04.101.20.1	M16X1	8	-
S04.101.20.2	M16x1	10	-
S04.101.20.3	M16X1	12	-
S04.101.25	M18x2	20	25
S04.101.32	M20x2	20	32
S04.101.40	M20x2	25	40

**Anillos Separadores para ejes portafresas  
DIN 2084-B**

Referencia	AGUJERO EJE	DIÁMETRO EXTERIOR
S12.16 (ESP)	16	27
S12.22 (ESP)	22	34
S12.27 (ESP)	27	41
S12.32 (ESP)	32	47
S12.40 (ESP)	40	55

**NOTA:** (Esp.) Sustituir por el espesor 2-3-4-5-6-8-10-20-30 mm.

**Ejemplo:** Código: S12.27.10 - Anillo de 27 de agujero y espesor 10 mm


**Portabrocas Serie Industrial**

Referencia	Amarre	Campo Amarre	Marca	Tipo
S5134.B1613	B16	1-13	XTLINE	1
S5134.B1616	B16	1-16	BAER	1
S5134.B1816	B18	1-16	BAER	1
S5134.UNC16	UNF 1/2X20	1-16	BAER	1
S5134.B1820	B18	5-20	BAER	1
S5136.UNF20	UNF 1/2X20	1.5-13	XTLINE	2
S5137.UNF20	UNF 1/2X20	1.5-13	XTLINE	3



Tipo 1



Tipo 2



Tipo 3

**Llave Extractora DIN 228-B**

Referencia	CM	Longitud
S03.107.01	1 Y 2	140
S03.107.03	3	190
S03.107.04	4	225


**Tornillo para DIN 228**

Referencia	Para Modelo	Rosca
S20.107.06	CM1	M-6
S20.107.10	CM2	M-10
S20.107.12	CM3	M-12
S20.107.16	CM4	M-16
S20.107.20	CM5	M-20


**Tapón Refrigeración HSK**

Referencia	Para Modelo
S05.HKS63	HSK-A63
S05.HKS100	HSK-A100


**Llave para Tapón HSK**

Referencia	Para Modelo
LL03.HSK63	HSK-A63
LL03.HSK100	HSK-A100



### Llaves para Pinzas ER/OZ



Referencia	Para Tuercas	D - Int
LL.01.OZ16	OZ16	40
LL.01.OZ25	OZ25	58
LL.01.OZ32	OZ32	68
LL.01.HKS2025	HKS20 y HKS25	55-62
LL.01.HKS32	HKS32	68-72
LL05.S17	Portabrocas Serie S17	48-53
LL.02.ER8	ER8 MINI	7.5
LL.02.ER11	ER11 MINI	11
LL.02.ER16M	ER16 MINI	15
LL.02.ER20M	ER20 MINI	19.5
LL.02.ER16	ER16	26
LL.02.ER20	ER20	30
LL.02.ER25	ER25	37
LL.02.ER32	ER32	46,5
LL.02.ER40	ER40	58
LL.02.ER50	ER50	74
LL.04.ER11	ER11	17
LL.04.ER16	ER16	25
LL.04.ER20	ER20	30

### Llave de Apriete Tuercas Cruz

Referencia	Para Rosca	D - ø
S10.103.M8	M8	16
S10.103.M10	M10	22
S10.103.M12	M12	27
S10.103.M16	M16	32
S10.103.M20	M20	40
S10.103.M24	M24	50
S10.103.M30	M30	60



### Soporte Básico Herramientas

Referencia	Para Modelo	Altura
S705.30	SK30 / BT30 / ISO30	134
S705.40	SK40 / BT40 / ISO40	132
S705.50	SK50 / BT50 / ISO50	175



### Soporte Orientable Herramientas

Referencia	Para Modelo	Base	Altura
S706.30	SK30 - ISO30 - BT-30 - CAT30 HSK-A50 - CAPTO C5	150	160
S706.40	SK40 - ISO40 - BT-40 - CAT40 HSK-A63 - CAPTO C6	150	160
S706.50	SK50 - ISO50 - BT-50 - CAT50 HSK-A100 - CAPTO C10	200	210



Referencia DTG-15	Referencia DTG-220	Referencia DTF-201
		
Dimensiones: 775 x 400 x 980 1 puerta doble con llave + 2 cajones con llave	Dimensiones: 500 x 400 x 980 1 cajón + 1 puerta con llave	Dimensiones: 600 x 450 x 880 4 cajones 100 mm y 1 cajón 200 mm

Referencia DTG-201	Referencia DTD40 / DTD50	Referencia DTH40 / DTH50
		
Dimensiones: 600 x 450 x 780 - Cajones: 4x100 y 1x200	Dimensiones: 600 x 600 x 1015 2 cajones + 1 cajón conos + base superior conos. Modelo para Conos 40 (DTD40) y Conos 50 (DTD50)	Dimensiones: 600 x 600 x 915 1 cajón + 1 cajón conos + base superior conos. Modelo para Conos 40 (DTH40) y Conos 50 (DTH50)

Referencia DTL40 / DTL50

Dimensiones: 450 x 600 x 915 4 cajones + base superior conos. Modelo para Conos 40 (DTL40) y para Conos 50 (DTL50)








Tamaño	Descripción	Referencia
Modelo 40	24 Soportes Superiores + 6/6 Inferiores	DTC40
Modelo 50	16 Soportes Superiores + 4/4 Inferiores	DTC50
Modelo A63	16 Soportes Superiores + 4/4 Inferiores	DTC63
Dimensiones: 920 x 475 x 775		



Descripción	Referencia
54 Soportes en 3 Niveles	DTE40
36 Soportes en 3 Niveles	DTE50
36 Soportes en 3 Niveles	DTE63
Dimensiones: 650 x 405 x 1545	

Descripción	Referencia
12 Soportes	S70930
12 Soportes	S70940
8 Soportes	S70950
8 Soportes	S70963
Dimensiones: 495 x 240 x 150	

<p><b>Mesa de Trabajo DTJ1</b></p> 	<p><b>Referencia: DTJ1</b></p> <ul style="list-style-type: none"> <li>• Mesa de Trabajo de gran resistencia.</li> <li>• Dimensiones: 1500 x 600 x 700.</li> <li>• Con tomas de corriente pre-configuradas en los laterales.</li> </ul>
<p><b>Mesa de Trabajo DTJ3</b></p> 	<p><b>Referencia: DTJ3</b></p> <ul style="list-style-type: none"> <li>• Mesa de Trabajo de gran resistencia.</li> <li>• Dimensiones: 1500 x 600 x 700.</li> <li>• Con tomas de corriente pre-configuradas en los laterales.</li> <li>• Armario de 600 x 450 x 780 incorporado.</li> <li>• Cajones: 4x100 + 1x200.</li> </ul>
<p><b>Mesa de Trabajo DTJ4</b></p> 	<p><b>Referencia: DTJ4</b></p> <ul style="list-style-type: none"> <li>• Mesa de Trabajo de gran resistencia.</li> <li>• Dimensiones: 1500 x 600 x 700.</li> <li>• Con tomas de corriente pre-configuradas en los laterales.</li> <li>• Panel frontal perforado de 450 mm de altura.</li> </ul>
<p><b>Mesa de Trabajo DTJ7</b></p> 	<p><b>Referencia: DTJ7</b></p> <ul style="list-style-type: none"> <li>• Mesa de Trabajo de gran resistencia.</li> <li>• Dimensiones: 1500 x 600 x 700.</li> <li>• Con tomas de corriente pre-configuradas en los laterales.</li> <li>• Panel frontal perforado de 450 mm + 450 mm altura con balda superior.</li> </ul>
<p><b>Mesa de Trabajo DTJ9</b></p> 	<p><b>Referencia: DTJ9</b></p> <ul style="list-style-type: none"> <li>• Mesa de trabajo de gran resistencia.</li> <li>• Dimensiones: 1500 x 600 x 700.</li> <li>• Con tomas de corriente pre-configuradas en los laterales.</li> <li>• Panel frontal perforado de 450 mm + 450 mm altura con balda superior.</li> <li>• Armario de 600 x 450 x 780 incorporado.</li> <li>• Cajones: 4x100 + 1x200.</li> </ul>



Código	Longitud (L)
DTQ-01	230 mm

Banda magnética para enganche de piezas. Max. 10-12 Kg. Ancho 24 mm.



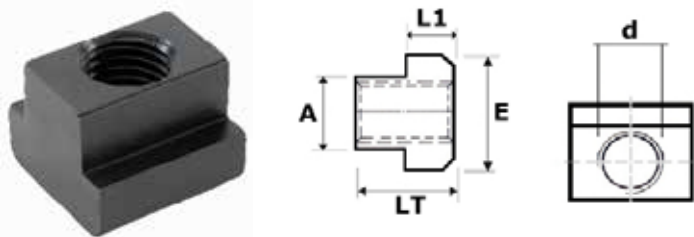
**Consulta Nuestra Sección  
Mobiliario POLAK**

**Consulte el Catalogo General**



## Tuercas Ranuras T - Roscada - DIN 508

- Tuercas para amarre en mesas con ranuras T Con Rosca , Según DIN508 - Resistencia 10



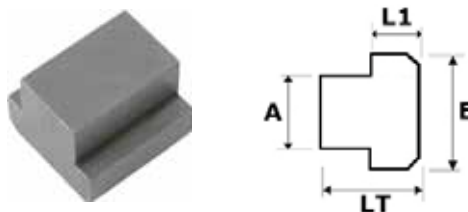
Referencia	D	A	E	LT	L1
T508-M5x6	M5	6	10	8	4
T508-M6X8	M6	8	13	10	6
T508-M6X10	M6	10	15	12	6
T508-M8X10	M8	10	15	12	6
T508-M8X12	M8	12	18	14	7
T508-M8X14	M8	14	22	16	8
T508-M8X16	M8	16	25	18	9
T508-M8X18	M8	18	28	20	10
T508-M10X12	M10	12	18	14	7
T508-M10X14	M10	14	22	16	8
T508-M10X16	M10	16	25	18	9
T508-M10X18	M10	18	28	20	10
T508-M12X14	M12	14	25	18	9
T508-M12X16	M12	16	25	18	9
T508-M12X18	M12	18	28	20	10
T508-M14X16	M14	16	25	18	9
T508-M14X18	M14	18	28	20	10

Referencia	D	A	E	LT	L1
T508-M16X18	M16	18	28	20	10
T508-M16X20	M16	20	32	24	12
T508-M16X22	M16	22	35	28	14
T508-M16X24	M16	24	40	32	16
T508-M16X28	M16	28	44	36	18
T508-M18X20	M18	20	32	24	12
T508-M18X22	M18	22	35	28	14
T508-M20X22	M20	22	35	28	14
T508-M20X24	M20	24	40	32	16
T508-M20X28	M20	28	44	36	18
T508-M22X24	M22	24	40	32	16
T508-M22X28	M22	28	44	36	18
T508-M24X28	M24	28	44	36	18
T508-M24X30	M24	30	48	38	19
T508-M24X36	M24	36	54	44	22
T508-M27X32	M27	32	50	40	20
T508-M30X36	M30	36	54	44	22

## Tuercas Ranuras T - Ciega - DIN 508

- Tuercas para amarre en mesas con ranuras T, Ciega sin Rosca
- Según DIN508 - Resistencia 10

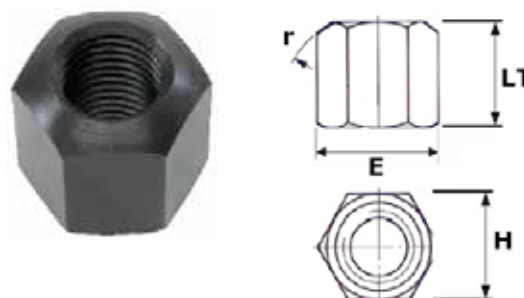
Referencia	A	E	LT	L1
TC508-6	6	10	8	4
TC508-8	8	13	10	6
TC508-10	10	15	12	6
TC508-12	10	15	12	6
TC508-14	12	18	14	7
TC508-16	14	22	16	8
TC508-18	16	25	18	9
TC508-20	18	28	20	10
TC508-22	12	18	14	7
TC508-24	14	22	16	8
TC508-28	16	25	18	9



## Tuercas para Espárragos y Ranuras T - DIN 6330

- Tuercas para amarre sobre espárragos , tornillos etc...
- Según DIN 6330 - Resistencia 10

Referencia	M	E / H	LT	r
T6330-M6	M-6	10	9	9
T6330-M8	M-8	13	12	12
T6330-M10	M-10	16	15	15
T6330-M12	M-12	18	18	17
T6330-M14	M-14	21	21	20
T6330-M16	M-16	24	24	22
T6330-M18	M-18	27	27	24
T6330-M20	M-20	30	30	27
T6330-M22	M-22	34	33	30
T6330-M24	M-24	36	36	32
T6330-M27	M-27	41	40	36
T6330-M30	M-30	46	45	41

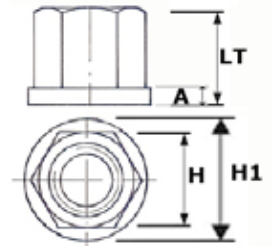




### Tuercas Con Collar - DIN 6331

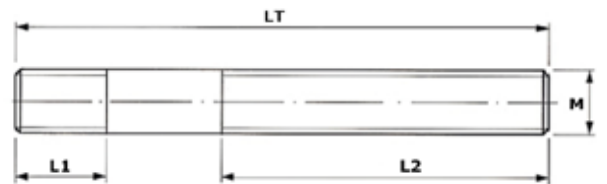
- Tuercas con collar para amarre sobre espárragos , tornillos etc...
- Según DIN 6331 - Resistencia 10

Referencia	M	H	LT	A	H1
T6331-M6	M-6	10	9	3	14
T6331-M8	M-8	13	12	3,5	18
T6331-M10	M-10	16	15	4	22
T6331-M12	M-12	18	18	4	25
T6331-M14	M-14	21	21	4,5	28
T6331-M16	M-16	24	24	5	31
T6331-M18	M-18	27	27	5	34
T6331-M20	M-20	30	30	6	37
T6331-M22	M-22	34	33	6	40
T6331-M24	M-24	36	36	6	45
T6331-M27	M-27	41	40	8	50
T6331-M30	M-30	46	45	8	58



### Espárragos Roscados - DIN 6379

- Espárragos roscados para Tuercas T y Tuercas T
- Según DIN 6379 - Calidad 8.8



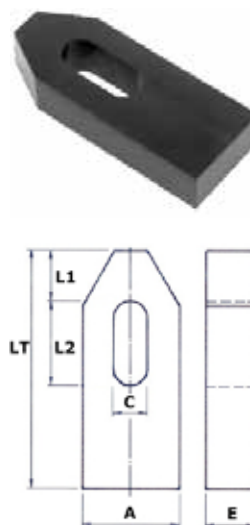
Referencia	M	LT	L2	L1
V6379-M8x40	M8	40	20	11
V6379-M8x63	M8	63	40	11
V6379-M8x80	M8	80	50	11
V6379-M8x100	M8	100	63	11
V6379-M8x125	M8	125	75	11
V6379-M8x160	M8	160	100	11
V6379-M10x50	M10	50	25	13
V6379-M10x80	M10	80	50	13
V6379-M10x100	M10	100	63	13
V6379-M10x125	M10	125	75	13
V6379-M10x160	M10	160	100	13
V6379-M10x200	M10	200	125	13
V6379-M12x50	M12	50	25	15
V6379-M12x63	M12	63	32	15
V6379-M12x80	M12	80	50	15
V6379-M12x100	M12	100	63	15
V6379-M12x125	M12	125	75	15
V6379-M12x160	M12	160	100	15
V6379-M12x200	M12	200	125	15
V6379-M14x63	M14	63	32	17
V6379-M14x80	M14	80	50	17
V6379-M14x100	M14	100	63	17
V6379-M14x125	M14	125	75	17
V6379-M14x160	M14	160	100	17
V6379-M14x200	M14	200	125	17
V6379-M14x250	M14	250	160	17
V6379-M16x63	M16	63	32	19
V6379-M16x80	M16	80	50	19
V6379-M16x100	M16	100	63	19
V6379-M16x125	M16	125	75	19
V6379-M16x160	M16	160	100	19
V6379-M16x200	M16	200	125	19
V6379-M16x250	M16	250	160	19
V6379-M16x315	M16	315	180	19
V6379-M16x500	M16	500	315	19
V6379-M18x80	M18	80	50	23
V6379-M18x125	M18	125	75	23
V6379-M18x160	M18	160	100	23
V6379-M18x200	M18	200	125	23
V6379-M18x250	M18	250	150	23
V6379-M18x315	M18	315	180	23

Referencia	M	LT	L2	L1
V6379-M20x80	M20	80	32	27
V6379-M20x125	M20	125	70	27
V6379-M20x160	M20	160	100	27
V6379-M20x200	M20	200	125	27
V6379-M20x250	M20	250	160	27
V6379-M20x315	M20	315	200	27
V6379-M20x400	M20	400	250	27
V6379-M20x500	M20	500	315	27
V6379-M22x100	M22	100	45	31
V6379-M22x160	M22	160	100	31
V6379-M22x200	M22	200	125	31
V6379-M22x250	M22	250	160	31
V6379-M22x315	M22	315	180	31
V6379-M22x400	M22	400	250	31
V6379-M24x100	M24	100	45	35
V6379-M24x125	M24	125	63	35
V6379-M24x160	M24	160	100	35
V6379-M24x200	M24	200	125	35
V6379-M24x250	M24	250	160	35
V6379-M24x315	M24	315	200	35
V6379-M24x400	M24	400	250	35
V6379-M24x500	M24	500	315	35
V6379-M24x630	M24	630	315	35
V6379-M27x125	M27	125	56	39
V6379-M27x200	M27	200	125	39
V6379-M27x315	M27	315	200	39
V6379-M27x400	M27	400	250	39
V6379-M27x500	M27	500	315	39
V6379-M30x125	M30	125	56	43
V6379-M30x200	M30	200	125	43
V6379-M30x315	M30	315	200	43
V6379-M30x500	M30	500	315	43
V6379-M30x700	M30	700	400	43

### Brida de Amarre - DIN 6314

• Según DIN 6314 - Fabricación Maciza

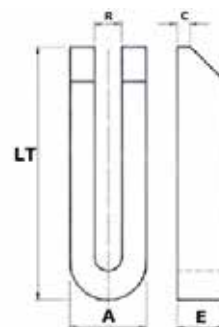
Referencia	C	LT	Para M	E	A	L1	L2
B6314-M6x50	6,6	50	M6	10	20	10	20
B6314-M8x60	9	60	M8	12	25	13	22
B6314-M10x80	11	80	M10	14	30	15	30
B6314-M1214x100	14	100	M12 - M14	20	40	21	40
B6314-M1214x125	14	125	M12 - M14	20	40	21	50
B6314-M1618x125	18	125	M16 - M18	25	50	26	45
B6314-M1618x160	18	160	M16 - M18	25	50	26	65
B6314-M2022x160	22	160	M20 - M22	30	60	30	60
B6314-M2022x200	22	200	M20 - M22	30	60	30	80
B6314-M24x200	26	200	M24	30	70	35	80
B6314-M24x250	26	250	M24	30	70	35	105
B6314-M30x250	33	250	M30	40	80	45	100
B6314-M30x315	33	315	M30	50	80	45	130



### Brida de Amarre Forma Horquilla con Chaflán

• Según DIN 6315B - Fabricación Maciza

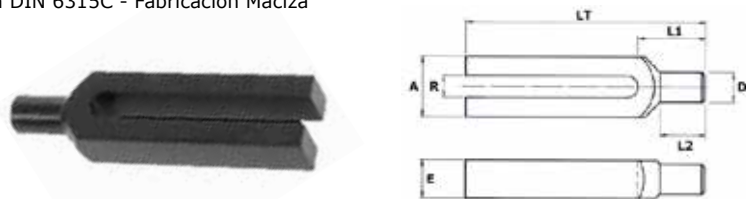
Referencia	M	LT	L2	L1
B6315B-6x60	6,6	60	12	19
B6315B-9x80	9	80	15	25
B6315B-11x100	11	100	20	31
B6315B-14x125	14	125	25	38
B6315B-14x160	14	160	25	38
B6315B-14x200	14	200	25	38
B6315B-18x160	18	160	30	48
B6315B-18x200	18	200	30	48
B6315B-18x250	18	250	40	48
B6315B-22x200	22	200	40	52
B6315B-22x250	22	250	40	62
B6315B-22x315	22	315	40	62
B6315B-26x200	26	200	40	66
B6315B-26x250	26	250	40	66
B6315B-26x315	26	315	40	66



Referencia	M	LT	L2	L1
B6315B-33x250	33	250	50	74
B6315B-33x315	33	315	50	74
B6315B-33x400	33	400	50	74
B6315B-40x400	40	400	60	100
B6315B-40x600	40	600	60	100

### Brida de Amarre Con Punta Redonda

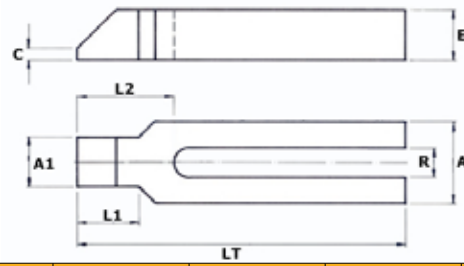
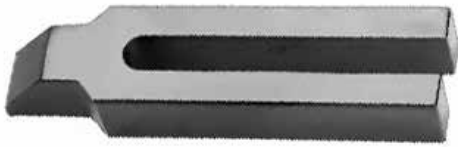
• Según DIN 6315C - Fabricación Maciza



Referencia	R	LT	Para M	E	A	D	L1	L2
B6315C-M8x15	9	100	M8	15	30	12	30	18
B6315C-M10x20	11	125	M10	20	30	16	36	24
B6315C-M8 a M14x25	14	160	M8 a M14	25	40	20	45	30
B6315C-M8 a M14x25	14	200	M8 a M14	25	40	20	45	30
B6315C-M16 - M18x30	18	200	M16 - M18	30	50	24	55	36
B6315C-M16 - M18x30	18	250	M16 - M18	30	50	24	55	36
B6315C-M20 - M22x40	22	250	M20 - M22	40	60	30	65	45
B6315C-M20 - M22x40	22	315	M20 - M22	40	60	30	65	45
B6315C-M24x40	26	250	M24	40	70	38	80	56
B6315C-M24x40	26	315	M24	40	70	38	80	56
B6315C-M30x50	33	315	M30	50	80	45	85	56
B6315C-M30x50	33	400	M30	50	80	45	85	56

### Brida de Amarre Con Punta Nariz

- Según DIN 6315GN - Fabricación Maciza

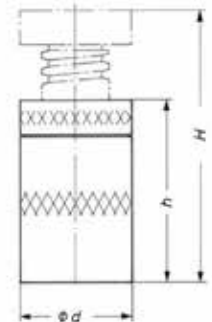


Referencia	R	LT	Para M	E	A	A1	C	L2
B6315GN-9x100	9	100	M8	15	30	16	7.5	32
B6315GN-11x125	11	125	M10	20	30	20	7.5	38
B6315GN-14x160	14	160	M12-M14	25	40	24	10	47
B6315GN-14x200	14	200	M12-M14	25	40	24	10	47
B6315GN-18x160	18	160	M16-M18	25	45	28	11.25	52
B6315GN-18x200	18	200	M16-M18	30	50	28	12.5	57
B6315GN-18x250	18	250	M16-M18	30	50	28	12.5	57
B6315GN-22x160	22	160	M20-M22	30	60	35	15	64
B6315GN-22x200	22	200	M20-M22	30	60	35	15	64
B6315GN-22x250	22	250	M20-M22	40	60	35	15	68
B6315GN-22x315	22	315	M20-M22	40	60	35	15	68
B6315GN-26x250	26	250	M24	40	70	43	17.5	83
B6315GN-26x315	26	315	M24	40	70	43	17.5	83
B6315GN-26x350	26	350	M24	40	70	43	17.5	83
B6315GN-33x315	33	315	M30	50	80	50	20	88
B6315GN-33x400	33	400	M30	50	80	50	20	88

### Calzo de Rosca Regulable

- Fabricado en Acero Tratado Recubierto

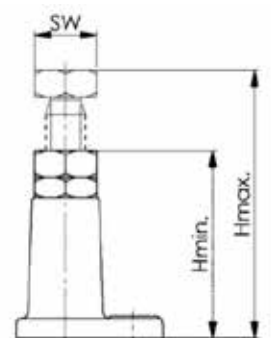
Referencia	Rango h-H	Rosca Int	d - ø
S6400-50	38-50	TR20X4	31
S6400-70	50-70	TR30X4	50
S6400-100	70-100	TR30X4	50
S6400-140	100-140	TR40X7	65
S6400-210	140-210	TR50X8	70
S6400-300	190-300	TR60X10	80



### Calzo de Rosca con Gran Base y Regulable

- Fabricado en Acero Tratado Recubierto
- Gran soporte inferior para una máxima estabilidad
- Dos ranuras laterales para amarrar con tuercas T

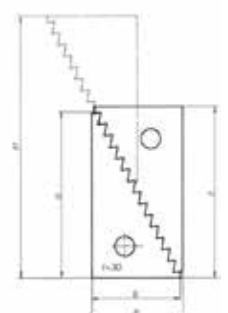
Referencia	H Min	H Max	SW
S6500-140	100	140	50
S6500-200	140	200	50
S6500-320	200	320	50
S6500-550	320	550	50



### Calzo Universal

- Fabricado en Acero Tratado
- Dentado de forma escalonada. Para uso por pares. Se vende individualmente
- Dos ranuras laterales para amarrar con tuercas T

Referencia	Rango h-H	a	b	c
S6500E-1	22-51	33	19	38
S6500-E2	39-107	66	35.5	70
S6500-E3	71-208	131	68	135



**Mordaza Manual para Taladro**

- Fabricado en Acero fundición
- Posicionamiento Vertical y Horizontal
- Dos ranuras laterales para amarrar con tuercas T

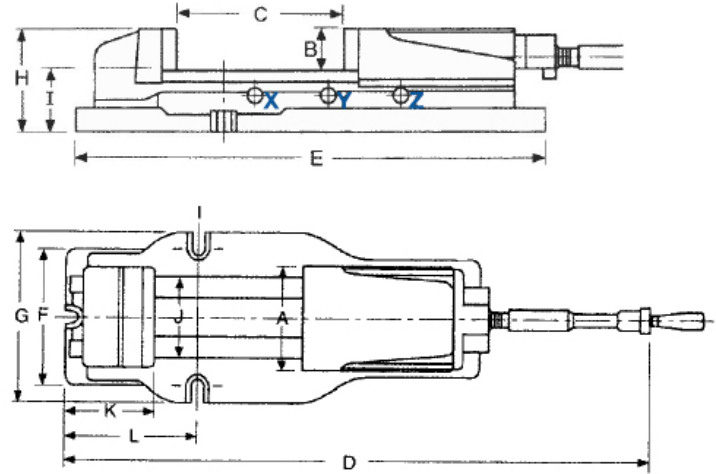
Referencia	Ancho Mordaza	Alto Mordaza	Apertura Máxima
M3424-80	80	20	50
M3424-100	100	23	75
M3434-125	125	26	100
M3434-150	150	30	125
M3434-200	200	35	175


**Mordaza Hidráulica**

- Fabricado en Acero fundición y rectificado
- Alta precisión: 0.01/0.02 mm de paralelismo



- Soporte Giratorio 360° (Opcional)  
 Para M3400-130 - Código: M3400-S130  
 Para M3400-150 - Código: M3400-S150  
 Para M3400-200 - Código: M3400-S200



Referencia	A	B	C	D	E	F	G	H	I	J	K	L
M3400-130	130	48	220	840	550	175	207	120	70.5	97	107	195
M3400-150	150	53	300	970	620	182	225	135	82.5	116	117	210
M3400-200	200	62	300	1070	680	260	280	162	100	160	150	260

- Rango Amarre M3400-130: X=0-73 | Y=72-146 | Z=145-220
- Rango Amarre M3400-150: X=0-100 | Y=98-200 | Z=198-300
- Rango Amarre M3400-200: X=0-100 | Y=99-200 | Z=198-300

**Mordaza Mecánica Inclinable**

- Fabricado en Acero fundición
- Soporte Giratorio en 360°
- Base principal inclinable en 90°
- Dos ranuras laterales para amarrar con tuercas T

Referencia	Ancho Mordaza	Alto Mordaza	Apertura Máxima
M3422-125	125	45	95
M3422-125L	125	45	130
M3422-160	160	50	125


**Mordaza Mecánica Inclinable - Triaxial**

- Fabricado en Acero fundición
- Soporte Giratorio en 360°
- Base principal inclinable en 90° en ambos sentidos
- Dos ranuras laterales para amarrar con tuercas T

Referencia	Ancho Mordaza	Alto Mordaza	Apertura Máxima
M3412-125	125	40	125



### Plato Torno 3 / 4 Garras Auto-Centrante

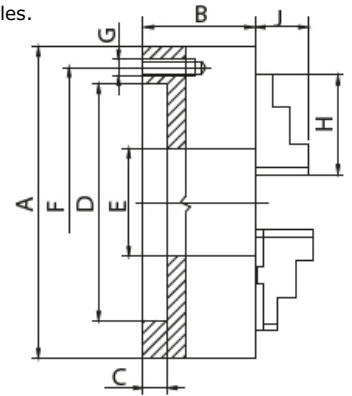
- El plato contiene 1 juego de garras duras int/ext y una llave de apriete. Se disponen juegos de garras blandas opcionales.
- Fabricado en acero. Alta Precisión. Según norma DIN 6350



Plato de 3 Garras



Plato de 4 Garras



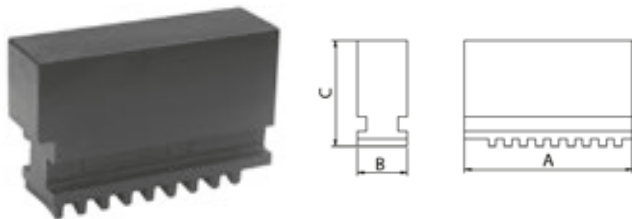
### Plato 3 Garras

Referencia	A (∅) mm	B	C	D	E	F	G	H	J	RPM Máx.	Kg
ZNX3-125	125	56	4	95	32	108	3xM8	51	20	4800	5
ZNX3-160	160	64	4	125	42	140	6XM10	70	32	4500	10
ZNX3-200	200	75	4	160	55	176	6XM10	85	29	4000	17.5
ZNX3-250	250	85	5	200	76	224	6XM12	105	34	3500	29
ZNX3-315	315	94	5	260	103	286	6XM16	125	43	2800	50
ZNX3-400	400	105	5	330	136	362	6XM16	145	55	2000	85
ZNX3-500	500	120	5	420	190	458	6XM16	180	60	1200	145
ZNX3-630	630	135	7	545	252	586	6XM16	225	70	1000	250

### Plato 4 Garras

Referencia	A (∅) mm	B	C	D	E	F	G	H	J	RPM Máx.	Kg
ZNX4-125	125	59.5	4	95	35.5	108	3xM8	51	20	4800	5
ZNX4-160	160	68	4	125	42	140	6XM10	70	32	4500	10
ZNX4-200	200	78	4	160	55	176	6XM10	85	29	4000	17.5
ZNX4-250	250	89	5	200	76	224	6XM12	105	34	3500	29
ZNX4-315	315	96.2	5	260	103	286	6XM16	125	43	2800	50
ZNX4-400	400	108	5	330	136	362	6XM16	145	55	2000	85
ZNX4-500	500	119	5	420	190	458	6XM16	180	60	1200	145

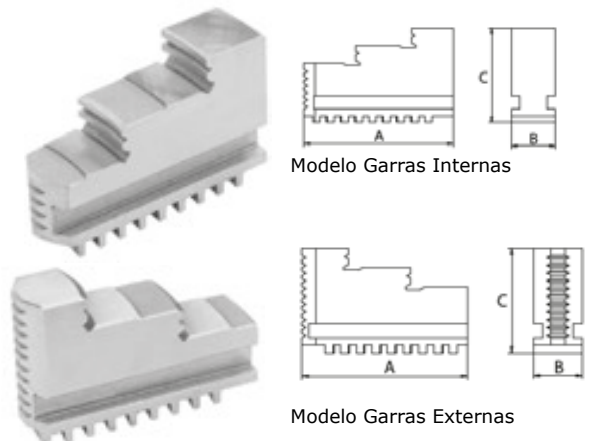
### Garras Blandas Enterizas para Plato ZNX



Ref. 3 Garras	Ref. 4 Garras	Para Plato ∅	A	B	C
GNXB-D1253	GNXB-D1254	125	51	20	40
GNXB-D1603	GNXB-D1604	160	70	20	53
GNXB-D2003	GNXB-D2004	200	85	25	54
GNXB-D2503	GNXB-D2504	250	105	28	63
GNXB-D3153	GNXB-D3154	315	125	32	73
GNXB-D4003	GNXB-D4004	400	145	36	92
GNXB-D5003	GNXB-D5004	500	180	40	100
GNXB-D6303	GNXB-D6304	630	225	50	110

### Garras Duras Enterizas para Plato ZNX

Ref. 3 Garras Internas	Ref. 4 Garras Internas	Para Plato ∅	Ref. 3 Garras Externas	Ref. 4 Garras Externas
GNXI-D1253	GNXI-D1254	125	GNXE-D1253	GNXE-D1254
GNXI-D1603	GNXI-D1604	160	GNXE-D1603	GNXE-D1604
GNXI-D2003	GNXI-D2004	200	GNXE-D2003	GNXE-D2004
GNXI-D2503	GNXI-D2504	250	GNXE-D2503	GNXE-D2504
GNXI-D3153	GNXI-D3154	315	GNXE-D3153	GNXE-D3154
GNXI-D4003	GNXI-D4004	400	GNXE-D4003	GNXE-D4004
GNXI-D5003	GNXI-D5004	500	GNXE-D5003	GNXE-D5004



Modelo Garras Internas

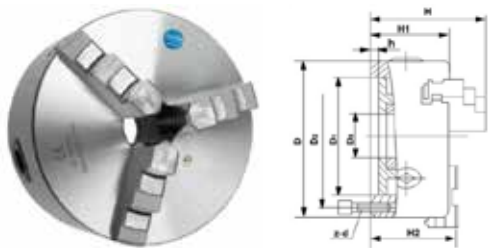
Modelo Garras Externas

Nota: Garras blandas y duras compatibles con nuestros platos y los de BISON



## Plato Torno 3 Garras Auto-Centrante

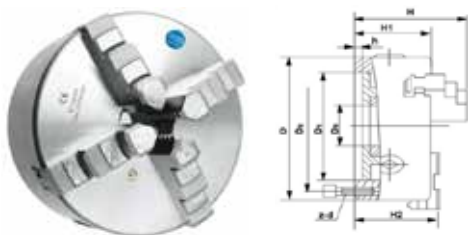
- Plato de Acero Fundición. El plato contiene 1 juego de garras duras y una llave de apriete. Se disponen juegos de garras blandas opcionales.



Referencia	D (∅) mm	D1	D2	D3	H	H1	h	z-d	Centrado	RPM Máx.	Kg
WAT-D80-3	80	55	66	16	66,56	50	4	3-M6	0,08	4000	2
WAT-D100-3	100	72	84	22	74,05	55	3	3-M8	0,08	3500	3
WAT-D125-3	125	95	108	30	84,5	58	4	3-M8	0,08	3000	5
WAT-D160-3	160	130	142	45	94	65	5	3-M8	0,08	2500	9
WAT-D200-3	200	165	180	65	109	75	5	3-M10	0,10	2000	16
WAT-D250-3	250	206	226	80	120	80	5	3-M12	0,10	1600	28
WAT-D315-3	315	260	285	100	147,5	90	6	3-M16	0,12	1200	47
WAT-D400-3	400	340	368	130	173,5	100	6	3-M16	0,12	1000	73
WAT-D500-3	500	440	465	210	202	115	6	6-M16	0,16	800	121
WAT-D630-3	630	545	586	252	220,5	135	7	6-M16	0,16	800	200

## Plato Torno 4 Garras Auto-Centrante

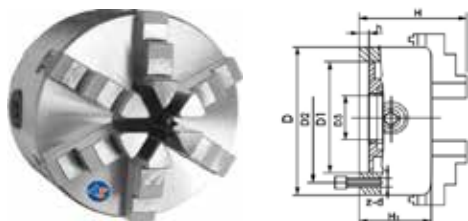
- Plato de Acero Fundición. El plato contiene 1 juego de garras duras y una llave de apriete. Se disponen juegos de garras blandas opcionales.



Referencia	D (∅) mm	D1	D2	D3	H	H1	h	z-d	Centrado	RPM Máx.	Kg
WAT-D80-4	80	55	66	16	66,56	50	4	3-M6	0,08	4000	2
WAT-D100-4	100	72	84	22	74,05	53,5	3	3-M8	0,08	3500	3
WAT-D125-4	125	95	108	30	84,5	58	4	3-M8	0,08	3000	5
WAT-D160-4	160	130	142	45	94	65	5	3-M8	0,08	2500	9
WAT-D200-4	200	165	180	65	109	75	5	3-M10	0,10	2000	16
WAT-D250-4	250	206	226	80	120	80	5	3-M12	0,10	1600	28
WAT-D315-4	315	260	285	100	147,5	90	6	3-M16	0,12	1200	47
WAT-D400-4	400	340	368	130	173,5	100	6	3-M16	0,12	1000	85
WAT-D500-4	500	440	465	210	202	115	6	6-M16	0,16	800	119

## Plato Torno 6 Garras Auto-Centrante

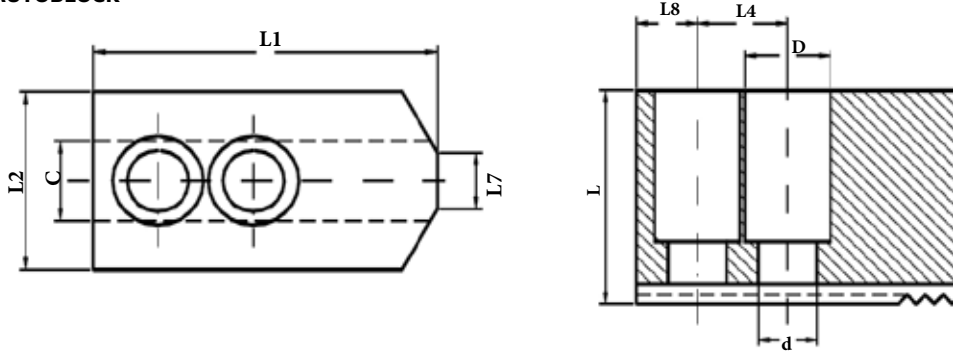
- Plato de Acero Fundición. El plato contiene 1 juego de garras duras y una llave de apriete. Se disponen juegos de garras blandas opcionales.



Referencia	D (∅) mm	D1	D2	D3	H	H1	h	z-d	Centrado	RPM Máx.	Kg
WAT-D100-6	100	72	84	26	74,5	55	3	3-M6	0,08	3500	3
WAT-D130-6	130	100	115	35	86,5	58	5	3-M8	0,08	3000	6
WAT-D165-6	165	130	145	45	94	65	5	3-M8	0,08	2500	9
WAT-D200-6	200	165	180	65	109	75	6	3-M10	0,10	2000	16
WAT-D252-6	252	206	226	80	120	80	6	3-M12	0,10	1600	26

**Garras Blandas Torno (1/16 - 1.5" X 60°)**

Para Modelo de 3 Garras - AUTOBLOCK



Referencia	Ø Modelo	L1	L2	L	L8	L4	D	d	L7
AUT-125-30	Ø125-130-140	60	30	30	15	16	13.5	9	5
AUT-125-45		60	30	45	15	16	13.5	9	5
AUT-125-60		60	30	60	15	16	13.5	9	5
AUT-165-37	Ø165-170	70	35	37	16	16	17	11	10
AUT-165-55		70	35	55	16	16	17	11	10
AUT-165-68		70	35	68	16	16	17	11	10
AUT-200-40	Ø200-210-220	90	40	40	20	23	19	13	12
AUT-200-50		90	40	50	20	23	19	13	12
AUT-200-60		90	40	60	20	23	19	13	12
AUT-200-70		90	40	70	20	23	19	13	12
AUT-200-90		90	40	90	20	23	19	13	12
AUT-250-55	Ø250	110	45	55	20	30	25	17	16
AUT-250-75		110	45	75	20	30	25	17	16
AUT-250-95		110	45	95	20	30	25	17	16
AUT-250-110		110	45	110	20	30	25	17	16
AUT-305-50	Ø305-315	125	50	50	22	30	25	17	16
AUT-305-60		125	50	60	22	30	25	17	16
AUT-305-70		125	50	70	22	30	25	17	16
AUT-305-90		125	50	90	22	30	25	17	16
AUT-400-60	Ø400	140	60	60	25	34	25	17	-
AUT-400-68		140	60	88	25	34	25	17	-
AUT-400-118		140	60	118	25	34	25	17	-

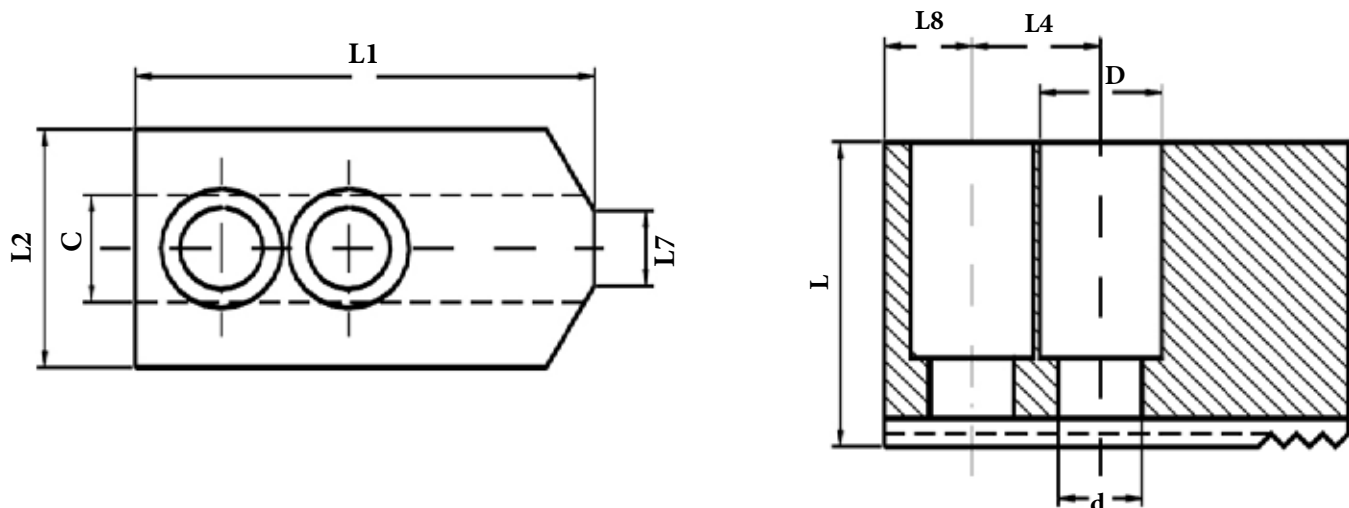
**Garras Blandas Torno (1/16" X 60°)**

Para Modelo de 3 Garras - GALVEZ - HIDRAM

Referencia	Ø Modelo	L1	L2	L	L8	L4	D	d	L7
GAH-130-40	Ø130-140	65	30	40	10	15	13.5	8.5	5
GAH-130-65		65	30	65	10	15	13.5	8.5	5
GAH-160-48	Ø160-200	75	38	48	14	19.5	19	13	12
GAH-160-62		75	38	62	14	19.5	19	13	12
GAH-16075		75	38	75	14	19.5	19	13	12
GAH-170-45	Ø170	75	32	45	13	25	17	11	8
GAH-170-75		75	32	75	13	25	17	11	8
GAH-200-48	Ø200	90	38	48	14	19.5	19	13	5
GAH-200-62		90	38	62	14	19.5	19	13	5
GAH-200-75		90	38	75	14	19.5	19	13	5
GAH-240-48	Ø200-240	100	38	48	14	39	19	13	10
GAH-240-73		100	38	73	14	39	19	13	10
GAH-240-100		100	38	100	14	39	19	13	10
GAH-250-55	Ø250-315	110	45	55	20	26	25	17	16
GAH-250-78		110	45	78	20	26	25	17	16
GAH-250-95		110	45	95	20	26	25	17	16
GAH-250-110		110	45	110	20	26	25	17	16
GAH-300-97	Ø300-340-400	130	45	67	25	45	23	15	16
GAH-300-97		130	45	97	25	45	23	15	16
GAH-300-145		130	45	145	25	45	23	15	16

## Plato Torno 3 Garras Auto-Centrante

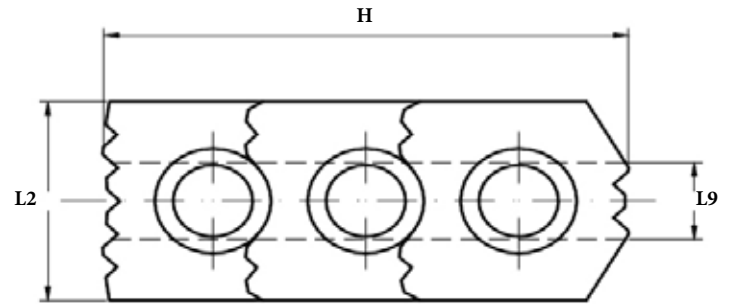
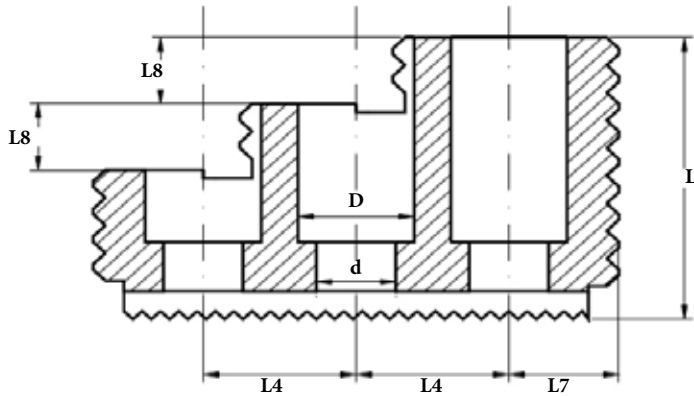
Para Modelo de 3 Garras - KITAWAGA - STRONG



Referencia	Ø Modelo	L1	L2	L	L8	L4	D	d	L7
KIS-4-27	4 Y 5" - Ø139	61	23	27	10	14	13.5	8.5	5
KIS-4-37		61	23	37	10	14	13.5	8.5	5
KIS-4-50		61	23	50	10	14	13.5	8.5	5
KIS-4-58		61	23	58	10	14	13.5	8.5	5
KIS-6-30	6" - Ø 169	73	31	30	15	20	17	11	12
KIS-6-37		73	31	37	15	20	17	11	12
KIS-6-48		73	31	48	15	20	17	11	12
KIS-6-58		73	31	58	15	20	17	11	12
KIS-6-68		73	31	68	15	20	17	11	12
KIS-6-88		73	31	88	15	20	17	11	12
KIS-8-38	8" - Ø 210	95	35	38	24	25	19	13	12
KIS-848		95	35	48	24	25	19	13	12
KIS-858		95	35	58	24	25	19	13	12
KIS-868		95	35	68	24	25	19	13	12
KIS-888		95	35	88	24	25	19	13	12
KIS-8100		95	35	100	24	25	19	13	12
KIS-10-42	10" - Ø 254	110	40	42	30	30	19	13	15
KIS-10-50		110	40	50	30	30	19	13	15
KIS-10-60		110	40	60	30	30	19	13	15
KIS-10-70		110	40	70	30	30	19	13	15
KIS-10-90		110	40	90	30	30	19	13	15
KIS-10-100		110	40	100	30	30	19	13	15
KIS-B212-50	12" - Ø 305	115	50	50	25	30	25	17	20
KIS-B212-60	Modelo B-212	115	50	60	25	30	25	17	20
KIS-B212-70		115	50	70	25	30	25	17	20
KIS-B212-90		115	50	90	25	30	25	17	20
KIS-B212-120		115	50	120	25	30	25	17	20
KIS-B212-150		115	50	150	25	30	25	17	20
KIS-B12-50	12" - Ø 305	130	50	50	40	30	23	15	15
KIS-B12-60	Modelo B-12	130	50	60	40	30	23	15	15
KIS-B12-70		130	50	70	40	30	23	15	15
KIS-B12-90		130	50	90	40	30	23	15	15
KIS-B12-120		130	50	120	40	30	23	15	15
KIS-B12-150		130	50	150	40	30	23	15	15

**Garras Duras Torno (1.5" X 60°)**

Para Modelo de 3 Garras - KITAWAGA - STRONG



Referencia	Ø Modelo	L1	L2	L	L7	L4	D	d	L9	L8
KI-GD4	KD4 - 4" KD5 - 5"	55	23	31	14	14	13.5	8.5	10	12
KI-GD6	KD-6 - 6"	67	32	36	13.5	20	17	11	12	12
KI-GD8	KD8 - 8"	86	36	51	18	25	19	13	14	12
KI-GD10	KD10 - 10"	100	40	54	17	30	19	13	16	12
KI-GDB121	KD12-B212 - 12"	115	50	72	25	30	25	17	21	17
KI-GDB12	KD12 / B12 - 12"	115	50	72	25	30	23	15	18	17
KI-GD15	KD15 - 15"	150	62	86	35	43	32	21	22	20

**Garras Duras Torno (1.5" X 60° - 1/16")**

Para Modelo de 3 Garras - AUTOBLOCK

Referencia	Ø Modelo	L1	L2	L	L7	L4	D	d	L9	L8
AUT-GD200	Ø200-210	90	40	48	27	23	19	13	17	12
AUT-GD250	Ø250	110	50	58	28	30	25	17	21	12
AUT-GD305	Ø305-315	115	50	72	25	30	25	17	21	17

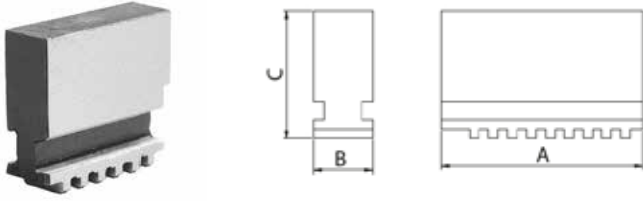
**Garras Duras Torno (1/16")**

Para Modelo de 3 Garras - GALVEZ - HIDRAM

Referencia	Ø Modelo	L1	L2	L	L7	L4	D	d	L9	L8
GAH-GD160	160-200	90	40	48	34	19.5	19	13	17	12
GAH-GD250	250-315	101	50	58	31	25	25	17	21	12

### Garras Blandas Enterizas para Plato WAT

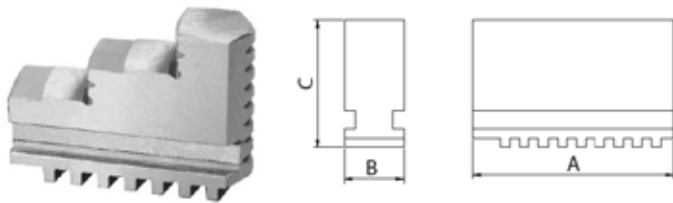
- Set compuesto por 3/4 garras enterizas para platos modelos WAT.
- Fabricados en material C-45.



Ref. 3 Garras	Ref. 4 Garras	Para Plato $\phi$	A	B	C
D80-3-MB	D80-4-MB	80	32	12	33
D100-3-MB	D100-4-MB	100	42	15	38
D125-3-MB	D125-4-MB	125	56	16	45
D160-3-MB	D160-4-MB	160	70	18,5	54
D200-3-MB	D200-4-MB	200	85	22	61
D250-3-MB	D250-4-MB	250	105	27	69
D315-3-MB	D315-4-MB	315	130	36	91
D400-3-MB	D400-4-MB	400	138	36	91
D500-3-MB	D500-4-MB	500	180	46	100

### Garras Duras Enterizas para Plato WAT

- Set compuesto por 3/4 garras enterizas para platos modelos WAT.
- Disponible el Juego de Interiores o de Exteriores.



Ref. 3 Garras Externas	Ref. 4 Garras Externas	Para Plato $\phi$	Ref. 3 Garras Internas	Ref. 4 Garras Internas
D80-3-BB	D80-4-BB	80	D80-3-DB	D80-4-DB
D100-3-BB	D100-4-BB	100	D100-3-DB	D100-4-DB
D125-3-BB	D125-4-BB	125	D125-3-DB	D125-4-DB
D160-3-BB	D160-4-BB	160	D160-3-DB	D160-4-DB
D200-3-BB	D200-4-BB	200	D200-3-DB	D200-4-DB
D250-3-BB	D250-4-BB	250	D250-3-DB	D250-4-DB
D315-3-BB	D315-4-BB	315	D315-3-DB	D315-4-DB
D400-3-BB	D400-4-BB	400	D400-3-DB	D400-4-DB

### Llave Amarre de Plato de Torno

- Consultar previamente el cuadradillo necesario, algunos modelos de platos no tienen la condifacion estándar y el cuadradillo es diferente.

Referencia	Para Plato (Según fabricante)	Cuadradillo
LL-PL80	80	6
LL-PL100125	100-125	9
LL-PL160200	160-200	11
LL-PL250315	250-315	14
LL-PL400	400	17
LL-PL500630	500-630	19
LL-PL800	800	19



### Plato Hidráulico - 2 Garras

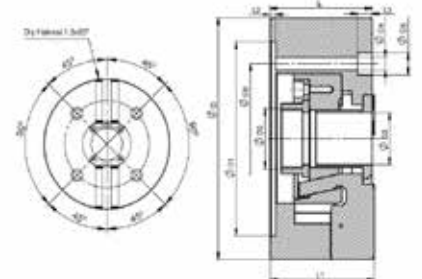
- El plato contiene: 1 juego de garras blandas - 1 juego de tuercas T y una llave de apriete.

Referencia	D	D1	D2	D3	D4	D5	D6	L	L1	L2	L3	L4
OZ602	169	140	M55X2	45	12	17	10480	81	83	5	12	32
OZ802	210	170	M60X2	52	14	20	13340	91	93	5	18	38
OZ102	254	220	M85X2	75	18	26	17140	100	102	5	18	41
OZ122	305	280	M100X2	85	18	26	17140	110	112	6	18	51



### Datos Técnicos

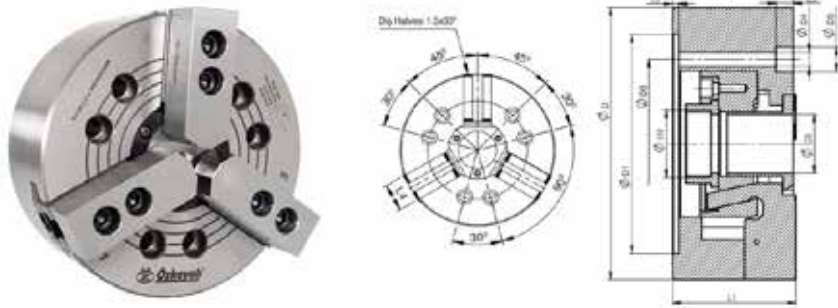
Código	Apriete Garra	Vel. Máx.	Máx.	Máx. Fuerza Amarre	Amarre	Nº Flanco	$\phi$ Min-Máx.	Peso
OZ602	5.5	6000	15KN	38KN	13	A5	12-169	10
OZ802	7.3	5000	23KN	57KN	17	A6	12-210	20
OZ102	8.5	4200	25KN	74KN	20	A8	28-254	30
OZ122	8.5	3300	37KN	96KN	20	A8	32-305	46





### Plato Hidráulico - 3 Garras

• El plato contiene: 1 juego de garras blandas - 1 juego de tuercas T y una llave de apriete. Garras duras opcionales modelos S050 a S0150.



Código	D	Código
OZ503	169	OZ50-3
OZ603	210	OZ60-3
OZ803	254	OZ80-3
OZ103	305	OZ10-3
OZ123	381	OZ12-3

Modelos acabados en -3 contienen:  
- Juego de garras blandas  
- Juego de garras duras  
- Juego de tuercas T  
- Llave de apriete

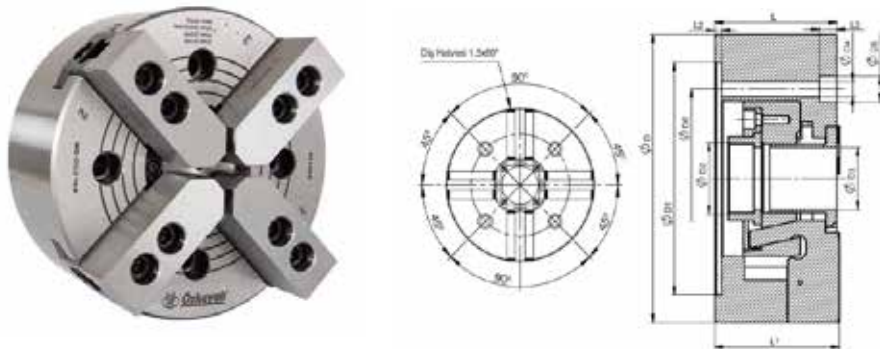
Modelo	D	D1	D2	D3	D4	D5	D6	L	L1	L2	L3	L4
OZ503	135	110	M40X1.5	33	12	17	8260	62	64	4	12	24
OZ603	169	140	M55X2	45	12	17	10480	81	83	5	12	32
OZ803	210	170	M60X2	52	14	20	13340	91	93	5	18	38
OZ103	254	220	M85X2	75	18	26	17140	100	102	5	18	41
OZ123	305	280	M100X2	85	18	26	17140	110	112	6	18	51
OZ153	381	300	M130X2	120	22	32	235	134	138	6	22	62

#### - Datos Técnicos -

Código	Apriete Garra	Vel. Máx.	Máx.	Máx. Fuerza Amarre	Amarre	Nº Flanco	Ø Min-Máx.	Peso
OZ503	5.5	7000	17KV	36KV	10	A4	11-135	7
OZ603	5.5	6000	21KV	56KV	13	A5	12-169	10
OZ803	7.3	5000	35KV	85KV	17	A5-A6	12-210	20
OZ103	8.5	4500	42KV	110KV	20	A6-A8	28-254	30
OZ123	8.5	3500	54KV	143KV	20	A8	32-305	46
OZ153	10.6	2500	71KV	179KV	23	A8-A11	45-381	120

### Plato Hidráulico - 4 Garras

• El plato contiene: 1 juego de garras blandas - 1 juego de tuercas T y una llave de apriete. Garras duras opcionales modelos S064 a S0154.



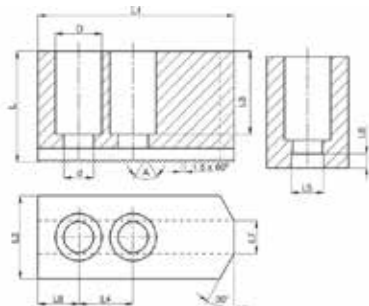
Código	D	Código
OZ604	169	OZ604-4
OZ804	210	OZ804-4
OZ104	254	OZ104-4
OZ124	305	OZ124-4
OZ154	381	OZ154-4

Modelos acabados en -4 contienen:  
- Juego de garras blandas  
- Juego de garras duras  
- Juego de tuercas T  
- Llave de apriete

Modelo	D	D1	D2	D3	D4	D5	D6	L	L1	L2	L3	L4
OZ604	169	140	M55X2	45	12	17	10480	62	83	5	12	32
OZ804	210	170	M60X2	52	14	20	13340	81	93	5	18	38
OZ104	254	220	M85X2	75	18	26	17140	91	102	5	18	41
OZ124	305	280	M100X2	85	18	26	17140	100	112	6	18	51
OZ154	381	300	M130X2	120	22	32	235	110	138	6	22	62

#### - Datos Técnicos -

Código	Apriete Garra	Vel. Máx.	Máx.	Máx. Fuerza Amarre	Amarre	Nº Flanco	Ø Min-Máx.	Peso
OZ604	5.5	6000	15KV	38KV	13	A5	12-169	10
OZ804	7.3	5000	23KV	57KV	17	A6	12-210	20
OZ104	8.5	4200	28KV	74KV	20	A8	28-254	30
OZ124	8.5	3300	37KV	96KV	20	A8	32-305	46
OZ154	10.6	2500	43KV	120KV	23	A8-A11	45-381	120

**Garras Blandas - Plato hidráulico**
**Garras Estándar (1.5 x 60°) - Set de 3 Garras**


Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
YU-050	5" - Ø 135	30	62	25	21	14	10	4	5	10	14	9
YU-060	6" - Ø 169	32	72	30	20	20	12	5	10	15	17	11
YU-080	8" - Ø 210	37	95	35	22	25	14	5	12	25	19	13
YU-0100	10" - Ø 254	42	110	40	29	30	16	5	14	30	19	13
YU-0120	12" - Ø 305	52	130	50	32	30	18	5	16	30	23	15
YU-01200	12" - Ø 305	52	130	50	32	30	21	5	18	30	25	17
YU-0150	15" - Ø 381	60	165	60	40	43	22	8	20	37	32	21
YU-02100	21" - Ø533	70	180	65	45	60	25	9	-	40	32	21

(\*) Excepto Modelo Ø 21" - 3.0x60ª

**Garras Estándar (1.5 x 60°) - Set de 4 Garras**

Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
YU-460	6" - Ø 169	32	72	30	21	20	12	5	10	15	17	11
YU-480	8" - Ø 210	37	95	35	20	25	14	5	12	25	19	13
YU-1004	10" - Ø 254	42	110	40	22	30	16	5	14	30	19	13
YU-124	12" - Ø 305	52	130	50	29	30	18	5	16	30	23	15
YU-1240	12" - Ø 305	52	130	50	32	30	21	5	18	30	25	17
YU-154	15" - Ø 381	60	165	60	32	43	22	8	20	37	32	21

**Garras Modelo Largo Longitud (1.5 x 60°) - Set de 3 Garras**

Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
EU-060	6" - Ø 169	32	90	30	22	20	12	5	10	15	17	11
EU-080	8" - Ø 210	37	115	35	22	25	14	5	12	25	19	13
EU-0100	10" - Ø 254	42	130	40	29	30	16	5	14	30	19	13
EU-01200	12" - Ø 305	52	150	50	32	30	18	5	16	30	23	15
EY-0150	15" - Ø 381	60	190	60	40	43	22	8	20	37	32	21
EU-02100	21" - Ø533	70	200	65	45	60	25	9	-	40	32	21

(\*) Excepto Modelo Ø 21" - 3.0x60ª

**Garras Modelo Alto (1.5 x 60°) - Set de 3 Garras**

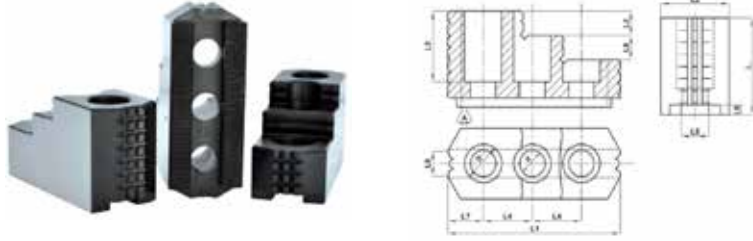
Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
Y-060	6" - Ø 169	57	72	30	47	20	12	5	10	15	17	11
Y-080	8" - Ø 210	67	95	35	50	25	14	5	12	25	19	13
Y-0100	10" - Ø 254	77	110	40	60	30	16	5	14	30	19	13
Y-0120	12" - Ø 305	77	130	50	55	30	18	5	16	30	23	15
Y-01200	12" - Ø 305	77	130	50	55	30	21	5	16	30	25	17
Y-0150	15" - Ø 381	100	165	60	60	43	22	8	20	37	32	21

Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
EY-08100	8" - Ø 210	100	95	35	50	25	14	5	12	25	19	13
EY-08120	8" - Ø 210	120	95	35	50	25	14	5	12	25	19	13
EY-08130	8" - Ø 210	130	95	35	50	25	14	5	12	25	19	13
EY-10100	10" - Ø 254	100	110	40	50	30	16	5	14	30	19	13
EY-10120	10" - Ø 254	120	110	40	50	30	16	5	14	30	19	13
EY-10130	10" - Ø 254	130	110	40	50	30	16	5	14	30	19	13
EY-12100	12" - Ø 305	100	130	50	50	30	21	5	16	30	25	17
EY-12120	12" - Ø 305	120	130	50	50	30	21	5	16	30	25	17
EY-12130	12" - Ø 305	130	130	50	50	30	21	5	16	30	25	17
EY-15130	15" - Ø 381	130	165	60	65	43	22	8	20	37	32	21
EY-15150	15" - Ø 381	150	165	60	65	43	22	8	20	37	32	21

**Modelo Pulgadas 1/16 x 90° - Set 3 Garras | Modelo YR Compatible con Ro... | Modelo YA compatible con Aut...**

Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
YR-6	6" - Ø 169	40	72	35	30	19	17	5	17	12	19	13
YR-8	8" - Ø 210	45	90	40	30	19	17	5	17	20	19	13
YR-10	10" - Ø 254	55	110	45	40	25	21	5	21	25	25	17
YR-12	12" - Ø 305	55	120	50	40	25	21	5	21	30	25	17
YA-16	6" - Ø 169	35	70	30	25	16	14	5	14	16	17	11
YA-18	8" - Ø 210	40	90	35	30	23	17	5	17	20	19	13
YA-10	10" - Ø 254	45	110	45	33	30	21	6	21	20	25	17
YA-12	12" - Ø 305	50	125	50	38	30	21	6	21	22	25	17

**Garras Duras Torno (1.5 X 60°)**



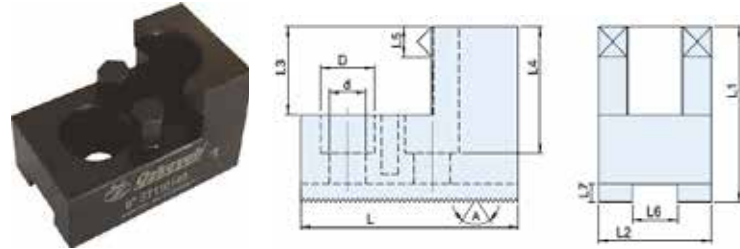
Para Modelo de 3 Garras

Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	D	d
S050	5" - ø 135	28	53	23	19	14	10	4	14	10	6	14	9
S060	6" - ø 169	36	72	30	25	20	12	5	17	10	11	17	11
S080	8" - ø 210	47	90	35	35	25	14	5	19	11	13	19	13
S0100	10" - ø 254	58	102	40	42	30	16	5	25	14	16	19	13
S0120	12" - ø 305	63	110	50	48	30	21	5	20	15	19	25	17
S0150	15" - ø 381	87	150	62	63	43	22	8	34	20	21	32	21

Para Modelo de 4 Garras

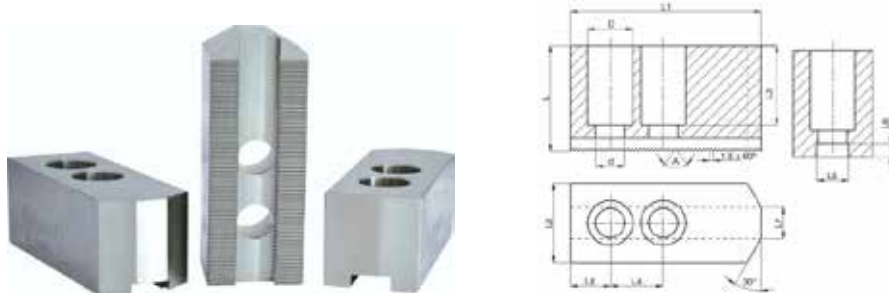
Referencia	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	D	d
S064	6" - ø 169	36	72	30	25	20	12	5	22	9	11	17	11
S084	8" - ø 210	48	90	35	35	25	14	5	28	11	13	19	13
S0104	10" - ø 254	58	100	40	42	30	16	5	30	14	15	19	13
S0124	12" - ø 305	63	110	50	45	30	21	5	30	15	20	25	17
S0154	15" - ø 381	82	150	62	58	43	22	8	24	20	21	32	21

**Garras Duras Torno - Con Tope (1.5 X 60°)**



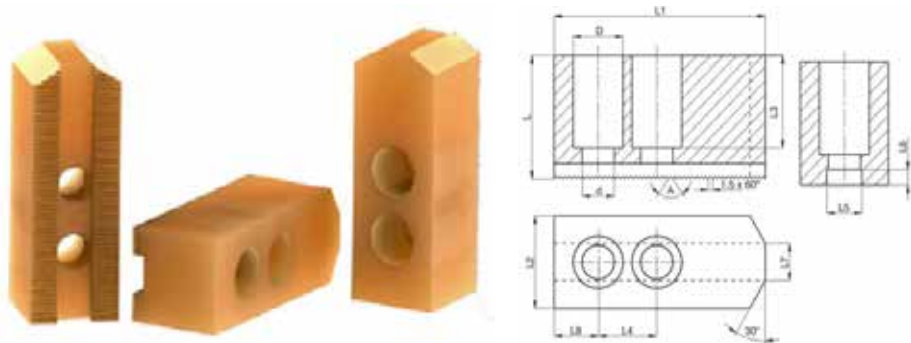
Referencia	Rango	Ø Modelo	L	L1	L2	L3	L4	L5	L6	L7	D	d
ST080110	80-110	6" - ø 169	58	37	30	14	25	7	12	5	17	11
ST110135	110-135	8" - ø 210	67	48	35	22	33	8.5	14	5	19	13
ST155190	155-190	10" - ø 254	72	58	40	29	42	10	16	6	19	13
ST135195	135-195	12" - ø 305	90	63	50	30	41	12.5	21	6	25	17
ST110140	110-140	6" - ø 169	59	37	30	14	25	7	12	5	17	11
ST135165	135-165	8" - ø 210	76	48	35	22	35	8.5	14	5	19	13
ST185220	185-220	10" - ø 254	77	58	40	29	42	10	16	6	19	13
ST195260	195-260	12" - ø 305	88	63	50	30	48	12.5	21	6	25	17

**Garras Blandas Aluminio (1.5 X 60°)**



Referencia	Plato	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
AL66006	6" - ø 169	32	72	30	22	20	12	5	10	15	17	11
AL66008	8" - ø 210	37	95	35	22	25	14	5	12	25	19	13
AL66010	10" - ø 254	42	110	40	29	30	16	5	14	30	19	13
AL66012	12" - ø 305	52	130	50	32	30	21	5	16	30	25	17

**Garras Blandas Plástico (1.5 X 60°)**



Referencia	Plato	L	L1	L2	L3	L4	L5	L6	L7	L8	D	d
KY66006	6" - ø 169	32	72	30	22	20	12	5	10	15	17	11
KY66008	8" - ø 210	37	95	35	22	25	14	5	12	25	19	13
KY66010	10" - ø 254	42	110	40	29	30	16	5	14	30	19	13
KY66012	12" - ø 305	52	130	50	32	30	21	5	16	30	25	17

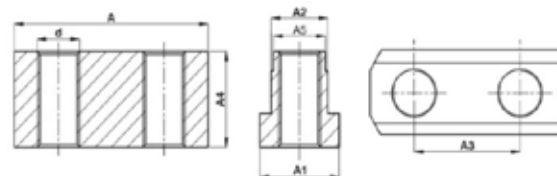
**T De de Amarre para Garras Torno - Estándar - 3 Juegos**

Referencia	Modelo	A	A1	A2	A3	A4	A5	d
AT100	5" - ø 135	26	15	10	14	15	-	M-8
AT101	6" - ø 169	36	17	12	20	18.5	-	M-10
AT102	8" - ø 210	46.5	20.5	14	25	20.5	-	M-12
AT104	10" - ø 254	51	22.5	16	30	21.5	-	M-12
AT106	12" - ø 305	55.5	26.5	18	30	33.5	-	M-14
AT107	12" - ø 305	55.5	29.5	21	30	27.5	-	M-16
AT108	15" - ø 381	80	33.5	24	43	45.5	22	M-20
AT15	15" - ø 381	80	35	25.5	43	41	22	M-20



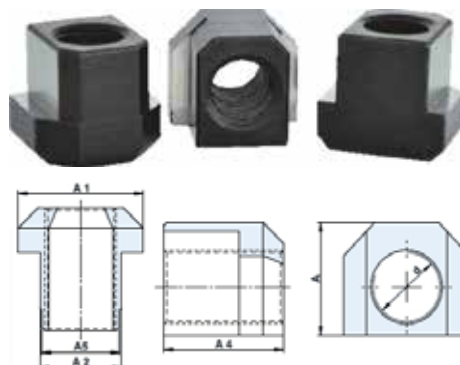
**T De de Amarre para Garras Torno - Estándar - 4 Juegos**

Referencia	Modelo	A	A1	A2	A3	A4	A5	d
AT114	6" - ø 169	36	17	12	20	18.5	-	M-10
AT115	8" - ø 210	46.5	20.5	14	25	20.5	-	M-12
AT116	10" - ø 254	51	22.5	16	30	21.5	-	M-12
AT117	12" - ø 305	55.5	26.5	18	30	33.5	-	M-14
AT118	12" - ø 305	55.5	29.5	21	30	27.5	-	M-16
AT119	15" - ø 381	80	33.5	24	43	45.5	22	M-20
AT154	15" - ø 381	80	35	24	43	41	22	M-20

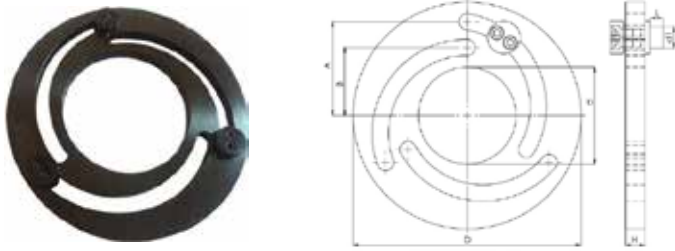


**Tuercas T Amarre Plato Torno (Cortas)**

Referencia	Modelo	A	A1	A2	A4	A5	d
AT610	6" - ø 169	17	17	12	18.5	-	M-10
AT810	8" - ø 210	20	20.5	14	20.5	-	M-12
AT110	10" - ø 254	21	22.5	16	21.5	-	M-12
AT120	12" - ø 305	26	26.5	18	33.5	-	M-16
AT122	12" - ø 305	26	29.5	21	27.5	-	M-20
AT123	15" - ø 381	35	33.5	24	45.5	22	M-20
AT210	21" - ø 533	46	37.5	25	45	-	M-20

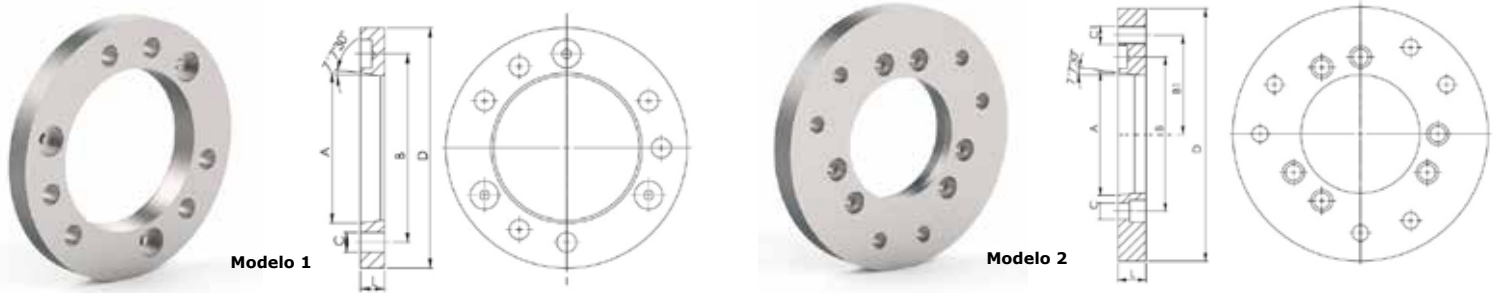


**Soporte Para Torneado de Garras**



Referencia	D	d	A	B	H	L	D1
S505	140	60	58	42	12	8	13.5
S605	168	80	72	52	12	8	16.5
S805	218	115	94	72	13	8	18.5
S1005	255	150	112.5	87.5	13	8	18.5
S1205	316	185	137	107	15	8	21.5
S1505	380	230	166	138	20	15	31

**Brida para Platos Hidráulicos**

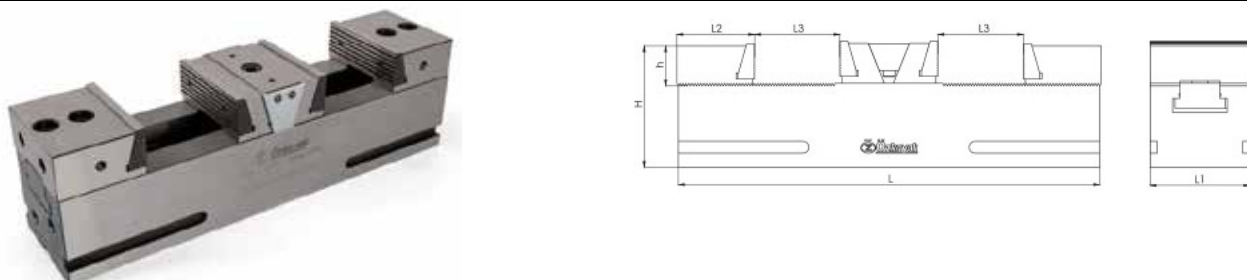


Referencia	No	D	A	B	C	L
AF5005	A4	110	63.513	82.6	12	13
AF6006	A5	140	82.563	104.8	12	17
AF8008	A6	170	106.375	133.4	14	17
AF1010	A8	220	139.719	171.4	18	18
AF1212	A8	280	139.719	171.4	18	21
AF1515	A11	300	196.869	235	22	21

**Modelo 2**

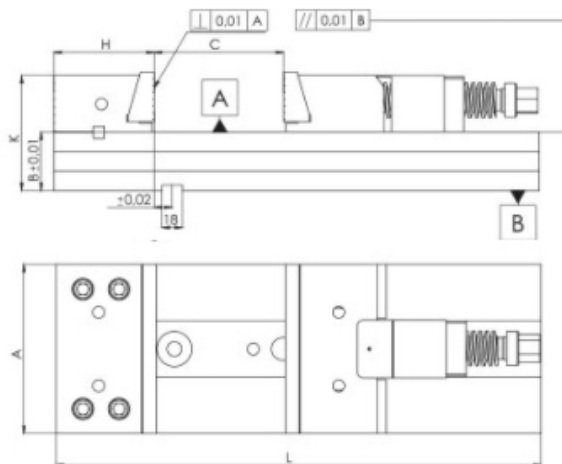
Referencia	No	D	A	B	C	B1	C1	L
AF5006	A4	140	63.513	82.6	12	104.8	M10	20
AF6008	A5	170	82.563	104.8	12	133.4	M12	24
AF8010	A6	220	106.375	133.4	14	171.4	M16	24
AF1012	A8	280	139.719	171.4	18	235	M16	30
AF1215	A8	300	139.719	171.4	18	235	M20	40

**Mordaza Hidráulica Dos Bocas**



Referencia	L	L1	L2	L3	H	h	Máx. Fuerza	Peso
HM10085	423	100	78	85	123	40	3250KGF/CM2	30

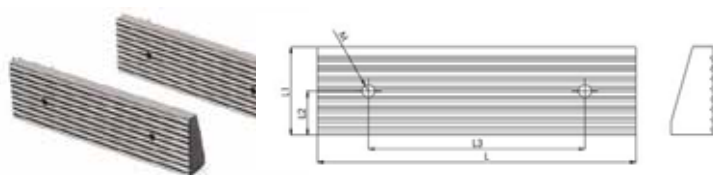


**Mordaza de Precisión**


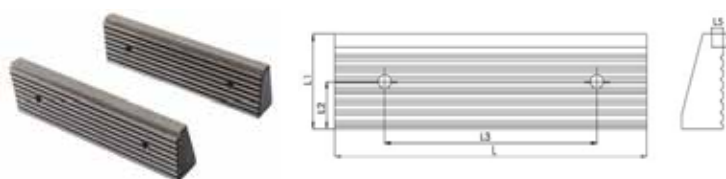
Referencia	A	C	H	B	K	L	KGf	KG
CTM12513	125	130	79	40	80	335	3200	12.8
CTM15020	150	200	89	52	102	430	4300	38.5
CTM15030	150	300	89	52	102	530	4300	43.5
CTM17530	175	300	97	60	120	560	4300	50.8
CTM20030	200	300	110	65	128	575	4500	73.2
CTM20040	200	400	100	65	128	675	4500	81.2

**Bocas para Mordaza CTM - Estándar**

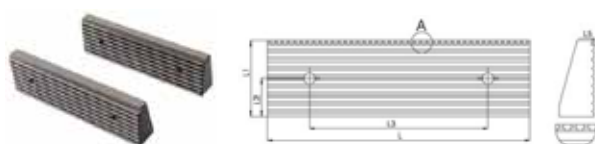
Referencia	L	L1	L2	L3	M
CT0126	125	34.5	17	85	M5
CT0151	150	44	22	95	M5
CT0176	175	50	25	105	M6
CT0201	200	53	26	135	M6


**Bocas para Mordaza CTM - Escalonada**

Referencia	L	L1	L2	L3	L4	L5	M
CT0132	125	34.5	17	85	3	3	M5
CT0157	150	44	22	95	3	3	M5
CT0182	175	50	25	105	3	3	M6
CT0207	200	53	26	135	3	3	M6


**Bocas para Mordaza CTM - Dentada**

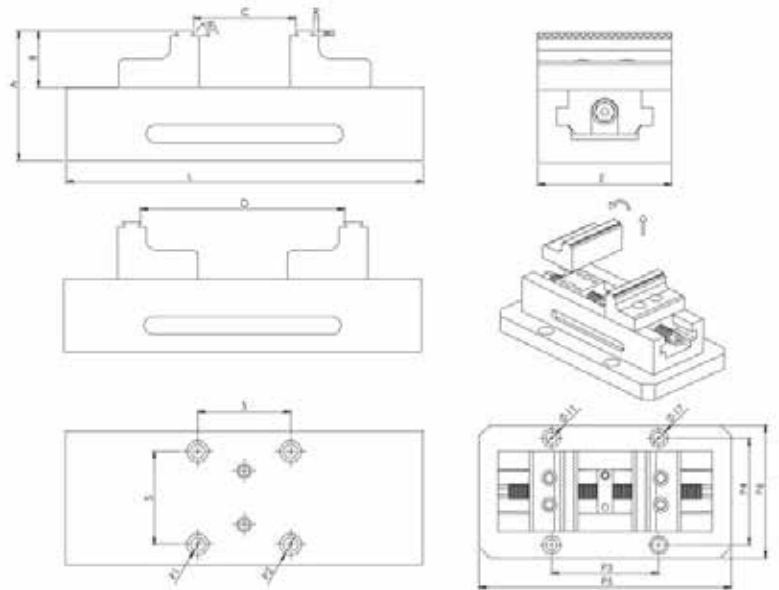
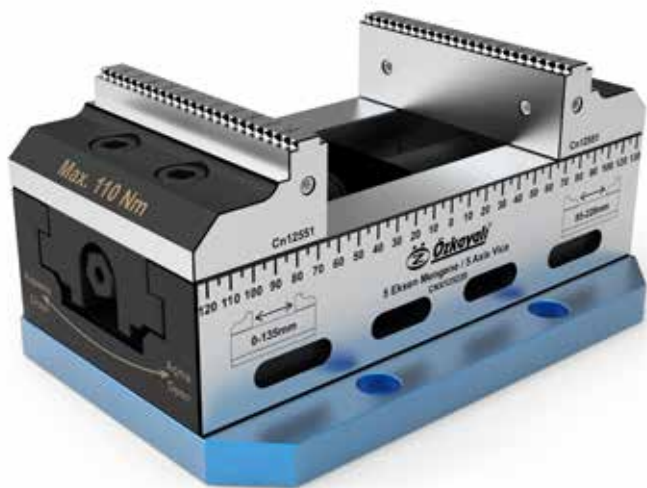
Referencia	L	L1	L2	L3	L4	L5	M
CT0130	125	34.5	17	85	3	3	M5
CT0155	150	44	22	95	3	3	M5
CT0180	175	50	25	105	3	3	M6
CT0205	200	53	26	135	3	3	M6


**Bocas para Mordaza CTM - Prismática**

Referencia	L	L1	L2	L3	D1	D2
CT0131	125	34.5	18	28	7-36	4-50
CT0156	150	44	24	37	11-48	6-65
CT0181	175	50	28	42	8-56	7-75
CT0206	200	53	29	44	10-60	8-80



**Mordaza de Precisión 5X**



Referencia	CNX75100	CNX75150	CNX75200	CNX100150	CNX100350	CNX125220	CNX125270	CNX125320
L	185	235	285	200	350	250	300	350
A	73	73	73	90	90	100	100	100
B	32	32	32	35	35	40	40	40
C-Min-Máx.	0-100	0-150	0-200	0-100	0-250	0-135	0-185	0-235
C-Min-Máx.	65-150	65-200	65-250	75-150	75-300	95-220	95-275	95-320
E	75	75	75	100	100	125	125	125
R	3	3	3	3	3	3	3	3
S	52	52	52	75	75	100	100	100
P1	M8	M8	M8	M10	M10	M10	M10	M10
P2	12	12	12	16	16	16	16	16
P3	100	100	100	100	100	100	100	100
P4	100	100	100	125	125	150	150	150
P5	180	235	285	200	350	250	300	350
P6	124	124	124	144	144	175	175	175

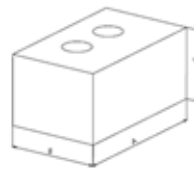
**Recambios para Modelo Mordaza 5X**

**Garras Duras Para 5X**



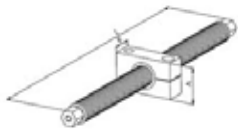
Referencia	75051	10051	12551
A	75	100	125
B	45	55	60
C	32	35	40
D	3	3	3

**Garras Blandas Para 5X**



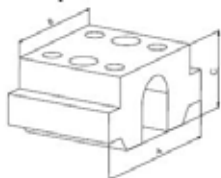
Referencia	75052	10052	12552
A	75	100	125
B	60	70	80
C	32	35	40

**Recambio Husillo - 5X**



Referencia	75185	75235	75285	100200	10350	125250	125300	125350
L	182	235	285	200	350	250	300	350
A	25	25	25	345	345	39	39	39
B	14	14	14	18	18	19	19	19

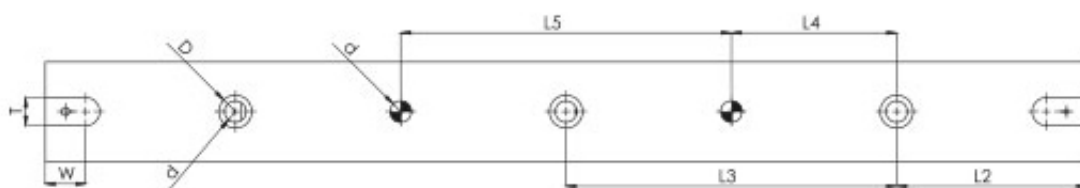
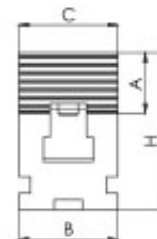
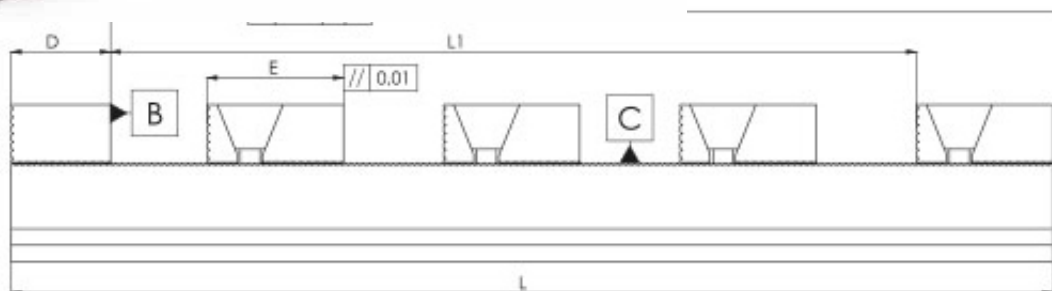
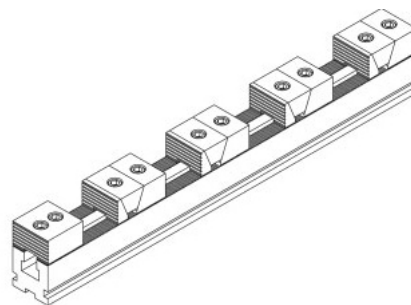
**Separador Base - 5X**



Referencia	7556R	7556L	10056R	10056L	12556R	12556L
A	54	54	72	72	85	85
B	41	41	55	55	67	67
C	25	25	33.5	33.5	37	37
ACC.	Derecha	Izquierda	Derecha	Izquierda	Derecha	Izquierda

**Mordaza Múltiples Amarres**

• La mordaza se suministra con el cuerpo principal, 1 juego de garras y 3 bloques de amarre (para poder amarrar 1+1 pieza)

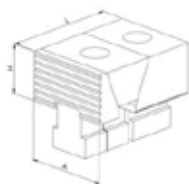


Referencia	L	L1	L2	L3	L4	L5	A	B	C	D	E	H	W	T	PASO	KN	KG
CSM60300	300	160	50	200	100	-	35	60	60	60	83	95	24.5	16	3X60°	20	15
CSM60450	450	560	125	200	100	-	35	60	60	60	83	95	24.5	16	3X60°	20	18
CSN70400	400	260	100	200	100	200	40	70	70	60	83	100	24.5	16	3X60°	20	23
CSM70600	600	560	100	200	100	100	40	70	70	60	83	100	24.5	16	3X60°	20	28

**Datos Técnicos**

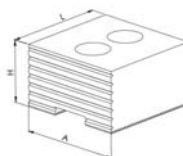
Piezas a Trabajar	CSM60300	CSM60450	CSM70400	CSM70600
1	157 mm	307 mm	257 mm	457 mm
2	37 mm	112 mm	87 mm	187 mm
3	-	20 mm	-	97 mm
4	-	-	-	52 mm
5	-	-	-	25 mm

**Accesorios para Mordaza - Serie CMS**



**Garras Duras**

Referencia	A	H	L
CSY600	60	35	81
CSY700	70	40	83

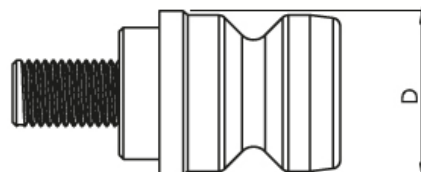


**Garras Blandas**

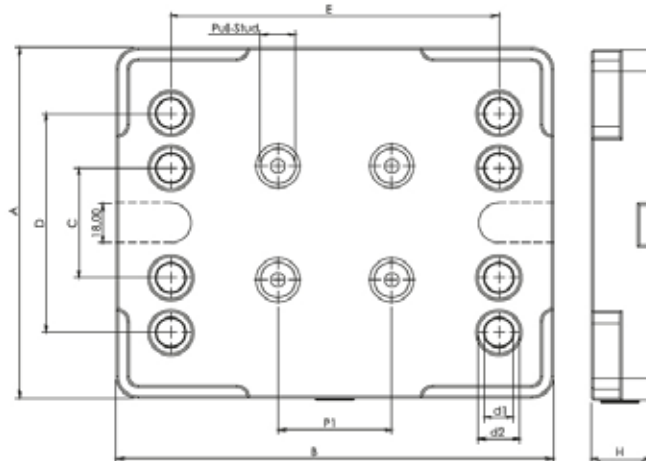
Referencia	A	H	L
CSY610	60	60	81
CSY710	70	60	83

**Tirantes Amarre para Soportes 5X**

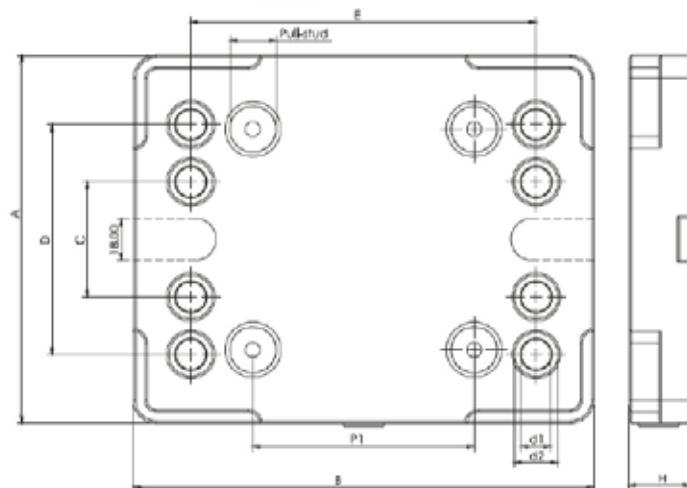
Referencia	Para Sistema	Amarre	Peso
PS16	52 mm	ø16	0.03 Kg
PS20	96 mm	ø20	0.04 Kg



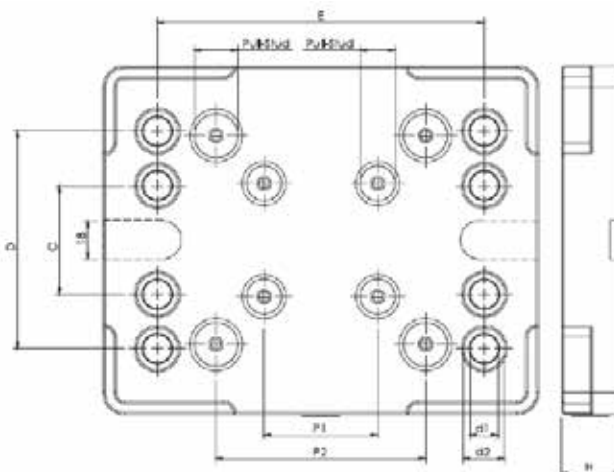
**Soportes Puesta Cero 5X**



Referencia	Amarre	A	B	C	D	d1	d2	E	H	P1	Precisión	Peso
ZTX5252	Ø16	160	200	50	100	Ø13	Ø19	150	28	52	0.005	6.12 Kg

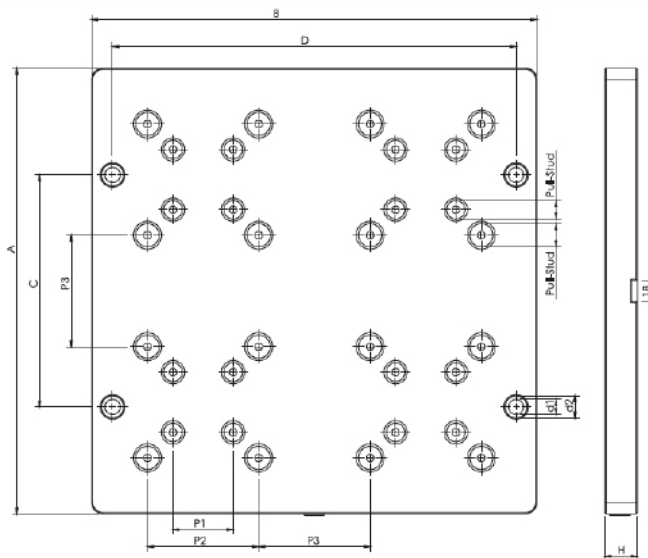


Referencia	Amarre	A	B	C	D	d1	d2	E	H	P1	Precisión	Peso
ZTX9696	Ø20	160	200	50	100	Ø13	Ø19	150	28	96	0.005	6.05 Kg



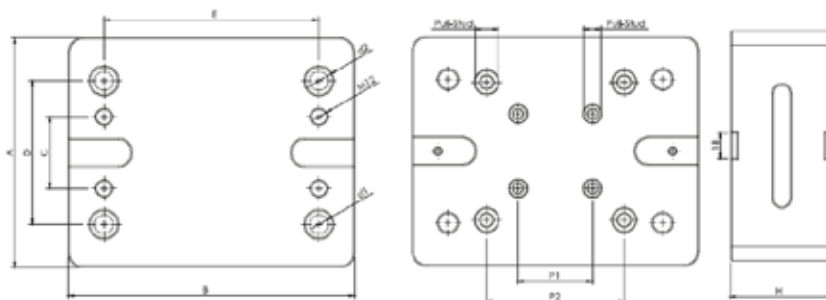
Referencia	Amarre	A	B	C	D	d1	d2	E	H	P1	P2	Precisión	Peso
ZTX5259	Ø16-20	160	200	50	100	Ø13	Ø19	150	28	96	96	0.005	6.05 Kg

**Soportes Puesta Cero 5X**



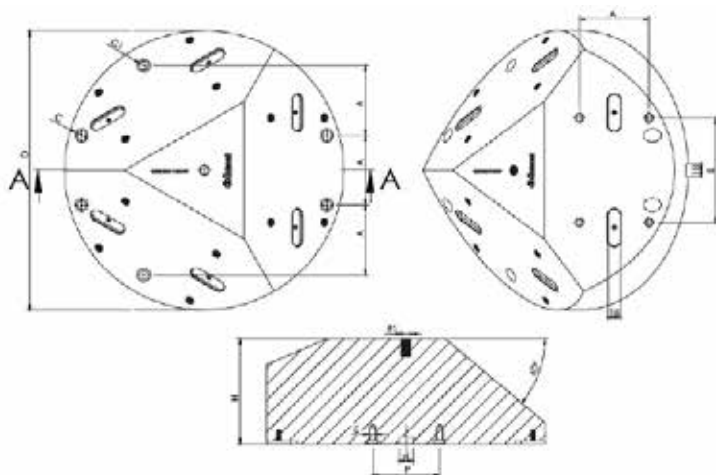
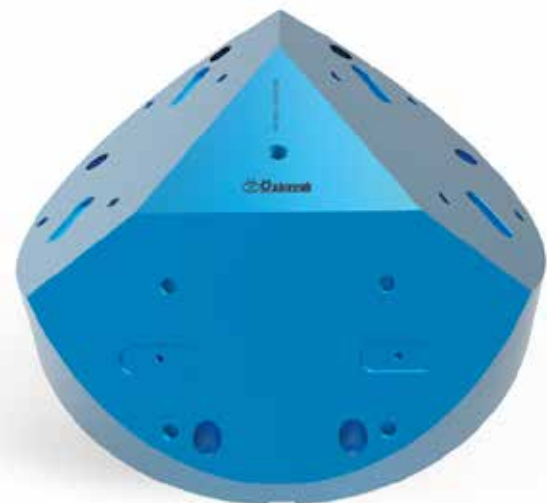
Referencia	Amarre	A	B	C	D	d1	d2	H	P1	P2	P3	Precisión	Peso
ZTM5296	Ø16-20	384	384	100	348	Ø13	Ø19	28	52	96	96	0.005	29.5 Kg

**Bloque Elevador para Soportes Puesta Cero 5X**



Referencia	Amarre	A	B	C	D	d1	d2	E	H	P1	P2	Peso
AR60	Ø16-20	160	200	50	100	Ø13	Ø19	150	60	52	96	8 Kg
AR100	Ø16-20	160	200	50	100	Ø13	Ø19	150	100	52	96	17 Kg

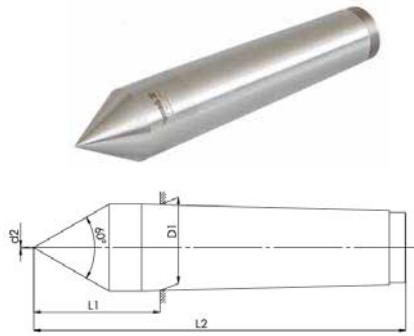
**Piramide para Mordazas 5X**



Referencia	D	d	A	B	C	C1	E	E1	P	H	Peso
ARS400	400	Ø20	100	150	Ø19	Ø13	M10	M14	96	150	34 Kg



**Punto Fijo 60°**



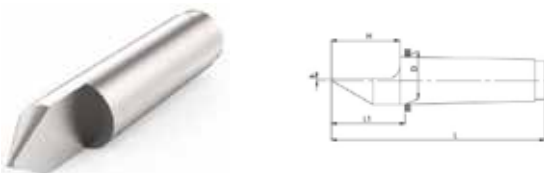
Referencia	Cono Morse	D1	d2	L1	L2
SP100	2	18	0.8	36	100
SP110	3	24.1	0.8	44	125
SP120	4	31.6	1	57	160
SP130	5	44.7	1.5	70	200
SP138	6	63.348	2	88	270

**Punto Fijo 60° - MD**



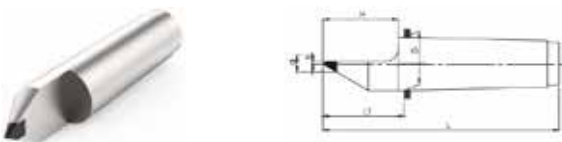
Referencia	Cono Morse	D1	d2	L1	L2
ES200	2	18	7	36	100
ES210	3	24.1	11	44	125
ES220	4	31.6	14	57	160
ES230	5	44.7	18	70	200

**Punto Fijo - Punta Parcial**



Referencia	Cono Morse	D1	d2	L1	L2
SDP100	2	18	7	36	100
SDP110	3	24.1	11	44	125
SDP120	4	31.6	14	57	160

**Punto Fijo - Punta Parcial Metal Duro**



Referencia	Cono Morse	H	L1	h	D	L	d
ESD100	2	40	41	2	18	110	7
ESD110	3	60	64	3	24.1	150	11
ESD120	4	70	71	3	180	180	14

**Punto Fijo 60 con Tuerca Hexagonal**



Referencia	CM	D	d	L1	L2	L	G
SP136	3	24.10	8	-	56	149	M27x1.5
SP137	4	31.60	-	-	71	175	M36x1.5
SP150	5	45	-	-	95	217	M48x1.5

**Punto Fijo 60/40° con Tuerca Hexagonal**



Referencia	CM	D	d	L1	L2	L	G
SP140	3	24.10	8	-	56	149	M27x1.5
SP141	4	31.60	14	-	71	175	M36x1.5
SP155	5	45	16	-	95	217	M48x1.5

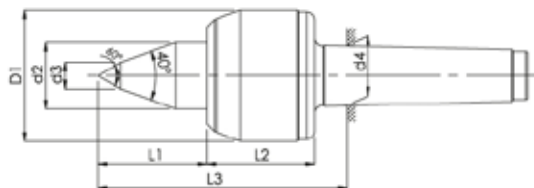
**Punto Fijo Rebajado 60° con Tuerca Hexagonal**



Referencia	CM	D	d	L1	L2	L	G
SP144	3	24.10	8	17	68	150	M27x1.5
SP145	4	31.60	14	25	86	190	M36x1.5
SP160	5	45	16	25	106	236	M48x1.5

### Punto Giratorio Punta Rebajada

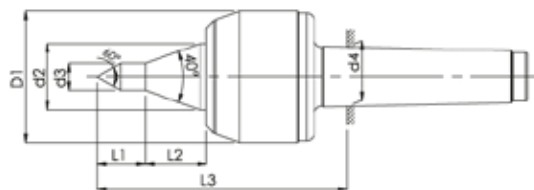
- Punta 40/60° rebajada en el extremo para acceder mejor y evitar el roce con las herramientas.



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.
C30	3	58	24.5	9	43	51	102	0.005
C40	4	68	34.5	14	57	56	123	0.005
C50	5	78	43.5	14	68	69	148	0.005

### Punto Giratorio Punta Alargada y Rebajada

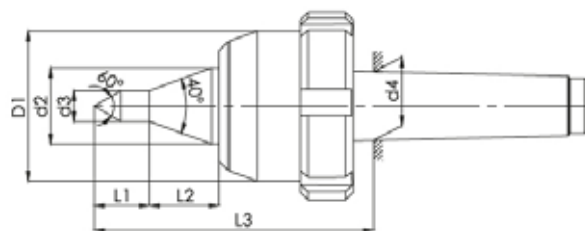
- Punta 40/60° alargada y rebajada en el extremo para acceder mejor y evitar el roce con las herramientas.



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.
C60	3	58	24.5	9	15	28	107	0.005
C70	4	68	34.5	14	25	32	121	0.005
C80	5	78	43.5	14	25	44	148	0.005

### Punto Giratorio Punta Alargada, Rebajada y Tuerca de extracción

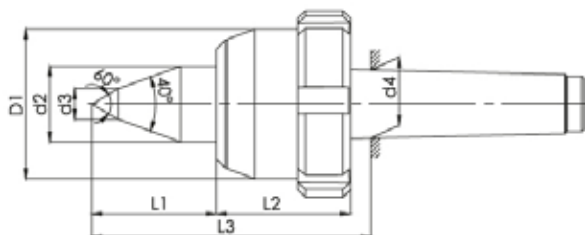
- Punta 40/60° alargada y rebajada en el extremo para acceder mejor y evitar el roce con las herramientas.
- Tuerca de extracción



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.
CS300	3	58	24.5	9	15	28	107	0.005
CS400	4	68	34.5	14	25	32	121	0.005
CS500	5	78	43.5	14	25	44	148	0.005

### Punto Giratorio Punta Rebajada y Tuerca de extracción

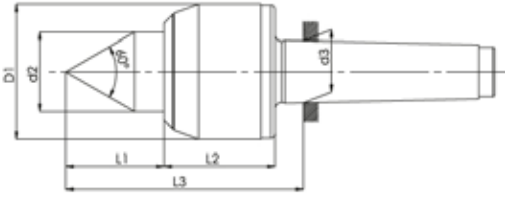
- Punta 40/60° rebajada en el extremo para acceder mejor y evitar el roce con las herramientas.
- Tuerca de extracción



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.
CS600	3	58	24.5	9	43	51	102	0.005
CS700	4	68	34.5	14	57	56	123	0.005
CS800	5	78	43.5	14	68	69	148	0.005

### Punto Giratorio Estándar

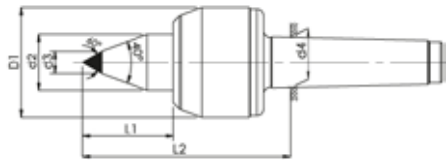
- Punta 60°



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.	Carga Peso
N01	2	50	24.5	17.780	32	50	92	0.005	1.700
N02	3	53	24.5	23.325	33	50	94	0.005	1.900
N03	4	68	40	31.267	50	56	114	0.005	3.000
N04	5	78	44	44.399	58	69	138	0.005	4.900
N05	6	98	53.5	63.348	80	96	191	0.01	10.00

### Punto Giratorio Punta MD

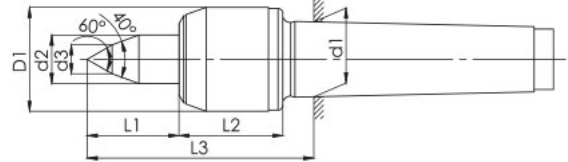
- Punta 40/60°



Referencia	CM	D1	d2	d3	L1	L2	d4	Máx.Cen.
CE40	4	68	34.5	14	57	123	31.267	0.005
CE50	5	78	44	14	68	148	44.399	0.005

### Punto Giratorio Ejecución Ligera

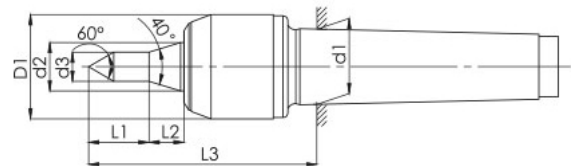
- Punta 40/60°



Referencia	CM	D1	d1	d2	d3	L1	L2	L3	Máx.Cen.
C110	4	43	31.267	20	12	30	58	88	0.005
C140	5	60	4.399	30	14	50	62	123	0.005

### Punto Giratorio Ejecución Ligera

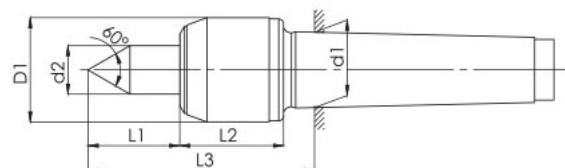
- Punta 60° ejecución ligera.



Referencia	CM	D1	d1	d2	d3	L1	L2	L3	Máx.Cen.
C120	4	43	31.267	20	12	25	15	95	0.005
C150	5	60	44.399	30	14	25	27	133	0.005

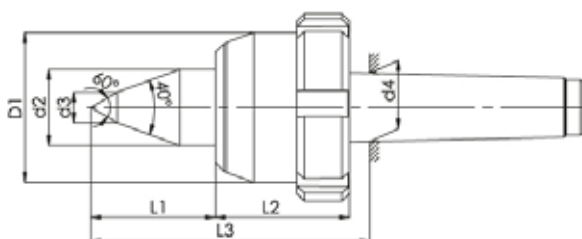
### Punto Giratorio Ejecución Ligera

- Punta 60° ejecución larga ligera



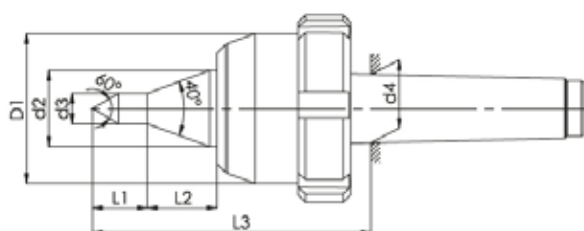
Referencia	CM	D1	d1	d2	d3	L1	L2	L3	Máx.Cen.
C130	4	43	31.267	20	-	27	42	88	0.005
C160	5	60	44.399	30	-	40	60	118	0.005

**Punto Giratorio Precisión con Tuerca de extracción**



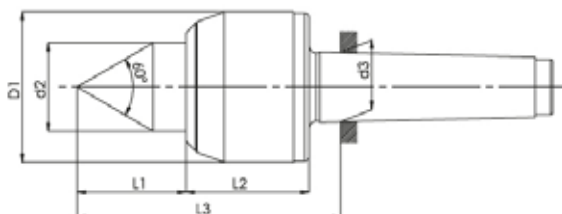
Referencia	CM	D1	d2	d3	d4	L1	L2	L3	Máx.Cen.
SC40	4	68	34.50	14	31.267	56	63	125	0.005
SC50	5	78	43.50	14	44.399	67	77	150	0.005

**Punto Giratorio Punta 60/40° de Precisión con Tuerca de extracción**



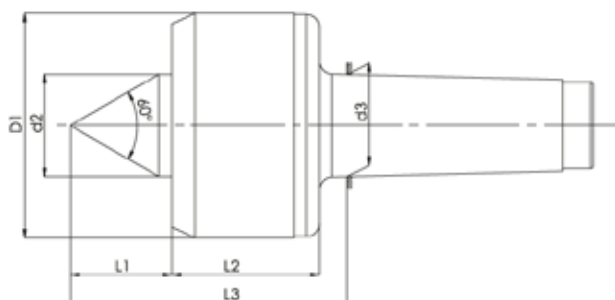
Referencia	CM	D1	d2	d3	d4	L1	L2	L3	Máx.Cen.
SC70	4	68	34.50	14	31.267	25	31	125	0.005
SC80	5	78	43.50	14	44.399	25	42	150	0.005

**Punto Giratorio De Gran Carga 60°**



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.	Kg Max
AY040	4	78	43.5	31.267	58	126	135	0.005	1000
AY050	5	98	53.5	44.399	67	88	170	0.005	2500
AY060	6	128	62.5	63.348	70	126	210	0.01	5000

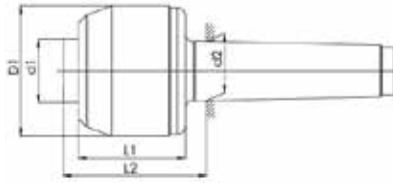
**Punto Giratorio De Gran Carga 60°**



Referencia	CM	D1	d2	d3	L1	L2	L3	Máx.Cen.	Kg Max
AY080	MT80	175	80	80	78	115	212	0.01	7000
AY0100	MT100	200	90	100	93	158	274	0.01	13000

### Set Punto Giratorio con Puntas Intercambiables

- Con puntas intercambiables para CM4 y CM5. Set incluido con todas las puntas.



Referencia Set	CM	D1	d1	L1	L2	L3	Máx.Cen.
C104	4	68	34.5	54	74	88	0.01
C105	5	78	44	69	90	118	0.01

Referencia Solo Punto	CM
C104-4	4
C105-5	5

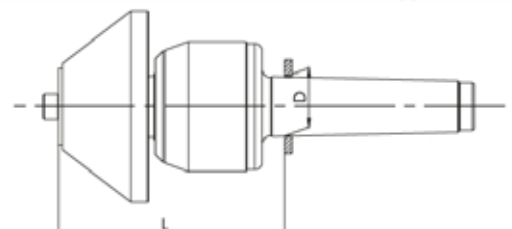
Referencia Llave	Para Modelos
C1030	C104 y C105

### Puntas de Recambio para Modelos C104/C105

Referencia	Tipo de Modelo	MK	D	d	Máx.Carga
C401	C201	4	48	30	250
C402	C202	4	34	-	215
C403	C203	4	22	9	200
C404	C204	4	22	14	170
C405	C205	4	22	8	120
C501	C201	5	58	42	750
C502	C202	5	44	-	700
C503	C203	5	34	14	560
C504	C204	5	34	20	250
C505	C205	5	34	10	194

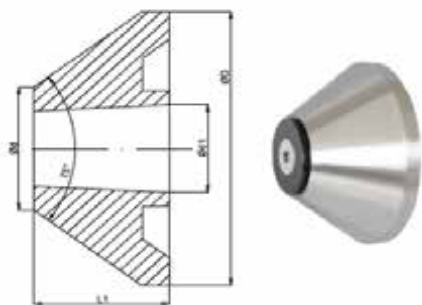
### Punto Giratorio para Tubos Adaptable

Referencia	CM	L	D	Máx. Kg
C284	3	116	31.267	750
C285	4	133	44.399	1700





Adaptadores para Punto Giratorio



Referencia	CM	D	d	d1	L1
C410	4	60	30	32	45
C420	4	100	45	32	45
C430	4	150	95	32	45
C440	4	200	145	32	45
C510	5	100	45	40	43
C520	5	150	95	40	43
C530	5	200	145	40	43
C540	5	250	195	40	43

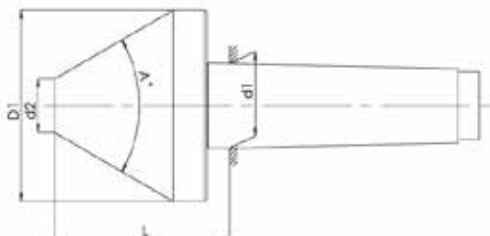
Punto Giratorio para Tubos

Referencia	CM	D1	A	d2	L	Conc.	Peso
B70	3	80	60°	26	70	0.008	2.5
B80	4	80	60°	26	71	0.008	2.8
B90	3	100	60°	28	84	0.008	3.9
B100	4	100	60°	28	86	0.008	4.2
B110	4	120	60°	38	89	0.008	5.8
B120	5	120	60°	38	97	0.008	6.5
B130	4	140	60°	45	104	0.01	8.0
B140	5	140	60°	45	108	0.01	8.8
B150	5	170	70°	58	121	0.01	13.0
B160	5	200	70°	65	134	0.01	19.0
B170	6	200	70°	65	126	0.01	22.0
B175	5	255	70°	150	114	0.01	36.0
B180	6	255	70°	150	115	0.01	39.0
B185	5	355	70°	195	139	0.01	71.0
B195	6	355	70°	195	168	0.01	72.0
B200	5	400	45°	200	145	0.01	90.0
B205	6	400	45°	200	140	0.01	92.0



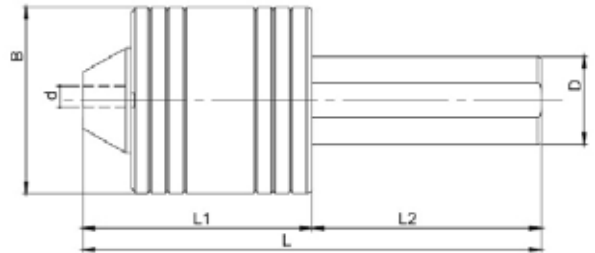
Punto Giratorio para Tubos con Tuerca de Extracción

Referencia	CM	D1	A	d2	L	Conc.	Peso
SB0803	3	80	60°	26	88	0.005	2.5
SB0804	4	80	60°	26	88	0.005	2.5
SB0103	3	100	60°	28	102	0.005	3.5
SB0104	4	100	60°	28	102	0.005	4.0
SB1204	4	120	60°	38	108	0.005	5.5
SB1205	5	120	60°	38	104	0.005	6.5
SB1404	4	140	60°	45	116	0.005	8.0
SB1405	5	140	60°	45	116	0.005	8.0
SB1705	5	170	70°	58	126	0.01	14.0
SB2005	5	200	70°	65	135	0.01	18.5



### Punto Giratorio - Punta Hexagonal Intercambiable

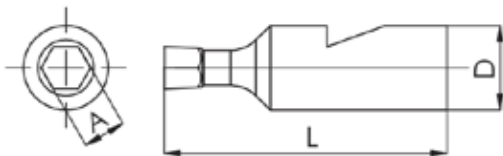
- Punto giratorio con punta hexagonal intercambiable
- Se suministra punto y punta hexagonal de manera independiente
- Alta precisión de concentricidad.



Referencia	L	L1	L2	B	D	d	Peso
AD2553	130	54	65	53	25	12	1
AD3253	130	54	65	53	32	12	1,5
AD4053	130	54	65	53	40	12	1,5
AD2541	123	47	65	41	25	8	1
AD1635	125	48	75	35	16	8	0,5
AD2035	125	48	75	35	20	8	0,5
AD2535	125	48	75	35	25	8	0,6
AD4095	203	103	100	95	40	16	5,6

### Punta Hexagonal Intercambiable

- Realizados en acero tratado para una mayor resistencia

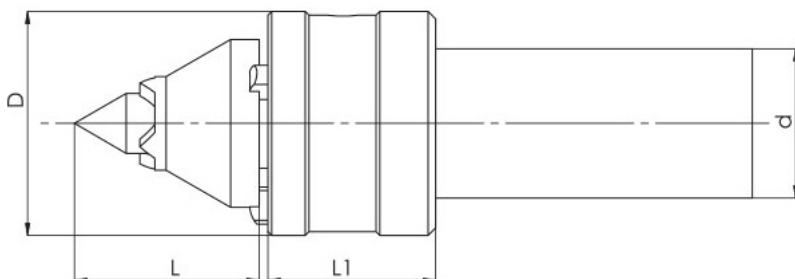


Referencia	D	A	L
AK0802	8	2	28
AK0803	8	3	28
AK0804	8	4	28
AK0805	8	5	28
AK0806	8	6	28
AK1203	12	3	40
AK1204	12	4	40
AK1205	12	5	40
AK1206	12	6	40
AK1208	12	8	40
AK1210	12	10	40
AK1212	12	12	40
AK1214	12	14	40

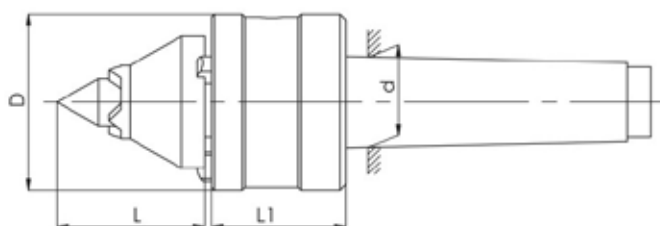
Referencia	D	A	L
AK1614	16	14	70
AK1615	16	15	70
AK1616	16	16	70
AK1617	16	17	70
AK1618	16	18	70
AK1619	16	19	70
AK1620	16	20	70
AK1621	16	21	70
AK1622	16	22	70
AK1623	16	23	70
AK1624	16	24	70
AK1625	16	25	70

**Punto Mango Cilíndrico Puntas**

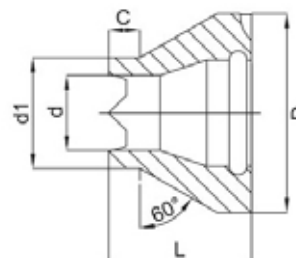
Referencia	D	L	d	L1	Diámetros rangos	Peso
T400925	60	53	40	45	9-16 / 16-25	2.5
T402662	60	53	40	45	26-50 / 33-62	3.0



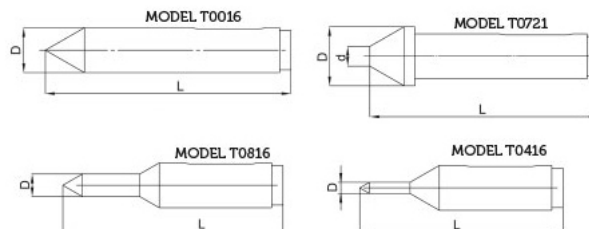
Referencia	D	D	L	d	L1	Diámetros rangos	Peso
T09254	4	60	53	31.267	45	9-16 / 16-25	2.0
T09255	5	60	53	44.399	45	9-16 / 16-25	3.0
T26624	4	60	53	31.267	45	26-50 / 33-62	2.5
T26625	5	60	53	44.399	45	26-50 / 33-62	3.5



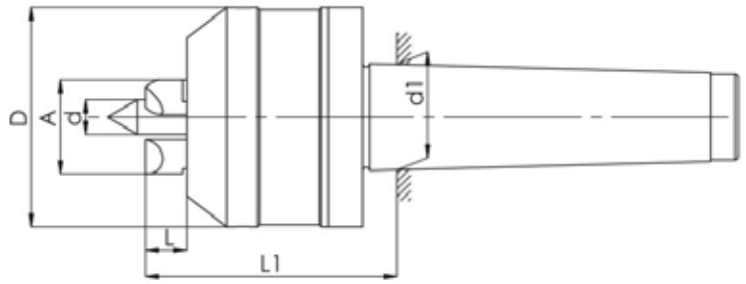
Referencia	L	D	d	d1	C
T00916	32	45	45	85	3
T01625	32	45	85	15	3
T02650	32	45	17	25	7
T03362	32	45	22	32	10



Referencia	D	d	L
T0016	16	-	87
T0721	21	7	81
T0816	8	-	78
T0416	4	-	72

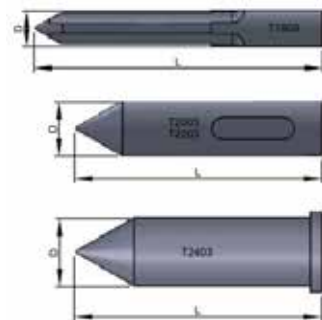
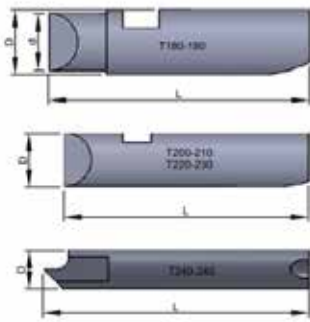


### Punto Mango Cónico Puntas



Referencia	MK	D	D	L	L1	A	d1	Rango	Peso
T180	4	50	8	8	48	18	31.267	19-35	1.2
T200	4	54	8	8	62	25	31.267	26-50	2.0
T210	5	54	8	8	62	25	44.399	26-50	2.5
T220	4	64	10	10	65	32	31.267	33-80	2.0
T230	5	64	10	10	65	32	44.399	33-80	3.0
T240	5	125	25	12	155	65	44.399	70-140	11.5

### Puntas de Contacto



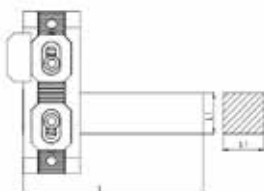
Referencia	D	d	L	Para Modelo
T180-180	8	7	32	T180
T200-210	8	7	44	T200 Y T210
T220-230	10	9	45	T220 Y T230
T220-240	14	-	98	T240
T1803	8	-	70	T180 - T200 - T210
T2003	8	-	44	T180 - T200 - T210
T2203	10	-	45	T220 - T230
T2403	25	-	90	T240

Referencia	D	d	L	Para Modelo
T1803	8	-	70	T180 - T200 - T210
T2003	8	-	44	T180 - T200 - T210
T2203	10	-	45	T220 - T230
T2403	25	-	90	T240

### Adaptador Extractor de Barra

- El extractor de barras está diseñado para tirar de husillos largos en tornos CNC. Es muy fácil de instalar y usar
- Garras endurecidas térmicamente que pueden extraer fácilmente husillos redondos, hexagonales y cuadrados
- Alto agarre gracias a los fuertes resortes en el interior que proporciona la fuerza necesaria.

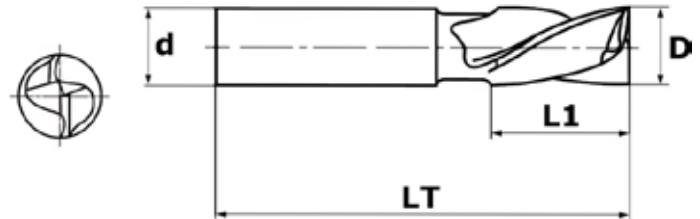
Referencia	L	L1	Capacidad
CTC020	110	20	0-65mm
CTC025	110	25	0-65mm



**Fresa MD – Z2**

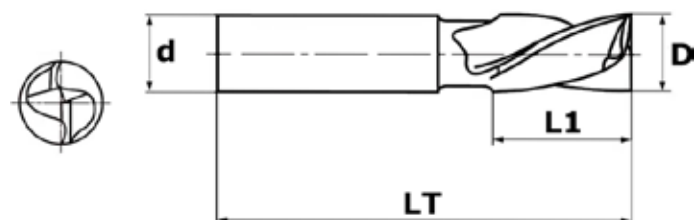
Referencia	D	d	L1	LT	Z
MF114.010	1	3	3	38	2
MF114.0101	1	4	3	50	2
MF114.015	1.5	3	4	38	2
MF114.0151	1.5	4	4	50	2
MF114.020	2	3	6	38	2
MF114.0201	2	4	6	50	2
MF114.025	2.5	3	8	38	2
MF114.0251	2.5	4	8	50	2
MF114.030	3	3	8	38	2
MF114.0301	3	4	8	50	2
MF114.03012	3	6	8	50	2
MF114.035	3.5	4	11	50	2
MF114.040	4	4	11	50	2
MF114.0401	4	6	11	50	2
MF114.045	4.5	6	11	50	2
MF114.050	5	5	13	50	2
MF114.055	5.5	6	13	50	2
MF114.060	6	6	16	50	2
MF114.065	6.5	8	16	50	2
MF114.070	7	8	16	60	2
MF114.080	8	8	19	60	2
MF114.085	8.5	10	19	60	2
MF114.090	9	10	19	75	2
MF114.095	9.5	10	22	72	2
MF114.100	10	10	22	75	2
MF114.105	10.5	12	22	75	2
MF114.110	11	12	22	75	2
MF114.120	12	12	26	75	2
MF114.125	12.5	14	30	84	2
MF114.130	13	14	26	75	2
MF114.140	14	14	30	85	2
MF114.150	15	16	30	85	2
MF114.160	16	16	32	92	2
MF114.170	17	18	38	100	2
MF114.180	18	18	38	100	2
MF114.190	19	20	38	100	2
MF114.200	20	20	38	100	2
MF114.220	22	22	38	100	2
MF114.250	25	25	38	100	2

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC


**Fresa MD – Z2 - Serie Larga**

Referencia	D	d	L1	LT	Z
MF115.010	1	3	5	60	2
MF115.020	2	3	10	60	2
MF115.030	3	3	15	60	2
MF115.040	4	4	20	80	2
MF115.050	5	5	25	80	2
MF115.060	6	6	25	80	2
MF115.080	8	8	35	90	2
MF115.100	10	10	45	100	2
MF115.120	12	12	50	100	2
MF115.140	14	14	65	150	2
MF115.160	16	16	65	150	2
MF115.200	20	20	70	150	2
MF115.250	25	25	75	150	2

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC

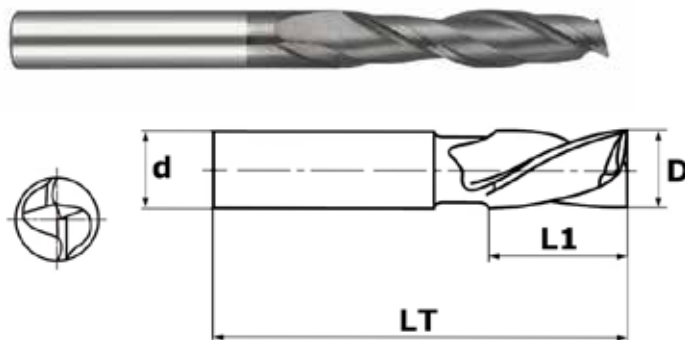




**Fresa MD – Z2 - Serie Extra larga**

Referencia	D	d	L1	LT	Z
MF115.0301	3	3	25	75	2
MF115.0401	4	4	25	100	2
MF115.0501	5	5	25	100	2
MF115.0601	6	6	25	100	2
MF115.0602	6	6	25	150	2
MF115.0603	6	6	40	100	2
MF115.0604	6	6	40	150	2
MF115.0801	8	8	45	100	2
MF115.0802	8	8	45	150	2
MF115.0803	8	8	25	150	2
MF115.1001	10	10	38	150	2
MF115.1002	10	10	50	150	2
MF115.1003	10	10	65	150	2
MF115.1201	12	12	38	150	2
MF115.1202	12	12	38	200	2
MF115.1203	12	12	50	150	2
MF115.1204	12	12	75	150	2

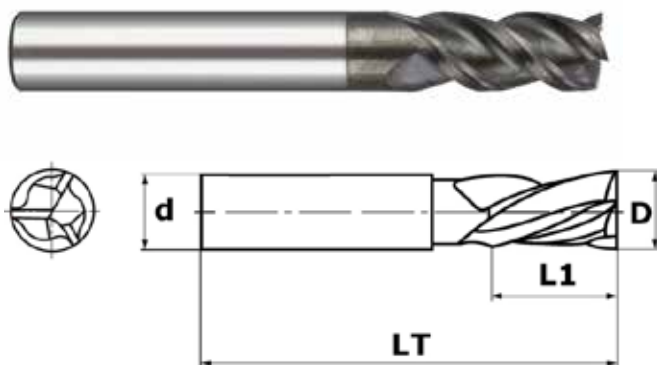
- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC



**Fresa MD – Z3**

Referencia	D	d	L1	LT	Z
MF116.010	1	3	3	38	3
MF116.0101	1	4	3	50	3
MF116.015	1.5	3	4	38	3
MF116.0151	1.5	4	4	50	3
MF116.020	2	3	6	38	3
MF116.0201	2	4	6	50	3
MF116.025	2.5	3	8	38	3
MF116.0251	2.5	4	8	50	3
MF116.030	3	3	8	38	3
MF116.0301	3	4	8	50	3
MF116.0302	3	6	8	50	3
MF116.035	3.5	4	8	50	3
MF116.040	4	4	11	50	3
MF116.0401	4	6	11	50	3
MF116.045	4.5	6	11	50	3
MF116.050	5	5	13	50	3
MF116.0501	5	6	13	50	3
MF116.055	5.5	6	16	50	3
MF116.060	6	6	16	50	3
MF116.070	7	8	19	60	3
MF116.075	7.5	8	19	60	3
MF116.080	8	8	19	60	3
MF116.085	8.5	10	22	72	3
MF116.090	9	10	22	72	3
MF116.095	9.5	10	22	72	3
MF116.100	10	10	22	75	3
MF116.105	10.5	12	26	75	3
MF116.110	11	12	26	75	3
MF116.120	12	12	26	75	3
MF116.130	13	14	30	84	3
MF116.140	14	14	30	85	3
MF116.150	15	16	32	92	3
MF116.160	16	16	32	92	3
MF116.170	17	18	38	100	3
MF116.180	18	18	38	100	3
MF116.190	19	20	38	100	3
MF116.200	20	20	38	100	3
MF116.220	22	22	38	100	3
MF116.250	25	25	38	100	3

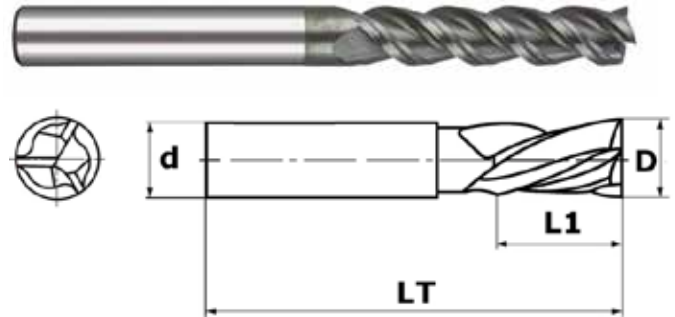
- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC



**Fresa MD – Z3 – Serie Larga**

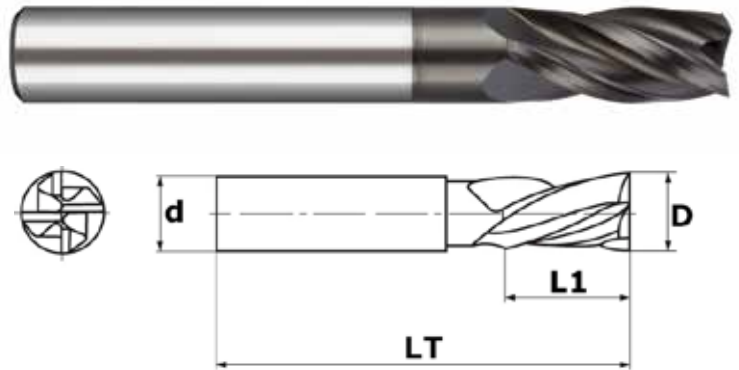
Referencia	D	d	L1	LT	Z
MF117.010	1	3	5	60	3
MF117.020	2	3	10	60	3
MF117.030	3	3	15	60	3
MF117.040	4	4	20	80	3
MF117.050	5	5	25	80	3
MF117.060	6	6	25	80	3
MF117.080	8	8	35	90	3
MF117.100	10	10	45	100	3
MF117.120	12	12	50	100	3
MF117.140	14	14	65	150	3
MF117.160	16	16	65	150	3
MF117.200	20	20	70	150	3
MF117.250	25	25	75	150	3

- Corte Hélice: 45°
- Modelo: Z-3 Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC


**Fresa MD – Z4**

Referencia	D	d	L1	LT	Z
MF118.010	1	3	3	38	4
MF118.0101	1	4	3	50	4
MF118.015	1.5	3	4	38	4
MF118.0151	1.5	4	4	50	4
MF118.020	2	3	6	38	4
MF118.0201	2	4	6	50	4
MF118.025	2.5	3	6	38	4
MF118.0251	2.5	4	8	50	4
MF118.030	3	3	8	38	4
MF118.0301	3	4	8	50	4
MF118.0302	3	6	8	50	4
MF118.035	3.5	4	8	40	4
MF118.040	4	4	11	50	4
MF118.0401	4	6	11	50	4
MF118.045	4.5	6	11	50	4
MF118.050	5	5	13	50	4
MF118.0501	5	6	13	50	4
MF118.055	5.5	6	16	50	4
MF118.060	6	6	16	50	4
MF118.0601	6	6	22	58	4
MF118.065	6.5	8	19	60	4
MF118.070	7	8	16	60	4
MF118.075	7.5	8	19	60	4
MF118.080	8	8	19	60	4
MF118.085	8.5	10	22	72	4
MF118.090	9	10	19	75	4
MF118.095	9.5	10	22	72	4
MF118.100	10	10	22	75	4
MF118.1001	10	10	32	80	4
MF118.105	10.5	12	26	75	4
MF118.110	11	12	22	75	4
MF118.120	12	12	26	75	4
MF118.125	12.5	14	30	84	4
MF118.130	13	14	26	85	4
MF118.140	14	14	30	85	4
MF118.150	15	16	30	92	4
MF118.160	16	16	32	100	4
MF118.170	17	18	32	100	4
MF118.180	18	18	38	100	4
MF118.190	19	20	38	100	4
MF118.200	20	20	38	100	4
MF118.220	22	22	38	100	4
MF118.250	25	25	38	100	4

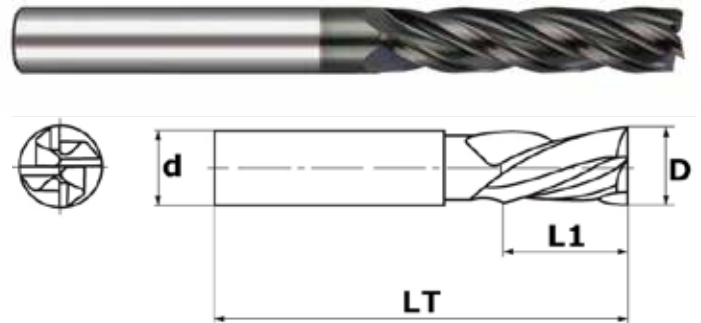
- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC



### Fresa MD – Z4 - Serie Larga

- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC

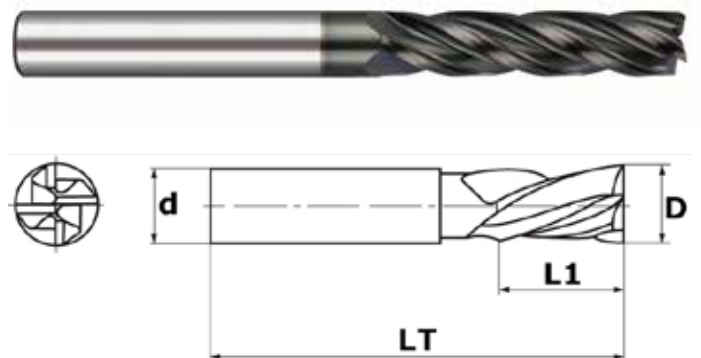
Referencia	D	d	L1	LT	Z
MF119.010	1	3	5	60	4
MF119.020	2	3	10	60	4
MF119.030	3	3	15	60	4
MF119.040	4	4	20	80	4
MF119.050	5	5	25	80	4
MF119.060	6	6	25	80	4
MF119.070	7	8	35	90	4
MF119.080	8	8	35	90	4
MF119.090	9	10	45	100	4
MF119.100	10	10	45	100	4
MF119.120	12	12	50	100	4
MF119.140	14	14	65	150	4
MF119.1401	14	14	90	150	4
MF119.160	16	16	65	150	4
MF119.1601	16	16	90	150	4
MF119.180	18	18	70	150	4
MF119.200	20	20	70	150	4
MF119.2001	20	20	90	150	4
MF119.2002	20	20	100	165	4
MF119.2003	20	20	110	200	4
MF119.250	25	25	75	150	44



### Fresa MD – Z4 - Serie Extra Larga

- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: Tialn
- Uso: General
- Dureza: <56HRC

Referencia	D	d	L1	LT	Z
MF120.030	3	3	25	75	4
MF120.0301	3	3	25	100	4
MF120.040	4	4	25	100	4
MF120.050	5	5	25	100	4
MF120.060	6	6	25	100	4
MF120.0601	6	6	40	100	4
MF120.0602	6	6	25	150	4
MF120.0603	6	6	40	150	4
MF120.080	8	8	25	150	4
MF120.0801	8	8	45	100	4
MF120.0802	8	8	45	150	4
MF120.100	10	10	38	150	4
MF120.1001	10	10	50	150	4
MF120.1002	10	10	65	150	4
MF120.120	12	12	38	150	4
MF120.1201	12	12	38	200	4
MF120.1202	12	12	50	150	4
MF120.1203	12	12	75	150	4



## Fresa MD - Z6

Referencia	D	d	L1	LT	Z
MF210.030	3	3	8	38	4
MF210.040	4	4	11	50	4
MF210.050	5	5	13	50	4
MF210.060	6	6	16	50	6
MF210.080	8	8	19	60	6
MF210.100	10	10	22	75	6
MF210.120	12	12	26	75	6
MF210.140	14	14	32	90	6
MF210.160	16	16	32	100	6
MF210.1601	16	16	50	100	6
MF210.180	18	18	38	100	6
MF210.200	20	20	38	100	6
MF210.2001	20	20	50	100	6
MF210.250	25	25	38	100	6
MF210.320	32	32	50	120	6

### Serie Larga Z-6

MF211.030	3	3	15	60	4
MF211.040	4	4	20	80	4
MF211.050	5	5	25	80	4
MF211.060	6	6	25	80	6
MF211.080	8	8	35	90	6
MF211.100	10	10	45	100	6
MF211.120	12	12	50	100	6
MF211.120L	12	12	70	125	6
MF211.140	14	14	65	150	6
MF211.160	16	16	65	150	6
MF211.160L	16	16	100	150	6
MF211.200	20	20	70	150	6
MF211.200L	20	20	100	150	6
MF211.200LL	20	20	135	200	6
MF211.250	25	25	75	150	6
MF211.250L	25	25	100	150	6
MF211.250LL	25	25	140	200	6
MF211.320	32	32	100	150	6
MF211.320L	32	32	150	210	6

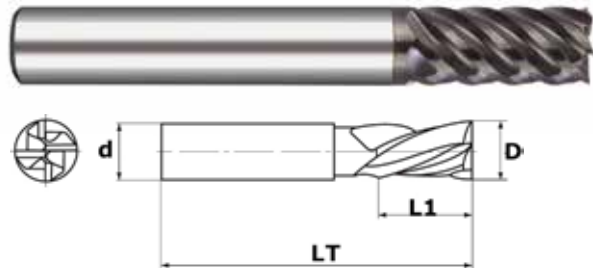
## Fresa MD Desbaste - Serie Estándar

Referencia	D	d	L1	LT	Z
MF220.060	6	6	16	50	3
MF220.080	8	8	19	60	3
MF220.0601	6	6	16	50	4
MF220.0801	8	8	19	60	4
MF220.100	10	10	22	75	4
MF220.120	12	12	26	75	4
MF220.140	14	14	30	90	4
MF220.160	16	16	32	100	4
MF220.200	20	20	38	100	4

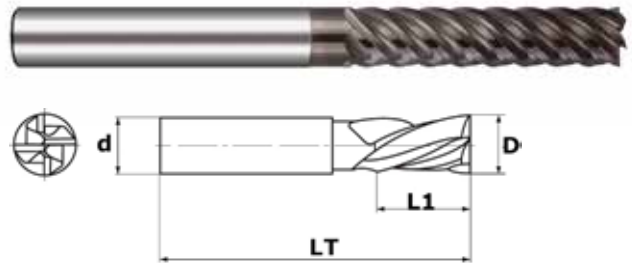
## Fresa MD Desbaste - Serie Larga

Referencia	D	d	L1	LT	Z
MF221.060	6	6	25	80	4
MF221.080	8	8	35	90	4
MF221.100	10	10	45	100	4
MF221.120	12	12	50	100	4
MF221.140	14	14	60	150	4
MF221.160	16	16	65	150	4
MF221.200	20	20	70	150	4

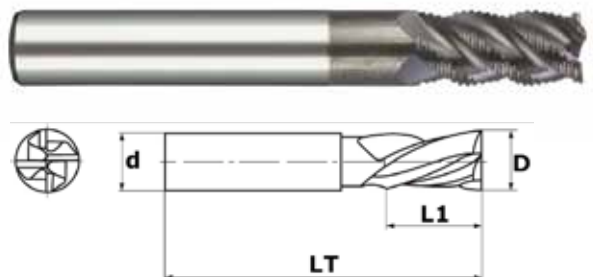
- Corte Hélice: 45°
- Modelo: Z-6
- Diámetros  $\phi 2$ - $\phi 3$ - $\phi 4$  - Z-4
- Recubrimiento: Tialn
- Uso: General
- Dureza: <65HRC



- Corte Hélice: 45°
- Modelo: Z-6
- Diámetros  $\phi 2$ - $\phi 3$ - $\phi 4$  - Z-4
- Recubrimiento: Tialn
- Uso: General
- Dureza: <65HRC



- Corte Hélice: 30° Modelo: Z-3 / Z4
- Recubrimiento: Altin
- Material: Sub-Micrograno
- Uso: General
- Dureza: <65HRC



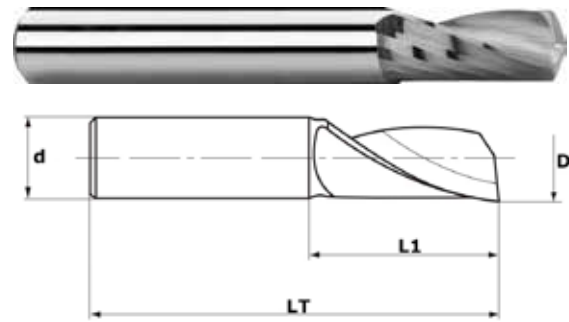
- Corte Hélice: 30° Modelo: Z4
- Recubrimiento: Altin
- Material: Sub-Micrograno
- Uso: General
- Dureza: <65HRC



**Fresa MD – Z1 – 20°**

- Corte Hélice: 20° - Derecha
- Modelo Z-1
- Uso: Plásticos/Aluminio

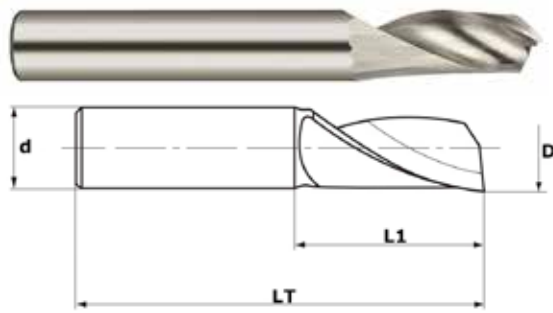
Referencia	d	D	L1	LT	Z
MF110.030	3	6	8	57	1
MF110.040	4	6	11	57	1
MF110.050	5	6	13	63	1
MF110.060	6	6	13	63	1
MF110.080	8	8	19	70	1
MF110.100	10	10	22	80	1
MF110.120	12	12	26	93	1



**Fresa MD – Z1 – 30°**

- Corte Hélice: 30°
- Modelo Z-1
- Uso: Plásticos/Aluminio

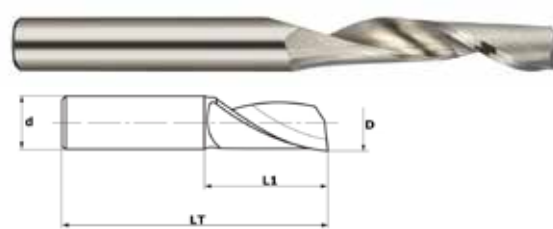
Referencia	D	d	L1	LT	Z
MF111.030	3	3	8	38	1
MF111.040	4	4	11	50	1
MF111.050	5	5	13	50	1
MF111.060	6	6	16	50	1
MF111.070	7	8	14	60	1
MF111.080	8	8	19	60	1
MF111.090	9	8	14	80	1
MF111.100	10	10	22	75	1
MF111.120	12	12	26	75	1



**Fresa MD – Z1 – Serie Larga**

- Corte Hélice: 30°
- Modelo Z-1
- Uso: Plásticos/Aluminio

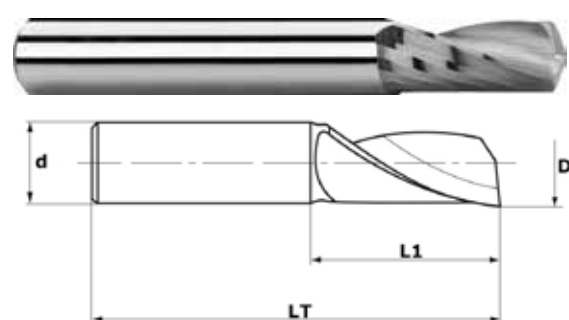
Referencia	D	d	L1	LT	Z
MF112.060	6	6	25	80	1
MF112.080	8	8	35	90	1
MF112.100	10	10	45	100	1
MF112.120	12	12	50	100	1



**Fresa MD – Z1 – 25°**

- Corte Hélice: 25° - Derecha
- Modelo Z-1
- Uso: Plásticos/Aluminio

Referencia	D	d	L1	LT	Z
MF113.030	3	6	8	57	1
MF113.040	4	6	11	57	1
MF113.050	5	6	13	63	1
MF113.060	6	6	13	63	1
MF113.080	8	8	19	70	1
MF113.100	10	10	22	80	1
MF113.120	12	12	26	93	1

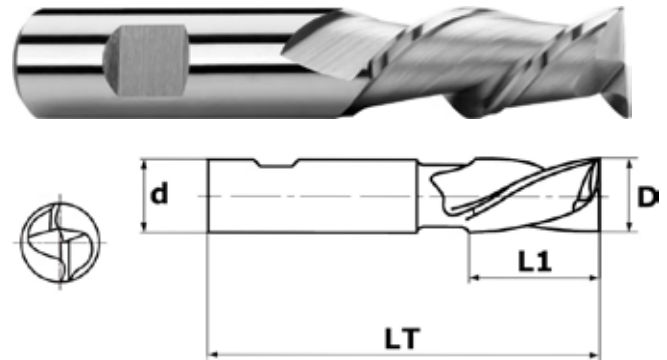




**Fresa MD – Z2 Aluminio**

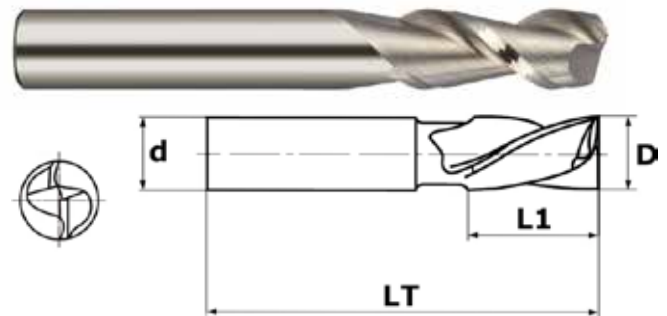
- Corte Hélice: 45°
- Modelo: Z-2
- Sin Recubrimiento
- Amarre: Weldon

Referencia	D	d	L1	LT	Z
MF310.030	3	6	8	57	2
MF310.035	3.5	6	10	57	2
MF310.040	4	6	11	57	2
MF310.045	4.5	6	11	57	2
MF310.050	5	6	13	57	2
MF310.060	6	6	13	57	2
MF310.070	7	8	16	63	2
MF310.080	8	8	19	63	2
MF310.090	9	10	19	72	2
MF310.100	10	10	22	72	2
MF310.120	12	12	26	83	2
MF310.140	14	14	26	83	2
MF310.160	16	16	32	92	2
MF310.180	18	18	32	92	2
MF310.200	20	20	38	104	6


**Fresa MD – Z2 Basic - Aluminio**

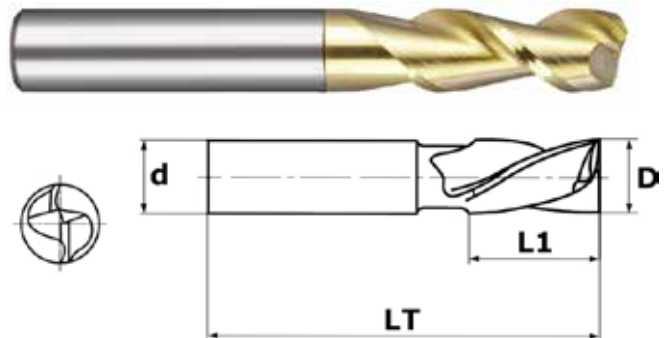
- Corte Hélice: 45°
- Modelo: Z-2
- Sin Recubrimiento
- Mango: Cilíndrico

Referencia	D	d	L1	LT	Z
MF315.030	3	6	8	50	2
MF315.040	4	6	11	50	2
MF315.050	5	6	13	50	2
MF315.060	6	6	16	50	2
MF315.080	8	8	19	60	2
MF315.100	10	10	25	72	2
MF315.120	12	12	30	75	2
MF315.140	14	14	35	84	2
MF315.160	16	16	40	92	2
MF315.200	20	20	45	100	2


**Fresa MD – Z2 Basic - ZrN**

- Corte Hélice: 45°
- Modelo: Z-2
- Recubrimiento ZrN
- Mango: Cilíndrico

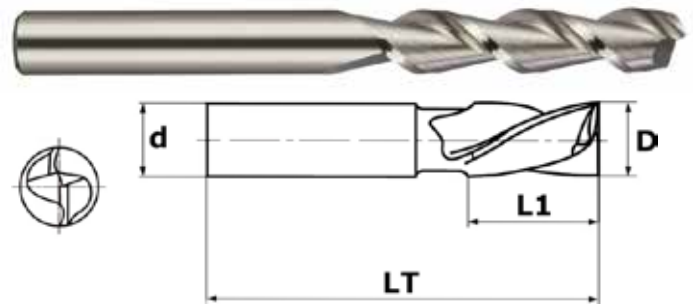
Referencia	D	d	L1	LT	Z
MF316.030	3	6	8	50	2
MF316.040	4	6	11	50	2
MF316.050	5	6	13	50	2
MF316.060	6	6	16	50	2
MF316.080	8	8	19	60	2
MF316.100	10	10	25	72	2
MF316.120	12	12	30	75	2
MF316.140	14	14	35	84	2
MF316.160	16	16	40	92	2
MF316.200	20	20	45	100	2



**Fresa MD – Z2 Basic - Aluminio - Serie Larga**

- Corte Hélice: 45°
- Modelo: Z-2
- Sin Recubrimiento
- Mango: Cilíndrico

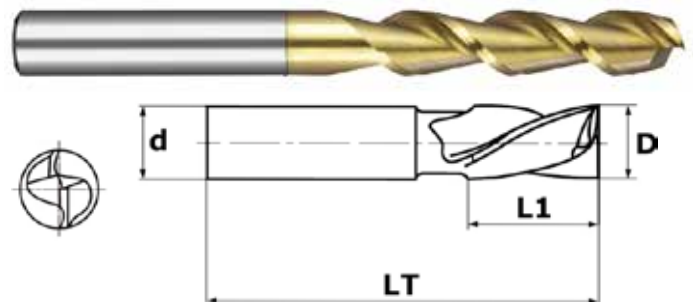
Referencia	D	d	L1	LT	Z
MF317.060	6	6	25	80	2
MF317.080	8	8	35	90	2
MF317.100	10	10	45	100	2
MF317.120	12	12	50	100	2
MF317.140	14	14	65	165	2
MF317.160	16	16	75	150	2
MF317.200	20	20	80	150	2



**Fresa MD – Z2 Basic - Serie Larga - ZrN**

- Corte Hélice: 45°
- Modelo: Z-2
- Recubrimiento ZrN
- Mango: Cilíndrico

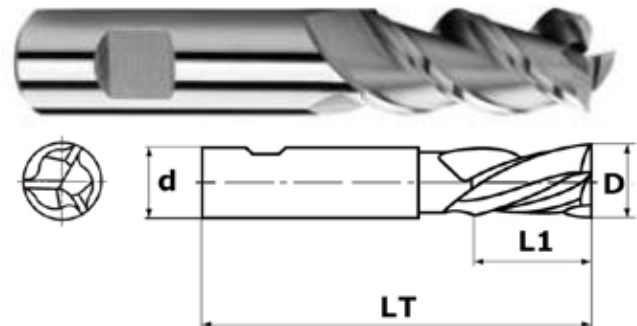
Referencia	D	d	L1	LT	Z
MF318.060	6	6	25	80	2
MF318.080	8	8	35	90	2
MF318.100	10	10	45	100	2
MF318.120	12	12	50	100	2
MF318.140	14	14	65	165	2
MF318.160	16	16	75	150	2
MF318.200	20	20	80	150	2



**Fresa MD – Z3 Aluminio**

- Corte Hélice: 45°
- Modelo: Z-3
- Sin Recubrimiento
- Amarre: Weldon

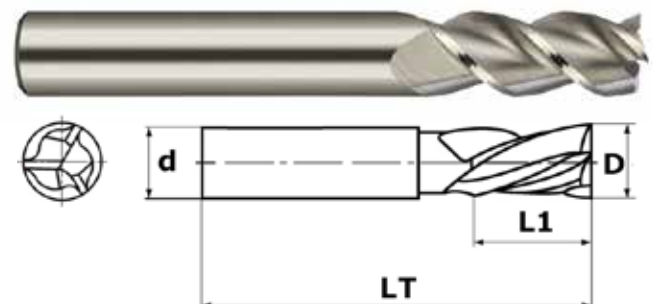
Referencia	D	d	L1	LT	Z
MF320.030	3	6	8	57	3
MF320.035	3.5	6	10	57	3
MF320.040	4	6	11	57	3
MF320.045	4.5	6	11	57	3
MF320.050	5	6	13	57	3
MF320.060	6	6	13	57	3
MF320.070	7	8	16	63	3
MF320.080	8	8	19	63	3
MF320.090	9	10	19	72	3
MF320.100	10	10	22	72	3
MF320.120	12	12	26	83	3
MF320.140	14	14	26	83	3
MF320.160	16	16	32	92	3
MF320.180	18	18	32	92	3
MF320.200	20	20	38	104	3



**FRESA MD – Z3 Basic - Aluminio**

- Corte Hélice: 45°
- Modelo: Z-3
- Sin Recubrimiento
- Mango: Cilíndrico

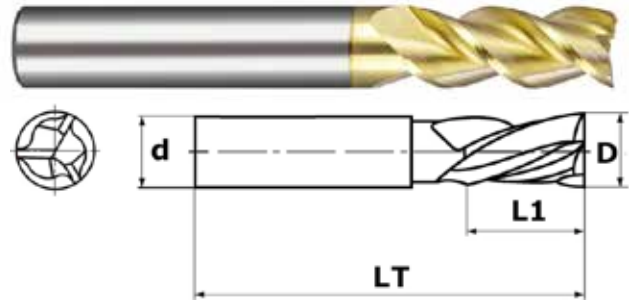
Referencia	D	d	L1	LT	Z
MF325.030	3	6	8	50	3
MF325.040	4	6	11	50	3
MF325.050	5	6	13	50	3
MF325.060	6	6	16	50	3
MF325.080	8	8	19	60	3
MF325.100	10	10	25	72	3
MF325.120	12	12	30	75	3
MF325.140	14	14	35	84	3
MF325.160	16	16	40	92	3
MF325.200	20	20	45	100	3



**FRESA MD – Z3 Basic - Aluminio ZrN**

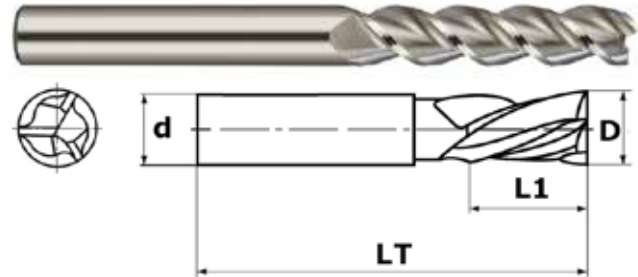
- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento ZrN
- Mango: Cilíndrico

Referencia	D	d	L1	LT	Z
MF326.030	3	6	8	50	3
MF326.040	4	6	11	50	3
MF326.050	5	6	13	50	3
MF326.060	6	6	16	50	3
MF326.080	8	8	19	60	3
MF326.100	10	10	25	72	3
MF326.120	12	12	30	75	3
MF326.140	14	14	35	84	3
MF326.160	16	16	40	92	3
MF326.200	20	20	45	100	3


**FRESA MD – Z3 Basic - Aluminio - Serie Larga**

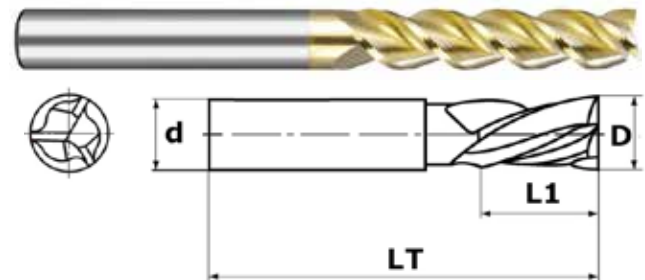
- Corte Hélice: 45°
- Modelo: Z-3
- Sin Recubrimiento
- Mango: Cilíndrico

Referencia	D	d	L1	LT	Z
MF327.060	6	6	25	80	3
MF327.080	8	8	35	90	3
MF327.100	10	10	45	100	3
MF327.120	12	12	50	100	3
MF327.140	14	14	65	165	3
MF327.160	16	16	75	150	3
MF327.200	20	20	80	150	3


**FRESA MD – Z3 Basic - Aluminio ZrN - Serie Larga**

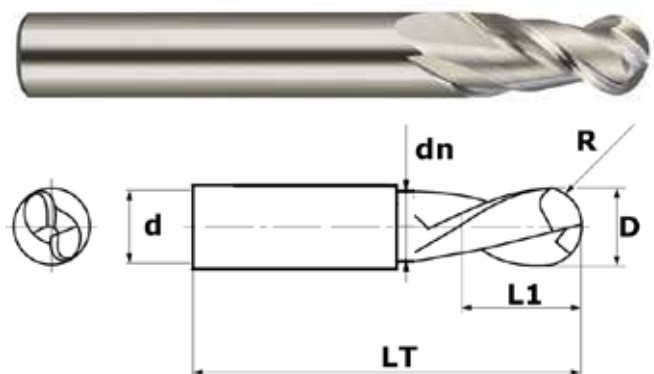
- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento ZrN
- Mango: Cilíndrico

Referencia	D	d	L1	LT	Z
MF328.060	6	6	25	80	3
MF328.080	8	8	35	90	3
MF328.100	10	10	45	100	3
MF328.120	12	12	50	100	3
MF328.140	14	14	65	165	3
MF328.160	16	16	75	150	3
MF328.200	20	20	80	150	3


**Fresa MD Bola – Z2 - Aluminio**

- Corte Hélice: 40°
- Modelo: Z-2
- Sin Recubrimiento
- Amarre: Cilíndrico

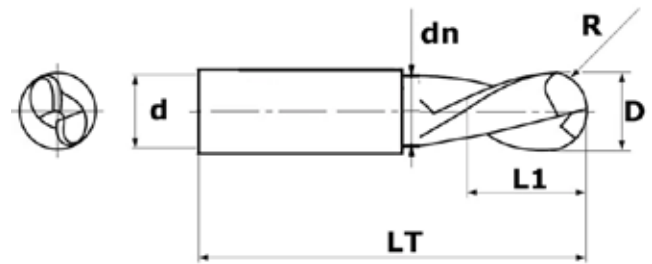
Referencia	D	d	L1	LT
MF330.030	3	6	6	50
MF330.040	4	6	8	50
MF330.050	5	6	10	50
MF330.060	6	6	12	50
MF330.080	8	8	15	60
MF330.100	10	10	20	72
MF330.120	12	12	24	75
MF330.140	14	14	26	83
MF330.160	16	16	30	92
MF330.200	20	20	40	100



### Fresa MD Bola – Z2 - Aluminio - Serie Larga

- Corte Hélice: 40°
- Modelo: Z-2
- Sin Recubrimiento
- Amarre: Cilíndrico
- Cuello reducido

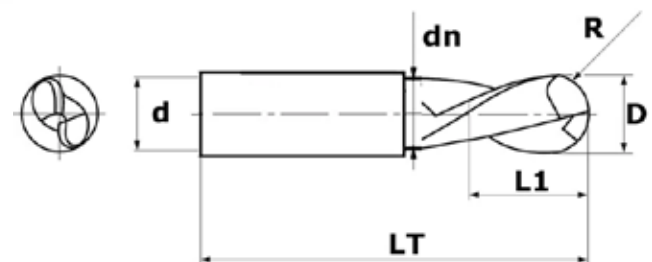
Referencia	D	d	dn	LR	L1	LT
MF332.060	6	6	5,5	35	12	80
MF332.080	8	8	7,5	35	15	90
MF332.100	10	10	9,5	45	20	100
MF332.120	12	12	11,5	50	24	100
MF332.160	16	16	15,5	92	30	150
MF332.200	20	20	19,5	92	40	150



### Fresa MD Bola – Z2 - Aluminio ZrN

- Corte Hélice: 40°
- Modelo: Z-2
- Recubrimiento ZrN
- Amarre: Cilíndrico

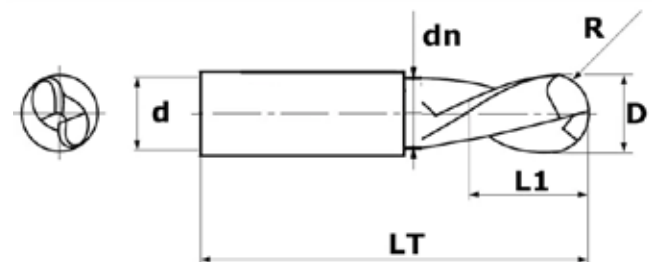
Referencia	D	d	L1	LT
MF331.030	3	6	6	50
MF331.040	4	6	8	50
MF331.050	5	6	10	50
MF331.060	6	6	12	50
MF331.080	8	8	15	60
MF331.100	10	10	20	72
MF331.120	12	12	24	75
MF331.140	14	14	26	83
MF331.160	16	16	30	92
MF331.200	20	20	40	100



### Fresa MD Bola – Z2 - Aluminio ZrN - Serie Larga

- Corte Hélice: 40°
- Modelo: Z-2
- Recubrimiento ZrN
- Amarre: Cilíndrico
- Cuello reducido

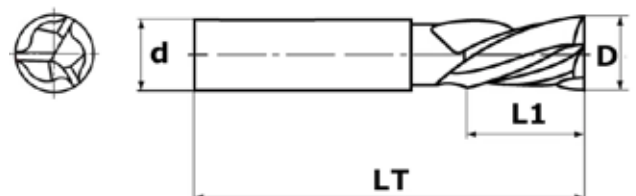
Referencia	D	d	dn	LR	L1	LT
MF333.060	6	6	5,5	35	12	80
MF333.080	8	8	7,5	35	15	90
MF333.100	10	10	9,5	45	20	100
MF333.120	12	12	11,5	50	24	100
MF333.160	16	16	15,5	92	30	150
MF333.200	20	20	19,5	92	40	150



### Fresa MD – Z3 – Desbaste Aluminio

- Corte Hélice: 25°
- Modelo: Z-3
- Sin Recubrimiento
- Amarre: Weldon

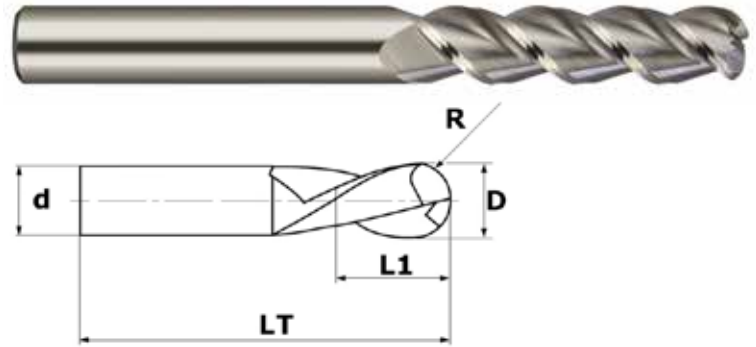
Referencia	D	d	L1	LT	Z
MF340.040	4	6	13	57	3
MF340.050	5	6	19	63	3
MF340.060	6	6	22	72	3
MF340.080	8	8	26	83	3
MF340.100	10	10	26	83	3
MF340.120	12	12	32	92	3
MF340.160	16	16	32	92	3
MF340.200	20	20	38	104	3



**Fresa MD Tórica – Z3 - Aluminio**

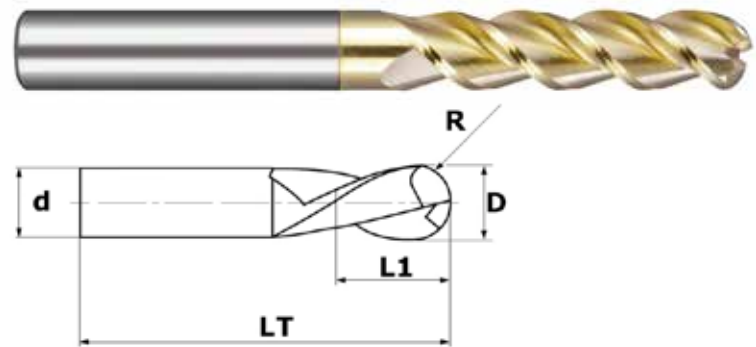
- Corte Hélice: 45°
- Modelo: Z-3
- Sin Recubrimiento
- Amarre: Cilíndrico
- Acabado Tórico

Referencia	D	d	R	L1	LT
MF334.06005	6	6	0,5	25	80
MF334.0601	6	6	1	25	80
MF334.08005	8	8	0,5	35	90
MF334.0801	8	8	1	35	90
MF334.10005	10	10	0,5	45	100
MF334.1001	10	10	1	45	100
MF334.1002	10	10	2	45	100
MF334.1003	10	10	3	45	100
MF334.12005	12	12	0,5	50	110
MF334.1201	12	12	1	50	110
MF334.12025	12	12	2,5	50	110
MF334.1204	12	12	4	50	110
MF334.1601	16	16	1	50	110
MF334.16025	16	16	2,5	50	110
MF334.1604	16	16	4	50	110
MF334.20025	20	20	2,5	50	130
MF334.2004	20	20	4	50	130


**Fresa MD Tórica – Z3 - Aluminio ZrN**

- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento ZrN
- Amarre: Cilíndrico
- Acabado Tórico

Referencia	D	d	R	L1	LT
MF335.06005	6	6	0,5	25	80
MF335.0601	6	6	1	25	80
MF335.08005	8	8	0,5	35	90
MF335.0801	8	8	1	35	90
MF335.10005	10	10	0,5	45	100
MF335.1001	10	10	1	45	100
MF335.1002	10	10	2	45	100
MF335.1003	10	10	3	45	100
MF335.12005	12	12	0,5	50	110
MF335.1201	12	12	1	50	110
MF335.12025	12	12	2,5	50	110
MF335.1204	12	12	4	50	110
MF335.1601	16	16	1	50	110
MF335.16025	16	16	2,5	50	110
MF335.1604	16	16	4	50	110
MF335.20025	20	20	2,5	50	130
MF335.2004	20	20	4	50	130

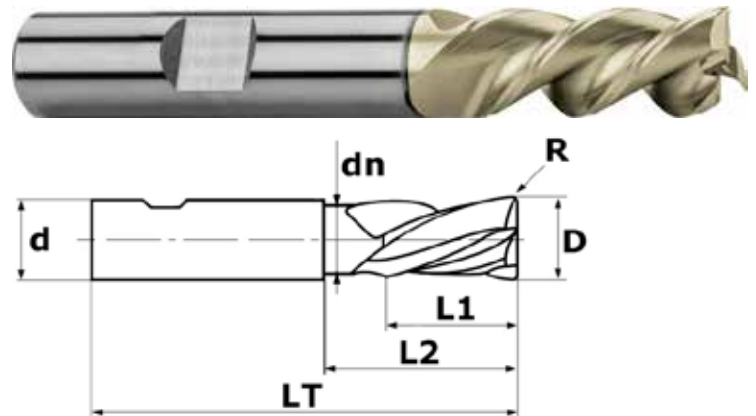




**Fresa MD Variable – Z3 - Aluminio ZrN**

- Corte Hélice: 44/46° - 15°
- Modelo: Z-3
- Recubrimiento ZrN
- Amarre: Weldon
- Acabado Tórico

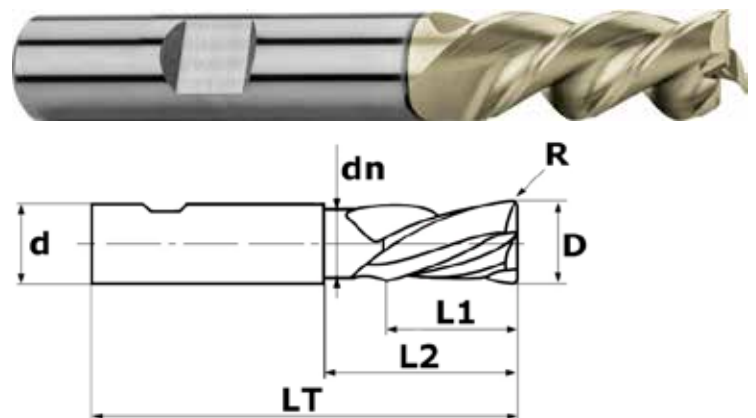
Referencia	D	d	R	L1	LT
MF336.060	6	6	0,2	15	57
MF336.080	8	8	0,2	21	63
MF336.100	10	10	0,3	24	72
MF336.120	12	12	0,4	28	83
MF336.140	14	14	0,4	30	83
MF336.160	16	16	0,5	35	92
MF336.180	18	18	0,5	38	92
MF336.200	20	20	0,6	42	104
MF336.250	25	25	0,6	50	120



**Fresa MD Variable Reducido – Z3 - Aluminio ZrN**

- Corte Hélice: 44/46° - 15°
- Modelo: Z-3
- Recubrimiento ZrN
- Amarre: Weldon y Reducido
- Acabado Tórico

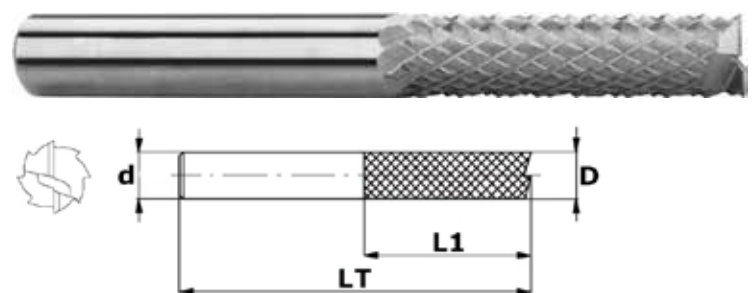
Referencia	D	d	dn	R	L1	LR	LT
MF337.060	6	6	5	0,2	7	24	62
MF337.080	8	8	7	0,2	9	30	68
MF337.100	10	10	9	0,3	11	38	80
MF337.120	12	12	11	0,4	13	46	93
MF337.140	14	14	13	0,4	15	46	93
MF337.160	16	16	15	0,5	17	58	108
MF337.180	18	18	17	0,5	19	58	108
MF337.200	20	20	19	0,6	21	74	126
MF337.250	25	25	24	0,6	26	92	150



**Fresa MD Contorno – Z2 - Plastico**

- Corte Hélice: Recto 90°
- Modelo: Z-2
- Sin Recubrimiento
- Amarre: Cilíndrico

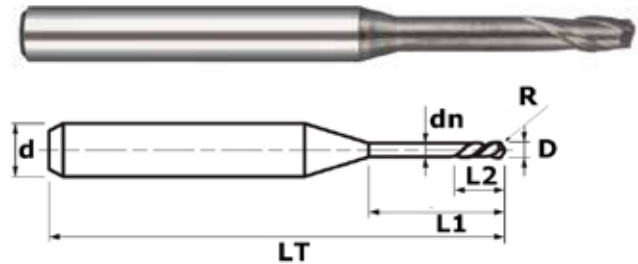
Referencia	D	d	L1	LT
MF345.020	2	3	10	40
MF345.030	3	3	12	40
MF345.040	4	4	16	50
MF345.050	5	5	16	50
MF345.060	6	6	19	50
MF345.0601	6	6	40	100
MF345.0602	6	6	25	57
MF345.080	8	8	25	60
MF345.0801	8	8	40	100
MF345.0802	8	8	40	80
MF345.100	10	10	25	70
MF345.1001	10	10	40	100
MF345.120	12	12	25	75
MF345.1201	12	12	40	100



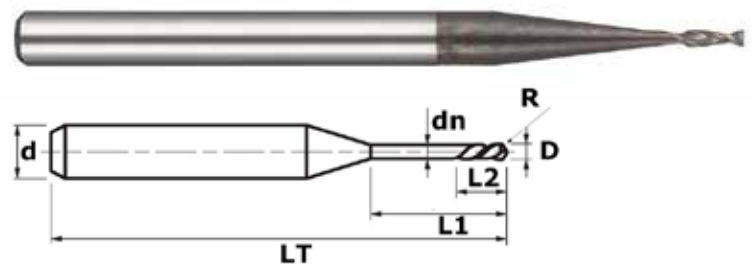
**Microfresa MD Z-2 - Cuello Rebajado**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Micrograno
- Uso: General
- Dureza: <56HRC

Referencia	D	d	dn	L1	L2	LT
MF222.010	1	6	0.95	5	1.5	55
MF222.010L	1	6	0.95	12	1.5	65
MF222.010L20	1	6	0.95	20	1.5	65
MF222.015	1.5	6	1.44	5	2	55
MF222.015L	1.5	6	1.44	12	2	65
MF222.015L20	1.5	6	1.44	20	2	65
MF222.020	2	6	1.92	10	3	55
MF222.020L	2	6	1.92	16	3	65
MF222.020L30	2	6	1.92	30	3	80
MF222.020L50	2	6	1.92	50	3	100
MF225.025	2,5	6	2,4	10	4	57
MF225.025L	2,5	6	2,4	20	4	65
MF225.025XL	2,5	6	2,4	40	4	80
MF222.030	3	6	2.9	9	5	65
MF222.030L	3	6	2.9	15	5	65
MF222.030L20	3	6	2.9	20	5	65
MF222.030L30	3	6	2.9	30	5	80
MF222.030L40	3	6	2.9	40	5	80
MF222.030L50	3	6	2.9	50	5	100
MF222.040	4	6	3.9	12	6	65
MF222.040L	4	6	3.9	20	6	65
MF222.040L30	4	6	3.9	30	6	80
MF222.040L40	4	6	3.9	40	6	80
MF222.040L50	4	6	3.9	50	6	100
MF222.050	5	6	4.8	12	7	60
MF222.050L	5	6	4.8	20	7	65
MF222.050L30	5	6	4.8	30	7	80
MF222.050L40	5	6	4.8	40	7	80
MF222.050L50	5	6	4.8	50	7	100


**Microfresa MD Z-2 - Cuello Cónico - Mango 4mm**

Referencia	D	d	L2	L1	LT
MF223.002	0.20	4	0.4	6,4	38
MF223.003	0.30	4	0.6	7,5	38
MF223.004	0.40	4	0.8	6,7	38
MF223.005	0.50	4	1	7,4	38
MF223.006	0.60	4	1.2	9,8	38
MF223.007	0.70	4	1.4	10,1	38
MF223.008	0.80	4	1.6	10,4	38
MF223.009	0.90	4	1.8	7,3	38


**Microfresa MD Z-2 - Cuello Rebajado - Mango 4mm**

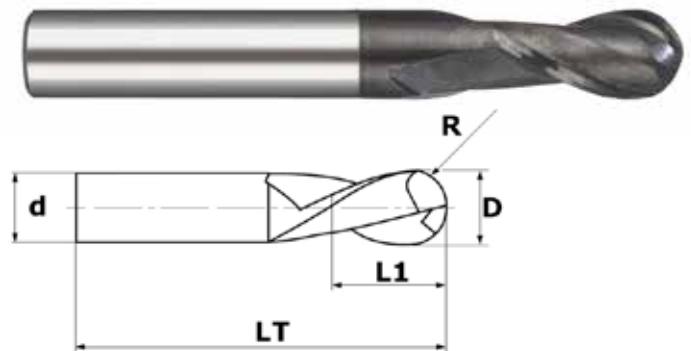
Referencia	D	d	dn	L1	L2	LT
MF224.005	0,5	4	0,48	4	0,7	50
MF224.0051	0,5	4	0,48	6	0,7	50
MF224.006	0,6	4	0,57	4	0,9	50
MF224.0061	0,6	4	0,57	6	0,9	50
MF224.0062	0,6	4	0,57	8	0,9	50
MF224.008	0,8	4	0,76	6	1,2	50
MF224.0081	0,8	4	0,76	8	1,2	50
MF224.0082	0,8	4	0,76	10	1,2	50
MF224.012	1,2	4	1,15	6	1,8	50
MF224.0121	1,2	4	1,15	8	1,8	50
MF224.0122	1,2	4	1,15	10	1,8	50



**Fresa MD Bola Z-2**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Micrograno
- Uso: General
- Dureza: <56HRC

Referencia	D	d	L1	LT
MF225.010	1	3	2	38
MF225.0101	1	4	2	50
MF225.015	1.5	3	3	38
MF225.0151	1.5	4	3	50
MF225.020	2	3	4	38
MF225.0201	2	4	4	50
MF225.025	2.5	3	5	38
MF225.030	3	3	6	38
MF225.0301	3	4	6	50
MF225.035	3.5	6	8	50
MF225.040	4	4	8	50
MF225.050	5	5	10	50
MF225.055	5.5	6	12	50
MF225.060	6	6	12	50
MF225.070	7	8	14	60
MF225.080	8	8	15	60
MF225.090	9	10	18	75
MF225.100	10	10	20	75
MF225.120	12	12	20	75
MF225.140	14	14	25	90
MF225.160	16	16	25	100
MF225.180	18	18	30	100
MF225.200	20	20	30	100

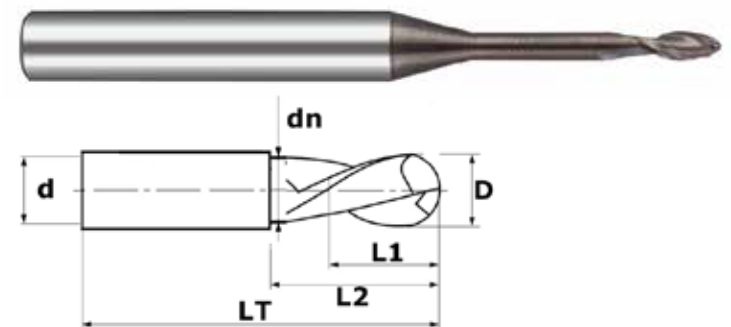


**Fresa MD Bola Z-2 - Serie Larga**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Micrograno
- Uso: General
- Dureza: <56HRC

Referencia	D	d	dn	L1	L2	LT
MF226.010	1	3	0.9	2	6	60
MF226.015	1.5	3	1.4	3	8	60
MF226.020	2	3	1.9	3	8	60
MF226.025	2.5	3	2.4	3	12	60

- Modelo diámetro 1 - 1.5 - 2 - 2.5



Referencia	D	d	L1	LT
MF226.030	3	3	4	60
MF226.040	4	4	5	80
MF226.050	5	5	6	80
MF226.060	6	6	8	80
MF226.080	8	8	12	100
MF226.100	10	10	15	100
MF226.120	12	12	15	100
MF226.140	14	14	20	150
MF226.160	16	16	20	150
MF226.200	20	20	25	150

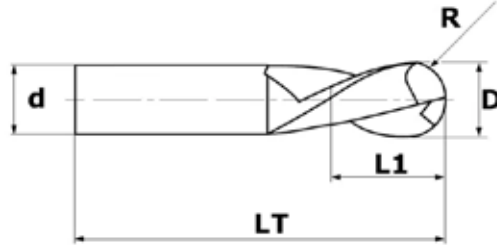
- Resto de medidas



**Fresa MD Bola Z-2 - Serie Extra Larga**

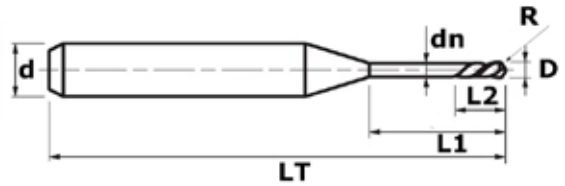
- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Micrograno
- Uso: General
- Dureza: <56HRC

Referencia	D	d	L1	LT
MF227.030	3	3	6	75
MF227.0301	3	3	6	100
MF227.040	4	4	6	100
MF227.050	5	5	6	100
MF227.060	6	6	15	100
MF227.060L	6	6	15	150
MF227.0602	6	6	30	200
MF227.080	8	8	25	150
MF227.080L	8	8	50	200
MF227.100	10	10	25	150
MF227.100L	10	10	50	200
MF227.120	12	12	25	150
MF227.120L	12	12	25	200
MF227.140	14	14	50	200
MF227.160	16	16	50	200



**Fresa MD Bola Z-2 - Cuello Reducido**

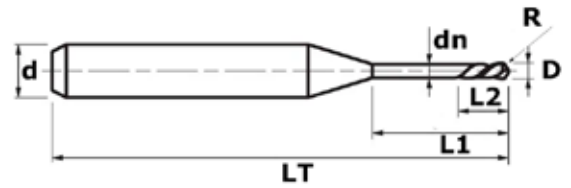
- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Micrograno
- Uso: General
- Dureza: <56HRC



Referencia	D	d	dn	L1	L2	LT
MF228.010	1	6	0,95	5	1,5	55
MF228.010L	1	6	0,95	12	1,5	65
MF228.010L20	1	6	0,95	20	1,5	65
MF228.015L8	1,5	6	1,42	8	2	57
MF228.015L10	1,5	6	1,42	10	2	57
MF228.015L15	1,5	6	1,42	15	2	65
MF228.015L20	1,5	6	1,42	20	2	65
MF228.020	2	6	1,92	10	3	57
MF228.020L	2	6	1,92	14	3	57
MF228.020L16	2	6	1,92	16	3	60
MF228.020L20	2	6	1,92	20	3	60
MF228.020L30	2	6	1,92	30	3	75
MF228.020L40	2	6	1,92	40	3	80
MF228.020L50	2	6	1,92	50	3	100
MF228.025	2,5	6	2,4	20	4	60
MF228.025L30	2,5	6	2,4	30	4	80
MF228.025L40	2,5	6	2,4	40	4	80
MF228.030	3	6	2,9	9	5	60
MF228.030L	3	6	2,9	15	5	60
MF228.030L20	3	6	2,9	20	5	60
MF228.030L30	3	6	2,9	30	5	80
MF228.030L40	3	6	2,9	40	5	80
MF228.030L50	3	6	2,9	50	5	100
MF228.040	4	6	3,9	12	6	60
MF228.040L	4	6	3,9	20	6	60
MF228.040L30	4	6	3,9	30	6	80
MF228.040L40	4	6	3,9	40	6	80
MF228.050	5	6	4,8	20	7	60
MF228.050L30	5	6	4,8	30	7	80
MF228.050L40	5	6	4,8	40	7	80
MF228.050L50	5	6	4,8	50	7	100

### Fresa MD Bola Z-2 – Cuello Largo Cónico

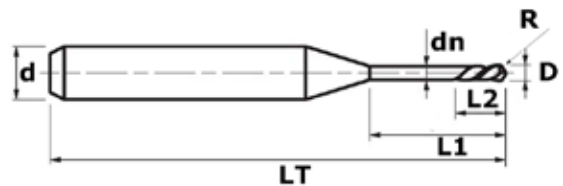
- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Sub-Micrograno
- Uso: General
- Dureza: <62HRC



Referencia	D	d	L1	L2	LT
MF229.010	1	6	20	1.5	60
MF229.015	1.5	6	20	2	60
MF229.020	2	6	20	3	60
MF229.020L	2	6	25	6	60
MF229.030	3	6	20	7	60
MF229.040	4	6	25	8	60
MF229.050	5	6	25	9	60

### Fresa MD Bola Z-2 – Cuello Largo Cónico - Serie Larga

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin
- Material: Sub-Micrograno
- Uso: General
- Dureza: <62HRC



Referencia	D	d	L1	L2	LT
MF230.010	1	6	40	1,5	80
MF230.010L50	1	6	50	1,5	100
MF230.010L60	1	6	60	1,5	108
MF230.010L70	1	6	70	1,5	108
MF230.015	1,5	6	40	2	80
MF230.015L50	1,5	6	50	2	100
MF230.015L60	1,5	6	60	2	108
MF230.015L70	1,5	6	70	2	108
MF230.020	2	6	40	3	80
MF230.020L50	2	6	50	3	100
MF230.020L60	2	6	60	3	108
MF230.050	3	6	50	5	100
MF230.050L60	3	6	60	5	108
MF230.040	4	6	50	6	100
MF230.040L	4	8	50	8	100
MF230.050L	5	6	50	7	100
MF230.050	5	8	41	12	90
MF230.050L60	5	8	60	12	90
MF230.060	6	8	33	14	90
MF230.060L	6	8	50	9	100
MF230.060XL	6	10	50	12	100
MF230.080	8	10	40	15	100
MF230.080L	8	12	50	15	100
MF230.080XL	8	10	70	10	150
MF230.100	10	12	50	20	100
MF230.100L	10	16	60	20	150
MF230.100XL	10	12	65	15	130
MF230.120	12	16	60	20	150



**Fresa MD Bola Z-2 – Materiales Duros (70HRC)**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin-Nano
- Material: Nano-Micrograno
- Uso: General
- Dureza: <70HRC

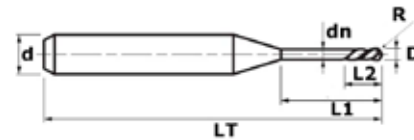
Referencia	D	d	dn	L1	L3	L2	LT
MF231.02020	2	6	-	-	20	3	60
MF231.03020	3	6	-	-	20	5	60
MF231.04020	4	6	-	-	20	6	60
MF231.05020	5	6	4,8	20	-	10	60
MF231.06020	6	6	5,8	20	-	12	60
MF231.08020	8	8	7,8	20	-	12	80
MF231.10022	10	10	9,8	22	-	10	75
MF231.12024	12	12	11,8	24	-	12	75
MF231.16040	16	16	15,8	40	-	20	92



- Resto de medidas



- Modelo diámetro 2 - 3 - 4 mm



**Fresa MD Bola Z-2 – Materiales Duros (70HRC) - Serie Larga**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin-Nano
- Material: Nano-Micrograno
- Uso: General
- Dureza: <70HRC

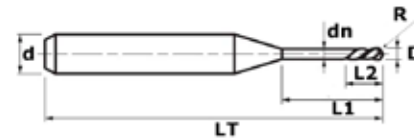
Referencia	D	d	dn	L1	L3	L2	LT
MF232.02020	2	6	-	-	40	3	80
MF232.03020	3	6	-	-	40	5	80
MF232.04020	4	6	-	-	40	6	80
MF232.05020	5	6	4,8	20	-	10	80
MF232.06020	6	6	5,8	20	-	12	80
MF232.08020	8	8	7,8	20	-	12	100
MF232.10022	10	10	9,8	22	-	10	100
MF232.12024	12	12	11,8	24	-	12	100
MF232.16040	16	16	15,8	40	-	20	150



- Resto de medidas



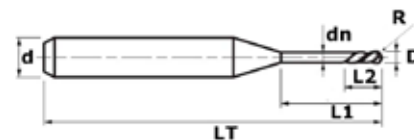
- Modelo diámetro 2 - 3 - 4 mm



**Fresa MD Bola Z-2 – Mango 4mm**

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: Altin-Nano
- Material: Nano-Micrograno
- Uso: General
- Dureza: <62HRC

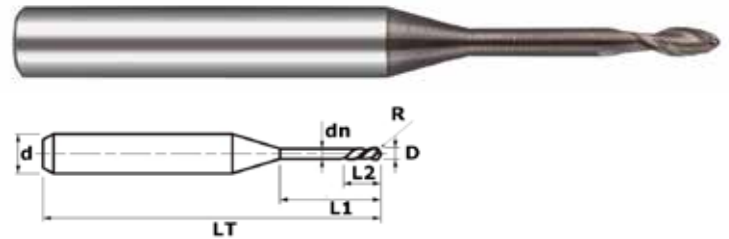
Referencia	D	d	L2	LT
MF233.020	0,2	4	0,4	50
MF233.030	0,3	4	0,6	50
MF233.040	0,4	4	0,8	50
MF233.050	0,5	4	1	50
MF233.060	0,6	4	1,2	50
MF233.070	0,7	4	1,4	50
MF233.080	0,8	4	1,6	50
MF233.090	0,9	4	1,8	50



**Fresa MD Bola Z-2 – Mango 4mm - Cuello Rebajado**

- Corte Hélice: 30°
- Modelo: Z-2
- Cuello Rebajado
- Mango: Cilíndrico
- Recubrimiento: Altin
- Material: Nano-Micrograno
- Uso: General
- Dureza: <62HRC

Referencia	D	d	dn	L1	L2	LT
MF234.0504	0,4	4	-	2	0,5	45
MF234.0506	0,4	4	-	4	0,5	45
MF234.0604	0,5	4	0,48	4	0,7	50
MF234.0606	0,5	4	0,48	6	0,7	50
MF234.0608	0,6	4	0,57	4	0,9	50
MF234.0806	0,6	4	0,57	6	0,9	50
MF234.0808	0,6	4	0,57	8	0,9	50
MF234.0810	0,8	4	0,76	6	1,2	50
MF234.1206	0,8	4	0,76	8	1,2	50
MF234.1208	0,8	4	0,76	10	1,2	50
MF234.1210	1,2	4	1,15	6	1,8	50
MF234.1208	1,2	4	1,15	8	1,8	50
MF234.1210	1,2	4	1,15	10	1,8	50



**Fresa MD Tórica Z-2**

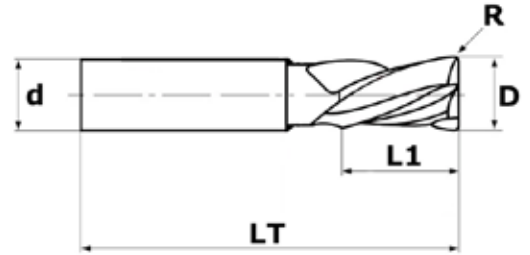
- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AlTiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC

Referencia	D	d	R	L1	LT
MF238.020020	2	6	0,2	6	50
MF238.020050	2	6	0,5	6	50
MF238.030020	3	6	0,2	8	50
MF238.030050	3	6	0,5	8	50
MF238.040020	4	6	0,2	11	50
MF238.040050	4	6	0,5	11	50
MF238.040100	4	6	1	11	50
MF238.050020	5	6	0,2	12	50
MF238.050050	5	6	0,5	12	50
MF238.050100	5	6	1	12	50
MF238.060020	6	6	0,2	12	50
MF238.060050	6	6	0,5	13	50
MF238.060100	6	6	1	13	50
MF238.060150	6	6	1,5	13	50
MF238.060200	6	6	2	13	50
MF238.080020	8	8	0,2	15	60
MF238.080050	8	8	0,5	15	60
MF238.080100	8	8	1	15	60
MF238.080150	8	8	1,5	15	60
MF238.080200	8	8	2	15	60
MF238.100050	10	10	0,5	20	72
MF238.100100	10	10	1	20	72
MF238.100150	10	10	1,5	20	72
MF238.100200	10	10	2	20	72
MF238.100300	10	10	3	20	72
MF238.120050	12	12	0,5	24	75
MF238.120100	12	12	1	24	75
MF238.120150	12	12	1,5	24	75
MF238.120200	12	12	2	24	75
MF238.120300	12	12	3	24	75
MF238.160050	16	16	0,5	30	92
MF238.160100	16	16	1	30	92
MF238.160200	16	16	2	30	92
MF238.160300	16	16	3	30	92
MF238.160400	16	16	4	30	92



**Fresa MD Tórica Z-4**

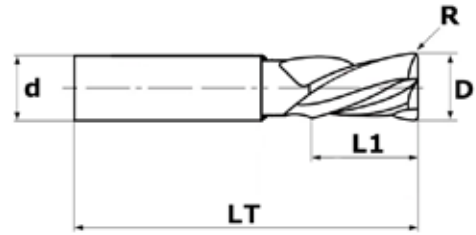
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AlTiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF239.020020	2	6	0,2	6	50
MF239.020050	2	6	0,5	6	50
MF239.030020	3	6	0,2	8	50
MF239.030050	3	6	0,5	8	50
MF239.040020	4	6	0,2	11	50
MF239.040050	4	6	0,5	11	50
MF239.040100	4	6	1	11	50
MF239.050020	5	6	0,2	12	50
MF239.050050	5	6	0,5	12	50
MF239.050100	5	6	1	12	50
MF239.060020	6	6	0,2	12	50
MF239.060050	6	6	0,5	13	50
MF239.060100	6	6	1	13	50
MF239.060150	6	6	1,5	13	50
MF239.060200	6	6	2	13	50
MF239.060200	8	8	0,2	15	60
MF239.080050	8	8	0,5	15	60
MF239.080100	8	8	1	15	60
MF239.080150	8	8	1,5	15	60
MF239.080200	8	8	2	15	60
MF239.100050	10	10	0,5	20	72
MF239.100100	10	10	1	20	72
MF239.100150	10	10	1,5	20	72
MF239.100200	10	10	2	20	72
MF239.100300	10	10	3	20	72
MF239.120050	12	12	0,5	24	75
MF239.120100	12	12	1	24	75
MF239.120150	12	12	1,5	24	75
MF239.120200	12	12	2	24	75
MF239.120300	12	12	3	24	75
MF239.160050	16	16	0,5	30	92
MF239.160100	16	16	1	30	92
MF239.160200	16	16	2	30	92
MF239.160300	16	16	3	30	92
MF239.160400	16	16	4	30	92

### Fresa MD Tórica Z-2

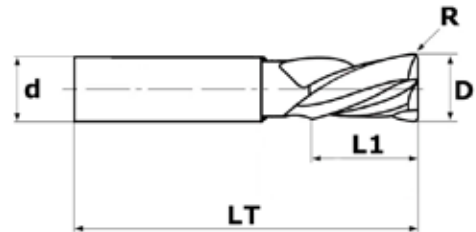
- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF240.060020	6	6	0,2	13	80
MF240.060050	6	6	0,5	13	80
MF240.060100	6	6	1	13	80
MF240.060150	6	6	1,5	13	80
MF240.060200	6	6	2	13	80
MF240.080050	8	8	0,5	19	90
MF240.080100	8	8	1	19	90
MF240.080150	8	8	1,5	19	90
MF240.080200	8	8	2	19	90
MF240.100050	10	10	0,5	22	100
MF240.100100	10	10	1	22	100
MF240.100150	10	10	1,5	22	100
MF240.100200	10	10	2	22	100
MF240.100300	10	10	3	22	100
MF240.120050	12	12	0,5	26	100
MF240.120100	12	12	1	26	100
MF240.120150	12	12	1,5	26	100
MF240.120200	12	12	2	26	100
MF240.120300	12	12	3	26	100

### Fresa MD Tórica Z-2 - Serie Larga

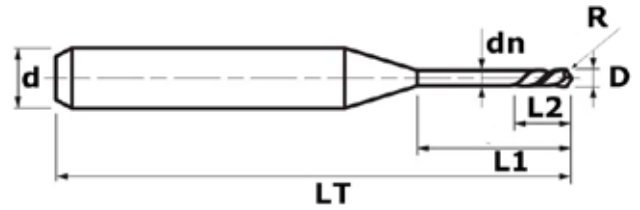
- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF240.020020L	2	6	0,2	10	80
MF240.020050L	2	6	0,5	10	80
MF240.030020L	3	6	0,2	15	80
MF240.030050L	3	6	0,5	15	80
MF240.040020L	4	6	0,2	20	80
MF240.040050L	4	6	0,5	20	80
MF240.040100L	4	6	1	20	80
MF240.050020L	5	6	0,2	25	80
MF240.050050L	5	6	0,5	25	80
MF240.050100L	5	6	1	25	80
MF240.060020L	6	6	0,2	25	80
MF240.060050L	6	6	0,5	25	80
MF240.060100L	6	6	1	25	80
MF240.060200L	6	6	2	25	80
MF240.080050L	8	8	0,5	35	90
MF240.080100L	8	8	1	35	90
MF240.080200L	8	8	2	35	90
MF240.100050L	10	10	0,5	45	100
MF240.100100L	10	10	1	45	100
MF240.100200L	10	10	2	45	100
MF240.100300L	10	10	3	45	100
MF240.120050L	12	12	0,5	50	100
MF240.120100L	12	12	1	50	100
MF240.120200L	12	12	2	50	100
MF240.120300L	12	12	3	50	100

**Fresa MD Tórica Z-2 - Con Cuello - Mango 6mm**

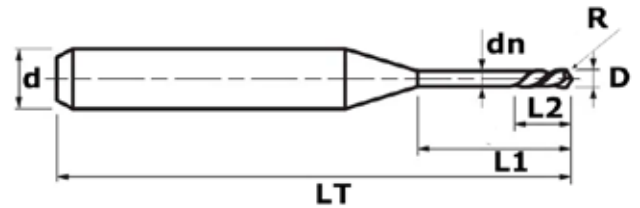
- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AlTiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	R	L2	L1	LT
MF240.010010	1	0,1	1,5	5	57
MF240.010010L	1	0,1	1,5	12	65
MF240.010010L20	1	0,1	1,5	20	65
MF240.010025	1	0,25	1,5	5	57
MF240.010025L	1	0,25	1,5	12	65
MF240.010025L20	1	0,25	1,5	20	65
MF240.015010	1,5	0,1	2	5	57
MF240.015010L	1,5	0,1	2	12	65
MF240.015010L20	1,5	0,1	2	20	65
MF240.015010L25	1,5	0,1	2	25	65
MF240.015030	1,5	0,3	2	5	57
MF240.015030L	1,5	0,3	2	12	65
MF240.015030L20	1,5	0,3	2	20	65
MF240.015030L25	1,5	0,3	2	25	65
MF240.020020	2	0,2	3	10	80
MF240.020020L15	2	0,2	3	15	80
MF240.020020L20	2	0,2	3	20	80
MF240.020020L25	2	0,2	3	25	80
MF240.020020L30	2	0,2	3	30	80
MF240.020020L40	2	0,2	3	40	80
MF240.020050	2	0,5	3	10	80
MF240.020050L15	2	0,5	3	15	80
MF240.020050L20	2	0,5	3	20	80
MF240.020050L25	2	0,5	3	25	80
MF240.020050L30	2	0,5	3	30	80
MF240.020050L40	2	0,5	3	40	80
MF240.030020	3	0,2	5	15	80
MF240.030020L20	3	0,2	5	20	80
MF240.030020L25	3	0,2	5	25	80
MF240.030020L30	3	0,2	5	30	80
MF240.030020L40	3	0,2	5	40	80
MF240.030050	3	0,5	5	15	80
MF240.030050L20	3	0,5	5	20	80
MF240.030050L25	3	0,5	5	25	80
MF240.030050L30	3	0,5	5	30	80
MF240.030050L40	3	0,5	5	40	80
MF240.040020	4	0,2	6	20	80
MF240.040020L30	4	0,2	6	30	80
MF240.040020L40	4	0,2	6	40	80
MF240.040050	4	0,5	6	20	80
MF240.040050L30	4	0,5	6	30	80
MF240.040050L40	4	0,5	6	40	80
MF240.040100	4	1	6	20	80
MF240.040100L30	4	1	6	30	80
MF240.040100L40	4	1	6	40	80
MF240.050020	5	0,2	7	25	80
MF240.050020L	5	0,2	7	30	80
MF240.050020L40	5	0,2	7	40	80
MF240.050050	5	0,5	7	25	80
MF240.050050L30	5	0,5	7	30	80
MF240.050050L40	5	0,5	7	40	80
MF240.050100	5	1	7	25	80
MF240.050100L30	5	1	7	30	80
MF240.050100L40	5	1	7	40	80

### Fresa MD Tórica Z-2 - Cónica

- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AlTiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC
- Conicidad 1°

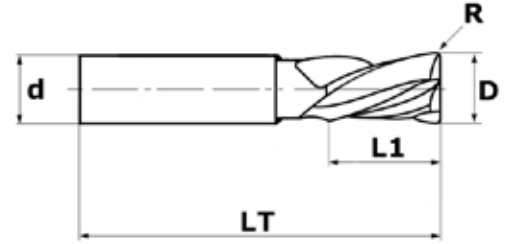


Referencia	D	d	R	L2	L1	LT
MF241.015030	1,5	6	0,3	2	43	109
MF241.015030L53	1,5	6	0,3	2	53	109
MF241.015030L63	1,5	6	0,3	2	63	109
MF241.020050	2	6	0,5	3	43	109
MF241.020050L53	2	6	0,5	3	53	109
MF241.020050L63	2	6	0,5	3	63	109
MF241.030050	3	6	0,5	5	44	109
MF241.030050L55	3	6	0,5	5	55	109
MF241.030050L65	3	6	0,5	5	65	109
MF241.040050	4	6	0,5	6	45	109
MF241.040050L55	4	6	0,5	6	55	109
MF241.040050L65	4	6	0,5	6	65	109
MF241.040100	4	6	1	6	45	109
MF241.040100L55	4	6	1	6	55	109
MF241.040100L65	4	6	1	6	65	109
MF241.050050	5	8	0,5	7	45	109
MF241.050050L55	5	8	0,5	7	55	109
MF241.050050L70	5	8	0,5	7	70	109
MF241.050100	5	8	1	7	45	109
MF241.050100L55	5	8	1	7	55	109
MF241.050100L70	5	8	1	7	70	109
MF241.060050	6	8	0,5	9	48	109
MF241.060050L55	6	8	0,5	9	55	109
MF241.060050L70	6	8	0,5	9	70	109
MF241.060100	6	8	1	9	48	109
MF241.060100L55	6	8	1	9	55	109
MF241.060100L70	6	8	1	9	70	109
MF241.060150	6	8	1,5	9	48	109
MF241.060150L55	6	8	1,5	9	55	109
MF241.060150L70	6	8	1,5	9	70	109
MF241.080050	8	10	0,5	10	48	109
MF241.080050L55	8	10	0,5	10	55	109
MF241.080050L70	8	10	0,5	10	70	109
MF241.080100	8	10	1	10	48	109
MF241.080100L55	8	10	1	10	55	109
MF241.080100L70	8	10	1	10	70	109
MF241.080150	8	10	1,5	10	48	109
MF241.080150L55	8	10	1,5	10	55	109
MF241.080150L70	8	10	1,5	10	70	109
MF241.080200	8	10	2	10	48	109
MF241.080200L55	8	10	2	10	55	109
MF241.080200L70	8	10	2	10	70	109



**Fresa MD Tórica Z-4**

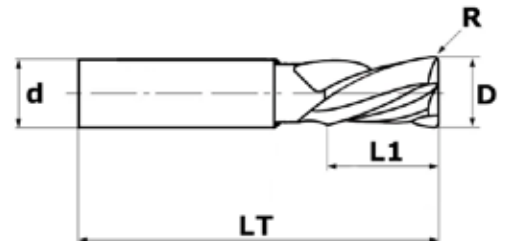
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF242.060020	6	6	0,2	13	80
MF242.060050	6	6	0,5	13	80
MF242.060100	6	6	1	13	80
MF242.060150	6	6	1,5	13	80
MF242.060200	6	6	2	13	80
MF242.080050	8	8	0,5	19	90
MF242.080100	8	8	1	19	90
MF242.080150	8	8	1,5	19	90
MF242.080200	8	8	2	19	90
MF242.100050	10	10	0,5	22	100
MF242.100100	10	10	1	22	100
MF242.100150	10	10	1,5	22	100
MF242.100200	10	10	2	22	100
MF242.100300	10	10	3	22	100
MF242.120050	12	12	0,5	26	100
MF242.120100	12	12	1	26	100
MF242.120150	12	12	1,5	26	100
MF242.120200	12	12	2	26	100
MF242.120300	12	12	3	26	100

**Fresa MD Tórica Z-4 - Serie Larga**

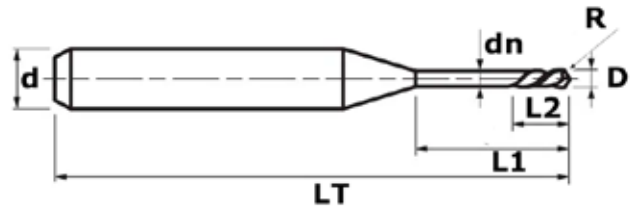
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF242.020020L	2	6	0,2	10	80
MF242.020050L	2	6	0,5	10	80
MF242.030050L	3	6	0,5	15	80
MF242.040020L	4	6	0,2	20	80
MF242.040050L	4	6	0,5	20	80
MF242.040100L	4	6	1	20	80
MF242.050020L	5	6	0,2	25	80
MF242.050050L	5	6	0,5	25	80
MF242.050100L	5	6	1	25	80
MF242.060020L	6	6	0,2	25	80
MF242.060050L	6	6	0,5	25	80
MF242.060100L	6	6	1	25	80
MF242.060200L	6	6	2	25	80
MF242.080050L	8	8	0,5	35	90
MF242.080100L	8	8	1	35	90
MF242.080200L	8	8	2	35	90
MF242.100050L	10	10	0,5	45	100
MF242.100100L	10	10	1	45	100
MF242.100200L	10	10	2	45	100
MF242.100300L	10	10	3	45	100
MF242.120050L	12	12	0,5	50	100
MF242.120100L	12	12	1	50	100
MF242.120200L	12	12	2	50	100
MF242.120300L	12	12	3	50	100

### Fresa MD Tórica Z-4 - Con Cuello - Mango 6mm

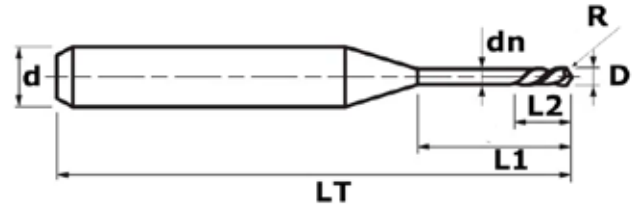
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	R	L2	L1	LT
MF242.020020	2	0,2	3	10	80
MF242.020020L15	2	0,2	3	15	80
MF242.020020L20	2	0,2	3	20	80
MF242.020020L25	2	0,2	3	25	80
MF242.020020L30	2	0,2	3	30	80
MF242.020020L40	2	0,2	3	40	80
MF242.020050	2	0,5	3	10	80
MF242.020050L15	2	0,5	3	15	80
MF242.020050L20	2	0,5	3	20	80
MF242.020050L25	2	0,5	3	25	80
MF242.020050L30	2	0,5	3	30	80
MF242.020050L40	2	0,5	3	40	80
MF242.030020	3	0,2	5	15	80
MF242.030020L20	3	0,2	5	20	80
MF242.030020L25	3	0,2	5	25	80
MF242.030020L30	3	0,2	5	30	80
MF242.030020L40	3	0,2	5	40	80
MF242.030050	3	0,5	5	15	80
MF242.030050L20	3	0,5	5	20	80
MF242.030050L25	3	0,5	5	25	80
MF242.030050L30	3	0,5	5	30	80
MF242.030050L40	3	0,5	5	40	80
MF242.040020	4	0,2	6	20	80
MF242.040020L30	4	0,2	6	30	80
MF242.040020L40	4	0,2	6	40	80
MF242.040050	4	0,5	6	20	80
MF242.040050L30	4	0,5	6	30	80
MF242.040050L40	4	0,5	6	40	80
MF242.040100	4	1	6	20	80
MF242.040100L30	4	1	6	30	80
MF242.040100L40	4	1	6	40	80
MF242.050020	5	0,2	7	25	80
MF242.050020L30	5	0,2	7	30	80
MF242.050020L40	5	0,2	7	40	80
MF242.050050	5	0,5	7	25	80
MF242.050050L30	5	0,5	7	30	80
MF242.050050L40	5	0,5	7	40	80
MF242.050100	5	1	7	V25	80
MF242.050100L30	5	1	7	30	80
MF242.050100L40	5	1	7	40	80

**Fresa MD Tórica Z-4 - Cónica**

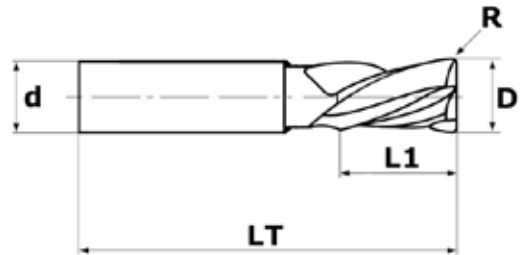
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC
- Conicidad 1°



Referencia	D	d	R	L2	L1	LT
MF243.020050	2	6	0,5	3	43	109
MF243.020050L53	2	6	0,5	3	53	109
MF243.020050L63	2	6	0,5	3	63	109
MF243.030050	3	6	0,5	5	44	109
MF243.030050L55	3	6	0,5	5	55	109
MF243.030050L65	3	6	0,5	5	65	109
MF243.040050	4	6	0,5	6	45	109
MF243.040050L55	4	6	0,5	6	55	109
MF243.040050L65	4	6	0,5	6	65	109
MF243.040100	4	6	1	6	45	109
MF243.040100L55	4	6	1	6	55	109
MF243.040100L65	4	6	1	6	65	109
MF243.050050	5	8	0,5	7	45	109
MF243.050050L55	5	8	0,5	7	55	109
MF243.050050L70	5	8	0,5	7	70	109
MF243.050100	5	8	1	7	45	109
MF243.050100L55	5	8	1	7	55	109
MF243.050100L70	5	8	1	7	70	109
MF243.060050	6	8	0,5	9	48	109
MF243.060050L55	6	8	0,5	9	55	109
MF243.060050L70	6	8	0,5	9	70	109
MF243.060100	6	8	1	9	48	109
MF243.060100L55	6	8	1	9	55	109
MF243.060100L70	6	8	1	9	70	109
MF243.060150	6	8	1,5	9	48	109
MF243.060150L55	6	8	1,5	9	55	109
MF243.060150L70	6	8	1,5	9	70	109
MF243.080050	8	10	0,5	10	48	109
MF243.080050L55	8	10	0,5	10	55	109
MF243.080050L70	8	10	0,5	10	70	109
MF243.080100	8	10	1	10	48	109
MF243.080100L55	8	10	1	10	55	109
MF243.080100L70	8	10	1	10	70	109
MF243.080150	8	10	1,5	10	48	109
MF243.080150L55	8	10	1,5	10	55	109
MF243.080150L70	8	10	1,5	10	70	109
MF243.080200	8	10	2	10	48	109
MF243.080200L55	8	10	2	10	55	109
MF243.080200L70	8	10	2	10	70	109

### Fresa MD Tórica Z-2 - Serie Extra Larga

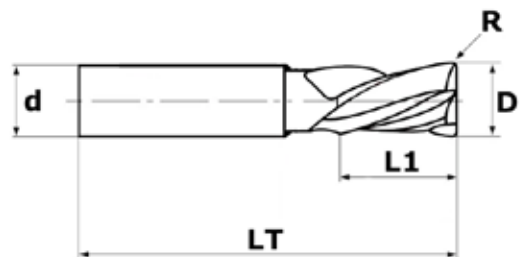
- Corte Hélice: 30° - Modelo: Z-2
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF244.060050XL	6	6	0,5	13	150
MF244.060100XL	6	6	1	13	150
MF244.060150XL	6	6	1,5	13	150
MF244.060200XL	6	6	2	13	150
MF244.080050XL	8	8	0,5	19	150
MF244.080100XL	8	8	1	19	150
MF244.080150XL	8	8	1,5	19	150
MF244.080200XL	8	8	2	19	150
MF244.100050XL	10	10	0,5	22	150
MF244.100100XL	10	10	1	22	150
MF244.100200XL	10	10	2	22	150
MF244.100300XL	10	10	3	22	150
MF244.120050XL	12	12	0,5	26	150
MF244.120100XL	12	12	1	26	150
MF244.120200XL	12	12	2	26	150
MF244.120300XL	12	12	3	26	150

### Fresa MD Tórica Z-4 - Serie Extra Larga

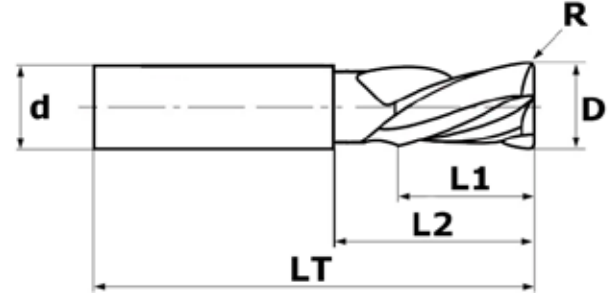
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	LT
MF245.060050XL	6	6	0,5	13	150
MF245.060100XL	6	6	1	13	150
MF245.060150XL	6	6	1,5	13	150
MF245.060200XL	6	6	2	13	150
MF245.080050XL	8	8	0,5	19	150
MF245.080100XL	8	8	1	19	150
MF245.080150XL	8	8	1,5	19	150
MF245.080200XL	8	8	2	19	150
MF245.100050XL	10	10	0,5	22	150
MF245.100100XL	10	10	1	22	150
MF245.100200XL	10	10	2	22	150
MF245.100300XL	10	10	3	22	150
MF245.120050XL	12	12	0,5	26	150
MF245.120100XL	12	12	1	26	150
MF245.120200XL	12	12	2	26	150
MF245.120300XL	12	12	3	26	150

**Fresa MD Tórica - Z4 Cuello Rebajado**

- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	L2	LT
MF246.020020	2	6	0,2	3	21	57
MF246.020050	2	6	0,5	3	21	57
MF246.030020	3	6	0,2	5	21	57
MF246.030050	3	6	0,5	5	21	57
MF246.040050	4	6	0,5	6	21	57
MF246.040100	4	6	1	6	21	57
MF246.050050	5	6	0,5	7	21	57
MF246.050100	5	6	1	7	21	57
MF246.060050	6	6	0,5	7	21	57
MF246.060100	6	6	1	7	21	57
MF246.060150	6	6	1,5	7	21	57
MF246.060200	6	6	2	7	21	57
MF246.080050	8	8	0,5	9	27	63
MF246.080100	8	8	1	9	27	63
MF246.080150	8	8	1,5	9	27	63
MF246.080200	8	8	2	9	27	63
MF246.100050	10	10	0,5	11	32	72
MF246.100100	10	10	1	11	32	72
MF246.100150	10	10	1,5	11	32	72
MF246.100200	10	10	2	11	32	72
MF246.120050	12	12	0,5	13	38	83
MF246.120100	12	12	1	13	38	83
MF246.120150	12	12	1,5	13	38	83
MF246.120200	12	12	2	13	38	83
MF246.120300	12	12	3	13	38	83
MF246.160050	16	16	0,5	17	44	92
MF246.160100	16	16	1	17	44	92
MF246.160200	16	16	2	17	44	92
MF246.160300	16	16	3	17	44	92
MF246.160400	16	16	4	17	44	92

**Fresa MD Tórica - Z4 Cuello Rebajado - Serie Larga**

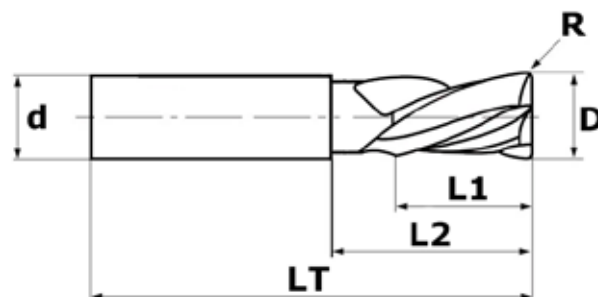
- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AltiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC



Referencia	D	d	R	L1	L2	LT
MF247.060020L20	6	6	0,2	7	20	80
MF247.060020L30	6	6	0,2	7	30	80
MF247.060020L45	6	6	0,2	7	45	80
MF247.060050L20	6	6	0,5	7	20	80
MF247.060050L30	6	6	0,5	7	30	80
MF247.060050L45	6	6	0,5	7	45	80
MF247.060100L20	6	6	1	7	20	80
MF247.060100L30	6	6	1	7	30	80
MF247.060100L45	6	6	1	7	45	80
MF247.060150L20	6	6	1,5	7	20	80
MF247.060150L30	6	6	1,5	7	30	80
MF247.060150L45	6	6	1,5	7	45	80
MF247.060200L20	6	6	2	7	20	80
MF247.060200L30	6	6	2	7	30	80
MF247.060200L45	6	6	2	7	45	80

### Fresa MD Tórica - Z4 Cuello Rebajado - Serie Larga

- Corte Hélice: 30° - Modelo: Z-4
- Recubrimiento: AlTiN-Nano - Material: Sub-Micrograno
- Uso: General - Dureza: <62HRC

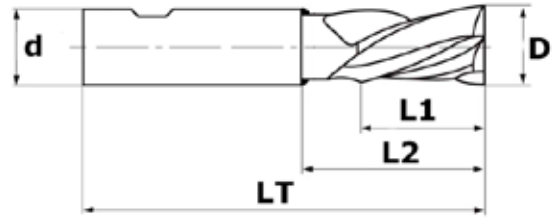


Referencia	D	d	R	L1	L2	LT
MF247.080050L25	8	8	0,5	9	25	90
MF247.080050L40	8	8	0,5	9	40	90
MF247.080050L55	8	8	0,5	9	55	90
MF247.080100L25	8	8	1	9	25	90
MF247.080100L40	8	8	1	9	40	90
MF247.080100L55	8	8	1	9	55	90
MF247.080150L25	8	8	1,5	9	25	90
MF247.080150L40	8	8	1,5	9	40	90
MF247.080150L55	8	8	1,5	9	55	90
MF247.080200L25	8	8	2	9	25	90
MF247.080200L40	8	8	2	9	40	90
MF247.080200L55	8	8	2	9	55	90
MF247.100050L30	10	10	0,5	11	30	100
MF247.100050L45	10	10	0,5	11	45	100
MF247.100050L60	10	10	0,5	11	60	100
MF247.100100L30	10	10	1	11	30	100
MF247.100100L45	10	10	1	11	45	100
MF247.100100L60	10	10	1	11	60	100
MF247.100200L30	10	10	2	11	30	100
MF247.100200L45	10	10	2	11	45	100
MF247.100200L60	10	10	2	11	60	100
MF247.100300L30	10	10	3	11	30	100
MF247.100300L45	10	10	3	11	45	100
MF247.100300L60	10	10	3	11	60	100
MF247.120050L30	12	12	0,5	13	30	100
MF247.120050L45	12	12	0,5	13	45	100
MF247.120050L60	12	12	0,5	13	60	100
MF247.120100L30	12	12	1	13	30	100
MF247.120100L45	12	12	1	13	45	100
MF247.120100L60	12	12	1	13	60	100
MF247.120200L30	12	12	2	13	30	100
MF247.120200L45	12	12	2	13	45	100
MF247.120200L60	12	12	2	13	60	100
MF247.120300L30	12	12	3	13	30	100
MF247.120300L45	12	12	3	13	45	100
MF247.120300L60	12	12	3	13	60	100
MF247.160050L75	16	16	0,5	20	75	150
MF247.160100L75	16	16	1	20	75	150
MF247.160200L75	16	16	2	20	75	150
MF247.160300L75	16	16	3	20	75	150
MF247.160400L75	16	16	4	20	75	150



**Fresa MD Hélice Variable – Z4**

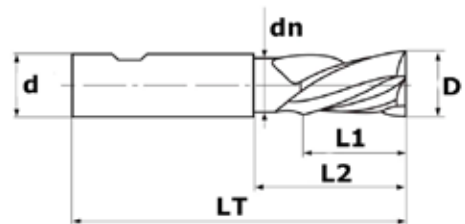
- Corte Hélice: 35/38° - Modelo: Z-4
- Recubrimiento: ALTIN-TITAN - Material: Micrograno 0.6um
- Uso: General - Dureza: <56HRC - Mango: Cilíndrico / Weldon
- Clafán en esquina 45°



Referencia Mango Cilíndrico	Referencia Mango Weldon	D	d	L1	C-45°	LT
MF252.0300	MF253.0300	3	6	8	0.05	50
MF252.0400	MF253.0400	4	6	11	0.05	50
MF252.0500	MF253.0500	5	6	13	0.07	50
MF252.0600	MF253.0600	6	6	16	0.10	50
MF252.0800	MF253.0800	8	8	19	0.15	60
MF252.1000	MF253.1000	10	10	22	0.15	73
MF252.1200	MF253.1200	12	12	26	0.25	75
MF252.1201		12	12	35	0.25	83
MF252.1400	MF253.1400	14	14	30	0.30	85
MF252.1600	MF253.1600	16	16	32	0.35	85
MF252.1601		16	16	45	0.35	100
MF252.1602		16	16	52	0.35	100
MF252.1603		16	16	65	0.35	150
MF252.2000	MF253.2000	20	20	38	0.35	100
MF252.2001		20	20	55	0.35	104
MF252.2002		20	20	70	0.35	150

**Fresa MD Hélice Variable Plus – Z4**

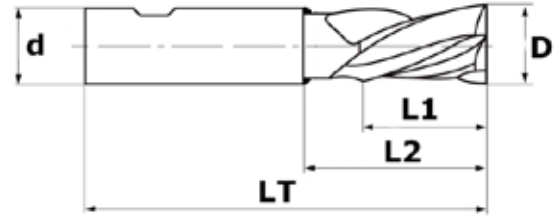
- Corte Hélice: 35/38°
- Modelo: Z-4
- Recubrimiento: AltinNano
- Material: Micrograno 0.6um
- Uso: General - Dureza: <56HRC
- Mango: Cilíndrico o Weldon
- Clafán en esquina 45°



Referencia Mango Cilíndrico	Referencia Mango Weldon	D	d	L1	L2	C-45°	LT
MF255.030	MF256.030	3	6	8	20	0.05	57
MF255.040	MF256.040	4	6	11	20	0.05	57
MF255.050	MF256.050	5	6	13	21	0.07	57
MF255.060	MF256.060	6	6	13	21	0.10	57
MF255.080	MF256.080	8	8	19	27	0.15	63
MF255.100	MF256.100	10	10	22	32	0.15	73
MF255.120	MF256.120	12	12	26	38	0.20	83
MF255.140	MF256.140	14	14	30	40	0.20	84
MF255.160	MF256.160	16	16	32	44	0.30	92
MF255.200	MF256.200	20	20	38	55	0.30	104

### Fresa MD Hélice Variable TOP – Z4

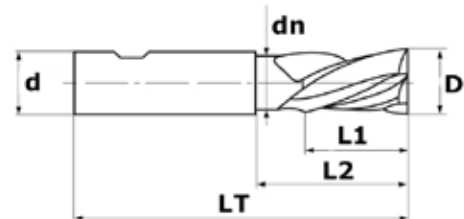
- Corte Hélice: 43/45°
- Modelo: Z-4
- Recubrimiento: AlCrN
- Material: Micrograno 0.6um
- Uso: General - Dureza: <56HRC
- Mango: Cilíndrico o Weldon
- Claflán en esquina



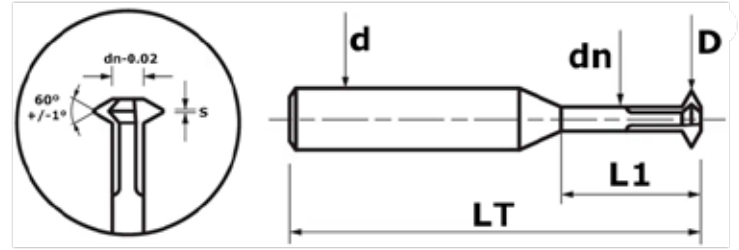
Referencia Mango Cilíndrico	Referencia Mango Weldon	D	d	L1	C-45°	LT
MF260.060	MF261.060	6	6	13	0.20	57
MF260.080	MF261.080	8	8	19	0.25	63
MF260.100	MF261.100	10	10	22	0.35	73
MF260.120	MF261.120	12	12	26	0.35	83
MF260.140	MF261.140	14	14	30	0.40	84
MF260.160	MF261.160	16	16	32	0.40	92
MF260.200	MF261.200	20	20	38	0.40	104

### Fresa MD Hélice Variable TOP – Z4 - Cuello Reducido

- Corte Hélice: 43/45°
- Modelo: Z-4
- Recubrimiento: AlCrN
- Material: Micrograno 0.6um
- Uso: General - Dureza: <56HRC
- Cuello Reducido
- Mango: Cilíndrico o Weldon
- Claflán en esquina



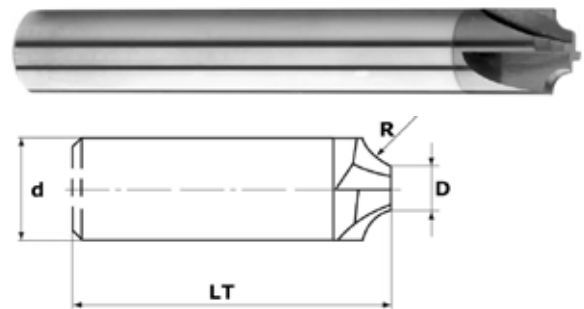
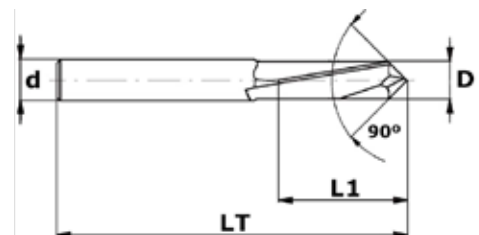
Referencia Mango Cilíndrico	Referencia Mango Weldon	D	d	L1	L2	C-45°	LT
MF262.030	MF263.030	3	6	8	11	0.07	57
MF262.030L	MF263.030L	3	6	8	20	0.07	57
MF262.040	MF263.040	4	6	11	14	0.09	57
MF262.040L	MF263.040L	4	6	11	20	0.09	57
MF262.050	MF263.050	5	6	13	16	0.12	57
MF262.050L	MF263.050L	5	6	13	20	0.12	57
MF262.060	MF263.060	6	6	13	21	0.20	57
MF262.080	MF263.080	8	8	19	27	0.25	63
MF262.100	MF263.100	10	10	22	32	0.35	73
MF262.120	MF263.120	12	12	26	38	0.35	83
MF262.140	MF263.140	14	14	30	40	0.40	84
MF262.160	MF263.160	16	16	32	44	0.40	92
MF262.200	MF263.200	20	20	38	55	0.40	104

**Fresa MD - Para Roscado**


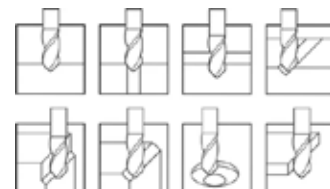
Referencia	Métrica	D	S	d   ± 0,05	I1	I2
MF264.008	M0,8	0,57	0,01	3	39	2,4
MF264.009	M0,9	0,64	0,01	3	39	2,7
MF264.010	M1	0,71	0,015	3	39	3
MF264.012	M1,2	0,91	0,015	3	39	3,6
MF264.014	M1,4	1,06	0,2	3	39	4,2
MF264.016	M1,6	1,2	0,2	3	39	4,8
MF264.018	M1,8	1,35	0,2	3	39	5,5
MF264.020	M2	1,5	0,2	3	39	6
MF264.025	M2,5	1,9	0,025	3	39	7
MF264.030	M3	2,3	0,03	6	66	9
MF264.040	M4	3,1	0,04	6	66	12
MF264.050	M5	4	0,05	6	66	15
MF264.060	M6	4,8	0,07	6	75	18
MF264.080	M8	6,5	0,08	6	80	22
MF264.100	M10	7,9	0,09	6	80	26

**Fresa Concava MD**

Referencia	R	Dc	d - h6	I1	Z
MF266.005	0,5	5	6	57	4
MF266.010	1	4	6	57	4
MF266.015	1,5	5	8	63	4
MF266.020	2	4	8	63	4
MF266.025	2,5	5	10	72	4
MF266.030	3	4	12	72	4
MF266.035	3,5	5	12	83	4
MF266.040	4	4	12	83	4
MF266.050	5	4	14	83	4


**Fresa Multifunción 90° - Z2**


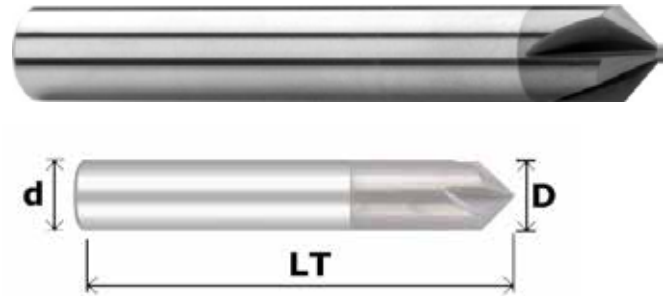
Referencia	α   K12	D   h6	d	I1	I2	Z
MF268.030	90°	3	4	50	6	2
MF268.040	90°	4	5	50	8	2
MF268.050	90°	5	6	50	10	2
MF268.060	90°	6	8	60	12	2
MF268.080	90°	8	10	60	16	2
MF268.100	90°	10	12	70	18	2
MF268.120	90°	12	12	70	20	2



### Fresa MD Achlaflanar 60°

- Modelo: Z-4
- Recubrimiento: Altin
- Uso: General
- Modelo 60°

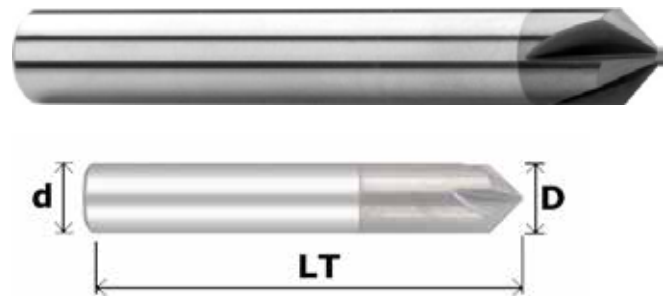
Referencia	D	d	LT
MF350.040	4	4	50
MF350.060	6	6	50
MF350.080	8	8	60
MF350.100	10	10	72
MF350.120	12	12	75



### Fresa MD Achlaflanar 90°

- Modelo: Z-4 / Z-6
- Recubrimiento: Altin
- Uso: General
- Modelo 90°

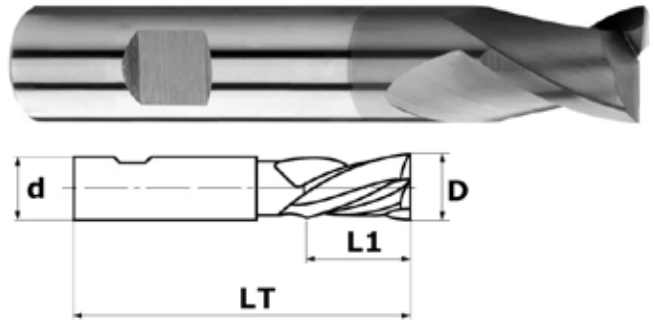
Referencia	D	d	LT	Z
MF352.040	4	4	50	4
MF352.060	6	6	50	4
MF352.080	8	8	60	4
MF352.086	8	8	60	6
MF352.100	10	10	72	4
MF352.1006	10	10	72	6
MF352.120	12	12	75	4
MF352.1206	12	12	75	6
MF352.160	16	16	92	4
MF352.1606	16	16	92	6



**Fresa MD – NXPro - Weldon Z-2**

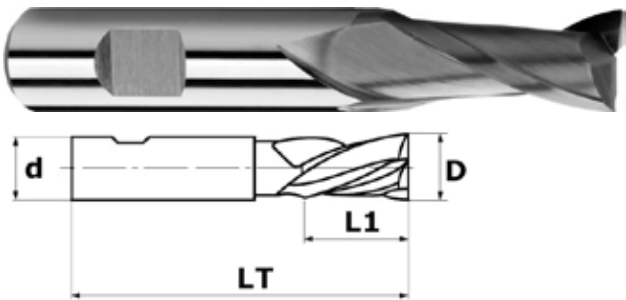
Referencia	D	d	L1	LT	Z
MF414.030	3	6	4	50	2
MF414.035	3.5	6	4	50	2
MF414.040	4	6	5	54	2
MF414.045	4.5	6	5	54	2
MF414.050	5	6	6	54	2
MF414.060	6	6	7	54	2
MF414.070	7	8	8	58	2
MF414.080	8	8	9	58	2
MF414.090	9	10	10	66	2
MF414.100	10	10	11	66	2
MF414.120	12	12	12	73	2
MF414.140	14	14	14	75	2
MF414.160	16	16	16	82	2
MF414.180	18	18	18	84	2
MF414.200	20	20	20	92	2

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: AlTiN
- Amarre: Weldon


**Fresa MD – NXPro - Serie Larga - Weldon Z-2**

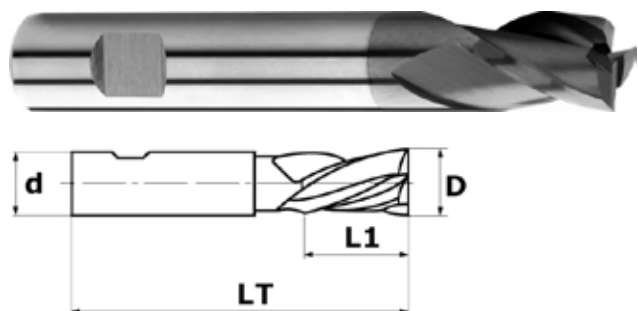
Referencia	D	d	L1	LT	Z
MF415.030	3	6	7	57	2
MF415.035	3.5	6	7	57	2
MF415.040	4	6	8	57	2
MF415.045	4.5	6	8	57	2
MF415.050	5	6	10	57	2
MF415.060	6	6	10	57	2
MF415.070	7	8	13	63	2
MF415.080	8	8	16	63	2
MF415.090	9	10	16	72	2
MF415.100	10	10	19	72	2
MF415.120	12	12	22	83	2
MF415.140	14	14	22	83	2
MF415.160	16	16	26	92	2
MF415.180	18	18	26	92	2
MF415.200	20	20	32	104	2

- Corte Hélice: 30°
- Modelo: Z-2
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Larga


**Fresa MD – NXPro - Weldon Z-3**

Referencia	D	d	L1	LT	Z
MF416.030	3	6	4	50	3
MF416.035	3.5	6	4	50	3
MF416.040	4	6	5	54	3
MF416.045	4.5	6	5	54	3
MF416.050	5	6	6	54	3
MF416.060	6	6	7	54	3
MF416.070	7	8	8	58	3
MF416.080	8	8	9	58	3
MF416.090	9	10	10	66	3
MF416.100	10	10	11	66	3
MF416.120	12	12	12	73	3
MF416.140	14	14	14	75	3
MF416.160	16	16	16	82	3
MF416.180	18	18	18	84	3
MF416.200	20	20	20	92	3

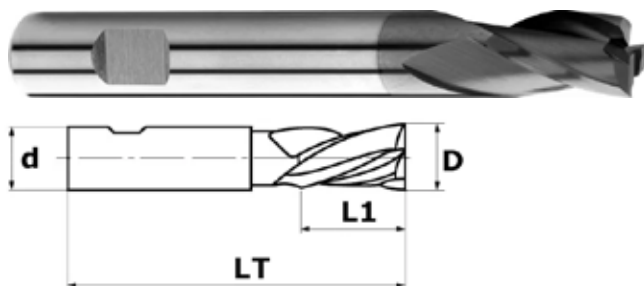
- Corte Hélice: 30°
- Modelo: Z-3
- Recubrimiento: AlTiN
- Amarre: Weldon



**Fresa MD – NXPro - Serie Larga - Weldon Z-3**

Referencia	D	d	L1	LT	Z
MF417.030	3	6	7	57	3
MF417.035	3.5	6	7	57	3
MF417.040	4	6	8	57	3
MF417.045	4.5	6	8	57	3
MF417.050	5	6	10	57	3
MF417.060	6	6	10	57	3
MF417.070	7	8	13	63	3
MF417.080	8	8	16	63	3
MF417.090	9	10	16	72	3
MF417.100	10	10	19	72	3
MF417.120	12	12	22	83	3
MF417.140	14	14	22	83	3
MF417.160	16	16	26	92	3
MF417.180	18	18	26	92	3
MF417.200	20	20	32	104	3

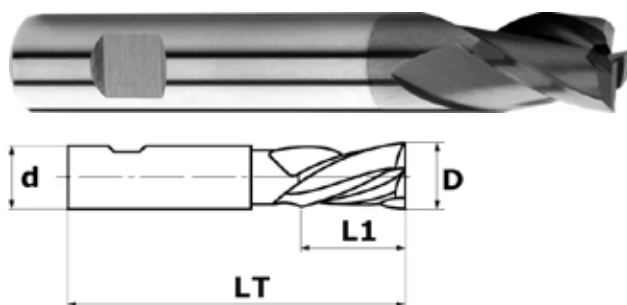
- Corte Hélice: 30°
- Modelo: Z-3
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Larga



**Fresa MD – NXPro - Weldon Z-3**

Referencia	D	d	L1	LT	Z
MF418.030	3	6	4	50	3
MF418.035	3.5	6	4	50	3
MF418.040	4	6	5	54	3
MF418.045	4.5	6	5	54	3
MF418.050	5	6	6	54	3
MF418.060	6	6	7	54	3
MF418.070	7	8	8	58	3
MF418.080	8	8	9	58	3
MF418.090	9	10	10	66	3
MF418.100	10	10	11	66	3
MF418.120	12	12	12	73	3
MF418.140	14	14	14	75	3
MF418.160	16	16	16	82	3
MF418.180	18	18	18	84	3
MF418.200	20	20	20	92	3

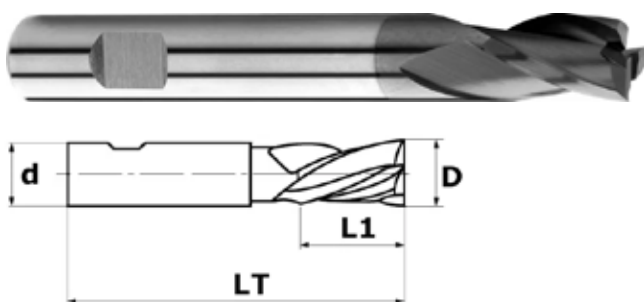
- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento: AlTiN
- Amarre: Weldon



**Fresa MD – NXPro - Serie Larga - Weldon Z-3**

Referencia	D	d	L1	LT	Z
MF419.030	3	6	7	57	3
MF419.035	3.5	6	7	57	3
MF419.040	4	6	8	57	3
MF419.045	4.5	6	8	57	3
MF419.050	5	6	10	57	3
MF419.060	6	6	10	57	3
MF419.070	7	8	13	63	3
MF419.080	8	8	16	63	3
MF419.090	9	10	16	72	3
MF419.100	10	10	19	72	3
MF419.120	12	12	22	83	3
MF419.140	14	14	22	83	3
MF419.160	16	16	26	92	3
MF419.180	18	18	26	92	3
MF419.200	20	20	32	104	3

- Corte Hélice: 45°
- Modelo: Z-3
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Larga

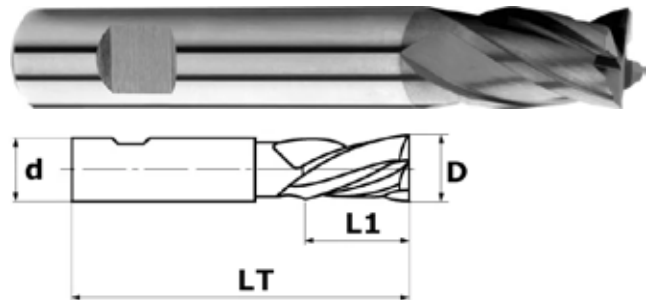




**Fresa MD – NXPro - Weldon Z-4**

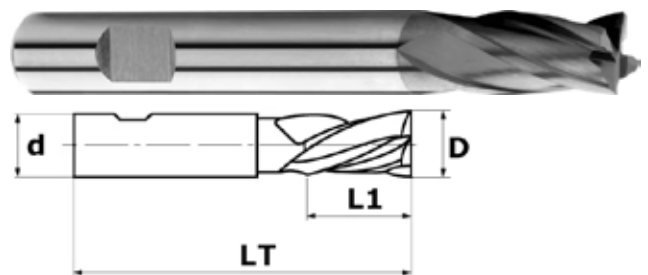
- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: AlTiN
- Amarre: Weldon

Referencia	D	d	L1	LT	Z
MF420.030	3	6	4	50	4
MF420.035	3.5	6	4	50	4
MF420.040	4	6	5	54	4
MF420.045	4.5	6	5	54	4
MF420.050	5	6	6	54	4
MF420.060	6	6	7	54	4
MF420.070	7	8	8	58	4
MF420.080	8	8	9	58	4
MF420.090	9	10	10	66	4
MF420.100	10	10	11	66	4
MF420.120	12	12	12	73	4
MF420.140	14	14	14	75	4
MF420.160	16	16	16	82	4
MF420.180	18	18	18	84	4
MF420.200	20	20	20	92	4


**Fresa MD – NXPro - Serie Larga - Weldon Z-4**

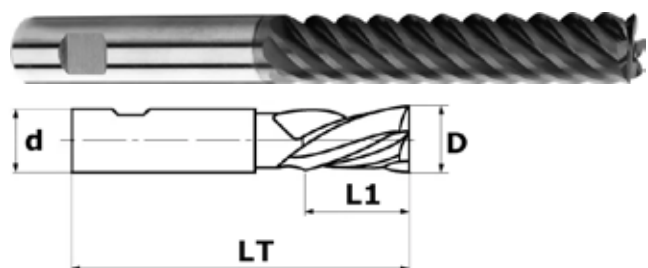
- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Larga

Referencia	D	d	L1	LT	Z
MF421.030	3	6	7	57	4
MF421.035	3.5	6	7	57	4
MF421.040	4	6	8	57	4
MF421.045	4.5	6	8	57	4
MF421.050	5	6	10	57	4
MF421.060	6	6	10	57	4
MF421.070	7	8	13	63	4
MF421.080	8	8	16	63	4
MF421.090	9	10	16	72	4
MF421.100	10	10	19	72	4
MF421.120	12	12	22	83	4
MF421.140	14	14	22	83	4
MF421.160	16	16	26	92	4
MF421.180	18	18	26	92	4
MF421.200	20	20	32	104	4


**Fresa MD – NXPro - Weldon Z-6**

- Corte Hélice: 45°
- Modelo: Z-6
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Larga

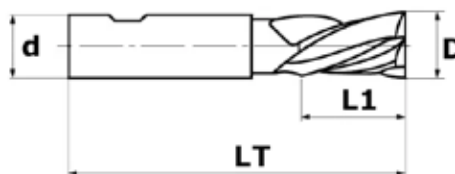
Referencia	D	d	L1	LT	Z
MF422.060	6	6	18	62	6
MF422.080	8	8	24	68	6
MF422.100	10	10	30	80	6
MF422.120	12	12	36	93	6
MF422.140	14	14	45	100	6
MF422.160	16	16	48	108	6
MF422.180	18	18	55	115	6
MF422.200	20	20	60	126	8



**Fresa MD – NXPro - Weldon Z-6 - Serie Larga**

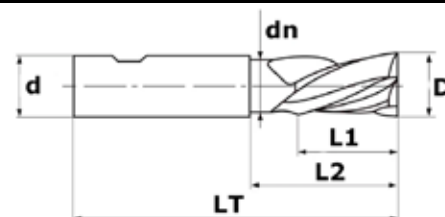
- Corte Hélice: 45°
- Modelo: Z-6
- Recubrimiento: AlTiN
- Amarre: Weldon
- Serie Extra Larga

Referencia	D	d	L1	LT	Z
MF423.060	6	6	36	80	6
MF423.080	8	8	46	90	6
MF423.100	10	10	50	100	6
MF423.120	12	12	65	120	6
MF423.160	16	16	80	140	6
MF423.200	20	20	94	160	8



**Fresa MD Variable – NXPro - Weldon Z-4**

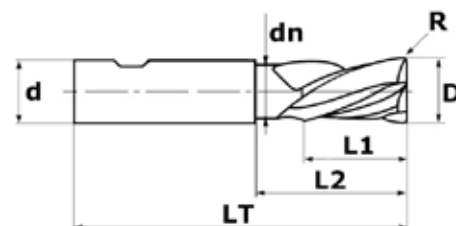
- Corte Hélice: 40/42°
- Modelo: Z-4
- Recubrimiento: AlCr
- Amarre: Weldon



Referencia	D	d	dn	L2	L1	LT	Z
MF424.030	3	6	8.8	14	8	57	4
MF424.035	3.5	6	3.3	16	10	57	4
MF424.040	4	6	3.8	16	11	57	4
MF424.045	4.5	6	4.3	18	11	57	4
MF424.050	5	6	4.8	18	13	57	4
MF424.060	6	6	5.7	19	13	57	4
MF424.080	8	8	7.6	25	19	63	4
MF424.100	10	10	9.5	30	22	72	4
MF424.120	12	12	11.5	36	26	83	4
MF424.140	14	14	13.5	36	26	83	4
MF424.160	16	16	15.5	42	32	92	4
MF424.180	18	18	17.5	42	32	92	4
MF424.200	20	20	19.5	52	38	104	4

**Fresa MD Variable Tórica – NXPro - Weldon Z-4**

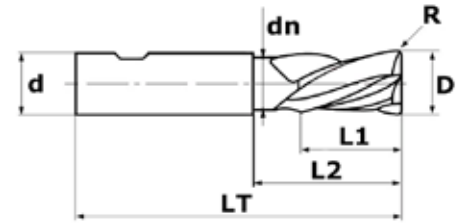
- Corte Hélice: 40/42°
- Modelo: Z-4
- Recubrimiento: AlCr
- Amarre: Weldon



Referencia	D	d	dn	L2	R	L1	LT	Z
MF425.06005	6	6	5.7	19	0.5	13	57	4
MF425.06010	6	6	5.7	19	1	13	57	4
MF425.08005	8	8	7.6	25	0.5	19	63	4
MF425.08010	8	8	7.6	25	1	19	63	4
MF425.10005	10	10	9.5	30	0.5	22	72	4
MF425.10010	10	10	9.5	30	1	22	72	4
MF425.10020	10	10	9.5	30	2	22	72	4
MF425.12005	12	12	11.5	36	0.5	26	83	4
MF425.12010	12	12	11.5	36	1	26	83	4
MF425.12020	12	12	11.5	36	2	26	83	4
MF425.16005	16	16	15.5	42	0.5	32	92	4
MF425.16010	16	16	15.5	42	1	32	92	4
MF425.16020	16	16	15.5	42	2	32	92	4

**Fresa MD Variable Tórica – NXPro - Weldon Z-5**

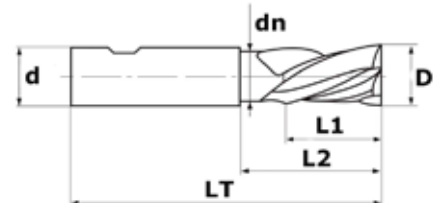
- Corte Hélice: 37/38°
- Modelo: Z-5
- Recubrimiento: AlcrN
- Amarre: Weldon
- Cuello Rebajado
- Uso Fresado Trocoidal



Referencia	D	d	dn	L2	L1	LT	R	Z
MF427.060	6	6	5.7	24	18	62	-	5
MF427.06005	6	6	5.7	24	18	62	0.5	5
MF427.060010	6	6	5.7	24	18	62	1	5
MF427.080	8	8	7.6	30	24	68	-	5
MF427.08005	8	8	7.6	30	24	68	0.5	5
MF427.08010	8	8	7.6	30	24	68	1	5
MF427.100	10	10	9.5	38	30	80	-	5
MF427.10005	10	10	9.5	38	30	80	0.5	5
MF427.10010	10	10	9.5	38	30	80	1	5
MF427.10020	10	10	9.5	38	30	80	2	5
MF427.120	12	12	11.5	46	36	93	-	5
MF427.12005	12	12	11.5	46	36	93	0.5	5
MF427.12010	12	12	11.5	46	36	93	1	5
MF427.12020	12	12	11.5	46	36	93	2	5
MF427.160	16	16	15.5	58	48	108	-	5
MF427.16005	16	16	15.5	58	48	108	0.5	5
MF427.16010	16	16	15.5	58	48	108	1	5
MF427.16020	16	16	15.5	58	48	108	2	5
MF427.200	20	20	19.5	74	60	126	-	5
MF427.20010	20	20	19.5	74	60	126	1	5
MF427.20020	20	20	19.5	74	60	126	2	5
MF427.20030	20	20	19.5	74	60	126	3	5
MF427.250	25	25	24	92	75	150	-	5

**Fresa MD – NXSP - Weldon Z-5**

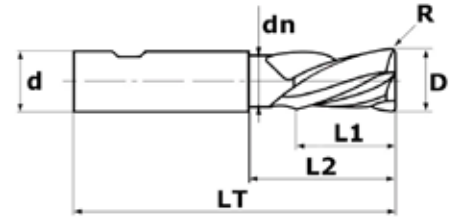
- Corte Hélice: 55°
- Modelo: Z-4
- Recubrimiento: Alcr
- Amarre: Weldon
- Uso materiales especiales



Referencia	D	d	dn	L2	L1	LT	Z
MF428.060	6	6	5.7	19	13	57	5
MF428.080	8	8	7.6	25	19	63	5
MF428.100	10	10	9.5	30	22	72	5
MF428.120	12	12	11.5	36	26	83	5
MF428.140	14	14	13.5	36	26	83	5
MF428.160	16	16	15.5	42	32	92	5
MF428.180	18	18	17.5	42	32	92	5
MF428.200	20	20	19.5	52	38	104	5

**Fresa MD Variable Tórica – NXPro - Weldon Z-5**

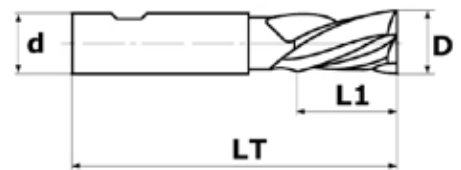
- Corte Hélice: 41/42
- Modelo: Z-5
- Recubrimiento: Alcr
- Amarre: Weldon
- Cuello Rebajado
- Uso Fresado Trocoidal



Referencia	D	d	dn	L2	L1	LT	R	Z
MF429.060	6	6	5.7	24	18	62	-	5
MF429.06005	6	6	5.7	24	18	62	0.5	5
MF429.060010	6	6	5.7	24	18	62	1	5
MF429.080	8	8	7.6	30	24	68	-	5
MF429.08005	8	8	7.6	30	24	68	0.5	5
MF429.08010	8	8	7.6	30	24	68	1	5
MF429.100	10	10	9.5	38	30	80	-	5
MF429.10005	10	10	9.5	38	30	80	0.5	5
MF429.10010	10	10	9.5	38	30	80	1	5
MF429.10020	10	10	9.5	38	30	80	2	5
MF429.120	12	12	11.5	46	36	93	-	5
MF429.12005	12	12	11.5	46	36	93	0.5	5
MF429.12010	12	12	11.5	46	36	93	1	5
MF429.12020	12	12	11.5	46	36	93	2	5
MF429.160	16	16	15.5	58	48	108	-	5
MF429.16005	16	16	15.5	58	48	108	0.5	5
MF429.16010	16	16	15.5	58	48	108	1	5
MF429.16020	16	16	15.5	58	48	108	2	5
MF429.200	20	20	19.5	74	60	126	-	5
MF429.20010	20	20	19.5	74	60	126	1	5
MF429.20020	20	20	19.5	74	60	126	2	5
MF429.20030	20	20	19.5	74	60	126	3	5
MF429.250	25	25	24	92	75	150	-	5

**Fresa MD Desbaste – NXPro - Weldon Z-4**

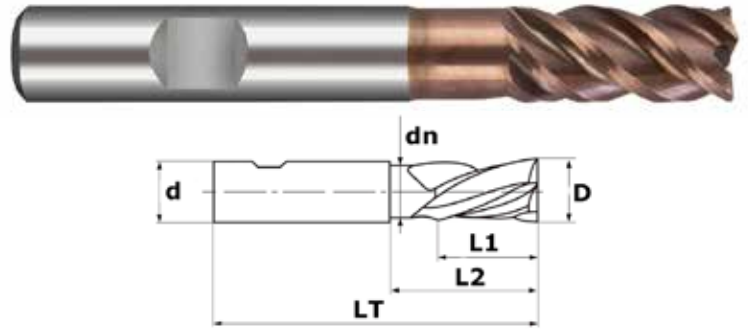
- Corte Hélice: 45°
- Modelo: Z-4
- Recubrimiento: AlTiN
- Amarre: Weldon
- Desbaste con rompeviruta



Referencia	D	d	L1	LT	Z
MF430.040	4	6	11	57	4
MF430.050	5	6	13	57	4
MF430.060	6	6	13	57	4
MF430.080	8	8	19	63	4
MF430.100	10	10	22	72	4
MF430.120	12	12	26	83	4
MF430.140	14	14	26	83	4
MF430.160	16	16	32	92	4
MF430.180	18	18	32	92	4
MF430.200	20	20	38	104	4

**Fresa MD Variable NXTita – Z4**

- Corte Hélice Variable : 43/45°
- Modelo: Z-4
- Recubrimiento: ALTIN TITAN
- Amarre: Cilíndrico / Weldon
- Para uso en materiales: Acero Inoxidable, Titanio, Aleaciones Titanio y Aleaciones Resistentes al Calor.



Referencia	Referencia Mango Weldon	D	d	L1	L2	Chafilán 45°	LT
MF431.030	MF432.030	3	6	8	11	0,07	57
MF431.0301	MF432.0301	3	6	8	20	0,07	57
MF431.040	MF432.040	4	6	11	14	0,09	57
MF431.0401	MF432.0401	4	6	11	20	0,09	57
MF431.050	MF432.050	5	6	13	16	0,12	57
MF431.0501	MF432.0501	5	6	13	21	0,12	57
MF431.060	MF432.060	6	6	13	21	0,2	57
MF431.080	MF432.080	8	8	19	27	0,25	63
MF431.100	MF432.100	10	10	22	32	0,35	73
MF431.120	MF432.120	12	12	26	38	0,35	83
MF431.140	MF432.140	14	14	30	40	0,4	84
MF431.160	MF432.160	16	16	32	44	0,5	92
MF431.180	MF432.180	20	20	38	55	0,5	104

**Fresa MD Hélice Variable - Z5 Refrigerada**

- Corte Hélice Variable : 43/45°
- Modelo: Z-5
- Mango reducido cónico a 1°
- Hasta 56HRC
- Refrigeración Central
- Recubrimiento: ALTIN TITAN
- Amarre: Cilíndrico
- Uso General de alto rendimiento



Referencia	D	d	L1	L2	Chafilán 45°	LT
MF433.0600	6	6	14	-	0,1	53
MF433.0601	6	6	14	32	0,1	65
MF433.0602	6	6	14	42	0,1	75
MF433.0603	6	6	14	51	0,1	81
MF433.0800	8	8	18	-	0,1	60
MF433.0801	8	8	18	42	0,1	75
MF433.0802	8	8	18	58	0,1	90
MF433.0803	8	8	18	71	0,1	109
MF433.1000	10	10	22	-	0,15	65
MF433.1001	10	10	22	51	0,15	81
MF433.1002	10	10	22	71	0,15	109
MF433.1003	10	10	22	82	0,15	109
MF433.1200	12	12	26	-	0,2	81
MF433.1201	12	12	26	51	0,2	81
MF433.1202	12	12	26	71	0,2	109
MF433.1203	12	12	26	86	0,2	117
MF433.1600	16	16	38	-	0,2	81
MF433.1601	16	16	38	61	0,2	109
MF433.1602	16	16	38	76	0,2	109
MF433.1603	16	16	38	101	0,2	150
MF433.2000	20	20	45	-	0,2	100
MF433.2001	20	20	45	71	0,2	109
MF433.2002	20	20	45	86	0,2	130
MF433.2003	20	20	45	101	0,2	150

### Fresa MD Hélice Variable - Z5 Refrigerada Radio

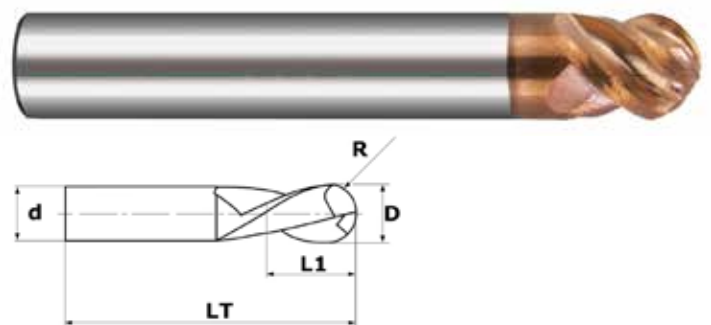
- Corte Hélice Variable : 43/45°
- Modelo: Z-5 - Con Radio
- Mango reducido cónico a 1°
- Hasta 56HRC
- Refrigeración Central
- Recubrimiento: ALTIN TITAN
- Amarre: Cilíndrico
- Uso General de alto rendimiento



Referencia	D	d	L1	R	L2	Chaflán 45°	LT
MF434.0605	6	6	14	0,5	-	0,5	53
MF434.0601	6	6	14	0,5	32	0,5	65
MF434.0602	6	6	14	0,5	42	0,5	75
MF434.0603	6	6	14	0,5	51	0,5	81
MF434.0801	8	8	18	0,5	-	0,5	60
MF434.0802	8	8	18	0,5	42	0,5	75
MF434.0803	8	8	18	0,5	58	0,5	90
MF434.0804	8	8	18	0,5	71	0,5	109
MF434.1000	10	10	22	0,5	-	0,5	65
MF434.1001	10	10	22	0,5	51	0,5	81
MF434.1002	10	10	22	0,5	71	0,5	109
MF434.1003	10	10	22	0,5	82	0,5	109
MF434.1200	12	12	26	1	-	1	81
MF434.1201	12	12	26	1	51	1	81
MF434.1202	12	12	26	1	71	1	109
MF434.1203	12	12	26	1	86	1	117
MF434.1600	16	16	38	2	-	2	81
MF434.1601	16	16	38	2	61	2	109
MF434.1602	16	16	38	2	76	2	109
MF434.1603	16	16	38	2	101	2	150
MF434.2000	20	20	45	2	-	2	100
MF434.2001	20	20	45	2	71	2	109
MF434.2002	20	20	45	2	86	2	130
MF434.2003	20	20	45	2	101	2	150

### Fresa MD Bola Hélice Variable

- Corte Hélice Variable : 38°
- Modelo: Z-4
- Hasta 65HRC
- Recubrimiento: ALTISIN
- Amarre: Cilíndrico
- Uso General de alto rendimiento

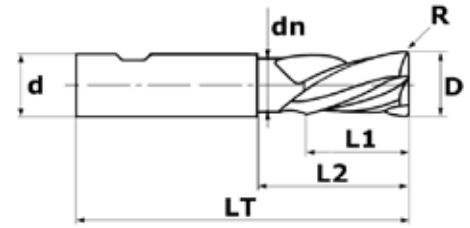


Referencia	D	d	L1	LT
MF435.0600	6	6	8	50
MF435.0601	6	6	8	80
MF435.0602	6	6	8	100
MF435.0603	6	6	8	150
MF435.0800	8	8	10	60
MF435.0801	8	8	10	100
MF435.0802	8	8	10	150
MF435.1000	10	10	13	72
MF435.1001	10	10	13	100
MF435.1002	10	10	13	150
MF435.1003	10	10	13	200
MF435.1200	12	12	15	75
MF435.1201	12	12	15	100
MF435.1202	12	12	15	150
MF435.1203	12	12	15	200



**Fresa MD Alto Avance**

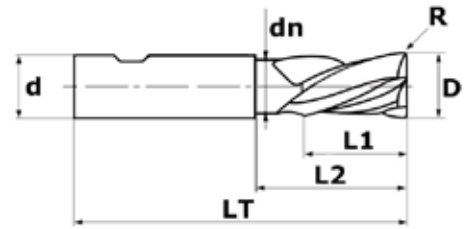
- Corte Hélice: 0°
- Modelo: Z-4
- Hasta 65HRC
- Recubrimiento: ALTISIN
- Amarre: Cilíndrico
- Uso General de alto rendimiento



Referencia	D	d	R	L1	L2	LT
MF450.030	3	6	0,5	1,5	12	60
MF450.040	4	6	0,5	2	12	60
MF450.041	4	6	1	2	12	60
MF450.060	6	6	1	3	14	60
MF450.061	6	6	1.5	3	15	60
MF450.080	8	8	2	4	20	60
MF450.081	8	8	0.5	4	20	60
MF450.082	8	8	1	4	20	60
MF450.100	10	10	2	5	20	72
MF450.101	10	10	0.5	5	25	75
MF450.102	10	10	1	5	25	75
MF450.120	12	12	2	6	22	83
MF450.121	12	12	1	6	30	75

**Fresa MD Alto Avance - Serie Larga**

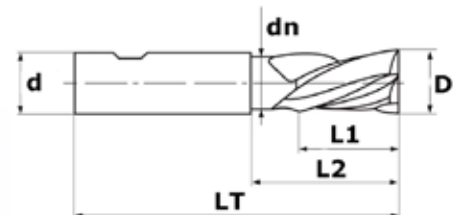
- Corte Hélice: 0°
- Modelo: Z-4
- Hasta 65HRC
- Recubrimiento: ALTISIN
- Amarre: Cilíndrico
- Uso General de alto rendimiento



Referencia	D	d	R	L1	L2	LT
MF451.030	3	6	0,5	1,5	20	80
MF451.040	4	6	0,5	2	20	80
MF451.060	6	6	1	3	30	80
MF451.080	8	8	2	4	40	80
MF451.100	10	10	2	5	50	100
MF451.120	12	12	2	6	50	110

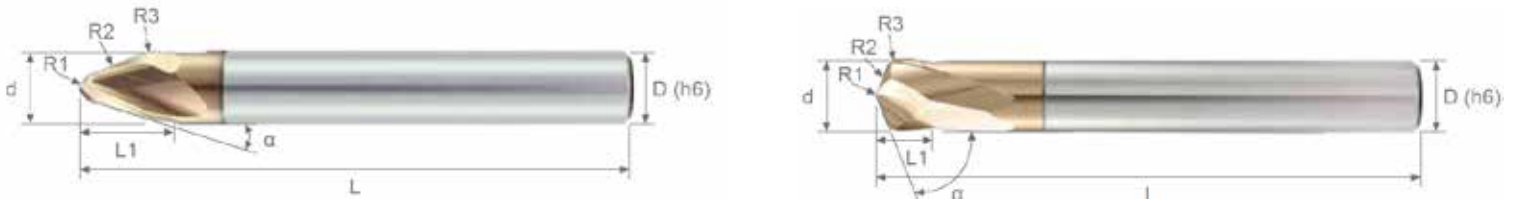
**Fresa MD Z5 - Trocoidal**

- Corte Hélice: 40°
- Modelo: Z-5
- Hasta 56HRC
- Recubrimiento: ALTIN-Nano
- Amarre: Cilíndrico
- Uso General de alto rendimiento



Referencia	D	d	L1	L2	Chaflán 45°	LT
MF455.060	6	6	18	25	0,1	62
MF455.080	8	8	24	30	0,15	70
MF455.100	10	10	30	35	0,2	80
MF455.120	12	12	36	45	0,2	94
MF455.160	16	16	48	55	0,4	110
MF455.200	20	20	60	70	0,4	126

**Fresa MD Forma A - Para 5X**



Referencia	$\alpha^\circ$	d	R1	R2	R3	L1	L	D	Z
MF510.0820	20	8	1.5	250	4.0	10.5	75	8	3
MF510.1020	20	10	2.0	250	5.0	12.5	75	10	3
MF510.1060	60	10	1.0	200	1.5	6.0	75	10	2

**Fresa MD Forma B - Para 5X**



Referencia	R	$\alpha^\circ$	L1	L	da	D	Z
MF511.0300	0.5	6	20	60	3.00	6	3
MF511.0380	1.0	6	19	60	3.80	6	3
MF511.0340	0.5	8	18	60	3.40	6	3
MF511.0385	1.0	8	15	60	3.85	6	3

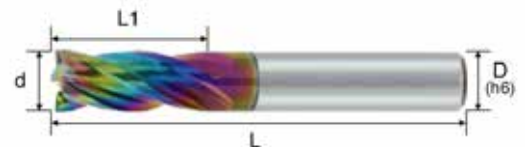
**Fresa MD Forma C - Para 5X**



Referencia	d	R1	R2	L1	L	D	Z
MF512.080	8	1	90	25	75	8	3
MF512.100	10	2	85	26	75	10	4

**Fresa MD para Grafito - Z4**

- Corte Hélice: 30°
- Modelo: Z-4
- Recubrimiento: DLC
- Amarre: Cilíndrico
- Para uso en materiales de Grafito o especiales

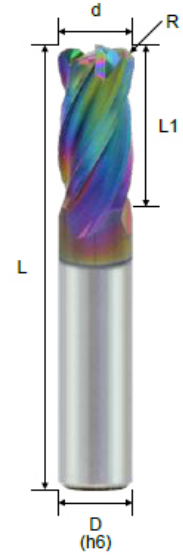


Referencia	d	L1	L	D	Z
MF520.030	3	8	50	4	4
MF520.0404	4	10	50	4	4
MF520.0406	4	10	50	6	4
MF520.050	5	13	50	6	4
MF520.060	6	15	50	6	4
MF520.080	8	20	60	8	4
MF520.100	10	25	75	10	4
MF520.120	12	30	75	12	4

**Fresa MD para Grafito - Tórica Z-4**

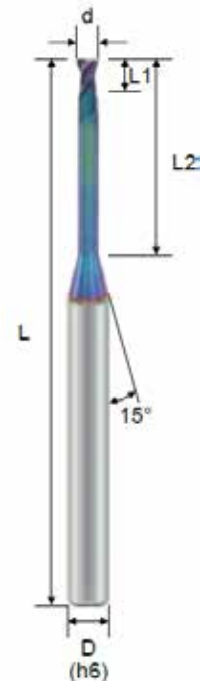
- Corte Hélice: 30° / Modelo: Z-4
- Radio Tórico / Amarre: Cilíndrico
- Recubrimiento: DLC
- Para uso en materiales de Grafito o Especiales

Referencia	d	R	L1	L	D	Z
MF525.03034	3	0.3	6	50	4	4
MF525.03054	3	0.5	6	50	4	4
MF525.03104	3	1.0	6	50	4	4
MF525.03036	3	0.3	6	50	6	4
MF525.03056	3	0.5	6	50	6	4
MF525.03106	3	1.0	6	50	6	4
MF525.04034	4	0.3	8	50	4	4
MF525.04054	4	0.5	8	50	4	4
MF525.04104	4	1.0	8	50	4	4
MF525.04036	4	0.3	8	50	6	4
MF525.04056	4	0.5	8	50	6	4
MF525.04106	4	1.0	8	50	6	4
MF525.05056	5	0.5	10	50	6	4
MF525.05106	5	1.0	10	50	6	4
MF525.06036	6	0.3	12	50	6	4
MF525.06056	6	0.5	12	50	6	4
MF525.06106	6	1.0	12	50	6	4
MF525.08058	8	0.5	16	60	8	4
MF525.08108	8	1.0	16	60	8	4
MF525.08158	8	1.5	16	60	8	4
MF525.100510	10	0.5	20	75	10	4
MF525.101010	10	1.0	20	75	10	4
MF525.101510	10	1.5	20	75	10	4
MF525.102010	10	2.0	20	75	10	4
MF525.120512	12	0.5	24	75	12	4
MF525.121012	12	1.0	24	75	12	4
MF525.121512	12	1.5	24	75	12	4
MF525.122012	12	2.0	24	75	12	4
MF525.123012	12	3.0	24	75	12	4


**Fresa MD para Grafito - Z-2 - Mango 4mm**

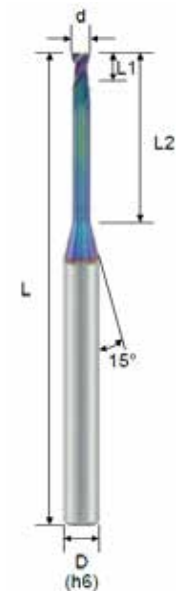
- Corte Hélice: 30° / Modelo: Z-4
- Radio Tórico / Amarre: Cilíndrico
- Recubrimiento: DLC
- Para uso en materiales de Grafito o Especiales

Referencia	d	L1	L2	L	D	Z
MF530.05061	0,5	0,6	4	50	4	2
MF530.05062	0,5	0,6	6	50	4	2
MF530.05063	0,5	0,6	8	50	4	2
MF530.10121	1,0	1,2	6	50	4	2
MF530.10122	1,0	1,2	8	50	4	2
MF530.10123	1,0	1,2	12	50	4	2
MF530.10124	1,0	1,2	16	50	4	2
MF530.10125	1,0	1,2	20	50	4	2
MF530.15181	1,5	1,8	8	50	4	2
MF530.15182	1,5	1,8	12	50	4	2
MF530.15183	1,5	1,8	16	50	4	2
MF530.15184	1,5	1,8	20	50	4	2
MF530.20251	2,0	2,5	10	50	4	2
MF530.20252	2,0	2,5	16	50	4	2
MF530.20253	2,0	2,5	20	50	4	2
MF530.20254	2,0	2,5	25	60	4	2



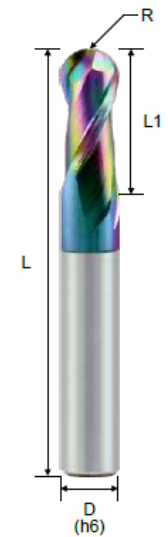
**Fresa MD para Grafito - Z-2 - Mango 6mm**

Referencia	d	L1	L2	L	D	Z
MF535.30351	3,0	3,5	12	50	6	2
MF535.30352	3,0	3,5	20	60	6	2
MF535.30353	3,0	3,5	25	60	6	2
MF535.30354	3,0	3,5	30	75	6	2
MF535.40451	4,0	4,5	16	50	6	2
MF535.40452	4,0	4,5	20	60	6	2
MF535.40453	4,0	4,5	25	60	6	2
MF535.40454	4,0	4,5	30	75	6	2
MF535.40455	4,0	4,5	35	75	6	2
MF535.50701	5,0	7,0	20	60	6	2
MF535.50702	5,0	7,0	25	60	6	2
MF535.50703	5,0	7,0	30	75	6	2
MF535.50704	5,0	7,0	35	75	6	2
MF535.601001	6,0	10,0	20	60	6	2
MF535.601002	6,0	10,0	30	75	6	2



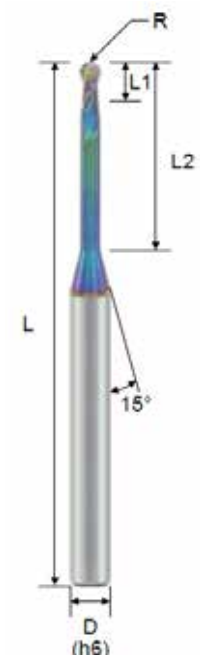
**Fresa MD para Grafito - Bola Z-2**

Referencia	R	d	L1	L	D	Z
MF540.010020	0.10	0,2	0,4	50	4	2
MF540.015030	0.15	0,3	0,6	50	4	2
MF540.020040	0.20	0,4	0,8	50	4	2
MF540.025050	0.25	0,5	1,0	50	4	2
MF540.030060	0.30	0,6	1,2	50	4	2
MF540.035070	0.35	0,7	1,4	50	4	2
MF540.040080	0.40	0,8	1,6	50	4	2
MF540.045090	0.45	0,9	1,8	50	4	2
MF540.05010	0.50	1,0	2,0	50	4	2
MF540.07515	0.75	1,5	3,0	50	4	2
MF540.1020	1.00	2,0	4,0	50	4	2
MF540.1530	1.50	3,0	6,0	50	4	2
MF540.20404	2.00	4,0	8,0	50	4	2
MF540.20406	2.00	4,0	8,0	50	6	2
MF540.2550	2.50	5,0	10,0	50	6	2
MF540.3060	3.00	6,0	12,0	50	6	2
MF540.4080	4.00	8,0	16,0	60	8	2
MF540.50100	5.00	10,0	20,0	75	10	2
MF540.60120	6.00	12,0	24,0	75	12	2



**Fresa MD para Grafito - Bola Z-2 - Cuello Reducido - Mango 4mm**

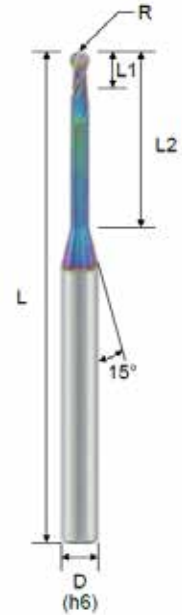
Referencia	R	d	L1	L2	L	D	Z
MF545.025051	0.25	0,5	0,5	4	50	4	2
MF545.025052	0.25	0,5	0,5	6	50	4	2
MF545.025053	0.25	0,5	0,5	8	50	4	2
MF545.050101	0.50	1,0	1,0	6	50	4	2
MF545.050102	0.50	1,0	1,0	8	50	4	2
MF545.050103	0.50	1,0	1,0	12	50	4	2
MF545.050104	0.50	1,0	1,0	16	50	4	2
MF545.050105	0.50	1,0	1,0	20	50	4	2
MF545.075151	0.75	1,5	1,5	8	50	4	2
MF545.075152	0.75	1,5	1,5	12	50	4	2
MF545.075153	0.75	1,5	1,5	16	50	4	2
MF545.075154	0.75	1,5	1,5	20	50	4	2
MF545.100201	1.00	2,0	2,0	10	50	4	2
MF545.100202	1.00	2,0	2,0	16	50	4	2
MF545.100203	1.00	2,0	2,0	20	50	4	2
MF545.100204	1.00	2,0	2,0	25	60	4	2



**Fresa MD para Grafito - Bola Z-2 - Cuello Reducido - Mango 6mm**

- Corte Hélice: 30° / Modelo: Z-2
- Radio Tórico / Amarre: Cilíndrico Cuello Reducido
- Recubrimiento: DLC
- Para uso en materiales de Grafito o Especiales

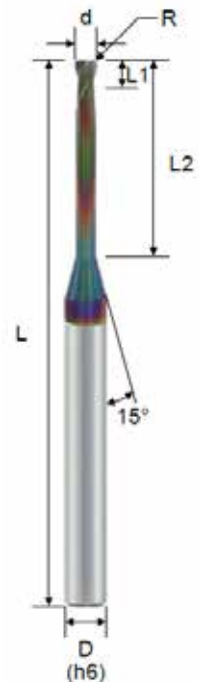
Referencia	R	d	L1	L2	L	D	Z
MF550.15301	1.50	3,0	3,0	12	50	6	2
MF550.15302	1.50	3,0	3,0	16	60	6	2
MF550.15303	1.50	3,0	3,0	20	60	6	2
MF550.15304	1.50	3,0	3,0	25	60	6	2
MF550.15305	1.50	3,0	3,0	30	75	6	2
MF550.20401	2.00	4,0	4,0	16	60	6	2
MF550.20402	2.00	4,0	4,0	20	60	6	2
MF550.20403	2.00	4,0	4,0	25	60	6	2
MF550.20404	2.00	4,0	4,0	30	75	6	2
MF550.25501	2.50	5,0	5,0	20	60	6	2
MF550.25502	2.50	5,0	5,0	25	60	6	2
MF550.25503	2.50	5,0	5,0	30	75	6	2
MF550.30601	3.00	6,0	10,0	20	60	6	2
MF550.30602	3.00	6,0	10,0	30	75	6	2



**Fresa MD para Grafito - Tórica Z-2 - Mango 4/6mm**

- Corte Hélice: 30° / Modelo: Z-2
- Radio Tórico / Amarre: Cilíndrico
- Recubrimiento: DLC
- Para uso en materiales de Grafito o Especiales

Referencia	d	Radio (R)	L1	L2	L	D	Z
MF555.01011	1	0.1	1	6	50	4	2
MF555.01012	1	0.1	1	8	50	4	2
MF555.01013	1	0.1	1	10	50	4	2
MF555.01014	1	0.1	1	12	50	4	2
MF555.02021	2	0.2	2	10	50	4	2
MF555.02022	2	0.2	2	16	50	4	2
MF555.02023	2	0.2	2	20	50	4	2
MF555.02024	2	0.2	2	25	60	4	2
MF555.02051	2	0.5	2	10	50	4	2
MF555.02052	2	0.5	2	16	50	4	2
MF555.02053	2	0.5	2	20	50	4	2
MF555.02054	2	0.5	2	25	60	4	2
MF555.03021	3	0.2	3	10	50	6	2
MF555.03022	3	0.2	3	20	60	6	2
MF555.03023	3	0.2	3	30	75	6	2
MF555.03051	3	0.5	3	10	50	6	2
MF555.03052	3	0.5	3	20	60	6	2
MF555.03053	3	0.5	3	30	75	6	2
MF555.04051	4	0.5	4	16	60	6	2
MF555.04052	4	0.5	4	25	60	6	2
MF555.04053	4	0.5	4	35	75	6	2
MF555.04101	4	1.0	4	16	60	6	2
MF555.04102	4	1.0	4	25	60	6	2
MF555.04103	4	1.0	4	35	75	6	2
MF555.05051	5	0.5	5	20	60	6	2
MF555.05052	5	0.5	5	30	75	6	2
MF555.06051	6	0.5	7	20	60	6	2
MF555.06052	6	0.5	7	30	75	6	2
MF555.06101	6	1.0	7	20	60	6	2
MF555.06102	6	1.0	7	30	75	6	2



### Cabeza Modular de Fresado - Z4

- Corte Hélice: 30° / Modelo: Z-4
- Amarre en Rosca Métrica
- Disponibles alargadores rosca Series SDM06/07/08/10

Referencia	d	L1	d	M	Z
MF600.100	10	10	5.5	M5	4
MF600.120	12	12	6.5	M6	4
MF600.160	16	16	8.5	M8	4
MF600.200	20	20	10.5	M10	4



### Cabeza Modular de Fresado - Z2 Bola

- Corte Hélice: 30° / Modelo: Z-2
- Amarre en Rosca Métrica
- Disponibles alargadores rosca Series SDM06/07/08/10

Referencia	d	D	L1	d	M	Z
MF601.050	5	10	10	5.5	M5	2
MF601.060	6	12	12	6.5	M6	2
MF601.080	8	16	16	8.5	M8	2
MF601.100	10	20	20	10.5	M10	2



### Cabeza Modular de Fresado - Z2 Bola

- Corte Hélice: 30° / Modelo: Z-4 Radio
- Amarre en Rosca Métrica
- Disponibles alargadores rosca Series SDM06/07/08/10

Referencia	d	R	L1	d	M	Z
MF602.1005	10	0.5	10	5.5	M-5	4
MF602.1010	10	1.0	10	5.5	M-5	4
MF602.1205	12	0.5	12	6.5	M-6	4
MF602.1210	12	1.0	12	6.5	M-6	4
MF602.1220	12	2.0	12	6.5	M-6	4
MF602.1230	12	3.0	12	6.5	M-6	4
MF602.1610	16	1.0	16	8.5	M-8	4
MF602.1620	16	2.0	16	8.5	M-8	4
MF602.1630	16	3.0	16	8.5	M-8	4
MF602.2010	20	1.0	20	10.5	M-10	4
MF602.2020	20	2.0	20	10.5	M-10	4
MF602.2030	20	3.0	20	10.5	M-10	4



### Cabeza Modular de Fresado - Z4/Z6 Avellanado

- Ángulo Corte: 45° / Modelo: Z-4 y Z-6
- Amarre en Rosca Métrica
- Disponibles alargadores rosca Series SDM06/07/08/10

Referencia	d	L1	a°	D	M	Z
MF603.1004	10	5	45	6.5	M-6	4
MF603.1204	12	6	45	6.5	M-6	4
MF603.1006	10	5	45	6.5	M-6	6
MF603.1206	12	6	45	6.5	M-6	6
MF603.1606	16	8	45	8.5	M-8	6





**Escariadores de Metal Duro - Serie Basic**

Referencia	Diámetro	øAmarre	LT	LC
ME100.0298	2.98	3	61	36
ME100.0299	2.99	3	61	36
ME100.0300	3	3	61	36
ME100.0301	3.01	3	61	36
ME100.0302	3.02	3	61	36
ME100.0350	3.5	3,5	70	40
ME100.0398	3.98	4	75	45
ME100.0399	3.99	4	75	45
ME100.0400	4	4	75	45
ME100.0400L	4	4	105	80
ME100.0401	4.01	4	75	45
ME100.0402	4.02	4	75	45
ME100.0450	4.5	4.5	80	52
ME100.0498	4.98	5	86	56
ME100.0499	4.99	5	86	56
ME100.0500	5	5	86	56
ME100.0500L	5	5	115	90
ME100.0501	5.01	5	86	56
ME100.0502	5.02	5	86	56
ME100.0510	5.10	5	86	56
ME100.0520	5.20	5	86	56
ME100.0530	5.30	5	86	56
ME100.0550	5.50	5	86	56
ME100.0598	5.98	6	86	56
ME100.0599	5.99	6	86	56
ME100.0600	6	6	86	56
ME100.0600L	6	6	130	100
ME100.0601	6.01	6	86	56
ME100.0602	6.02	6	86	56
ME100.0610	6.10	6	86	56
ME100.0620	6.20	6	86	56
ME100.0630	6.30	6	86	56
ME100.0640	6.40	6	86	56
ME100.0650	6.50	6	86	56
ME100.0700	7	7	86	56
ME100.0700L	7	7	140	110
ME100.0750	7.5	7	86	56
ME100.0798	7.98	8	86	56
ME100.0799	7.99	8	86	56
ME100.0800	8	8	86	56
ME100.0800L	8	8	117	84
ME100.0800XL	8	8	160	130
ME100.0801	8.01	8	86	56
ME100.0801L	8.01	8	117	84
ME100.0802	8.02	8	86	56
ME100.0802L	8.02	8	117	84
ME100.0810	8.10	8	117	84
ME100.0820	8.20	8	117	84
ME100.0830	8.30	8	117	84
ME100.0850	8.50	8	90	60
ME100.0850L	8.50	8	117	84
ME100.0898	8.98	9	90	60
ME100.0899	8.99	9	90	60
ME100.0900	9	9	90	60
ME100.0900L	9	9	125	88
ME100.0900XL	9	9	160	130

- Corte Hélice: 10º Izquierda
- Modelo: Z-4 hasta ø6.3 | Z-6 desde ø6.4
- Uso: General - Amarre h7
- Tolerancia: 0/+0.004

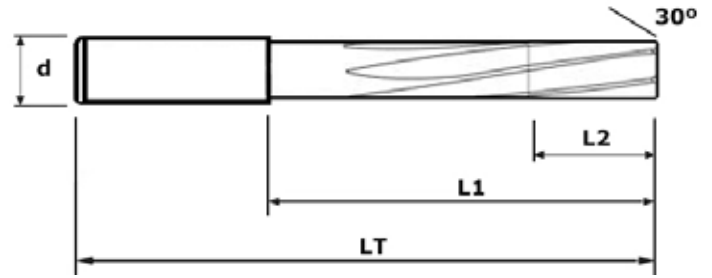


Referencia	Diámetro	øAmarre	LT	LC
ME100.0950	9.5	9	90	60
ME100.0950L	9.5	9	125	88
ME100.0998	9.98	10	90	60
ME100.0999	9.99	10	90	60
ME100.1000	10	10	90	60
ME100.1000L	10	10	133	97
ME100.1000XL	10	10	190	150
ME100.1001	10.01	10	90	60
ME100.1001L	10.01	10	133	97
ME100.1002	10.02	10	90	60
ME100.1002L	10.02	10	133	97
ME100.1010	10.1	10	133	97
ME100.1020	10.2	10	133	97
ME100.1030	10.3	10	133	97
ME100.1050	10.5	10	90	60
ME100.1050L	10.5	10	133	97
ME100.1100	11	11	90	60
ME100.1100L	11	11	133	97
ME100.1100XL	11	11	190	150
ME100.1150	11.5	11	90	60
ME100.1150L	11.5	12	151	110
ME100.1198	11.98	11	90	60
ME100.1199	11.99	11	90	60
ME100.1200	12	11	90	60
ME100.1200L	12	12	151	110
ME100.1200XL	12	12	220	170
ME100.1201	12.01	11	90	60
ME100.1201L	12.01	12	151	110
ME100.1202	12.02	11	90	60
ME100.1202L	12.02	12	151	110
ME100.1205	12.5	12	151	110
ME100.1300	13	12	151	110
ME100.1300L	13	13	220	170
ME100.1301	13.01	12	151	110
ME100.1302	13.02	12	151	110
ME100.1400	14	14	160	110
ME100.1400L	14	14	220	170
ME100.1401	14.01	14	160	110
ME100.1402	14.02	14	160	110
ME100.1500	15	14	162	112
ME100.1500L	15	16	220	170
ME100.1501	15.01	14	162	112
ME100.1502	15.02	14	162	112
ME100.1600	16	16	170	117
ME100.1600L	16	16	230	180
ME100.1601	16.01	16	170	117
ME100.1602	16.02	16	170	117
ME100.1800	18	16	182	129
ME100.1800L	18	18	230	180
ME100.2000	20	16	195	142
ME100.2000L	20	20	230	180

- LC = Longitud Corte
- LT = Longitud Total

**Escariador de Metal Duro - H7**

- **Referencia: ME110**
- Serie Corta - Norma DIN 1420
- Corte Hélice: 30° Izquierda
- Para Agujeros Pasantes
- Tolerancia diámetro: H7
- Tolerancia amarre : d= h6

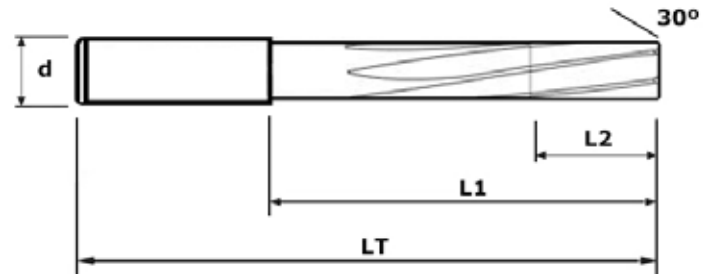


Referencia	Ø	d	LT	L1	L2	Z
ME110.020	2	2	49	29	10	3
ME110.025	2.5	2.5	57	32	12	3
ME110.030	3	3	61	36	12	4
ME110.035	3.5	3.5	70	40	12	4
ME110.040	4	4	75	45	12	4
ME110.045	4.5	4	80	52	12	4
ME110.050	5	5	86	56	16	4
ME110.055	5.5	5	86	56	16	4
ME110.060	6	6	86	56	16	4
ME110.065	6.5	6	86	56	16	6
ME110.070	7	8	86	56	16	6
ME110.075	7.5	8	86	56	16	6
ME110.080	8	8	86	56	16	6
ME110.085	8.5	8	90	60	20	6
ME110.090	9	10	90	60	20	6

Referencia	Ø	d	LT	L1	L2	Z
ME110.095	9.5	10	90	60	20	6
ME110.100	10	10	90	60	20	6
ME110.105	10.5	10	90	60	20	6
ME110.110	11	12	95	60	20	6
ME110.120	12	12	95	60	20	6
ME110.130	13	14	105	70	25	6
ME110.140	14	14	115	80	25	6
ME110.150	15	16	130	85	30	6
ME110.160	16	16	130	85	30	6
ME110.170	17	18	140	95	30	6
ME110.180	18	18	140	95	30	6
ME110.190	19	20	140	95	30	6
ME110.200	20	20	140	95	30	6

**Escariador de Metal Duro - H7 - Serie Larga**

- **Referencia: ME115**
- Serie Larga - Norma DIN 1420
- Corte Hélice: 30° Izquierda
- Para Agujeros Pasantes
- Tolerancia diámetro: H7
- Tolerancia amarre : d= h6

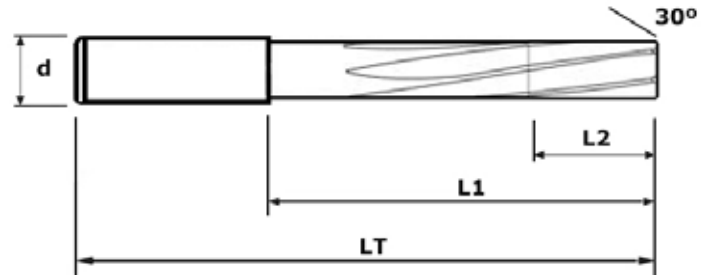


Referencia	Ø	d	LT	L1	L2	Z
ME115.040	4	4	105	80	16	4
ME115.045	4.5	4	105	80	16	4
ME115.050	5	5	115	90	30	4
ME115.055	5.5	5	115	90	30	4
ME115.060	6	6	130	100	30	4
ME115.065	6.5	6	130	100	30	6
ME115.070	7	8	140	110	30	6
ME115.075	7.5	8	140	110	30	6
ME115.080	8	8	160	130	30	6
ME115.085	8.5	8	160	130	30	6
ME115.090	9	10	160	130	30	6
ME115.095	9.5	10	160	130	30	6
ME115.100	10	10	190	150	30	6

Referencia	Ø	d	LT	L1	L2	Z
ME115.105	10.5	10	190	150	30	6
ME115.110	11	12	190	150	30	6
ME115.120	12	12	220	150	35	6
ME115.130	13	14	220	170	35	6
ME115.140	14	14	220	170	35	6
ME115.150	15	16	220	170	35	6
ME115.160	16	16	230	180	40	6
ME115.170	17	18	230	180	40	6
ME115.180	18	18	230	180	40	6
ME115.190	19	20	230	180	40	6
ME115.200	20	20	230	180	40	6

### Escariadores de Metal Duro Centesimales

- Referencia: **ME120**
- Serie Corta
- Corte Hélice: 30° Izquierda
- Para Agujeros Pasantes
- Tolerancia diámetro: 0/+0.004
- Tolerancia amarre : d= h6



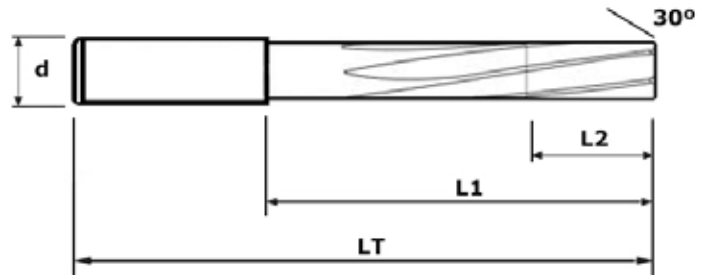
Rango Diámetros Serie ME120	d	LT	L1	L2	Z
1.48 A 2.25	2	49	29	10	3
2.26 A 2.75	2.5	57	32	12	3
2.76 A 3.25	3	61	36	12	4
3.26 A 3.75	3.5	70	40	12	4
3.76 A 4.25	4	75	45	12	4
4.26 A 4.75	4	80	52	12	4
4.76 A 5.25	5	86	56	16	4
5.26 A 5.75	5	86	56	16	4
5.76 A 6.25	6	86	56	16	4
6.26 A 6.75	6	86	56	16	6
6.76 A 7.25	8	86	56	16	6
7.26 A 7.75	8	86	56	16	6
7.76 A 8.25	8	86	56	16	6
8.26 A 8.75	8	90	60	20	6
8.76 A 9.25	10	90	60	20	6
9.26 A 9.75	10	90	60	20	6
9.76 A 10.25	10	90	60	20	6
10.26 A 10.75	10	90	60	20	6
10.76 A 11.25	12	95	60	20	6
11.26 A 11.75	12	95	60	20	6

Rango Diámetros Serie ME120	d	LT	L1	L2	Z
11.26 A 11.75	12	95	60	20	6
11.76 A 12.25	12	95	60	20	6
12.26 A 12.75	12	105	70	25	6
12.76 A 13.25	14	105	70	25	6
13.26 A 13.75	14	115	80	25	6
13.76 A 14.25	14	115	80	25	6
14.26 A 14.75	14	120	85	30	6
14.76 A 15.25	16	130	85	30	6
15.26 A 15.75	16	130	85	30	6
15.76 A 16.25	16	130	85	30	6
16.26 A 16.75	16	140	95	30	6
16.76 A 17.25	18	140	95	30	6
17.26 A 17.75	18	140	95	30	6
17.76 A 18.25	18	140	95	30	6
18.26 A 18.75	18	140	95	30	6
18.76 A 19.25	20	140	95	30	6
19.26 A 19.75	20	140	95	30	6
19.76 A 20.25	20	140	95	30	6

• Ejemplo de Pedido: Escariador 6.70mm - Código: ME120.0670

### Escariadores de Metal Duro Centesimales

- Referencia: **ME125**
- Serie NORMA DIN 212
- Corte Hélice: 30° Izquierda
- Para Agujeros Pasantes
- Tolerancia diámetro: 0/+0.004
- Tolerancia amarre : d= h6



Rango Diámetros Serie ME125	d	LT	L1	L2	Z
5.26 A 5.80	6	93	58	26	6
5.81 A 6.70	6	101	65	28	6
6.71 A 7.50	8	109	73	31	6
7.51 A 8.50	8	117	81	33	6
8.51 A 9.50	10	125	85	36	6
9.51 A 10.60	10	133	93	38	6
10.61 A 11.80	10	142	102	41	6
11.81 A 13.20	12	151	111	44	6
13.21 A 14.05	14	160	115	47	6

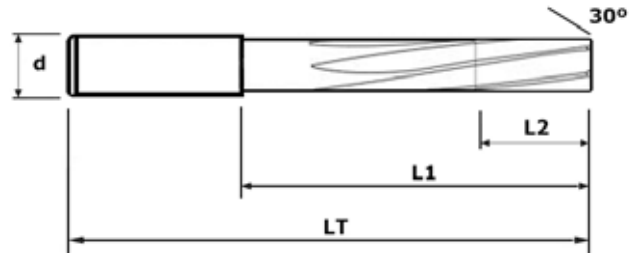
Rango Diámetros Serie ME125	d	LT	L1	L2	Z
14.06 A 15.05	14	162	117	50	6
15.06 A 16.05	16	170	117	52	6
16.06 A 17.05	16	175	130	54	6
17.06 A 18.05	16	182	137	56	6
18.06 A 18.75	20	189	141	58	6
18.76 A 19.05	20	189	141	58	6
19.06 A 20.00	20	195	147	60	6

• Ejemplo de Pedido: Escariador 6.70mm - Código: ME125.0670

**Escariadores de Metal Duro Centesimales**

• **Referencia: ME130**

- Serie Larga
- Corte Hélice: 30° Izquierda
- Para Agujeros Pasantes
- Tolerancia diámetro: 0/+0.004
- Tolerancia amarre : d= h6



Rango Diámetros Serie ME130	d	LT	L1	L2	Z
3.76 A 4.25	4	105	80	16	4
4.26 A 4.75	4	105	80	16	4
4.76 A 5.25	5	115	90	30	4
5.26 A 5.75	5	115	90	30	4
5.76 A 6.25	6	130	90	30	4
6.26 A 6.75	6	130	100	30	6
6.76 A 7.25	8	140	110	30	6
7.26 A 7.75	8	140	110	30	6
7.76 A 8.25	8	160	130	30	6
8.26 A 8.75	8	160	130	30	6
8.76 A 9.25	10	160	130	30	6
9.26 A 9.75	10	160	130	30	6
9.76 A 10.25	10	190	150	30	6
10.26 A 10.75	10	190	150	30	6
10.76 A 11.25	12	190	150	30	6
11.26 A 11.75	12	190	150	30	6
11.76 A 12.25	12	220	170	35	6

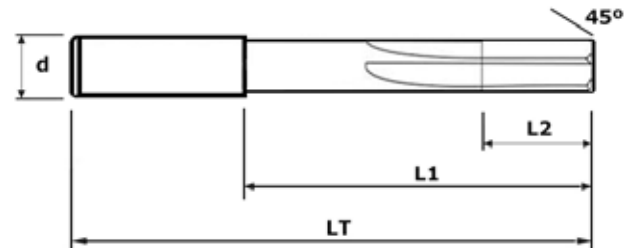
Rango Diámetros Serie ME130	d	LT	L1	L2	Z
12.26 A 12.75	12	220	170	35	6
12.76 A 13.25	14	220	170	35	6
13.26 A 13.75	14	220	170	35	6
13.76 A 14.25	14	220	170	35	6
14.26 A 14.75	14	220	170	35	6
14.76 A 15.25	16	220	170	35	6
15.26 A 15.75	16	220	170	35	6
15.76 A 16.25	16	230	180	40	6
16.26 A 16.75	16	230	180	40	6
16.76 A 17.25	18	230	180	40	6
17.26 A 17.75	18	230	180	40	6
17.76 A 18.25	18	230	180	40	6
18.26 A 18.75	18	230	180	40	6
18.76 A 19.25	20	230	180	40	6
19.26 A 19.75	20	230	180	40	6
19.76 A 20.25	20	230	180	40	6

• Ejemplo de Pedido: Escariador 6.70mm - Codigo: ME130.0670

**Escariadores de Metal Duro Centesimales**

• **Referencia: ME140**

- Serie Corta
- Corte Hélice: 45° Derecha
- Para Agujeros Ciegos
- Tolerancia diámetro: 0/+0.004
- Tolerancia amarre : d= h6



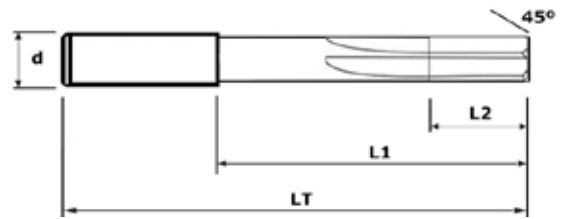
Rango Diámetros Serie ME140	d	LT	L1	L2	Z
1.48 A 2.25	2	49	29	10	3
2.26 A 2.75	2.5	57	32	12	3
2.76 A 3.25	3	61	36	12	4
3.26 A 3.75	3.5	70	40	12	4
3.76 A 4.25	4	75	45	12	4
4.26 A 4.75	4	80	52	12	4
4.76 A 5.25	5	86	56	16	4
5.26 A 5.75	5	86	56	16	4
5.76 A 6.25	6	86	56	16	4
6.26 A 6.75	6	86	56	16	6
6.76 A 7.25	8	86	56	16	6
7.26 A 7.75	8	86	56	16	6
7.76 A 8.25	8	86	56	16	6
8.26 A 8.75	8	90	60	20	6
8.76 A 9.25	10	90	60	20	6
9.26 A 9.75	10	90	60	20	6
9.76 A 10.25	10	90	60	20	6
10.26 A 10.75	10	90	60	20	6
10.76 A 11.25	12	95	60	20	6
11.26 A 11.75	12	95	60	20	6

Rango Diámetros Serie ME140	d	LT	L1	L2	Z
11.26 A 11.75	12	95	60	20	6
11.76 A 12.25	12	95	60	20	6
12.26 A 12.75	12	105	70	25	6
12.76 A 13.25	14	105	70	25	6
13.26 A 13.75	14	115	80	25	6
13.76 A 14.25	14	115	80	25	6
14.26 A 14.75	14	120	85	30	6
14.76 A 15.25	16	130	85	30	6
15.26 A 15.75	16	130	85	30	6
15.76 A 16.25	16	130	85	30	6
16.26 A 16.75	16	140	95	30	6
16.76 A 17.25	18	140	95	30	6
17.26 A 17.75	18	140	95	30	6
17.76 A 18.25	18	140	95	30	6
18.26 A 18.75	18	140	95	30	6
18.76 A 19.25	20	140	95	30	6
19.26 A 19.75	20	140	95	30	6
19.76 A 20.25	20	140	95	30	6

• Ejemplo de Pedido: Escariador 6.70mm - Codigo: ME130.0670

### Escariadores de Metal Duro Centesimales

- Referencia: **ME145**
- Serie Larga
- Corte Hélice: 45° Derecha
- Para Agujeros Ciegos
- Tolerancia diámetro: 0/+0.004
- Tolerancia amarre : d= h6



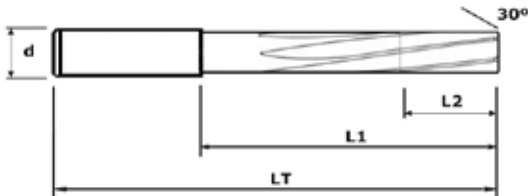
Rango Diámetros Serie ME145	d	LT	L1	L2	Z
3.76 A 4.25	4	105	80	16	4
4.26 A 4.75	4	105	80	16	4
4.76 A 5.25	5	115	90	30	4
5.26 A 5.75	5	115	90	30	4
5.76 A 6.25	6	130	90	30	4
6.26 A 6.75	6	130	100	30	6
6.76 A 7.25	8	140	110	30	6
7.26 A 7.75	8	140	110	30	6
7.76 A 8.25	8	160	130	30	6
8.26 A 8.75	8	160	130	30	6
8.76 A 9.25	10	160	130	30	6
9.26 A 9.75	10	160	130	30	6
9.76 A 10.25	10	190	150	30	6
10.26 A 10.75	10	190	150	30	6
10.76 A 11.25	12	190	150	30	6
11.26 A 11.75	12	190	150	30	6
11.76 A 12.25	12	220	170	35	6
12.26 A 12.75	12	220	170	35	6

Rango Diámetros Serie ME145	d	LT	L1	L2	Z
12.76 A 13.25	14	220	170	35	6
13.26 A 13.75	14	220	170	35	6
13.76 A 14.25	14	220	170	35	6
14.26 A 14.75	14	220	170	35	6
14.76 A 15.25	16	220	170	35	6
15.26 A 15.75	16	220	170	35	6
15.76 A 16.25	16	230	180	40	6
16.26 A 16.75	16	230	180	40	6
16.76 A 17.25	18	230	180	40	6
17.26 A 17.75	18	230	180	40	6
17.76 A 18.25	18	230	180	40	6
18.26 A 18.75	18	230	180	40	6
18.76 A 19.25	20	230	180	40	6
19.26 A 19.75	20	230	180	40	6
19.76 A 20.25	20	230	180	40	6

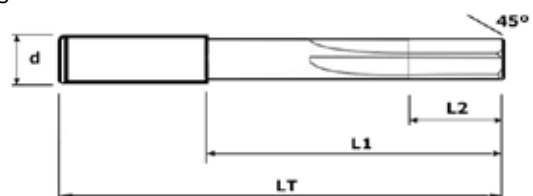
- Ejemplo de Pedido: Escariador 6.70mm - Código: ME145.0670

### Escariador de Metal Duro - Con Refrigeración

- Corte Hélice: 30° Izquierda - Para Agujeros Pasantes
- Tolerancia diámetro: 0/+0.004 - Tolerancia amarre : d= h6
- Refrigeración Interior Lateral



- Corte Hélice: 45° Izquierda - Para Agujeros Pasantes
- Tolerancia diámetro: 0/+0.004 - Tolerancia amarre : d= h6
- Refrigeración Interior Lateral

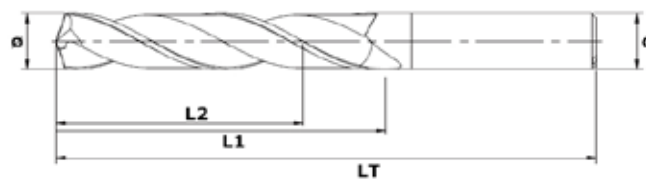


Referencia	Ø	d	LT	L1	L2	Z
ME150.040	4	4	75	45	12	4
ME150.045	4.5	4	80	52	12	4
ME150.050	5	5	86	56	16	4
ME150.055	5.5	5	86	56	16	4
ME150.060	6	6	86	56	16	4
ME150.065	6.5	6	86	56	16	4
ME150.070	7	8	86	56	16	6
ME150.075	7.5	8	86	56	16	6
ME150.080	8	8	86	56	16	6
ME150.085	8.5	8	92	60	20	6
ME150.090	9	10	92	60	20	6
ME150.095	9.5	10	92	60	20	6
ME150.100	10	10	92	60	20	6
ME150.110	11	12	95	60	20	6
ME150.120	12	12	95	60	20	6
ME150.130	13	14	115	80	25	6
ME150.140	14	14	115	80	25	6
ME150.150	15	16	130	85	30	6
ME150.160	16	16	130	85	30	6
ME150.170	17	18	140	95	30	6
ME150.180	18	18	140	95	30	6
ME150.190	19	20	140	95	30	6
ME150.200	20	20	140	95	30	6

Referencia	Ø	d	LT	L1	L2	Z
ME160.040	4	4	75	45	12	4
ME160.045	4.5	4	80	52	12	4
ME160.050	5	5	86	56	16	4
ME160.055	5.5	5	86	56	16	4
ME160.060	6	6	86	56	16	4
ME160.065	6.5	6	86	56	16	4
ME160.070	7	8	86	56	16	6
ME160.075	7.5	8	86	56	16	6
ME160.080	8	8	86	56	16	6
ME160.085	8.5	8	92	60	20	6
ME160.090	9	10	92	60	20	6
ME160.095	9.5	10	92	60	20	6
ME160.100	10	10	92	60	20	6
ME160.110	11	12	95	60	20	6
ME160.120	12	12	95	60	20	6
ME160.130	13	14	115	80	25	6
ME160.140	14	14	115	80	25	6
ME160.150	15	16	130	85	30	6
ME160.160	16	16	130	85	30	6
ME160.170	17	18	140	95	30	6
ME160.180	18	18	140	95	30	6
ME160.190	19	20	140	95	30	6
ME160.200	20	20	140	95	30	6

**Broca MD Sin Refrigeración - 3xD**

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: ALTiN
- Uso: General



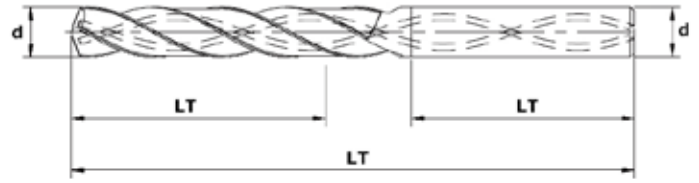
Referencia	ø	d	L1	L2	LT
MB110.030	3	6	20	14	62
MB110.031	3.1	6	20	14	62
MB110.032	3.2	6	20	14	62
MB110.033	3.3	6	20	14	62
MB110.034	3.4	6	20	14	62
MB110.035	3.5	6	20	14	62
MB110.036	3.6	6	20	14	62
MB110.037	3.7	6	20	14	62
MB110.038	3.8	6	24	17	62
MB110.039	3.9	6	24	17	66
MB110.040	4	6	24	17	66
MB110.041	4.1	6	24	17	66
MB110.042	4.2	6	24	17	66
MB110.043	4.3	6	24	17	66
MB110.044	4.4	6	24	17	66
MB110.045	4.5	6	24	17	66
MB110.046	4.6	6	24	17	66
MB110.047	4.7	6	24	17	66
MB110.048	4.8	6	28	20	66
MB110.049	4.9	6	28	20	66
MB110.050	5	6	28	20	66
MB110.051	5.1	6	28	20	66
MB110.052	5.2	6	28	20	66
MB110.053	5.3	6	28	20	66
MB110.054	5.4	6	28	20	66
MB110.055	5.5	6	28	20	66
MB110.056	5.6	6	28	20	66
MB110.057	5.7	6	28	20	66
MB110.058	5.8	6	28	20	66
MB110.059	5.9	6	28	20	66
MB110.060	6	6	28	20	66
MB110.061	6.1	8	28	20	79
MB110.062	6.2	8	34	24	79
MB110.063	6.3	8	34	24	79
MB110.064	6.4	8	34	24	79
MB110.065	6.5	8	34	24	79
MB110.066	6.6	8	34	24	79
MB110.067	6.7	8	34	24	79
MB110.068	6.8	8	34	24	79
MB110.069	6.9	8	34	24	79
MB110.070	7	8	34	24	79
MB110.071	7.1	8	41	29	79
MB110.072	7.2	8	41	29	79
MB110.073	7.3	8	41	29	79
MB110.074	7.4	8	41	29	79
MB110.075	7.5	8	41	29	79
MB110.076	7.6	8	41	29	79
MB110.077	7.7	8	41	29	79
MB110.078	7.8	8	41	29	79
MB110.079	7.9	8	41	29	79
MB110.080	8	8	47	35	79
MB110.081	8.1	8	47	35	89
MB110.082	8.2	10	47	35	89
MB110.083	8.3	10	47	35	89
MB110.084	8.4	10	47	35	89
MB110.085	8.5	10	47	35	89

Referencia	ø	d	L1	L2	LT
MB110.086	8.6	10	47	35	89
MB110.087	8.7	10	47	35	89
MB110.088	8.8	10	47	35	89
MB110.089	8.9	10	47	35	89
MB110.090	9.0	10	47	35	89
MB110.091	9.1	10	47	35	89
MB110.092	9.2	10	47	35	89
MB110.093	9.3	10	47	35	89
MB110.094	9.4	10	47	35	89
MB110.095	9.5	10	47	35	89
MB110.096	9.6	10	47	35	89
MB110.097	9.7	10	47	35	89
MB110.098	9.8	10	47	35	89
MB110.099	9.9	10	47	35	89
MB110.100	10.0	10	47	35	89
MB110.101	10.1	12	55	40	102
MB110.102	10.2	12	55	40	102
MB110.103	10.3	12	55	40	102
MB110.104	10.4	12	55	40	102
MB110.105	10.5	12	55	40	102
MB110.106	10.6	12	55	40	102
MB110.107	10.7	12	55	40	102
MB110.108	10.8	12	55	40	102
MB110.109	10.9	12	55	40	102
MB110.110	11.0	12	55	40	102
MB110.111	11.1	12	55	40	102
MB110.112	11.2	12	55	40	102
MB110.113	11.3	12	55	40	102
MB110.114	11.4	12	55	40	102
MB110.110	11.5	12	55	40	102
MB110.116	11.6	12	55	40	102
MB110.117	11.7	12	55	40	102
MB110.118	11.8	12	55	40	102
MB110.119	11.9	12	55	40	102
MB110.120	12.0	12	55	40	102
MB110.122	12.2	14	60	43	107
MB110.125	12.5	14	60	43	107
MB110.127	12.7	14	60	43	107
MB110.128	12.8	14	60	43	107
MB110.130	13.0	14	60	43	107
MB110.132	13.2	14	60	43	107
MB110.135	13.5	14	60	43	107
MB110.138	13.8	14	60	43	107
MB110.140	14.0	14	60	43	115
MB110.145	14.5	16	65	45	115
MB110.148	14.8	16	65	45	115
MB110.150	15.0	16	65	45	115
MB110.155	15.5	16	65	45	115
MB110.160	16.0	16	65	45	115
MB110.165	16.5	18	73	51	123
MB110.170	17.0	18	73	51	123
MB110.175	17.5	18	73	51	123
MB110.180	18.0	18	73	51	123
MB110.185	18.5	20	79	55	131
MB110.190	19.0	20	79	55	131
MB110.195	19.5	20	79	55	131
MB110.200	20.0	20	79	55	131



### Broca MD Con Refrigeración - 3xD

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: ALTiN
- Uso: General

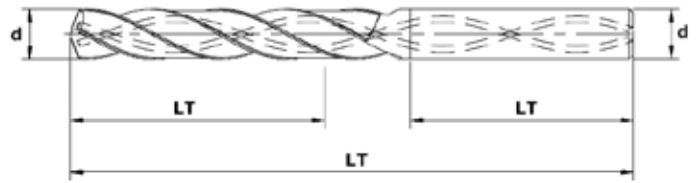


Referencia	ø	d	L1	L2	LT
MB115.030	3	6	20	14	62
MB115.031	3.1	6	20	14	62
MB115.032	3.2	6	20	14	62
MB115.033	3.3	6	20	14	62
MB115.034	3.4	6	20	14	62
MB115.035	3.5	6	20	14	62
MB115.036	3.6	6	20	14	62
MB115.037	3.7	6	20	14	62
MB115.038	3.8	6	24	17	62
MB115.039	3.9	6	24	17	66
MB115.040	4	6	24	17	66
MB115.041	4.1	6	24	17	66
MB115.042	4.2	6	24	17	66
MB115.043	4.3	6	24	17	66
MB115.044	4.4	6	24	17	66
MB115.045	4.5	6	24	17	66
MB115.046	4.6	6	24	17	66
MB115.047	4.7	6	24	17	66
MB115.048	4.8	6	28	20	66
MB115.049	4.9	6	28	20	66
MB115.050	5	6	28	20	66
MB115.051	5.1	6	28	20	66
MB115.052	5.2	6	28	20	66
MB115.053	5.3	6	28	20	66
MB115.054	5.4	6	28	20	66
MB115.055	5.5	6	28	20	66
MB115.056	5.6	6	28	20	66
MB115.057	5.7	6	28	20	66
MB115.058	5.8	6	28	20	66
MB115.059	5.9	6	28	20	66
MB115.060	6	6	28	20	66
MB115.061	6.1	8	28	20	79
MB115.062	6.2	8	34	24	79
MB115.063	6.3	8	34	24	79
MB115.064	6.4	8	34	24	79
MB115.065	6.5	8	34	24	79
MB115.066	6.6	8	34	24	79
MB115.067	6.7	8	34	24	79
MB115.068	6.8	8	34	24	79
MB115.069	6.9	8	34	24	79
MB115.070	7	8	34	24	79
MB115.071	7.1	8	41	29	79
MB115.072	7.2	8	41	29	79
MB115.073	7.3	8	41	29	79
MB115.074	7.4	8	41	29	79
MB115.075	7.5	8	41	29	79
MB115.076	7.6	8	41	29	79
MB115.077	7.7	8	41	29	79
MB115.078	7.8	8	41	29	79
MB115.079	7.9	8	41	29	79
MB115.080	8	8	47	35	79
MB115.081	8.1	8	47	35	89
MB115.082	8.2	10	47	35	89
MB115.083	8.3	10	47	35	89
MB115.084	8.4	10	47	35	89
MB115.085	8.5	10	47	35	89

Referencia	ø	d	L1	L2	LT
MB115.086	8.6	10	47	35	89
MB115.087	8.7	10	47	35	89
MB115.088	8.8	10	47	35	89
MB115.089	8.9	10	47	35	89
MB115.090	9.0	10	47	35	89
MB115.091	9.1	10	47	35	89
MB115.092	9.2	10	47	35	89
MB115.093	9.3	10	47	35	89
MB115.094	9.4	10	47	35	89
MB115.095	9.5	10	47	35	89
MB115.096	9.6	10	47	35	89
MB115.097	9.7	10	47	35	89
MB115.098	9.8	10	47	35	89
MB115.099	9.9	10	47	35	89
MB115.100	10.0	10	47	35	89
MB115.101	10.1	12	55	40	102
MB115.102	10.2	12	55	40	102
MB115.103	10.3	12	55	40	102
MB115.104	10.4	12	55	40	102
MB115.105	10.5	12	55	40	102
MB115.106	10.6	12	55	40	102
MB115.107	10.7	12	55	40	102
MB115.108	10.8	12	55	40	102
MB115.109	10.9	12	55	40	102
MB115.110	11.0	12	55	40	102
MB115.111	11.1	12	55	40	102
MB115.112	11.2	12	55	40	102
MB115.113	11.3	12	55	40	102
MB115.114	11.4	12	55	40	102
MB115.115	11.5	12	55	40	102
MB115.116	11.6	12	55	40	102
MB115.117	11.7	12	55	40	102
MB115.118	11.8	12	55	40	102
MB115.119	11.9	12	55	40	102
MB115.120	12.0	12	55	40	102
MB115.122	12.2	14	60	43	107
MB115.125	12.5	14	60	43	107
MB115.127	12.7	14	60	43	107
MB115.128	12.8	14	60	43	107
MB115.130	13.0	14	60	43	107
MB115.132	13.2	14	60	43	107
MB115.135	13.5	14	60	43	107
MB115.138	13.8	14	60	43	107
MB115.140	14.0	14	60	43	115
MB115.145	14.5	16	65	45	115
MB115.148	14.8	16	65	45	115
MB115.150	15.0	16	65	45	115
MB115.155	15.5	16	65	45	115
MB115.160	16.0	16	65	45	115
MB115.165	16.5	18	73	51	123
MB115.170	17.0	18	73	51	123
MB115.175	17.5	18	73	51	123
MB115.180	18.0	18	73	51	123
MB115.185	18.5	20	79	55	131
MB115.190	19.0	20	79	55	131
MB115.195	19.5	20	79	55	131
MB115.200	20.0	20	79	55	131

**Broca MD Con Refrigeración - 3xD - Para INOX**

- Corte Angulo: 140° - 30°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: AlTiN
- Uso: Inox

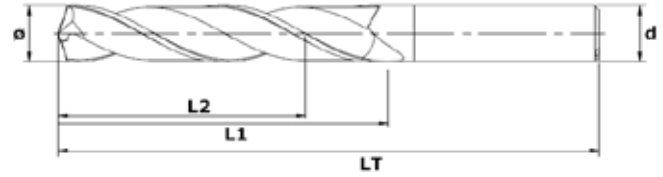


Referencia	ø	d	L1	L2	LT
MB117.030	3	6	14	36	62
MB117.031	3,1	6	14	36	62
MB117.032	3,2	6	14	36	62
MB117.033	3,3	6	14	36	62
MB117.034	3,4	6	14	36	62
MB117.035	3,5	6	14	36	62
MB117.036	3,6	6	14	36	62
MB117.037	3,7	6	14	36	62
MB117.038	3,8	6	17	36	66
MB117.039	3,9	6	17	36	66
MB117.040	4	6	17	36	66
MB117.041	4,1	6	17	36	66
MB117.042	4,2	6	17	36	66
MB117.043	4,3	6	17	36	66
MB117.044	4,4	6	17	36	66
MB117.045	4,5	6	17	36	66
MB117.046	4,6	6	17	36	66
MB117.047	4,7	6	17	36	66
MB117.048	4,8	6	20	36	66
MB117.049	4,9	6	20	36	66
MB117.050	5	6	20	36	66
MB117.051	5,1	6	20	36	66
MB117.052	5,2	6	20	36	66
MB117.053	5,3	6	20	36	66
MB117.054	5,4	6	20	36	66
MB117.055	5,5	6	20	36	66
MB117.056	5,6	6	20	36	66
MB117.057	5,7	6	20	36	66
MB117.058	5,8	6	20	36	66
MB117.059	5,9	6	20	36	66
MB117.060	6	6	20	36	66
MB117.061	6,1	8	24	36	79
MB117.062	6,2	8	24	36	79
MB117.063	6,3	8	24	36	79
MB117.064	6,4	8	24	36	79
MB117.065	6,5	8	24	36	79
MB117.066	6,6	8	24	36	79
MB117.067	6,7	8	24	36	79
MB117.068	6,8	8	24	36	79
MB117.069	6,9	8	24	36	79
MB117.070	7	8	24	36	79
MB117.071	7,1	8	29	36	79
MB117.072	7,2	8	29	36	79
MB117.073	7,3	8	29	36	79
MB117.074	7,4	8	29	36	79
MB117.075	7,5	8	29	36	79
MB117.076	7,6	8	29	36	79
MB117.077	7,7	8	29	36	79
MB117.078	7,8	8	29	36	79
MB117.079	7,9	8	29	36	79
MB117.080	8	8	29	36	79
MB117.081	8,1	10	35	40	89
MB117.082	8,2	10	35	40	89
MB117.083	8,3	10	35	40	89
MB117.084	8,4	10	35	40	89
MB117.085	8,5	10	35	40	89
MB117.086	8,6	10	35	40	89

Referencia	ø	d	L1	L2	LT
MB117.087	8,7	10	35	40	89
MB117.088	8,8	10	35	40	89
MB117.089	8,9	10	35	40	89
MB117.090	9	10	35	40	89
MB117.091	9,1	10	35	40	89
MB117.092	9,2	10	35	40	89
MB117.093	9,3	10	35	40	89
MB117.094	9,4	10	35	40	89
MB117.095	9,5	10	35	40	89
MB117.096	9,6	10	35	40	89
MB117.097	9,7	10	35	40	89
MB117.098	9,8	10	35	40	89
MB117.099	9,9	10	35	40	89
MB117.100	10	10	35	40	89
MB117.101	10,1	12	40	45	102
MB117.102	10,2	12	40	45	102
MB117.103	10,3	12	40	45	102
MB117.104	10,4	12	40	45	102
MB117.105	10,5	12	40	45	102
MB117.106	10,6	12	40	45	102
MB117.107	10,7	12	40	45	102
MB117.108	10,8	12	40	45	102
MB117.109	10,9	12	40	45	102
MB117.110	11	12	40	45	102
MB117.111	11,1	12	40	45	102
MB117.112	11,2	12	40	45	102
MB117.113	11,3	12	40	45	102
MB117.114	11,4	12	40	45	102
MB117.115	11,5	12	40	45	102
MB117.116	11,6	12	40	45	102
MB117.117	11,7	12	40	45	102
MB117.118	11,8	12	40	45	102
MB117.119	11,9	12	40	45	102
MB117.120	12	12	40	45	102
MB117.122	12,2	14	43	45	107
MB117.125	12,5	14	43	45	107
MB117.127	12,7	14	43	45	107
MB117.128	12,8	14	43	45	107
MB117.130	13	14	43	45	107
MB117.132	13,2	14	43	45	107
MB117.135	13,5	14	43	45	107
MB117.138	13,8	14	43	45	107
MB117.140	14	14	43	45	107
MB117.145	14,5	16	45	48	115
MB117.148	14,8	16	45	48	115
MB117.150	15	16	45	48	115
MB117.155	15,5	16	45	48	115
MB117.160	16	16	45	48	115
MB117.165	16,5	18	51	48	123
MB117.170	17	18	51	48	123
MB117.175	17,5	18	51	48	123
MB117.180	18	18	51	48	123
MB117.185	18,5	20	55	48	131
MB117.190	19	20	55	48	131
MB117.195	19,5	20	55	48	131
MB117.200	20	20	55	48	131

## Broca MD Sin Refrigeración - 5xD

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: AlTiN
- Uso: General

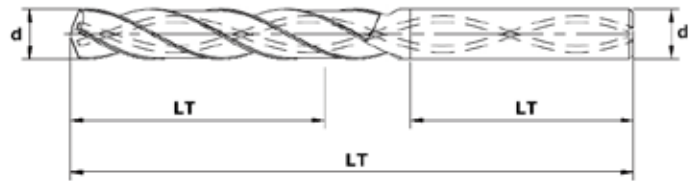


Referencia	ø	d	L1	L2	LT
MB120.030	3.0	6	28	23	66
MB120.031	3.1	6	28	23	66
MB120.032	3.2	6	28	23	66
MB120.033	3.3	6	28	23	66
MB120.034	3.4	6	28	23	66
MB120.035	3.5	6	28	23	66
MB120.036	3.6	6	28	23	66
MB120.037	3.7	6	28	23	66
MB120.038	3.8	6	36	29	74
MB120.039	3.9	6	36	29	74
MB120.040	4.0	6	36	29	74
MB120.041	4.1	6	36	29	74
MB120.042	4.2	6	36	29	74
MB120.043	4.3	6	36	29	74
MB120.044	4.4	6	44	35	82
MB120.045	4.5	6	44	35	82
MB120.046	4.6	6	44	35	82
MB120.047	4.7	6	44	35	82
MB120.048	4.8	6	44	35	82
MB120.049	4.9	6	44	35	82
MB120.050	5.0	6	44	35	82
MB120.051	5.1	6	44	35	82
MB120.052	5.2	6	44	35	82
MB120.053	5.3	6	44	35	82
MB120.054	5.4	6	44	35	82
MB120.055	5.5	6	44	35	82
MB120.056	5.6	6	44	35	82
MB120.057	5.7	6	44	35	82
MB120.058	5.8	6	44	35	82
MB120.059	5.9	6	44	35	82
MB120.060	6.0	6	44	35	82
MB120.061	6.1	8	53	43	91
MB120.062	6.2	8	53	43	91
MB120.063	6.3	8	53	43	91
MB120.064	6.4	8	53	43	91
MB120.065	6.5	8	53	43	91
MB120.066	6.6	8	53	43	91
MB120.067	6.7	8	53	43	91
MB120.068	6.8	8	53	43	91
MB120.069	6.9	8	53	43	91
MB120.070	7.0	8	53	43	91
MB120.071	7.1	8	53	43	91
MB120.072	7.2	8	53	43	91
MB120.073	7.3	8	53	43	91
MB120.074	7.4	8	53	43	91
MB120.075	7.5	8	53	43	91
MB120.076	7.6	8	53	43	91
MB120.077	7.7	8	53	43	91
MB120.078	7.8	8	53	43	91
MB120.079	7.9	8	53	43	91
MB120.080	8.0	10	61	49	103
MB120.081	8.1	10	61	49	103
MB120.082	8.2	10	61	49	103
MB120.083	8.3	10	61	49	103
MB120.084	8.4	10	61	49	103
MB120.085	8.5	10	61	49	103
MB120.086	8.6	10	61	49	103

Referencia	ø	d	L1	L2	LT
MB120.087	8.7	10	61	49	103
MB120.088	8.8	10	61	49	103
MB120.089	8.9	10	61	49	103
MB120.090	9.0	10	61	49	103
MB120.091	9.1	10	61	49	103
MB120.092	9.2	10	61	49	103
MB120.093	9.3	10	61	49	103
MB120.094	9.4	10	61	49	103
MB120.095	9.5	10	61	49	103
MB120.096	9.6	10	61	49	103
MB120.097	9.7	10	61	49	103
MB120.098	9.8	10	61	49	103
MB120.099	9.9	10	61	49	103
MB120.100	10.0	10	61	49	103
MB120.101	10.1	12	71	56	118
MB120.102	10.2	12	71	56	118
MB120.103	10.3	12	71	56	118
MB120.104	10.4	12	71	56	118
MB120.105	10.5	12	71	56	118
MB120.106	10.6	12	71	56	118
MB120.107	10.7	12	71	56	118
MB120.108	10.8	12	71	56	118
MB120.109	10.9	12	71	56	118
MB120.110	11.0	12	71	56	118
MB120.111	11.1	12	71	56	118
MB120.112	11.2	12	71	56	118
MB120.113	11.3	12	71	56	118
MB120.114	11.4	12	71	56	118
MB120.115	11.5	12	71	56	118
MB120.116	11.6	12	71	56	118
MB120.117	11.7	12	71	56	118
MB120.118	11.8	12	71	56	118
MB120.119	11.9	12	71	56	118
MB120.120	12.0	12	71	56	118
MB120.122	12.2	14	77	60	124
MB120.125	12.5	14	77	60	124
MB120.127	12.7	14	77	60	124
MB120.128	12.8	14	77	60	124
MB120.130	13.0	14	77	60	124
MB120.131	13.1	14	77	60	124
MB120.135	13.5	14	77	60	124
MB120.138	13.8	14	77	60	124
MB120.140	14.0	14	77	60	124
MB120.145	14.5	16	83	63	133
MB120.148	14.8	16	83	63	133
MB120.150	15.0	16	83	63	133
MB120.155	15.5	16	83	63	133
MB120.160	16.0	16	83	63	133
MB120.165	16.5	18	93	71	143
MB120.170	17.0	18	93	71	143
MB120.175	17.5	18	93	71	143
MB120.180	18.0	18	93	71	143
MB120.185	18.5	20	101	77	153
MB120.190	19.0	20	101	77	153
MB120.195	19.5	20	101	77	153
MB120.200	20.0	20	101	77	153

**Broca MD Con Refrigeración Interior - 5xD**

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: AlTiN
- Uso: General

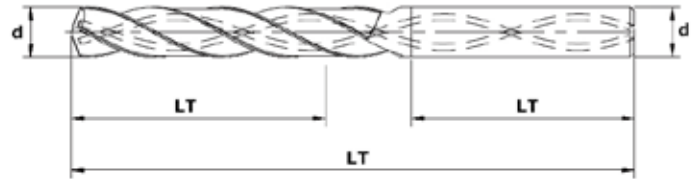


Referencia	ø	d	L1	L2	LT
MB125.030	3.0	6	28	23	66
MB125.031	3.1	6	28	23	66
MB125.032	3.2	6	28	23	66
MB125.033	3.3	6	28	23	66
MB125.034	3.4	6	28	23	66
MB125.035	3.5	6	28	23	66
MB125.036	3.6	6	28	23	66
MB125.037	3.7	6	28	23	66
MB125.038	3.8	6	36	29	74
MB125.039	3.9	6	36	29	74
MB125.040	4.0	6	36	29	74
MB125.041	4.1	6	36	29	74
MB125.042	4.2	6	36	29	74
MB125.043	4.3	6	36	29	74
MB125.044	4.4	6	44	35	82
MB125.045	4.5	6	44	35	82
MB125.046	4.6	6	44	35	82
MB125.047	4.7	6	44	35	82
MB125.048	4.8	6	44	35	82
MB125.049	4.9	6	44	35	82
MB125.050	5.0	6	44	35	82
MB125.051	5.1	6	44	35	82
MB125.052	5.2	6	44	35	82
MB125.053	5.3	6	44	35	82
MB125.054	5.4	6	44	35	82
MB125.055	5.5	6	44	35	82
MB125.056	5.6	6	44	35	82
MB125.057	5.7	6	44	35	82
MB125.058	5.8	6	44	35	82
MB125.059	5.9	6	44	35	82
MB125.060	6.0	6	44	35	82
MB125.061	6.1	8	53	43	91
MB125.062	6.2	8	53	43	91
MB125.063	6.3	8	53	43	91
MB125.064	6.4	8	53	43	91
MB125.065	6.5	8	53	43	91
MB125.066	6.6	8	53	43	91
MB125.067	6.7	8	53	43	91
MB125.068	6.8	8	53	43	91
MB125.069	6.9	8	53	43	91
MB125.070	7.0	8	53	43	91
MB125.071	7.1	8	53	43	91
MB125.072	7.2	8	53	43	91
MB125.073	7.3	8	53	43	91
MB125.074	7.4	8	53	43	91
MB125.075	7.5	8	53	43	91
MB125.076	7.6	8	53	43	91
MB125.077	7.7	8	53	43	91
MB125.078	7.8	8	53	43	91
MB125.079	7.9	8	53	43	91
MB125.080	8.0	10	61	49	103
MB125.081	8.1	10	61	49	103
MB125.082	8.2	10	61	49	103
MB125.083	8.3	10	61	49	103
MB125.084	8.4	10	61	49	103
MB125.085	8.5	10	61	49	103

Referencia	ø	d	L1	L2	LT
MB125.086	8.6	10	61	49	103
MB125.087	8.7	10	61	49	103
MB125.088	8.8	10	61	49	103
MB125.089	8.9	10	61	49	103
MB125.090	9.0	10	61	49	103
MB125.091	9.1	10	61	49	103
MB125.092	9.2	10	61	49	103
MB125.093	9.3	10	61	49	103
MB125.094	9.4	10	61	49	103
MB125.095	9.5	10	61	49	103
MB125.096	9.6	10	61	49	103
MB125.097	9.7	10	61	49	103
MB125.098	9.8	10	61	49	103
MB125.099	9.9	10	61	49	103
MB125.100	10.0	10	61	49	103
MB125.101	10.1	12	71	56	118
MB125.102	10.2	12	71	56	118
MB125.103	10.3	12	71	56	118
MB125.104	10.4	12	71	56	118
MB125.105	10.5	12	71	56	118
MB125.106	10.6	12	71	56	118
MB125.107	10.7	12	71	56	118
MB125.108	10.8	12	71	56	118
MB125.109	10.9	12	71	56	118
MB125.110	11.0	12	71	56	118
MB125.111	11.1	12	71	56	118
MB125.112	11.2	12	71	56	118
MB125.113	11.3	12	71	56	118
MB125.114	11.4	12	71	56	118
MB125.115	11.5	12	71	56	118
MB125.116	11.6	12	71	56	118
MB125.117	11.7	12	71	56	118
MB125.118	11.8	12	71	56	118
MB125.119	11.9	12	71	56	118
MB125.120	12.0	12	71	56	118
MB125.122	12.2	14	77	60	124
MB125.125	12.5	14	77	60	124
MB125.127	12.7	14	77	60	124
MB125.128	12.8	14	77	60	124
MB125.130	13.0	14	77	60	124
MB125.131	13.1	14	77	60	124
MB125.135	13.5	14	77	60	124
MB125.138	13.8	14	77	60	124
MB125.140	14.0	14	77	60	124
MB125.145	14.5	16	83	63	133
MB125.148	14.8	16	83	63	133
MB125.150	15.0	16	83	63	133
MB125.155	15.5	16	83	63	133
MB125.160	16.0	16	83	63	133
MB125.165	16.5	18	93	71	143
MB125.170	17.0	18	93	71	143
MB125.175	17.5	18	93	71	143
MB125.180	18.0	18	93	71	143
MB125.185	18.5	20	101	77	153
MB125.190	19.0	20	101	77	153
MB125.195	19.5	20	101	77	153
MB125.200	20.0	20	101	77	153

## Broca MD Con Refrigeración - 5xD - Para INOX

- Corte Angulo: 140° - 30°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: AlTiN
- Uso: Inox

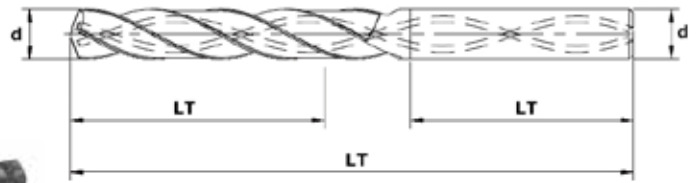


Referencia	ø	d	L1	L2	LT
MB127.030	3	6	23	36	66
MB127.031	3,1	6	23	36	66
MB127.032	3,2	6	23	36	66
MB127.033	3,3	6	23	36	66
MB127.034	3,4	6	23	36	66
MB127.035	3,5	6	23	36	66
MB127.036	3,6	6	23	36	66
MB127.037	3,7	6	23	36	66
MB127.038	3,8	6	29	36	74
MB127.039	3,9	6	29	36	74
MB127.040	4	6	29	36	74
MB127.041	4,1	6	29	36	74
MB127.042	4,2	6	29	36	74
MB127.043	4,3	6	29	36	74
MB127.044	4,4	6	29	36	74
MB127.045	4,5	6	29	36	74
MB127.046	4,6	6	29	36	74
MB127.047	4,7	6	29	36	74
MB127.048	4,8	6	35	36	82
MB127.049	4,9	6	35	36	82
MB127.050	5	6	35	36	82
MB127.051	5,1	6	35	36	82
MB127.052	5,2	6	35	36	82
MB127.053	5,3	6	35	36	82
MB127.054	5,4	6	35	36	82
MB127.055	5,5	6	35	36	82
MB127.056	5,6	6	35	36	82
MB127.057	5,7	6	35	36	82
MB127.058	5,8	6	35	36	82
MB127.059	5,9	6	35	36	82
MB127.060	6	6	35	36	82
MB127.061	6,1	8	43	36	91
MB127.062	6,2	8	43	36	91
MB127.063	6,3	8	43	36	91
MB127.064	6,4	8	43	36	91
MB127.065	6,5	8	43	36	91
MB127.066	6,6	8	43	36	91
MB127.067	6,7	8	43	36	91
MB127.068	6,8	8	43	36	91
MB127.069	6,9	8	43	36	91
MB127.070	7	8	43	36	91
MB127.071	7,1	8	43	36	91
MB127.072	7,2	8	43	36	91
MB127.073	7,3	8	43	36	91
MB127.074	7,4	8	43	36	91
MB127.075	7,5	8	43	36	91
MB127.076	7,6	8	43	36	91
MB127.077	7,7	8	43	36	91
MB127.078	7,8	8	43	36	91
MB127.079	7,9	8	43	36	91
MB127.080	8	8	43	36	91
MB127.081	8,1	10	49	40	103
MB127.082	8,2	10	49	40	103
MB127.083	8,3	10	49	40	103
MB127.084	8,4	10	49	40	103
MB127.085	8,5	10	49	40	103
MB127.086	8,6	10	49	40	103

Referencia	ø	d	L1	L2	LT
MB127.087	8,7	10	49	40	103
MB127.088	8,8	10	49	40	103
MB127.089	8,9	10	49	40	103
MB127.090	9	10	49	40	103
MB127.091	9,1	10	49	40	103
MB127.092	9,2	10	49	40	103
MB127.093	9,3	10	49	40	103
MB127.094	9,4	10	49	40	103
MB127.095	9,5	10	49	40	103
MB127.096	9,6	10	49	40	103
MB127.097	9,7	10	49	40	103
MB127.098	9,8	10	49	40	103
MB127.099	9,9	10	49	40	103
MB127.100	10	10	49	40	103
MB127.101	10,1	12	56	45	118
MB127.102	10,2	12	56	45	118
MB127.103	10,3	12	56	45	118
MB127.104	10,4	12	56	45	118
MB127.105	10,5	12	56	45	118
MB127.106	10,6	12	56	45	118
MB127.107	10,7	12	56	45	118
MB127.108	10,8	12	56	45	118
MB127.109	10,9	12	56	45	118
MB127.110	11	12	56	45	118
MB127.111	11,1	12	56	45	118
MB127.112	11,2	12	56	45	118
MB127.113	11,3	12	56	45	118
MB127.114	11,4	12	56	45	118
MB127.115	11,5	12	56	45	118
MB127.116	11,6	12	56	45	118
MB127.117	11,7	12	56	45	118
MB127.118	11,8	12	56	45	118
MB127.119	11,9	12	56	45	118
MB127.120	12	12	56	45	118
MB127.122	12,2	14	60	45	124
MB127.125	12,5	14	60	45	124
MB127.127	12,7	14	60	45	124
MB127.128	12,8	14	60	45	124
MB127.130	13	14	60	45	124
MB127.132	13,2	14	60	45	124
MB127.135	13,5	14	60	45	124
MB127.138	13,8	14	60	45	124
MB127.140	14	14	60	45	124
MB127.145	14,5	16	63	48	133
MB127.148	14,8	16	63	48	133
MB127.150	15	16	63	48	133
MB127.155	15,5	16	63	48	133
MB127.160	16	16	63	48	133
MB127.165	16,5	18	71	48	143
MB127.170	17	18	71	48	143
MB127.175	17,5	18	71	48	143
MB127.180	18	18	71	48	143
MB127.185	18,5	20	77	48	153
MB127.190	19	20	77	48	153
MB127.195	19,5	20	77	48	153
MB127.200	20	20	77	48	153

**Broca MD Con Refrigeración Interior - 8xD**

- Corte Angulo: 140°
- Tolerancia corte: h8
- Recubrimiento: AlTiN
- Uso: General
- Según DIN-6537L



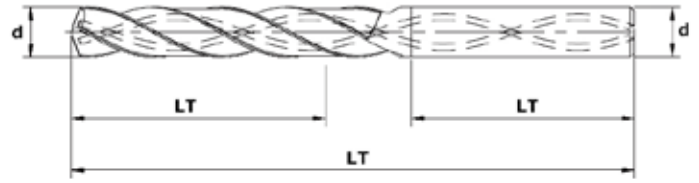
Referencia	ø	d	L1	L2	LT
MB135.030	3.0	6	34	29	72
MB135.031	3.1	6	34	29	72
MB135.032	3.2	6	34	29	72
MB135.033	3.3	6	34	29	72
MB135.034	3.4	6	34	29	72
MB135.035	3.5	6	34	29	72
MB135.036	3.6	6	34	29	72
MB135.037	3.7	6	34	29	72
MB135.038	3.8	6	34	29	81
MB135.039	3.9	6	43	36	81
MB135.040	4.0	6	43	36	81
MB135.041	4.1	6	43	36	81
MB135.042	4.2	6	43	36	81
MB135.043	4.3	6	43	36	81
MB135.044	4.4	6	43	36	81
MB135.045	4.5	6	43	36	81
MB135.046	4.6	6	43	36	81
MB135.047	4.7	6	43	36	81
MB135.048	4.8	6	57	48	95
MB135.049	4.9	6	57	48	95
MB135.050	5.0	6	57	48	95
MB135.051	5.1	6	57	48	95
MB135.052	5.2	6	57	48	95
MB135.053	5.3	6	57	48	95
MB135.054	5.4	6	57	48	95
MB135.055	5.5	6	57	48	95
MB135.056	5.6	6	57	48	95
MB135.057	5.7	6	57	48	95
MB135.058	5.8	6	57	48	95
MB135.059	5.9	6	57	48	95
MB135.060	6.0	6	57	48	95
MB135.061	6.1	8	76	66	114
MB135.062	6.2	8	76	66	114
MB135.063	6.3	8	76	66	114
MB135.064	6.4	8	76	66	114
MB135.065	6.5	8	76	66	114
MB135.066	6.6	8	76	66	114
MB135.067	6.7	8	76	66	114
MB135.068	6.8	8	76	66	114
MB135.069	6.9	8	76	66	114
MB135.070	7.0	8	76	66	114
MB135.071	7.1	8	76	66	114
MB135.072	7.2	8	76	66	114
MB135.073	7.3	8	76	66	114
MB135.074	7.4	8	76	66	114
MB135.075	7.5	8	76	66	114
MB135.076	7.6	8	76	66	114
MB135.077	7.7	8	76	66	114
MB135.078	7.8	8	76	66	114

Referencia	ø	d	L1	L2	LT
MB135.079	7.9	8	76	66	114
MB135.080	8.0	8	76	66	114
MB135.081	8.1	10	95	83	142
MB135.082	8.2	10	95	83	142
MB135.083	8.3	10	95	83	142
MB135.084	8.4	10	95	83	142
MB135.085	8.5	10	95	83	142
MB135.086	8.6	10	95	83	142
MB135.087	8.7	10	95	83	142
MB135.088	8.8	10	95	83	142
MB135.089	8.9	10	95	83	142
MB135.090	9.0	10	95	83	142
MB135.091	9.1	10	95	83	142
MB135.092	9.2	10	95	83	142
MB135.093	9.3	10	95	83	142
MB135.094	9.4	10	95	83	142
MB135.095	9.5	10	95	83	142
MB135.096	9.6	10	95	83	142
MB135.097	9.7	10	95	83	142
MB135.098	9.8	10	95	83	142
MB135.099	9.9	10	95	83	142
MB135.100	10.0	10	114	99	142
MB135.102	10.2	12	114	99	162
MB135.104	10.4	12	114	99	162
MB135.105	10.5	12	114	99	162
MB135.108	10.8	12	114	99	162
MB135.110	11.0	12	114	99	162
MB135.115	11.5	12	114	99	162
MB135.118	11.8	12	114	99	162
MB135.120	12.0	12	114	99	162
MB135.125	12.5	14	133	116	178
MB135.130	13.0	14	133	116	178
MB135.135	13.5	14	133	116	178
MB135.138	13.8	14	133	116	178
MB135.140	14.0	14	133	116	178
MB135.145	14.5	16	152	132	203
MB135.150	15.0	16	152	132	203
MB135.155	15.5	16	152	132	203
MB135.160	16.0	16	152	132	203
MB135.165	16.5	16	171	149	222
MB135.170	17.0	18	171	149	222
MB135.175	17.5	18	171	149	222
MB135.180	18.0	18	171	149	222
MB135.185	18.5	20	190	170	243
MB135.190	19.0	20	190	170	243
MB135.195	19.5	20	190	170	243
MB135.200	20.0	20	190	170	243



### Broca MD Con Refrigeración - 15xD

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: AlTiN
- Uso: General

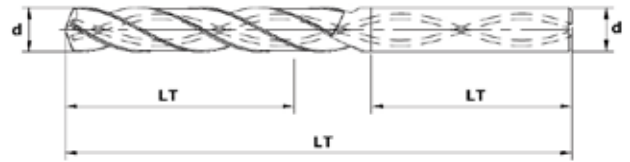


Referencia	D	d	LT	L
MB142.030	3	6	95	55
MB142.031	3.1	6	104	64
MB142.032	3.2	6	104	64
MB142.033	3.3	6	104	64
MB142.034	3.4	6	104	64
MB142.035	3.5	6	104	64
MB142.036	3.6	6	104	64
MB142.037	3.7	6	104	64
MB142.038	3.8	6	104	64
MB142.039	3.9	6	104	64
MB142.040	4	6	104	64
MB142.041	4.1	6	131	91
MB142.042	4.2	6	131	91
MB142.043	4.3	6	131	91
MB142.044	4.4	6	131	91
MB142.045	4.5	6	131	91
MB142.046	4.6	6	131	91
MB142.047	4.7	6	131	91
MB142.048	4.8	6	131	91
MB142.049	4.9	6	131	91
MB142.050	5	6	131	91
MB142.051	5.1	6	149	109
MB142.052	5.2	6	149	109
MB142.053	5.3	6	149	109
MB142.054	5.4	6	149	109
MB142.055	5.5	6	149	109
MB142.056	5.6	6	149	109
MB142.057	5.7	6	149	109
MB142.058	5.8	6	149	109
MB142.059	5.9	6	149	109
MB142.060	6	6	149	109
MB142.061	6.1	8	167	127
MB142.062	6.2	8	167	127
MB142.063	6.3	8	167	127
MB142.064	6.4	8	167	127
MB142.065	6.5	8	167	127
MB142.066	6.6	8	167	127
MB142.067	6.7	8	167	127
MB142.068	6.8	8	167	127
MB142.069	6.9	8	167	127
MB142.070	7	8	167	127
MB142.071	7.1	8	185	145
MB142.072	7.2	8	185	145
MB142.073	7.3	8	185	145
MB142.074	7.4	8	185	145
MB142.075	7.5	8	185	145
MB142.076	7.6	8	185	145
MB142.077	7.7	8	185	145
MB142.078	7.8	8	185	145
MB142.079	7.9	8	185	145
MB142.080	8	8	185	145
MB142.081	8.1	10	207	163

Referencia	D	d	LT	L
MB142.082	8.2	10	207	163
MB142.083	8.3	10	207	163
MB142.084	8.4	10	207	163
MB142.085	8.5	10	207	163
MB142.086	8.6	10	207	163
MB142.087	8.7	10	207	163
MB142.088	8.8	10	207	163
MB142.089	8.9	10	207	163
MB142.090	9	10	207	163
MB142.091	9.1	10	207	163
MB142.092	9.2	10	207	163
MB142.093	9.3	10	207	163
MB142.094	9.4	10	207	163
MB142.095	9.5	10	207	163
MB142.096	9.6	10	207	163
MB142.097	9.7	10	207	163
MB142.098	9.8	10	207	163
MB142.099	9.9	10	207	163
MB142.100	10	10	207	163
MB142.101	10.1	12	249	200
MB142.102	10.2	12	249	200
MB142.103	10.3	12	249	200
MB142.104	10.4	12	249	200
MB142.105	10.5	12	249	200
MB142.106	10.6	12	249	200
MB142.107	10.7	12	249	200
MB142.108	10.8	12	249	200
MB142.109	10.9	12	249	200
MB142.110	11	12	249	200
MB142.111	11.1	12	167	218
MB142.112	11.2	12	167	218
MB142.113	11.3	12	167	218
MB142.114	11.4	12	167	218
MB142.115	11.5	12	167	218
MB142.116	11.6	12	167	218
MB142.117	11.7	12	167	218
MB142.118	11.8	12	167	218
MB142.119	11.9	12	167	218
MB142.120	12	12	267	218
MB142.121	12.1	14	285	236
MB142.122	12.2	14	285	236
MB142.123	12.3	14	285	236
MB142.124	12.4	14	285	236
MB142.125	12.5	14	285	236
MB142.126	12.6	14	285	236
MB142.127	12.7	14	285	236
MB142.128	12.8	14	285	236
MB142.129	12.9	14	285	236
MB142.130	13	14	285	236
MB142.140	14	14	303	254

**Broca MD Con Refrigeración Interior - 12xD**

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: ALTiN
- Uso: General

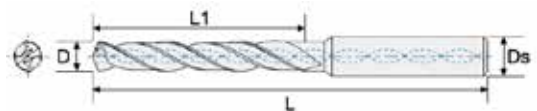


Referencia	Diámetro	øAmarre	LC	LT
MB140.030	3	6	54	92
MB140.035	3.5	6	54	92
MB140.040	4	6	64	102
MB140.045	4.5	6	64	102
MB140.050	5	6	78	118
MB140.055	5.5	6	78	118
MB140.060	6	6	78	118
MB140.065	6.5	8	108	146
MB140.070	7	8	108	146
MB140.075	7.5	8	108	146
MB140.080	8	8	108	146
MB140.085	8.5	10	120	162

Referencia	Diámetro	øAmarre	LC	LT
MB140.090	9	10	120	162
MB140.095	9.5	10	120	162
MB140.100	10	10	120	162
MB140.105	10.5	12	156	204
MB140.110	11	12	156	204
MB140.115	11.5	12	156	204
MB140.120	12	12	156	204
MB140.130	13	14	182	230
MB140.140	14	14	182	230
MB140.150	15	16	208	260
MB140.160	16	16	208	260

**Broca MD Con Refrigeración Interior - 20xD**

- Corte Angulo: 135°
- Tolerancia corte: h8
- Recubrimiento: Altinx
- Uso: General - Necesario broca piloto para inicio

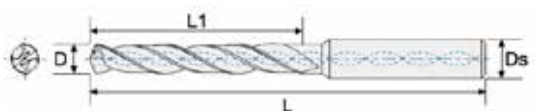


Referencia	D	ds	L1	L
MB145.030	3	4	70	110
MB145.035	3.5	4	82	123
MB145.040	4	4	96	136
MB145.045	4.5	6	118	158
MB145.050	5	6	118	158
MB145.055	5.5	6	140	180
MB145.060	6	6	140	180
MB145.065	6.5	8	162	202

Referencia	Diámetro	øAmarre	LC	LT
MB145.070	7	8	162	202
MB145.075	7.5	8	183	223
MB145.080	8	8	183	223
MB145.085	8.5	10	205	249
MB145.090	9	10	205	249
MB145.095	9.5	10	227	271
MB145.100	10	10	227	271

**Broca MD Con Refrigeración Interior - 25xD**

- Corte Angulo: 135°
- Tolerancia corte: h8
- Recubrimiento: Altinx
- Uso: General - Necesario broca piloto para inicio



Referencia	D	ds	L1	L
MB147.030	3	6	85.5	130
MB147.032	3.2	6	95.5	140
MB147.035	3.5	6	100.5	150
MB147.038	3.8	6	100.5	150
MB147.040	4	6	110.5	160
MB147.042	4.2	6	120.5	170
MB147.045	4.5	6	130.5	180
MB147.048	4.8	6	140.5	190
MB147.050	5	6	140.5	190
MB147.055	5.5	6	160.5	210

Referencia	Diámetro	øAmarre	LC	LT
MB147.060	6	6	170.5	220
MB147.065	6.5	8	191	230
MB147.070	7	8	201	240
MB147.075	7.5	8	214	250
MB147.080	8	8	224	260
MB147.085	8.5	10	237	280
MB147.090	9	10	247	290
MB147.098	9.5	10	267	310
MB147.100	10	10	267	310

**Broca MD MINI de 2xD / 3xD / 7xD / 10xD / 15xD**

- Corte Angulo: 130°
- Tolerancia corte: h8
- Recubrimiento: Altinix
- Uso: General - Mango Reforzado


**Broca MD MINI 2xD**

Referencia	D	L1	L	Ds
MB210.030	0,30	2	38	3
MB210.050	0,50	3	38	3
MB210.060	0,60	3	38	3
MB210.070	0,70	3	38	3
MB210.080	0,80	4	38	3
MB210.090	0,90	4	38	3
MB210.100	1,00	4	38	3
MB210.110	1,10	6	38	3
MB210.120	1,20	6	38	3
MB210.130	1,30	6	38	3
MB210.140	1,40	6	38	3
MB210.150	1,50	6	38	3
MB210.160	1,60	8	38	3
MB210.170	1,70	8	38	3
MB210.180	1,80	8	38	3
MB210.190	1,90	8	38	3
MB210.200	2,00	8	38	3
MB210.210	2,10	8	38	3
MB210.220	2,20	8	38	3
MB210.230	2,30	8	38	3
MB210.240	2,40	8	38	3
MB210.250	2,50	8	38	3
MB210.260	2,60	8	38	3
MB210.270	2,70	8	38	3
MB210.280	2,80	8	38	3
MB210.290	2,90	8	38	3
MB210.300	3,00	8	38	3

**Broca MD MINI 3xD**

Referencia	D	L1	L	Ds
MB211.210	2,10	12	50	3
MB211.220	2,2	12	50	3
MB211.230	2,3	12	50	3
MB211.240	2,4	12	50	3
MB211.250	2,5	16	50	3
MB211.260	2,6	16	50	3
MB211.270	2,7	16	50	3
MB211.280	2,8	16	50	3
MB211.290	2,9	16	50	3
MB211.300	3	16	50	3

**Broca MD MINI 7xD**

Referencia	D	L1	L	Ds
MB213.070	0,70	8	38	3
MB213.075	0,75	8	38	3
MB213.080	0,80	8	38	3
MB213.090	0,90	8	38	3
MB213.100	1,00	10	50	3
MB213.110	1,10	10	50	3

**Broca MD MIN 5xD**

Referencia	D	L1	L	Ds
MB212.020	0,20	1,5	38	3
MB212.120	1,20	10	50	3
MB212.130	1,30	10	50	3
MB212.140	1,40	10	50	3
MB212.150	1,50	12	50	3
MB212.160	1,60	12	50	3
MB212.170	1,70	12	50	3
MB212.180	1,80	14	50	3
MB212.190	1,90	14	50	3
MB212.200	2,00	14	50	3
MB212.210	2,10	14	50	3
MB212.220	2,20	16	50	3
MB212.230	2,30	16	50	3
MB212.240	2,40	16	50	3
MB212.250	2,50	20	50	3
MB212.260	2,60	20	50	3
MB212.270	2,70	20	50	3
MB212.280	2,80	20	50	3
MB212.290	2,90	20	50	3
MB212.300	3,00	22	60	3

**Broca MD MINI 10xD**

Referencia	D	L1	L	Ds
MB214.045	0,45	6	38	3
MB214.050	0,50	6	38	3
MB214.060	0,60	8	38	3
MB214.061	0,61	8	38	3
MB214.062	0,62	8	38	3
MB214.065	0,65	8	38	3

**Broca MD MINI 12xD**

Referencia	D	L1	L	Ds
MB215.018	0,18	3	38	3
MB215.025	0,25	3	38	3
MB215.030	0,30	4,5	38	3
MB215.033	0,33	5,5	38	3
MB215.035	0,35	5,5	38	3
MB215.036	0,36	5,5	38	3
MB215.040	0,40	6	38	3
MB215.055	0,55	8	38	3

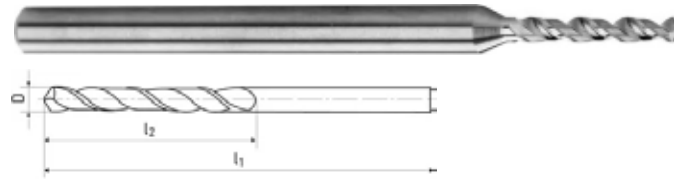
**Broca MD MINI 15xD**

Referencia	D	L1	L	Ds
MB216.020	0,20	4	38	3

**Broca MD MINI**

- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: Altin
- Uso: General

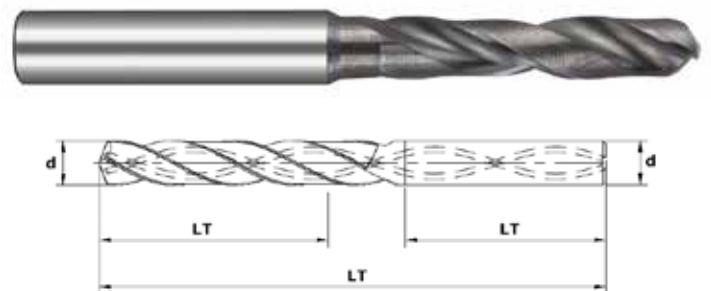
Referencia	D	d	L2	L1
MB205.003	0.3	1	2,2	25
MB205.004	0.4	1	3,6	25
MB205.005	0.5	1	4	25
MB205.006	0.6	1	4,5	25
MB205.007	0.7	1	5,6	25
MB205.008	0.8	1,5	6,3	25
MB205.009	0.9	1,5	7,1	25
MB205.010	1	1,5	8	25
MB205.011	1.1	1,5	9	25
MB205.012	1.2	1,5	10	25
MB205.013	1.3	1,5	10	25
MB205.014	1.4	1,5	11,2	25



**Broca MD Mini 3xD - Sin Refrigeración**

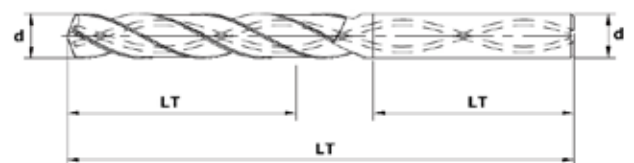
- Corte Angulo: 140°
- Tolerancia corte: h8 - Según DIN-6537K
- Recubrimiento: ALTiN
- Sin refrigeración interior
- Uso: General

Referencia	D	d	LC	LT
MB206.010	1	3	8	38
MB206.015	1.5	3	8	38
MB206.016	1.6	3	8	38
MB206.020	2	3	16	50
MB206.025	2.5	3	20	50



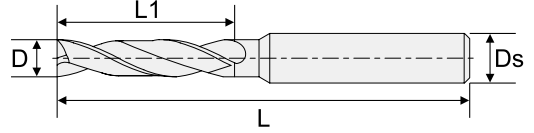
**Broca MD ALUMINIO - 5xD Refrigerada**

- Corte Angulo: 140°
- Recubrimiento: ZrN
- Con refrigeración interior
- Uso: Aluminio / Plástico



Referencia	ø	d	L1	L2	LT
MB240.030	3.0	6	28	23	66
MB240.035	3.5	6	28	23	66
MB240.040	4.0	6	36	29	74
MB240.045	4.5	6	44	35	82
MB240.050	5.0	6	44	35	82
MB240.055	5.5	6	44	35	82
MB240.060	6.0	6	44	35	82
MB240.065	6.5	8	53	43	91
MB240.070	7.0	8	53	43	91
MB240.075	7.5	8	53	43	91
MB240.080	8.0	10	61	49	103
MB240.085	8.5	10	61	49	103
MB240.090	9.0	10	61	49	103
MB240.095	9.5	10	61	49	103
MB240.100	10.0	10	61	49	103
MB240.120	12.0	12	71	56	118
MB240.140	14.0	14	77	60	124
MB240.150	15.0	16	83	63	133
MB240.160	16.0	16	83	63	133
MB240.180	18.0	18	93	71	143
MB240.200	20.0	20	101	77	153

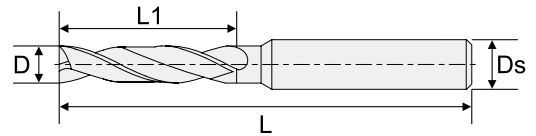
Broca MD - Acabado Plano



Referencia	D	L1	L	Ds
MB220.022	2,20	13	60	4
MB220.026	2,60	15	60	4
MB220.027	2,70	15	60	4
MB220.030	3,00	20	60	4
MB220.031	3,10	20	60	4
MB220.0316	3,10	20	62	6
MB220.032	3,20	20	60	4
MB220.0326	3,20	20	62	6
MB220.033	3,30	20	60	4
MB220.0336	3,30	20	62	6
MB220.034	3,40	20	60	4
MB220.0346	3,40	20	62	6
MB220.035	3,50	20	60	4
MB220.0356	3,50	20	62	6
MB220.036	3,60	20	60	4
MB220.0366	3,60	20	62	6
MB220.037	3,70	20	60	4
MB220.0376	3,70	20	62	6
MB220.038	3,80	24	60	4
MB220.0386	3,80	24	66	6
MB220.039	3,90	24	60	4
MB220.0396	3,90	24	66	6
MB220.040	4,00	24	66	6
MB220.041	4,10	24	66	6
MB220.042	4,20	24	66	6
MB220.043	4,30	24	66	6
MB220.044	4,40	24	66	6
MB220.045	4,50	24	66	6
MB220.046	4,60	24	66	6
MB220.047	4,70	24	66	6
MB220.048	4,80	28	66	6
MB220.049	4,90	28	66	6
MB220.050	5,00	28	66	6
MB220.051	5,10	28	66	6
MB220.052	5,20	28	66	6
MB220.053	5,30	28	66	6
MB220.054	5,40	28	66	6
MB220.055	5,50	28	66	6
MB220.056	5,60	28	66	6
MB220.057	5,70	28	66	6
MB220.058	5,80	28	66	6
MB220.059	5,90	28	66	6
MB220.060	6,00	28	66	6
MB220.061	6,10	34	79	8
MB220.062	6,20	34	79	8
MB220.063	6,30	34	79	8
MB220.0635	6,35	34	79	8
MB220.064	6,40	34	79	8
MB220.065	6,50	34	79	8
MB220.066	6,60	34	79	8
MB220.067	6,70	34	79	8
MB220.068	6,80	34	79	8
MB220.069	6,90	34	79	8
MB220.070	7,00	34	79	8

Referencia	D	L1	L	Ds
MB220.071	7,10	41	79	8
MB220.072	7,20	41	79	8
MB220.073	7,30	41	79	8
MB220.074	7,40	41	79	8
MB220.075	7,50	41	79	8
MB220.076	7,60	41	79	8
MB220.077	7,70	41	79	8
MB220.078	7,80	41	79	8
MB220.079	7,90	41	79	8
MB220.080	8,00	41	79	8
MB220.081	8,10	47	89	10
MB220.082	8,20	47	89	10
MB220.083	8,30	47	89	10
MB220.084	8,40	47	89	10
MB220.085	8,50	47	89	10
MB220.086	8,60	47	89	10
MB220.087	8,70	47	89	10
MB220.088	8,80	47	89	10
MB220.089	8,90	47	89	10
MB220.090	9,00	47	89	10
MB220.091	9,10	47	89	10
MB220.092	9,20	47	89	10
MB220.093	9,30	47	89	10
MB220.094	9,40	47	89	10
MB220.095	9,50	47	89	10
MB220.096	9,60	47	89	10
MB220.097	9,70	47	89	10
MB220.098	9,80	47	89	10
MB220.099	9,90	47	89	10
MB220.100	10,00	47	89	10
MB220.101	10,10	55	102	12
MB220.102	10,2	55	102	12
MB220.103	10,3	55	102	12
MB220.104	10,4	55	102	12
MB220.105	10,5	55	102	12
MB220.106	10,6	55	102	12
MB220.107	10,7	55	102	12
MB220.108	10,8	55	102	12
MB220.109	10,9	55	102	12
MB220.110	11,0	55	102	12
MB220.111	11,1	55	102	12
MB220.112	11,2	55	102	12
MB220.113	11,3	55	102	12
MB220.114	11,4	55	102	12
MB220.115	11,5	55	102	12
MB220.116	11,6	55	102	12
MB220.117	11,7	55	102	12
MB220.118	11,8	55	102	12
MB220.119	11,9	55	102	12
MB220.120	12,0	55	102	12
MB220.121	12,1	60	107	14
MB220.122	12,2	60	107	14
MB220.123	12,3	60	107	14
MB220.124	12,4	60	107	14
MB220.125	12,5	60	107	14

**Broca MD - Acabado Plano**



Referencia	D	L1	L	Ds
MB220.126	12,6	60	107	14
MB220.127	12,7	60	107	14
MB220.128	12,8	60	107	14
MB220.129	12,9	60	107	14
MB220.130	13,0	60	107	14
MB220.132	13,2	60	107	14
MB220.133	13,3	60	107	14
MB220.135	13,5	60	107	14
MB220.137	13,7	60	107	14
MB220.138	13,8	60	107	14
MB220.140	14,0	60	107	14
MB220.142	14,2	65	115	16
MB220.143	14,3	65	115	16
MB220.144	14,4	65	115	16
MB220.145	14,5	65	115	16
MB220.147	14,7	65	115	16

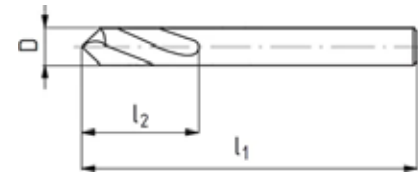
Referencia	D	L1	L	Ds
MB220.150	15,0	65	115	16
MB220.152	15,2	65	115	16
MB220.155	15,5	65	115	16
MB220.156	15,6	65	115	16
MB220.157	15,7	65	115	16
MB220.158	15,8	65	115	16
MB220.160	16,0	65	115	16
MB220.165	16,5	73	123	18
MB220.170	17,0	73	123	18
MB220.175	17,5	73	123	18
MB220.180	18,0	73	123	18
MB220.185	18,5	79	131	20
MB220.190	19,0	79	131	20
MB220.195	19,5	79	131	20
MB220.200	20,0	79	131	20

**Broca Punteado MD 90° / 120°**

- Corte Angulo: 90/120°
- Recubrimiento: AlTiN
- Uso: General



Referencia 90°	Referencia 120°	Diámetro	Diámetro Mango	Longitud Corte	Longitud Total
MB100.040	MB102.040	4	4	12	50
MB100.060	MB102.060	6	6	18	50
MB100.080	MB102.080	8	8	23	60
MB100.100	MB102.100	10	10	24	70
MB100.120	MB102.120	12	12	24	70

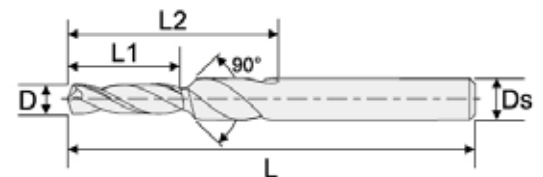


**Broca con Avellanado 90° MD**

- Ángulo Avellanado: 90°
- Recubrimiento: AlTiN
- Uso: General



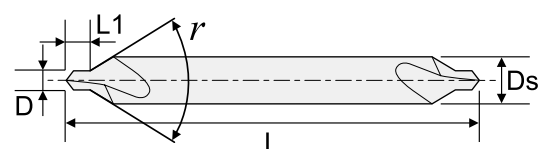
Referencia SIN Ref. Interior	Referencia CON Ref. Interior	D	L1	L2	L	Ds
MB104.033	MB106.033	3.30	12	26	62	6
MB104.042	MB106.042	4.20	15	28	66	6
MB104.080	MB106.080	5.00	18	36	79	8
MB104.100	MB106.100	6.80	24	48	90	10
MB104.120	MB106.120	8.50	30	55	102	12



**Broca Punteado MD 60°**

- Corte Angulo: 60°
- Recubrimiento: AlTiN
- Uso: General

Referencia	D	L1	L	Ds
MB108.010	1	1.6	38	3
MB108.0125	1.25	1.9	38	3
MB108.016	1.6	2.4	42	4
MB108.020	2	2.9	50	5
MB108.025	2.5	3.6	50	6
MB108.030	3	3.9	60	8
MB108.0315	3.15	3.9	60	8
MB108.040	4	5.0	75	10
MB108.050	5	6.3	75	12

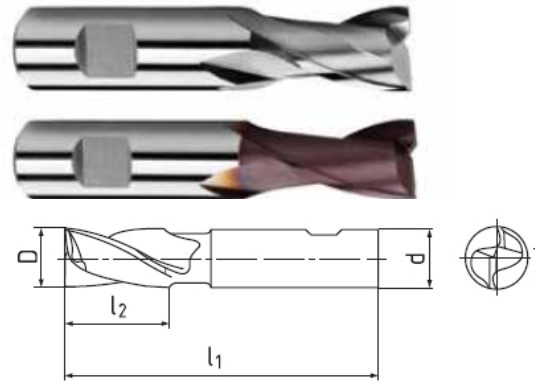




**Fresa HSS – Z2 – Serie Estándar**

• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 25/12°

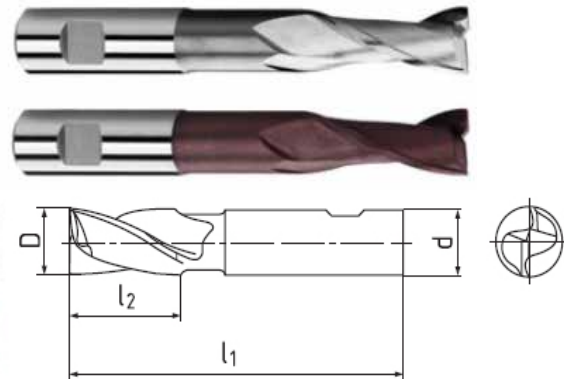
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF112.010	HF113.010	1	6	47	2.5	2
HF112.015	HF113.015	1.5	6	47	3	2
HF112.020	HF113.020	2	6	48	4	2
HF112.025	HF113.025	2.5	6	49	5	2
HF112.028	HF113.028	2.8	6	49	5	2
HF112.030	HF113.030	3	6	49	5	2
HF112.035	HF113.035	3.5	6	50	6	2
HF112.038	HF113.038	3.8	6	51	7	2
HF112.040	HF113.040	4	6	51	7	2
HF112.045	HF113.045	4.5	6	51	7	2
HF112.048	HF113.048	4.8	6	52	8	2
HF112.050	HF113.050	5	6	52	8	2
HF112.055	HF113.055	5.5	6	52	8	2
HF112.0575	HF113.0575	5.75	6	52	8	2
HF112.060	HF113.060	6	6	52	8	2
HF112.065	HF113.065	6.5	10	60	10	2
HF112.070	HF113.070	7	10	60	10	2
HF112.075	HF113.075	7.5	10	60	10	2
HF112.0775	HF113.0775	7.75	10	61	11	2
HF112.080	HF113.080	8	10	61	11	2
HF112.085	HF113.085	8.5	10	61	11	2
HF112.090	HF113.090	9	10	61	11	2
HF112.095	HF113.095	9.5	10	61	11	2
HF112.097	HF113.097	9.7	10	63	13	2
HF112.100	HF113.100	10	10	63	13	2
HF112.105	HF113.105	10.5	12	70	13	2
HF112.110	HF113.110	11	12	70	13	2
HF112.115	HF113.115	11.5	12	70	13	2
HF112.117	HF113.117	11.7	12	70	13	2
HF112.120	HF113.120	12	12	73	16	2
HF112.125	HF113.125	12.5	12	73	16	2
HF112.130	HF113.130	13	12	73	16	2
HF112.135	HF113.135	13.5	12	73	16	2
HF112.137	HF113.137	13.7	12	73	16	2
HF112.140	HF113.140	14	12	73	16	2
HF112.150	HF113.150	15	15	73	16	2
HF112.160	HF113.160	16	16	79	19	2
HF112.170	HF113.170	17	16	79	19	2
HF112.177	HF113.177	17.7	16	79	19	2
HF112.180	HF113.180	18	16	79	19	2
HF112.190	HF113.190	19	16	79	19	2
HF112.200	HF113.200	20	20	88	22	2
HF112.210	HF113.210	21	20	88	22	2
HF112.220	HF113.220	22	20	88	22	2
HF112.240	HF113.240	24	25	102	26	2
HF112.27020	HF113.27020	24,7*	20	96	26	2
HF112.250	HF113.250	25	25	102	26	2
HF112.25020	HF113.25020	25*	20	96	26	2
HF112.260	HF113.260	26	25	102	26	2
HF112.280	HF113.280	28	25	102	26	2
HF112.28020	HF113.28020	28*	20	96	26	2
HF112.300	HF113.300	30	25	102	26	2
HF112.320	HF113.320	32	32	112	32	2
HF112.360	HF113.360	36	32	112	32	2
HF112.400	HF113.400	40	40	130	38	2
HF112.40032	HF113.40032	40*	32	118	38	2



## Fresa - Z2 - Serie Larga

• Características: HSS-CO8 - ISO 1641 - Tipo N - Corte 25/12°

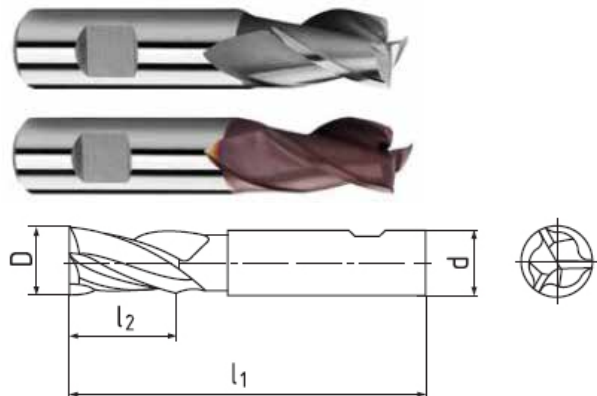
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF114.020	HF115.020	2	6	54	7	2
HF114.030	HF115.030	3	6	56	8	2
HF114.035	HF115.035	3.5	6	59	10	2
HF114.040	HF115.040	4	6	63	11	2
HF114.045	HF115.045	4.5	6	63	11	2
HF114.050	HF115.050	5	6	68	13	2
HF114.055	HF115.055	5.5	6	68	13	2
HF114.060	HF115.060	6	6	68	13	2
HF114.065	HF115.065	6.5	10	80	16	2
HF114.070	HF115.070	7	10	80	16	2
HF114.080	HF115.080	8	10	88	19	2
HF114.085	HF115.085	8.5	10	88	19	2
HF114.090	HF115.090	9	10	88	19	2
HF114.100	HF115.100	10	10	95	22	2
HF114.110	HF115.110	11	12	102	22	2
HF114.120	HF115.120	12	12	110	26	2
HF114.130	HF115.130	13	12	110	26	2
HF114.140	HF115.140	14	12	110	26	2
HF114.150	HF115.150	15	12	110	26	2
HF114.160	HF115.160	16	16	123	32	2
HF114.180	HF115.180	18	16	123	32	2
HF114.190	HF115.190	19	16	123	32	2
HF114.200	HF115.200	20	20	141	38	2
HF114.220	HF115.220	22	20	141	38	2
HF114.240	HF115.240	24	25	166	45	2
HF114.250	HF115.250	25	25	166	45	2
HF114.260	HF115.260	26	25	166	45	2
HF114.280	HF115.280	28	25	166	45	2
HF114.300	HF115.300	30	25	166	45	2
HF114.320	HF115.320	32	32	186	53	2
HF114.350	HF115.350	35	32	186	53	2
HF114.360	HF115.360	36	32	186	53	2
HF114.40032	HF115.40032	40*	32	196	63	2



## Fresa HSS - Z3 - Serie Corta

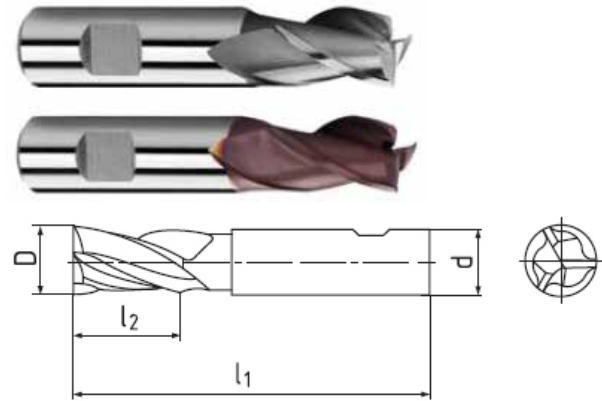
• Características: HSS-CO8 - DIN 327 - Tipo N - Corte 30/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF116.020	HF117.020	2	6	48	4	3
HF116.030	HF117.030	3	6	49	5	3
HF116.035	HF117.035	3.5	6	50	6	3
HF116.040	HF117.040	4	6	51	7	3
HF116.045	HF117.045	4.5	6	51	7	3
HF116.050	HF117.050	5	6	52	8	3
HF116.055	HF117.055	5.5	6	52	8	3
HF116.060	HF117.060	6	6	52	8	3
HF116.065	HF117.065	6.5	10	60	10	3
HF116.070	HF117.070	7	10	60	10	3
HF116.070	HF117.070	7.5	10	60	10	3
HF116.080	HF117.080	8	10	61	11	3
HF116.090	HF117.090	9	10	61	11	3
HF116.095	HF117.095	9.5	10	61	11	3
HF116.100	HF117.100	10	10	63	13	3
HF116.110	HF117.110	11	12	70	13	3
HF116.120	HF117.120	12	12	73	16	3
HF116.130	HF117.130	13	12	73	16	3



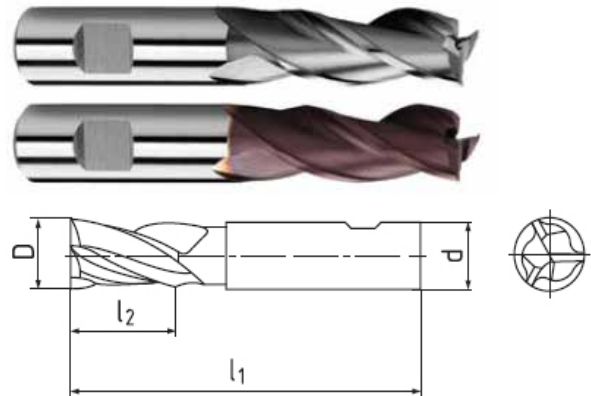
**FRESA HSS – Z3 – Serie Corta (Continuación)**

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF116.140	HF117.140	14	12	73	16	3
HF116.150	HF117.150	15	12	73	16	3
HF116.160	HF117.160	16	16	79	19	3
HF116.180	HF117.180	18	16	79	19	3
HF116.197	HF117.197	19.7	16	88	22	3
HF116.200	HF117.200	20	20	88	22	3
HF116.217	HF117.217	21.7	20	88	22	3
HF116.220	HF117.220	22	20	88	22	3
HF116.247	HF117.247	24,7	25	102	26	3
HF116.250	HF117.250	25	25	102	26	3
HF116.280	HF117.280	28	25	102	26	3
HF116.300	HF117.300	30	25	102	26	3
HF116.320	HF117.320	32	32	112	32	3


**Fresa HSS – Z3 – Serie Larga**

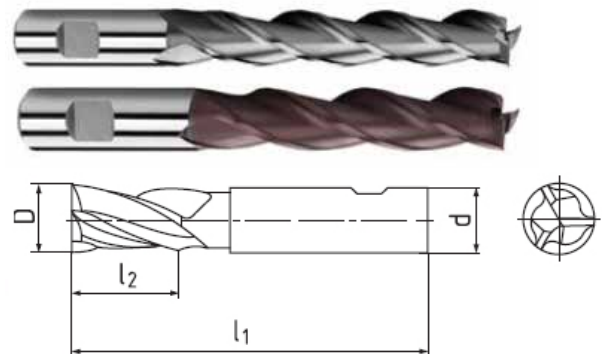
• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 30/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF118.028	HF119.028	2.8	6	52	8	3
HF118.030	HF119.030	3	6	52	8	3
HF118.038	HF119.038	3.8	6	55	11	3
HF118.040	HF119.040	4	6	55	11	3
HF118.055	HF119.055	5	6	57	13	3
HF118.060	HF119.060	6	6	57	13	3
HF118.070	HF119.070	7	10	66	16	3
HF118.080	HF119.080	8	10	69	19	3
HF118.090	HF119.090	9	10	69	19	3
HF118.100	HF119.100	10	10	72	22	3
HF118.110	HF119.110	11	12	79	22	3
HF118.120	HF119.120	12	12	83	26	3
HF118.130	HF119.130	13	12	83	26	3
HF118.140	HF119.140	14	12	83	26	3
HF118.150	HF119.150	15	12	83	26	3
HF118.160	HF119.160	16	16	92	32	3
HF118.180	HF119.180	18	16	92	32	3
HF118.200	HF119.200	20	20	104	38	3
HF118.220	HF119.220	22	20	104	38	3
HF118.240	HF119.240	24	25	121	45	3
HF118.250	HF119.250	25	25	121	45	3


**Fresa HSS – Z3 – Serie Larga**

• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 30/12°

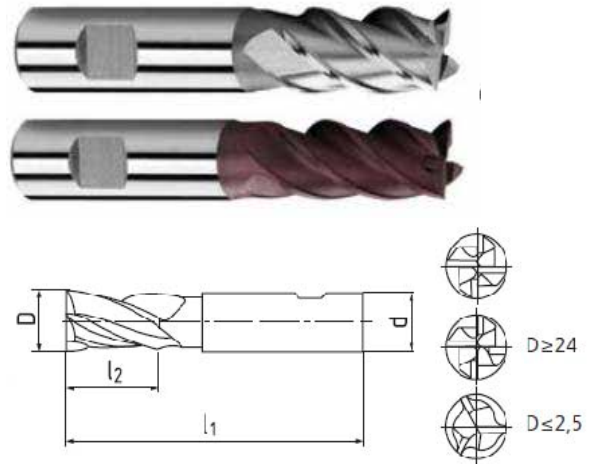
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF120.020	HF121.020	2	6	54	10	3
HF120.030	HF121.030	3	6	56	12	3
HF120.040	HF121.040	4	6	63	19	3
HF120.050	HF121.050	5	6	68	24	3
HF120.060	HF121.060	6	6	68	24	3
HF120.080	HF121.080	8	10	88	38	3
HF120.090	HF121.090	9	10	88	38	3
HF120.100	HF121.100	10	10	95	45	3
HF120.120	HF121.120	12	12	110	53	3
HF120.140	HF121.140	14	12	110	53	3
HF120.160	HF121.160	16	16	123	63	3
HF120.180	HF121.180	18	16	123	63	3
HF120.200	HF121.200	20	20	141	75	3
HF120.220	HF121.220	22	20	141	75	3
HF120.250	HF121.250	25	25	166	90	3



**Fresa HSS Z4 / Z5 – Serie Estándar**

• Características: HSS-CO8 – DIN 844 Tipo N – Corte 40/12°

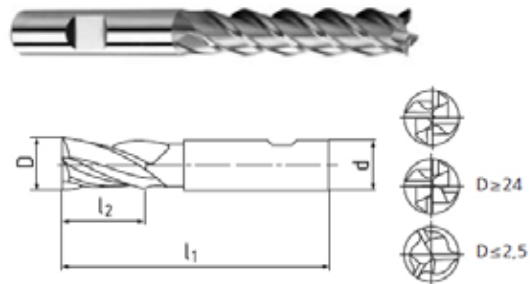
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF124.020	HF125.020	2	6	51	7	3
HF124.025	HF125.025	2.5	6	52	8	3
HF124.030	HF125.030	3	6	52	8	4
HF124.035	HF125.035	3.5	6	54	10	4
HF124.040	HF125.040	4	6	55	11	4
HF124.045	HF125.045	4.5	6	55	11	4
HF124.050	HF125.050	5	6	57	13	4
HF124.055	HF125.055	5.5	6	57	13	4
HF124.060	HF125.060	6	6	57	13	4
HF124.065	HF125.065	6.5	10	66	16	4
HF124.070	HF125.070	7	10	66	16	4
HF124.075	HF125.075	7.5	10	66	16	4
HF124.080	HF125.080	8	10	69	19	4
HF124.085	HF125.085	8.5	10	69	19	4
HF124.090	HF125.090	9	10	69	19	4
HF124.095	HF125.095	9.5	10	69	19	4
HF124.100	HF125.100	10	10	72	22	4
HF124.110	HF125.110	11	12	79	22	4
HF124.120	HF125.120	12	12	83	26	4
HF124.130	HF125.130	13	12	83	26	4
HF124.140	HF125.140	14	12	83	26	4
HF124.150	HF125.150	15	12	83	26	4
HF124.160	HF125.160	16	16	92	32	4
HF124.170	HF125.170	17	16	92	32	4
HF124.180	HF125.180	18	16	92	32	4
HF124.190	HF125.190	19	16	92	32	4
HF124.200	HF125.200	20	20	104	38	4
HF124.220	HF125.220	22	20	104	38	4
HF124.240	HF125.240	24	25	121	45	5
HF124.250	HF125.250	25	25	121	45	5
HF124.280	HF125.280	28	25	121	45	5
HF124.300	HF125.300	30	25	121	45	5
HF124.320	HF125.320	32	32	133	53	6



**Fresa HSS Serie Larga**

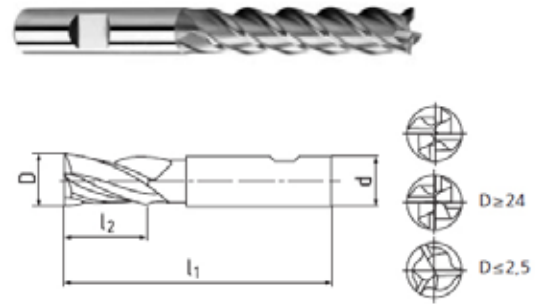
• Características: HSS-CO8 – DIN 844 - Tipo N – Corte 40/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF126.020	HF127.020	2	6	54	10	3
HF126.025	HF127.025	2.5	6	56	12	3
HF126.030	HF127.030	3	6	56	12	4
HF126.035	HF127.035	3.5	6	59	15	4
HF126.040	HF127.040	4	6	63	19	4
HF126.045	HF127.045	4.5	6	63	19	4
HF126.050	HF127.050	5	6	68	24	4
HF126.055	HF127.055	5.5	6	68	24	4
HF126.060	HF127.060	6	6	68	24	4
HF126.065	HF127.065	6.5	10	80	30	4
HF126.070	HF127.070	7	10	80	30	4
HF126.075	HF127.075	7.5	10	80	30	4
HF126.080	HF127.080	8	10	88	38	4
HF126.085	HF127.085	8.5	10	88	38	4
HF126.090	HF127.090	9	10	88	38	4
HF126.095	HF127.095	9.5	10	88	38	4
HF126.100	HF127.100	10	10	95	45	4
HF126.110	HF127.110	11	12	102	45	4
HF126.120	HF127.120	12	12	110	53	4
HF126.130	HF127.130	13	12	110	53	4
HF126.140	HF127.140	14	12	110	53	4
HF126.150	HF127.150	15	12	110	53	4



**Fresa HSS Serie Larga - Continuación**

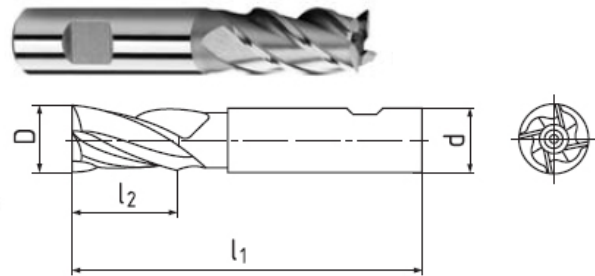
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF126.160	HF127.160	16	16	123	63	4
HF126.170	HF127.170	17	16	123	63	4
HF126.180	HF127.180	18	16	123	63	4
HF126.190	HF127.190	19	16	123	63	4
HF126.200	HF127.200	20	20	141	75	4
HF126.220	HF127.220	22	20	141	75	4
HF126.240	HF127.240	24	25	166	90	5
HF126.250	HF127.250	25	25	166	90	5
HF126.280	HF127.280	28	25	166	90	5
HF126.300	HF127.300	30	25	166	90	5
HF126.320	HF127.320	32	32	186	106	6



**Fresa Z4/5/6 - Serie Estándar**

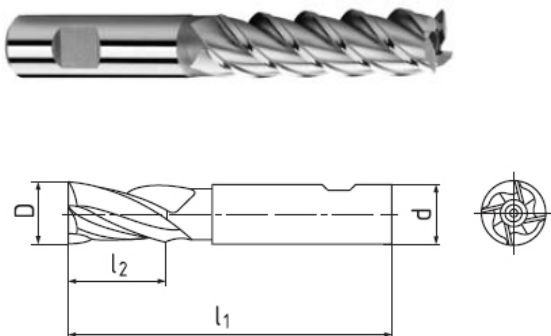
- Características: HSS-CO8 - DIN 844 - Tipo N - Corte 40/12° / 35/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF128.060	HF129.060	6	6	57	13	4
HF128.070	HF129.070	7	10	66	16	4
HF128.080	HF129.080	8	10	69	19	4
HF128.090	HF129.090	9	10	69	19	4
HF128.100	HF129.100	10	10	72	22	4
HF128.110	HF129.110	11	12	79	22	4
HF128.120	HF129.120	12	12	83	26	4
HF128.130	HF129.130	13	12	83	26	4
HF128.140	HF129.140	14	12	83	26	4
HF128.150	HF129.150	15	12	83	26	4
HF128.160	HF129.160	16	16	92	32	4
HF128.170	HF129.170	17	16	92	32	4
HF128.180	HF129.180	18	16	92	32	4
HF128.190	HF129.190	19	16	92	32	4
HF128.200	HF129.200	20	20	104	38	4
HF128.210	HF129.210	21	20	104	38	5
HF128.220	HF129.220	22	20	104	38	5
HF128.240	HF129.240	24	25	121	45	5
HF128.250	HF129.250	25	25	121	45	5
HF128.280	HF129.280	28	25	121	45	5
HF128.300	HF129.300	30	25	121	45	6
HF128.320	HF129.320	32	32	133	53	6
HF128.360	HF129.360	36	32	133	53	6
HF128.400	HF129.400	40*	32	143	63	6



**Fresa HSS Z4/5/6 - Serie Larga**

- Características: HSS-CO8 - DIN 844
- Tipo N - Corte 40/12°

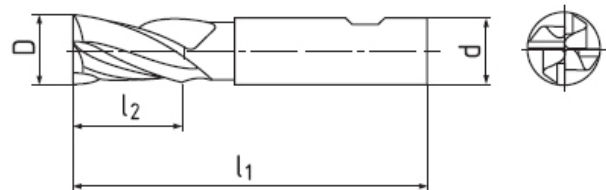


Referencia	Referencia TIALN	D	d	L1	L2	Z
HF130.060	HF131.060	6	6	68	24	4
HF130.070	HF131.070	7	10	80	30	4
HF130.080	HF131.080	8	10	88	38	4
HF130.090	HF131.090	9	10	88	38	4
HF130.100	HF131.100	10	10	95	45	4
HF130.110	HF131.110	11	12	102	45	4
HF130.120	HF131.120	12	12	110	53	4
HF130.130	HF131.130	13	12	110	53	4
HF130.140	HF131.140	14	12	110	53	4
HF130.150	HF131.150	15	12	110	53	4
HF130.160	HF131.160	16	16	123	63	4
HF130.170	HF131.170	17	16	123	63	4
HF130.180	HF131.180	18	16	123	63	4
HF130.200	HF131.200	20	20	141	75	4
HF130.220	HF131.220	22	20	141	75	4
HF130.250	HF131.250	25	25	166	90	5
HF130.280	HF131.280	28	25	166	90	5
HF130.300	HF131.300	30	25	166	90	5
HF130.320	HF131.320	32	32	186	106	5
HF130.360	HF131.360	36	32	186	106	5

### Fresa HSS Z3/4/5/6 – Serie Estándar

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF132.020	HF133.020	2	6	51	7	3
HF132.025	HF133.025	2.5	6	52	8	3
HF132.030	HF133.030	3	6	52	8	4
HF132.035	HF133.035	3.5	6	54	10	4
HF132.040	HF133.040	4	6	55	11	4
HF132.045	HF133.045	4.5	6	55	11	4
HF132.050	HF133.050	5	6	57	13	4
HF132.055	HF133.055	5.5	6	57	13	4
HF132.060	HF133.060	6	6	57	13	4
HF132.065	HF133.065	6.5	10	66	16	4
HF132.070	HF133.070	7	10	66	16	4
HF132.075	HF133.075	7.5	10	66	16	4
HF132.080	HF133.080	8	10	69	19	4
HF132.085	HF133.085	8.5	10	69	19	4
HF132.090	HF133.090	9	10	69	19	4
HF132.095	HF133.095	9.5	10	69	19	4
HF132.100	HF133.100	10	10	72	22	4
HF132.105	HF133.105	10.5	12	79	22	4
HF132.110	HF133.110	11	12	79	22	4
HF132.120	HF133.120	12	12	83	26	4
HF132.130	HF133.130	13	12	83	26	4
HF132.140	HF133.140	14	12	83	26	4
HF132.150	HF133.150	15	12	83	26	4
HF132.160	HF133.160	16	16	92	32	4
HF132.170	HF133.170	17	16	92	32	4
HF132.180	HF133.180	18	16	92	32	4
HF132.200	HF133.200	20	20	104	38	4
HF132.210	HF133.210	21	20	104	38	5
HF132.220	HF133.220	22	20	104	38	5
HF132.240	HF133.240	24	25	121	45	5
HF132.250	HF133.250	25	25	121	45	5
HF132.260	HF133.260	26	25	121	45	5
HF132.270	HF133.270	27	25	121	45	5
HF132.280	HF133.280	28	25	121	45	5
HF132.300	HF133.300	30	25	121	45	5
HF132.320	HF133.320	32	32	133	53	6
HF132.340	HF133.340	34	32	133	53	6
HF132.350	HF133.350	35	32	133	53	6
HF132.360	HF133.360	36	32	133	53	6
HF132.400	HF133.400	40	32	143	63	6

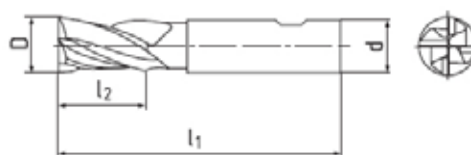
- Características: HSS-C08 – DIN 844
- Tipo N – Corte 30/8°



### Fresa HSS Z3/4/5/6 – Serie Larga

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF134.020	HF135.020	2	6	54	10	3
HF134.030	HF135.030	3	6	56	12	4
HF134.035	HF135.035	3.5	6	59	15	4
HF134.040	HF135.040	4	6	63	19	4
HF134.045	HF135.045	4.5	6	63	19	4
HF134.050	HF135.050	5	6	68	24	4
HF134.055	HF135.055	5.5	6	68	24	4
HF134.060	HF135.060	6	6	68	24	4
HF134.070	HF135.070	7	10	80	30	4
HF134.080	HF135.080	8	10	88	38	4
HF134.090	HF135.090	9	10	88	38	4
HF134.100	HF135.100	10	10	95	45	4
HF134.110	HF135.110	11	12	102	45	4
HF134.120	HF135.120	12	12	110	53	4
HF134.130	HF135.130	13	12	110	53	4
HF134.140	HF135.140	14	12	110	53	4
HF134.150	HF135.150	15	12	110	53	4
HF134.160	HF135.160	16	16	123	63	4
HF134.180	HF135.180	18	16	123	63	4

- Características: HSS-C08 – DIN 844
- Tipo N – Corte 30/8°

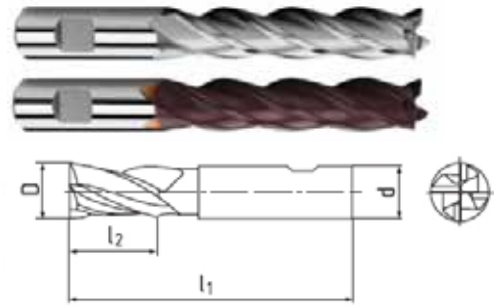




**Fresa HSS Z3/4/5/6 – Serie Larga – Continuación**

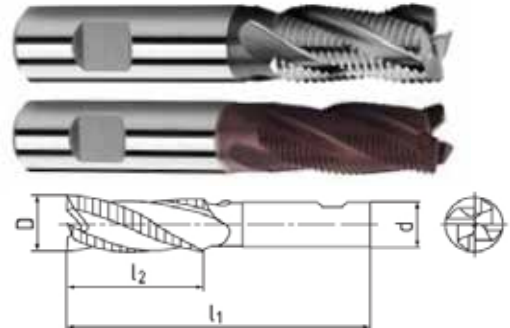
- Características: HSS-CO8 – DIN 844 – Tipo N – Corte 30/8°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF134.200	HF135.200	20	20	141	75	4
HF134.220	HF135.220	22	25	141	75	5
HF134.240	HF135.240	24	25	166	90	5
HF134.250	HF135.250	25	25	166	90	5
HF134.280	HF135.280	28	25	166	90	5
HF134.300	HF135.300	30	25	166	90	5
HF134.320	HF135.320	32	32	186	106	6
HF134.360	HF135.360	36	32	186	106	6
HF134.40032	HF135.40032	40	32	205	125	6
HF134.400	HF135.400	40	40	217	125	6


**Fresa HSS Desbaste Medio Z4/Z5 – Serie Estándar**

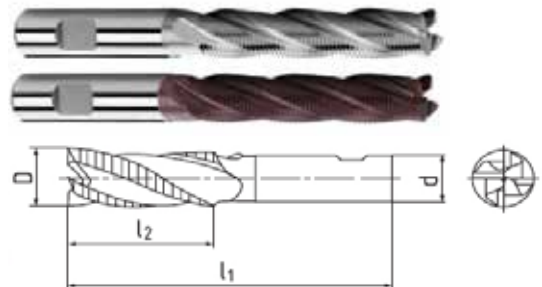
- Características: HSS-CO8 – DIN 844 – Tipo HR – Corte 30/10° – Acabado Tipo RA6.3

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF140.060	HF141.060	6	6	57	13	4
HF140.070	HF141.070	7	10	66	16	4
HF140.080	HF141.080	8	10	69	19	4
HF140.090	HF141.090	9	10	69	19	4
HF140.100	HF141.100	10	10	72	22	4
HF140.110	HF141.110	11	12	79	22	4
HF140.120	HF141.120	12	12	83	26	4
HF140.130	HF141.130	13	12	83	26	4
HF140.140	HF141.140	14	12	83	26	4
HF140.150	HF141.150	15	12	83	26	4
HF140.160	HF141.160	16	16	92	32	4
HF140.170	HF141.170	17	16	92	32	4
HF140.180	HF141.180	18	16	92	32	4
HF140.200	HF141.200	20	20	104	38	5
HF140.220	HF141.220	22	20	104	38	5
HF140.240	HF141.240	24	25	121	45	5
HF140.250	HF141.250	25	25	121	45	5
HF140.260	HF141.260	26	25	121	45	5
HF140.280	HF141.280	28	25	121	45	5
HF140.300	HF141.300	30	25	121	45	5
HF140.320	HF141.320	32	32	133	53	6


**Fresa HSS Desbaste Medio Z4/Z5 – Serie Larga**

- Características: HSS-CO8 – DIN 844 – Tipo HR – Corte 30/10° – Acabado Tipo RA6.3

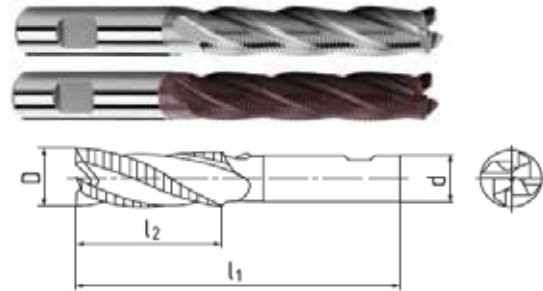
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF142.060	HF143.060	6	6	68	24	4
HF142.080	HF143.080	7	10	88	38	4
HF142.100	HF143.100	10	10	95	45	4
HF142.110	HF143.110	11	12	102	45	4
HF142.120	HF143.120	12	12	110	53	4
HF142.130	HF143.130	13	12	110	53	4
HF142.140	HF143.140	14	12	110	53	4
HF142.160	HF143.160	16	16	123	63	4
HF142.180	HF143.180	18	16	123	63	4
HF142.200	HF143.200	20	20	141	75	5
HF142.220	HF143.220	22	20	141	75	5
HF142.240	HF143.240	24	25	166	90	5
HF142.250	HF143.250	25	25	166	90	5
HF142.260	HF143.260	26	25	166	90	5
HF142.280	HF143.280	28	25	166	90	5
HF142.300	HF143.300	30	25	166	90	5
HF142.320	HF143.320	32	32	186	106	6



### Fresa HSS Desbaste Fuerte - Z4/Z5 – Serie Extra Larga

• Características: HSS-CO8 – DIN 844 – Tipo NR – Corte 30/12° - Acabado Tipo RA 12.5

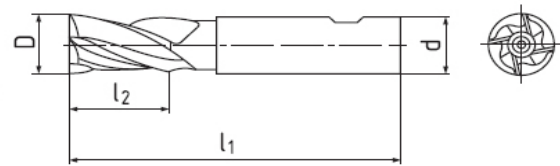
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF146.100	HF147.100	10	10	110	60	4
HF146.120	HF147.120	12	12	137	80	4
HF146.140	HF147.140	14	12	137	80	4
HF146.160	HF147.160	16	16	160	100	4
HF146.180	HF147.180	18	16	160	100	4
HF146.200	HF147.200	20	20	191	125	4
HF146.220	HF147.220	22	20	191	125	5
HF146.250	HF147.250	25	25	216	140	5
HF146.280	HF147.280	28	25	216	140	5
HF146.300	HF147.300	30	25	216	140	5
HF146.320	HF147.320	32	32	260	180	6



### Fresa HSS Acabado - Z4/Z5 – Serie extra Larga

• Características: HSS-CO8 – DIN 844 – Corte 30/12°

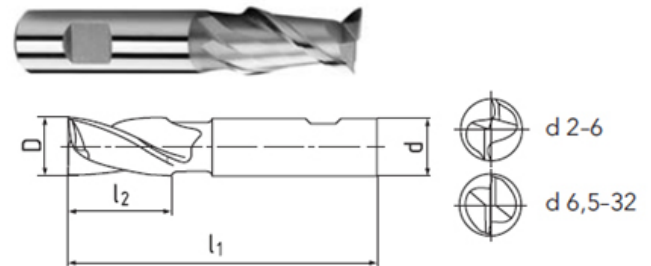
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF148.100	HF149.100	10	10	110	60	4
HF148.120	HF149.120	12	12	137	80	4
HF148.140	HF149.140	14	12	137	80	4
HF148.160	HF149.160	16	16	160	100	5
HF148.180	HF149.180	18	16	160	100	5
HF148.200	HF149.200	20	20	191	125	5
HF148.220	HF149.220	22	20	191	125	5
HF148.250	HF149.250	25	25	216	140	6
HF148.280	HF149.280	28	25	216	140	6
HF148.300	HF149.300	30	25	216	140	6
HF148.320	HF149.320	32	32	260	180	6



### Fresa Z2 – ALU – Serie Estándar

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/20° - Uso Aluminios y materiales no férricos

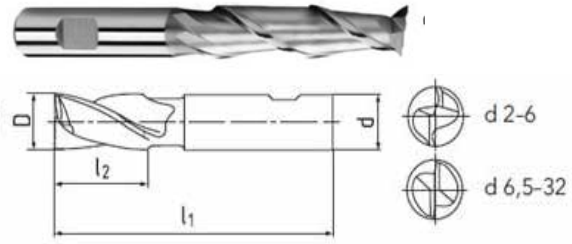
Referencia	D	d	L1	L2	Z
HF160.020	2	6	51	7	2
HF160.030	3	6	52	8	2
HF160.040	4	6	55	11	2
HF160.050	5	6	57	13	2
HF160.055	5.5	6	57	13	2
HF160.060	6	10	57	13	2
HF160.070	7	10	66	16	2
HF160.080	8	10	69	19	2
HF160.090	9	10	69	19	2
HF160.100	10	10	72	22	2
HF160.110	11	12	79	22	2
HF160.120	12	12	83	26	2
HF160.130	13	12	83	26	2
HF160.140	14	12	83	26	2
HF160.150	15	12	83	26	2
HF160.160	16	16	92	32	2
HF160.170	17	16	92	32	2
HF160.180	18	16	92	32	2
HF160.190	19	16	92	32	2
HF160.200	20	20	104	38	2
HF160.210	21	20	104	38	2
HF160.220	22	20	104	38	2
HF160.230	23	20	104	38	2
HF160.240	24	25	121	45	2
HF160.250	25	25	121	45	2
HF160.260	26	25	121	45	2
HF160.280	28	25	121	45	2
HF160.300	30	25	121	45	2
HF160.320	32	32	133	53	2



**Fresa Z2 – ALU – Serie Larga**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/20° - Uso Aluminios y materiales no férricos

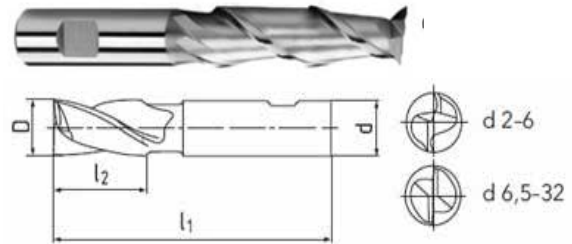
Referencia	D	d	L1	L2	Z
HF162.020	2	6	54	10	2
HF162.030	3	6	56	12	2
HF162.040	4	6	63	19	2
HF162.050	5	6	68	24	2
HF162.060	6	6	68	24	2
HF162.070	7	10	80	30	2
HF162.080	8	10	88	38	2
HF162.100	10	10	95	45	2
HF162.110	11	12	102	45	2
HF162.120	12	12	110	53	2
HF162.130	13	12	110	53	2
HF162.140	14	12	110	53	2
HF162.150	15	12	110	53	2
HF162.160	16	16	123	63	2
HF162.180	18	16	123	63	2
HF162.200	20	20	141	75	2
HF162.220	22	20	141	75	2
HF162.250	25	25	166	90	2



**Fresa Z3 – ALU – Serie Estándar**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/25° - Uso Aluminios y materiales no férricos

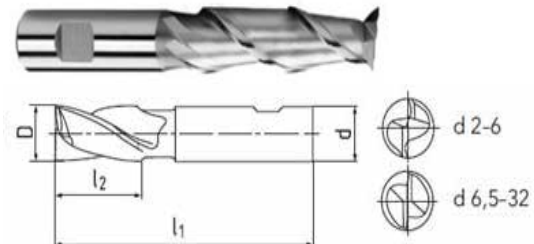
Referencia	D	d	L1	L2	Z
HF164.020	2	6	51	7	3
HF164.030	3	6	52	8	3
HF164.040	4	6	55	11	3
HF164.045	4.5	6	55	11	3
HF164.050	5	6	57	13	3
HF164.060	6	6	57	13	3
HF164.070	7	10	66	16	3
HF164.080	8	10	69	19	3
HF164.090	9	10	69	19	3
HF164.100	10	10	72	22	3
HF164.110	12	12	83	26	3
HF164.120	14	12	83	26	3
HF164.130	15	12	83	26	3
HF164.140	16	16	92	32	3
HF164.180	18	16	92	32	3
HF164.200	20	20	104	38	3



**Fresa Z3 – ALU – Serie Larga**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/25° - Uso Aluminios y materiales no férricos

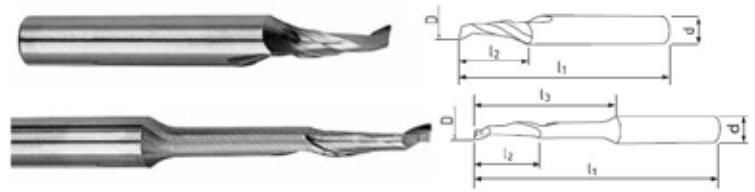
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF166.060	HF167.060	6	6	68	24	3
HF166.070	HF167.070	7	10	80	30	3
HF166.080	HF167.080	8	10	88	38	3
HF166.090	HF167.090	9	10	88	38	3
HF166.100	HF167.100	10	10	95	45	3
HF166.120	HF167.120	12	12	110	53	3
HF166.140	HF167.140	14	12	110	53	3
HF166.150	HF167.150	15	12	110	53	3
HF166.160	HF167.160	16	16	123	63	3
HF166.180	HF167.180	18	16	123	63	3
HF166.200	HF167.200	20	20	141	75	3



### Fresa HSS – Z1 – ALU

- Características: HSS-CO5 – DIN 844 - Tipo W – Corte 30/20°
- Serie HF110 - Estándar
- Serie HF111 - Larga

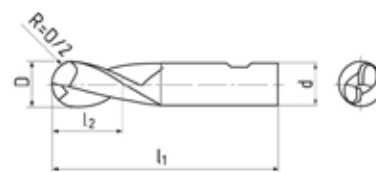
Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF110.030	3	8	60	12
HF110.040	4	8	60	12
HF110.050	5	8	60	14
HF110.060	6	8	60	14
HF110.070	7	8	60	14
HF110.080	8	8	80	14
HF110.090	9	8	80	14
HF110.100	10	8	80	14
HF110.120	12	8	80	14



Referencia	D	Ø Amarre	Longitud Total	Longitud Corte	Longitud Rebajado
HF111.040	3	8	80	16	45
HF111.050	4	8	80	16	45
HF111.050L	5	8	120	16	84
HF111.060	6	8	90	16	45
HF111.080	8	8	100	30	70
HF111.080L	8	8	120	16	90

### Fresa HSS Bola - Z2

- Características: HSS-CO8 - DIN 1889 - Weldon Din 1835B - Corte 25/10°

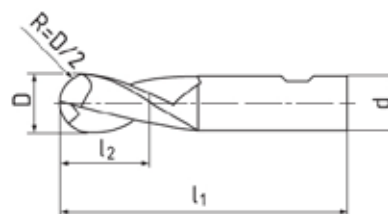


Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF150.020	2	6	48	4
HF150.030	3	6	49	5
HF150.040	4	6	51	7
HF150.045	4.5	6	51	7
HF150.050	5	6	52	8
HF150.060	6	6	60	8
HF150.070	7	10	61	10
HF150.080	8	10	61	11
HF150.090	9	10	63	11
HF150.100	10	10	70	13
HF150.110	11	12	73	13
HF150.120	12	12	73	16
HF150.130	13	12	73	16

Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF150.140	14	12	73	16
HF150.150	15	12	73	16
HF150.160	16	16	79	19
HF150.180	18	16	79	19
HF150.200	20	20	88	22
HF150.220	22	20	88	22
HF150.240	24	25	102	26
HF150.250	25	25	102	26
HF150.280	28	25	102	26
HF150.300	30	25	102	26
HF150.320	32	32	102	32

### Fresa HSS Bola - Z2 Serie Larga

- Características: HSS-CO8 - DIN 1889 - Weldon Din 1835B - Corte 25/10°

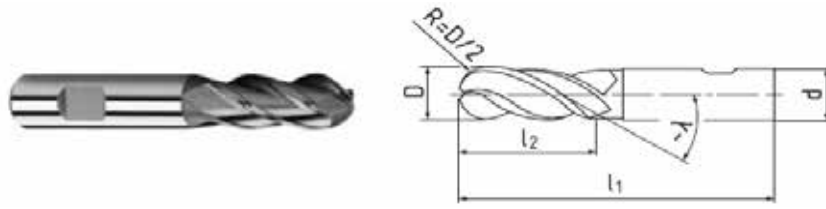


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF152.020	2	6	7	54
HF152.030	3	6	8	56
HF152.040	4	6	11	63
HF152.050	5	6	13	68
HF152.060	6	6	13	68
HF152.070	7	10	16	80
HF152.080	8	10	19	88
HF152.090	9	10	19	88
HF152.100	10	10	22	95
HF152.110	11	12	22	102
HF152.120	12	12	26	110
HF152.130	13	12	26	110

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF152.140	14	12	26	110
HF152.150	15	12	26	110
HF152.160	16	16	32	123
HF152.180	18	16	32	123
HF152.200	20	20	38	141
HF152.220	22	20	38	141
HF152.240	24	25	45	166
HF152.250	25	25	45	166
HF152.280	28	25	45	166
HF152.300	30	25	45	166
HF152.320	32	32	53	186

**Fresa HSS Bola – Z4**

- Características: HSS-CO8 – DIN 1889 – Weldon Din 1835B – Corte 12°

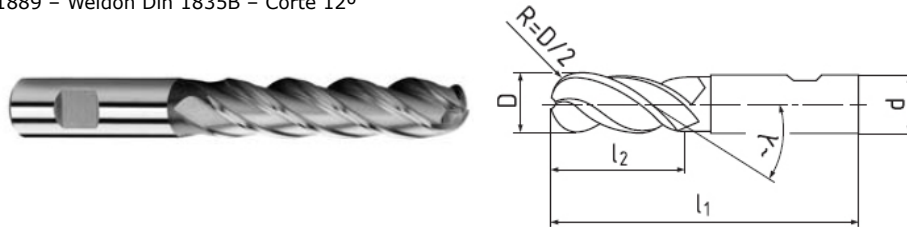


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF154.040	4	6	11	55
HF154.050	5	6	13	57
HF154.060	6	6	13	57
HF154.080	8	10	19	69

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF154.100	10	10	22	72
HF154.120	12	12	26	83
HF154.160	16	16	32	92
HF154.200	20	20	38	104

**Fresa HSS Bola – Z4 – Serie Larga**

- Características: HSS-CO8 – DIN 1889 – Weldon Din 1835B – Corte 12°

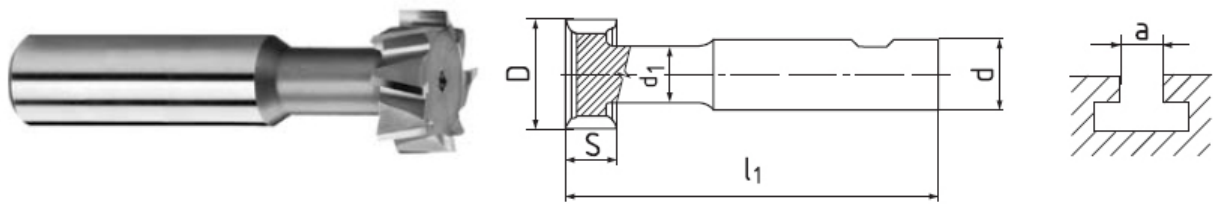


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF156.040	4	6	19	63
HF156.050	5	6	24	68
HF156.060	6	6	24	68
HF156.080	8	10	38	88

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF156.100	10	10	45	95
HF156.120	12	12	53	110
HF156.160	16	16	63	123
HF156.200	20	20	75	141

**Fresa en T - Mango Cilíndrico**

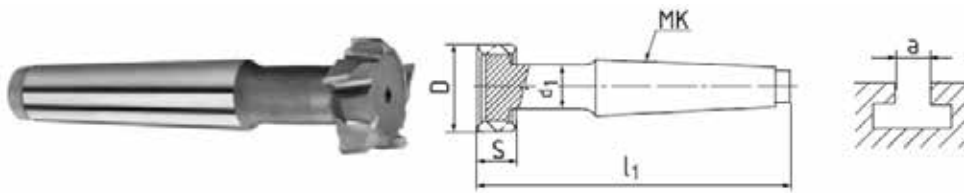
- Características: Fresa HSS-CO5 - DIN 851 - Tipo N – Corte 10/10° - HSS-CO5



Referencia	Diametro D	Amarre d	Altura S	Mango Reducido d1	Longitud Total L1	Dientes Z	Ancho Ranura a
HF214.110	11	10	4	4	53.5	6	5
HF214.125	12.5	10	6	5	57	6	6
HF214.160	16	10	8	7	62	6	8
HF214.180	18	12	8	8	70	6	10
HF214.190	19	12	9	8	71	6	8
HF214.210	21	12	9	10	74	6	12
HF214.220	22	12	10	10	75	6	10
HF214.250	25	16	11	12	82	8	14
HF214.280	28	16	12	13	85	8	13
HF214.320	32	16	14	15	90	8	18
HF214.360	36	25	16	17	103	8	17
HF214.400	40	25	18	19	108	10	22
HF214.450	45	25	20	21	113	10	21
HF214.500	50	32	22	25	124	10	28
HF214.600	60	32	28	30	139	10	36

### Fresa en T - Mango Cono Morse

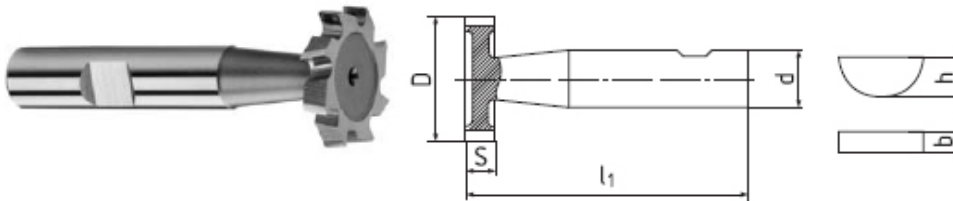
- Características: Fresa HSS-CO5 - DIN 851 - Tipo N - Corte 10/10° - HSS - Amarre Cono Morse 228A



Referencia	Diametro	Cono Morse	Anchura	Diametro Min	Longitud Total	Dientes	Ancho
HF216.180	18	1	8	8	82	8	10
HF216.210	21	2	9	10	102	8	12
HF216.250	25	2	11	12	104	8	14
HF216.320	32	2	14	16	111	8	18
HF216.400	40	3	18	20	138	8	22
HF216.500	50	4	22	25	173	8	28
HF216.600	60	4	28	31	188	10	36
HF216.720	72	5	35	36	229	10	42

### Fresa en T - Woodruff

- Características: Fresa HSS-CO5 - DIN 850 - Corte 10/10° - HSS-CO5 - Amarre Weldon DIN-1835B



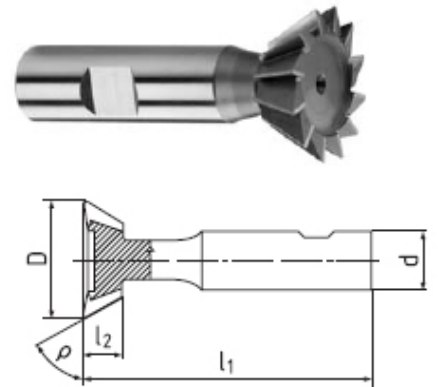
Referencia	Diametro	Amarre	Altura	Longitud Total	Diente	B	H
HF218.045010	4.5	6	1	50	6	1	1.4
HF218.075015	7.5	6	1.5	50	6	1.5	2.6
HF218.075020	7.5	6	2	50	6	2	2.6
HF218.105020	10.5	6	2	50	6	2	3.7
HF218.105025	10.5	6	2.5	50	6	2.5	3.7
HF218.105030	10.5	6	3	50	6	3	3.7
HF218.135020	13.5	10	2	56	6	-	-
HF218.135030	13.5	10	3	56	6	3	5
HF218.135040	13.5	10	4	56	6	4	5
HF218.165020	16.5	10	2	56	6	3	6.5
HF218.165030	16.5	10	3	56	6	3	6.5
HF218.165040	16.5	10	4	56	6	4	6.5
HF218.165050	16.5	10	5	56	6	5	6.5
HF218.195030	19.5	10	3	63	8	-	-
HF218.195040	19.5	10	4	63	8	4	7.5
HF218.195050	19.5	10	5	63	8	5	7.5
HF218.195060	19.5	10	6	63	8	6	7.5
HF218.225040	22.5	10	4	63	8	-	-
HF218.225050	22.5	10	5	63	10	5	9
HF218.225060	22.5	10	6	63	10	6	9
HF218.225080	22.5	10	8	63	10	8	9
HF218.255050	25.5	10	5	63	10	-	-
HF218.255060	25.5	10	6	63	10	6	10
HF218.255080	25.5	10	8	63	10	8	9
HF218.285060	28.5	10	6	63	10	6	11
HF218.285080	28.5	10	8	63	10	8	11
HF218.285100	28.5	12	10	71	10	10	11
HF218.325060	32.5	12	6	71	10	-	-
HF218.325070	32.5	12	7	71	10	-	-
HF218.325080	32.5	12	8	71	10	8	13
HF218.325100	32.5	12	10	71	10	10	13
HF218.385080	38.5	12	8	71	10	-	-
HF218.455080	45.5	12	8	71	12	-	-
HF218.455100	45.5	12	10	71	12	10	16



**Fresa Cónica Angular**

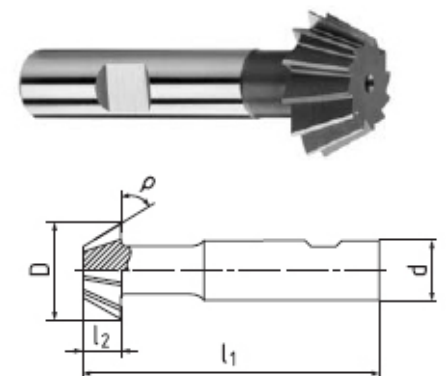
- Características: Fresa HSS-CO5 - DIN 1833A - Corte 0/0° - HSS-CO5 - Amarre Weldon DIN-1835B

Referencia	Ángulo	Diámetro	Amarre	Longitud Total	Altura	Diente
HF220.04516	45	16	12	60	4	10
HF220.04520	45	20	12	63	5	10
HF220.04525	45	25	12	67	6.3	10
HF220.04532	45	32	16	71	8	12
HF220.04540	45	40	16	80	10	12
HF220.05016	50	16	12	80	5	10
HF220.05020	50	20	12	60	6.3	10
HF220.05025	50	25	12	63	8	10
HF220.05516	55	16	12	67	5.6	10
HF220.05520	55	20	12	60	7.1	10
HF220.05525	55	25	12	63	9	10
HF220.06016	60	16	12	67	6.3	10
HF220.06020	60	20	12	60	8	10
HF220.06025	60	25	12	63	10	10
HF220.06032	60	32	12	67	12.5	12
HF220.06040	60	40	12	71	16	12
HF220.06516	65	16	12	80	6.3	10
HF220.06525	65	25	12	60	10	12
HF220.07016	70	16	12	67	7	10
HF220.07020	70	20	12	60	9	10
HF220.07025	70	25	16	63	11	10
HF220.07516	75	16	12	67	8	10
HF220.07525	75	25	12	60	10	12
HF220.08016	80	16	12	67	8	10
HF220.08025	80	25	12	60	10	12
HF220.08516	85	16	12	67	8	10
HF220.08525	85	25	12	60	10	12


**Fresa Cónica Angular**

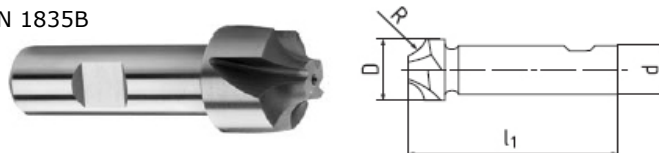
- Características: Fresa HSS-CO5 - DIN 1833A - Corte 0/0° - HSS-CO5 - Amarre Weldon DIN-1835B

Referencia	Ángulo	Diámetro	Amarre	Longitud Total	Altura	Diente
HF222.04516	45	16	12	60	4	10
HF222.04520	45	20	12	63	5	10
HF222.04525	45	25	12	67	6.3	10
HF222.04532	45	32	16	71	8	12
HF222.04540	45	40	16	80	10	12
HF222.05016	50	16	12	60	5	12
HF222.05020	50	20	12	63	6.3	12
HF222.05025	50	25	12	67	8	12
HF222.05516	55	16	12	60	5.6	10
HF222.05520	55	20	12	63	7.1	10
HF222.05525	55	25	12	67	9	12
HF222.06016	60	16	12	60	6.3	10
HF222.06020	60	20	12	63	8	10
HF222.06025	60	25	12	67	10	10
HF222.06516	65	16	16	60	6.3	10
HF222.06525	65	25	16	67	10	12
HF222.07016	70	16	12	60	7	10
HF222.07020	70	20	12	63	9	10
HF222.07516	75	16	12	60	8	10
HF222.07525	75	25	12	67	10	12



### Fresa Radio

• Características: DIN 6518 - Corte 0/9° - HSS-CO8 - Amarre Weldon DIN 1835B

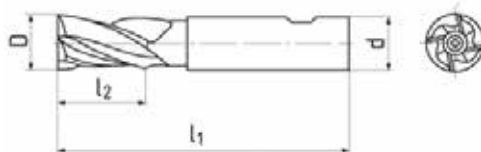


Referencia	Radio	Diametro	Amarre	Long. Total	Dientes
HF224.010	1	8	10	60	4
HF224.0125	1.25	9	10	60	4
HF224.015	1.5	9	10	60	4
HF224.016	1.6	9.2	10	60	4
HF224.020	2	10	10	60	4
HF224.025	2.5	11	10	60	4
HF224.030	3	12	12	60	4
HF224.035	3.5	13	12	60	4
HF224.040	4	14	12	60	4
HF224.045	4.5	15	12	60	4
HF224.050	5	16	12	60	4
HF224.055	5.5	19	16	67	4
HF224.060	6	20	16	67	4
HF224.063	6.3	20.6	16	71	4
HF224.065	6.5	21	16	71	4
HF224.070	7.0	22	16	71	4
HF224.075	7.5	23	16	71	4

Referencia	Radio	Diametro	Amarre	Long.Total	Dientes
HF224.080	8	24	16	71	4
HF224.085	8.5	25	25	85	4
HF224.090	9	26	25	85	4
HF224.095	9.5	27	25	85	4
HF224.100	10	28	25	85	4
HF224.105	10.5	31	25	90	4
HF224.110	11	32	25	90	4
HF224.120	12	34	25	90	4
HF224.125	12.5	41	25	100	6
HF224.130	13	42	25	100	6
HF224.140	14	44	25	100	6
HF224.150	15	46	25	100	6
HF224.160	16	48	25	100	6
HF224.170	17	50	32	112	6
HF224.180	18	52	32	112	6
HF224.190	19	56	32	112	6
HF224.200	20	56	32	112	6

### Fresa Acabado Mango Cilíndrico

• Características: Modelo: Z6/Z8 - HSS-CO8 - Tipo: N - Helice 30°/12°

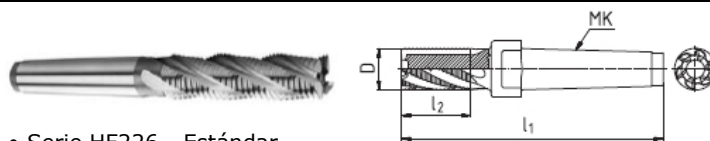


Referencia	Referencia TIALN	D	d	L1	L2	Z
HF212.300	HF213.300	30	20	90	30	6
HF212.350	HF213.350	35	20	90	30	6
HF212.400	HF213.400	40	25	90	32	8
HF212.500	HF213.500	50	32	100	36	8

### Fresa Desbaste Cono Morse

• Características: DIN 845B/C - Tipo NR - Corte 30/12° - HSS-CO8

Referencia	D	MK	Long. Total	Long. Corte	Z
HF226.100	10	1	92	22	4
HF226.120	12	1	96	26	4
HF226.140	14	2	111	26	4
HF226.160	16	2	117	32	4
HF226.180	18	2	117	32	4
HF226.200	20	2	123	38	4
HF226.220	22	2	123	38	5
HF226.240	24	3	147	45	5
HF226.250	25	3	147	45	5
HF226.260	26	3	147	45	5
HF226.280	28	3	147	45	5
HF226.300	30	3	147	45	6
HF226.320	32	4	201	53	6
HF226.350	35	4	201	53	6
HF226.360	36	4	201	53	6
HF226.400	40	4	211	63	6
HF226.410	41	4	211	63	6
HF226.450	45	4	211	63	6
HF226.500	50	5	261	75	6
HF226.630	63	5	276	90	6



- Serie HF226 - Estándar
- Serie HF228 - Larga

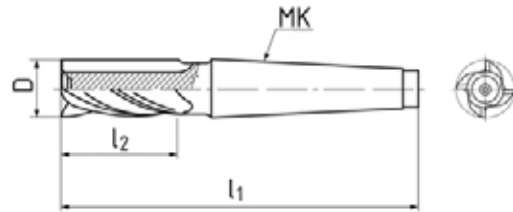
Referencia	D	MK	Long. Total	Long. Corte	Z
H228.160	16	2	148	63	4
H228.200	20	2	160	75	4
H228.220	22	3	160	75	5
H228.240	24	3	192	90	5
H228.250	25	3	192	90	5
H228.260	26	3	192	90	5
H228.280	28	3	192	90	5
H228.300	30	3	192	90	5
H228.320	32	4	254	106	6
H228.360	36	4	254	106	6
H228.400	40	4	273	125	6
H228.450	45	4	273	125	6
H228.500	50	5	336	150	8
H228.630	63	5	366	180	8

**Fresa Z-2 Cono Morse**

- Características: DIN 326 - Tipo N - Corte 25/12° - HSS-CO5



Referencia	D	MK	Long. Total	Long. Corte	Z
HF230.120	12	1	85	14	2
HF230.140	14	2	100	16	2
HF230.160	16	2	105	8	2
HF230.180	18	2	110	20	2
HF230.200	20	2	115	20	2
HF230.220	22	2	120	22	2
HF230.240	24	3	140	25	2
HF230.250	25	3	140	25	2

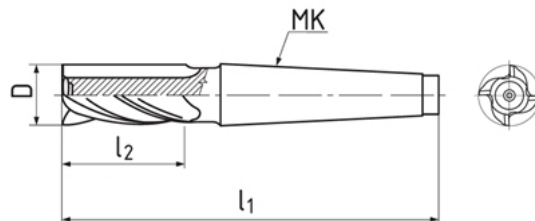


Referencia	D	MK	Long. Total	Long. Corte	Z
HF230.280	28	3	145	28	2
HF230.300	30	3	150	30	2
HF230.320	32	4	175	32	2
HF230.360	36	4	175	34	2
HF230.400	40	4	180	38	2
HF230.450	45	4	185	42	2
HF230.500	50	5	220	45	2

**Fresa Cono Morse**

- Características: DIN 845B/C - Tipo W - Corte 45/22° - HSS-CO5

Referencia	D	MK	Long. Total	Long. Corte	Z
HF232.100	10	1	92	22	3
HF232.120	12	2	111	26	3
HF232.160	16	2	117	32	3
HF232.200	20	2	123	38	3
HF232.220	22	2	123	38	3
HF232.240	24	3	147	45	4
HF232.250	25	3	147	45	4
HF232.260	26	3	147	45	4
HF232.280	28	3	147	45	4
HF232.300	30	3	147	45	4
HF232.320	32	4	178	53	4
HF232.360	36	4	178	53	4
HF232.400	40	4	188	63	4
HF232.450	45	4	188	63	4
HF232.500	50	5	233	75	5
HF232.630	63	5	248	90	6

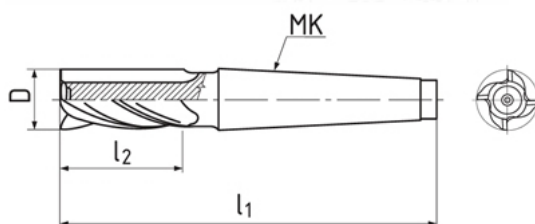

**Serie Larga**

Referencia	D	MK	Long. Total	Long. Corte	Z
HF234.250	25	3	192	90	4
HF234.320	32	4	231	106	4
HF234.400	40	4	250	125	4
HF234.500	50	5	308	150	5
HF234.630	63	5	338	180	6

**Fresa Acabado Cono Morse**

- Características: DIN 845B/C - Tipo W Corte 45/22° - HSS-CO5

Referencia	D	MK	Long. Total	Long. Corte	Z
HF244.100	10	1	92	22	4
HF244.120	12	1	96	26	4
HF244.140	14	2	111	26	4
HF244.160	16	2	117	32	4
HF244.180	18	2	117	32	4
HF244.200	20	2	123	38	4
HF244.220	22	2	123	38	5
HF244.250	25	3	147	45	5
HF244.280	28	3	147	45	5
HF244.300	30	3	147	45	6
HF244.320	32	4	178	53	6
HF244.360	36	4	178	53	6
HF244.400	40	4	188	63	6
HF244.450	45	4	188	63	6
HF244.500	50	5	233	75	6



## Fresas Disco HSS-CO5 - Diente Cruzado

- Características: Diente Cruzado y Uso Universal
- DIN 885A – DIN 138 – Tipo N – Corte 10/12° - HSS-CO5



Referencia	Diametro	Espesor	Agujero	Dientes
HF258.05003	50	3	16	12
HF258.05004	50	4	16	12
HF258.05005	50	5	16	12
HF258.05006	50	6	16	12
HF258.05008	50	8	16	12
HF258.05010	50	10	16	12
HF258.06303	63	3	22	12
HF258.06304	63	4	22	12
HF258.06305	63	5	22	12
HF258.06306	63	6	22	12
HF258.06308	63	8	22	12
HF258.06310	63	10	22	12
HF258.06312	63	12	22	12
HF258.06314	63	14	22	12
HF258.06316	63	16	22	12
HF258.06318	63	18	22	12
HF258.08003	80	3	27	14
HF258.08004	80	4	27	14
HF258.08005	80	5	27	14
HF258.08006	80	6	27	14
HF258.08008	80	8	27	14
HF258.08010	80	10	27	14
HF258.08012	80	12	27	14
HF258.08014	80	14	27	14
HF258.08016	80	16	27	14
HF258.08018	80	18	27	14
HF258.08020	80	20	27	14
HF258.10003	100	3	32	14
HF258.10004	100	4	32	14
HF258.10005	100	5	32	14
HF258.10006	100	6	32	14
HF258.10008	100	8	32	14
HF258.10010	100	10	32	14
HF258.10012	100	12	32	14
HF258.10014	100	14	32	14
HF258.10016	100	16	32	14
HF258.10018	100	18	32	14
HF258.10020	100	20	32	14
HF258.10022	100	22	32	14
HF258.10025	100	25	32	14
HF258.12504	125	4	32	16
HF258.12505	125	5	32	16
HF258.12506	125	6	32	16
HF258.12508	125	8	32	16
HF258.12510	125	10	32	16
HF258.12512	125	12	32	16
HF258.12514	125	14	32	16
HF258.12516	125	16	32	16
HF258.12518	125	18	32	16
HF258.12520	125	20	32	16
HF258.12522	125	22	32	16
HF258.12525	125	25	32	16
HF258.12528	125	28	32	16

## Fresas Disco HSS-CO5 - Diente Cruzado

- Características: Diente Cruzado y Materiales Duros
- DIN 885A – DIN 138 – Tipo H – Corte 10/8° - HSS-CO5



Referencia	Diametro	Agujero	Espesor	Dientes
HF260.05003	50	3	16	16
HF260.05004	50	4	16	16
HF260.05005	50	5	16	16
HF260.05006	50	6	16	16
HF260.05008	50	8	16	16
HF260.05010	50	10	16	18
HF260.06303	63	3	22	18
HF260.06304	63	4	22	18
HF260.06305	63	5	22	18
HF260.06306	63	6	22	18
HF260.06308	63	8	22	18
HF260.06310	63	10	22	18
HF260.06312	63	12	22	18
HF260.06314	63	14	22	18
HF260.06316	63	16	22	18
HF260.08004	80	4	27	20
HF260.08005	80	5	27	20
HF260.08006	80	6	27	20
HF260.08008	80	8	27	20
HF260.08010	80	10	27	18
HF260.08012	80	12	27	18
HF260.08014	80	14	27	18
HF260.08016	80	16	27	18
HF260.08018	80	18	27	18
HF260.08020	80	20	27	18
HF260.10003	100	3	32	20
HF260.10004	100	4	32	20
HF260.10005	100	5	32	20
HF260.10006	100	6	32	20
HF260.10008	100	8	32	20
HF260.10010	100	10	32	20
HF260.10012	100	12	32	20
HF260.10014	100	14	32	20
HF260.10016	100	16	32	20
HF260.10018	100	18	32	20
HF260.10020	100	20	32	20
HF260.10025	100	25	32	20
HF260.12505	125	5	32	24
HF260.12506	125	6	32	24
HF260.12508	125	8	32	24
HF260.12510	125	10	32	22
HF260.12512	125	12	32	22
HF260.12514	125	14	32	22
HF260.12516	125	16	32	22
HF260.12518	125	18	32	22
HF260.12520	125	20	32	22
HF260.12525	125	25	32	22
HF260.12528	125	28	32	22

**Fresas Disco HSS-C05 - Diente Cruzado - Continuación**

Referencia	Diametro	Espesor	Agujero	Dientes
HF258.16006	160	6	40	18
HF258.16008	160	8	40	18
HF258.16010	160	10	40	18
HF258.16012	160	12	40	18
HF258.16014	160	14	40	18
HF258.16016	160	16	40	18
HF258.16018	160	18	40	18
HF258.16020	160	20	40	18
HF258.16025	160	25	40	18
HF258.16032	160	32	40	18
HF258.20008	200	8	40	24
HF258.20010	200	10	40	18
HF258.20012	200	12	40	18
HF258.20014	200	14	40	18
HF258.20016	200	16	40	18
HF258.20018	200	18	40	18
HF258.20020	200	20	40	18
HF258.20025	200	25	40	18
HF258.20032	200	32	40	18

Referencia	Diametro	Agujero	Espesor	Dientes
HF260.16006	160	6	40	26
HF260.16008	160	8	40	26
HF260.16010	160	10	40	26
HF260.16012	160	12	40	26
HF260.16014	160	14	40	26
HF260.16016	160	16	40	26
HF260.16018	160	18	40	26
HF260.16020	160	20	40	26
HF260.16025	160	25	40	26
HF260.16032	160	32	40	26
HF260.20008	200	8	40	32
HF260.20010	200	10	40	32
HF260.20012	200	12	40	32
HF260.20014	200	14	40	32
HF260.20016	200	16	40	32
HF260.20018	200	18	40	32
HF260.20020	200	20	40	32
HF260.20025	200	25	40	32
HF260.20032	200	32	40	32
HF260.25008	250	8	40	38
HF260.25010	250	10	40	38
HF260.25012	250	12	40	38

**Fresas Disco HSS-C08 - Recto**

- Características: Diente Recto - Uso Universal
- DIN 885B - DIN 138 - Tipo H - Corte 0/8° - HSS-C08



Referencia	Diametro	Espesor	Agujero	Dientes
HF261.05004	50	4	16	16
HF261.05005	50	5	16	16
HF261.05006	50	6	16	16
HF261.05008	50	8	16	16
HF261.05010	50	10	16	16
HF261.06304	63	4	22	18
HF261.06305	63	5	22	18
HF261.06306	63	6	22	18
HF261.06308	63	8	22	18
HF261.06310	63	10	22	18
HF261.06312	63	12	22	18
HF261.06314	63	14	22	18
HF261.06316	63	16	22	18
HF261.06318	63	18	22	18
HF261.08004	80	4	27	20
HF261.08005	80	5	27	20
HF261.08006	80	6	27	20
HF261.08008	80	8	27	20
HF261.08010	80	10	27	20
HF261.08012	80	12	27	20
HF261.08014	80	14	27	20
HF261.08016	80	16	27	20
HF261.08018	80	18	27	20
HF261.08020	80	20	27	20
HF261.10006	100	6	32	24
HF261.10008	100	8	32	24
HF261.10010	100	10	32	24

Referencia	Diametro	Espesor	Agujero	Dientes
HF261.10012	100	12	32	24
HF261.10014	100	14	32	24
HF261.10016	100	16	32	24
HF261.10018	100	18	32	24
HF261.10020	100	20	32	24
HF261.10022	100	22	32	24
HF261.10025	100	25	32	24
HF261.12506	125	6	32	24
HF261.12508	125	8	32	24
HF261.12510	125	10	32	24
HF261.12512	125	12	32	24
HF261.12514	125	14	32	24
HF261.12516	125	16	32	24
HF261.12518	125	18	32	24
HF261.12520	125	20	32	24
HF261.12525	125	25	32	24
HF261.16010	160	10	40	24
HF261.16012	160	12	40	24
HF261.16014	160	14	40	24
HF261.16016	160	16	40	24
HF261.16018	160	18	40	24
HF261.16020	160	20	40	24
HF261.20010	200	10	40	32
HF261.20012	200	12	40	32
HF261.20014	200	14	40	32
HF261.20016	200	16	40	32
HF261.20018	200	18	40	32
HF261.20020	200	20	40	32

## Fresas Disco HSS-CO5 - Diente Cruzado

- Características: Diente Cruzado - DIN 885A  
DIN 138 - Tipo N - Corte 10/12° - HSS-CO5
- Serie HF262 - Uso Universal Serie HF264:  
Uso Materiales Duros



Referencia	Diametro	Espesor	Agujero	Dientes
#HF262.063016	63	1.6	22	28
HF262.063020	63	2	22	28
HF262.063025	63	2.5	22	28
HF262.063030	63	3	22	28
HF262.063040	63	4	22	28
HF262.063050	63	5	22	28
HF262.063060	63	6	22	28
HF262.080016	80	1.6	27	32
HF262.080020	80	2	27	32
HF262.080025	80	2.5	27	32
HF262.080030	80	3	27	32
HF262.080040	80	4	27	32
HF262.080050	80	5	27	32
HF262.080060	80	6	27	32
HF262.100016	100	1.6	32	24
HF262.100020	100	2	32	24
HF262.100025	100	2.5	32	24
HF262.100030	100	3	32	24
HF262.100040	100	4	32	24
HF262.100050	100	5	32	24
HF262.100060	100	6	32	24
HF262.100080	100	8	32	24
HF262.125016	125	1.6	32	26
HF262.125020	125	2	32	26
HF262.125025	125	2.5	32	26
HF262.125030	125	3	32	26
HF262.125040	125	4	32	26
HF262.125050	125	5	32	26
HF262.125060	125	6	32	26
HF262.125080	125	8	32	26
HF262.125100	125	10	32	26
HF262.160020	160	2	40	30
HF262.160025	160	2.5	40	30
HF262.160030	160	3	40	30
HF262.160040	160	4	40	30
HF262.160050	160	5	40	30
HF262.160060	160	6	40	30
HF262.160080	160	8	40	30
HF262.160100	160	10	40	30
HF262.160120	160	12	40	30
HF262.200030	200	3	40	36

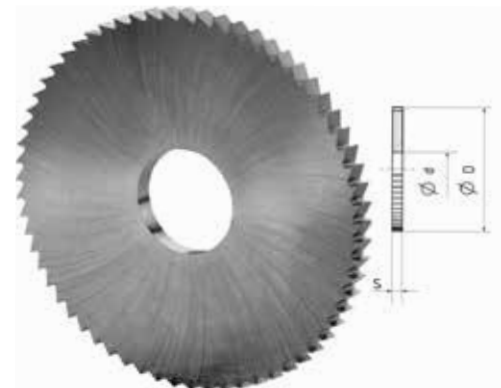
Referencia	Diametro	Espesor	Agujero	Dientes
HF264.050016	50	1.6	16	24
HF264.050020	50	2	16	24
HF264.050025	50	2.5	16	24
HF264.050030	50	3	16	24
HF264.050035	50	3.5	16	24
HF264.050040	50	4	16	24
HF264.050050	50	5	16	22
HF264.063016	63	1.6	22	28
HF264.063020	63	2	22	28
HF264.063025	63	2.5	22	28
HF264.063030	63	3	22	28
HF264.063035	63	3.5	22	28
HF264.063040	63	4	22	28
HF264.063050	63	5	22	28
HF264.063060	63	6	22	28
HF264.080016	80	1.6	27	32
HF264.080020	80	2	27	32
HF264.080025	80	2.5	27	32
HF264.080030	80	3	27	32
HF264.080035	80	3.5	27	32
HF264.080040	80	4	27	32
HF264.080050	80	5	27	32
HF264.080060	80	6	27	32
HF264.100016	100	1.6	32	36
HF264.100020	100	2	32	36
HF264.100025	100	2.5	32	36
HF264.100030	100	3	32	36
HF264.100035	100	3.5	32	36
HF264.100040	100	4	32	36
HF264.100050	100	5	32	36
HF264.100060	100	6	32	36
HF264.100080	100	8	32	28
HF264.125016	125	1.6	32	40
HF264.125020	125	2	32	40
HF264.125025	125	2.5	32	40
HF264.125030	125	3	32	40
HF264.125035	125	3.5	32	40
HF264.125040	125	4	32	40
HF264.125050	125	5	32	40
HF264.125060	125	6	32	40
HF264.125070	125	7	32	32
HF264.125080	125	8	32	32
HF264.125100	125	10	32	32
HF264.160020	160	2	40	48
HF264.160025	160	2.5	40	48
HF264.160030	160	3	40	48
HF264.160035	160	3.5	40	48
HF264.160040	160	4	40	48
HF264.160050	160	5	40	48
HF264.160060	160	6	40	48
HF264.160080	160	8	40	36
HF264.160100	160	10	40	36
HF264.160120	160	12	40	36
HF264.200020	200	2	40	52
HF264.200025	200	2.5	40	52
HF264.200030	200	3	40	52
HF264.200040	200	4	40	52
HF264.200050	200	5	40	52
HF264.200060	200	6	40	52
HF264.200080	200	8	40	40
HF264.200100	200	10	40	40
HF264.200120	200	12	40	40
HF264.200140	200	14	40	40



**Disco Corte HSS-C05**

• Características: HSS – DIN 1837 – Tipo H - Corte Recto Fino (HF280) -- HSS – DIN 1838 Tipo W - Corte Recto Grueso (HF282)

Diámetro Esesor	Ø Agujero	HF280	HF282	Diámetro Esesor	Ø Agujero	HF280	HF282	Diámetro Esesor	Ø Agujero	HF280.	HF282.
20x0,20	5	200020	-	40x1	10	400100	-	80x5	22	800500	800500
20x0,25	5	200025	-	40x1,2	10	400120	-	80x6	22	800600	800600
20x0,30	5	200030	-	40x1,5	10	400150	-	100x0,4	22	1000040	1000040
20x0,40	5	200040	-	40x1,6	10	400160	-	100x0,5	22	1000050	1000050
20x0,50	5	200050	-	40x2	10	400200	-	100x0,6	22	1000060	1000060
20x0,60	5	200060	-	40x2,5	10	400250	-	100x0,7	22	1000070	1000070
20x0,70	5	200070	-	40x3	10	400300	-	100x0,8	22	1000080	1000080
20x0,80	5	200080	-	50x0,2	13	500020	500020	100x0,9	22	1000090	1000090
20x0,90	5	200090	-	50x0,25	13	500025	500025	100x1	22	1000100	1000100
20x1,00	5	200100	-	50x0,3	13	500030	500030	100x1,2	22	1000120	1000120
20x1,20	5	200120	-	50x0,4	13	500040	500040	100x1,5	22	1000150	1000150
20x1,50	5	200150	-	50x0,5	13	500050	500050	100x1,6	22	1000160	1000160
20x1,60	5	200160	-	50x0,6	13	500060	500060	100x2	22	1000200	1000200
20x2,00	5	200200	-	50x0,7	13	500070	500070	100x2,5	22	1000250	1000250
20x2,50	5	200250	-	50x0,8	13	500080	500080	100x3	22	1000300	1000300
20x3,00	5	200300	-	50x0,9	13	500090	500090	100x3,5	22	1000350	1000350
25x0,15	8	250015	-	50x1	13	500100	500100	100x4	22	1000400	1000400
25x0,20	8	250020	-	50x1,2	13	500120	500120	100x5	22	1000500	1000500
25x0,25	8	250025	-	50x1,5	13	500150	500150	100x6	22	1000600	1000600
25x0,30	8	250030	-	50x1,6	13	500160	500160	125x0,5	22	1250050	1250050
25x0,40	8	250040	-	50x2	13	500200	500200	125x0,6	22	1250060	1250060
25x0,50	8	250050	-	50x2,5	13	500250	500250	125x0,7	22	1250070	1250070
25x0,60	8	250060	-	50x3	13	500300	500300	125x0,8	22	1250080	1250080
25x0,70	8	250070	-	50x4	13	500400	500400	125x0,9	22	1250090	1250090
25x0,80	8	250080	-	50x5	13	500500	500500	125x1	22	1250100	1250100
25x0,90	8	250090	-	63x0,25	16	630025	630025	125x1,2	22	1250120	1250120
25x1,00	8	250100	-	63x0,3	16	630030	630030	125x1,5	22	1250150	1250150
25x1,20	8	250120	-	63x0,4	16	630040	630040	125x1,6	22	1250160	1250160
25x1,50	8	250150	-	63x0,5	16	630050	630050	125x2	22	1250200	1250200
25x1,60	8	250160	-	63x0,6	16	630060	630060	125x2,5	22	1250250	1250250
25x2,00	8	250200	-	63x0,7	16	630070	630070	125x3	22	1250300	1250300
25x2,50	8	250250	-	63x0,8	16	630080	630080	125x3,2	22	1250320	1250320
25x3	8	250300	-	63x0,9	16	630090	630090	125x3,5	22	1250350	1250350
32x0,15	8	320015	-	63x1	16	630100	630100	125x4	22	1250400	1250400
32x0,2	8	320020	-	63x1,2	16	630120	630120	125x5	22	1250500	1250500
32x0,25	8	320025	-	63x1,5	16	630150	630150	125x6	22	1250600	1250600
32x0,3	8	320030	-	63x1,6	16	630160	630160	160x1	32	1600100	1600100
32x0,4	8	320040	-	63x2	16	630200	630200	160x1,2	32	1600120	1600120
32x0,5	8	320050	-	63x2,5	16	630250	630250	160x1,5	32	1600150	1600150
32x0,6	8	320060	-	63x3	16	630300	630300	160x1,6	32	1600160	1600160
32x0,7	8	320070	-	63x3,5	16	630350	630350	160x2	32	1600200	1600200
32x0,8	8	320080	-	63x4	16	630400	630400	160x2,5	32	1600250	1600250
32x0,9	8	320090	-	63x5	16	630500	630500	160x3	32	1600300	1600300
32x1	8	320100	-	63x6	16	630600	630600	160x3,5	32	1600350	1600350
32x1,2	8	320120	-	80x0,3	22	800030	800030	160x4	32	1600400	1600400
32x1,5	8	320150	-	80x0,4	22	800040	800040	160x4,5	32	1600450	1600450
32x1,6	8	320160	-	80x0,5	22	800050	800050	160x5	32	1600500	1600500
32x2	8	320200	-	80x0,6	22	800060	800060	160x6	32	1600600	1600600
32x2,5	8	320250	-	80x0,7	22	800070	800070				
32x3	8	320300	-	80x0,8	22	800080	800080				
32x4	8	320400	-	80x0,9	22	800090	800090				
40x0,2	10	400020	-	80x1	22	800100	800100				
40x0,25	10	400025	-	80x1,2	22	800120	800120				
40x0,3	10	400030	-	80x1,5	22	800150	800150				
40x0,4	10	400040	-	80x1,6	22	800160	800160				
40x0,5	10	400050	-	80x2	22	800200	800200				
40x0,6	10	400060	-	80x2,5	22	800250	800250				
40x0,7	10	400070	-	80x3	22	800300	800300				
40x0,8	10	400080	-	80x3,5	22	800350	800350				
40x0,9	10	400090	-	80x4	22	800400	800400				



### Disco Corte HSS-C05 - Continuación -

- Características: HSS – DIN 1837 – Tipo H - Corte Recto Fino (HF280) -- HSS – DIN 1838 Tipo W - Corte Recto Grueso (HF282)

Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280	HF282
200x1	32	2000100	2000100	225x1,5	32	2250150	2250150	250x6,00	32	2500600	2500600
200x1,2	32	2000120	2000120	225x1,6	32	2250160	2250160	275x1,75	32	2750175	2750175
200x1,5	32	2000150	2000150	225x1,8	32	2250180	2250180	275x2,00	32	2750200	2750200
200x1,6	32	2000160	2000160	225x2,00	32	2250200	2250200	275x2,50	32	2750250	2750250
200x1,8	32	2000180	2000180	225x2,50	32	2250250	2250250	275x3,00	32	2750300	2750300
200x2	32	2000200	2000200	225x3,00	32	2250300	2250300	275x3,50	32	2750350	2750350
200x2,5	32	2000250	2000250	225x3,50	32	2250350	2250350	285x2,00	32	2850200	2850200
200x3	32	2000300	2000300	225x4,00	32	2250400	2250400	300x2,00	32	3000200	3000200
200x3,5	32	2000350	2000350	250x1,50	32	2500150	2500150	300x2,50	32	3000250	3000250
200x4	32	2000400	2000400	250x1,60	32	2500160	2500160	300x3,00	32	3000300	3000300
200x4,5	32	2000450	2000450	250x2,00	32	2500200	2500200	300x3,50	40	3000350	3000350
200x5	32	2000500	2000500	250x2,50	32	2500250	2500250	315x2,00	40	3150200	3150200
200x5,5	32	2000550	2000550	250x3,00	32	2500300	2500300	315x2,50	40	3150250	3150250
200x6	32	2000600	2000600	250x3,50	32	2500350	2500350	315x3,00	40	3150300	3150300
				250x4,00	32	2500400	2500400	315x4,00	40	3150400	3150400
				250x4,50	32	2500450	2500450	315x4,50	40	3150450	3150450
				250x5,00	32	2500500	2500500	315x5,00	40	3150500	3150500
				250x5,50	32	2500550	2500550	315x6,00	40	3150600	3150600

### Fresa Disco HSS Convexo

- Características: DIN 856 – DIN 138 – Tipo N - Corte 0/10° - HSS-CO



Referencia	Diámetro	Radio	Agujero	Espesor	Z
HF266.0500100	50	1	16	2	14
HF266.0500125	50	1.25	16	2.5	14
HF266.0500150	50	1.5	16	3	14
HF266.0500160	50	1.6	16	3.2	14
HF266.0500200	50	2	16	4	14
HF266.0630250	63	2.5	22	5	12
HF266.0630300	63	3	22	6	12
HF266.0630315	63	3.15	22	6.3	12
HF266.0630350	63	3.5	22	7	12
HF266.0630400	63	4	22	8	12
HF266.0630450	63	4.5	22	9	12
HF266.0630500	63	5	22	10	12
HF266.0800550	80	5.5	27	11	12
HF266.0800600	80	6	27	12	12
HF266.0800630	80	6.3	27	12.6	12
HF266.0800650	80	6.5	27	13	12
HF266.0800700	80	7	27	14	12
HF266.0800750	80	7.5	27	15	12
HF266.0800800	80	8	27	16	12

Referencia	Diámetro	Radio	Agujero	Espesor	Z
HF266.1000850	100	8.5	32	17	12
HF266.1000900	100	9	32	18	12
HF266.1000950	100	9.5	32	19	12
HF266.1001000	100	10	32	20	12
HF266.1001100	100	11	32	22	12
HF266.1001200	100	12	32	24	12
HF266.1001250	100	12.5	32	25	12
HF266.1251400	125	14	40	28	12
HF266.1251500	125	15	32	30	12
HF266.1251600	125	16	32	32	12
HF266.1251750	125	17.5	40	35	12
HF266.1251800	125	18	40	36	12
HF266.1252000	125	20	32	40	12
HF266.1602500	160	25	40	50	12

### Fresa Disco Angular

- Características: DIN 1824A – DIN 138 - Tipo N – Corte 0/0° - HSS

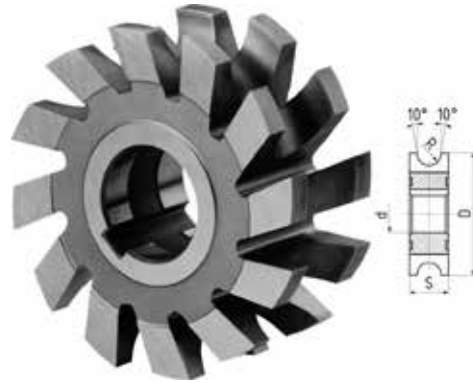
Referencia	Angulo	Diámetro	Espesor	Agujero	Radio	Dientes
HF268.20063	20	63	6	16	1	14
HF268.20100	20	100	10	27	1.5	18
HF268.25063	25	63	6	22	1	14
HF268.25080	25	80	10	22	1	16
HF268.25100	25	100	14	27	1.5	18
HF268.25125	25	125	18	27	2	20
HF268.25160	25	160	22	32	2.5	22
HF268.30063	30	63	8	22	1	14
HF268.30100	30	100	14	27	1.5	18



**Fresa Disco Concava**

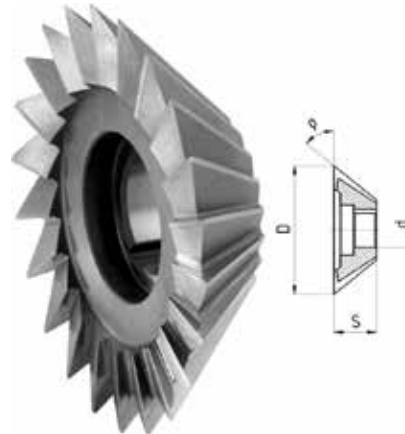
- Características: DIN 885A – DIN 138 – Tipo N – Corte 0/10° - HSS-CO5

Referencia	Diametro	Radio	Agujero	Espesor	Dientes
HF270.0500100	50	1	16	6	14
HF270.0500125	50	1.25	16	6	14
HF270.0500150	50	1.5	16	8	14
HF270.0500200	50	2	16	9	14
HF270.0630250	63	2.5	22	10	14
HF270.0630300	63	3	22	12	12
HF270.0630400	63	4	22	16	12
HF270.0630500	63	5	22	20	10
HF270.0800600	80	6	27	24	10
HF270.0800800	80	8	27	32	10
HF270.1000900	100	9	32	32	10
HF270.1000100	100	10	32	36	10
HF270.1000120	100	12	32	40	10
HF270.1250200	125	20	32	60	10


**Fresa Ángulo Cónica**

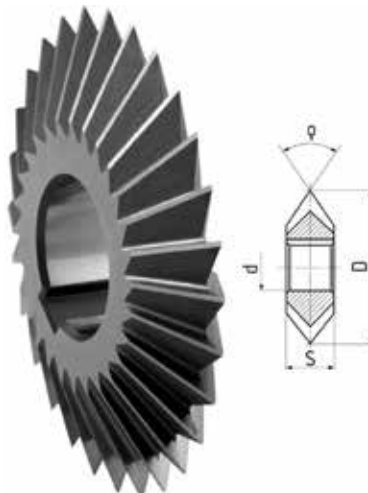
- Características: DIN 842 – DIN 138 – Tipo N – Corte 0/2° - HSS-CO5

Referencia	Angulo	Diametro	Espesor	Agujero	Dientes
HF272.045040	45	40	10	14	14
HF272.045050	45	50	13	13	16
HF272.045063	45	63	18	16	16
HF272.045080	45	80	22	22	18
HF272.045100	45	100	28	27	20
HF272.050040	50	40	13	10	14
HF272.050050	50	50	16	13	16
HF272.050063	50	63	20	16	16
HF272.050080	50	80	25	20	18
HF272.050100	50	100	32	27	20
HF272.060040	60	40	13	10	14
HF272.060050	60	50	16	13	16
HF272.060063	60	63	20	16	16
HF272.060080	60	80	25	22	18
HF272.060100	60	100	32	27	20


**Fresa Angular 45/60/80-90°**

- Características: DIN 842 – DIN 138 – Tipo N – Corte 0/2° - HSS-CO5

Referencia	Angulo	Diametro	Espesor	Agujero	Dientes
HF274.045050	45	50	8	16	16
HF274.045063	45	63	10	22	16
HF274.045080	45	80	12	27	20
HF274.045100	45	100	18	32	20
HF274.060050	60	50	10	16	16
HF274.060063	60	63	14	22	16
HF274.060080	60	80	18	22	18
HF274.060100	60	100	25	32	20
HF274.080063	80	63	16	22	16
HF274.090050	90	50	14	16	16
HF274.090063	90	63	20	22	16
HF274.090080	90	80	22	27	18
HF274.090100	90	100	32	32	20



## Fresa Disco Modular

- Características: DIN 3972 – DIN 138 – Tipo N – Corte 0/0° – HSS-CO5

Referencia	Mm	Diametro	Agujero
HF276.050	0.5	40	16
HF276.075	0.75	40	16
HF276.100	1	50	16
HF276.125	1.25	50	16
HF276.150	1.50	63	22
HF276.175	1.75	63	22
HF276.200	2	63	22
HF276.225	2.25	63	22
HF276.250	2.5	63	22
HF276.275	2.75	70	27
HF276.300	3	70	27
HF276.325	3.25	70	27
HF276.350	3.5	80	27
HF276.375	3.75	80	27



Referencia	Mm	Diametro	Agujero
HF276.400	4	80	27
HF276.425	4.25	80	27
HF276.450	4.5	90	27
HF276.475	4.75	90	27
HF276.500	5	90	32
HF276.550	5.5	90	32
HF276.600	6	100	32

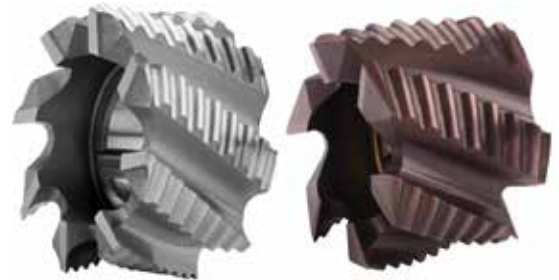
1	2	3	4	5	6	7	8
12-13	14-16	17-20	21-25	26-34	35-54	55-134	135-00

## Fresa Frontal Desbaste

- Características: Fresa HSS-CO5 - DIN 1880 - DIN 138 – Tipo NR – Corte 30/12° – HSS-CO5

Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF250.040	HF251.040	40	16	32	6
HF250.050	HF251.050	50	22	36	6
HF250.063	HF251.063	63	27	40	8
HF250.080	HF251.080	80	27	45	8
HF250.100	HF251.100	100	32	50	10
HF250.125*	-	125	40	56	12
HF250.160*	-	160	50	63	14

(\*) Modelo con HSS-CO8%



## Fresa Frontal Desbaste Fino

- Características: DIN 1880 – DIN 138 – Tipo HR – Corte 30/10° – HSS-CO5

Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF252.040	HF253.040	40	16	32	8
HF252.050	HF253.050	50	22	36	8
HF252.063	HF253.063	63	27	40	10
HF252.080	HF253.080	80	27	45	10
HF252.100	HF253.100	100	32	50	12

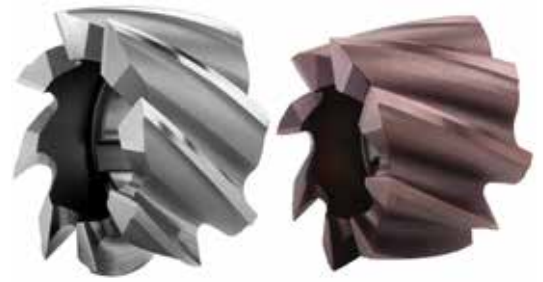


**Fresa Frontal Gruesa Tipo N**

- Características: Fresa HSS-CO5 - DIN 1880 - DIN 138 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF254.040	HF255.040	40	16	32	6
HF254.050	HF255.050	50	22	36	8
HF254.063	HF255.063	63	27	40	8
HF254.080	HF255.080	80	27	45	10
HF254.100	HF255.100	100	32	50	10
HF254.125(*)	HF255.125	125	40	56	14
HF254.160(*)	-	160	50	63	16

(\*) Modelo con HSS-CO8%


**Fresa Frontal Fina Tipo N**

- Características: DIN 138 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Diametro	Agujero	Altura	Dientes
HF256.05040	50	22	40	8
HF256.05063	50	22	63	8
HF256.05080	50	22	80	8
HF256.06350	63	27	50	8
HF256.06370	63	27	70	8
HF256.08063	80	32	63	8
HF256.080100	80	32	100	8
HF256.10070	100	40	70	10


**Fresa Frontal Din 841**

- Características: DIN 841 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Diametro	Agujero	Altura	Dientes
HF278.030	30	13	30	6
HF278.040	40	16	20	8
HF278.050	50	22	25	8
HF278.0505	50	22	50	8
HF278.060	60	27	30	8
HF278.0606	60	27	60	8
HF278.075	75	27	35	10
HF278.0757	75	27	75	10
HF278.080	80	27	35	10
HF278.110	110	32	35	12


**Broca de Centrado Tipo H - 128°**

- Características: HSS-CO5 - RH - 128°
- Recubrimiento: Altin



Referencia	Diametro	Longitud Total	Longitud Corte
HB112.030	3	46	12
HB112.040	4	55	12
HB112.050	5	62	14
HB112.060	6	66	16
HB112.080	8	79	21
HB112.100	10	89	25
HB112.120	12	102	30
HB112.140	14	107	34
HB112.160	16	115	38
HB112.200	20	131	45
HB112.250	25	151	53

### Broca de Centrado Tipo H - 90°

- Características: HSS-CO5 - RH - 90°
- Recubrimiento: Altin

Referencia	Diametro	Longitud Total	Longitud Corte
HB110.030	3	46	12
HB110.040	4	55	12
HB110.050	5	62	14
HB110.060	6	66	16
HB110.080	8	79	21
HB110.100	10	89	25
HB110.120	12	102	30
HB110.140	14	107	34
HB110.160	16	115	38
HB110.200	20	131	45
HB110.250	25	151	53



### Broca de Puntear 60° - Forma A

- Características: HSS-CO5 - 60° - DIN 333A



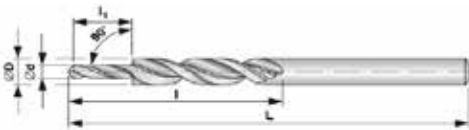
Referencia HSS	Referencia HSS-CO5	Ø Amarre	Ø Punta	Longitud Total	Longitud Corte
HB114.010	HB116.010	3.15	1	31	1.3-1.7
HB114.0125	HB116.0125	3.15	1.25	31	1.6-2
HB114.016	HB116.016	4	1.6	35	2-2.6
HB114.020	HB116.020	5	2	40	2.5-3.1
HB114.025	HB116.025	6.3	2.5	45	3.1-3.8
HB114.0315	HB116.0315	8	3.15	50	3.9-4.6
HB114.040	HB116.040	10	4	55	5-5.9
HB114.050	HB116.050	12.5	5	63	6.3-7.2
HB114.063		16	6.3	71	8-8.9
HB114.080		20	8	80	10.1-11.1
HB114.100		25	10	100	12.8-13.8

#### Serie Larga Broca Puntear 60° - A

HB115.010		4	1	100	1.3-1.7
HB115.015		5	1.5	100	2-2.6
HB115.020		6	2	100	2.5-3.1
HB115.025		8	2.5	100	3.1-3.8
HB115.0308		8	3	100	3.9-4.6
HB115.03010		10	3	100	3.9-4.6
HB115.04010		10	4	100	5-5.9
HB115.04012		12	4	100	5-5.9
HB115.050		12	5	100	6.3-7.2

### Broca Bidiametral 180° - Mango Cilindrico

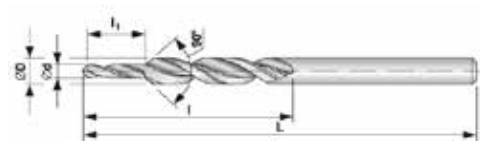
- Características: DIN 8376 - HSS
- Soporte Plano



Referencia	Ø D	Ø d	L	I	I1	Metrica
HB170.M3	6	3.4	93	57	9	M-3
HB170.M4	8	4.5	117	75	11	M-4
HB170.M5	10	5.5	133	87	13	M-5
HB170.M6	11	6.6	142	94	15	M-6
HB170.M8	15	9	169	114	19	M-8
HB170.M10	18	11	191	130	23	M-10

### Broca Bidiametral 90° - Mango Cilindrico

- Características: DIN 8374 - HSS
- Soporte Cónico



Referencia	Ø D	Ø d	L	I	I1	Metrica
HB172.M3	6.6	3.4	101	63	9	M-3
HB172.M4	9	4.5	125	81	11	M-4
HB172.M5	11	5.5	142	94	13	M-5
HB172.M6	13	6.6	151	101	15	M-6
HB172.M8	17.2	9	191	130	19	M-8



**Escariador - HSS - Mano**

- Hélice a 8°
- Tolerancia H7
- Según DIN206B



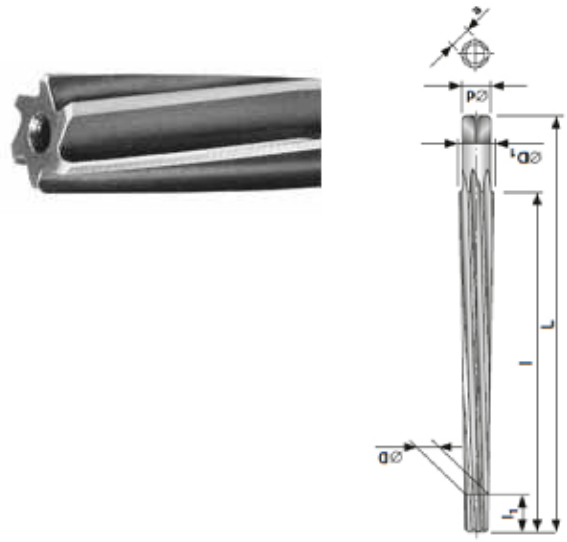
Referencia	øD	Amarre	Longitud Corte	Longitud Total
HE300.0300	3	3	31	62
HE300.0350	3,5	3,5	35	71
HE300.0400	4	4	38	76
HE300.0450	4,5	4,5	41	81
HE300.0500	5	5	44	87
HE300.0550	5,5	5,5	47	93
HE300.0600	6	6	47	93
HE300.0650	6,5	6,5	50	100
HE300.0700	7	7	54	107
HE300.0750	7,5	7,5	54	107
HE300.0800	8	8	58	115
HE300.0850	8,5	8,5	58	115
HE300.0900	9	9	62	124
HE300.0950	9,5	9,5	62	124
HE300.1000	10	10	66	133
HE300.1050	10,5	10,5	66	133
HE300.1100	11	11	71	142
HE300.1150	11,5	11,5	71	142
HE300.1200	12	12	76	152
HE300.1250	12.5	12.5	76	152

Referencia	øD	Amarre	Longitud Corte	Longitud Total
HE300.1300	13	13	76	152
HE300.1350	13.5	13.5	81	163
HE300.1400	14	14	81	163
HE300.1450	14.5	14.5	81	163
HE300.1500	15	15	81	163
HE300.1550	15.5	15.5	87	175
HE300.1600	16	16	87	175
HE300.1650	16.5	16.5	87	175
HE300.1700	17	17	87	175
HE300.1750	17.5	17.5	93	188
HE300.1800	18	18	93	188
HE300.1850	18.5	18.5	93	188
HE300.1900	19	19	93	188
HE300.1950	19.5	19.5	100	201
HE300.2000	20	20	100	201
HE300.2100	21	21	100	201
HE300.2200	22	22	107	215
HE300.2300	23	23	107	215
HE300.2400	24	24	115	231
HE300.2500	25	25	115	231
HE300.2600	26	26	115	231

**Escariador - HSS - Cónico 1:10**

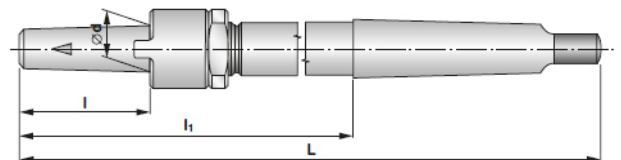
- Características: HSS - Forma A
- Dientes hélice - Corte derecha

Referencia	ø - D	L	l1	l	ød	a	øD1	Z
HE310.030	3	80	5	58	4	3.15	4.06	4
HE310.040	4	93	5	68	5	4	5.26	4
HE310.050	5	100	5	73	6.3	5	6.36	5
HE310.060	6	135	5	105	8	6.3	8	6
HE310.080	8	180	5	145	10	8	10.80	6
HE310.100	10	215	5	175	12.5	10	13.40	6
HE310.120	12	255	10	210	14	11.2	16	8
HE310.140	14	255	10	210	14	11.2	18	8
HE310.160	16	280	10	230	18	14	20.40	8
HE310.200	20	310	10	250	22.4	18	24.80	8
HE310.250	25	370	15	300	28	22.4	30.70	10
HE310.300	30	400	15	320	31.5	25	36.10	10
HE310.320	32	400	15	320	31.5	25	38.10	10
HE310.400	40	430	15	340	40	31.5	46.50	12
HE310.500	50	460	15	360	50	40	56.90	12


**Mango para Escariadores Huecos de Máquina**

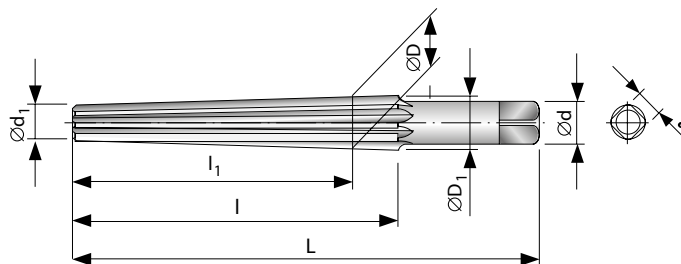
- Características: DIN217
- Para escariadores Serie HE330 / HE332

Referencia	ød - h6	l - h16	l1	L - js16	CM
HE335.130	13	45	151	250	3
HE335.160	16	50	162	261	3
HE335.190	19	56	174	296	4
HE335.220	22	63	188	312	4
HE335.270	27	71	203	359	5
HE335.320	32	80	220	376	5
HE335.400	40	90	240	396	5
HE335.500	50	100	260	416	5



### Escariador - HSS - Cónico 1:10

- Características: HSS - Forma A - Dientes rectos - Corte derecha

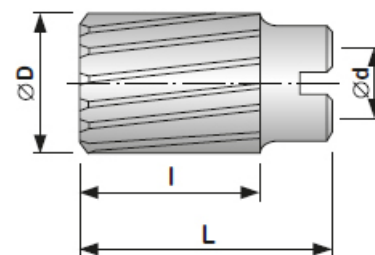


Referencia	Ø - D	L	l1	l	Ød	a	ØD1	Ød1	Z
HE314.100	10	100	60	70	10	8	11	4	4
HE314.160	16	120	70	80	12.5	10	17	9	6
HE314.240	24	160	100	110	20	16	25	14	6
HE314.320	32	200	120	140	25	20	34	20	8

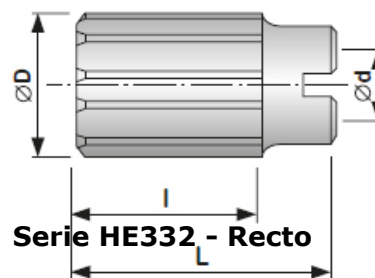
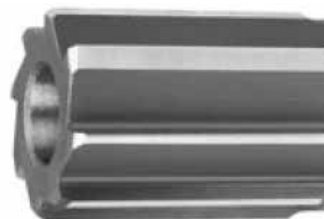
### Escariador - HSS-Co - Huecos de Máquina

- Características: HSS-CO - DIN 219B / DIN 219C - H7

Referencia Diente Hélice	Referencia Diente Recto	ØD	L	l	Ød	Z
HE330.250	HE332.250	25	45	32	13	10
HE330.260	HE332.260	26	45	32	13	10
HE330.270	HE332.270	27	45	32	13	10
HE330.280	HE332.280	28	45	32	13	10
HE330.290	HE332.290	29	45	32	13	10
HE330.300	HE332.300	30	45	32	13	10
HE330.310	HE332.310	31	50	36	16	10
HE330.320	HE332.320	32	50	36	16	10
HE330.340	HE332.340	34	50	36	16	10
HE330.350	HE332.350	35	50	36	16	10
HE330.360	HE332.360	36	56	40	19	12
HE330.380	HE332.380	38	56	40	19	12
HE330.400	HE332.400	40	56	40	19	12
HE330.420	HE332.420	42	56	40	19	12
HE330.440	HE332.440	44	63	45	22	12
HE330.450	HE332.450	45	63	45	22	12
HE330.460	HE332.460	46	63	45	22	12
HE330.480	HE332.480	48	63	45	22	12
HE330.500	HE332.500	50	63	45	22	12
HE330.520	HE332.520	52	71	50	27	12
HE330.550	HE332.550	55	71	50	27	12
HE330.580	HE332.580	58	71	50	27	12
HE330.600	HE332.600	60	71	50	27	14
HE330.620	HE332.620	62	80	56	32	14
HE330.630	HE332.630	63	80	56	32	14
HE330.650	HE332.650	65	80	56	32	14
HE330.680	HE332.680	68	80	56	32	14
HE330.700	HE332.700	70	80	56	32	14
HE330.720	HE332.720	72	90	63	40	14
HE330.750	HE332.750	75	90	63	40	14
HE330.780	HE332.780	78	90	63	40	14
HE330.800	HE332.800	80	90	63	40	14
HE330.820	HE332.820	82	90	63	40	14
HE330.850	HE332.850	85	90	63	40	14
HE330.880	HE332.880	88	100	71	50	16
HE330.900	HE332.900	90	100	71	50	16
HE330.920	HE332.920	92	100	71	50	16
HE330.950	HE332.950	95	100	71	50	16
HE330.980	HE332.980	98	100	71	50	16
HE330.1000	HE332.1000	100	100	71	50	16



Serie HE330 - Hélice

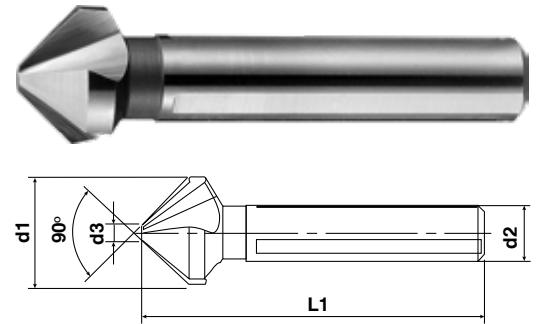


Serie HE332 - Recto

**Avellanador 90° - HSS-E**

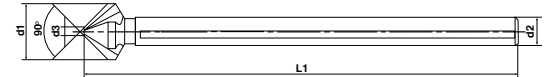
- Características: HSS-E
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Corte 90°

Referencia	d1	d3	L1	d2	ISO 7046/7047	DIN 7991
HA100.043	4.3	1.3	40	4	M2	-
HA100.05	5	1.5	40	4	M2.5	-
HA100.053	5.3	1.5	40	4	-	-
HA100.06	6	1.5	45	5	M3	-
HA100.063	6.3	1.5	45	5	-	M3
HA100.07	7	1.8	50	6	M3.5	-
HA100.073	7.3	1.8	50	6	-	-
HA100.08	8	2	50	6	M4	-
HA100.083	8.3	2	50	6	-	M4
HA100.094	9.4	2.2	50	6	-	-
HA100.010	10	2.5	50	6	M5	-
HA100.0104	10.4	2.8	50	8	-	M5
HA100.0115	11.5	2.8	56	8	M6	-
HA100.0124	12.4	2.8	56	8	-	M6
HA100.0134	13.4	2.9	56	8	-	-
HA100.015	15	3.2	60	10	M8	-
HA100.0165	16.5	3.2	60	10	-	M8
HA100.019	19	3.5	63	10	M10	-
HA100.0205	20.5	3.5	63	10	-	M10
HA100.023	23	3.8	667	10	M12	-
HA100.025	25	3.8	67	10	-	M12
HA100.026	26	3.9	71	12	M14	-
HA100.028	28	4	71	12	-	M14
HA100.030	30	4.1	71	12	M16	-
HA100.031	31	4.2	71	12	-	M16


**Avellanador 90° - HSS-E - Serie Larga**

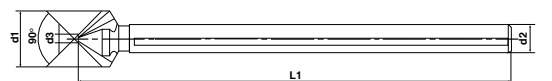
- Características: HSS-E
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Serie Larga - Corte 90°

Referencia	d1	d3	L1	d2	ISO 7046/7047	DIN 7991
HA120.063	6.3	1.5	85	5	-	M3
HA120.083	8.3	2	85	6	-	M4
HA120.0104	10.4	2.5	88	6	-	M5
HA120.0124	12.4	2.8	108	8	-	M6
HA120.0150	15	3.2	110	10	M8	-
HA120.0165	16.5	3.2	112	10	-	M8
HA120.0205	20.5	3.5	115	10	-	M10
HA120.0250	25	3.8	118	10	-	M12


**Avellanador 90° - HSS-E - Serie Extra Larga**

- Características: HSS-E
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Serie Extra Larga - Corte 90°

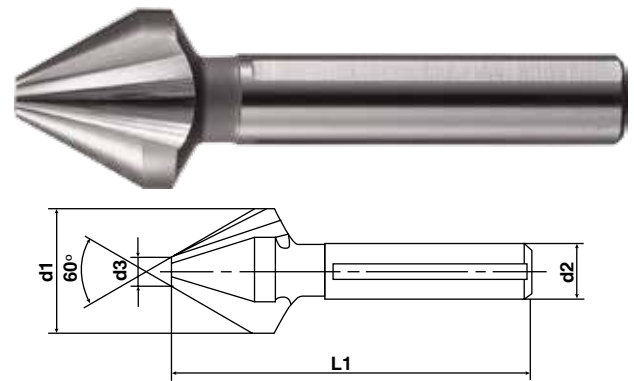
Referencia	d1	d3	L1	d2	ISO 7046/7047	DIN 7991
HA130.063	6.3	1.5	154	5	-	M3
HA130.083	8.3	2	155	6	-	M4
HA130.0104	10.4	2.5	157	6	-	M5
HA130.0124	12.4	2.8	158	8	-	M6
HA130.0150	15	3.2	158	10	M8	-
HA130.0165	16.5	3.2	161	10	-	M8
HA130.0205	20.5	3.5	164	10	-	M10
HA130.0250	25	3.8	164	10	-	M12



**Avellanador 60° - HSS-E**

- Características: HSS-E
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Corte 60°

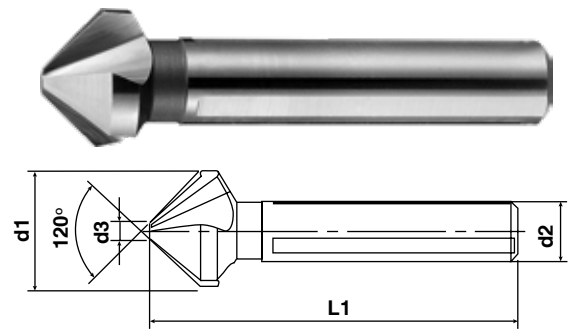
Referencia	d1	d3	L1	d2
HA150.063	6.3	1.5	45	5
HA150.080	8	2	50	6
HA150.0100	10	2.5	50	6
HA150.0250	25	3.8	67	10



**Avellanador 120° - HSS-E**

- Características: HSS-E
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Corte 120°

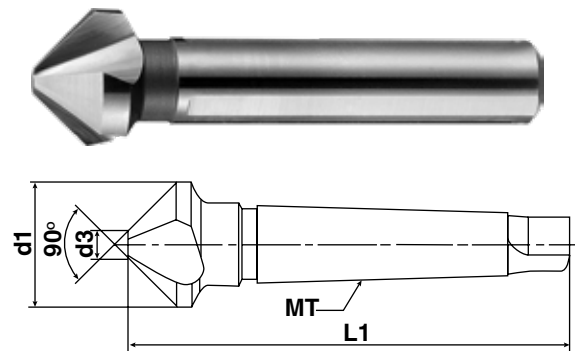
Referencia	d1	d3	L1	d2
HA160.063	6.3	1.5	45	5
HA160.083	8.3	2	50	6
HA160.0104	10.4	2.5	50	6
HA160.0124	12.4	2.8	56	8
HA160.0165	16.5	3.2	60	10
HA160.0205	20.5	3.5	63	10
HA160.0250	25	3.8	67	10



**Avellanador 90° - PM**

- Características: Material HSS-PM
- 3 Cortes para un mejor acabado
- Mango con tres zonas planas para un mejor apriete en portabrocas
- Corte 90°

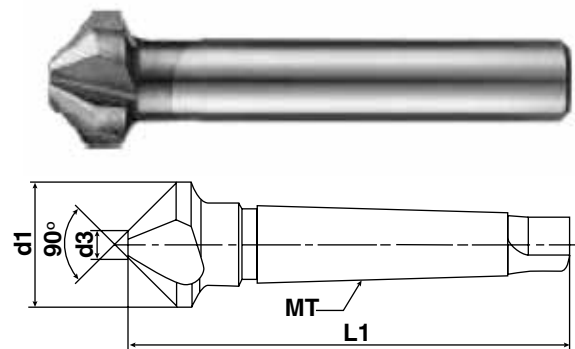
Referencia	d1	d3	L1	d2	DIN 7991
HA110.0063	6.3	1.5	45	5	M3
HA110.0083	8.3	2	50	6	M4
HA110.0104	10.4	2.5	50	6	M5
HA110.0124	12.4	2.8	56	8	M6
HA110.0165	16.5	3.2	60	10	M8
HA110.0205	20.5	3.5	63	10	M10
HA110.0250	25	3.8	67	10	M12
HA110.0310	31	4.2	71	12	M16



**Avellanador 90° - MD**

- Características: Material Metal Duro
- 3 Cortes para un mejor acabado
- Para Materiales de hasta 58HRC
- Corte 90° - Especial

Referencia	d1	d3	L1	d2
HA115.0104	10.4	4	46	8
HA115.0124	12.4	4	56	8
HA115.0165	16.5	4.5	60	10
HA115.0205	20.5	5	63	10
HA115.0250	25	5.5	67	10
HA115.0310	31	6	71	12



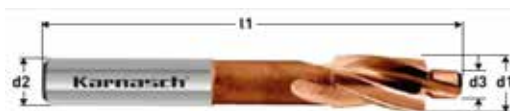
**SET Avellanadores**

Ø Incluidos	Ø Incluidos
6.3-8.3-10.4-12.4-16.5-20.5	6.3-10.4-16.5-20.5-25
Referencia	Referencia
HA100-SET1	HA100-SET2

Kits Avellanadores de la Serie HA100



**Avellanador Cabeza Tornillo Allen - DIN 373 90° - Ajuste Fino**



Referencia	Para M	d1	d3	l1	d2	Z	Referencia Recubierta
K201791020	M-2	4.3	2.2	56	4.3	3	K201891020
K201791025	M-2.5	5	2.7	56	5	3	K201891025
K201791030	M-3	6	3.2	71	5	3	K201891030
K201791040	M-4	8	4.3	71	5	3	K201891040
K201791050	M-5	10	5.3	80	8	3	K201891050
K201791060	M-6	11	6.4	80	8	3	K201891060
K201791080	M-8	15	8.4	100	12.5	3	K201891080
K201791100	M-10	18	10.5	100	12.5	3	K201891100
K201791120	M-12	20	13	100	12.5	3	K201891120

**Avellanador Cabeza Tornillo Allen - DIN 373 90° - Ajuste Medio**



Referencia	Para M	d1	d3	l1	d2	Z	Referencia Recubierta
K201792030	M-3	6	3.4	71	5	3	K201892030
K201792040	M-4	8	4.5	71	5	3	K201892040
K201792050	M-5	10	5.5	80	8	3	K201892050
K201792060	M-6	11	6.6	80	8	3	K201892060
K201792080	M-8	15	9	100	12.5	3	K201892080
K201792100	M-10	18	11	100	12.5	3	K201892100
K201792120	M-12	20	13.5	100	12.5	3	K201892120

**Avellanador Cabeza Tornillo Allen - DIN 373 90° - Agujero Roscado**



Referencia	Para M	d1	d3	l1	d2	Z	Referencia Recubierta
K201793030	M-3	6	2.5	71	5	3	K201893030
K201793040	M-4	8	3.3	71	5	3	K201893040
K201793050	M-5	10	4.2	80	8	3	K201893050
K201793060	M-6	11	5.0	80	8	3	K201893060
K201793080	M-8	15	6.8	100	12.5	3	K201893080
K201793100	M-10	18	8.5	100	12.5	3	K201893100
K201793120	M-12	20	10.2	100	12.5	3	K201893120

**Set de Avellanadores Cabeza Tornillo Allen**

**Sin Recubrimiento**

Referencia	MEDIDAS M	AJUSTE
K401794	M3 - M4 - M5 - M6 - M8 - M10	FINO
K401797	M3 - M4 - M5 - M6 - M8 - M10	MEDIO
K401798	M3 - M4 - M5 - M6 - M8 - M10	ROSCADO

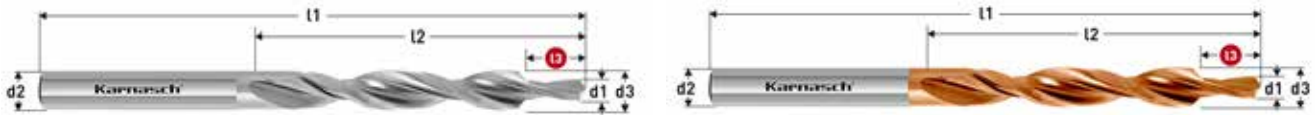


**Con Recubrimiento**

Referencia	MEDIDAS M	AJUSTE
K401791	M3 - M4 - M5 - M6 - M8 - M10	FINO
K401792	M3 - M4 - M5 - M6 - M8 - M10	MEDIO
K401793	M3 - M4 - M5 - M6 - M8 - M10	ROSCADO

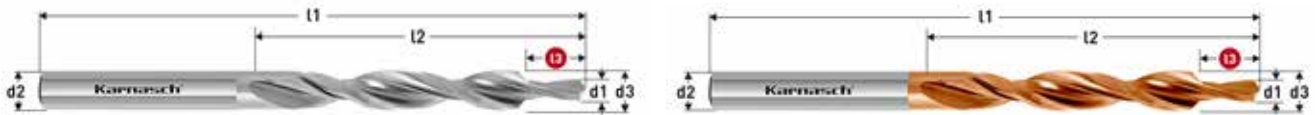


**Broca Bidiametral 90° - DIN 8374 - Ajuste Fino**



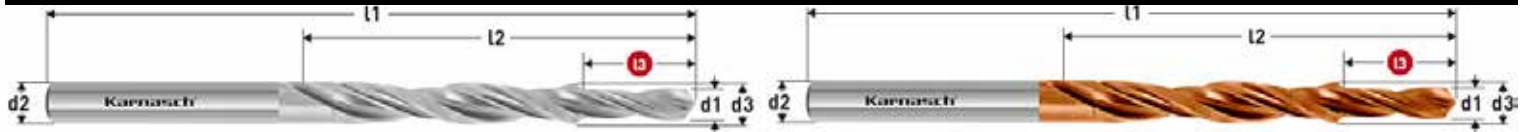
Referencia	Para M	d1	d2	d3	L3	L2	L1	Referencia Recubierta
K401010030	M-3	3.2	6.0	6.0	9.0	57	93	K402010030
K401010040	M-4	4.3	8.0	8.0	11.0	75	117	K402010040
K401010050	M-5	5.3	10.0	10.0	13.0	87	133	K402010050
K401010060	M-6	6.4	11.5	11.5	15.0	94	142	K402010060
K401010080	M-8	8.4	15.0	15.0	19.0	114	169	K402010080
K401010100	M-10	10.5	19.0	19.0	23.0	135	198	K402010100

**Broca Bidiametral 90° - DIN 8376 - Ajuste Medio**



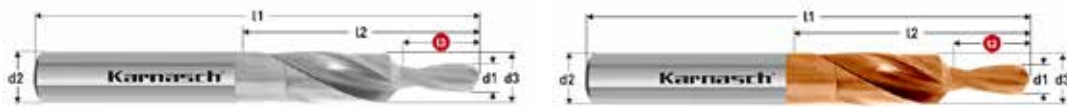
Referencia	Para M	d1	d2	d3	L3	L2	L1	Referencia Recubierta
K401020030	M-3	3.4	6.5	6.5	9.0	63	101	K402020030
K401020040	M-4	4.5	8.0	8.0	11.0	75	117	K402020040
K401020050	M-5	5.5	10.0	10.0	13.0	87	133	K402020050
K401020060	M-6	6.6	11.0	11.0	15.0	94	142	K402020060
K401020080	M-8	9.0	15.0	15.0	19.0	114	169	K402020080
K401020100	M-10	11.0	18.0	18.0	23.0	130	191	K402020100

**Broca Bidiametral 90° - DIN 8378 - Agujero Roscado**



Referencia	Para M	d1	d2	d3	L3	L2	L1	Referencia Recubierta
K401030030	M-3	2.5	3.4	3.4	8.8	39	70	K402030030
K401030040	M-4	3.3	4.5	4.5	11.4	47	80	K402030040
K401030050	M-5	4.2	5.5	5.5	13.6	57	93	K402030050
K401030060	M-6	5.0	6.6	6.6	16.5	63	101	K402030060
K401030080	M-8	6.8	9.0	9.0	21.0	81	125	K402030080
K401030100	M-10	8.5	11.0	11.0	25.5	94	142	K402030100
K401030120	M-12	10.2	13.5	13.5	30.0	108	160	K402030120

**Broca Bidiametral 90° - DIN 1897 - Agujero pasante**



Referencia	Para M	d1	d2	d3	L3	L2	L1	Referencia Recubierta
K401040030	M-3	3.2	6.0	6.0	9	28	66	K402040030
K401040040	M-4	4.3	8.0	8.0	11	37	79	K402040040
K401040050	M-5	5.3	10.0	10.0	13	43	89	K402040050
K401040060	M-6	6.4	11.5	11.5	15	47	95	K402040060
K401040080	M-8	8.4	15.0	15.0	19	56	111	K402040080
K401040100	M-10	10.5	19.0	19.0	23	64	127	K402040100

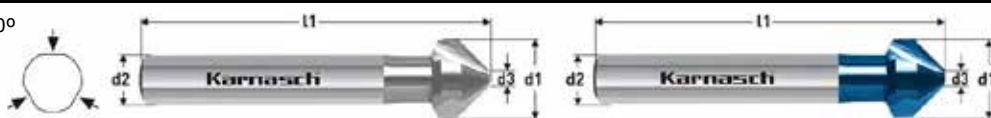
**Broca Bidiametral 180° - DIN 1897 - Agujero pasante**

Referencia	Para M	d1	d2	d3	L3	L2	L1	Referencia Recubierta
K401050030	M-3	3.4	6.0	6.0	9	28	66	K402050030
K401050040	M-4	4.5	8.0	8.0	11	37	79	K402050040
K401050050	M-5	5.5	10.0	10.0	13	43	89	K402050050
K401050060	M-6	6.6	11.0	11.0	15	47	95	K402050060
K401050080	M-8	9.0	15.0	10.0	19	56	111	K402050080
K401050100	M-10	11.0	18.0	18.0	23	62	123	K402050100



**Avellanador 90° - Z3**

- Características: HSS-XE – DIN335 – Forma C – 90°
- (\*) - Hasta fin existencias



Referencia	d1	d3	L1	d2	Z	AF	BF	Referencia BLUE
K201740.010	4.3	1.3	40	4	3	-	-	K201745.010
K201740.020(*)	5	1.5	40	4	3	M2.5	-	-
K201740.040	6	1.5	45	5	3	M3	-	-
K201740.050	6.3	1.5	45	5	3	-	M3	K201745.050
K201740.060(*)	7	1.8	50	6	3	M3.5	-	-
K201740.070(*)	7.3	1.8	50	6	3	-	-	K201745.070(*)
K201740.080	8	2	50	6	3	M4	-	K201745.080
K201740.090	8.3	2	50	6	3	-	M4	K201745.090
K201740.100	9.4	2.2	50	6	3	-	-	K201745.100
K201740.110	10	2.5	50	6	3	M5	-	K201745.110
K201740.120	10.4	2.5	50	6	3	-	M5	K201745.120
K201740.130	11.5	2.8	56	8	3	M6	-	K201745.130
K201740.140	12.4	2.8	56	8	3	-	M6	K201745.140
K201740.150	13.4	2.9	56	8	3	-	-	K201745.150
K201740.160	15	3.2	60	10	3	M8	-	K201745.160
K201740.170	16.5	3.2	60	10	3	-	M8	K201745.170
K201740.180	19	3.5	63	10	3	M10	-	K201745.180
K201740.190	20.5	3.5	63	10	3	-	M10	K201745.190
K201740.200	23	3.8	67	10	3	M12	-	K201745.200
K201740.210	25	3.8	67	10	3	-	M12	K201745.210
K201740.220	26	3.9	71	12	3	M14	-	K201745.220
K201740.230	28	4	71	12	3	-	M14	K201745.230
K201740.240	30	4.1	71	12	3	M16	-	K201745.240
K201740.250	31	4.2	71	12	3	-	M16	K201745.250
K201740.260	40	10	80	15	3	-	-	K201745.260

**Avellanador 90° - Z3 - ASP y Metal Duro**

- Características: HSS-XE – DIN335 – Forma C – 90°



Referencia ASP	d1	d3	L1	d2	Z	AF	BF	Referencia MD
K201750.050	6.3	1.5	45	5	3	-	M3	K201755.050
K201750.090	8.3	2	50	6	3	-	M4	K201755.090
K201750.120	10.4	2.5	50	6	3	-	M5	K201755.120
K201750.140	12.4	2.8	56	8	3	-	M6	K201755.140
K201750.170	16.5	3.2	60	10	3	-	M8	K201755.170
K201750.190	20.5	3.5	63	10	3	-	M10	K201755.190
K201750.210	25	3.8	67	10	3	-	M12	K201755.210
K201750.250	31	4.2	71	12	3	-	M16	K201755.250

**KITS DE AVELLANADORES**



Ø Incluidos	Ø Incluidos	Ø Incluidos	Ø Incluidos
6.3-8.3-10.4-12.4-16.5-20.5	6.3-10.4-16.5-20.5-25	6.3-8.3-10.4-12.4-16.5-20.5	6.3-10.4-16.5-20.5-25
Referencia	Referencia	Referencia	Referencia
K201641 - HSS-XE	K201642 - HSS XE	K201643 - HSS XE BLUE	K201644 - HSS XE BLUE
Kits Avellanadores Serie Larga			
Ø Incluidos	Ø Incluidos		
6.3-8.3-10.4-12.4-16.5-20.5	6.3-8.3-10.4-12.4-16.5-20.5		
Referencia	Referencia		
K404090010 HSS-XE	K403090010 - HSS XE BLUE		

(\*) Disponibles Hasta Fin Existencias

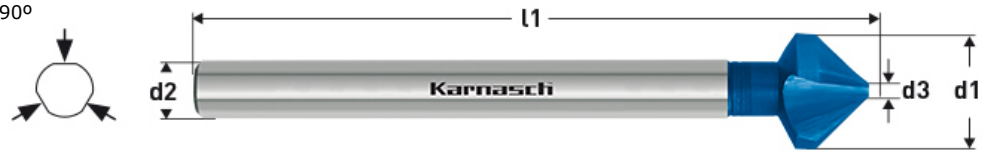
### Avellanador 90° - Z3 - Serie Larga / Serie Extralarga

• Características: HSS-XE - DIN 335 - Forma C - 90°



Referencia Larga	d1	d3	L1 (Modelo Largo)	L1 (Modelo Extra Largo)	d2	Z	BF	Referencia Extra Larga
K201720.010	6.3	1.5	85	154	5	3	M3	K201770.010
K201720.020	8.3	2	85	155	6	3	M4	K201770.020
K201720.030	10.4	2.5	88	157	6	3	M5	K201770.030
K201720.040	12.4	2.8	108	158	8	3	M6	K201770.040
K201720.050	15	3.2	110	158	10	3	M8	K201770.050
K201720.060	16.5	3.2	112	161	10	3	M8	K201770.060
K201720.070	20.5	3.5	115	164	10	3	M10	K201770.070
K201720.080	25	3.8	118	164	10	3	M12	K201770.080
K201720.080	25	3.8	118	164	10	3	M12	K201770.080

• Características: HSS-XE-Blue - DIN 335 - Forma C - 90°

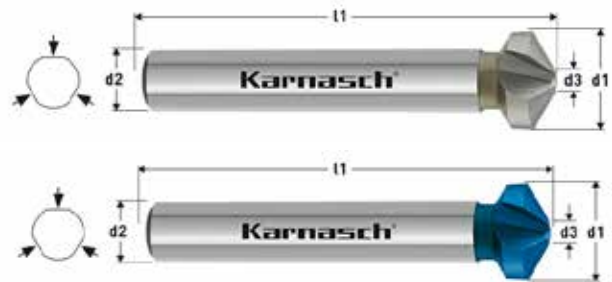


Referencia Larga (Blue)	d1	d3	L1 (Modelo Largo)	L1 (Modelo Extra Largo)	d2	Z	BF	Referencia Extra Larga (Blue)
K201725.010	6.3	1.5	85	154	5	3	M3	K201775.010
K201725.020	8.3	2	85	155	6	3	M4	K201775.020
K201725.030	10.4	2.5	88	157	6	3	M5	K201775.030
K201725.040	12.4	2.8	108	158	8	3	M6	K201775.040
K201725.050	15	3.2	110	158	10	3	M8	K201775.050
K201725.060	16.5	3.2	112	161	10	3	M8	K201775.060
K201725.070	20.5	3.5	115	164	10	3	M10	K201725.070
K201725.080	25	3.8	118	164	10	3	M12	K201725.080
K201725.080	25	3.8	118	164	10	3	M12	K201775.080

### Avellanador 100°

• Características: HSS-XE-Blue - DIN 335 - Forma C - 100°

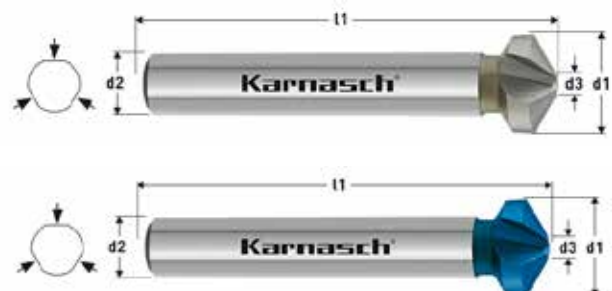
Referencia	d1	d3	L1	Z	d2	Referencia BLUE
K201730.005	6.3	1.5	45	3	5	K201735.005
K201730.010	8.3	2	50	3	6	K201735.010
K201730.020	10.4	2.5	50	3	6	K201735.020
K201730.030	12.4	2.8	56	3	8	K201735.030
K201730.040	16.5	3.2	60	3	10	K201735.040
K201730.050	20.5	3.5	63	3	10	K201735.050
K201730.060	25	3.8	67	3	10	K201730.060



### Avellanador 120

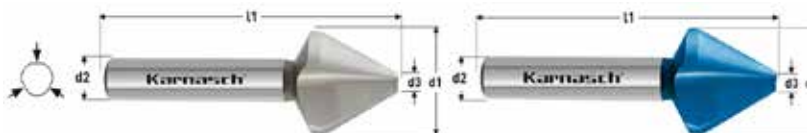
• Características: HSS-XE-Blue - DIN 335 - Forma C - 120°

Referencia	d1	d3	L1	Z	d2	Referencia BLUE
K404040.0063	6.3	1.5	45	3	5	K403040.0063
K404040.0083	8.3	2	50	3	6	K403040.0083
K404040.0104	10.4	2.5	50	3	6	K403040.0104
K404040.0124	12.4	3	56	3	8	K403040.0124
K404040.0165	16.5	3.5	60	3	10	K403040.0165
K404040.0205	20.5	4	60	3	10	K403040.0205
K404040.0250	25	5	63	3	10	K403040.0250



**Avellanador 60°**

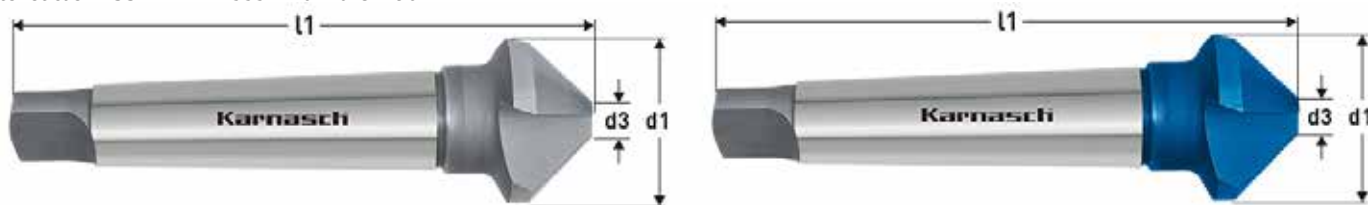
• Características: HSS-XE – DIN 335 – Forma C – 60°



Referencia	d1	d3	L1	Z	d2	Referencia BLUE
K404030.0063	6.3	1.6	45	3	5	K403030.0063
K404030.0080	8	2	50	3	6	K403030.0080
K404030.0100	10	2.5	53	3	6	K403030.0100
K404030.0125	12.5	3.2	56	3	8	K403030.0125
K404030.0160	16	4	63	3	10	K403030.0160
K404030.0200	20	5	67	3	10	K403030.0200
K404030.0250	25	6.3	71	3	10	K403030.0250
K404030.0315	31.5	10	76	3	12	K403030.0315

**Avellanador 90° - Cono Morse**

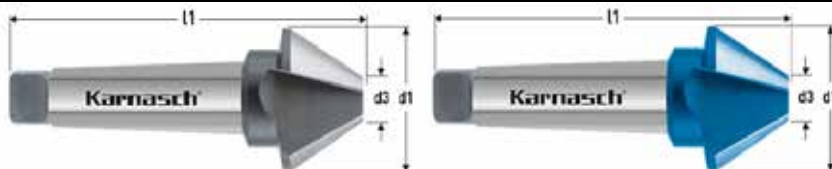
• Características: HSS-XE – DIN335 – Forma C – 90°



Referencia	d1	d3	L1	Z	CM	AF	BF	Referencia BLUE
K201790.010	20.5	3.5	100	3	2	-	M10	K201795.010
K201790.020	25	3.8	106	3	2	-	M12	K201795.020
K201790.030	31	4.2	112	3	2	-	M16	K201795.030
K201790.040	37	4.8	118	3	2	M20	M20	K201795.040
K201790.050	40	10	140	3	3	-	-	K201795.050
K201790.060	50	14	150	3	3	-	-	K201795.060
K201790.070	63	16	180	3	4	-	-	K201795.070
K201790.080	80	22	190	3	4	-	-	K201795.080

**Avellanador 60° - Cono Morse**

• Características: HSS-XE – DIN335 – Forma C – 60°

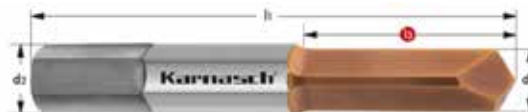


Referencia	d1	d3	L1	Z	d2	Referencia BLUE
K404035.0200	20	5	106	3	2	K403035.0200
K404035.0250	25	6.3	112	3	2	K403035.0250
K404035.0315	31.5	10	118	3	2	K403035.0315
K404035.0400	40	12.5	150	3	3	K403035.0400
K404035.0500	50	16	160	3	3	K403035.0500
K404035.0630	63	20	190	3	4	K403035.0630
K404035.0800	80	25	200	3	4	K403035.0800

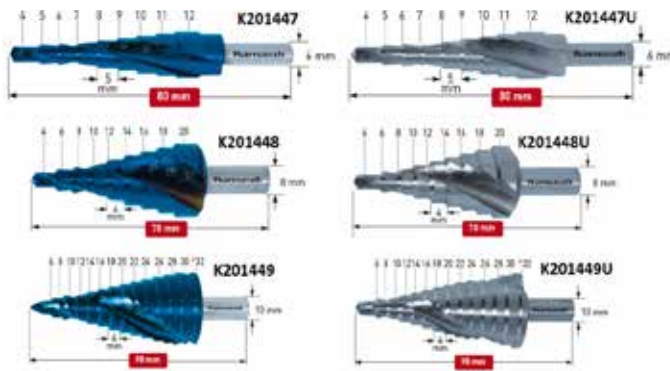
**Extractor de Machos - Set Extractor de Machos**

• Hasta 65 HRC – Micrograno MD – 0° - Amarre Cilindrico y Hexagonal

Referencia	Para M	Ød1 H7	L3	L1	Ød2 H6	
K201860.010	M-3	2.5	10	38	3	
K201860.020	M-4	3.3	14	46	4	
K201860.030	M-5	4.2	19	50	5	
K201860.040	M-6	5.0	23	50	6	
K201860.050	M-8	6.8	23	60	8	
K201860.060	M-10	8.5	25	80	10	
K201860.070	M-12	10.2	35	80	12	
K201865	M3 a M10	Set de Extractor de Machos				

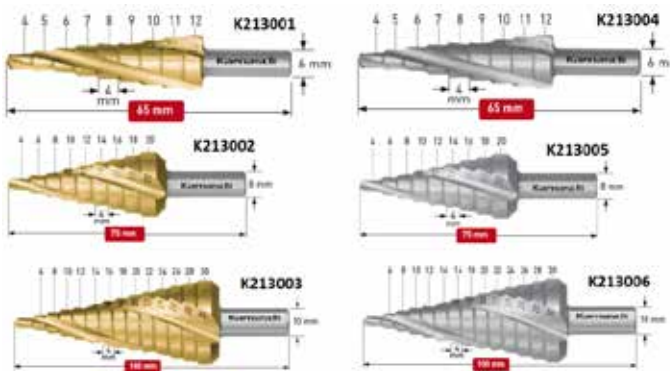


**Brocas Escalonadas HSS**



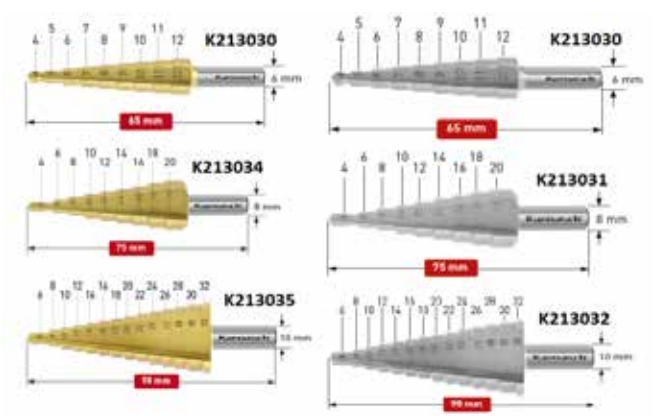
Referencia Recubierta	Rango	Ø Amarre	Altura corte	Longitud total	Referencia Sin Recubrir
K201447	4-12	6	5	80	K201447U
K201448	4-20	8	4	70	K201448U
K201449	6-32	10	4	98	K201449U

Set de Brocas Escalonadas Con Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K201466					
Set de Brocas Escalonadas Sin Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K201492					



Referencia Recubierta	Rango	Ø Amarre	Altura corte	Longitud total	Referencia Sin Recubrir
K213001	4-12	6	4	65	K213004
K213002	4-20	8	4	75	K213005
K213003	6-30	10	4	100	K213006

Set de Brocas Escalonadas Con Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K213007					
Set de Brocas Escalonadas Sin Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K213008					



Referencia Recubierta	Rango	Ø Amarre	Altura corte	Longitud total	Referencia Sin Recubrir
K213030	4-12	6	4	65	K213030
K213034	4-20	8	4	75	K213031
K213035	6-32	10	4	98	K213032

Set de Brocas Escalonadas Con Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K213092					
Set de Brocas Escalonadas Sin Recubrimiento					
Rango: 4-12 + 4-20 + 6-32					
Referencia: K213082					



Modelo - Descripción	Referencia
<p>• Broca Escalonada HSS-XE Titan-Tec - 6 a 12 mm cada 10mm</p>	K213050
<p>• Broca Escalonada HSS-XE Titan-Tec - 6 a 20 mm cada 10mm</p>	K213051
<p>• Broca Escalonada HSS-XE Titan-Tec - 6 a 27 mm cada 10mm</p>	K213052




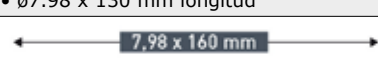
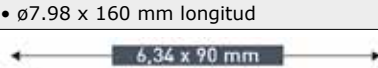
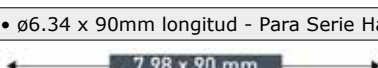
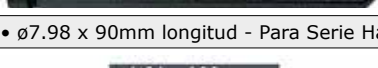
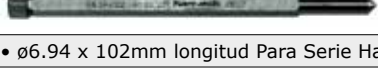


Set de Brocas Escalonadas HSS-XE TITAN-TEC	
Rango: 6-12 + 6-20 + 6-27	
Referencia: K213072	





**Accesorios para Coronas/Fresas Karnash**

Imagen	Referencia
 6,35 mm 1/4"	<b>K201509</b>
• Amarre ø6.35 mm - Para Coronas (K201500) de 14-30mm	
 9,5 mm 3/8"	<b>K201507</b>
• Amare Hex 9.5mm - Para Coronas (K201500) de 14-30mm	
 9,5 mm 3/8"	<b>K201503</b>
• Amarre Hex 9.5mm - Para Coronas (K201500) 32-210mm	
 11,0 mm 7/16"	<b>K201521</b>
• Amare Hex 11mm - Para Coronas (K201500) 32-210mm	
 11,0 mm 7/16"	<b>K201528</b>
• Amarre Hex 11mm - Para coronas (K201500) 32-305 mm. • Recomendable para mayores de ø100mm	
 Nitto/Universal 19 mm 3/4" Weldon 19 mm 3/4"	<b>K201263</b>
• Adaptador Nitto/Universal 19 a Weldon 19mm	
 FEIN Quick-In 18 mm Weldon + Nitto / Universal 19 mm 3/4"	<b>K201311</b>
• Adaptador Quick-FEIN 18mm a Nitto/Universal/Weldon 19mm	
 Weldon 32 mm 1.1/4" Weldon + Nitto / Universal 19 mm 3/4"	<b>K210048</b>
• Adaptador Weldon 32 a Nitto/Universal/Weldon 19mm	

Imagen	Referencia
 6,34 x 77 mm	<b>K201261</b>
• ø6.34 x 77 mm longitud	
 6,34 x 102 mm	<b>K201271</b>
• ø6.34 x 102 mm longitud	
 7,98 x 130 mm	<b>K201439</b>
• ø7.98 x 130 mm longitud	
 7,98 x 160 mm	<b>K201399</b>
• ø7.98 x 160 mm longitud	
 6,34 x 90 mm	<b>K201149</b>
• ø6.34 x 90mm longitud - Para Serie Hard Line 40 de ø12 a 17mm	
 7,98 x 90 mm	<b>K201151</b>
• ø7.98 x 90mm longitud - Para Serie Hard Line 40 de ø18 a 65mm	
 6,34 x 102 mm	<b>K201271</b>
• ø6.94 x 102mm longitud Para Serie Hard Line 55 de ø12 a 17mm	
 7,98 x 105 mm	<b>K201273</b>
• ø6.94 x 102mm longitud Para Serie Hard Line 55 de ø18 a 60mm	
 6,35 x 105 mm	<b>K201512</b>
• Broca Guía ø6.35x105mm válido para el extractor K201509	
 6,35 x 80 mm	<b>K201505</b>
• Broca Guía ø6.35x80mm	

**Corona Bimetálica CO8% - 38 mm**

Diámetro	Diámetro	Referencia	Diámetro
K201500.014	Ø14	K201500.043	Ø43
K201500.016	Ø16	K201500.044	Ø44
K201500.017	Ø17	K201500.045	Ø45
K201500.019	Ø19	K201500.046	Ø46
K201500.020	Ø20	K201500.048	Ø48
K201500.021	Ø21	K201500.050	Ø50
K201500.022	Ø22	K201500.051	Ø51
K201500.024	Ø24	K201500.052	Ø52
K201500.025	Ø25	K201500.054	Ø54
K201500.027	Ø27	K201500.055	Ø55
K201500.028	Ø28	K201500.057	Ø57
K201500.029	Ø29	K201500.059	Ø59
K201500.030	Ø30	K201500.060	Ø60
K201500.032	Ø32	K201500.064	Ø64
K201500.033	Ø33	K201500.065	Ø65
K201500.035	Ø35	K201500.067	Ø67
K201500.037	Ø37	K201500.068	Ø68
K201500.038	Ø38	K201500.070	Ø70
K201500.040	Ø40	K201500.073	Ø73
K201500.041	Ø41	K201500.075	Ø75

Referencia	Diámetro
K201500.076	Ø76
K201500.079	Ø79
K201500.080	Ø80
K201500.083	Ø83
K201500.086	Ø86
K201500.089	Ø89
K201500.092	Ø92
K201500.095	Ø95
K201500.098	Ø98
K201500.100	Ø100
K201500.102	Ø102
K201500.105	Ø105
K201500.108	Ø108
K201500.111	Ø111
K201500.114	Ø114
K201500.121	Ø121
K201500.127	Ø127
K201500.133	Ø133
K201500.140	Ø140
K201500.146	Ø146

Referencia	Diámetro
K201500.152	Ø152
K201500.160	Ø160
K201500.168	Ø168
K201500.177	Ø177
K201500.200	Ø200
K201500.210	Ø210
K201500.220	Ø220
K201500.233	Ø233
K201500.250	Ø250
K201500.260	Ø260
K201500.265	Ø265
K201500.279	Ø279
K201500.305	Ø305



**Coronas para Maquinas de Base Electromagética – Blue Line**

- Fresa Hueca HSS-XE con Recubrimiento y Amarre Weldon 19mm.
- Modelo K201312 (Longitud 30 mm)
- Modelo K201313 (Longitud 55mm)
- Modelo K201285 (Longitud 80mm)
- Modelo K201280 (Longitud 110mm)



Ø	Medida L3			
	30 mm	55 mm	80 mm	110mm
Ø12	K201312.012	K201313.012	-	-
Ø13	K201312.013	K201313.013	-	-
Ø14	K201312.014	K201313.014	-	-
Ø15	K201312.015	K201313.015	-	-
Ø16	K201312.016	K201313.016	-	-
Ø17	K201312.017	K201313.017	-	-
Ø18	K201312.018	K201313.018	K201285.018	K201280.018
Ø19	K201312.019	K201313.019	K201285.019	K201280.019
Ø20	K201312.020	K201313.020	K201285.020	K201280.020
Ø21	K201312.021	K201313.021	K201285.021	K201280.021
Ø22	K201312.022	K201313.022	K201285.022	K201280.022
Ø23	K201312.023	K201313.023	K201285.023	K201280.023
Ø24	K201312.024	K201313.024	K201285.024	K201280.024
Ø25	K201312.025	K201313.025	K201285.025	K201280.025
Ø26	K201312.026	K201313.026	K201285.026	K201280.026
Ø27	K201312.027	K201313.027	K201285.027	K201280.027
Ø28	K201312.028	K201313.028	K201285.028	K201280.028
Ø29	K201312.029	K201313.029	K201285.029	K201280.029
Ø30	K201312.030	K201313.030	K201285.030	K201280.030
Ø31	K201312.031	K201313.031	-	-
Ø32	K201312.032	K201313.032	K201285.032	K201280.032
Ø33	K201312.033	K201313.033	K201285.033	K201280.033
Ø34	K201312.034	K201313.034	-	-
Ø35	K201312.035	K201313.035	K201285.035	K201280.035
Ø36	K201312.036	K201313.036	K201285.036	K201280.036

Ø	Medida L3			
	30 mm	55 mm	80 mm	110mm
Ø37	K201312.037	K201313.037	-	-
Ø38	K201312.038	K201313.038	K201285.038	K201280.038
Ø39	K201312.039	K201313.039	-	-
Ø40	K201312.040	K201313.040	K201285.040	K201280.040
Ø41	K201312.041	K201313.041	-	-
Ø42	K201312.042	K201313.042	-	-
Ø43	K201312.043	K201313.043	-	-
Ø44	K201312.044	K201313.044	-	-
Ø45	K201312.045	K201313.045	K201285.045	K201280.045
Ø46	K201312.046	K201313.046	-	-
Ø47	K201312.047	K201313.047	-	-
Ø48	K201312.048	K201313.048	-	-
Ø49	K201312.049	K201313.049	-	-
Ø50	K201312.050	K201313.050	K201285.050	K201280.050
Ø51	K201312.051	K201313.051	-	-
Ø52	K201312.052	K201313.052	-	-
Ø53	K201312.053	K201313.053	-	-
Ø54	K201312.054	K201313.054	-	-
Ø55	K201312.055	K201313.055	-	-
Ø56	K201312.056	K201313.056	-	-
Ø57	K201312.057	K201313.057	-	-
Ø58	K201312.058	K201313.058	-	-
Ø59	K201312.059	K201313.059	-	-
Ø60	K201312.060	K201313.060	-	-

**Coronas para Maquinas de Base Electromagética – Gold Line**

- Fresa Hueca HSS y Amarre Weldon 19mm.
- Modelo K201260U (Longitud 30 mm)
- Modelo K201270U (Longitud 55mm)
- Disponibles también de longitud 80 y 110 mm algunas medidas



Ø	Referencia L3 30 mm	Referencia L3 55 mm
Ø12	K201260U.012	K201270U.012
Ø13	K201260U.013	K201270U.013
Ø13.5	K201260U.0135	K201270U.0135
Ø14	K201260U.014	K201270U.014
Ø15	K201260U.015	K201270U.015
Ø15.5	K201260U.0155	K201270U.0155
Ø16	K201260U.016	K201270U.016
Ø17	K201260U.017	K201270U.017
Ø17.5	K201260U.0175	K201270U.0175
Ø18	K201260U.018	K201270U.018
Ø19	K201260U.019	K201270U.019
Ø19.5	K201260U.0195	K201270U.0195
Ø20	K201260U.020	K201270U.020
Ø21	K201260U.021	K201270U.021
Ø22	K201260U.022	K201270U.022
Ø23	K201260U.023	K201270U.023
Ø24	K201260U.024	K201270U.024
Ø25	K201260U.025	K201270U.025
Ø26	K201260U.026	K201270U.026
Ø26.5	K201260U.0265	K201270U.0265

Ø	Referencia L3 30 mm	Referencia L3 55 mm
Ø27	K201260U.027	K201270U.027
Ø28	K201260U.028	K201270U.028
Ø29	K201260U.029	K201270U.029
Ø30	K201260U.030	K201270U.030
Ø31	K201260U.031	K201270U.031
Ø32	K201260U.032	K201270U.032
Ø33	K201260U.033	K201270U.033
Ø34	K201260U.034	K201270U.034
Ø35	K201260U.035	K201270U.035
Ø36	K201260U.036	K201270U.036
Ø37	K201260U.037	K201270U.037
Ø38	K201260U.038	K201270U.038
Ø39	K201260U.039	K201270U.039
Ø40	K201260U.040	K201270U.040
Ø41	K201260U.041	K201270U.041
Ø42	K201260U.042	K201270U.042
Ø43	K201260U.043	K201270U.043
Ø44	K201260U.044	K201270U.044
Ø45	K201260U.045	K201270U.045

Ø	Referencia L3 30 mm	Referencia L3 55 mm
Ø46	K201260U.046	K201270U.046
Ø45	K201260U.045	K201270U.045
Ø46	K201260U.046	K201270U.046
Ø45	K201260U.045	K201270U.045
Ø46	K201260U.046	K201270U.046
Ø47	K201260U.047	K201270U.047
Ø48	K201260U.048	K201270U.048
Ø49	K201260U.049	K201270U.049
Ø50	K201260U.050	K201270U.050
Ø51	K201260U.051	K201270U.051
Ø52	K201260U.052	K201270U.052
Ø53	K201260U.053	K201270U.053
Ø54	K201260U.054	K201270U.054
Ø55	K201260U.055	K201270U.055
Ø56	K201260U.056	K201270U.056
Ø57	K201260U.057	K201270U.057
Ø58	K201260U.058	K201270U.058
Ø59	K201260U.059	K201270U.059
Ø60	K201260U.060	K201270U.060



**Coronas para Maquinas de Base Electromagnética – Silver Line Basic**

- Fresa Hueca HSS y Amarre Weldon 19mm.
- Modelo K201255 (Longitud 25 mm)
- Modelo K201265 (Longitud 50mm)



Diámetro	Referencia L3 30 mm	Referencia L3 55 mm	Diámetro	Referencia L3 30 mm	Referencia L3 55 mm
Ø12	K201255.012	K201265.012	Ø37	K201255.037	K201265.037
Ø13	K201255.013	K201265.013	Ø38	K201255.038	K201265.038
Ø14	K201255.014	K201265.014	Ø39	K201255.039	K201265.039
Ø15	K201255.015	K201265.015	Ø40	K201255.040	K201265.040
Ø16	K201255.016	K201265.016	Ø41	K201255.041	K201265.041
Ø17	K201255.017	K201265.017	Ø42	K201255.042	K201265.042
Ø18	K201255.018	K201265.018	Ø43	K201255.043	K201265.043
Ø19	K201255.019	K201265.019	Ø44	K201255.044	K201265.044
Ø20	K201255.020	K201265.020	Ø45	K201255.045	K201265.045
Ø21	K201255.021	K201265.021	Ø46	K201255.046	K201265.046
Ø22	K201255.022	K201265.022	Ø47	K201255.047	K201265.047
Ø23	K201255.023	K201265.023	Ø48	K201255.048	K201265.048
Ø24	K201255.024	K201265.024	Ø49	K201255.049	K201265.049
Ø25	K201255.025	K201265.025	Ø50	K201255.050	K201265.050
Ø26	K201255.026	K201265.026	Ø51	K201255.051	K201265.051
Ø27	K201255.027	K201265.027	Ø52	K201255.052	K201265.052
Ø28	K201255.028	K201265.028	Ø53	K201255.053	K201265.053
Ø29	K201255.029	K201265.029	Ø54	K201255.054	K201265.054
Ø30	K201255.030	K201265.030	Ø55	K201255.055	K201265.055
Ø31	K201255.031	K201265.031	Ø56	K201255.056	K201265.056
Ø32	K201255.032	K201265.032	Ø57	K201255.057	K201265.057
Ø33	K201255.033	K201265.033	Ø58	K201255.058	K201265.058
Ø34	K201255.034	K201265.034	Ø59	K201255.059	K201265.059
Ø35	K201255.035	K201265.035	Ø60	K201255.060	K201265.060
Ø36	K201255.036	K201265.036			
Ø31	K201255.031	K201265.031			
Ø32	K201255.032	K201265.032			
Ø33	K201255.033	K201265.033			

**Consulte nuestros Sets de Coronas en diferentes modelos/medidas**

Tambien puede realizar cajas individuales personalizadas con sus modelos en estuche de plastico rigido a medida del cliente.



**Coronas para Maquinas de Base Electromagnética – Hard-Line**

- Fresa Hueca Metal Duro y Amarre Weldon 19mm.
- Modelo k201315 (Longitud 40 mm)
- Modelo K201316 (Longitud 55mm)
- Disponibles también de longitud 80 y 110 y 150mm algunas medidas



Diámetro	Referencia L3 40 mm	Referencia L3 55mm	Diámetro	Referencia L3 40 mm	Referencia L3 55 mm
Ø12	K201315.012	K201316.012	Ø61	K201315.061	K201316.061
Ø13	K201315.013	K201316.013	Ø62	K201315.062	K201316.062
Ø14	K201315.014	K201316.014	Ø63	K201315.063	K201316.063
Ø15	K201315.015	K201316.015	Ø64	K201315.064	K201316.064
Ø16	K201315.016	K201316.016	Ø65	K201315.065	K201316.065
Ø17	K201315.017	K201316.017	Ø66	K201315.066	K201316.066
Ø18	K201315.018	K201316.018	Ø67	K201315.067	K201316.067
Ø19	K201315.019	K201316.019	Ø68	K201315.068	K201316.068
Ø20	K201315.020	K201316.020	Ø69	K201315.069	K201316.069
Ø21	K201315.021	K201316.021	Ø70	K201315.070	K201316.070
Ø22	K201315.022	K201316.022	Ø71	K201315.071	K201316.071
Ø23	K201315.023	K201316.023	Ø72	K201315.072	K201316.072
Ø24	K201315.024	K201316.024	Ø73	K201315.073	K201316.073
Ø25	K201315.025	K201316.025	Ø74	K201315.074	K201316.074
Ø26	K201315.026	K201316.026	Ø75	K201315.075	K201316.075
Ø27	K201315.027	K201316.027	Ø76	K201315.076	K201316.076
Ø28	K201315.028	K201316.028	Ø77	K201315.077	K201316.077
Ø29	K201315.029	K201316.029	Ø78	K201315.078	K201316.078
Ø30	K201315.030	K201316.030	Ø79	K201315.079	K201316.079
Ø31	K201315.031	K201316.031	Ø80	K201315.080	K201316.080
Ø32	K201315.032	K201316.032	Ø82	-	K201316.082
Ø33	K201315.033	K201316.033	Ø83	-	K201316.083
Ø34	K201315.034	K201316.034	Ø84	-	K201316.084
Ø35	K201315.035	K201316.035	Ø85	K201315.085	K201316.085
Ø36	K201315.036	K201316.036	Ø88	-	K201316.088
Ø37	K201315.037	K201316.037	Ø90	K201315.090	K201316.090
Ø38	K201315.038	K201316.038	Ø92	-	K201316.092
Ø39	K201315.039	K201316.039	Ø95	-	K201316.095
Ø40	K201315.040	K201316.040	Ø100	K201315.100	K201316.100
Ø41	K201315.041	K201316.041	Ø105	K201315.105	K201316.105
Ø42	K201315.042	K201316.042	Ø110	K201315.110	K201316.110
Ø43	K201315.043	K201316.043	Ø115	-	K201316.115
Ø44	K201315.044	K201316.044	Ø120	K201315.120	K201316.120
Ø45	K201315.045	K201316.045	Ø125	-	K201316.125
Ø46	K201315.046	K201316.046	Ø130	-	K201316.130
Ø47	K201315.047	K201316.047	Ø135	-	K201316.135
Ø48	K201315.048	K201316.048	Ø140	-	K201316.140
Ø49	K201315.049	K201316.049	Ø145	-	K201316.145
Ø50	K201315.050	K201316.050	Ø150	-	K201316.150
Ø51	K201315.051	K201316.051	Ø155	-	K201316.155
Ø52	K201315.052	K201316.052	Ø160	-	K201316.160
Ø53	K201315.053	K201316.053	Ø165	-	K201316.165
Ø54	K201315.054	K201316.054	Ø170	-	K201316.170
Ø55	K201315.055	K201316.055	Ø175	-	K201316.175
Ø56	K201315.056	K201316.056	Ø180	-	K201316.180
Ø57	K201315.057	K201316.057	Ø185	-	K201316.185
Ø58	K201315.058	K201316.058	Ø190	-	K201316.190
Ø59	K201315.059	K201316.059	Ø195	-	K201316.195
Ø60	K201315.060	K201316.060	Ø200	-	K201316.200

**Fresa Rotativa HP3 - Forma A**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5001 015	1,5	6	3	38	K11 3001 015
K11 5001 025	2	11	3	38	K11 3001 025
K11 5001 027	2,5	11	3	38	K11 3001 027
K11 5001 030	3	14	3	38	K11 3001 030
K11 5001 035	3	14	3	50	K11 3001 035
K11 5001 040	3	14	3	65	K11 3001 040
K11 5001 045	3	14	3	75	K11 3001 045
K11 5001 050	3	14	3	100	K11 3001 050
K11 5001 052	3	12,7	6	50	K11 3001 052
K11 5001 055	4	14	6	50	K11 3001 055
K11 5001 057	5	12,7	3	38	K11 3001 057
K11 5001 058	5	16	6	50	K11 3001 058
K11 5001 059	6	5	3	37	K11 3001 059
K11 5001 060	6	13	3	45	K11 3001 060
K11 5001 065	6	18	6	50	K11 3001 065
K11 5001 067	6	25	6	50	K11 3001 067
K11 5001 070	6	18	6	100	K11 3001 070

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5001 075	6	18	6	150	K11 3001 075
K11 5001 080	8	20	6	65	K11 3001 080
K11 5001 085	8	20	6	170	K11 3001 085
K11 5001 087	10	13	6	58	K11 3001 087
K11 5001 090	10	20	6	65	K11 3001 090
K11 5001 095	10	20	6	172	K11 3001 095
K11 5001 100	10	25	6	70	K11 3001 100
K11 5001 103	12	20	6	64	K11 3001 103
K11 5001 105	12	25	6	70	K11 3001 105
K11 5001 107	12DIN	25	6	70	K11 3001 107
K11 5001 110	12	25	6	175	K11 3001 110
K11 5001 115	12	25	8	70	K11 3001 115
K11 5001 120	16	25	6	70	K11 3001 120
K11 5001 125	16	25	8	70	K11 3001 125
K11 5001 130	20	25	6	70	K11 3001 130
K11 5001 140	25	25	6	70	K11 3001 140
K11 5001 145	25	25	8	70	-

**Fresa Rotativa HP3 - Forma B**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5011 005	1,5	6	3	38	K11 3011 005
K11 5011 010	2	11	3	38	K11 3011 010
K11 5011 012	2,5	11	3	38	K11 3011 012
K11 5011 015	3	14	3	38	K11 3011 015
K11 5011 020	3	14	3	50	K11 3011 020
K11 5011 025	3	14	3	65	K11 3011 025
K11 5011 030	3	14	3	75	K11 3011 030
K11 5011 035	3	14	3	100	K11 3011 035
K11 5011 037	3	12,7	6	50	K11 3011 037
K11 5011 040	4	14	6	50	K11 3011 040
K11 5011 042	5	16	6	50	K11 3011 042
K11 5011 043	6	5	3	37	K11 3011 043
K11 5011 045	6	13	3	45	K11 3011 045
K11 5011 050	6	13	6	50	K11 3011 050
K11 5011 055	6	18	6	75	K11 3011 055
K11 5011 060	6	18	6	100	K11 3011 060
K11 5011 065	6	18	6	150	K11 3011 065
K11 5011 070	6	18	6	50	K11 3011 070

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5011 005	1,5	6	3	38	K11 3011 005
K11 5011 010	2	11	3	38	K11 3011 010
K11 5011 012	2,5	11	3	38	K11 3011 012
K11 5011 015	3	14	3	38	K11 3011 015
K11 5011 020	3	14	3	50	K11 3011 020
K11 5011 025	3	14	3	65	K11 3011 025
K11 5011 030	3	14	3	75	K11 3011 030
K11 5011 035	3	14	3	100	K11 3011 035
K11 5011 037	3	12,7	6	50	K11 3011 037
K11 5011 040	4	14	6	50	K11 3011 040
K11 5011 042	5	16	6	50	K11 3011 042
K11 5011 043	6	5	3	37	K11 3011 043
K11 5011 045	6	13	3	45	K11 3011 045
K11 5011 050	6	13	6	50	K11 3011 050
K11 5011 055	6	18	6	75	K11 3011 055
K11 5011 060	6	18	6	100	K11 3011 060
K11 5011 065	6	18	6	150	K11 3011 065

**Fresa Rotativa HP3 - Forma C**



Referencia BLUE	D1	L2	D2	L1	Referencia
K11 5021 020	2	11	3	38	K11 3021 020
K11 5021 022	2,5	11	3	38	K11 3021 022
K11 5021 025	3	14	3	38	K11 3021 025
K11 5021 030	3	14	3	50	K11 3021 030
K11 5021 032	3	14	3	60	K11 3021 032
K11 5021 035	3	14	3	75	K11 3021 035
K11 5021 040	3	14	3	100	K11 3021 040
K11 5021 042	3	12,7	6	50	K11 3021 042
K11 5021 043	3	30*(15)	6	60	K11 3021 043
K11 5021 045	4	16	6	50	K11 3021 045
K11 5021 046	4	30*(15)	6	60	K11 3021 046
K11 5021 047	5	12,7	3	38	K11 3021 047
K11 5021 049	5	16	6	50	K11 3021 049
K11 5021 050	6	12,7	3	44	K11 3021 050
K11 5021 055	6	18	6	50	K11 3021 055
K11 5021 056	6	18	6	60	K11 3021 056
K11 5021 058	6	18	6	80	K11 3021 058
K11 5021 060	6	18	6	100	K11 3021 060
K11 5021 065	6	18	6	150	K11 3021 065

Referencia BLUE	D1	L2	D2	L1	Referencia
K11 5021 060	6	18	6	100	K11 3021 060
K11 5021 065	6	18	6	150	K11 3021 065
K11 5021 070	6	25	6	50	K11 3021 070
K11 5021 075	8	20	6	65	K11 3021 075
K11 5021 080	8	20	6	170	K11 3021 080
K11 5021 085	10	20	6	65	K11 3021 085
K11 5021 090	10	20	6	170	K11 3021 090
K11 5021 095	10	25	6	70	K11 3021 095
K11 5021 097	11	25	6	70	K11 3021 097
K11 5021 099	12	10	6	54	-
K11 5021 100	12	20	6	65	K11 3021 100
K11 5021 105	12	25	6	70	K11 3021 105
K11 5021 107	12DIN	25	6	70	K11 3021 107
K11 5021 110	12	25	6	175	K11 3021 110
K11 5021 115	12	25	8	70	K11 3021 115
K11 5021 120	16	25	6	70	K11 3021 120
K11 5021 125	16	25	8	70	K11 3021 125
K11 5021 130	20	25	6	70	K11 3021 130
K11 5021 135	20	25	8	70	K11 3021 135

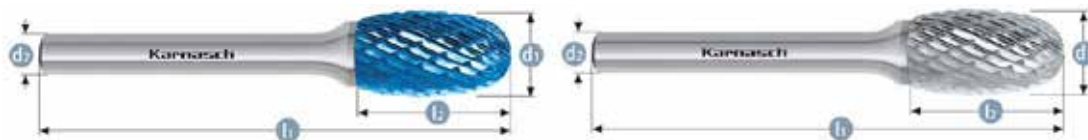
**Fresa Rotativa HP3 - Forma D - Bola**



Referencia BLUE	D1	L2	D2	L1	Referencia
K11 5031 020	2	1,8	3	38	K11 3031 020
K11 5031 022	2,5	2,3	3	38	K11 3031 022
K11 5031 025	3	2,5	3	38	K11 3031 025
K11 5031 030	3	2,5	3	50	K11 3031 030
K11 5031 035	3	2,5	3	75	K11 3031 035
K11 5031 040	3	2,5	6	50	K11 3031 040
K11 5031 045	4	3,4	3	38	K11 3031 045
K11 5031 046	4	3,4	6	50	K11 3031 046
K11 5031 047	5	4,7	3	38	K11 3031 047
K11 5031 048	5	5,0	6	50	K11 3031 048
K11 5031 050	6	5,0	3	38	K11 3031 050
K11 5031 055	6	4,7	6	50	K11 3031 055
K11 5031 060	8	6,0	6	52	K11 3031 060
K11 5031 065	8	6,0	6	180	K11 3031 065

Referencia BLUE	D1	L2	D2	L1	Referencia
K11 5031 070	10	8,0	6	54	K11 3031 070
K11 5031 075	10	8,0	6	185	K11 3031 075
K11 5031 077	11	9,5	6	55	K11 3031 077
K11 5031 080	12	11,4	6	56	K11 3031 080
K11 5031 083	12DIN	11,0	6	56	K11 3031 083
K11 5031 085	12	11,0	8	56	K11 3031 085
K11 5031 090	12	11,0	6	162	K11 3031 090
K11 5031 095	16	14,0	6	60	K11 3031 095
K11 5031 100	16	14,0	8	60	K11 3031 100
K11 5031 105	20	16,5	6	62	K11 3031 105
K11 5031 110	20	16,5	8	62	K11 3031 110
K11 5031 115	25	22,0	6	68	K11 3031 115
K11 5031 120	25	22,0	8	68	K11 3031 120

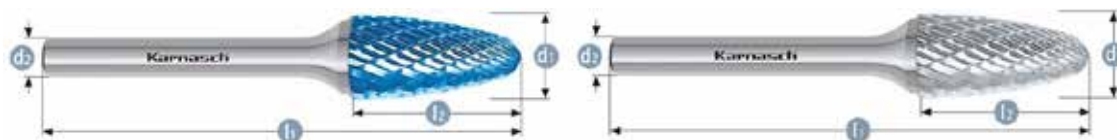
**Fresa Rotativa HP3 - Forma E - Oval**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5041 010	3	6	3	38	K11 3041 010
-	3	6	3	50	K11 3041 005
K11 5041 011	3	6	3	75	K11 3041 011
K11 5041 012	5	7,1	3	38	K11 3041 012
K11 5041 015	6	10	3	42	K11 3041 015
K11 5041 020	6	10	6	50	K11 3041 020
K11 5041 025	8	15	6	60	K11 3041 025
K11 5041 030	10	16	6	60	K11 3041 030
K11 5041 032	10	16	6	170	-

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5041 035	12	22	6	67	K11 3041 035
K11 5041 037	12DIN	21	6	66	K11 3041 037
-	12	22	6	175	K11 3041 038
K11 5041 040	12	22	8	67	K11 3041 040
K11 5041 045	16	25	6	70	K11 3041 045
K11 5041 050	16	25	8	70	K11 3041 050
K11 5041 055	20	25	6	70	-
K11 5041 060	20	25	8	70	K11 3041 060

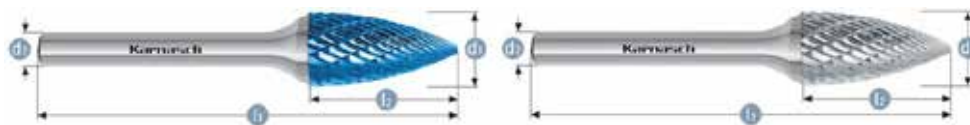
**Fresa Rotativa HP3 - Forma F - Ojival Redondeada**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5051 007	3	6	3	38	K11 3051 007
K11 5051 010	3	8	3	38	K11 3051 010
K11 5051 015	3	14	3	38	K11 3051 015
K11 5051 020	3	14	3	50	K11 3051 020
K11 5051 021	3	14	3	75	-
K11 5051 022	5	12,7	3	38	K11 3051 022
K11 5051 025	6	12	3	44	K11 3051 025
K11 5051 030	6	18	6	50	K11 3051 030
K11 5051 033	6	18	6	168	K11 3051 033
K11 5051 035	8	20	6	65	K11 3051 035
K11 5051 040	10	20	6	65	K11 3051 040
K11 5051 045	10	20	6	170	K11 3051 045
K11 5051 047	11	25	6	70	K11 3051 047

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5051 048	12	20	6	65	K11 3051 048
K11 5051 050	12	25	6	70	K11 3051 050
K11 5051 053	12DIN	25	6	70	K11 3051 053
K11 5051 055	12	25	8	70	K11 3051 055
K11 5051 060	12	25	6	175	K11 3051 060
K11 5051 065	16	25	6	70	K11 3051 065
K11 5051 070	16	25	8	70	K11 3051 070
K11 5051 075	20	25	6	70	K11 3051 075
K11 5051 080	20	25	8	70	K11 3051 080
K11 5051 082	20	32	6	77	K11 3051 082
K11 5051 085	20	38	6	83	K11 3051 085
K11 5051 090	20	38	8	83	K11 3051 090

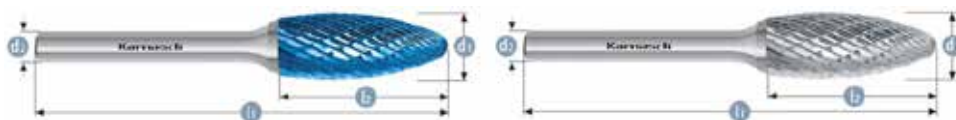
**Fresa Rotativa HP3 - Forma G - Ojival Punta**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5061 010	3	6	3	38	K11 3061 010
K11 5061 012	3	10	3	38	K11 3061 012
K11 5061 015	3	14	3	38	K11 3061 015
K11 5061 020	3	14	3	50	K11 3061 020
K11 5061 025	3	14	3	75	-
K11 5061 028	5	12,7	3	38	K11 3061 028
K11 5061 030	6	12	3	44	K11 3061 030
K11 5061 035	6	18	6	50	K11 3061 035
K11 5061 040	8	20	6	65	K11 3061 040
K11 5061 045	10	20	6	65	K11 3061 045
K11 5061 050	10	20	6	170	K11 3061 050
K11 5061 055	12	20	6	65	K11 3061 055
K11 5061 060	12	25	6	70	K11 3061 060

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5061 063	12DIN	25	6	70	K11 3061 063
K11 5061 065	12	25	8	70	K11 3061 065
K11 5061 070	12	25	6	175	K11 3061 070
K11 5061 075	12	30	6	75	K11 3061 075
K11 5061 080	12	30	8	75	K11 3061 080
K11 5061 085	16	25	6	70	K11 3061 085
K11 5061 090	16	25	8	70	K11 3061 090
K11 5061 095	16	30	6	75	K11 3061 095
K11 5061 100	16	30	8	75	K11 3061 100
K11 5061 105	20	25	6	70	K11 3061 105
K11 5061 110	20	25	8	70	-
K11 5061 115	20	38	6	83	K11 3061 115

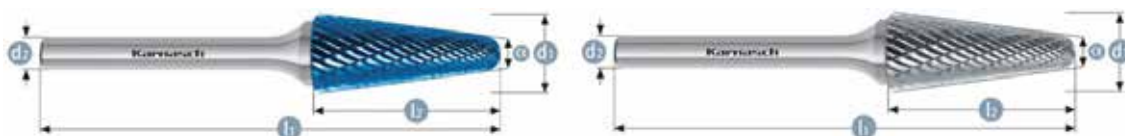
**Fresa Rotativa HP3 - Forma H**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5071 005	3	6	3	38	K11 3071 005
K11 5071 003	3	6	3	50	K11 3071 003
K11 5071 006	3	6	3	75	K11 3071 006
K11 5071 007	5	9,5	3	38	K11 3071 007
K11 5071 010	6	14	6	50	K11 3071 010
K11 5071 015	8	20	6	65	K11 3071 015
K11 5071 017	8	20	6	170	K11 3071 017
K11 5071 020	10	20	6	65	K11 3071 020

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5071 025	12	32	6	77	K11 3071 025
K11 5071 027	12DIN	30	6	75	K11 3071 027
K11 5071 028	12	32	6	180	K11 3071 028
K11 5071 030	12	32	8	77	K11 3071 030
K11 5071 035	16	36	6	82	K11 3071 035
K11 5071 040	16	36	8	82	K11 3071 040
K11 5071 045	20	41	6	86	K11 3071 045
K11 5071 050	20	41	8	86	K11 3071 050

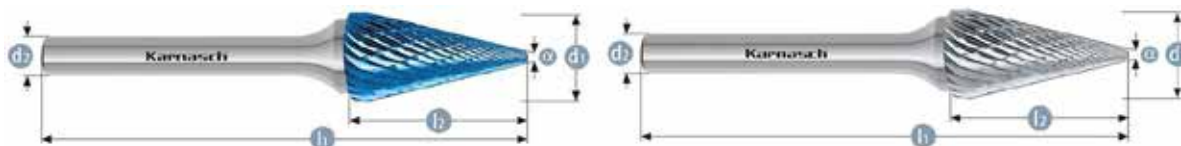
**Fresa Rotativa HP3 - Forma L**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5081 005	3	10	3	38	K11 3081 005
K11 5081 010	3	14	3	38	K11 3081 010
K11 5081 009	3	14	3	50	K11 3081 009
K11 5081 011	3	14	3	75	K11 3081 011
K11 5081 012	5	12,7	3	38	K11 3081 012
K11 5081 015	6	16	3	48	K11 3081 015
K11 5081 020	6	18	6	50	K11 3081 020
K11 5081 025	8	25	6	70	K11 3081 025
K11 5081 030	10	20	6	65	K11 3081 030
K11 5081 035	10	30	6	75	K11 3081 035

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5081 040	10	30	6	176	K11 3081 040
K11 5081 045	12	32	6	77	K11 3081 045
K11 5081 047	12DIN	25	6	70	K11 3081 047
K11 5081 050	12	32	8	77	K11 3081 050
K11 5081 055	12	32	6	182	K11 3081 055
K11 5081 060	16	33	6	78	K11 3081 060
K11 5081 065	16	33	8	78	K11 3081 065
K11 5081 070	20	41	6	86	K11 3081 070
K11 5081 075	20	41	8	86	K11 3081 075

**Fresa Rotativa HP3 - Forma M**

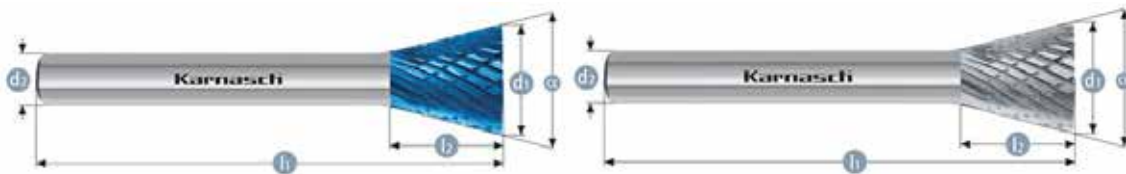


Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5091 010	3	8	3	38	K11 3091 010
K11 5091 015	3	11	3	38	K11 3091 015
K11 5091 020	3	15	3	38	K11 3091 020
K11 5091 025	6	12	3	48	K11 3091 025
K11 5091 027	6	12,7	6	50	K11 3091 027
K11 5091 030	6	20	6	50	K11 3091 030
K11 5091 032	6	25	6	50	K11 3091 032

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5091 035	8	18	6	63	K11 3091 035
K11 5091 040	10	20	6	65	K11 3091 040
K11 5091 045	12	25	6	70	K11 3091 045
K11 5091 047	12DIN	25	6	70	K11 3091 047
K11 5091 050	12	25	8	70	K11 3091 050
K11 5091 055	16	26	6	74	K11 3091 055
K11 5091 060	16	26	8	74	K11 3091 060



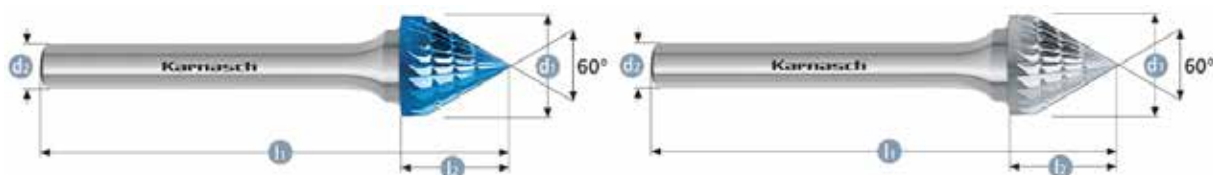
**Fresa Rotativa HP3 - Forma N**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5096 005	3	5	3	38	K11 3096 005
K11 5096 010	6	7	3	39	K11 3096 010
K11 5096 015	6	8	6	50	K11 3096 015
K11 5096 020	10	10	6	55	K11 3096 020
K11 5096 025	12	13	6	58	K11 3096 025

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5096 030	12	13	8	58	K11 3096 030
K11 5096 035	16	19	6	64	K11 3096 035
K11 5096 040	16	19	8	64	K11 3096 040
K11 5096 045	20	16	6	61	K11 3096 045

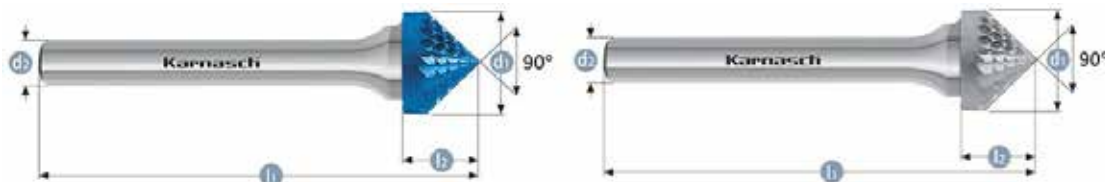
**Fresa Rotativa HP3 - Forma J**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5101 005	3	3	3	38	K11 3101 005
K11 5101 010	6	6	6	50	K11 3101 010
K11 5101 015	10	8	6	56	K11 3101 015
K11 5101 020	12	11	6	60	K11 3101 020

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5101 025	16	15	6	62	K11 3101 025
K11 5101 030	16	15	8	62	K11 3101 030
K11 5101 035	20	17	6	65	K11 3101 035
K11 5101 040	25	24,5	6	68	K11 3101 040

**Fresa Rotativa HP3 - Forma K**



Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5111 005	3	3	3	38	K11 3111 005
K11 5111 010	6	6	6	50	K11 3111 010
K11 5111 015	10	5	6	53	K11 3111 015
K11 5111 020	12	7	6	55	K11 3111 020
K11 5111 025	12	7	8	55	K11 3111 025

Referencia BLUE	d1	L2	d2	L1	Referencia
K11 5111 030	16	8	6	57	K11 3111 030
K11 5111 035	16	8	8	57	K11 3111 035
K11 5111 040	20	12	6	60	K11 3111 040
K11 5111 045	25	12,7	6	60	K11 3111 045

**Set de Fresas Rotativas HP3 Blue**



**Referencia: K11 4918**

- 5 Fresas Recubrimiento BLUE - ø10 - Tipos B-C-F-G-L

**Referencia: K11 4926**

- 5 Fresas Recubrimiento BLUE - ø12 - Tipos B-C-F-G-L

**Referencia: K11 4907**

- 5 Fresas Recubrimiento BLUE - ø12DIN - Tipos B-C-F-G-L

**Referencia: K11 4934**

- 5 Fresas Recubrimiento BLUE - ø10 - Tipos B-C-F-G-L
- 5 Fresas Recubrimiento BLUE - ø12 - Tipos B-C-F-G-L

**Taladros Magnéticos Karnasch**



<b>Modelo KA 35</b>	<b>Referencia: K208013</b>
<p>Motor: 1100 Refrigeración: Interna Automática Toma: Directa Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-38 mm – 110mm Máximo Broca: 3-18 mm Máximo Avellanador: 10-30 mm Recorrido: 120/210 mm Soporte Magnético: 80x168 Dimensiones: 275 x 370/550 mm Peso: 11 Kg</p>	



<b>Modelo KA 38</b>	<b>Referencia: K208020</b>
<p>Motor: 1100 Refrigeración: Interna Automática Toma: Directa Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-38 mm – 110mm Máximo Broca: 3-18 mm Máximo Avellanador: 10-30 mm Recorrido: 170 mm Soporte Magnético: 85x170 Dimensiones: 280 x 320/490 mm Peso: 11 Kg</p>	



<b>Modelo KA 40</b>	<b>Referencia: K208021</b>
<p>Motor: 1100 Refrigeración: Interna Automática Toma: Directa Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-40 mm – 110 mm Máximo Broca: 3-18 mm Máximo Avellanador: 10-30 mm Recorrido: 170 mm Soporte Magnético: 85x170 Dimensiones: 280 x 330/510 mm Peso: 12 Kg</p>	



<b>Modelo KAS 40</b>	<b>Referencia: K208022</b>
<p>Motor: 1100 Refrigeración: Interna Automática Toma: Directa Weldon 19mm Máximo Fresa Hueca: <math>\varnothing</math>12-40 mm – 110mm Máximo Broca: 3-18 mm Máximo Avellanador: 10-30 mm Recorrido: 180 mm Soporte Magnético: 85x170 rotativo 360° Dimensiones: 280 x 340/520 mm Peso: 12 Kg</p>	



<b>Modelo KA 50</b>	<b>Referencia: K208023</b>
<p>Motor: 1150 Refrigeración: Interna Automática Toma: Cono Morse 2 Con Weldon 19 mm Maximo Fresa Hueca: <math>\varnothing</math>12-50 mm – 110mm Máximo Broca: 3-23 mm Máximo Avellanador: 10-40 mm Recorrido: 170 mm Dimensiones: 280 x 420/560 mm Peso: 13 Kg</p>	



<b>Modelo KAS 50</b>	<b>Referencia: K208024</b>
<p>Motor: 1150 Refrigeración: Interna Automática Toma: Cono Morse 2 Con Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-50 mm – 110mm Máximo Broca: 3-23 mm Máximo Avellanador: 10-40 mm Recorrido: 180 mm Soporte Magnético: 85x170 rotativo 360° Dimensiones: 280 x 430/570 mm Peso: 14Kg</p>	



<b>Modelo KATV 55</b>	<b>Referencia: K208025</b>
<p>Motor: 1250 Refrigeración: Interna Automática Toma: Cono Morse 2 Con Weldon 19mm Máximo Fresa Hueca: <math>\varnothing</math>12-55 mm – 110mm Máximo Broca: 3-23 mm Máximo Avellanador: 10-40 mm Machos: 6-20 mm Recorrido: 180 mm Soporte Magnético: 85x180 Dimensiones: 280 x 420/560 mm Protección a sobre temperatura del equipo Giro: Derecha /Izquierda Peso: 14 Kg</p>	



<b>Modelo KATSV 55</b>	<b>Referencia: K208026</b>
<p>Motor: 1250 Refrigeración: Interna Automática Toma: Cono Morse 2 Con Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-55 mm – 110 mm Máximo Broca: 3-23 mm Máximo Avellanador: 10-40 mm Machos: 6-20 mm Recorrido: 195 mm Soporte Magnético: 85x180 rotativo 360° Dimensiones: 280 x 420/560 mm Protección a sobre temperatura del equipo Giro: Derecha /Izquierda Peso: 15Kg</p>	



<b>Modelo KALP 55</b>	<b>Referencia: K208031</b>
<p>Motor: 1100 Refrigeración: Interna Automática Toma: Directa Weldon 19 mm Máximo Fresa Hueca: <math>\varnothing</math>12-45 mm – 55mm Máximo Broca: 6-16 mm Máximo Avellanador: 10-30 mm Recorrido: 63 mm Soporte Magnético: 86x196 Dimensiones: 310 x 178 mm Peso: 11 Kg</p>	

(\*) Disponemos de otros modelos de taladros magnéticos disponibles en el catálogo general de Karnasch

### K12.100 - Disco Laminas Ceramic PRO

Lijado agresivo y procesamiento de superficies también para materiales difíciles de lijar. Excelente en adición a los aceros estructurales también para aceros de alta aleación e inoxidables, acero de carbono, aleaciones a base de níquel, aleaciones de titanio, aleaciones de aluminio duro.



Referencia	Diámetro	Grano
K121000.115036	115	36
K121000.115040	115	40
K121000.115060	115	60
K121000.115080	115	80
K121000.125036	125	36
K121000.125040	125	40
K121000.125060	125	60
K121000.115080	125	80

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 13300 (ø115) - 12000 (ø125)

### K12.1010 - Disco Laminas ZIRCONIO STANDAR PRO

Rendimiento de corte agresivo con una larga vida útil del disco. Para todos los trabajos de desbaste exigentes en acero / inoxidable con un coste económico.

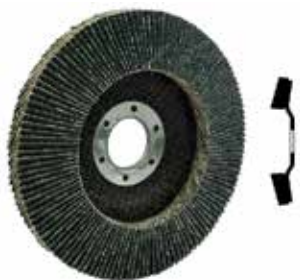


Referencia	Diámetro	Grano
K121010.115036	115	36
K121010.115040	115	40
K121010.115060	115	60
K121010.115080	115	80
K121010.115120	115	120
K121010.125036	125	36
K121010.125040	125	40
K121010.125060	125	60
K121010.125080	125	80
K121010.125120	125	120

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 13300 (ø115) - 12000 (ø125)

### K12.1020 - Disco Laminas ZIRCONIO COLOSSUS

La tecnología XXL-COLOSSUS, con hasta un 50-60 % más de abrasivos de corindón, aumenta la vida útil hasta un 50 % en comparación a los discos abarabivos a láminas Standard Zirconium. El grosor considerablemente mayor del material de la tecnología XXL-COLOSSUS crea un efecto de amortiguación positivo para un mayor control y menos vibraciones.



Referencia	Diámetro	Grano
K121020.115040	115	40
K121020.115060	115	60
K121020.115080	115	80
K121020.125040	125	40
K121020.125060	125	60
K121020.125080	125	80

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 13300 (ø115) - 12000 (ø125)

### K121030 - Disco Laminas CERAMIC FLEX-ELAST

Ideales para el desbaste y el acabado de superficies curvadas y contorneadas. CERAMIC FlexElast está diseñado para un desbaste agresivo con el mayor desprendimiento de material. Ofrece flexibilidad para la difuminación y el acabado de superficies cóncavas y convexas, contornos y perfiles. Su fabricación de tela flexible reduce el riesgo de corte y desgaste.



Referencia	Diámetro	Grano
K121030.115040	115	40
K121030.115060	115	60
K121030.115080	115	80

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 13300 (ø115)

### K121040 - Disco Laminas ZIRCONIO FLEX-ELAST

Ideales para la difuminación y el acabado de superficies cóncavas y convexas de gran tamaño, contornos y perfiles. Para áreas de difícil acceso, así como para áreas difíciles de procesar, por ejemplo, radios estrechos. Su fabricación en tela flexible reduce el riesgo de recorte y desgaste. Otra ventaja es la alta resistencia al desgarro en el rectificado de esquinas y bordes



Referencia	Diámetro	Grano
K121040.115040	115	40
K121040.115060	115	60
K121040.115080	115	80
K121040.125040	125	40
K121040.125060	125	60
K121040.125080	125	80

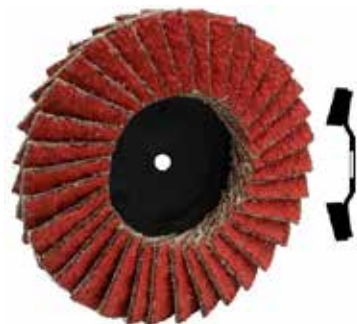
- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 13300 (ø115) - 12000 (ø125)

### K121050 - Disco Laminas CERAMIC QUICK-CHANGE

El disco CERAMIC CERAMIC QUICK-CHANGE MINI ofrece una productividad excepcional y tiene una duración significativamente mayor en comparación con los discos abrasivos revestidos convencionales del mismo diámetro.

Ventajas:

- Mejora el desprendimiento de material
- Evita el atasco
- Permite un desbaste más frío
- El sistema de bloqueo Quick-Change permite un cambio eficaz de los discos



Referencia	Grano	Soporte ø	Código Adaptador Tipo R
K121050.115036	40	50/2	K125000 / K125020 / K125140
K121050.115040	40	50/2	K125000 / K125020 / K125140
K121050.115060	60	50/2	K125000 / K125020 / K125140
K121050.115080	80	50/2	K125000 / K125020 / K125140
K121050.125036	36	75/3	K125030 / K125150
K121050.125040	40	75/3	K125030 / K125150
K121050.125060	60	75/3	K125030 / K125150
K121050.125080	80	75/3	K125030 / K125150

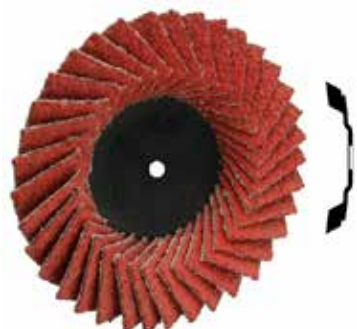
- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 30000 (50/2) - 20000 (75/3)

### K121060 - Disco Laminas CERAMIC FLEX ELAST MINI

Para la difuminación y el acabado en superficies curvas y contorneadas de difícil acceso. Disco de diámetro pequeño diseñado para un lijado agresivo e ideal para su uso en áreas de difícil acceso. Ofrece flexibilidad para la difuminación y el acabado de superficies cóncavas y convexas, contornos y perfiles. Su fabricación flexible reduce el riesgo de recortes y desgastes.

Ventajas:

- Mejora el desprendimiento de material
- Evita el atasco
- Permite un desbaste más frío
- El sistema de bloqueo Quick-Change permite un cambio eficaz de los discos



Referencia	Grano	Soporte ø	Código Adaptador Tipo R
K121060.115040	40	50/2	K125000 / K125020 / K125140
K121060.115060	60	50/2	K125000 / K125020 / K125140
K121060.115080	80	50/2	K125000 / K125020 / K125140
K121060.125040	40	75/3	K125030 / K125150
K121060.125060	60	75/3	K125030 / K125150
K121060.125080	80	75/3	K125030 / K125150

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 25000 (50/2) - 20000 (75/3)

### K121070 - Disco Laminas ZIRCONIUM MINI

Los minidisos Quick-Change son discos a láminas de diámetro reducido para materiales ferrosos. Son ideales para la eliminación y difuminación de materiales cuando la accesibilidad es un problema o el área de trabajo debe reducirse al mínimo. El minidisco ofrece una vida útil excepcional en comparación con los discos Quick-Change convencionales del mismo diámetro. El sistema de bloqueo fácil permite un cambio rápido y práctico de los discos.

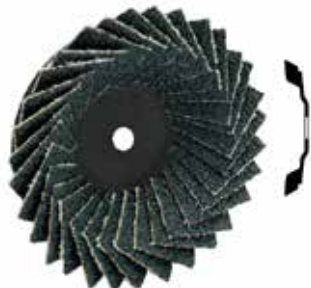


Referencia	Grano	Soporte ø	Código Adaptador Tipo R
K121070.115040	40	50/2	K125000 / K125020 / K125140
K121070.115060	60	50/2	K125000 / K125020 / K125140
K121070.115080	80	50/2	K125000 / K125020 / K125140
K121070.125040	40	75/3	K125030 / K125150
K121070.125060	60	75/3	K125030 / K125150
K121070.125080	80	75/3	K125030 / K125150

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 25000 (50/2) - 20000 (75/3)

### K121080 - Disco Laminas ZIRCONIUM FLEX-ELAST MINI

Los minidisos Quick-Change son discos a láminas de diámetro reducido para materiales ferrosos. Son ideales para la eliminación y difuminación de materiales cuando la accesibilidad es un problema o el área de trabajo debe reducirse al mínimo. El minidisco ofrece una vida útil excepcional en comparación con los discos Quick-Change convencionales del mismo diámetro. El sistema de bloqueo fácil permite un cambio rápido y práctico de los discos.



Referencia	Grano	Soporte ø	Código Adaptador Tipo R
K121080.115036	36	50/2	K125000 / K125020 / K125140
K121080.115040	40	50/2	K125000 / K125020 / K125140
K121080.115060	60	50/2	K125000 / K125020 / K125140
K121080.115080	80	50/2	K125000 / K125020 / K125140
K121080.115120	120	50/2	K125000 / K125020 / K125140
K121080.125036	36	75/3	K125030 / K125150
K121080.125040	40	75/3	K125030 / K125150
K121080.125060	60	75/3	K125030 / K125150
K121080.125080	80	75/3	K125030 / K125150
K121080.125120	120	75/3	K125030 / K125150

- Pack 10 Und
- Diámetro Eje: 22mm
- RPM Max: 25000 (50/2) - 20000 (75/3)

### K122010 - Disco Ceramico Quick Change Tipo AD

Los discos Karnasch CERAMIC Quick-Change son ideales para su uso en acero inoxidable, aleaciones con alto contenido de níquel y otros materiales sensibles al calor. Se consigue un desprendimiento rápido de material en aplicaciones de alta presión. Incluso con una presión de contacto reducida, el grano cerámico autoafilable consigue resultados de rectificado óptimos sin empañar. Los mejores resultados de rectificado se consiguen con rectificadoras angulares de alta potencia. El sistema de bloqueo fácil es ideal para un cambio rápido y práctico de los discos.



Referencia	Grano	Diámetro ø	Código Adaptador
K122010.050036	36	50	K125040 / K125120
K122010.050060	60	50	K125040 / K125120
K122010.050080	80	50	K125040 / K125120
K122010.075036	36	75	K125050 / K125130
K122010.075060	60	75	K125050 / K125130
K122010.075080	80	75	K125050 / K125130

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)

### K122020 - Disco Ceramico Quick Change Tipo R

Los discos Karnasch CERAMIC Quick-Change son ideales para su uso en acero inoxidable, aleaciones con alto contenido de níquel y otros materiales sensibles al calor. Se consigue un desprendimiento rápido de material en aplicaciones de alta presión. Incluso con una presión de contacto reducida, el grano cerámico autoafilable consigue resultados de rectificado óptimos sin empañar. Los mejores resultados de rectificado se consiguen con rectificadoras angulares de alta potencia. El sistema de bloqueo fácil es ideal para un cambio rápido y práctico de los discos.



Referencia	Grano	Diámetro ø	Código Adaptador
K122020.050036	36	50	K125040 / K125120
K122020.050040	40	50	K125040 / K125120
K122020.050050	50	50	K125040 / K125120
K122020.050060	60	50	K125040 / K125120
K122020.075036	36	75	K125050 / K125130
K122020.075040	40	75	K125050 / K125130
K122020.075050	50	75	K125050 / K125130
K122020.075060	60	75	K125050 / K125130

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)



### K122025 - Disco Ceramico Quick Change Tipo S

Los discos Karnasch CERAMIC Quick-Change son ideales para su uso en acero inoxidable, aleaciones con alto contenido de níquel y otros materiales sensibles al calor. Se consigue un desprendimiento rápido de material en aplicaciones de alta presión. Incluso con una presión de contacto reducida, el grano cerámico autoafilable consigue resultados de rectificado óptimos sin empañar. Los mejores resultados de rectificado se consiguen con rectificadoras angulares de alta potencia. El sistema de bloqueo fácil es ideal para un cambio rápido y práctico de los discos.



Referencia	Grano	Diámetro ø	Código Adaptador
K122025.050036	36	50	K125080 / K125100
K122025.050040	40	50	K125080 / K125100
K122025.050050	50	50	K125080 / K125100
K122025.050060	60	50	K125080 / K125100
K122025.075036	36	75	K125090 / K125110
K122025.075040	40	75	K125090 / K125110
K122025.075050	50	75	K125090 / K125110
K122025.075060	60	75	K125090 / K125110

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)

### K122030 - Disco OX Quick Change Tipo AD

Los discos Karnasch Oxido Aluminio, son excelentes para su uso en acabados de soldaduras, biselado, desbarbado, desbaste de superficies de acero.



Referencia	Grano	Diámetro ø	Código Adaptador
K122030.050036	36	50	K125040 / K125120
K122030.050040	40	50	K125040 / K125120
K122030.050060	60	50	K125040 / K125120
K122030.050080	80	50	K125040 / K125120
K122030.050120	120	50	K125040 / K125120
K122030.075036	36	75	K125050 / K125130
K122030.075040	40	75	K125050 / K125130
K122030.075060	60	75	K125050 / K125130
K122030.075080	80	75	K125050 / K125130
K122030.075120	120	75	K125050 / K125130

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)

### K122040 - Disco OX Quick Change Tipo R



Referencia	Grano	Diámetro ø	Código Adaptador
K122040.050036	36	50	K125000 / K125020 / K125140
K122040.050040	40	50	K125000 / K125020 / K125140
K122040.050060	60	50	K125000 / K125020 / K125140
K122040.050080	80	50	K125000 / K125020 / K125140
K122040.050120	120	50	K125000 / K125020 / K125140
K122040.075036	36	75	K125010 / K125030 / K125150
K122040.075040	40	75	K125010 / K125030 / K125150
K122040.075060	60	75	K125010 / K125030 / K125150
K122040.075080	80	75	K125010 / K125030 / K125150
K122040.075120	120	75	K125010 / K125030 / K125150

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)

### K122045 - Disco OX Quick Change Tipo AD

Los discos Karnasch Oxido Aluminio, son excelentes para su uso en acabados de soldaduras, biselado, desbarbado, desbaste de superficies de acero.



Referencia	Grano	Diámetro ø	Código Adaptador
K122045.050036	36	50	K125080 / K125100
K122045.050040	40	50	K125080 / K125100
K122045.050060	60	50	K125080 / K125100
K122045.050080	80	50	K125080 / K125100
K122045.050120	120	50	K125080 / K125100
K122045.075036	36	75	K125090 / K125110
K122045.075040	40	75	K125090 / K125110
K122045.075060	60	75	K125090 / K125110
K122045.075080	80	75	K125090 / K125110
K122045.075120	120	75	K125090 / K125110

- Pack 50 Und
- Diámetros: 50/ 75 mm
- RPM Max: 25000 (ø50) - 20000 (ø75)



### K122050 - Disco Preparación Superficie - Tipo AD

Ideales para eliminar defectos superficiales, marcas de mecanizado, oxidación abundante, salpicaduras de soldadura y para limpiar todos los metales. Ofrecen durabilidad para el trabajo en los bordes. Rendimiento de corte consistente durante toda su vida útil.



- Pack: 50 Und (ø50) - 25Und (ø75)
- Diámetros: 50/ 75 mm
- RPM Max: 20000 (ø50) - 17000 (ø75)

Referencia	Grano	Diámetro ø	Código Adaptador
K122050050.100	Grueso	50	K125040 / K125120
K122050050.120	Medio	50	K125040 / K125120
K122050050.140	Fino	50	K125040 / K125120
K122050075.100	Grueso	75	K125050 / K125130
K122050075.120	Medio	75	K125050 / K125130
K122050075.140	Fino	75	K125050 / K125130

### K122060 - Disco Preparación Superficie - Tipo R

Ideales para eliminar defectos superficiales, marcas de mecanizado, oxidación abundante, salpicaduras de soldadura y para limpiar todos los metales. Ofrecen durabilidad para el trabajo en los bordes. Rendimiento de corte consistente durante toda su vida útil.



- Pack: 50 Und (ø50) - 25Und (ø75)
- Diámetros: 50/ 75 mm
- RPM Max: 20000 (ø50) - 17000 (ø75)

Referencia	Grano	Diámetro ø	Código Adaptador
K122060050.100	Grueso	50	K125000 / K125020 / K125140
K122060050.120	Medio	50	K125000 / K125020 / K125140
K122060050.140	Fino	50	K125000 / K125020 / K125140
K122060075.100	Grueso	75	K125010 / K125030 / K125150
K122060075.120	Medio	75	K125010 / K125030 / K125150
K122060075.140	Fino	75	K125010 / K125030 / K125150

### K122065 - Disco Preparación Superficie - Tipo S

Ideales para eliminar defectos superficiales, marcas de mecanizado, oxidación abundante, salpicaduras de soldadura y para limpiar todos los metales. Ofrecen durabilidad para el trabajo en los bordes. Rendimiento de corte consistente durante toda su vida útil.

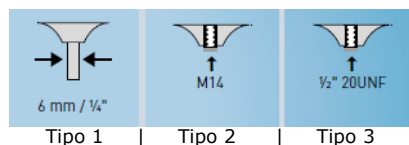


- Pack: 50 Und (ø50) - 25Und (ø75)
- Diámetros: 50/ 75 mm
- RPM Max: 20000 (ø50) - 17000 (ø75)

Referencia	Grano	Diámetro ø	Código Adaptador
K122065050.100	Grueso	50	K125080 / K125100
K122065050.120	Medio	50	K125080 / K125100
K122065050.140	Fino	50	K125080 / K125100
K122065075.100	Grueso	75	K125090 / K125110
K122065075.120	Medio	75	K125090 / K125110
K122065075.140	Fino	75	K125090 / K125110

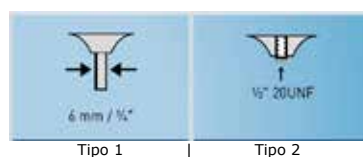
### Adaptador Quick-Change para Discos Tipo R

Referencia	Diámetro Ext	Tipo
K125000	50/2	1
K125020	50/2	2
K125030	75/3	2
K125140	50/2	3
K125150	75/3	3



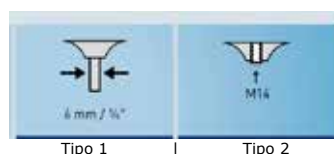
### Adaptador Quick-Change para Discos Tipo AD

Referencia	Diámetro Ext	Tipo
K125040	50/2	1
K125120	50/2	2
K125050	75/3	1
K125130	75/3	2



### Adaptador Quick-Change para Discos Tipo S

Referencia	Diámetro Ext	Tipo
K125080	50/2	1
K125100	50/2	2
K125090	75/3	1
K125110	75/3	2



**K123010 - Abanico Lijador - Modelo Estrecho**

Los discos de láminas de Karnasch son ideales para su uso en una gran variedad de materiales para el desbaste, desbarbado, limpieza, pulido y acabado. El grano de óxido de aluminio de alto rendimiento garantiza una rápida eliminación del material. Las aplicaciones típicas son la limpieza de superficies soldadas y la eliminación de líneas de troquelado, pintura, óxido y lijado.



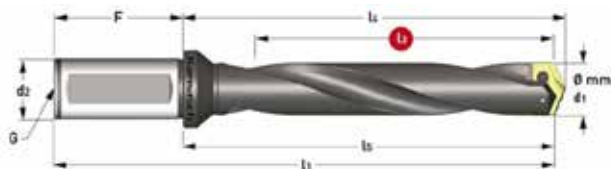
- Pack 10 Und (Todos los modelos)
- Pack 6 Und (Modelos ø80 x 50 ancho)
- Grano 150 / 240 / 320 - Bajo Petición

Referencia	Diámetro	Ancho	Mango	Grano	RPM
K123010030.0403	30	15	3	40	25.000
K123010030.0603	30	15	3	60	25.000
K123010030.0803	30	15	3	80	25.000
K123010030.1203	30	15	3	120	25.000
K123010030.040	30	15	6	40	25.000
K123010030.060	30	15	6	60	25.000
K123010030.080	30	15	6	80	25.000
K123010030.120	30	15	6	120	25.000
K123010040.040	40	15	6	40	19.000
K123010040.060	40	15	6	60	19.000
K123010040.080	40	15	6	80	19.000
K123010040.120	40	15	6	120	19.000
K123010050.040	50	20	6	40	15.000
K123010050.060	50	20	6	60	15.000
K123010050.080	50	20	6	80	15.000
K123010050.120	50	20	6	120	15.000
K123010060.040	60	15	6	40	12.600
K123010060.060	60	15	6	60	12.600
K123010060.080	60	15	6	80	12.600
K123010060.120	60	15	6	120	12.600
K123010080.040	80	25	6	40	9500
K123010080.060	80	25	6	60	9500
K123010080.080	80	25	6	80	9500
K123010080.120	80	25	6	120	9500

**K123010 - Abanico Lijador - Modelo Ancho**

Referencia	Diámetro	Ancho	Mango	Grano	RPM
K123020040.040	40	30	6	40	19.000
K123020040.060	40	30	6	60	19.000
K123020040.080	40	30	6	80	19.000
K123020040.120	40	30	6	120	19.000
K123020050.040	50	40	6	40	15.000
K123020050.060	50	40	6	60	15.000
K123020050.080	50	40	6	80	15.000
K123020050.120	50	40	6	120	15.000
K123020060.040	60	40	6	40	12.600
K123020060.060	60	40	6	60	12.600
K123020060.080	60	40	6	80	12.600
K123020060.120	60	40	6	120	12.600
K123020080.040	80	50	6	40	9500
K123020080.060	80	50	6	60	9500
K123020080.080	80	50	6	80	9500
K123020080.120	80	50	6	120	9500

**22.1010 - Broca Intercambiable Hélice Mango Cilíndrico - 4xD**



Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1010.01175.0180	18-21	18-24	117.5	154.8	158.4	210.8	25	56	1/8"
K22.1010.01175.0220	22-24	-	117.5	154.8	158.4	210.8	25	56	1/8"
K22.1010.01365.0255	25-29	25-35	136.5	179.4	183	293.4	32	60	1/4"
K22.1010.01365.0300	30-35	-	136.5	179.4	183	293.4	32	60	1/4"
K22.1010.01651.0360	36-41	36-47	165.1	217.5	222.3	287.5	40	70	1/4"
K22.1010.01651.0420	42-47	-	165.1	217.5	222.3	287.5	40	70	1/4"

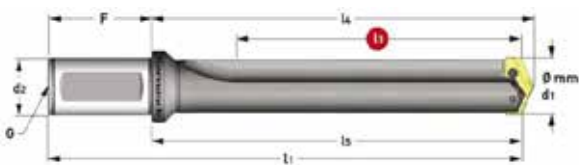
**22.1010 - Broca Intercambiable Hélice Mango Cilíndrico - 5xD**

Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1010.00603.0095	9.5-11	-	60.3	89.7	92.1	139.7	20	50	1/8"
K22.1010.00603.0115	11.5-12.5	-	60.3	89.7	92.1	139.7	20	50	1/8"
K22.1010.00635.0130	13-15	13-17.5	63.5	92.1	94.9	142.1	20	50	1/8"
K22.1010.00635.0155	15.5-17.5	-	63.5	92.1	94.9	142.1	20	50	1/8"
K22.1010.01683.0180	18-21	18-24	168.3	205.6	209.2	261.6	25	56	1/8"
K22.1010.01683.0220	22-24	-	168.3	205.6	209.2	261.6	25	56	1/8"
K22.1010.01873.0250	25-29	25-35	187.3	230.2	233.8	290.2	32	60	1/4"
K22.1010.01873.0300	30-35	-	187.3	230.2	233.8	290.2	32	60	1/4"
K22.1010.02096.0360	36-41	36-47	209.6	261.9	266.7	331.9	40	70	1/4"
K22.1010.02096.0420	42-47	-	209.6	261.9	266.7	331.9	40	70	1/4"
K22.1010.02318.0480	48-55	48-65	231.8	281	285.8	351	40	70	1/4"
K22.1010.02318.0560	56-65	-	231.8	281	285.8	351	40	70	1/4"

**22.1010 - Broca Intercambiable Hélice Mango Cilíndrico - 8xD**

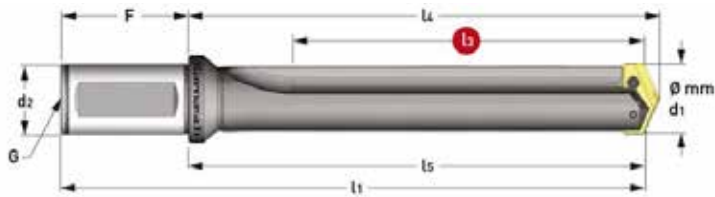
Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1010.01111.0095	9.5-11	-	111.1	140.5	142.9	190.5	20	50	1/8"
K22.1010.01111.0115	11.5-12.5	-	111.1	140.5	142.9	190.5	20	50	1/8"
K22.1010.01143.0130	13-15	13-17.5	114.3	142.9	145.7	192.9	20	50	1/8"
K22.1010.01143.0155	15-17.5	-	114.3	142.9	145.7	192.9	20	50	1/8"
K22.1010.02699.0180	18-21	18-24	269.9	307.2	310.8	363.2	25	56	1/8"
K22.1010.02699.0220	22-24	-	269.9	307.2	310.8	363.2	25	56	1/8"
K22.1010.02889.0250	25-29	25-35	288.9	331.8	335.4	391.8	32	60	1/4"
K22.1010.02889.0300	30-35	-	288.9	331.8	335.4	391.8	32	60	1/4"

**22.1020 - Broca Intercambiable Recta Mango Cilíndrico - 3xD**



Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1020.00318.0095	9.5-11	-	31.8	61.1	63.5	111.1	20	50	1/8"
K22.1020.00318.0115	11.5-12.5	-	31.8	61.1	63.5	111.1	20	50	1/8"
K22.1020.00349.0135	13-15	13-17	34.9	63.5	66.3	113.5	20	50	1/8"
K22.1020.00349.0155	15.5-17.5	-	34.9	63.5	66.3	113.5	20	50	1/8"
K22.1020.00667.0180	18-21	18-24	66.7	107.2	110.7	163.2	25	56	1/8"
K22.1020.00667.0220	22-24	-	66.7	107.2	110.7	163.2	25	56	1/8"
K22.1020.00857.0250	25-29	25-35	85.7	128.6	132.2	188.6	32	60	1/4"
K22.1020.00857.0300	30-35	-	85.7	128.6	132.2	188.6	32	60	1/4"
K22.1020.01207.0360	36-41	36-47	120.7	173	177.8	243	40	70	1/4"
K22.1020.01207.0420	42-47	-	120.7	173	177.8	243	40	70	1/4"
K22.1020.01302.0480	48-55	48-65	130.2	179.4	184.2	249.4	40	70	1/4"
K22.1020.01302.0560	56-65	-	130.2	179.4	184.2	249.4	40	70	1/4"

**22.1020 - Broca Intercambiable Recta Mango Cilíndrico - 8xD**



Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1020.03493.0360	36-41	36-47	349.3	401.6	406.4	471.6	40	70	1/4"
K22.1020.03493.0420	42-47	-	349.3	401.6	406.4	471.6	40	70	1/4"
K22.1020.04223.0480	48-55	48-65	422.3	471.5	476.3	541.5	40	70	1/4"
K22.1020.04223.0560	56-65	-	422.3	471.5	476.3	541.5	40	70	1/4"

**22.1020 - Broca Intercambiable Recta Mango Cilíndrico - 12xD**

Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1020.02220.0095	9.5-11	-	222	251.7	254.1	301.7	20	50	1/8"
K22.1020.02223.0115	11.5-12.5	-	222.3	251.7	254.1	301.7	20	50	1/8"
K22.1020.02950.0130	13-15	13-17.5	295	323.9	326.7	373.9	20	50	1/8"
K22.1020.02950.0155	15.5-17.5	-	295	323.9	326.7	373.9	20	50	1/8"
K22.1020.04570.0180	18-21	18-24	457	494.5	498.1	550.5	25	56	1/8"
K22.1020.04570.0220	22-24	-	457	494.5	498.1	550.5	25	56	1/8"
K22.1020.05110.0250	25-29	25-35	511	554.1	557.7	614.1	32	60	1/4"
K22.1020.05110.0300	30-35	-	511	554.1	557.7	614.1	32	60	1/4"
K22.1020.05588.0360	36-41	36-47	558	611	615.9	681.1	40	70	1/4"
K22.1020.05588.0420	42-47	-	558	611	615.9	681.1	40	70	1/4"
K22.1020.06250.0480	48-55	48-65	625	674.7	679.5	744.7	40	70	1/4"
K22.1020.06250.0560	56-65	-	625	674.7	679.5	744.7	40	70	1/4"

**22.1020 - Broca Intercambiable Recta Mango Cilíndrico - 15xD**

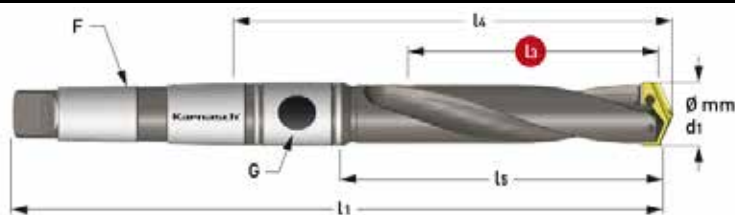
Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	d2	F	G
K22.1020.02900.0095	9.5-11	-	290	319.9	322.3	369.9	20	50	1/8"
K22.1020.02905.0115	11.5-12.5	-	290	319.9	322.3	369.9	20	50	1/8"
K22.1020.03870.0130	13-15	13-17.5	387	416	418.8	446	20	50	1/8"
K22.1020.03870.0155	15.5-17.5	-	387	416	418.8	446	20	50	1/8"
K22.1020.05690.0180	18-21	18-24	569	602.5	606.1	658.5	25	56	1/8"
K22.1020.05690.0220	22-24	-	569	602.5	606.1	658.5	25	56	1/8"
K20.1020.06920.0250	25-29	25-35	692	735.1	738.7	795.1	32	60	1/4"
K22.1020.06920.0300	30-35	-	692	735.1	738.7	795.1	32	60	1/4"
K22.1020.07874.0360	36-41	34-47	787.4	839.7	844.5	909.7	40	70	1/4"
K22.1020.07874.0420	42-47	-	787.4	839.7	844.5	909.7	40	70	1/4"
K22.1020.08790.0480	48-55	48-65	879	928.7	933.5	998.7	40	70	1/4"
K22.1020.08790.0560	56-65	-	879	928.7	933.5	998.7	40	70	1/4"

**22.1030 - Broca Intercambiable Hélice Cono Morse - 4xD**



Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1030.01207.0180	18-21	18-24	120.7	149.2	193.3	283.3	3	1/8"
K22.1030.01207.0220	22-24	-	120.7	149.2	193.3	283.3	3	1/8"
K22.1030.01365.0250	25-29	25-35	136.5	165.1	218.4	331.8	4	1/8"
K22.1030.01365.0300	30-35	-	136.5	165.1	218.4	331.8	4	1/8"
K22.1030.01651.0360	36-41	36-47	165.1	196.9	250.9	363.6	4	1/4"
K22.1030.01651.0420	42-47	-	165.1	196.9	250.9	363.6	4	1/4"

**22.1030 - Broca Intercambiable Hélice Cono Morse - 5xD**

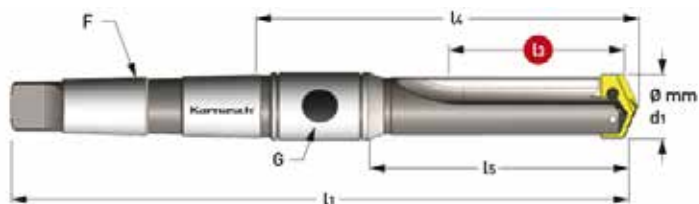


Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1030.00603.0095	9.5-11	-	60.3	80.2	116.7	188.9	2	1/16"
K22.1030.00603.0115	11.5-12.5	-	60.3	80.2	116.7	188.9	2	1/16"
K22.1030.00635.0130	13-15	13-17.5	63.5	84.1	121	192.9	2	1/16"
K22.1030.00635.0155	15.5-17.5	-	63.5	84.1	121	192.9	2	1/16"
K22.1030.01715.0180	18-21	18-24	171.5	200	244.1	334.2	3	1/8"
K22.1030.01715.0220	22-24	-	171.5	200	244.1	334.2	3	1/16"
K22.1030.01873.0250	25-29	25-35	187.3	215.9	262	375.4	4	1/8"
K22.1030.01873.0300	30-35	-	187.3	215.9	269.2	382.6	4	1/4"
K22.1030.02095.0360	36-41	36-47	209.5	241.3	295.3	408	4	1/4"
K22.1030.02095.0420	42-47	-	209.5	241.3	295.3	408	4	1/4"
K22.1030.02318.0480	48-55	48-65	231.8	266.7	320.7	465.1	5	1/4"
K22.1030.02318.0560	56-65	-	231.8	266.7	320.7	465.1	5	1/4"

**22.1030 - Broca Intercambiable Hélice Cono Morse - 8xD**

Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1030.01111.0095	9.5-11	-	111.1	130.9	167.4	239.7	2	1/16"
K22.1030.01111.0115	11.5-12.5	-	111.1	130.9	167.4	239.7	2	1/16"
K22.1030.01143.0130	13-15	13-17.5	114.3	135	171.8	243.7	2	1/16"
K22.1030.01143.0155	15.5-17.5	-	114.3	135	171.8	243.7	2	1/16"
K22.1030.02731.0180	18-21	18-24	273.1	301.6	345.7	435.8	3	1/8"
K22.1030.02731.0220	22-24	-	273.1	301.6	345.7	435.8	3	1/8"
K22.1030.02890.0250	25-29	25-35	289	317.5	363.6	477	4	1/4"
K22.1030.02890.0300	30-35	-	289	317.5	370.8	482.2	4	1/4"

**22.1040 - Broca Intercambiable Recta Cono Morse - 3xD**

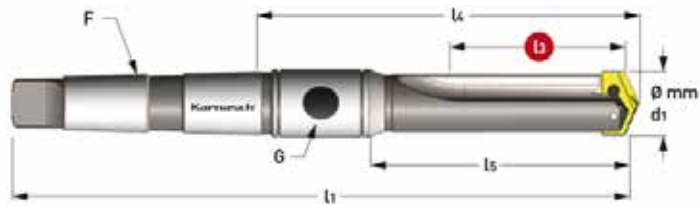


Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1040.01301.0480	48-55	48-65	130.1	165.1	219.1	363.5	5	1/4"
K22.1040.01301.0560	56-65	-	130.1	165.1	219.1	363.5	5	1/4"
K22.1040.01715.0640	64-76	64-88	171.5	215.9	287.3	430.2	5	1/2"
K22.1040.01715.0780	78-88	-	171.5	215.9	287.3	430.2	5	1/2"
K22.1040.01715.0900	90-100	90-114	171.5	225.4	296.8	439.7	5	1/2"
K22.1040.01715.1020	102-114	-	171.5	225.4	296.8	439.7	5	1/2"

**22.1040 - Broca Intercambiable Recta como Morse - 8xD**

Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1040.03493.0360	36-41	36-47	349.3	381	435	547.7	4	1/4"
K22.1040.03493.0420	42-47	-	349.3	381	435	547.7	4	1/4"
K22.1040.04223.0480	48-55	48-65	422.3	457.2	511.2	655.6	5	1/4"
K22.1040.04223.0560	56-65	-	422.3	457.2	511.2	655.6	5	1/4"
K22.1040.04636.0640	64-76	64-88	463.6	508	579.4	722.3	5	1/2"
K22.1040.04636.0780	78-88	-	463.6	508	579.4	722.3	5	1/2"
K22.1040.05556.0900	90-100	90-114	555.6	609.6	681.1	823.9	5	1/2"
K22.1040.05556.1020	102-114	-	555.6	609.6	681.1	823.9	5	1/2"

**22.1040 - Broca Intercambiable Recta Cono Morse - 12xD**



Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1040.05558.0360	36-41	36-47	558.8	590.6	644.6	757.2	4	1/4"
K22.1040.05558.0420	42-47	-	558.8	590.6	644.6	757.2	4	1/4"
K22.1040.06250.0480	48-55	48-65	625	660.4	714.4	858.8	5	1/4"
K22.1040.06250.0560	56-65	-	625	660.4	714.4	858.8	5	1/4"
K22.1040.06600.0640	64-79	64-88	660	704.8	776.2	919.1	5	1/2"
K22.1040.06600.0780	78-88	-	660	704.8	776.2	919.1	5	1/2"
K22.1040.06850.0900	90-100	90-114	685	739.7	811.2	954	5	1/2"
K22.1040.06850.1020	102-114	-	685	739.7	811.2	954	5	1/2"

**22.1040 - Broca Intercambiable Recta Cono Morse - 15xD**

Referencia	Rango Óptimo	Rango Posible	Corte L3	L5	L4	L1	F	G
K22.1040.07874.0360	36-41	36-47	787.4	819.2	873.2	958.8	4	1/4"
K22.1040.07874.0420	42-47	-	787.4	819.2	873.2	958.8	4	1/4"
K22.1040.08790.0480	48-55	48-65	879	914.4	968.4	1112.8	5	1/4"
K22.1040.08790.0560	56-65	-	879	914.4	968.4	1112.8	5	1/4"
K22.1040.08890.0640	64-76	64-88	889	933.4	1004.8	1147.7	5	1/2"
K22.1040.08890.0780	78-88	-	889	933.4	1004.8	1147.7	5	1/2"
K22.1040.09390.0900	90-100	90-114	939	993.7	1065.2	1208	5	1/2"
K22.1040.09390.1020	102-114	-	939	993.7	1065.2	1208	5	1/2"

**Recambios para Brocas Punta Intercambiable**

Referencia	Para Brocas Ø mm
K22.9010.0095	09-11
K22.9010.0115	11.5-12.5
K22.9010.0130	13-17.5
K22.9010.0180	18-24
K22.9010.0250	25-35
K22.9010.0360	36-65
K22.9010.0640	64-114



Referencia	Máx N/cm
K22.9011.0084	84
K22.9011.0084	84
K22.9011.0175	175
K22.9011.0305	305
K22.9011.0690	690
K22.9011.1370	1370
K22.9011.1750	1750

• Información técnica



**Cuchillas para Brocas Intercambiables - Guía Calidades**

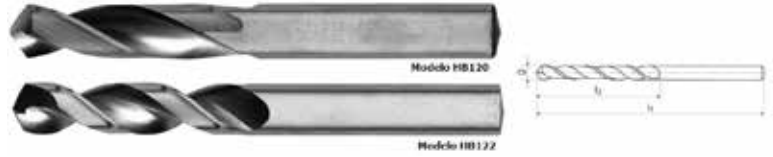


Referencia	Tipo	Diámetros Disponibles	Uso
K22.2010	HSS	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 65 (Cada 1mm)	Uso para inoxidables, hierro y fundición
K22.2510	HSS	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 65 (Cada 1mm)	Uso para inoxidables, hierro y fundición en grandes diámetros
K22.3010	HSS	64 a 114 ( Cada 2mm)	Uso para aluminios, latón y cobre
K22.3510	HSS	64 a 114 ( Cada 2mm)	Uso para cero fundido, acero y fundición
K22.4010	MD	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 35 (Cada 1mm)	Uso para inoxidables, materiales desbaste y materiales duros
K22.4510	MD	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 35 (Cada 1mm)	Uso para todo tipo de fundición
K22.5010	MD	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 35 (Cada 1mm)	Uso para aluminios, latón y cobre
K22.5510	MD	9,5 - 10 - 10,2 - 10,5 - 10,8 11 a 20.5 (Cada 0.5mm) 21 a 35 (Cada 1mm)	Uso para materiales abrasivos, grafito, fibra, etc



## Broca Cilíndrica HSS Serie Extra-Corta

- HB120 > DIN 1897 -Tipo N - Punta 118° -Hélice 25/30° - HSS
- HB122 > DIN 1897 -Tipo GT100-C - Punta 128° -Hélice 39° - HSS-CO5

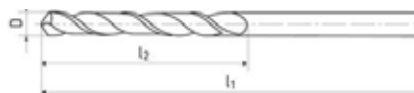


Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB120.0100	-	1	26	6
HB120.0110	-	1.1	28	7
HB120.0120	-	1.2	30	8
HB120.0125	-	1.25	30	8
HB120.0130	-	1.3	30	8
HB120.0140	-	1.4	32	9
HB120.0150	-	1.5	32	9
HB120.0160	-	1.6	34	10
HB120.0170	-	1.7	34	10
HB120.0175	-	1.75	36	11
HB120.0180	-	1.8	36	11
HB120.0190	-	1.9	36	11
HB120.0200	HB122.0200	2	38	12
HB120.0210	HB122.0210	2.1	38	12
HB120.0220	HB122.0220	2.2	40	13
HB120.0225	HB122.0225	2.25	40	13
HB120.0230	HB122.0230	2.3	40	13
HB120.0240	HB122.0240	2.4	43	14
HB120.0250	HB122.0250	2.5	43	14
HB120.0260	HB122.0260	2.6	43	14
HB120.0270	HB122.0270	2.7	46	16
HB120.0275	HB122.0275	2.75	46	16
HB120.0280	HB122.0280	2.8	46	16
HB120.0290	HB122.0290	2.9	46	16
HB120.0300	HB122.0300	3	46	16
HB120.0310	HB122.0310	3.1	49	18
HB120.0320	HB122.0320	3.2	49	18
HB120.0325	HB122.0325	3.25	49	18
HB120.0330	HB122.0330	3.3	49	18
HB120.0340	HB122.0340	3.4	52	20
HB120.0350	HB122.0350	3.5	52	20
HB120.0360	HB122.0360	3.6	52	20
HB120.0370	HB122.0370	3.7	52	20
HB120.0375	HB122.0375	3.75	52	20
HB120.0380	HB122.0380	3.8	55	22
HB120.0390	HB122.0390	3.9	55	22
HB120.0400	HB122.0400	4	55	22
HB120.0410	HB122.0410	4.1	55	22
HB120.0420	HB122.0420	4.2	55	22
HB120.0425	HB122.0425	4.25	55	22
HB120.0430	HB122.0430	4.3	58	24
HB120.0440	HB122.0440	4.4	58	24
HB120.0450	HB122.0450	4.5	58	24
HB120.0460	HB122.0460	4.6	58	24
HB120.0470	HB122.0470	4.7	58	24
HB120.0475	HB122.0475	4.75	58	24
HB120.0480	HB122.0480	4.8	62	26
HB120.0490	HB122.0490	4.9	62	26
HB120.0500	HB122.0500	5	62	26
HB120.0510	HB122.0510	5.1	62	26
HB120.0520	HB122.0520	5.2	62	26
HB120.0525	HB122.0525	5.25	62	26
HB120.0530	HB122.0530	5.3	62	26
HB120.0540	HB122.0540	5.4	66	28
HB120.0550	HB122.0550	5.5	66	28
HB120.0560	HB122.0560	5.6	66	28
HB120.0570	HB122.0570	5.7	66	28
HB120.0580	HB122.0580	5.8	66	28

Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB120.0590	HB122.0590	5.9	66	28
HB120.0600	HB122.0600	6	66	28
HB120.0610	HB122.0610	6.1	70	31
HB120.0620	HB122.0620	6.2	70	31
HB120.0630	HB122.0630	6.3	70	31
HB120.0640	HB122.0640	6.4	70	31
HB120.0650	HB122.0650	6.5	70	31
HB120.0660	HB122.0660	6.6	70	31
HB120.0670	HB122.0670	6.7	70	31
HB120.0680	HB122.0680	6.8	74	34
HB120.0690	HB122.0690	6.9	74	34
HB120.0700	HB122.0700	7	74	34
HB120.0710	HB122.0710	7.1	74	34
HB120.0720	HB122.0720	7.2	74	34
HB120.0730	HB122.0730	7.3	74	34
HB120.0740	HB122.0740	7.4	74	34
HB120.0750	HB122.0750	7.5	74	34
HB120.0760	HB122.0760	7.6	79	37
HB120.0770	HB122.0770	7.7	79	37
HB120.0780	HB122.0780	7.8	79	37
HB120.0790	HB122.0790	7.9	79	37
HB120.0800	HB122.0800	8	79	37
HB120.0810	HB122.0810	8.1	79	37
HB120.0820	HB122.0820	8.2	79	37
HB120.0830	HB122.0830	8.3	79	37
HB120.0840	HB122.0840	8.4	79	37
HB120.0850	HB122.0850	8.5	79	37
HB120.0860	HB122.0860	8.6	84	40
HB120.0870	HB122.0870	8.7	84	40
HB120.0880	HB122.0880	8.8	84	40
HB120.0890	HB122.0890	8.9	84	40
HB120.0900	HB122.0900	9	84	40
HB120.0910	HB122.0910	9.1	84	40
HB120.0920	HB122.0920	9.2	84	40
HB120.0930	HB122.0930	9.3	84	40
HB120.0940	HB122.0940	9.4	84	40
HB120.0950	HB122.0950	9.5	84	40
HB120.0960	HB122.0960	9.6	89	43
HB120.0970	HB122.0970	9.7	89	43
HB120.0980	HB122.0980	9.8	89	43
HB120.0990	HB122.0990	9.9	89	43
HB120.1000	HB122.1000	10	89	43
HB120.1020	HB122.1020	10.2	89	43
HB120.1050	HB122.1050	10.5	89	43
HB120.1080	HB122.1080	10.8	95	47
HB120.1100	HB122.1100	11	95	47
HB120.1120	HB122.1120	11.2	95	47
HB120.1150	HB122.1150	11.5	95	47
HB120.1180	HB122.1180	11.8	95	47
HB120.1200	HB122.1200	12	102	51
HB120.1220	HB122.1220	12.2	102	51
HB120.1250	HB122.1250	12.5	102	51
HB120.1280	HB122.1280	12.8	102	51
HB120.1300	HB122.1300	13	102	51
HB120.1320	HB122.1320	13.2	102	51
HB120.1350	HB122.1350	13.5	107	54
HB120.1380	HB122.1380	13.8	107	54
HB120.1400	HB122.1400	14	107	54

**Broca Cilíndrica HSS - Serie Estándar**

- HB124 > DIN 338 -Tipo N - Punta 118° - HSS
- HB126 > DIN 338 -Tipo C - Punta 128° - HSS-CO5

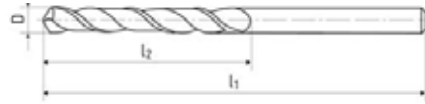


Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB124.0030	-	0,3	19	4
HB124.0035	-	0,35	19	4
HB124.0040	-	0,4	20	5
HB124.0045	-	0,45	20	5
HB124.0050	-	0,5	22	6
HB124.0055	-	0,55	24	7
HB124.0060	-	0,6	24	7
HB124.0065	-	0,65	26	8
HB124.0070	-	0,7	28	9
HB124.0075	-	0,75	28	9
HB124.0080	-	0,8	30	10
HB124.0085	-	0,85	30	10
HB124.0090	-	0,9	32	11
HB124.0095	-	0,95	32	11
HB124.0100	HB126.0100	1	34	12
HB124.0105	-	1,05	34	12
HB124.0110	HB126.0110	1,1	36	14
HB124.0115	-	1,15	36	14
HB124.0120	HB126.0120	1,2	38	16
HB124.0125	-	1,25	38	16
HB124.0130	HB126.0130	1,3	38	16
HB124.0135	-	1,35	40	18
HB124.0140	HB126.0140	1,4	40	18
HB124.0145	-	1,45	40	18
HB124.0150	HB126.0150	1,5	40	18
HB124.0155	-	1,55	43	20
HB124.0160	HB126.0160	1,6	43	20
HB124.0165	-	1,65	43	20
HB124.0170	HB126.0170	1,7	43	20
HB124.0175	-	1,75	46	22
HB124.0180	HB126.0180	1,8	46	22
HB124.0185	-	1,85	46	22
HB124.0190	HB126.0190	1,9	46	22
HB124.0195	-	1,95	49	24
HB124.0200	HB126.0200	2	49	24
HB124.0205	-	2,05	49	24
HB124.0210	HB126.0210	2,1	49	24
HB124.0215	-	2,15	53	27
HB124.0220	HB126.0220	2,2	53	27
HB124.0225	-	2,25	53	27
HB124.0230	HB126.0230	2,3	53	27
HB124.0235	-	2,35	53	27
HB124.0240	HB126.0240	2,4	57	30
HB124.0245	-	2,45	57	30
HB124.0250	HB126.0250	2,5	57	30
HB124.0255	-	2,55	57	30
HB124.0260	HB126.0260	2,6	57	30
HB124.0265	-	2,65	57	30
HB124.0270	HB126.0270	2,7	61	33
HB124.0275	-	2,75	61	33
HB124.0280	HB126.0280	2,8	61	33
HB124.0285	-	2,85	61	33
HB124.0290	HB126.0290	2,9	61	33
HB124.0295	-	2,95	61	33
HB124.0300	HB126.0300	3	61	33
HB124.0310	HB126.0310	3,1	65	36

Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB124.0320	HB126.0320	3,2	65	36
HB124.0330	HB126.0330	3,3	65	36
HB124.0340	HB126.0340	3,4	70	39
HB124.0350	HB126.0350	3,5	70	39
HB124.0360	HB126.0360	3,6	70	39
HB124.0370	HB126.0370	3,7	70	39
HB124.0380	HB126.0380	3,8	75	43
HB124.0390	HB126.0390	3,9	75	43
HB124.0400	HB126.0400	4	75	43
HB124.0410	HB126.0410	4,1	75	43
HB124.0420	HB126.0420	4,2	75	43
HB124.0430	HB126.0430	4,3	80	47
HB124.0440	HB126.0440	4,4	80	47
HB124.0450	HB126.0450	4,5	80	47
HB124.0460	HB126.0460	4,6	80	47
HB124.0470	HB126.0470	4,7	80	47
HB124.0480	HB126.0480	4,8	86	52
HB124.0490	HB126.0490	4,9	86	52
HB124.0500	HB126.0500	5	86	52
HB124.0510	HB126.0510	5,1	86	52
HB124.0520	HB126.0520	5,2	86	52
HB124.0530	HB126.0530	5,3	86	52
HB124.0540	HB126.0540	5,4	93	57
HB124.0540	HB126.0540	5,5	93	57
HB124.0560	HB126.0560	5,6	93	57
HB124.0570	HB126.0570	5,7	93	57
HB124.0580	HB126.0580	5,8	93	57
HB124.0590	HB126.0590	5,9	93	57
HB124.0600	HB126.0600	6	93	57
HB124.0610	HB126.0610	6,1	101	63
HB124.0620	HB126.0620	6,2	101	63
HB124.0630	HB126.0630	6,3	101	63
HB124.0640	HB126.0640	6,4	101	63
HB124.0650	HB126.0650	6,5	101	63
HB124.0660	HB126.0660	6,6	101	63
HB124.0670	HB126.0670	6,7	101	63
HB124.0680	HB126.0680	6,8	109	69
HB124.0690	HB126.0690	6,9	109	69
HB124.0700	HB126.0700	7	109	69
HB124.0710	HB126.0710	7,1	109	69
HB124.0720	HB126.0720	7,2	109	69
HB124.0730	HB126.0730	7,3	109	69
HB124.0740	HB126.0740	7,4	109	69
HB124.0750	HB126.0750	7,5	109	69
HB124.0760	HB126.0760	7,6	117	75
HB124.0770	HB126.0770	7,7	117	75
HB124.0780	HB126.0780	7,8	117	75
HB124.0790	HB126.0790	7,9	117	75
HB124.0800	HB126.0800	8	117	75
HB124.0810	HB126.0810	8,1	117	75
HB124.0820	HB126.0820	8,2	117	75
HB124.0830	HB126.0830	8,3	117	75
HB124.0840	HB126.0840	8,4	117	75
HB124.0850	HB126.0850	8,5	117	75

## Broca Cilíndrica HSS - Serie Estándar

- HB124 > DIN 338 -Tipo N - Punta 118° - HSS
- HB126 > DIN 338 -Tipo C - Punta 128° - HSS-CO5



Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB124.0860	HB126.0860	8,6	125	81
HB124.0870	HB126.0870	8,7	125	81
HB124.0880	HB126.0880	8,8	125	81
HB124.0890	HB126.0890	8,9	125	81
HB124.0900	HB126.0900	9	125	81
HB124.0910	HB126.0910	9,1	125	81
HB124.0920	HB126.0920	9,2	125	81
HB124.0930	HB126.0930	9,3	125	81
HB124.0940	HB126.0940	9,4	125	81
HB124.0950	HB126.0950	9,5	125	81
HB124.0960	HB126.0960	9,6	133	87
HB124.0970	HB126.0970	9,7	133	87
HB124.0980	HB126.0980	9,8	133	87
HB124.0990	HB126.0990	9,9	133	87
HB124.1000	HB126.1000	10	133	87
HB124.1010	-	10,1	133	87
HB124.1020	HB126.1020	10,2	133	87
HB124.1030	-	10,3	133	87
HB124.1040	-	10,4	133	87
HB124.1050	HB126.1050	10,5	133	87
HB124.1060	-	10,6	133	87
HB124.1070	-	10,7	142	94
HB124.1080	HB126.1080	10,8	142	94
HB124.1090	-	10,9	142	94
HB124.1100	HB126.1100	11	142	94
HB124.1110	-	11,1	142	94
HB124.1120	HB126.1120	11,2	142	94
HB124.1130	-	11,3	142	94
HB124.1140	-	11,4	142	94
HB124.1150	HB126.1150	11,5	142	94
HB124.1160	-	11,6	142	94
HB124.1170	-	11,7	142	94
HB124.1180	HB126.1180	11,8	142	94
HB124.1190	-	11,9	151	101
HB124.1200	HB126.1200	12	151	101
HB124.1210	-	12,1	151	101
HB124.1220	HB126.1220	12,2	151	101
HB124.1230	-	12,3	151	101
HB124.1240	-	12,4	151	101
HB124.1250	HB126.1250	12,5	151	101
HB124.1260	-	12,6	151	101
HB124.1270	-	12,7	151	101
HB124.1280	HB126.1280	12,8	151	101
HB124.1290	-	12,9	151	101

Referencia HSS	Referencia HSS-CO5	Ø D	I1 Long. Total	I2 Long. Corte
HB124.1300	HB126.1300	13	151	101
HB124.1310	-	13,1	151	101
HB124.1320	HB126.1320	13,2	151	101
HB124.1330	-	13,3	160	108
HB124.1340	-	13,4	160	108
HB124.1350	HB126.1350	13,5	160	108
HB124.1360	-	13,6	160	108
HB124.1370	-	13,7	160	108
HB124.1380	HB126.1380	13,8	160	108
HB124.1390	-	13,9	160	108
HB124.1400	HB126.1400	14	160	108
HB124.1410	-	14,1	169	114
HB124.1420	-	14,2	169	114
HB124.1425	-	14,25	169	114
HB124.1430	-	14,3	169	114
HB124.1440	-	14,4	169	114
HB124.1450	HB126.1450	14,5	169	114
HB124.1460	-	14,6	169	114
HB124.1470	-	14,7	169	114
HB124.1475	-	14,75	169	114
HB124.1480	-	14,8	169	114
HB124.1490	-	14,9	169	114
HB124.1500	HB126.1500	15	169	114
HB124.1525	-	15,25	178	120
HB124.1550	HB126.1550	15,5	178	120
HB124.1575	-	15,75	178	120
HB124.1600	HB126.1600	16	178	120
HB124.1625	-	16,25	184	125
HB124.1650	HB126.1650	16,5	184	125
HB124.1675	-	16,75	184	125
HB124.1700	HB126.1700	17	184	125
HB124.1725	-	17,25	191	130
HB124.1750	HB126.1750	17,5	191	130
HB124.1775	-	17,75	191	130
HB124.1800	HB126.1800	18	191	130
HB124.1825	-	18,25	198	135
HB124.1850	HB126.1850	18,5	198	135
HB124.1875	-	18,75	198	135
HB124.1900	HB126.1900	19	198	135
HB124.1925	-	19,25	205	140
HB124.1950	HB126.1950	19,5	205	140
HB124.1975	-	19,75	205	140
HB124.2000	HB126.2000	20	205	140

**Broca HSS - Cilíndrica - DIN 338 - Recubrimiento Tin**

• Características: DIN 338 -Tipo N - Punta 118° - HSS



Referencia	Ø D	L	I
HB125.0100	1,00	34	12
HB125.0105	1,05	34	12
HB125.0110	1,10	36	14
HB125.0115	1,15	36	14
HB125.0120	1,20	38	16
HB125.0125	1,25	38	16
HB125.0130	1,30	38	16
HB125.0135	1,35	40	18
HB125.0140	1,40	40	18
HB125.0145	1,45	40	18
HB125.0150	1,50	40	18
HB125.0155	1,55	43	20
HB125.0160	1,60	43	20
HB125.0165	1,65	43	20
HB125.0170	1,70	43	20
HB125.0175	1,75	46	22
HB125.0180	1,80	46	22
HB125.0185	1,85	46	22
HB125.0190	1,90	46	22
HB125.0195	1,95	49	24
HB125.0200	2,00	49	24
HB125.0205	2,05	49	24
HB125.0210	2,10	49	24
HB125.0215	2,15	53	27
HB125.0220	2,20	53	27
HB125.0225	2,25	53	27
HB125.0230	2,30	53	27
HB125.0235	2,35	53	27
HB125.0240	2,40	57	30
HB125.0245	2,45	57	30
HB125.0250	2,50	57	30
HB125.0255	2,55	57	30
HB125.0260	2,60	57	30
HB125.0265	2,65	57	30
HB125.0270	2,70	61	33
HB125.0275	2,75	61	33
HB125.0280	2,80	61	33
HB125.0285	2,85	61	33
HB125.0290	2,90	61	33
HB125.0295	2,95	61	33
HB125.0300	3,00	61	33
HB125.0310	3,10	65	36
HB125.0320	3,20	65	36
HB125.0330	3,30	65	36
HB125.0340	3,40	70	39
HB125.0350	3,50	70	39
HB125.0360	3,60	70	39
HB125.0370	3,70	70	39
HB125.0380	3,80	75	43
HB125.0390	3,90	75	43
HB125.0400	4,00	75	43
HB125.0410	4,10	75	43
HB125.0420	4,20	75	43
HB125.0430	4,30	80	47
HB125.0440	4,40	80	47
HB125.0450	4,50	80	47
HB125.0460	4,60	80	47
HB125.0470	4,70	80	47

Referencia	Ø D	L	I
HB125.0480	4,80	86	52
HB125.0490	4,90	86	52
HB125.0500	5,00	86	52
HB125.0510	5,10	86	52
HB125.0520	5,20	86	52
HB125.0530	5,30	86	52
HB125.0540	5,40	93	57
HB125.0550	5,50	93	57
HB125.0560	5,60	93	57
HB125.0570	5,70	93	57
HB125.0580	5,80	93	57
HB125.0590	5,90	93	57
HB125.0600	6,00	93	57
HB125.0610	6,10	101	63
HB125.0620	6,20	101	63
HB125.0630	6,30	101	63
HB125.0640	6,40	101	63
HB125.0650	6,50	101	63
HB125.0660	6,60	101	63
HB125.0670	6,70	101	63
HB125.0680	6,80	109	69
HB125.0690	6,90	109	69
HB125.0700	7,00	109	69
HB125.0710	7,10	109	69
HB125.0720	7,20	109	69
HB125.0730	7,30	109	69
HB125.0740	7,40	109	69
HB125.0750	7,50	109	69
HB125.0760	7,60	117	75
HB125.0770	7,70	117	75
HB125.0780	7,80	117	75
HB125.0790	7,90	117	75
HB125.0800	8,00	117	75
HB125.0810	8,10	117	75
HB125.0820	8,20	117	75
HB125.0830	8,30	117	75
HB125.0840	8,40	117	75
HB125.0850	8,50	117	75
HB125.0860	8,60	125	81
HB125.0870	8,70	125	81
HB125.0880	8,80	125	81
HB125.0890	8,90	125	81
HB125.0900	9,00	125	81
HB125.0910	9,10	125	81
HB125.0920	9,20	125	81
HB125.0930	9,30	125	81
HB125.0940	9,40	125	81
HB125.0950	9,50	125	81
HB125.0960	9,60	133	87
HB125.0970	9,70	133	87
HB125.0980	9,80	133	87
HB125.0990	9,90	133	87
HB125.1000	10,00	133	87
HB125.1010	10,10	133	87
HB125.1020	10,20	133	87
HB125.1030	10,30	133	87
HB125.1040	10,40	133	87
HB125.1050	10,50	133	87

Referencia	Ø D	L	I
HB125.1060	10,60	133	87
HB125.1070	10,70	142	94
HB125.1080	10,80	142	94
HB125.1090	10,90	142	94
HB125.1100	11,00	142	94
HB125.1110	11,10	142	94
HB125.1120	11,20	142	94
HB125.1130	11,30	142	94
HB125.1140	11,40	142	94
HB125.1150	11,50	142	94
HB125.1160	11,60	142	94
HB125.1170	11,70	142	94
HB125.1180	11,80	142	94
HB125.1190	11,90	151	101
HB125.1200	12,00	151	101
HB125.1210	12,10	151	101
HB125.1220	12,20	151	101
HB125.1230	12,30	151	101
HB125.1240	12,40	151	101
HB125.1250	12,50	151	101
HB125.1260	12,60	151	101
HB125.1270	12,70	151	101
HB125.1280	12,80	151	101
HB125.1290	12,90	151	101
HB125.1300	13,00	151	101
HB125.1310	13,10	151	101
HB125.1320	13,20	151	101
HB125.1330	13,30	160	108
HB125.1340	13,40	160	108
HB125.1350	13,50	160	108
HB125.1360	13,60	160	108
HB125.1370	13,70	160	108
HB125.1380	13,80	160	108
HB125.1390	13,90	160	108
HB125.1400	14,00	160	108
HB125.1410	14,10	169	114
HB125.1420	14,20	169	114
HB125.14250	14,25	169	114
HB125.1430	14,30	169	114
HB125.1440	14,40	169	114
HB125.1450	14,50	169	114
HB125.1460	14,60	169	114
HB125.1470	14,70	169	114
HB125.14750	14,75	169	114
HB125.1480	14,80	169	114
HB125.1490	14,90	169	114
HB125.1500	15,00	169	114
HB125.15250	15,25	178	120
HB125.1550	15,50	178	120
HB125.15750	15,75	178	120
HB125.1600	16,00	178	120
HB125.1700	17,00	184	125
HB125.1800	18,00	191	130
HB125.1900	19,00	198	135
HB125.2000	20,00	205	140

## Broca HSS - Cilíndrica - DIN 338 - Otros Materiales

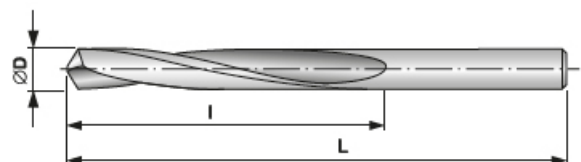


• **HB127** - Características: DIN 338 -Tipo W - Punta 135° - Hélice 40°  
 Uso en Aluminio, Cobre y Plásticos Blandos

• **HB129** - Características: DIN 338 -Tipo H - Punta 118° - Hélice 12° -  
 Uso en Mg , Cobre y Plásticos Duros

Referencia HB127	Referencia HB129	Ø D	L	I
HB127.0100	HB129.0100	1,00	34	12
HB127.0105	HB129.0105	1,10	36	14
HB127.0120	HB129.0120	1,20	38	16
HB127.0130	HB129.0130	1,30	38	16
HB127.0140	HB129.0140	1,40	40	18
HB127.0150	HB129.0150	1,50	40	18
HB127.0160	HB129.0160	1,60	43	20
HB127.0170	HB129.0170	1,70	43	20
HB127.0180	HB129.0180	1,80	46	22
HB127.0190	HB129.0190	1,90	46	22
HB127.0200	HB129.0200	2,00	49	24
HB127.0210	HB129.0210	2,10	49	24
HB127.0220	HB129.0220	2,20	53	27
HB127.0230	HB129.0230	2,30	53	27
HB127.0240	HB129.0240	2,40	57	30
HB127.0250	HB129.0250	2,50	57	30
HB127.0260	HB129.0260	2,60	57	30
HB127.0270	HB129.0270	2,70	61	33
HB127.0280	HB129.0280	2,80	61	33
HB127.0290	HB129.0290	2,90	61	33
HB127.0300	HB129.0300	3,00	61	33
HB127.0310	HB129.0310	3,10	65	36
HB127.0320	HB129.0320	3,20	65	36
HB127.0330	HB129.0330	3,30	65	36
HB127.0340	HB129.0340	3,40	70	39
HB127.0350	HB129.0350	3,50	70	39
HB127.0360	HB129.0360	3,60	70	39
HB127.0370	HB129.0370	3,70	70	39
HB127.0380	HB129.0380	3,80	75	43
HB127.0390	HB129.0390	3,90	75	43
HB127.0400	HB129.0400	4,00	75	43
HB127.0410	HB129.0410	4,10	75	43
HB127.0420	HB129.0420	4,20	75	43
HB127.0430	HB129.0430	4,30	80	47
HB127.0440	HB129.0440	4,40	80	47
HB127.0450	HB129.0450	4,50	80	47
HB127.0460	HB129.0460	4,60	80	47
HB127.0470	HB129.0470	4,70	80	47
HB127.0480	HB129.0480	4,80	86	52
HB127.0490	HB129.0490	4,90	86	52
HB127.0500	HB129.0500	5,00	86	52
HB127.0510	HB129.0510	5,10	86	52
HB127.0520	HB129.0520	5,20	86	52
HB127.0530	HB129.0530	5,30	86	52
HB127.0540	HB129.0540	5,40	93	57
HB127.0550	HB129.0550	5,50	93	57
HB127.0560	HB129.0560	5,60	93	57
HB127.0570	HB129.0570	5,70	93	57
HB127.0580	HB129.0580	5,80	93	57
HB127.0590	HB129.0590	5,90	93	57
HB127.0600	HB129.0600	6,00	93	57
HB127.0610	HB129.0610	6,10	101	63
HB127.0620	HB129.0620	6,20	101	63
HB127.0630	HB129.0630	6,30	101	63
HB127.0640	HB129.0640	6,40	101	63
HB127.0650	HB129.0650	6,50	101	63

Referencia HB127	Referencia HB129	Ø D	L	I
HB127.0660	HB129.0660	6,60	101	63
HB127.0670	HB129.0670	6,70	101	63
HB127.0680	HB129.0680	6,80	109	69
HB127.0690	HB129.0690	6,90	109	69
HB127.0700	HB129.0700	7,00	109	69
HB127.0710	HB129.0710	7,10	109	69
HB127.0720	HB129.0720	7,20	109	69
HB127.0730	HB129.0730	7,30	109	69
HB127.0740	HB129.0740	7,40	109	69
HB127.0750	HB129.0750	7,50	109	69
HB127.0760	HB129.0760	7,60	117	75
HB127.0770	HB129.0770	7,70	117	75
HB127.0780	HB129.0780	7,80	117	75
HB127.0790	HB129.0790	7,90	117	75
HB127.0800	HB129.0800	8,00	117	75
HB127.0810	HB129.0810	8,10	117	75
HB127.0820	HB129.0820	8,20	117	75
HB127.0830	HB129.0830	8,30	117	75
HB127.0840	HB129.0840	8,40	117	75
HB127.0850	HB129.0850	8,50	117	75
HB127.0860	HB129.0860	8,60	125	81
HB127.0870	HB129.0870	8,70	125	81
HB127.0880	HB129.0880	8,80	125	81
HB127.0890	HB129.0890	8,90	125	81
HB127.0900	HB129.0900	9,00	125	81
HB127.0910	HB129.0910	9,10	125	81
HB127.0920	HB129.0920	9,20	125	81
HB127.0930	HB129.0930	9,30	125	81
HB127.0940	HB129.0940	9,40	125	81
HB127.0950	HB129.0950	9,50	125	81
HB127.0960	HB129.0960	9,60	133	87
HB127.0970	HB129.0970	9,70	133	87
HB127.0980	HB129.0980	9,80	133	87
HB127.0990	HB129.0990	9,90	133	87
HB127.1000	HB129.1000	10,00	133	87
HB127.1020	HB129.1020	10,20	133	87
HB127.1050	HB129.1050	10,50	133	87
HB127.1080	HB129.1080	10,80	142	94
HB127.1100	HB129.1100	11,00	142	94
HB127.1120	HB129.1120	11,20	142	94
HB127.1150	HB129.1150	11,50	142	94
HB127.1180	HB129.1180	11,80	142	94
HB127.1200	HB129.1200	12,00	151	101
HB127.1220	HB129.1220	12,20	151	101
HB127.1250	HB129.1250	12,50	151	101
HB127.1280	HB129.1280	12,80	151	101
HB127.1300	HB129.1300	13,00	151	101
HB127.1320	HB129.1320	13,20	151	101
HB127.1350	HB129.1350	13,50	160	108
HB127.1380	HB129.1380	13,80	160	108
HB127.1400	HB129.1400	14,00	160	108



**Broca Cilíndrica HSS - Serie Estándar - CO8%**

- HB130 > DIN 338 -Tipo C- Punta 128° - HSS-CO8

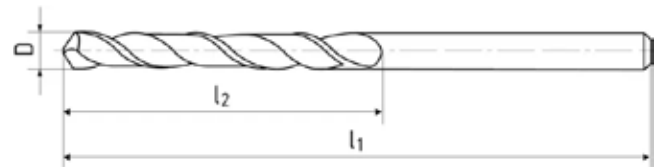


Referencia	Ø D	I1	I2
HB130.0300	3	61	33
HB130.0320	3,2	65	36
HB130.0330	3,3	65	36
HB130.0350	3,5	70	39
HB130.0400	4	75	43
HB130.0420	4,2	75	43
HB130.0450	4,5	80	47
HB130.0500	5	86	52
HB130.0510	5,1	86	52
HB130.0520	5,2	86	52
HB130.0550	5,5	93	57
HB130.0600	6	93	57
HB130.0650	6,5	101	63
HB130.0680	6,8	109	69
HB130.0700	7	109	69
HB130.0750	7,5	109	69
HB130.0800	8	117	75
HB130.0850	8,5	117	75
HB130.0900	9	125	81
HB130.0950	9,5	125	81
HB130.1000	10	133	87

Referencia	Ø D	I1	I2
HB130.1050	10,5	133	87
HB130.1100	11	142	94
HB130.1150	11,5	142	94
HB130.1200	12	151	101
HB130.1250	12,5	151	101
HB130.1300	13	151	101
HB130.1350	13,5	160	108
HB130.1400	14	160	108
HB130.1450	14,5	169	114
HB130.1500	15	169	114
HB130.1550	15,5	178	120
HB130.1600	16	178	120
HB130.1650	16,5	184	125
HB130.1700	17	184	125
HB130.1750	17,5	191	130
HB130.1800	18	191	130
HB130.1850	18,5	198	135
HB130.1900	19	198	135
HB130.1950	19,5	205	140
HB130.2000	20	205	140

**Broca Cilíndrica HSS - Serie Estándar - TIALN**

- HB131 > DIN 338 -Tipo C- Punta 130° - HSS-CO5 - TIALN



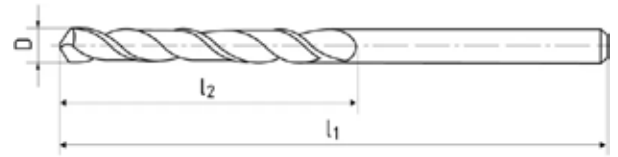
Referencia	Ø D	I1	I2
HB131.0100	1	34	12
HB131.0150	1,5	40	18
HB131.0200	2	49	24
HB131.0250	2,5	57	30
HB131.0300	3	61	33
HB131.0330	3,3	65	36
HB131.0350	3,5	70	39
HB131.0400	4	75	43
HB131.0420	4,2	75	43
HB131.0450	4,5	80	47
HB131.0500	5	86	52
HB131.0550	5,5	93	57
HB131.0600	6	93	57
HB131.0650	6,5	101	63

Referencia	Ø D	I1	I2
HB131.0700	7	109	69
HB131.0750	7,5	109	69
HB131.0800	8	117	75
HB131.0850	8,5	117	75
HB131.0900	9	125	81
HB131.0950	9,5	125	81
HB131.1000	10	133	87
HB131.1050	10,5	133	87
HB131.1100	11	142	94
HB131.1150	11,5	142	94
HB131.1200	12	151	101
HB131.1250	12,5	151	101
HB131.1300	13	151	101



## Broca Cilíndrica HSS - Serie Estándar - Tipo T100

- HB133 > DIN 338 -Tipo C - Forma T100 - 39° - Punta 130° - HSS-CO5 - Recomendado para Altas Velocidades

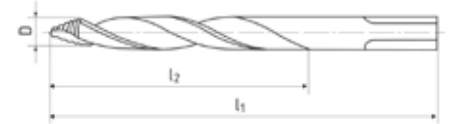


Referencia	Ø D	I1	I2
HB133.0100	1	34	12
HB133.0150	1,5	40	18
HB133.0200	2	49	24
HB133.0250	2,5	57	30
HB133.0300	3	61	33
HB133.0330	3,3	65	36
HB133.0350	3,5	70	39
HB133.0400	4	75	43
HB133.0420	4,2	75	43
HB133.0450	4,5	80	47
HB133.0500	5	86	52
HB133.0550	5,5	93	52
HB133.0600	6	93	57
HB133.0650	6,5	101	63
HB133.0680	6,8	109	69

Referencia	Ø D	I1	I2
HB133.0700	7	109	69
HB133.0750	7,5	109	69
HB133.0800	8	117	75
HB133.0850	8,5	117	75
HB133.0900	9	125	81
HB133.0950	9,5	125	81
HB133.1000	10	133	87
HB133.1020	10,2	133	87
HB133.1050	10,5	133	87
HB133.1100	11	142	94
HB133.1150	11,5	142	94
HB133.1200	12	151	101
HB133.1250	12,5	151	101
HB133.1300	13	151	101

## Broca Cilíndrica HSS Con Guía

- HB135 > 5xD - Punta Escalonada progresiva - Mango Cilíndrico con tres partes planas para mejor amarre

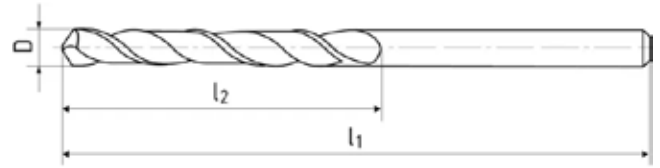


Referencia	Ø D	I1	I2
HB135.0100	1	34	12
HB135.0150	1,5	40	18
HB135.0200	2	49	24
HB135.0250	2,5	57	30
HB135.0300	3	61	33
HB135.0320	3,2	65	36
HB135.0330	3,3	65	36
HB135.0350	3,5	70	39
HB135.0400	4	75	43
HB135.0410	4,1	75	43
HB135.0420	4,2	75	43
HB135.0450	4,5	80	47
HB135.0490	4,9	86	52
HB135.0500	5	86	52
HB135.0510	5,1	86	52
HB135.0520	5,2	86	52
HB135.0550	5,5	93	57
HB135.0600	6	93	57

Referencia	Ø D	I1	I2
HB135.0650	6,5	101	63
HB135.0680	6,8	109	69
HB135.0700	7	109	69
HB135.0750	7,5	109	69
HB135.0800	8	117	75
HB135.0850	8,5	117	75
HB135.0900	9	125	81
HB135.0950	9,5	125	81
HB135.1000	10	133	87
HB135.1020	10,2	133	87
HB135.1050	10,5	133	87
HB135.1100	11	142	94
HB135.1150	11,5	142	94
HB135.1200	12	151	101
HB135.1250	12,5	151	101
HB135.1300	13	151	101

**Broca Cilíndrica HSS - Serie Larga - DIN 340**

- HB134 > DIN 340 -Tipo N- Punta 128° - HSS-CO5%
- Aceros/Aceros resistentes/Inoxidables/Aluminio



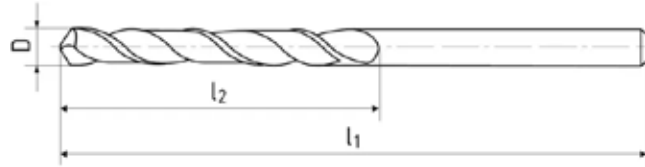
Referencia	Ø D	I1	I2
HB134.0090	0,9	52	30
HB134.0100	1	56	33
HB134.0110	1,1	60	37
HB134.0120	1,2	65	41
HB134.0130	1,3	65	41
HB134.0140	1,4	70	45
HB134.0150	1,5	70	45
HB134.0160	1,6	76	50
HB134.0170	1,7	76	50
HB134.0180	1,8	80	53
HB134.0190	1,9	80	53
HB134.0200	2	85	56
HB134.0210	2,1	85	56
HB134.0220	2,2	90	59
HB134.0230	2,3	90	59
HB134.0240	2,4	95	62
HB134.0250	2,5	95	62
HB134.0260	2,6	95	62
HB134.0270	2,7	100	66
HB134.0280	2,8	100	66
HB134.0290	2,9	100	66
HB134.0300	3	100	66
HB134.0310	3,1	106	69
HB134.0320	3,2	106	69
HB134.0330	3,3	106	69
HB134.0340	3,4	112	73
HB134.0350	3,5	112	73
HB134.0360	3,6	112	73
HB134.0370	3,7	112	73
HB134.0380	3,8	119	78
HB134.0390	3,9	119	78
HB134.0400	4	119	78
HB134.0410	4,1	119	78
HB134.0420	4,2	119	78
HB134.0430	4,3	126	82
HB134.0440	4,4	126	82
HB134.0450	4,5	126	82
HB134.0460	4,6	126	82
HB134.0470	4,7	126	82
HB134.0480	4,8	132	87
HB134.0490	4,9	132	87
HB134.0500	5	132	87
HB134.0510	5,1	132	87
HB134.0520	5,2	132	87
HB134.0530	5,3	132	87
HB134.0540	5,4	139	91
HB134.0550	5,5	139	91
HB134.0560	5,6	139	91
HB134.0570	5,7	139	91
HB134.0580	5,8	139	91
HB134.0590	5,9	139	91
HB134.0600	6	139	91
HB134.0610	6,1	148	97
HB134.0620	6,2	148	97
HB134.0630	6,3	148	97
HB134.0640	6,4	148	97

Referencia	Ø D	I1	I2
HB134.0640	6,4	148	97
HB134.0650	6,5	148	97
HB134.0660	6,6	148	97
HB134.0670	6,7	148	97
HB134.0680	6,8	156	102
HB134.0690	6,9	156	102
HB134.0700	7	156	102
HB134.0710	7,1	156	102
HB134.0720	7,2	156	102
HB134.0730	7,3	156	102
HB134.0740	7,4	156	102
HB134.0750	7,5	156	102
HB134.0760	7,6	165	109
HB134.0770	7,7	165	109
HB134.0780	7,8	165	109
HB134.0790	7,9	165	109
HB134.0800	8	165	109
HB134.0810	8,1	165	109
HB134.0820	8,2	165	109
HB134.0830	8,3	165	109
HB134.0840	8,4	165	109
HB134.0850	8,5	165	109
HB134.0860	8,6	175	115
HB134.0870	8,7	175	115
HB134.0880	8,8	175	115
HB134.0890	8,9	175	115
HB134.0900	9	175	115
HB134.0910	9,1	175	115
HB134.0920	9,2	175	115
HB134.0930	9,3	175	115
HB134.0940	9,4	175	115
HB134.0950	9,5	175	115
HB134.0960	9,6	184	121
HB134.0970	9,7	184	121
HB134.0980	9,8	184	121
HB134.0990	9,9	184	121
HB134.1000	10	184	121
HB134.1010	10,1	184	121
HB134.1020	10,2	184	121
HB134.1030	10,3	184	121
HB134.1040	10,4	184	121
HB134.1050	10,5	184	121
HB134.1060	10,6	184	121
HB134.1070	10,7	195	128
HB134.1080	10,8	195	128
HB134.1090	10,9	195	128
HB134.1100	11	195	128
HB134.1110	11,1	195	128
HB134.1120	11,2	195	128
HB134.1130	11,3	195	128
HB134.1140	11,4	195	128
HB134.1150	11,5	195	128
HB134.1160	11,6	195	128
HB134.1170	11,7	195	128
HB134.1180	11,8	195	128
HB134.1190	11,9	205	134

Referencia	Ø D	I1	I2
HB134.1200	12	205	134
HB134.1200	12	205	134
HB134.1210	12,1	205	134
HB134.1220	12,2	205	134
HB134.1230	12,3	205	134
HB134.1240	12,4	205	134
HB134.1250	12,5	205	134
HB134.1260	12,6	205	134
HB134.1270	12,7	205	134
HB134.1280	12,8	205	134
HB134.1290	12,9	205	134
HB134.1300	13	205	134
HB134.1310	13,1	205	134
HB134.1320	13,2	205	134
HB134.1330	13,3	214	140
HB134.1340	13,4	214	140
HB134.1350	13,5	214	140
HB134.1360	13,6	214	140
HB134.1370	13,7	214	140
HB134.1380	13,8	214	140
HB134.1390	13,9	214	140
HB134.1400	14	214	140
HB134.1340	13,4	214	140
HB134.1350	13,5	214	140
HB134.1360	13,6	214	140
HB134.1370	13,7	214	140
HB134.1380	13,8	214	140
HB134.1390	13,9	214	140
HB134.1400	14	214	140
HB134.1340	13,4	214	140
HB134.1350	13,5	214	140
HB134.1360	13,6	214	140
HB134.1370	13,7	214	140
HB134.1380	13,8	214	140
HB134.1390	13,9	214	140
HB134.1400	14	214	140

## Broca HSS Cilíndrica - DIN 1869 - Tipo N - Series Largas

• Características: REF HB136-Serie 1 | HB 138-Serie 2 | HB140-Serie 3 > DIN 1869 - Tipo C - Punta 118° - HSS



Referencia Serie 1	Ø D	I1	I2
HB136.0200	2	125	85
HB136.0210	2,1	125	85
HB136.0220	2,2	135	90
HB136.0225	2,25	135	90
HB136.0230	2,3	135	90
HB136.0240	2,4	140	95
HB136.0250	2,5	140	95
HB136.0260	2,6	140	95
HB136.0270	2,7	150	100
HB136.0275	2,75	150	100
HB136.0280	2,8	150	100
HB136.0290	2,9	150	100
HB136.0300	3	150	100
HB136.0310	3,1	155	105
HB136.0320	3,2	155	105
HB136.0325	3,25	155	105
HB136.0330	3,3	155	105
HB136.0340	3,4	165	115
HB136.0350	3,5	165	115
HB136.0360	3,6	165	115
HB136.0370	3,7	165	115
HB136.0375	3,75	165	115
HB136.0380	3,8	175	120
HB136.0390	3,9	175	120
HB136.0400	4	175	120
HB136.0410	4,1	175	120
HB136.0420	4,2	175	120
HB136.0425	4,25	175	120
HB136.0430	4,3	185	125
HB136.0440	4,4	185	125
HB136.0450	4,5	185	125
HB136.0460	4,6	185	125
HB136.0470	4,7	185	125
HB136.0475	4,75	185	125
HB136.0480	4,8	195	135
HB136.0490	4,9	195	135
HB136.0500	5	195	135
HB136.0510	5,1	195	135
HB136.0520	5,2	195	135
HB136.0525	5,25	195	135
HB136.0530	5,3	195	135
HB136.0540	5,4	205	140
HB136.0550	5,5	205	140
HB136.0560	5,6	205	140
HB136.0570	5,7	205	140
HB136.0575	5,75	205	140
HB136.0580	5,8	205	140
HB136.0590	5,9	205	140
HB136.0600	6	205	140
HB136.0610	6,1	215	150
HB136.0620	6,2	215	150
HB136.0625	6,25	215	150
HB136.0630	6,3	215	150
HB136.0640	6,4	215	150
HB136.0650	6,5	215	150

Referencia Serie 2	Ø D	I1	I2
HB138.0270	2,7	190	130
HB138.0275	2,75	190	130
HB138.0280	2,8	190	130
HB138.0290	2,9	190	130
HB138.0300	3	190	130
HB138.0310	3,1	200	135
HB138.0320	3,2	200	135
HB138.0325	3,25	200	135
HB138.0330	3,3	200	135
HB138.0340	3,4	210	145
HB138.0350	3,5	210	145
HB138.0360	3,6	210	145
HB138.0370	3,7	210	145
HB138.0375	3,75	210	145
HB138.0380	3,8	220	150
HB138.0390	3,9	220	150
HB138.0400	4	220	150
HB138.0410	4,1	220	150
HB138.0420	4,2	220	150
HB138.0425	4,25	220	150
HB138.0430	4,3	235	160
HB138.0440	4,4	235	160
HB138.0450	4,5	235	160
HB138.0460	4,6	235	160
HB138.0470	4,7	235	160
HB138.0475	4,75	235	160
HB138.0480	4,8	245	170
HB138.0490	4,9	245	170
HB138.0500	5	245	170
HB138.0510	5,1	245	170
HB138.0520	5,2	245	170
HB138.0525	5,25	245	170
HB138.0530	5,3	245	170
HB138.0540	5,4	260	180
HB138.0550	5,5	260	180
HB138.0560	5,6	260	180
HB138.0570	5,7	260	180
HB138.0575	5,75	260	180
HB138.0580	5,8	260	180
HB138.0590	5,9	260	180
HB138.0600	6	260	180
HB138.0610	6,1	275	190
HB138.0620	6,2	275	190
HB138.0625	6,25	275	190
HB138.0630	6,3	275	190
HB138.0640	6,4	275	190

Referencia Serie 3	Ø D	I1	I2
HB140.0350	3,5	265	180
HB140.0360	3,6	265	180
HB140.0370	3,7	265	180
HB140.0375	3,75	265	180
HB140.0380	3,8	280	190
HB140.0390	3,9	280	190
HB140.0400	4	280	190
HB140.0410	4,1	280	190
HB140.0420	4,2	280	190
HB140.0425	4,25	280	190
HB140.0430	4,3	295	200
HB140.0440	4,4	295	200
HB140.0450	4,5	295	200
HB140.0460	4,6	295	200
HB140.0470	4,7	295	200
HB140.0475	4,75	295	200
HB140.0480	4,8	315	210
HB140.0490	4,9	315	210
HB140.0500	5	315	210
HB140.0510	5,1	315	210
HB140.0520	5,2	315	210
HB140.0525	5,25	315	210
HB140.0530	5,3	315	210
HB140.0540	5,4	330	225
HB140.0550	5,5	330	225
HB140.0560	5,6	330	225
HB140.0570	5,7	330	225
HB140.0575	5,75	330	225
HB140.0580	5,8	330	225
HB140.0590	5,9	330	225
HB140.0600	6	330	225
HB140.0610	6,1	350	235
HB140.0620	6,2	350	235
HB140.0625	6,25	350	235
HB140.0630	6,3	350	235
HB140.0640	6,4	350	235
HB140.0650	6,5	350	235
HB140.0660	6,6	350	235
HB140.0670	6,7	350	235
HB140.0675	6,75	350	235
HB140.0680	6,8	370	250
HB140.0690	6,9	370	250
HB140.0700	7	370	250
HB140.0710	7,1	370	250
HB140.0720	7,2	370	250
HB140.0725	7,25	370	250

**Broca HSS Cilíndrica - DIN 1869 - Tipo N - Series Largas - Continuación**

• Características: REF HB136-Serie 1 | HB 138-Serie 2 | HB140-Serie 3 > DIN 1869 - Tipo C - Punta 118° - HSS



Referencia Serie 1	Ø D	I1	I2
HB136.0660	6,6	215	150
HB136.0670	6,7	215	150
HB136.0675	6,75	215	150
HB136.0680	6,8	225	155
HB136.0690	6,9	225	155
HB136.0700	7	225	155
HB136.0710	7,1	225	155
HB136.0720	7,2	225	155
HB136.0725	7,25	225	155
HB136.0730	7,3	225	155
HB136.0740	7,4	225	155
HB136.0750	7,5	225	155
HB136.0760	7,6	240	165
HB136.0770	7,7	240	165
HB136.0775	7,75	240	165
HB136.0780	7,8	240	165
HB136.0790	7,9	240	165
HB136.0800	8	240	165
HB136.0810	8,1	240	165
HB136.0820	8,2	240	165
HB136.0825	8,25	240	165
HB136.0830	8,3	240	165
HB136.0840	8,4	240	165
HB136.0850	8,5	240	165
HB136.0860	8,6	250	175
HB136.0870	8,7	250	175
HB136.0875	8,75	250	175
HB136.0880	8,8	250	175
HB136.0890	8,9	250	175
HB136.0900	9	250	175
HB136.0910	9,1	250	175
HB136.0920	9,2	250	175
HB136.0925	9,25	250	175
HB136.0930	9,3	250	175
HB136.0940	9,4	250	175
HB136.0950	9,5	250	175
HB136.0960	9,6	265	185
HB136.0970	9,7	265	185
HB136.0975	9,75	265	185
HB136.0980	9,8	265	185
HB136.0990	9,9	265	185
HB136.1000	10	265	185
HB136.1010	10,1	265	185
HB136.1020	10,2	265	185
HB136.1025	10,25	265	185
HB136.1030	10,3	265	185
HB136.1040	10,4	265	185
HB136.1050	10,5	265	185
HB136.1060	10,6	265	185
HB136.1070	10,7	280	195
HB136.1075	10,75	280	195
HB136.1080	10,8	280	195
HB136.1090	10,9	280	195
HB136.1100	11	280	195

Referencia Serie 2	Ø D	I1	I2
HB138.0650	6,5	275	190
HB138.0660	6,6	275	190
HB138.0670	6,7	275	190
HB138.0675	6,75	275	190
HB138.0680	6,8	290	200
HB138.0690	6,9	290	200
HB138.0700	7	290	200
HB138.0710	7,1	290	200
HB138.0720	7,2	290	200
HB138.0725	7,25	290	200
HB138.0730	7,3	290	200
HB138.0740	7,4	290	200
HB138.0750	7,5	290	200
HB138.0760	7,6	305	210
HB138.0770	7,7	305	210
HB138.0775	7,75	305	210
HB138.0780	7,8	305	210
HB138.0790	7,9	305	210
HB138.0800	8	305	210
HB138.0810	8,1	305	210
HB138.0820	8,2	305	210
HB138.0825	8,25	305	210
HB138.0830	8,3	305	210
HB138.0840	8,4	305	210
HB138.0850	8,5	305	210
HB138.0860	8,6	320	220
HB138.0870	8,7	320	220
HB138.0875	8,75	320	220
HB138.0880	8,8	320	220
HB138.0890	8,9	320	220
HB138.0900	9	320	220
HB138.0910	9,1	320	220
HB138.0920	9,2	320	220
HB138.0925	9,25	320	220
HB138.0930	9,3	320	220
HB138.0940	9,4	320	220
HB138.0950	9,5	320	220
HB138.0960	9,6	340	235
HB138.0970	9,7	340	235
HB138.0975	9,75	340	235
HB138.0980	9,8	340	235
HB138.0990	9,9	340	235
HB138.1000	10	340	235
HB138.1010	10,1	340	235
HB138.1020	10,2	340	235
HB138.1025	10,25	340	235
HB138.1030	10,3	340	235
HB138.1040	10,4	340	235
HB138.1050	10,5	340	235
HB138.1060	10,6	340	235
HB138.1070	10,7	365	250
HB138.1075	10,75	365	250
HB138.1080	10,8	365	250
HB138.1090	10,9	365	250
HB138.1100	11	365	250

Referencia Serie 3	Ø D	I1	I2
HB140.0730	7,3	370	250
HB140.0710	7,1	370	250
HB140.0720	7,2	370	250
HB140.0725	7,25	370	250
HB140.0730	7,3	370	250
HB140.0710	7,1	370	250
HB140.0720	7,2	370	250
HB140.0725	7,25	370	250
HB140.0730	7,3	370	250
HB140.0740	7,4	370	250
HB140.0750	7,5	370	250
HB140.0760	7,6	390	265
HB140.0770	7,7	390	265
HB140.0775	7,75	390	265
HB140.0780	7,8	390	265
HB140.0790	7,9	390	265
HB140.0800	8	390	265
HB140.0810	8,1	390	265
HB140.0820	8,2	390	265
HB140.0825	8,25	390	265
HB140.0830	8,3	390	265
HB140.0840	8,4	390	265
HB140.0850	8,5	390	265
HB140.0860	8,6	410	280
HB140.0870	8,7	410	280
HB140.0875	8,75	410	280
HB140.0880	8,8	410	280
HB140.0890	8,9	410	280
HB140.0900	9	410	280
HB140.0910	9,1	410	280
HB140.0920	9,2	410	280
HB140.0925	9,25	410	280
HB140.0930	9,3	410	280
HB140.0940	9,4	410	280
HB140.0950	9,5	410	280
HB140.0960	9,6	430	295
HB140.0970	9,7	430	295
HB140.0975	9,75	430	295
HB140.0980	9,8	430	295
HB140.0990	9,9	430	295
HB140.1000	10	430	295
HB140.1010	10,1	430	295
HB140.1020	10,2	430	295
HB140.1025	10,25	430	295
HB140.1030	10,3	430	295
HB140.1040	10,4	430	295
HB140.1050	10,5	430	295
HB140.1060	10,6	430	295
HB140.1070	10,7	455	310
HB140.1075	10,75	455	310
HB140.1080	10,8	455	310
HB140.1090	10,9	455	310
HB140.1100	11	455	310
HB140.1110	11,1	455	310
HB140.1120	11,2	455	310

**Broca HSS Cilíndrica - DIN 1869 - Tipo N - Series Largas - Continuación**

• Características: REF HB136-Serie 1 | HB 138-Serie 2 | HB140-Serie 3 > DIN 1869 - Tipo C - Punta 118° - HSS



Referencia Serie 1	Ø D	I1	I2
HB136.1110	11,1	280	195
HB136.1120	11,2	280	195
HB136.1125	11,25	280	195
HB136.1130	11,3	280	195
HB136.1140	11,4	280	195
HB136.1150	11,5	280	195
HB136.1160	11,6	280	195
HB136.1170	11,7	280	195
HB136.1175	11,75	280	195
HB136.1180	11,8	280	195
HB136.1190	11,9	295	205
HB136.1200	12	295	205
HB136.1210	12,1	295	205
HB136.1220	12,2	295	205
HB136.1225	12,25	295	205
HB136.1230	12,3	295	205
HB136.1240	12,4	295	205
HB136.1250	12,5	295	205
HB136.1260	12,6	295	205
HB136.1270	12,7	295	205
HB136.1275	12,75	295	205
HB136.1280	12,8	295	205
HB136.1290	12,9	295	205
HB136.1300	13	295	205

Referencia Serie 2	Ø D	I1	I2
HB138.1110	11,1	365	250
HB138.1120	11,2	365	250
HB138.1125	11,25	365	250
HB138.1130	11,3	365	250
HB138.1140	11,4	365	250
HB138.1150	11,5	365	250
HB138.1160	11,6	365	250
HB138.1170	11,7	365	250
HB138.1175	11,75	365	250
HB138.1180	11,8	365	250
HB138.1190	11,9	375	260
HB138.1200	12	375	260
HB138.1210	12,1	375	260
HB138.1220	12,2	375	260
HB138.1225	12,25	375	260
HB138.1230	12,3	375	260
HB138.1240	12,4	375	260
HB138.1250	12,5	375	260
HB138.1260	12,6	375	260
HB138.1270	12,7	375	260
HB138.1275	12,75	375	260
HB138.1280	12,8	375	260
HB138.1290	12,9	375	260
HB138.1300	13	375	260

Referencia Serie 3	Ø D	I1	I2
HB140.1125	11,25	455	310
HB140.1130	11,3	455	310
HB140.1140	11,4	455	310
HB140.1150	11,5	455	310
HB140.1160	11,6	455	310
HB140.1170	11,7	455	310
HB140.1175	11,75	455	310
HB140.1180	11,8	455	310
HB140.1190	11,9	480	330
HB140.1200	12	480	330
HB140.1210	12,1	480	330
HB140.1220	12,2	480	330
HB140.1225	12,25	480	330
HB140.1230	12,3	480	330
HB140.1240	12,4	480	330
HB140.1250	12,5	480	330
HB140.1260	12,6	480	330
HB140.1270	12,7	480	330
HB140.1275	12,75	480	330
HB140.1280	12,8	480	330
HB140.1290	12,9	480	330
HB140.1300	13	480	330

**Set Brocas Cilíndricas**

- **HB124** > DIN 338 -Tipo N - Punta 118° - HSS
- **HB126** > DIN 338 -Tipo C - Punta 128° - HSS-CO5



Referencia: HB124-SET1
Rango: 1.5 a 6.5 mm Medidas: 1.5 - 2 - 2.5 - 3 - 3.3 - 3.5 - 4 - 4.2 - 4.5 - 5 - 5.5 - 6 - 6.5
Referencia: HB124-SET2
Rango: 1 a 10 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10
Referencia: HB124-SET3
Rango: 1 a 13 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10 - 10.5 - 11 - 11.5 - 12 - 12.5 - 13

Referencia: HB126-SET2
Rango: 1 a 10 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10
Referencia: HB126-SET3
Rango: 1 a 13 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10 - 10.5 - 11 - 11.5 - 12 - 12.5 - 13

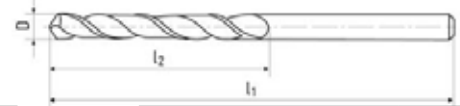
- **HB125** > DIN 338 -Tipo N - Punta 118° - HSS - Recubrimiento Tin

Referencia: HB125-SET2
Rango: 1 a 10 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10
Referencia: HB125-SET3
Rango: 1 a 13 mm Medidas: 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10 - 10.5 - 11 - 11.5 - 12 - 12.5 - 13



**Broca HSS-CO5 - Cilíndrica - DIN 1869 - Tipo GT 100 - Series Largas**

• Características: REF HB142-Serie 1 | HB 144-Serie 2 | HB146- Serie 3 >DIN 1869 Tipo GT100 - Punta 128° - HSS-CO5%



Referencia Serie 1	Ø D	I1	I2
HB142.0200	2	125	85
HB142.0220	2,2	135	90
HB142.0250	2,5	140	95
HB142.0280	2,8	150	100
HB142.0300	3	150	100
HB142.0320	3,2	155	105
HB142.0350	3,5	165	115
HB142.0360	3,6	165	115
HB142.0380	3,8	175	120
HB142.0400	4	175	120
HB142.0420	4,2	175	120
HB142.0450	4,5	185	125
HB142.0480	4,8	195	135
HB142.0500	5	195	135
HB142.0520	5,2	195	135
HB142.0550	5,5	205	140
HB142.0580	5,8	205	140
HB142.0600	6	205	140
HB142.0650	6,5	215	150
HB142.0700	7	225	155
HB142.0750	7,5	225	155
HB142.0800	8	240	165
HB142.0850	8,5	240	165
HB142.0900	9	250	175
HB142.0950	9,5	250	175
HB142.1000	10	265	185
HB142.1050	10,5	265	185
HB142.1100	11	280	195
HB142.1150	11,5	280	195
HB142.1200	12	295	205
HB142.1250	12,5	295	205
HB142.1300	13	295	205

Referencia Serie 2	Ø D	I1	I2
HB144.0200	2	160	110
HB144.0250	2,5	180	120
HB144.0280	2,8	190	130
HB144.0300	3	190	130
HB144.0320	3,2	200	135
HB144.0350	3,5	210	145
HB144.0360	3,6	210	145
HB144.0380	3,8	220	150
HB144.0400	4	220	150
HB144.0420	4,2	220	150
HB144.0450	4,5	235	160
HB144.0480	4,8	245	170
HB144.0500	5	245	170
HB144.0520	5,2	245	170
HB144.0550	5,5	260	180
HB144.0580	5,8	260	180
HB144.0600	6	260	180
HB144.0650	6,5	275	190
HB144.0700	7	290	200
HB144.0750	7,5	290	200
HB144.0800	8	305	210
HB144.0850	8,5	305	210
HB144.0900	9	320	220
HB144.0950	9,5	320	220
HB144.1000	10	340	235
HB144.1050	10,5	340	235
HB144.1100	11	365	250
HB144.1150	11,5	365	250
HB144.1200	12	375	260
HB144.1250	12,5	375	260
HB144.1300	13	375	260

Referencia Serie 3	Ø D	I1	I2
HB146.0350	3,5	265	180
HB146.0380	3,8	280	190
HB146.0400	4	280	190
HB146.0420	4,2	280	190
HB146.0450	4,5	295	200
HB146.0480	4,8	315	210
HB146.0500	5	315	210
HB146.0520	5,2	315	210
HB146.0550	5,5	330	225
HB146.0580	5,8	330	225
HB146.0600	6	330	225
HB146.0650	6,5	350	235
HB146.0700	7	370	250
HB146.0750	7,5	370	250
HB146.0800	8	390	265
HB146.0850	8,5	390	265
HB146.0900	9	410	280
HB146.0950	9,5	410	280
HB146.1000	10	430	295
HB146.1050	10,5	430	295
HB146.1100	11	455	310
HB146.1150	11,5	455	310
HB146.1200	12	480	330
HB146.1250	12,5	480	330
HB146.1300	13	480	330

**Broca HSS Cono Morse - DIN 345**

• **HB150** > HSS - DIN 345 - Tipo N - Punta 118° - PAS  
 • **HB152** > HSS-CO5% - DIN 345 - Tipo N - Punta 128°



Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.0500	HB152.0500	5	1	133	52
HB150.0550	HB152.0550	5,5	1	138	57
HB150.0600	HB152.0600	6	1	138	57
HB150.0650	HB152.0650	6,5	1	144	63
HB150.0675	-	6,75	1	150	69
HB150.0700	HB152.0700	7	1	150	69
HB150.0750	HB152.0750	7,5	1	150	69
HB150.0800	HB152.0800	8	1	156	75
HB150.0825	-	8,25	1	156	75
HB150.0850	HB152.0850	8,5	1	156	75
HB150.0875	-	8,75	1	162	81
HB150.0900	HB152.0900	9	1	162	81
HB150.0925	-	9,25	1	162	81
HB150.0950	HB152.0950	9,5	1	162	81
HB150.0975	-	9,75	1	168	87

Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.1000	HB152.1000	10	1	168	87
HB150.1025	-	10,25	1	168	87
HB150.1050	HB152.1050	10,5	1	168	87
HB150.1075	-	10,75	1	175	94
HB150.1100	HB152.1100	11	1	175	94
HB150.1125	-	11,25	1	175	94
HB150.1150	HB152.1150	11,5	1	175	94
HB150.1175	-	11,75	1	175	94
HB150.1200	HB152.1200	12	1	182	101
HB150.1210	-	12,1	1	182	101
HB150.1220	-	12,2	1	182	101
HB150.1225	-	12,25	1	182	101
HB150.1230	-	12,3	1	182	101
HB150.1240	-	12,4	1	182	101
HB150.1250	HB152.1250	12,5	1	182	101



**Broca HSS Cono Morse - DIN 345**

- **HB150** > HSS - DIN 345 - TIPO N - Punta 118° - PAS
- **HB152** > HSS-CO5% - DIN 345 - Tipo N - Punta 128°



Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.1260	-	12,6	1	182	101
HB150.1270	-	12,7	1	182	101
HB150.1275	-	12,75	1	182	101
HB150.1280	-	12,8	1	182	101
HB150.1290	-	12,9	1	182	101
HB150.1300	HB152.1300	13	1	182	101
HB150.1310	-	13,1	1	182	101
HB150.1320	-	13,2	1	182	101
HB150.1325	-	13,25	1	189	108
HB150.1330	-	13,3	1	189	108
HB150.1340	-	13,4	1	189	108
HB150.1350	HB152.1350	13,5	1	189	108
HB150.1360	-	13,6	1	189	108
HB150.1370	-	13,7	1	189	108
HB150.1375	-	13,75	1	189	108
HB150.1380	-	13,8	1	189	108
HB150.1390	-	13,9	1	189	108
HB150.1400	HB152.1400	14	1	189	108
HB150.1425	-	14,25	2	212	114
HB150.1450	HB152.1450	14,5	2	212	114
HB150.1475	-	14,75	2	212	114
HB150.1500	HB152.1500	15	2	212	114
HB150.1525	-	15,25	2	218	120
HB150.1550	HB152.1550	15,5	2	218	120
HB150.1575	-	15,75	2	218	120
HB150.1600	HB152.1600	16	2	218	120
HB150.1625	-	16,25	2	223	125
HB150.1650	HB152.1650	16,5	2	223	125
HB150.1675	-	16,75	2	223	125
HB150.1700	HB152.1700	17	2	223	125
HB150.1725	-	17,25	2	228	130
HB150.1750	HB152.1750	17,5	2	228	130
HB150.1775	-	17,75	2	228	130
HB150.1800	HB152.1800	18	2	228	130
HB150.1825	-	18,25	2	233	135
HB150.1850	HB152.1850	18,5	2	233	135
HB150.1875	-	18,75	2	233	135
HB150.1900	HB152.1900	19	2	233	135
HB150.1925	-	19,25	2	238	140
HB150.1950	HB152.1950	19,5	2	238	140
HB150.1975	-	19,75	2	238	140
HB150.2000	HB152.2000	20	2	238	140
HB150.2025	-	20,25	2	243	145
HB150.2050	HB152.2050	20,5	2	243	145
HB150.2075	-	20,75	2	243	145
HB150.2100	HB152.2100	21	2	243	145
HB150.2125	-	21,25	2	248	150
HB150.2150	HB152.2150	21,5	2	248	150
HB150.2175	-	21,75	2	248	150
HB150.2200	HB152.2200	22	2	248	150
HB150.2225	-	22,25	2	248	150

Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.2250	HB152.2250	22,5	2	253	155
HB150.2275	-	22,75	2	253	155
HB150.2300	HB152.2300	23	2	253	155
HB150.2325	-	23,25	3	276	155
HB150.2350	HB152.2350	23,5	3	276	155
HB150.2375	-	23,75	3	281	160
HB150.2400	HB152.2400	24	3	281	160
HB150.2425	-	24,25	3	281	160
HB150.2450	HB152.2450	24,5	3	281	160
HB150.2475	-	24,75	3	281	160
HB150.2500	HB152.2500	25	3	281	160
HB150.2525	-	25,25	3	286	165
HB150.2550	HB152.2550	25,5	3	286	165
HB150.2575	-	25,75	3	286	165
HB150.2600	HB152.2600	26	3	286	165
HB150.2625	-	26,25	3	286	165
HB150.2650	HB152.2650	26,5	3	286	165
HB150.2675	-	26,75	3	291	170
HB150.2700	HB152.2700	27	3	291	170
HB150.2725	-	27,25	3	291	170
HB150.2750	HB152.2750	27,5	3	291	170
HB150.2775	-	27,75	3	291	170
HB150.2800	HB152.2800	28	3	291	170
HB150.2825	-	28,25	3	296	175
HB150.2850	HB152.2850	28,5	3	296	175
HB150.2875	-	28,75	3	296	175
HB150.2900	HB152.2900	29	3	296	175
HB150.2925	-	29,25	3	296	175
HB150.2950	HB152.2950	29,5	3	296	175
HB150.2975	-	29,75	3	296	175
HB150.3000	HB152.3000	30	3	296	175
HB150.3025	-	30,25	3	301	180
HB150.3050	HB152.3050	30,5	3	301	180
HB150.3075	-	30,75	3	301	180
HB150.3100	HB152.3100	31	3	301	180
HB150.3125	-	31,25	3	301	180
HB150.3150	HB152.3150	31,5	3	301	180
HB150.3175	-	31,75	3	306	185
HB150.3200	HB152.3200	32	4	334	185
HB150.3250	HB152.3250	32,5	4	334	185
HB150.3300	HB152.3300	33	4	334	185
HB150.3350	HB152.3350	33,5	4	334	185
HB150.3400	HB152.3400	34	4	339	190
HB150.3450	HB152.3450	34,5	4	339	190
HB150.3500	HB152.3500	35	4	339	190
HB150.3550	HB152.3550	35,5	4	339	190
HB150.3600	HB152.3600	36	4	344	195
HB150.3650	HB152.3650	36,5	4	344	195
HB150.3700	HB152.3700	37	4	344	195
HB150.3750	HB152.3750	37,5	4	344	195

**Broca HSS Cono Morse - DIN 345**

- **HB150** > HSS - DIN 345 - TIPO N - Punta 118° - PAS
- **HB152** > HSS-CO5% - DIN 345 - Tipo N - Punta 128°



Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.3800	HB152.3800	38	4	349	200
HB150.3850	HB152.3850	38,5	4	349	200
HB150.3900	HB152.3900	39	4	349	200
HB150.3950	HB152.3950	39,5	4	349	200
HB150.4000	HB152.4000	40	4	349	200
HB150.4050	HB152.4050	40,5	4	354	205
HB150.4100	HB152.4100	41	4	354	205
HB150.4150	HB152.4150	41,5	4	354	205
HB150.4200	HB152.4200	42	4	354	205
HB150.4250	HB152.4250	42,5	4	354	205
HB150.4300	HB152.4300	43	4	359	210
HB150.4350	HB152.4350	43,5	4	359	210
HB150.4400	HB152.4400	44	4	359	210
HB150.4450	HB152.4450	44,5	4	359	210
HB150.4500	HB152.4500	45	4	359	210
HB150.4550	HB152.4550	45,5	4	364	215
HB150.4600	HB152.4600	46	4	364	215
HB150.4650	HB152.4650	46,5	4	364	215
HB150.4700	HB152.4700	47	4	364	215
HB150.4750	HB152.4750	47,5	4	364	215
HB150.4800	HB152.4800	48	4	369	220
HB150.4850	HB152.4850	48,5	4	369	220
HB150.4900	HB152.4900	49	44	369	220
HB150.4950	HB152.4950	49,5	4	369	220
HB150.5000	HB152.5000	50	4	369	220
HB150.5050	-	50,5	4	374	225
HB150.5100	-	51	5	412	225
HB150.5200	-	52	5	412	225
HB150.5300	-	53	5	412	223
HB150.5400	-	54	5	417	230
HB150.5500	-	55	5	417	230
HB150.5600	-	56	5	417	230
HB150.5700	-	57	5	422	235

Referencia HSS	Referencia HSS-COS	Ø D	MK CM	I1 Long. Total	I2 Long. Corte
HB150.5800	-	58	5	422	235
HB150.5900	-	59	5	422	235
HB150.6000	-	60	5	422	235
HB150.6100	-	61	5	427	240
HB150.6200	-	62	5	427	240
HB150.6300	-	63	5	427	240
HB150.6400	-	64	5	432	245
HB150.6500	-	65	5	432	245
HB150.6600	-	66	5	432	245
HB150.6700	-	67	5	432	250
HB150.6800	-	68	5	437	250
HB150.6900	-	69	5	437	250
HB150.7000	-	70	5	437	250
HB150.7100	-	71	5	437	255
HB150.7200	-	72	5	442	255
HB150.7300	-	73	5	442	255
HB150.7400	-	74	5	442	255
HB150.7500	-	75	5	442	260
HB150.7600	-	76	5	447	260
HB150.7700	-	77	6	514	260
HB150.7800	-	78	6	514	260
HB150.7900	-	79	6	514	260
HB150.8000	-	80	6	514	265
HB150.8100	-	81	6	519	265
HB150.8200	-	82	6	519	265
HB150.8300	-	83	6	519	265
HB150.8400	-	84	6	519	265
HB150.8500	-	85	6	519	265
HB150.8600	-	86	6	524	270
HB150.8700	-	87	6	524	270
HB150.8800	-	88	6	524	270
HB150.8900	-	89	6	524	270
HB150.9000	-	90	6	524	270

**Broca Cono Morse HSS-CO8% - Materiales Duros y Resistentes**

- **HB168** > Tipo C - Punta 128° - HSS-CO8%  
Recomendado para materiales Hardox 400-500



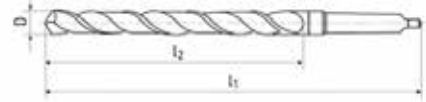
Referencia	D	MK	I1	I2
HB168.1000	10	2	190	90
HB168.1100	11	2	190	90
HB168.1200	12	2	190	90
HB168.1300	13	2	190	90
HB168.1400	14	2	190	90
HB168.1500	15	2	190	90
HB168.1600	16	2	190	90
HB168.1700	17	2	190	90
HB168.1800	18	2	190	90
HB168.1900	19	3	225	105
HB168.2000	20	3	225	105
HB168.2100	21	3	225	105
HB168.2200	22	3	225	105
HB168.2300	23	3	225	105

Referencia	D	MK	I1	I2
HB168.2400	24	3	225	105
HB168.2500	25	3	225	105
HB168.2600	26	3	225	105
HB168.2700	27	4	265	120
HB168.2800	28	4	265	120
HB168.2900	29	4	265	120
HB168.3000	30	4	265	120
HB168.3100	31	4	265	120
HB168.3200	32	4	265	120
HB168.3300	33	4	265	120
HB168.3400	34	4	265	120
HB168.3500	35	4	265	120
HB168.3600	36	4	265	120
HB168.3700	37	4	265	120

Referencia	D	MK	I1	I2
HB168.3800	38	4	265	120
HB168.3900	39	4	265	120
HB168.4000	40	4	265	120
HB168.4100	41	4	265	120
HB168.4200	42	4	265	120
HB168.4300	43	4	265	120
HB168.4400	44	4	265	120
HB168.4500	45	4	265	120
HB168.4600	46	4	265	120
HB168.4700	47	4	265	150
HB168.4800	48	5	340	150
HB168.4900	49	5	340	150
HB168.5000	50	5	340	150

**Broca HSS Cono Morse - DIN 341/1870 - Series Largas**

• Características: DIN 341 / DIN 1870 - Tipo C/A - Punta 118° - HSS



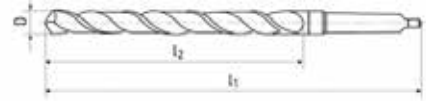
Referencia	D	MK	I1	I2
HB154.0800	8	1	181	100
HB154.0850	8,5	1	181	100
HB154.0900	9	1	188	107
HB154.0950	9,5	1	188	107
HB154.1000	10	1	197	116
HB154.1050	10,5	1	197	116
HB154.1100	11	1	206	125
HB154.1150	11,5	1	206	125
HB154.1200	12	1	215	134
HB154.1250	12,5	1	215	134
HB154.1300	13	1	215	134
HB154.1350	13,5	1	223	142
HB154.1400	14	1	223	142
HB154.1450	14,5	2	245	147
HB154.1500	15	2	245	147
HB154.1550	15,5	2	251	153
HB154.1600	16	2	251	153
HB154.1650	16,5	2	257	159
HB154.1700	17	2	257	159
HB154.1750	17,5	2	263	165
HB154.1800	18	2	263	165
HB154.1850	18,5	2	269	171
HB154.1900	19	2	269	171
HB154.1950	19,5	2	275	177
HB154.2000	20	2	275	177
HB154.2050	20,5	2	282	184
HB154.2100	21	2	282	184
HB154.2150	21,5	2	289	191
HB154.2200	22	2	289	191
HB154.2250	22,5	2	296	198
HB154.2300	23	2	296	198
HB154.2350	23,5	3	319	198
HB154.2400	24	3	327	206
HB154.2450	24,5	3	327	206
HB154.2500	25	3	327	206
HB154.2550	25,5	3	335	214
HB154.2600	26	3	335	214
HB154.2650	26,5	3	335	214
HB154.2700	27	3	343	222
HB154.2750	27,5	3	343	222
HB154.2800	28	3	343	222
HB154.2850	28,5	3	351	230
HB154.2900	29	3	351	230
HB154.2950	29,5	3	351	230
HB154.3000	30	3	351	230
HB154.3100	31	3	360	239
HB154.3200	32	4	397	248
HB154.3300	33	4	397	248
HB154.3400	34	4	406	257
HB154.3500	35	4	406	257
HB154.3600	36	4	416	267
HB154.3700	37	4	416	267
HB154.3800	38	4	426	277
HB154.3900	39	4	426	277

Referencia	D	MK	I1	I2
HB156.0800	8	1	265	165
HB156.0850	8,5	1	265	165
HB156.0900	9	1	275	175
HB156.0950	9,5	1	275	175
HB156.1000	10	1	285	185
HB156.1050	10,5	1	285	185
HB156.1100	11	1	300	195
HB156.1150	11,5	1	300	195
HB156.1200	12	1	310	205
HB156.1250	12,5	1	310	205
HB156.1300	13	1	310	205
HB156.1350	13,5	1	325	220
HB156.1400	14	1	325	220
HB156.1450	14,5	2	340	220
HB156.1500	15	2	340	220
HB156.1550	15,5	2	355	230
HB156.1600	16	2	355	230
HB156.1650	16,5	2	355	230
HB156.1700	17	2	355	230
HB156.1750	17,5	2	370	245
HB156.1800	18	2	370	245
HB156.1850	18,5	2	370	245
HB156.1900	19	2	370	245
HB156.1950	19,5	2	385	260
HB156.2000	20	2	385	260
HB156.2050	20,5	2	385	260
HB156.2100	21	2	385	260
HB156.2150	21,5	2	405	270
HB156.2200	22	2	405	270
HB156.2250	22,5	2	405	270
HB156.2300	23	2	405	270
HB156.2350	23,5	3	425	270
HB156.2400	24	3	440	290
HB156.2450	24,5	3	440	290
HB156.2500	25	3	440	290
HB156.2550	25,5	3	440	290
HB156.2600	26	3	440	290
HB156.2650	26,5	3	440	290
HB156.2700	27	3	460	305
HB156.2750	27,5	3	460	305
HB156.2800	28	3	460	305
HB156.2850	28,5	3	460	305
HB156.2900	29	3	460	305
HB156.2950	29,5	3	460	305
HB156.3000	30	3	460	305
HB156.3100	31	3	480	320
HB156.3200	32	4	505	320
HB156.3300	33	4	505	320
HB156.3400	34	4	530	340
HB156.3500	35	4	530	340
HB156.3600	36	4	530	340
HB156.3700	37	4	530	340
HB156.3800	38	4	555	360
HB156.3900	39	4	555	360

Referencia	D	MK	I1	I2
HB158.1000	10	1	360	235
HB158.1050	10,5	1	360	235
HB158.1100	11	1	375	250
HB158.1150	11,5	1	375	250
HB158.1200	12	1	395	260
HB158.1250	12,5	1	395	260
HB158.1300	13	1	395	260
HB158.1350	13,5	1	410	275
HB158.1400	14	1	410	275
HB158.1450	14,5	2	425	275
HB158.1500	15	2	425	275
HB158.1550	15,5	2	445	295
HB158.1600	16	2	445	295
HB158.1650	16,5	2	445	295
HB158.1700	17	2	445	295
HB158.1750	17,5	2	465	310
HB158.1800	18	2	465	310
HB158.1850	18,5	2	465	310
HB158.1900	19	2	465	310
HB158.1950	19,5	2	490	325
HB158.2000	20	2	490	325
HB158.2050	20,5	2	490	325
HB158.2100	21	2	490	325
HB158.2150	21,5	2	515	345
HB158.2200	22	2	515	345
HB158.2250	22,5	2	515	345
HB158.2300	23	2	515	345
HB158.2350	23,5	3	535	345
HB158.2400	24	3	555	365
HB158.2450	24,5	3	555	365
HB158.2500	25	3	555	365
HB158.2550	25,5	3	555	365
HB158.2600	26	3	555	365
HB158.2650	26,5	3	555	365
HB158.2700	27	3	580	385
HB158.2750	27,5	3	580	385
HB158.2800	28	3	580	385
HB158.2850	28,5	3	580	385
HB158.2900	29	3	580	385
HB158.2950	29,5	3	580	385
HB158.3000	30	3	580	385
HB158.3100	31	3	610	410
HB158.3200	32	4	635	410
HB158.3300	33	4	635	410
HB158.3400	34	4	665	430
HB158.3500	35	4	665	430
HB158.3600	36	4	665	430
HB158.3700	37	4	665	430
HB158.3800	38	4	695	460
HB158.3900	39	4	695	460

**Broca HSS Cono Morse - DIN 341/1870 - Series Largas - Continuación**

- Características: DIN 341 / DIN 1870 - Tipo C/A - Punta 118° - HSS



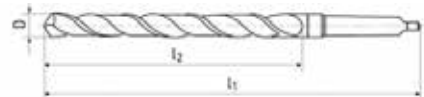
Referencia	D	MK	I1	I2
HB154.4000	40	4	426	277
HB154.4100	41	4	436	287
HB154.4200	42	4	436	287
HB154.4300	43	4	447	298
HB154.4400	44	4	447	298
HB154.4500	45	4	447	298
HB154.4600	46	4	459	310
HB154.4700	47	4	459	310
HB154.4800	48	4	470	321
HB154.4900	49	4	470	321
HB154.5000	50	4	470	321

Referencia	D	MK	I1	I2
HB156.4000	40	4	555	360
HB156.4100	41	4	555	360
HB156.4200	42	4	555	360
HB156.4300	43	4	585	385
HB156.4400	44	4	585	385
HB156.4500	45	4	585	385
HB156.4600	46	4	585	385
HB156.4700	47	4	585	385
HB156.4800	48	4	605	405
HB156.4900	49	4	605	405
HB156.5000	50	4	605	405

Referencia	D	MK	I1	I2
HB158.4000	40	4	695	460
HB158.4100	41	4	695	460
HB158.4200	42	4	695	460
HB158.4300	43	4	735	490
HB158.4400	44	4	735	490
HB158.4500	45	4	735	490
HB158.4600	46	4	735	490
HB158.4700	47	4	735	490
HB158.4800	48	4	765	510
HB158.4900	49	4	765	510
HB158.5000	50	4	765	510

**Broca HSS CO5 Cono Morse- DIN 341/1870 - Series Largas**

- Características: DIN 341 / DIN 1870 - Tipo C - GT100 - HSS-CO5% - Punta 118°



Referencia	D	MK	I1	I2
HB160.0800	8	1	181	100
HB160.0850	8,5	1	181	100
HB160.0900	9	1	188	107
HB160.0950	9,5	1	188	107
HB160.1000	10	1	197	116
HB160.1050	10,5	1	197	116
HB160.1100	11	1	206	125
HB160.1150	11,5	1	206	125
HB160.1200	12	1	215	134
HB160.1250	12,5	1	215	134
HB160.1300	13	1	215	134
HB160.1350	13,5	1	223	142
HB160.1400	14	1	223	142
HB160.1450	14,5	2	245	147
HB160.1500	15	2	245	147
HB160.1550	15,5	2	251	153
HB160.1600	16	2	251	153
HB160.1650	16,5	2	257	159
HB160.1700	17	2	257	159
HB160.1750	17,5	2	263	165
HB160.1800	18	2	263	165
HB160.1850	18,5	2	269	171
HB160.1900	19	2	269	171
HB160.1950	19,5	2	275	177
HB160.2000	20	2	275	177

Referencia	D	MK	I1	I2
HB162.0800	8	1	265	165
HB162.0850	8,5	1	265	165
HB162.0900	9	1	275	175
HB162.0950	9,5	1	275	175
HB162.1000	10	1	285	185
HB162.1050	10,5	1	285	185
HB162.1100	11	1	300	195
HB162.1150	11,5	1	300	195
HB162.1200	12	1	310	205
HB162.1250	12,5	1	310	205
HB162.1300	13	1	310	205
HB162.1350	13,5	1	325	220
HB162.1400	14	1	325	220
HB162.1450	14,5	2	340	220
HB162.1500	15	2	340	220
HB162.1550	15,5	2	355	230
HB162.1600	16	2	355	230
HB162.1650	16,5	2	355	230
HB162.1700	17	2	355	230
HB162.1750	17,5	2	370	245
HB162.1800	18	2	370	245
HB162.1850	18,5	2	370	245
HB162.1900	19	2	370	245
HB162.1950	19,5	2	385	260
HB162.2000	20	2	385	260

Referencia	D	MK	I1	I2
HB164.1400	14	1	410	275
HB164.1450	14,5	2	425	275
HB164.1500	15	2	425	275
HB164.1550	15,5	2	445	295
HB164.1600	16	2	445	295
HB164.1650	16,5	2	445	295
HB164.1700	17	2	445	295
HB164.1750	17,5	2	465	310
HB164.1800	18	2	465	310
HB164.1850	18,5	2	465	310
HB164.1900	19	2	465	310
HB164.1950	19,5	2	490	325
HB164.2000	20	2	490	325

**Set Brocas Cono Morse DIN 345**

- HB150 > HSS - DIN 345 - TIPO N - Punta 118° - PAS
- HB152 > HSS-CO5% - DIN 345 - TIPO N - Punta 128°

Referencia: HB150-SET9
Medidas: 15 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30
Referencia: HB152-SET9
Medidas: 15 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30



## Broca MD K10 - 3xD



Referencia	Ø D	I1	I2
MB150.010	1.0	6	26
MB150.015	1.5	9	32
MB150.016	1.6	10	34
MB150.020	2.0	12	38
MB150.021	2.1	12	38
MB150.022	2.2	13	40
MB150.023	2.3	13	40
MB150.024	2.4	14	43
MB150.025	2.5	14	43
MB150.026	2.6	14	43
MB150.027	2.7	16	46
MB150.028	2.8	16	46
MB150.029	2.9	16	46
MB150.030	3.0	16	46
MB150.031	3.1	18	49

Referencia	Ø D	I1	I2
MB150.032	3.2	18	49
MB150.033	3.3	18	49
MB150.034	3.4	20	52
MB150.035	3.5	20	52
MB150.036	3.6	20	52
MB150.037	3.7	20	52
MB150.038	3.8	22	55
MB150.039	3.9	22	55
MB150.040	4.0	22	55
MB150.041	4.1	22	55
MB150.042	4.2	22	55
MB150.043	4.3	24	58
MB150.044	4.4	24	58
MB150.045	4.5	24	58
MB150.046	4.6	24	58

Referencia	Ø D	I1	I2
MB150.047	4.7	24	58
MB150.048	4.8	26	62
MB150.049	4.9	26	62
MB150.050	5.0	26	62
MB150.055	5.5	28	66
MB150.060	6.0	28	66
MB150.065	6.5	31	70
MB150.068	6.8	34	74
MB150.070	7.0	34	74
MB150.075	7.5	34	74
MB150.080	8.0	36	79
MB150.085	8.5	36	79
MB150.090	9.0	40	84
MB150.095	9.5	40	84
MB150.100	10.0	43	89

## Broca MD K10 - 5xD

Referencia	Ø D	I1	I2
MB152.010	1.0	12	34
MB152.015	1.5	18	40
MB152.016	1.6	20	43
MB152.020	2.0	24	49
MB152.021	2.1	24	49
MB152.022	2.2	27	53
MB152.023	2.3	27	53
MB152.024	2.4	30	57
MB152.025	2.5	30	57
MB152.026	2.6	33	57
MB152.027	2.7	33	61
MB152.028	2.8	33	61
MB152.029	2.9	33	61
MB152.030	3.0	36	61
MB152.031	3.1	36	65

Referencia	Ø D	I1	I2
MB152.032	3.2	36	65
MB152.033	3.3	39	65
MB152.034	3.4	39	70
MB152.035	3.5	39	70
MB152.036	3.6	39	70
MB152.037	3.7	39	70
MB152.038	3.8	43	75
MB152.039	3.9	43	75
MB152.040	4.0	43	75
MB152.041	4.1	43	75
MB152.042	4.2	43	75
MB152.043	4.3	47	80
MB152.044	4.4	47	80
MB152.045	4.5	47	80
MB152.046	4.6	47	80

Referencia	Ø D	I1	I2
MB152.047	4.7	47	80
MB152.048	4.8	52	86
MB152.049	4.9	52	86
MB152.050	5.0	52	86
MB152.055	5.5	57	93
MB152.060	6.0	57	93
MB152.065	6.5	63	101
MB152.068	6.8	69	109
MB152.070	7.0	69	109
MB152.075	7.5	69	109
MB152.080	8.0	75	117
MB152.085	8.5	75	117
MB152.090	9.0	81	125
MB152.095	9.5	81	125
MB152.100	10.0	87	133

## Cuchilla ISO 1 - DIN 4791

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC01R	MC01L	10 x 10 x 90	P20 - M30 - K10
MC01R	MC01L	12 x 12 x 100	P20 - M30 - K10
MC01R	MC01L	16 x 16 x 110	P20 - M30 - K10
MC01R	MC01L	20 x 20 x 125	P20 - M30 - K10
MC01R	MC01L	25 x 25 x 140	P20 - M30 - K10
MC01R	MC01L	32 x 32 x 170	P20 - M30 - K10
MC01R	MC01L	40 x 40 x 200	P20 - M30 - K10

### TIPO DE CALIDADES:

- Calidad P20 - Acero
- Calidad M30 - Inoxidable
- Calidad K10 - Fundición



## Cuchilla ISO 2 - DIN 4972

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC02R	MC02L	10 x 10 x 90	P20 - M30 - K10
MC02R	MC02L	12 x 12 x 100	P20 - M30 - K10
MC02R	MC02L	16 x 16 x 110	P20 - M30 - K10
MC02R	MC02L	20 x 20 x 125	P20 - M30 - K10
MC02R	MC02L	25 x 25 x 140	P20 - M30 - K10
MC02R	MC02L	32 x 32 x 170	P20 - M30 - K10
MC02R	MC02L	40 x 40 x 200	P20 - M30 - K10



### Cuchilla ISO 3 – DIN 4980

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC03R	MC03L	16 x 16 x 110	P20 – M30 – K10
MC03R	MC03L	20 x 20 x 125	P20 – M30 – K10
MC03R	MC03L	25 x 25 x 140	P20 – M30 – K10
MC03R	MC03L	32 x 32 x 170	P20 – M30 – K10
MC03R	MC03L	40 x 40 x 200	P20 – M30 – K10



### Cuchilla ISO 4 – DIN 4976

Referencia Neutra	Dimensiones	Calidades
MC04N	16 x 10 x 110	P20 – M30 – K10
MC04N	20 x 12 x 125	P20 – M30 – K10
MC04N	25 x 16 x 140	P20 – M30 – K10
MC04N	32 x 20 x 170	P20 – M30 – K10
M04CN	40 x 25 x 200	P20 – M30 – K10



### Cuchilla ISO 5 – DIN 4799

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC05R	MC05L	10 x 10 x 90	P20 – M30 – K10
MC05R	MC05L	12 x 12 x 100	P20 – M30 – K10
MC05R	MC05L	16 x 16 x 110	P20 – M30 – K10
MC05R	MC05L	20 x 20 x 125	P20 – M30 – K10
MC05R	MC05L	25 x 25 x 140	P20 – M30 – K10
MC05R	MC05L	32 x 32 x 170	P20 – M30 – K10
MC05R	MC05L	40 x 40 x 200	P20 – M30 – K10



### Cuchilla ISO 6 – DIN 4980

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC06R	MC06L	10 x 10 x 90	P20 – M30 – K10
MC06R	MC06L	12 x 12 x 100	P20 – M30 – K10
MC06R	MC06L	16 x 16 x 110	P20 – M30 – K10
MC06R	MC06L	20 x 20 x 125	P20 – M30 – K10
MC06R	MC06L	25 x 25 x 140	P20 – M30 – K10
MC06R	MC06L	32 x 32 x 170	P20 – M30 – K10
MC06R	MC06L	40 x 40 x 200	P20 – M30 – K10



### Cuchilla ISO 7 – DIN 4981

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades	Espesor
MC07R	MC07L	12 X 8 X 3 X 100	P20 – M30 – K10	3
MC07R	MC07L	16 X 10 X 4 X 110	P20 – M30 – K10	4
MC07R	MC07L	20 X 12 X 5 X 125	P20 – M30 – K10	5
MC07R	MC07L	25 X 16 X 6 X 140	P20 – M30 – K10	6
MC07R	MC07L	32 X 20 X 8 X 170	P20 – M30 – K10	8
MC07R	MC07L	10 x 10 x 4 x 110	P20 – M30 – K10	4
MC07R	MC07L	12 x 12 x 4 x 110	P20 – M30 – K10	4
MC07R	MC07L	16 x 16 x 4 x 100	P20 – M30 – K10	4
MC07R	MC07L	20 x 20 x 5 x 125	P20 – M30 – K10	5





**Broca HSS Cono Morse - DIN 341/1870 - Series Largas**

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC08R	MC08L	8 X 8 X 125	P20 - M30 - K10
MC08R	MC08L	10 X 10 X 150	P20 - M30 - K10
MC08R	MC08L	12 X 12 X 180	P20 - M30 - K10
MC08R	MC08L	16 X 16 X 210	P20 - M30 - K10
MC08R	MC08L	20 X 20 X 250	P20 - M30 - K10
MC08R	MC08L	25 X 25 X 300	P20 - M30 - K10
MC08R	MC08L	32 X 32 X 355	P20 - M30 - K10


**Cuchilla ISO 9 - DIN 4974**

Referencia	Dimensiones	Calidades
MC09N	8 X 8 X 125	P20 - M30 - K10
MC09N	10 X 10 X 150	P20 - M30 - K10
MC09N	12 X 12 X 180	P20 - M30 - K10
MC09N	16 X 16 X 210	P20 - M30 - K10
MC09N	20 X 20 X 250	P20 - M30 - K10
MC09N	25 X 25 X 300	P20 - M30 - K10
MC09N	32 X 32 X 355	P20 - M30 - K10


**Cuchilla ISO 10 - DIN 4795**

Referencia	Dimensiones	Calidades
MC10N	16 x 10 x 110	P20 - M30 - K10
MC10N	20 x 12 x 125	P20 - M30 - K10
MC10N	25 x 16 x 140	P20 - M30 - K10
MC10N	32 x 20 x 170	P20 - M30 - K10


**Cuchilla ISO 12 - DIN 282R**

Referencia Derechas	Referencia Izquierdas	Dimensiones	Calidades
MC12R	MC12L	20 X 12 X 125	P20 - M30 - K10
MC12R	MC12L	25 X 16 X 140	P20 - M30 - K10
MC12R	MC12L	32 X 20 X 170	P20 - M30 - K10


**Cuchilla ISO 13 - DIN 4981**

Referencia Derechas	Dimensiones	Calidades
MC13R	10 X 10 X 125	P20 - M30 - K10
MC13R	12 X 12 X 150	P20 - M30 - K10
MC13R	16 X 16 X 180	P20 - M30 - K10
MC13R	20 X 20 X 210	P20 - M30 - K10
MC13R	25 X 25 X 250	P20 - M30 - K10
MC13R	32 X 32 X 300	P20 - M30 - K10


**Cuchillas de Cobalto para Torno - Trapezoidal**

• Características: HSS-CO10% - Tolerancia:h12 - Según DIN 4964 Forma E

Referencia	Medida	Longitud
HC01.123150	12 x 3	150
HC01.123160	12 x 3	160
HC01.153150	15 x 3	150
HC01.154200	15 x 4	200
HC01.163160	16 x 3	160
HC01.163200	16 x 3	200

Referencia	Medida	Longitud
HC01.164160	16 x 4	160
HC01.164200	16 x 4	200
HC01.183150	18 x 3	150
HC01.183200	18 x 3	200
HC01.184200	18 x 4	200

Referencia	Medida	Longitud
HC01.203160	20 x 3	160
HC01.203200	20 x 3	200
HC01.204160	20 x 4	160
HC01.204200	20 x 4	200
HC01.205160	20 x 5	160
HC01.205200	20 x 5	200



## Cuchillas de Cobalto para Torno - Redonda

• Características: HSS-CO10% - Tolerancia:h8 - Según DIN 4964 Forma A



Referencia	Ø D	Longitud
HC02.3100	3	100
HC02.4100	4	100
HC02.4200	4	200
HC02.5100	5	100
HC02.5200	5	200
HC02.6100	6	100
HC02.6160	6	160
HC02.6200	6	200

Referencia	Ø D	Longitud
HC02.8100	8	100
HC02.8160	8	160
HC02.8200	8	200
HC02.10100	10	100
HC02.10160	10	160
HC02.10200	10	200
HC02.12100	12	100
HC02.12160	12	160
HC02.12200	12	200

Referencia	Ø D	Longitud
HC02.16100	16	100
HC02.16160	16	160
HC02.16200	16	200
HC02.20160	20	160
HC02.20200	20	200
HC02.25160	25	160
HC02.25200	25	200
HC02.30200	30	200

## Cuchillas de Cobalto para Torno - Cuadrado

• Características: HSS-CO10% - Tolerancia:h14 - Según DIN 4964 Forma B



Referencia	Ø C	Longitud
HC03.4160	4	160
HC03.5100	5	100
HC03.5160	5	160
HC03.6100	6	100
HC03.6160	6	160
HC03.6200	6	200
HC03.7200	7	200
HC03.8100	8	100
HC03.8160	8	160
HC03.8200	8	200

Referencia	Ø C	Longitud
HC03.10100	10	100
HC03.10160	10	160
HC03.10200	10	200
HC03.12100	12	100
HC03.12160	12	160
HC03.12200	12	200
HC03.14160	14	160
HC03.14200	14	200
HC03.16100	16	100
HC03.16160	16	160
HC03.16200	16	200
HC03.16250	16	250

Referencia	Ø C	Longitud
HC03.18160	18	160
HC03.18200	18	200
HC03.20160	20	160
HC03.20200	20	200
HC03.20250	20	250
HC03.25160	25	160
HC03.25200	25	200
HC03.32200	32	200
HC03.40200	40	200
HC03.40250	40	250
HC03.40300	40	300

## Cuchillas de Cobalto para Torno - Rectangular

• Características: HSS-CO10% - Tolerancia:h14 - Según DIN 4964 Forma D



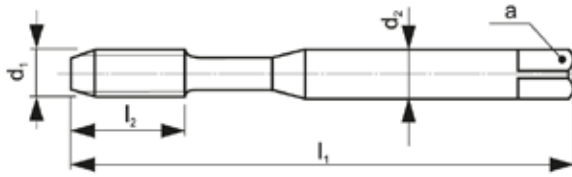
Referencia	Medida	Longitud
HC04.64100	6 x 4	100
HC04.85100	8 x 5	100
HC04.103160	10 x 3	160
HC04.104160	10 x 4	160
HC04.104200	10 x 4	200
HC04.105160	10 x 5	160
HC04.105200	10 x 5	200
HC04.123150	12 x 3	150
HC04.123200	12 x 3	200
HC04.124150	12 x 4	150
HC04.124200	12 x 4	200
HC04.125150	12 x 5	150
HC04.125200	12 x 5	200
HC04.126150	12 x 6	150
HC04.126200	12 x 6	200
HC04.128150	12 x 8	150
HC04.128200	12 x 8	200
HC04.1210160	12 x 10	160
HC04.1210200	12 x 10	200
HC04.144160	14 x 4	160
HC04.144200	14 x 4	200
HC04.145150	14 x 5	150
HC04.145200	14 x 5	200
HC04.146200	14 x 6	200
HC04.1410150	14 x 10	150
HC04.1410200	14 x 10	200

Referencia	Medida	Longitud
HC04.153150	15 x 3	150
HC04.153200	15 x 3	200
HC04.154150	15 x 4	150
HC04.154200	15 x 4	200
HC04.155200	15 x 5	200
HC04.156200	15 x 6	200
HC04.158200	15 x 8	200
HC04.163160	16 x 3	160
HC04.164160	16 x 4	160
HC04.164200	16 x 4	200
HC04.166200	16 x 6	200
HC04.168160	16 x 8	160
HC04.168200	16 x 8	200
HC04.1610160	16 x 10	160
HC04.1610200	16 x 10	200
HC04.1612160	16 x 12	160
HC04.183200	18 x 3	200
HC04.184200	18 x 4	200
HC04.185200	18 x 5	200
HC04.186200	18 x 6	200
HC04.203100	20 x 3	100
HC04.203200	20 x 3	200
HC04.204160	20 x 4	160
HC04.204200	20 x 4	200
HC04.205160	20 x 5	160
HC04.205200	20 x 5	200

Referencia	Medida	Longitud
HC04.206160	20 x 6	160
HC04.206200	20 x 6	200
HC04.208160	20 x 8	160
HC04.208200	20 x 8	200
HC04.2010160	20 x 10	160
HC04.2010200	20 x 10	200
HC04.2012160	20 x 12	160
HC04.2012200	20 x 12	200
HC04.2016160	20 x 16	160
HC04.2016200	20 x 16	200
HC04.255200	25 x 5	200
HC04.256200	25 x 6	200
HC04.258200	25 x 8	200
HC04.2510200	25 x 10	200
HC04.2512160	25 x 12	160
HC04.2516160	25 x 16	160
HC04.2516200	25 x 16	200
HC04.2520160	25 x 20	160
HC04.2520200	25 x 20	200
HC04.3010200	30 x 10	200
HC04.328200	32 x 8	200
HC04.3212200	32 x 12	200
HC04.3216200	32 x 16	200
HC04.4010200	40 x 10	200
HC04.4012200	40 x 12	200

## Macho Rosca Métrica - Pasante

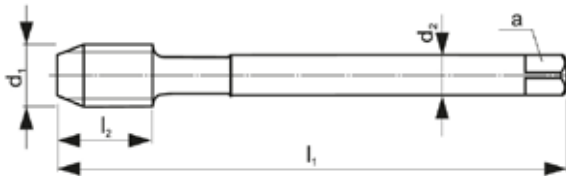
- Mango Reforzado
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- HSSE



Referencia:							100-100	100-100 ISO3-6G	100-101 OX	100-104 TiALN
Métrica	P	l1	l2	d2	a	Z				
M2	0,4	45	8	2,8	2,1	3	•			
M2,5	0,45	50	9	2,8	2,1	3	•			
M3	0,5	56	11	3,5	2,7	3	•	•	•	•
M4	0,7	63	13	4,5	3,4	3	•	•	•	•
M5	0,8	70	16	6	4,9	3	•	•	•	•
M6	1	80	19	6	4,9	3	•	•	•	•
M8	1,25	90	22	8	6,2	3	•	•	•	•
M10	1,5	100	24	10	8	3	•	•	•	•

## Macho Rosca Métrica - Pasante

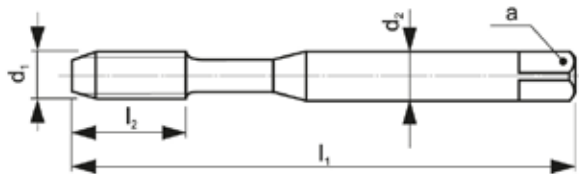
- Mango Fino
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- HSSE



Referencia:							200-100	200-100 ISO3-6G	200-101 OX	200-104 TiALN	200-400
Métrica	P	l1	l2	d2	a	Z	FORMA B	FORMA B	FORMA B	FORMA B	FORMA C
M3	0,5	56	9	2,2	-	3	•		•		•
M4	0,7	63	12	2,8	2,1	3	•		•		•
M5	0,8	70	13	3,5	2,7	3	•		•		•
M6	1	80	15	4,5	3,4	3	•		•		•
M7	1	80	15	5,5	4,3	3	•		•		•
M8	1,25	90	18	6	4,9	3	•		•		•
M10	1,5	100	20	7	5,5	3	•		•		•
M12	1,75	110	28	9	7	3	•	•	•	•	•
M14	2	110	25	11	9	3	•	•	•	•	•
M16	2	110	25	12	9	3	•	•	•	•	•
M18	2,5	125	30	14	11	3	•		•	•	•
M20	2,5	140	30	16	12	3	•	•	•	•	•
M22	2,5	140	30	18	14,5	3	•		•		•
M24	3	160	36	18	14,5	4	•		•		•
M27	3	160	36	20	16	4	•		•		•
M30	3,5	180	40	22	18	4	•		•		•
M33	3,5	180	42	25	20	4	•		•		•
M36	4	200	50	28	22	4	•		•		•
M39	4	200	50	32	24	4					•
M42	4,5	200	56	32	24	4					•
M45	4,5	200	56	36	29	4					•
M48	5	250	63	36	29	4					•
M52	5	250	63	40	32	4					•

### Macho Rosca Métrica - Pasante

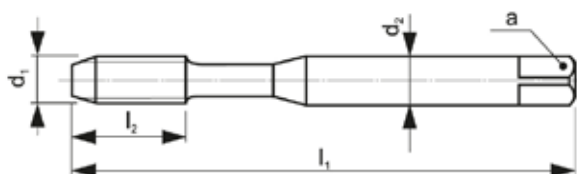
- Mango Reforzado
- Paso 60°
- DIN 13
- DIN 371 - ISO 2 6H
- Forma C - 2-3
- HSSE



Referencia:							100-400
Métrica	P	l1	l2	d2	a	Z	
M3	0,5	56	11	3,5	2,7	3	•
M3.5	0,6	56	11	4	3	3	•
M4	0,7	63	13	4,5	3,4	3	•
M5	0,8	70	16	6	4,9	3	•
M6	1	80	19	6	4,9	3	•
M8	1,25	90	22	8	6,2	3	•
M10	1,5	100	24	10	8	3	•

### Machos de Rosca Métrica - Pasantes

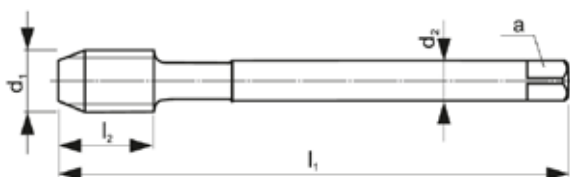
- Mango Reforzado
- Para Aceros 1200N/mm2
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- HSSE



Referencia:							100-121	100-123
Métrica	P	l1	l2	d2	a	Z	OX	TICN
M3	0,5	56	5	3,5	2,7	3	•	•
M4	0,7	63	7	4,5	3,4	3	•	•
M5	0,8	70	8	6	4,9	3	•	•
M6	1	80	10	6	4,9	3	•	•
M8	1,25	90	13	8	6,2	3	•	•
M10	1,5	100	15	10	8	3	•	•

### Machos de Rosca Métrica - Pasantes

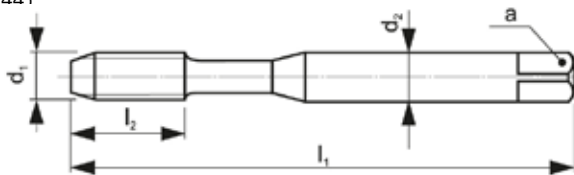
- Mango Fino
- Para Aceros 1200N/mm2
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- HSSE



Referencia:							200-121	200-123
Métrica	P	l1	l2	d2	a	Z	OX	TICN
M3	0,5	56	9	2,2	-	3	•	•
M4	0,7	63	12	2,8	2,1	3	•	•
M5	0,8	70	13	3,5	2,7	3	•	•
M6	1	80	15	4,5	3,4	3	•	•
M8	1,25	90	18	6	4,9	3	•	•
M10	1,5	100	20	7	5,5	3	•	•
M12	1,75	110	23	9	7	3	•	•
M14	2	110	25	11	9	3	•	•
M16	2	110	25	12	9	3	•	•
M18	2,5	125	30	14	11	3	•	•
M20	2,5	140	30	16	12	3	•	•
M22	2,5	140	30	18	14,5	3	•	•
M24	3	160	36	18	14,5	4	•	•
M27	3	160	36	20	16	4	•	•
M30	3,5	180	40	22	18	4	•	•

**Macho Rosca Métrica - Pasante**

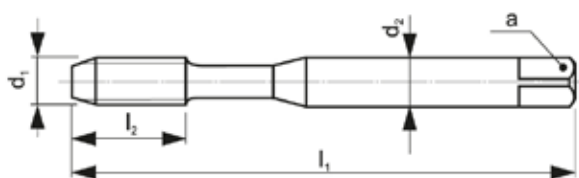
- Mango Reforzado DIN 371 (Serie 100-144)
- Mango Fino DIN 376 (Serie 200-144)
- Para Aceros 1400N/mm2
- Paso 60°
- DIN 13 - DIN 371 y 376
- ISO 2 6H
- Forma B - 3.5-6
- PM



Referencia:							100-144	200-144
Métrica	P	l1	l2	d2	a	Z	FNT	FNT
M3	0,5	56	5	3,5	2,7	3	•	
M4	0,7	63	7	4,5	3,4	3	•	
M5	0,8	70	8	6	4,9	3	•	
M6	1	80	10	6	4,9	3	•	
M8	1,25	90	13	8	6,2	3	•	
M10	1,5	100	15	10	8	3	•	
M12	1.75	110	23	9	7	3		•

**Macho Rosca Métrica - Pasantes - Inoxidables**

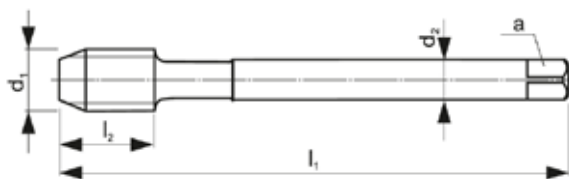
- Mango Reforzado
- Especial Inoxidables
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- HSSE



Referencia:							100-255	100-201	100-203
Métrica	P	l1	l2	d2	a	Z	HL - PM	OX HSSE	TICN HSSE
M3	0,5	56	5	3,5	2,7	3	•	•	•
M4	0,7	63	7	4,5	3,4	3	•	•	•
M5	0,8	70	8	6	4,9	3	•	•	•
M6	1	80	10	6	4,9	3	•	•	•
M8	1,25	90	13	8	6,2	3	•	•	•
M10	1,5	100	15	10	8	3	•	•	•

**Macho Rosca Métrica - Pasantes Inoxidables**

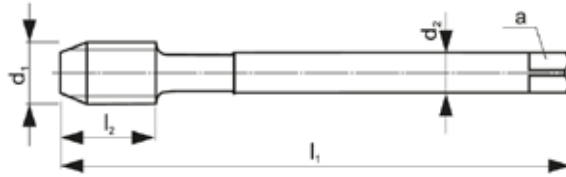
- Mango Fino
- Especial Inoxidables
- Paso 60°
- DIN 13 - DIN 376
- ISO 2 6H
- Forma B - 3.5-6
- PM / HSSE



Referencia:							200-255	200-201	200-203
Métrica	P	l1	l2	d2	a	Z	HL - PM	OX HSSE	TICN HSSE
M3	0,5	56	9	3,5	2,7	3		•	
M4	0,7	63	12	4,5	3,4	3		•	
M5	0,8	70	13	6	4,9	3		•	
M6	1	80	15	6	4,9	3		•	
M8	1,25	90	18	8	6,2	3		•	
M10	1,5	100	20	10	8	3		•	
M12	1,75	110	23	9	7	3	•	•	•
M14	2	110	25	11	9	3	•	•	•
M16	2	110	25	12	9	3	•	•	•
M18	2,5	125	30	14	11	3		•	•
M20	2,5	140	30	16	12	3	•	•	•
M22	2,5	140	30	18	14,5	3		•	
M24	3	160	36	18	14,5	4		•	•
M27	3	160	36	20	16	4		•	•
M30	3,5	180	40	22	18	4		•	•

**Macho Rosca - Métrica Fina**

- Mango Fino
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma B - 3.5-6
- Forma C - 2-3
- HSSE

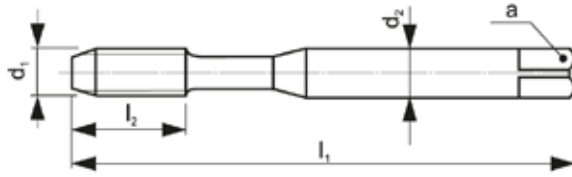


Referencia:							300-100	300-400	
Métrica	P	l1	l2	d2	a	Z	FORMA B	FORMA C	
M4	0,5	63	12	2,8	2,1	3	•	•	
M5	0,5	70	13	3,5	2,7	3	•	•	
M6	0,5	80	15	4,5	3,4	3	•	•	
M6	0,75	80	15	4,5	3,4	3	•	•	
M7	0,75	80	15	5,5	4,3	3	•	•	
M8	0,75	80	15	6	4,9	3	•	•	
M8	1	90	18	6	4,9	3	•	•	
M9	1	90	18	7	5,5	3	•	•	
M10	0,75	90	20	7	5,5	3	•	•	
M10	1	90	20	7	5,5	3	•	•	
M10	1,25	100	20	7	5,5	3	•	•	
M11	1	90	20	8	6,2	3	•	•	
M12	1	100	21	9	7	3		•	
M12	1,25	100	21	9	7	3	•	•	
M12	1,5	100	21	9	7	3	•	•	
M14	1	100	21	11	9	3	•	•	
M14	1,25	100	21	11	9	3	•	•	
M14	1,5	100	21	11	9	3	•	•	
M15	1	100	21	12	9	3	•	•	
M16	1	100	21	12	9	3	•	•	
M16	1,5	100	21	12	9	3	•	•	
M17	1	100	21	12	9	3		•	
M18	1	110	24	14	11	3	•	•	
M18	1,5	110	24	14	11	3	•	•	
M18	2	125	24	14	11	3	•	•	
M20	1	125	24	16	12	3	•	•	
M20	1,5	125	24	16	12	3	•	•	
M20	2	140	30	16	12	3	•	•	
M22	1	125	24	18	14,5	3	•	•	
M22	1,5	125	24	18	14,5	3	•	•	
M22	2	140	30	18	14,5	3	•	•	
M24	1	140	26	18	14,5	4	•	•	
M24	1,5	140	26	18	14,5	4	•	•	
M24	2	140	26	18	14,5	4	•	•	
M25	1,5	140	26	18	14,5	4	•	•	
M26	1,5	140	26	18	14,5	4	•	•	
M27	1	140	26	20	16	4	•	•	
M27	1,5	140	26	20	16	4	•	•	
M27	2	140	26	20	16	4	•	•	
M28	1,5	140	26	20	16	4	•	•	
M28	2	140	26	20	16	4	•	•	
M30	1	150	28	22	18	4	•	•	
M30	1,5	150	28	22	18	4	•	•	
M30	2	150	28	22	18	4	•	•	
M32	1,5	150	28	22	18	4	•	•	
M33	1,5	160	30	25	20	4	•	•	
M33	2	160	30	25	20	4	•	•	
M34	1,5	170	30	28	22	4		•	
M35	1,5	170	30	28	22	4		•	
M36	1,5	170	30	28	22	4	•	•	
M36	2	170	30	28	22	4	•	•	
M36	3	200	42	28	22	4	•	•	



**Macho Rosca Métrica - Ciegos**

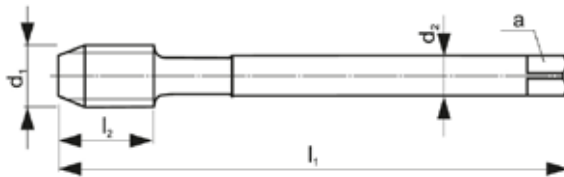
- Mango Reforzado
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma C - 2-3 - RSP40°
- HSSE



Referencia:							100-500	100-500	100-501	100-504
Métrica	P	l1	l2	d2	a	Z		ISO 3 6G	OX	TIALN
M2	0,4	45	6	2,8	2,1	3	•			
M2,5	0,45	50	7,5	2,8	2,1	3	•	•	•	•
M3	0,5	56	5	3,5	2,7	3	•	•	•	•
M4	0,7	63	7	4,5	3,4	3	•	•	•	•
M5	0,8	70	8	6	4,9	3	•	•	•	•
M6	1	80	10	6	4,9	3	•	•	•	•
M8	1,25	90	13	8	6,2	3	•	•	•	•
M10	1,5	100	15	10	8	3		•	•	

**Macho Rosca Métrica - Ciegos**

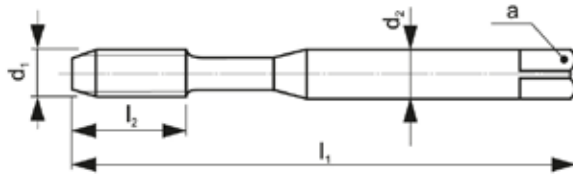
- Mango Fino
- Paso 60°
- DIN 13 - DIN 376
- ISO 2 6H
- Forma C - 2-3 - RSP40°
- HSSE



Referencia:							200-500	200-500	200-501	200-504
Métrica	P	l1	l2	d2	a	Z		ISO 3 6G	OX	TIALN
M3	0,5	56	5	2,2	-	3	•			
M4	0,7	63	7	2,8	2,1	3	•		•	
M5	0,8	70	8	3,5	2,7	3	•		•	
M6	1	80	10	4,5	3,4	3	•		•	
M7	1	80	10	5,5	4,3	3	•		•	
M8	1,25	90	13	6	4,9	3	•		•	
M10	1,5	100	15	7	5,5	3	•		•	
M12	1,75	110	18	9	7	3	•	•	•	•
M14	2	110	20	11	9	3	•	•	•	•
M16	2	110	20	12	9	3	•	•	•	•
M18	2,5	125	25	14	11	4	•		•	•
M20	2,5	140	25	16	12	4	•	•	•	•
M22	2,5	140	25	18	14,5	4	•		•	
M24	3	160	30	18	14,5	4	•		•	
M27	3	160	30	20	16	4	•		•	
M30	3,5	180	35	22	18	4	•		•	
M33	3,5	180	35	25	20	4	•		•	
M36	4	200	40	28	22	4	•		•	

**Macho Rosca Métrica - Ciegos**

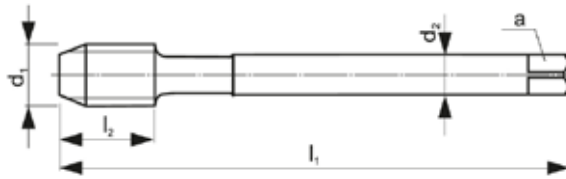
- Mango Reforzado
- Para Aceros 1200N/mm<sup>2</sup>
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma C - 2-3 - RSP 40°
- HSSE



Referencia:							100-521	100-523
Métrica	P	l1	l2	d2	a	Z	OX	TICN
M3	0,5	56	5	3,5	2,7	3	•	•
M4	0,7	63	7	4,5	3,4	3	•	•
M5	0,8	70	8	6	4,9	3	•	•
M6	1	80	10	6	4,9	3	•	•
M8	1,25	90	13	8	6,2	3	•	•
M10	1,5	100	15	10	8	3	•	•

**Macho Rosca Métrica - Ciegos**

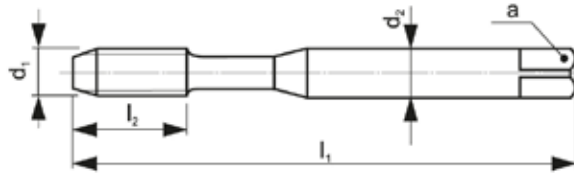
- Mango Fino
- Para Aceros 1200N/mm<sup>2</sup>
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma C - 2-3 - RSP 40°
- HSSE



Referencia:							200-521	200-523
Métrica	P	l1	l2	d2	a	Z	OX	TICN
M3	0,5	56	5	2,2	-	3	OX	TICN
M4	0,7	63	7	2,8	2,1	3	•	•
M5	0,8	70	8	3,5	2,7	3	•	•
M6	1	80	10	4,5	3,4	3	•	•
M8	1,25	90	13	6	4,9	3	•	•
M10	1,5	100	15	7	5,5	3	•	•
M12	1,75	110	18	9	7	4	•	•
M14	2	110	20	11	9	4	•	•
M16	2	110	20	12	9	4	•	•
M18	2,5	125	25	14	11	4	•	•
M20	2,5	140	25	16	12	4	•	•
M22	2,5	140	25	18	14,5	4	•	•
M24	3	160	30	18	14,5	4	•	•
M27	3	160	30	20	16	4	•	•
M30	3,5	180	35	22	18	5	•	•
M30	3,5	180	35	22	18	4	•	•

**Macho Rosca Métrica - Ciegos**

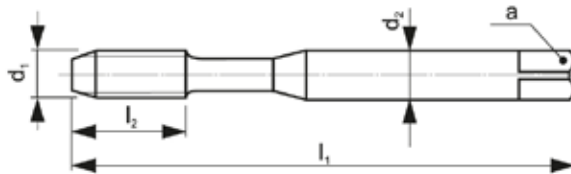
- Mango Reforzado DIN 371 (Serie 100-564 y 100-544)
- Mango Fino DIN 376 (Serie 200-564 y 200-544)
- Para Aceros 1400N/mm<sup>2</sup>
- Paso 60°
- DIN 13 - DIN 371 / 376
- ISO 2 6H
- Forma B - 3.5-6
- PM - Recubrimiento FNT



Referencia:							100-564	100-544	200-564	200-544
Métrica	P	l1	l2	d2	a	Z	FORMA C	FORMA D	FORMA C	FORMA D
M3	0,5	56	5	3,5	2,7	3	•	•		
M4	0,7	63	7	4,5	3,4	3	•	•		
M5	0,8	70	8	6	4,9	3	•	•		
M6	1	80	10	6	4,9	3	•	•		
M8	1,25	90	13	8	6,2	3	•	•		
M10	1,5	100	15	10	8	3	•	•		
M12	1.75	110	23	9	7	3			•	•

**Macho Rosca Métrica - Ciegos - Inoxidables**

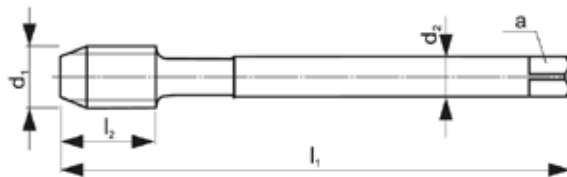
- Mango Reforzado
- Para Inoxidables
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6H
- Forma C - RSP40°
- PM



Referencia:							100-655	100-601	100-603
Métrica	P	l1	l2	d2	a	Z	HL - PM	OX HSSE	TICN HSSE
M3	0,5	56	5	3,5	2,7	3	•	•	•
M4	0,7	63	7	4,5	3,4	3	•	•	•
M5	0,8	70	8	6	4,9	3	•	•	•
M6	1	80	10	6	4,9	3	•	•	•
M8	1,25	90	13	8	6,2	3	•	•	•
M10	1,5	100	15	10	8	3	•	•	•

**Macho Rosca Métrica - Ciegos - Inoxidables**

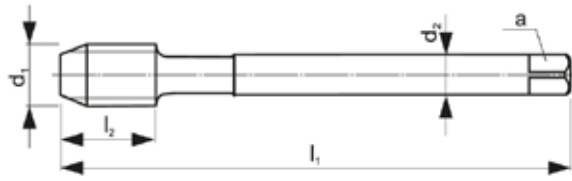
- Mango Fino
- Para Inoxidables
- Paso 60°
- DIN 13 - DIN 376
- ISO 2 6H
- Forma C - 2-3 - RSP40°
- PM



Referencia:							200-655	200-601	200-603
Métrica	P	l1	l2	d2	a	Z	HL - PM	OX HSSE	TICN HSSE
M3	0,5	56	9	3,5	2,7	3		•	
M4	0,7	63	12	4,5	3,4	3		•	
M5	0,8	70	13	6	4,9	3		•	
M6	1	80	15	6	4,9	3		•	
M8	1,25	90	18	8	6,2	3		•	
M10	1,5	100	20	10	8	3		•	
M12	1,75	110	23	9	7	3	•	•	•
M14	2	110	25	11	9	3	•	•	•
M16	2	110	25	12	9	3	•	•	•
M18	2,5	125	30	14	11	3		•	•
M20	2,5	140	30	16	12	3	•	•	•
M22	2,5	140	30	18	14,5	3		•	
M24	3	160	36	18	14,5	4		•	•
M27	3	160	36	20	16	4		•	•
M30	3,5	180	40	22	18	4		•	•

**Macho Rosca Métrica Fina - Ciegos**

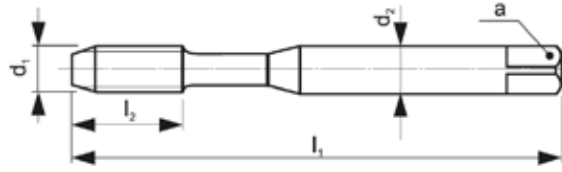
- Mango Fino
- Paso 60°
- DIN 13 - DIN 374
- ISO 2 6H
- Forma C - 2-3 - RSP40°
- HSSE



Referencia:									300-500	
Métrica	P	l1	l2	d2	a	Z				
M4	0,5	63	7	2,8	2,1	3			•	
M5	0,5	70	8	3,5	2,7	3			•	
M6	0,5	80	10	4,5	3,4	3			•	
M6	0,75	80	10	4,5	3,4	3			•	
M7	0,75	80	10	5,5	4,3	3			•	
M8	0,75	80	10	6	4,9	3			•	
M8	1	90	13	6	4,9	3			•	
M9	1	90	13	7	5,5	3			•	
M10	0,75	90	12	7	5,5	3			•	
M10	1	90	12	7	5,5	3			•	
M10	1,25	100	15	7	5,5	3			•	
M11	1	90	12	8	6,2	3			•	
M12	1	100	14	9	7	3			•	
M12	1,25	100	14	9	7	3			•	
M12	1,5	100	14	9	7	3			•	
M14	1	100	16	11	9	3			•	
M14	1,25	100	16	11	9	3			•	
M14	1,5	100	16	11	9	3			•	
M15	1	100	16	12	9	3			•	
M16	1	100	16	12	9	4			•	
M16	1,5	100	16	12	9	4			•	
M18	1	110	20	14	11	4			•	
M18	1,5	110	20	14	11	4			•	
M18	2	125	20	14	11	4			•	
M20	1	125	20	16	12	4			•	
M20	1,5	125	20	16	12	4			•	
M20	2	140	20	16	12	4			•	
M22	1	125	20	18	14,5	4			•	
M22	1,5	125	20	18	14,5	4			•	
M22	2	140	20	18	14,5	4			•	
M24	1	140	22	18	14,5	4			•	
M24	1,5	140	22	18	14,5	4			•	
M24	2	140	22	18	14,5	4			•	
M25	1,5	140	22	18	14,5	4			•	
M26	1,5	140	22	18	14,5	4			•	
M27	1	140	22	20	16	4			•	
M27	1,5	140	22	20	16	4			•	
M27	2	140	22	20	16	4			•	
M28	1,5	140	22	20	16	4			•	
M28	2	140	22	20	16	4			•	
M30	1	150	26	22	18	4			•	
M30	1,5	150	26	22	18	4			•	
M30	2	150	26	22	18	4			•	
M32	1,5	150	26	22	18	4			•	
M33	1,5	160	28	25	20	4			•	
M33	2	160	28	25	20	4			•	
M35	1,5	170	30	28	22	4			•	
M36	1,5	170	28	28	22	4			•	
M36	2	170	28	28	22	4			•	
M36	3	200	36	28	22	4			•	

**Macho Rosca Métrica - CG - Fundición**

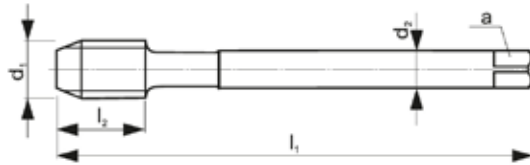
- Mango Reforzado
- Para Fundición
- Paso 60°
- DIN 13 - DIN 371
- ISO 2 6HX
- Forma C - 2-3
- HSSE



Referencia:							100-423	
Métrica	P	l1	l2	d2	a	Z	TICN	
M3	0,5	56	9	3,5	2,7	3	•	
M4	0,7	63	12	4,5	3,4	3	•	
M5	0,8	70	13	6	4,9	3	•	
M6	1	80	15	6	4,9	3	•	
M8	1,25	90	18	8	6,2	4	•	
M10	1,5	100	20	10	8	4	•	

**Macho Rosca Métrica - CG - Fundición**

- Mango FINO
- Para Fundición
- Paso 60°
- DIN 13 - DIN 376
- ISO 2 6HX
- Forma C - 2-3
- HSSE



Referencia:							200-423	
Métrica	P	l1	l2	d2	a	Z	TICN	
M3	0,5	56	9	2,2	-	3	•	
M4	0,7	63	12	2,8	2,1	3	•	
M5	0,8	70	13	3,5	2,7	3	•	
M6	1	80	15	4,5	3,4	3	•	
M8	1,25	90	18	6	4,9	4	•	
M10	1,5	100	20	7	5,5	4	•	
M12	1,75	110	23	9	7	4	•	
M14	2	110	25	11	9	4	•	
M16	2	110	25	12	9	4	•	
M18	2,5	125	30	14	11	4	•	
M20	2,5	140	30	16	12	4	•	
M22	2,5	140	30	18	14,5	4	•	
M24	3	160	36	18	14,5	4	•	
M27	3	160	36	20	16	4	•	
M30	3,5	180	40	22	18	5	•	

**Macho Rosca Métrica - Laminación**

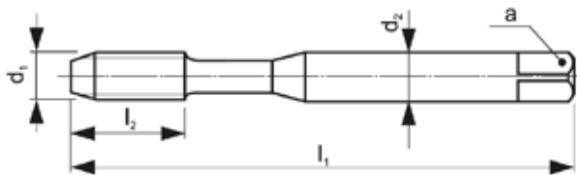
- 60°
- DIN 13- DIN 2174
- ISO 2 6H 6GX
- Forma C - 2-3
- HSSE
- 800-902 (Sin ranuras refrigeración)
- 800-922 (Con ranuras refrigeración)



Referencia:							800-902	800-902	800-922	800-922
Métrica	P	l1	l2	d2	a		ISO 2 6 HX	ISO 3 6GX	ISO 2 6 HX	ISO 3 6GX
M3	0,5	56	11	3,5	2,7		•	•	•	•
M3,5	0,6	56	12	4	3		•	•	•	•
M4	0,7	63	13	4,5	3,4		•	•	•	•
M5	0,8	70	16	6	4,9		•	•	•	•
M6	1	80	19	6	4,9		•	•	•	•
M8	1,25	90	22	8	6,2		•	•	•	•
M10	1,5	100	24	10	8		•	•	•	•
M12	1,75	110	28	9	7		•	•	•	•

**Macho Rosca Métrica Pasante - AL - Aluminio**

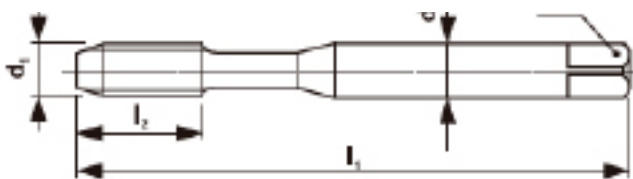
- Mango Reforzado / Fino
- Para Aluminio
- Agujero Pasante
- Paso 60°
- DIN 13 - DIN 371 / 376
- ISO 2 6HX
- Forma B - 3.5-6
- HSSE



Referencia:							100-126	100-306	200-126	200-306
Métrica	P	l1	l2	d2	a		DIN 371	DIN 371	DIN 376	DIN 376
M3	0,5	56	9	3,5	2,7	3	•	•		
M4	0,7	63	12	4,5	3,4	3	•	•		
M5	0,8	70	13	6	4,9	3	•	•		
M6	1	80	15	6	4,9	3	•	•		
M8	1,25	90	18	8	6,2	3	•	•		
M10	1,5	100	20	10	8	3	•	•		
M12	1,75	110	23	9	7	3			•	•
M14	2	110	25	11	9	3			•	•
M16	2	110	25	12	9	3			•	•
M18	2,5	125	30	14	11	3			•	•
M20	2,5	140	30	16	12	3			•	•

**Macho Rosca Métrica Ciego - AL - Aluminio**

- Mango Reforzado / Fino
- Para Aluminio
- Agujero Ciego
- Paso 60°
- DIN 13 - DIN 371 / 376
- RSP40° - RSP45°
- ISO 2 6HX
- Forma C - 2-3
- HSSE

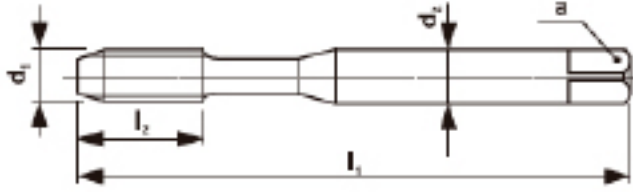


Referencia:							100-526	100-706	200-526	200-706
Métrica	P	l1	l2	d2	a		DIN 371	DIN 371	DIN 376	DIN 376
M3	0,5	56	9	3,5	2,7	3	•	•		
M4	0,7	63	12	4,5	3,4	3	•	•		
M5	0,8	70	13	6	4,9	3	•	•		
M6	1	80	15	6	4,9	3	•	•		
M8	1,25	90	18	8	6,2	3	•	•		
M10	1,5	100	20	10	8	3	•	•		
M12	1,75	110	23	9	7	3			•	•
M14	2	110	25	11	9	3			•	•
M16	2	110	25	12	9	3			•	•
M18	2,5	125	30	14	11	3			•	•
M20	2,5	140	30	16	12	3			•	•



**Macho Rosca Métrica - UNI - Pasante**

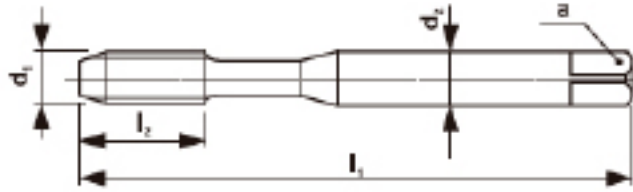
- Uso Universal
- 60°
- DIN 13
- DIN 371 - 376
- ISO 2 6H
- Forma B - 3.5-6
- HSSE
- Recubrimiento TIN



Referencia:							100-272	200-272	
Métrica	P	l1	l2	d2	a		DIN 371	DIN 376	
M3	0,5	56	9	3,5	2,7	3	•		
M4	0,7	63	12	4,5	3,4	3	•		
M5	0,8	70	13	6	4,9	3	•		
M6	1	80	15	6	4,9	3	•		
M8	1,25	90	18	8	6,2	3	•		
M10	1,5	100	20	10	8	3	•		
M12	1,75	110	23	9	7	3		•	
M14	2	110	25	11	9	3		•	
M16	2	110	25	12	9	3		•	
M18	2,5	125	30	14	11	3		•	
M20	2,5	140	30	16	12	3		•	

**Macho Rosca Métrica - UNI - Pasante**

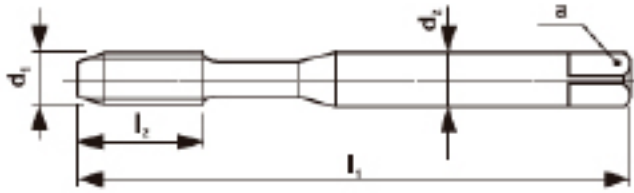
- Uso Universal
- 60°
- DIN 13
- DIN 371 - 376
- ISO 2 6HX / 6GX
- Forma B - 3.5-6
- PM
- Recubrimiento HL



Referencia:							100-295	100-295	200-295	200-295
Métrica	P	l1	l2	d2	a		DIN 371 ISO2 6HX	DIN 371 ISO3 6 GX	DIN 376 ISO2 6HX	DIN 376 ISO3 6GX
M2	0,4	45	8	2,8	2,1	3	•			
M2,5	0,45	50	9	2,8	2,1	3	•			
M3	0,5	56	11	3,5	2,7	3	•	•		
M4	0,7	63	13	4,5	3,4	3	•	•		
M5	0,8	70	16	6	4,9	3	•	•		
M6	1	80	19	6	4,9	3	•	•		
M8	1,25	90	22	8	6,2	3	•	•		
M10	1,5	100	24	10	8	3	•	•		
M12	1,75	110	28	9	7	3			•	•
M14	2	110	30	11	9	4			•	
M16	2	110	32	12	9	4			•	•
M18	2,5	140	34	16	12	4			•	•
M20	3	160	38	18	14,5	3			•	
M27	3	160	38	20	16	4			•	
M30	3,5	180	45	22	18	4			•	

**Macho Rosca Métrica - UNI - Ciego**

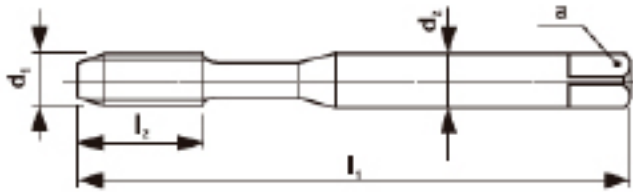
- Uso Universal
- 60°
- DIN 13
- DIN 371 - 376
- ISO 2 6H
- Forma C - 2-3 - RSP35°
- HSSE
- Recubrimiento TIN



Referencia:							100-672	200-672	
Métrica	P	l1	l2	d2	a	Z	DIN 371	DIN 376	
M3	0,5	56	5	3,5	2,7	3	•		
M4	0,7	63	7	4,5	3,4	3	•		
M5	0,8	70	8	6	4,9	3	•		
M6	1	80	10	6	4,9	3	•		
M8	1,25	90	13	8	6,2	3	•		
M10	1,5	100	15	10	8	3	•		
M12	1,75	110	18	9	7	3		•	
M14	2	110	20	11	9	3		•	
M16	2	110	20	12	9	4		•	
M18	2,5	125	25	14	11	4		•	
M20	2,5	140	25	16	12	4		•	

**Macho Rosca Métrica - UNI - Ciego**

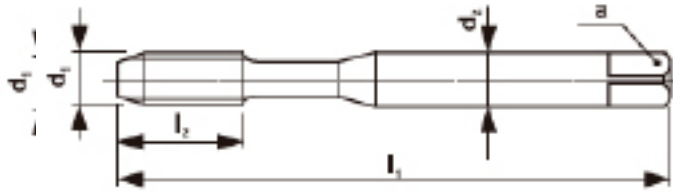
- Uso Universal
- 60°
- DIN 13
- DIN 371 - 376
- ISO 2 6HX / 6GX
- Forma C - 2-3 - RSP50°
- PM
- Recubrimiento HL



Referencia:							100-695	100-695	200-695	200-695
Métrica	P	l1	l2	d2	a	Z	DIN 371 ISO2 6HX	DIN 371 ISO3 6 GX	DIN 376 ISO2 6HX	DIN 376 ISO3 6GX
M2	0,4	45	8	2,8	2,1	3	•			
M2,5	0,45	50	9	2,8	2,1	3	•			
M3	0,5	56	11	3,5	2,7	3	•	•		
M4	0,7	63	13	4,5	3,4	3	•	•		
M5	0,8	70	16	6	4,9	3	•	•		
M6	1	80	19	6	4,9	3	•	•		
M8	1,25	90	22	8	6,2	3	•	•		
M10	1,5	100	24	10	8	3	•	•		
M12	1,75	110	28	9	7	3			•	•
M14	2	110	30	11	9	3			•	
M16	2	110	32	12	9	3			•	•
M18	2,5	140	34	16	12	3			•	•
M20	3	160	38	18	14,5	4			•	
M27	3	160	38	20	16	5			•	
M30	3,5	180	45	22	18	5			•	

**Macho Rosca Gas - Pasante**

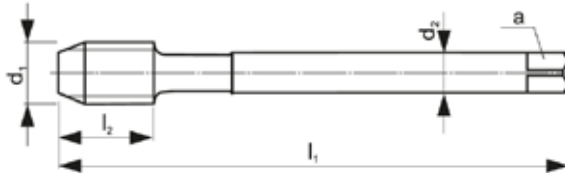
- 55°
- DIN ISO 228
- DIN 5156
- Forma B - 3.5-6
- Forma C - 2-3
- HSSE



Referencia:								203-400	203-100	203-102
G	P	l1	l2	d2	a	Z		FORMA C	FORMA B	FORMA B TIN
G1/8"	28	90	20	7	5,5	3		•	•	•
G1/4"	19	100	21	11	9	3		•	•	•
G3/8"	19	100	21	12	9	3		•	•	•
G1/2"	14	125	24	16	12	3		•	•	•
G5/8"	14	125	24	18	14,5	4		•	•	•
G3/4"	14	140	26	20	16	4		•	•	•
G7/8"	14	150	28	22	18	4		•	•	•
G1"	11	160	30	25	20	4		•	•	•
G1 1/8"	11	170	30	28	22	4		•	•	•
G1 1/4"	11	170	30	32	24	4		•	•	•
G1 3/8"	11	180	32	36	29	4		•	•	
G1 1/2"	11	190	32	36	29	6		•	•	•
G1 3/4"	11	190	32	40	32	6		•	•	
G2"	11	220	40	45	35	6		•	•	•

**Macho Rosca Gas - Pasante**

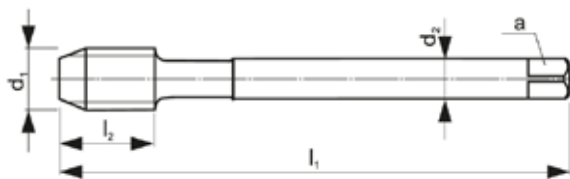
- Para Inoxidables
- 55°
- DIN ISO 228
- DIN 5156
- Forma B - 3.5-6
- HSSE



Referencia:								203-201	203-202	
G	P	l1	l2	d2	a	Z		OX	TIN	
G1/8"	28	90	20	7	5,5	3		•	•	
G1/4"	19	100	21	11	9	3		•	•	
G3/8"	19	100	21	12	9	3		•	•	
G1/2"	14	125	24	16	12	3		•	•	
G5/8"	14	125	24	18	14,5	4		•	•	
G3/4"	14	140	26	20	16	4		•	•	
G7/8"	14	150	28	22	18	4		•	•	
G1"	11	160	30	25	20	4		•	•	
G1 1/8"	11	170	30	28	22	4		•	•	
G1 1/4"	11	170	30	32	24	4		•	•	
G1 3/8"	11	180	32	36	29	4		•	•	
G1 1/2"	11	190	32	36	29	6		•	•	

**Macho Rosca Gas - Ciego**

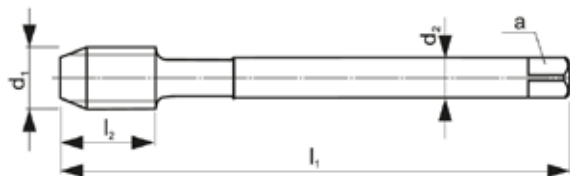
- 55°
- DIN ISO 228
- DIN 5156
- Forma C - 2-3
- HSSE



Referencia:							203-500	203-502
G	P	l1	l2	d2	a	Z		TIN
G1/8"	28	90	20	7	5,5	3	•	•
G1/4"	19	100	21	11	9	3	•	•
G3/8"	19	100	21	12	9	3	•	•
G1/2"	14	125	24	16	12	3	•	•
G5/8"	14	125	24	18	14,5	4	•	•
G3/4"	14	140	26	20	16	4	•	•
G7/8"	14	150	28	22	18	4	•	•
G1"	11	160	30	25	20	4	•	•
G1 1/8"	11	170	30	28	22	4	•	•
G1 1/4"	11	170	30	32	24	4	•	•
G1 1/2"	11	190	32	36	29	6	•	•

**Macho Rosca Gas - Ciego - INOX**

- 55°
- DIN ISO 228
- DIN 5156
- Forma C - 2-3
- RSP 35°
- HSSE



Referencia:							203-601	203-602
G	P	l1	l2	d2	a	Z	OX	TIN
G1/8"	28	90	20	7	5,5	3	•	•
G1/4"	19	100	21	11	9	3	•	•
G3/8"	19	100	21	12	9	3	•	•
G1/2"	14	125	24	16	12	3	•	•
G5/8"	14	125	24	18	14,5	4	•	•
G3/4"	14	140	26	20	16	4	•	•
G7/8"	14	150	28	22	18	4	•	•
G1"	11	160	30	25	20	4	•	•
G1 1/8"	11	170	30	28	22	4	•	•
G1 1/4"	11	170	30	32	24	4	•	•
G1 1/2"	11	190	32	36	29	6	•	•

## Macho Rosca UNC

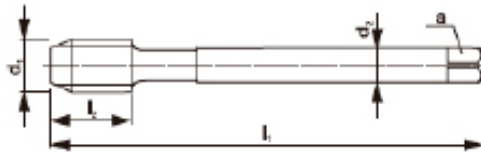
- 60°
- DIN 371
- ISO 2B
- Forma C 2-3
- HSSE



Referencia:								101-400	101-100	101-500
UNC	P	l1	l2	l2 RSP35°	d2	a	Z	FORMA C	FORMA B	FORMA C RSP 35°
UNC5	40	56	9	5	3,5	2,7	3	•	•	•
UNC6	32	56	11	7	4	3	3	•	•	•
UNC8	32	63	12	7	4,5	3,4	3	•	•	•
UNC10	24	70	13	8	6	4,9	3	•	•	•
UNC12	24	80	15	10	6	4,9	3	•	•	•
UNC1/4	20	80	15	10	7	5,5	3	•	•	•
UNC5/16	18	90	18	13	8	6,2	3	•	•	•
UNC3/8	16	90	20	15	9	7	3	•	•	•

## Macho Rosca UNC

- 60°
- DIN 13
- DIN 376
- ISO 2B
- Forma B - 3.5-6
- HSSE



Referencia:							201-400	201-100	201-500
UNC	P	l1	l2	d2	a	Z RSP35°	FORMA C	FORMA B	RSP 35°
UNC7/16	14	100	20	8	6,2	3/3	•	•	•
UNC1/2	13	110	23	9	7	3/3	•	•	•
UNC9/16	12	110	25	11	9	3/3	•	•	•
UNC5/8	11	110	25	12	9	3/3	•	•	•
UNC3/4	10	125	30	14	11	3/4	•	•	•
UNC7/8	9	140	30	18	14,5	3/4	•	•	•
UNC1	8	160	36	18	14,5	3/4	•	•	•
UNC1 1/8	7	180	40	22	18	4/-	•	•	•

## Macho Rosca UNF

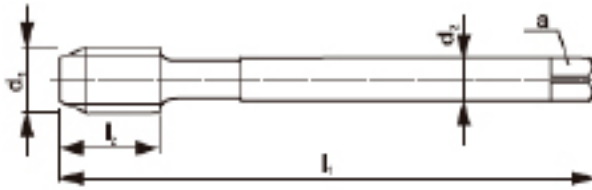
- 60°
- DIN 13
- DIN 374
- ISO 2B
- Forma C - 2-3
- HSSE



Referencia:							302-400	302-100	302-500
UNF	P	l1	l2	d2	a	Z RSP35°	FORMA C	FORMA B	RSP 35°
UNF5	44	56	9	2,2	-	3/3	•	•	•
UNF6	40	56	11	2,5	2,1	3/3	•	•	•
UNF8	36	63	12	2,8	2,1	3/3	•	•	•
UNF10	32	70	13	3,5	2,7	3/3	•	•	•
UNF12	28	80	15	4	3	3/3	•	•	•
UNF1/4	28	80	15	4,5	3,4	3/3	•	•	•
UNF5/16	24	90	18	6	4,9	3/3	•	•	•
UNF3/8	24	90	20	7	5,5	3/3	•	•	•
UNF7/16	20	100	20	8	6,2	3/3	•	•	•
UNF1/2	20	100	21	9	7	3/3	•	•	•
UNF9/16	18	100	21	11	9	3/3	•	•	•
UNF5/8	18	100	21	12	9	3/3	•	•	•
UNF3/4	16	110	24	14	11	3/4	•	•	•
UNF7/8	14	125	24	18	14,5	3/4	•	•	•
UNF1	12	140	26	18	14,5	3/4	•	•	•

**Macho Rosca NPT**

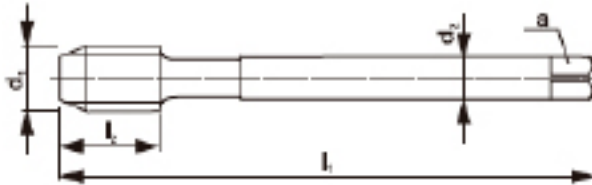
- Norma Especial
- 1:16
- Forma C 2-3
- 60°
- HSSE



Referencia:							704-400	
NTP	P	l1	l2	d2	a	Z	FORMA C	
NPT1/8	27	65	15	7	5,5	4	•	
NPT1/4	18	70	22	11	9	4	•	
NPT3/8	18	75	23	12	9	4	•	
NPT1/2	14	80	30	16	12	4	•	
NPT3/1	14	100	31	20	16	4	•	
NPT1	11,5	110	36	25	20	4	•	
NPT1 1/4	11,5	125	36	32	24	4	•	
NPT1 1/2	11,5	140	36	36	29	6	•	
NPT2	11,5	160	36,5	36	29	6	•	

**Macho Rosca PG**

- 80°
- DIN 40 433
- Forma C - 2-3
- HSSE



Referencia:							705-400	
PG	P	l1	l2	d2	a	Z	FORMA C	
PG7	20	70	22	9	7	4	•	
PG9	18	70	22	12	9	4	•	
PG11	18	80	22	14	11	4	•	
PG13,5	18	80	22	16	12	4	•	
PG16	18	80	22	18	14,5	4	•	
PG21	16	90	22	22	18	4	•	
PG29	16	100	25	28	22	4	•	

**Set de Machos Rosca Mano Métrica - INOX**

- Uso Inoxidables
- 60°
- Forma C - 2-3
- Recubrimiento OX



Referencia:							400-091	
Métrica	P	l1	l2	d2	a	Z	OX	
M3	0,5	40	9	3,5	2,7	3	•	
M4	0,7	45	12	4,5	3,4	3	•	
M5	0,8	50	13	6	4,9	3	•	
M6	1	56	15	6	4,9	3	•	
M8	1,25	63	18	6	4,9	3	•	
M10	1,5	70	20	7	5,5	3	•	
M12	1,75	75	23	9	7	3	•	
M14	2	80	25	11	9	4	•	
M16	2	80	25	12	9	4	•	
M18	2,5	95	30	14	11	4	•	
M20	2,5	95	30	16	12	4	•	



**Set Machos Rosca Mano Métrica**

- 60°
- DIN 13
- DIN 352
- ISO 2 6H
- Forma C - 2-3
- HSS



Referencia:							400-070
Métrica	P	l1	l2	d2	a	Z	
M3	0,5	40	9	3,5	2,7	3	•
M3,5	0,6	45	11	4	3	3	•
M4	0,7	45	12	4,5	3,4	3	•
M4,5	0,75	50	13	6	4,9	3	•
M5	0,8	50	13	6	4,9	3	•
M6	1	56	15	6	4,9	3	•
M7	1	56	15	6	4,9	3	•
M8	1,25	63	18	6	4,9	3	•
M9	1,25	63	18	7	5,5	3	•
M10	1,5	70	20	7	5,5	3	•
M11	1,5	70	20	8	6,2	3	•
M12	1,75	75	23	9	7	3	•
M14	2	80	25	11	9	4	•
M16	2	80	25	12	9	4	•
M18	2,5	95	30	14	11	4	•
M20	2,5	95	30	16	12	4	•
M22	2,5	100	30	18	14,5	4	•
M24	3	110	34	18	14,5	4	•
M27	3	110	34	20	16	4	•
M30	3,5	125	40	22	18	4	•
M33	3,5	125	40	25	20	4	•
M36	4	150	50	28	22	4	•
M39	4	150	50	32	24	4	•
M42	4,5	150	56	32	24	4	•
M45	4,5	160	58	36	29	6	•
M48	5	180	65	36	29	6	•
M52	5	180	65	40	32	6	•

**Set Machos Rosca Mano Métrica Fina**

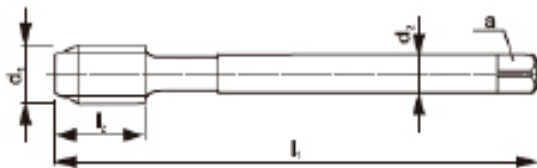
- 60°
- DIN 13
- DIN 2181 - ISO 2 6H
- Forma C - 2-3
- HSS



Referencia:							400-080
Métrica	P	l1	l2	d2	a	Z	
M4,5	0,5	50	10	6	4,9	3	•
M5,5	0,5	56	11	6	4,9	3	•
M5	0,5	50	10	6	4,9	3	•
M6	0,75	56	11	6	4,9	3	•
M6	0,5	56	11	6	4,9	3	•
M7	0,75	56	11	6	4,9	3	•
M8	1	63	18	6	4,9	3	•
M8	0,75	56	14	6	4,9	3	•
M8	0,5	56	14	6	4,9	3	•
M9	1	63	18	7	5,5	3	•
M9	0,75	56	14	7	5,5	3	•

**Set Machos Rosca Mano Métrica Fina**

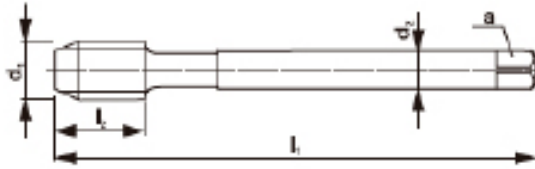
- 60°
- DIN 13
- DIN 2181
- ISO 2 6H
- Forma C - 2-3
- HSS



Referencia:							400-080
Métrica	P	l1	l2	d2	a	Z	
M10	1,25	70	20	7	5,5	3	•
M10	1	63	18	7	5,5	3	•
M10	0,75	63	18	7	5,5	3	•
M11	1	63	18	8	6,2	3	•
M12	1,5	70	20	9	7	3	•
M12	1,25	70	20	9	7	3	•
M12	1	70	18	9	7	3	•
M13	1	70	18	11	9	3	•
M14	1,5	70	20	11	9	4	•
M14	1,25	70	20	11	9	4	•
M14	1	70	18	11	9	4	•
M15	1,5	70	20	12	9	4	•
M15	1	70	18	12	9	4	•
M16	1,5	70	20	12	9	4	•
M16	1	70	18	12	9	4	•
M17	1	70	18	12	9	4	•
M18	2	80	22	14	11	4	•
M18	1,5	80	22	14	11	4	•
M18	1	80	18	14	11	4	•
M20	2	80	22	16	12	4	•
M20	1,5	80	22	16	12	4	•
M20	1	80	18	16	12	4	•
M22	2	80	22	18	14,5	4	•
M22	1,5	80	22	18	14,5	4	•
M22	1	80	18	18	14,5	4	•
M24	2	90	22	18	14,5	4	•
M24	1,5	90	22	18	14,5	4	•
M24	1	90	18	18	14,5	4	•
M25	1,5	90	22	18	14,5	4	•
M26	1,5	90	22	18	14,5	4	•
M27	2	90	22	20	16	4	•
M27	1,5	90	22	20	16	4	•
M27	1	90	18	20	16	4	•
M28	2	90	22	20	16	4	•
M28	1,5	90	22	20	16	4	•
M30	2	90	22	22	18	4	•
M30	1,5	90	22	22	18	4	•
M30	1	90	18	22	18	4	•
M32	1,5	90	22	22	18	4	•
M33	2	100	25	25	20	4	•
M33	1,5	100	25	25	20	4	•
M34	1,5	100	25	28	22	4	•
M35	1,5	100	25	28	22	4	•

**Set Machos Rosca Mano Métrica Fina**

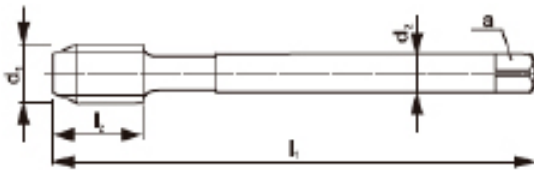
- 60°
- DIN 13
- DIN 2181 - ISO 2 6H
- Forma C - 2-3
- HSS



Referencia:							400-080
Métrica	P	l1	l2	d2	a	Z	
M36	3	125	36	28	22	4	•
M36	2	125	30	28	22	4	•
M36	1,5	100	25	28	22	4	•
M38	1,5	100	25	28	22	4	•
M39	3	125	36	32	24	4	•
M39	2	125	30	32	24	4	•
M39	1,5	110	25	32	24	4	•
M40	3	125	36	32	24	4	•
M40	2	125	30	32	24	4	•
M40	1,5	110	25	32	24	4	•
M42	3	125	36	32	24	4	•
M42	2	125	30	32	24	4	•
M42	1,5	110	25	32	24	4	•
M45	3	125	36	36	29	6	•
M45	2	125	30	36	29	6	•
M45	1,5	110	25	36	29	6	•
M48	3	140	36	36	29	6	•
M48	2	140	30	36	29	6	•
M48	1,5	140	25	36	29	6	•
M50	3	140	36	36	29	6	•
M50	2	140	30	36	29	6	•
M50	1,5	140	25	36	29	6	•
M52	3	140	40	40	32	6	•
M52	2	140	32	40	32	6	•
M52	1,5	140	25	40	32	6	•

**Set Machos Rosca Mano - GAS (G)**

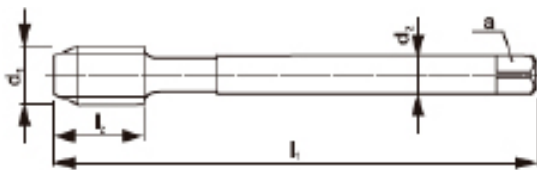
- 55°
- DIN ISO 228
- DIN 5157
- Forma C - 2-3
- HSS



Referencia:							403-080
G	P	l1	l2	d2	a	Z	
G1/8"	28	63	18	7	5,5	3	•
G1/4"	19	70	20	11	9	3	•
G3/8"	19	70	20	12	9	3	•
G1/2"	14	80	22	16	12	3	•
G5/8"	14	80	22	18	14,5	4	•
G3/4"	14	90	22	20	16	4	•
G7/8"	14	90	22	22	18	4	•
G1"	11	100	25	25	20	4	•
G1 1/8"	11	125	30	28	22	4	•
G1 1/4"	11	125	30	32	24	4	•
G1 1/2"	11	140	30	36	29	6	•
G1 3/4"	11	140	32	40	32	6	•
G2"	11	160	36	45	35	6	•

**Set Machos Rosca Mano - UNC**

- 60°
- DIN 352
- ISO 2B
- Forma C - 2-3
- HSS



Referencia:							401-070
UNC	P	l1	l2	d2	a	Z	
UNC5	40	40	10	3,5	2,7	3	•
UNC6	32	45	11	4	3	3	•
UNC8	32	45	12	4,5	3,4	3	•
UNC10	24	50	14	6	4,9	3	•
UNC12	24	56	16	6	4,9	3	•
UNC1/4	20	56	16	6	4,9	3	•
UNC5/16	18	63	20	6	4,9	3	•
UNC3/8	16	70	22	7	5,5	3	•
UNC7/16	14	70	22	8	6,2	3	•
UNC1/2	13	75	25	9	7	3	•
UNC9/16	12	80	26	11	9	3	•
UNC5/8	11	80	27	12	9	3	•
UNC3/4	10	95	32	14	11	4	•
UNC7/8	9	100	32	18	14,5	4	•
UNC1	8	110	36	18	14,5	4	•

**Set Machos Rosca Mano - UNF**

- 60°
- DIN 2121
- ISO 2B
- Forma C - 2-3
- HSS



Referencia:							402-080
UNF	P	l1	l2	d2	a	Z	
UNF5	44	40	10	3,5	2,7	3	•
UNF6	40	45	11	4	3	3	•
UNF8	36	45	12	4,5	3,4	3	•
UNF10	32	50	14	6	4,9	3	•
UNF12	28	56	16	6	4,9	3	•
UNF1/4	28	56	16	6	4,9	3	•
UNF5/16	24	63	18	6	4,9	3	•
UNF3/8	24	63	18	7	5,5	3	•
UNF7/16	20	70	20	8	6,2	3	•
UNF1/2	20	70	20	9	7	3	•
UNF9/16	18	70	20	11	9	3	•
UNF5/8	18	70	20	12	9	3	•
UNF3/4	16	80	22	14	11	4	•
UNF7/8	14	80	22	18	14,5	4	•
UNF1	12	80	22	18	14,5	4	•

**Terrajas de Rosca - Métrica**

- 60°
- DIN 13
- DIN EN 22 568
- ISO 6g
- HSS

Referencia				090-010
Métrica	P	d	e	
M2	0,4	16	5	•
M2,5	0,45	16	5	•
M3	0,5	20	5	•
M4	0,7	20	5	•
M5	0,8	20	7	•
M6	1	20	7	•
M6	0,75	20	7	•
M7	1	25	9	•
M8	1,25	25	9	•
M8	1	25	9	•
M8	0,75	25	9	•
M9	1,25	25	9	•
M10	1,5	30	11	•
M10	1,25	30	11	•
M10	1	30	11	•
M11	1,5	30	11	•
M12	1,75	38	14	•
M12	1,5	38	10	•
M12	1,25	38	10	•
M12	1	38	10	•
M14	2	38	14	•
M14	1,5	38	10	•
M14	1,25	38	10	•
M14	1	38	10	•



Referencia				090-010
Métrica	P	d	e	
M16	2	45	18	•
M16	1,5	45	14	•
M16	1	45	14	•
M18	2,5	45	18	•
M18	2	45	14	•
M18	1,5	45	14	•
M20	2,5	45	18	•
M20	1,5	45	14	•
M20	1	45	14	•
M22	2,5	55	22	•
M22	2	55	16	•
M22	1,5	55	16	•
M22	1	55	16	•
M24	3	55	22	•
M24	2	55	16	•
M24	1,5	55	16	•
M24	1	55	16	•
M27	3	65	25	•
M30	3,5	65	25	•
M33	3,5	65	25	•
M36	4	65	25	•

**Terrajas de Rosca - Gas (G)**

- 55°
- DIN ISO 228
- DIN EN 24 231
- Tipo A
- Paso 1.5
- HSS



Referencia				093-010
G	P	d	e	
G1/8"	28	30	11	•
G1/4"	19	38	10	•
G3/8"	19	45	14	•
G1/2"	14	45	14	•
G5/8"	14	55	16	•
G3/4"	14	55	16	•
G1"	11	65	18	•
G1 1/8"	11	75	20	•
G1 1/4"	11	75	20	•
G1 1/2"	11	90	22	•

### Fluido de Corte - NX

Revolucionario aceite de corte que proporciona hasta un 400% mas de vida en las herramientas. Un aceite de corte que ha sido desarrollado para y con los talleres de mecanizado para obtener el máximo rendimiento del aceite y de la herramienta ya que busca los siguientes objetivos en su uso diario.

- Aumento de la vida de las herramientas
- Menor esfuerzo de las máquinas al trabajar
- Menor emisión de humos o vapores
- Mejor acabado de los trabajos
- Anticorrosivo
- Eliminación de olores al mecanizar
- Ahorro de costes debido a su mejor aprovechamiento.



Referencia	Características
CGM-NX	5 Litros/Kg

### Aceite de mantenimiento WD-40

- Aceite universal WD-40
- Abrillanta
- Lubrica
- Protege
- Aloja
- Desplaza la humedad



Referencia	Características
WD750083	Spray 400ml



### LUBRICANTES Y REFRIGERANTES PROFESIONALES

#### MECUTOIL 100 PRO

CONCENTRADO DE LUBRICANTE DE REFRIGERACIÓN DE ALTO RENDIMIENTO. SIN SILICONA con un bajo contenido de aceite mineral. Mecutoil 100 PRO es un lubricante de refrigeración universal, mezclable con agua, con un porcentaje de aceite mineral del 20 % para el mecanizado general y para el suministro interno de refrigerante. Principalmente para sistemas de refrigeración con una presión de refrigerante de >20 bares así como cortes de alto rendimiento (HPC) o el mecanizado de alta presión con suministro interno de refrigerante 80, pero también para sistemas de refrigeración con una presión de refrigerante de <20 bares. ¡Debe ser revuelto en el agua!

**Propiedades:**

- Mezclable en agua
- Para cortes de alto rendimiento (HPC), el mecanizado de alta presión >20 bar
- ¡No es una sustancia peligrosa! (sin etiqueta)! Por lo cual, no es un material peligroso para las leyes de tráfico.
- Libre de nitrito y cloro!
- No contiene metales pesados
- Protección contra el óxido
- Factor del refractómetro: 1,8



Referencia	Características
K60120025	25 Litros
K60120010	10 Litros

#### MECUTOIL 100

CONCENTRADO DE LUBRICANTE DE REFRIGERACIÓN DE ALTO RENDIMIENTO. SIN SILICONA con un alto contenido de aceite mineral MECUTOIL 100 es un excelente lubricante de refrigeración universal de alto rendimiento, mezclable con agua, con un contenido de aceite mineral del 60%. No está etiquetado y es adecuado para el mecanizado general y el suministro de refrigerante interno, principalmente para sistemas de refrigeración con una presión refrigerante de <20 bares. No es adecuado para sistemas de refrigeración con una presión refrigerante de >20 bares. ¡Debe ser revuelto en agua!

**Propiedades:**

- Mezclable en agua
- Ideal para los sistemas de refrigeración convencionales con refrigeración por inmersión
- ¡No es una sustancia peligrosa (no está etiquetada)! Por lo cual, no es un material peligroso para las leyes de tráfico.
- Libre de nitrito y cloro
- No contiene metales pesados
- Protección contra el óxido
- Factor del refractómetro: 1.0



Referencia	Características
K60110010	10 Litros
K6011005	5 Litros
K60110025	2.5 Litros



## MECUT-MMKS-MQL - ACERO/ALUMINIO/COBRE

ACEITE DE CORTE DE ALTO RENDIMIENTO BIOLÓGICO Y ACEITE LUBRICANTE EN CANTIDADES MÍNIMAS PARA EL CORTE DE METALES PESADOS Y EL MECANIZADO SIN CORTE. Aceite de base elaborado con productos vegetales (aceites de coco y colza). Respetuoso con el medio ambiente. Sin cloro.  
**Uso:** Ideal para corte, fresado, taladrado, torneado, pulido y roscado. También apto para mecanizado sin arranque de viruta, como laminado, embutición profunda, trefilado y doblado de tubos.

Referencia	Características
K601154	10 Litros
K601153	5 Litros
K601150	500ml (Spray)
K601151	500ml (Bote)



## MECUT-MMKS-MQL - ACERO/ALUMINIO/COBRE

LUBRICANTE DE CANTIDAD MÍNIMA DE ALTO RENDIMIENTO SIN ACEITES MINERALES, PARA MECANIZADO SEMIDURO CON Y SIN ARRANQUE DE VIRUTA. SE QUITA CON AGUA. Sin aceites minerales. **Se quita con agua.** Sin cloruros de hidrógeno volátiles. **Uso:** Ideal para corte, fresado, taladrado, torneado, pulido y roscado. También apto para mecanizado sin arranque de viruta, como laminado, embutición profunda, trefilado y doblado de tubos.

Referencia	Características
K601163	10 Litros
K601162	5 Litros
K601152	500ml (Spray Espuma)
K601164	500ml (Bote)



## MECUT-MMKS-MQL - UNIVERSAL

NUESTRO ACEITE DE CORTE DE BAJO PRECIO Y LUBRICANTE A CANTIDAD MÍNIMA DE ACEITE PARA APLICACIONES DE CORTE DE METALES PESADOS Aceite a base de productos vegetales (aceite de coco, aceite de colza). Ecológico. Sin cloro.

Referencia	Características
K601261	25 Litros
K601263	10 Litros
K601262	5 Litros
K601264	500ml (Bote)



## PASTA DE CORTE UNIVERSAL

PASTA DE CORTE UNIVERSAL SIN CLORO. SIN SILICONA

- La pasta se adhiere a la herramienta
- Sin goteo ni inyecciones
- Ideal para trabajar en espacios reducidos como "el uso por encima" y en máquinas sin sistema de refrigeración.

Referencia	Características
K601159	Lata 125gr
K601157	Lata 750gr



## TUBO LÁPIZ DE LUBRICACIÓN ALTO RENDIMIENTO

Sin silicona

- La cera se adhiere a la herramienta
- Sin goteo ni inyecciones
- Ideal para trabajar en espacios reducidos como "el uso por encima" y en máquinas sin sistema de refrigeración.

Referencia	Características
K601200	Bote 350gr



## MECUT-MMKS-MQL - ACERO/ALUMINIO/COBRE

DESENGRASANTE DE METALES Y LIMPIADOR CONCENTRADO ANTICORROSIVO

**Uso:**

- Para desengrasar o limpiar metales como preparación para el barnizado y el recubrimiento en polvo.
- Disuelve a la perfección aceites anticorrosivos, grasas y ceras, tanto sintéticas como naturales.
- Se puede emplear en métodos de pulverización, inmersión y con pincel, en frío o en caliente.
- Ideal también para instalaciones de limpieza ultrasónicas.

**Notas de uso:**

Según la suciedad, recomendamos diluirlo:

Suciedad intensa (p. ej., grasa de laminación, aceites anticorrosivos o aceites sintéticos) = 1:5 - 1:10

Suciedad media = 1:10 - 1:20

Suciedad baja = 1:20 - 1:40

Al utilizar limpiadores de alta presión (hasta 90°),

la fuerza de limpieza se multiplica por cinco debido a las sustancias detergentes.

Después del tiempo de actuación, que depende del nivel de contaminación, la suciedad disuelta se puede eliminar aplicando o pulverizando agua. Según el grado de suciedad, utilizar concentrado o diluido hasta 40 veces. Después de la aplicación, dejar que actúe y, en caso necesario, retirar con un paño y pulverizar con un chorro de agua intenso.

**Propiedades:**

- Limpiador con disolvente considerablemente suave para la piel
- Anticorrosivo (tras la limpieza, impide la corrosión inmediata).
- Los agentes tensioactivos son biodegradables conforme al Reglamento de la CE.
- Producto rentable gracias a su alta capacidad de dilución.
- Desemulsionante y apto para la separación de aceite.
- No está sujeto al Reglamento sobre COV.



Referencia	Características
K601161	10 Litros
K601160	5 Litros

## ACEITE CORTE ALTA CALIDAD BAER

Aceite de alta calidad BAER 1000 ml para corte de roscas y conformado

Nuestro aceite de corte de alto rendimiento en la práctica botella de 1 litro se ha desarrollado especialmente para operaciones de mecanizado como taladrado, fresado, roscado, torneado, fresado de roscas, escariado, fresado, perforación con corona y serrado. Está especialmente indicado para aceros duros y de alta aleación, así como para materiales difíciles o extremadamente difíciles de mecanizar.

El aceite de corte se compone de sustancias activas polares que evitan eficazmente que los picos de rugosidad se suelden entre la pieza de trabajo y la herramienta, lo que permite alcanzar una precisión y calidad constantes en los resultados del trabajo. Es adecuado para una amplia gama de materiales.

Entre ellos se encuentran la fundición gris, el acero, el acero inoxidable, el aluminio, los metales no férricos e incluso los plásticos.

BAER High Performance Cutting Oil es un lubricante universal sintético a base de aceite de éster, que se caracteriza por una formación de niebla extremadamente baja. Utilice el aceite puro por pulverización, inmersión o cepillado y experimente la mejora del rendimiento de sus herramientas.

Beneficiarse de la versatilidad y la calidad del aceite de corte de alto rendimiento BAER para obtener el máximo rendimiento, eficacia y precisión en su trabajo.

**Características:**

- Color: marrón, transparente
- Viscosidad a 40 °C 2,8 mm<sup>2</sup>/s
- Densidad a 20 °C 0,89 g/mm<sup>3</sup>
- Punto de inflamación: aprox. 196 °C
- Contenido de aceite mineral 80%v



Referencia	Características
B-OEL	1 Litro

## PASTA CORTE BAER

Nuestra pasta de corte de alto rendimiento en el práctico envase de 100 ml se caracteriza por aditivos de presión especialmente alta que consiguen un rendimiento de lubricación muy elevado. La pasta se adhiere firmemente a los filos de corte y sólo se vuelve líquida durante el uso. Para obtener resultados óptimos, la pasta de corte debe aplicarse sin diluir. La pasta de corte BAER es ideal para muchas operaciones de mecanizado, como taladrado, roscado, roscado, fresado, perforación con corona y aserrado.

Es adecuada para todo tipo de aceros: desde hierro y acero para herramientas hasta aceros de alta aleación y aleaciones de cromo-níquel, pasando por aluminio, titanio, manganeso, acero fundido, fundición gris, latón, bronce y todos los aceros inoxidables V2A, V4A, INOX, etc. Gracias a su formulación respetuosa con el medio ambiente, sin petróleo, sin cloro y sin azufre, la pasta de corte de alto rendimiento BAER no sólo ofrece una mayor vida útil de la herramienta, sino que además no deja ninguna película grasa de aceite en las piezas de trabajo. Experimente la diferencia con la pasta de corte de alto rendimiento BAER: calidad y rendimiento que le ayudarán a que sus procesos de mecanizado sean más eficientes y económicos.

Porque la clave de unos resultados excelentes a menudo también reside en una lubricación adecuada.



Referencia	Características
B-SP5000	500ml

**Macho Métrica Fina - Pasante B | Derecha / Izquierda**

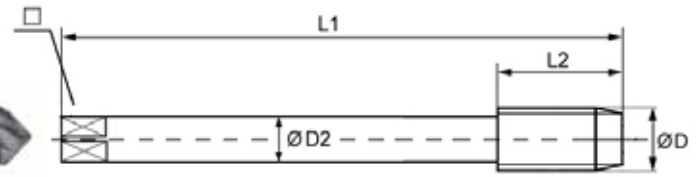
- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma B - 4-5



MF	D	D1	H	D2	□	DERECHA	IZQUIERDA
MF 25 x 1,0	25,0	18,0	140	28	14,5	B-120401052	B-120402052
MF 25 x 1,5	25,0	18,0	140	28	14,5	B-120401053	B-120402053
MF 26 x 1,0	26,0	18,0	140	28	14,5	B-120401054	B-120402054
MF 26 x 1,5	26,0	18,0	140	28	14,5	B-120401055	B-120402055
MF 26 x 2,0	26,0	18,0	140	28	14,5	B-120401056	B-120402056
MF 27 x 1,0	27,0	20,0	140	28	16,0	B-120401057	B-120402057
MF 27 x 1,5	27,0	20,0	140	28	16,0	B-120401058	B-120402058
MF 27 x 2,0	27,0	20,0	140	28	16,0	B-120401059	B-120402059
MF 28 x 1,0	28,0	20,0	140	28	16,0	B-120401060	B-120402060
MF 28 x 1,5	28,0	20,0	140	28	16,0	B-120401061	B-120402061
MF 28 x 2,0	28,0	20,0	140	28	16,0	B-120401062	B-120402062
MF 29 x 1,5	29,0	22,0	150	28	18,0	B-120401063	B-120402063
MF 30 x 1,0	30,0	22,0	150	28	18,0	B-120401064	B-120402064
MF 30 x 1,5	30,0	22,0	150	28	18,0	B-120401065	B-120402065
MF 30 x 2,0	30,0	22,0	150	28	18,0	B-120401066	B-120402066
MF 30 x 2,5	30,0	22,0	180	45	18,0	B-120401067	B-120402067
MF 30 x 3,0	30,0	22,0	180	45	18,0	B-120401068	B-120402068
MF 32 x 1,5	32,0	22,0	150	28	18,0	B-120401069	B-120402069
MF 32 x 2,0	32,0	22,0	150	28	18,0	B-120401070	B-120402070
MF 32 x 3,0	32,0	22,0	180	50	18,0	B-120401071	B-120402071
MF 33 x 1,5	33,0	25,0	160	30	20,0	B-120401072	B-120402072
MF 33 x 2,0	33,0	25,0	160	30	20,0	B-120401073	B-120402073
MF 33 x 3,0	33,0	25,0	180	50	20,0	B-120401074	B-120402074
MF 34 x 1,5	34,0	28,0	170	30	22,0	B-120401075	B-120402075
MF 34 x 2,0	34,0	28,0	170	30	22,0	B-120401076	B-120402076
MF 35 x 1,5	35,0	28,0	170	30	22,0	B-120401077	B-120402077
MF 36 x 1,5	36,0	28,0	170	30	22,0	B-120401078	B-120402078
MF 36 x 2,0	36,0	28,0	170	30	22,0	B-120401079	B-120402079
MF 36 x 3,0	36,0	28,0	200	56	22,0	B-120401080	B-120402080
MF 38 x 1,5	38,0	28,0	170	30	22,0	B-120401081	B-120402081
MF 39 x 1,5	39,0	32,0	170	30	24,0	B-120401082	B-120402082
MF 39 x 2,0	39,0	32,0	170	30	24,0	B-120401083	B-120402083
MF 39 x 3,0	39,0	32,0	200	60	24,0	B-120401084	B-120402084
MF 40 x 1,5	40,0	32,0	170	30	24,0	B-120401085	B-120402085
MF 40 x 2,0	40,0	32,0	170	30	24,0	B-120401086	B-120402086
MF 40 x 3,0	40,0	32,0	200	60	24,0	B-120401087	B-120402087
MF 42 x 1,5	42,0	32,0	170	30	24,0	B-120401088	B-120402088
MF 42 x 2,0	42,0	32,0	170	30	24,0	B-120401089	B-120402089
MF 42 x 3,0	42,0	32,0	200	60	24,0	B-120401090	B-120402090
MF 45 x 1,5	45,0	36,0	180	32	29,0	B-120401091	B-120402091
MF 45 x 2,0	45,0	36,0	180	32	29,0	B-120401092	B-120402092
MF 45 x 3,0	45,0	36,0	200	50	29,0	B-120401093	B-120402093
MF 48 x 1,5	48,0	36,0	190	32	29,0	B-120401094	B-120402094
MF 48 x 2,0	48,0	36,0	190	32	29,0	B-120401095	B-120402095
MF 48 x 3,0	48,0	36,0	225	50	29,0	B-120401096	B-120402096
MF 50 x 1,5	50,0	36,0	190	32	29,0	B-120401097	B-120402097
MF 50 x 2,0	50,0	36,0	190	32	29,0	B-120401098	B-120402098
MF 50 x 3,0	50,0	36,0	225	50	29,0	B-120401099	B-120402099
MF 52 x 1,5	52,0	40,0	190	32	32,0	B-120401100	B-120402100
MF 52 x 2,0	52,0	40,0	190	32	32,0	B-120401101	B-120402101
MF 52 x 3,0	52,0	40,0	225	50	32,0	B-120401102	B-120402102
MF 63 x 1,5	63,0	50,0	275	50	39,0	B-120401103	-

**Macho Métrica Fina - Ciego C | Derecha / Izquierda**

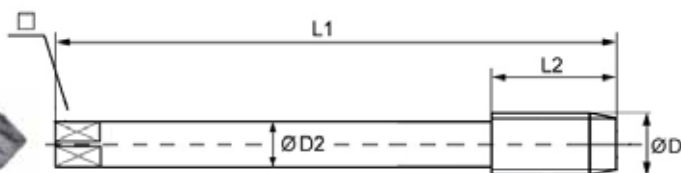
- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma C - 35° - 2-3



MF	D	D1	H	D2	□	DERECHA	IZQUIERDA
MF 3 x 0,35	3,0	2,2	56	5	-	B-120601001	B-120602001
MF 4 x 0,35	4,0	2,8	63	5	2,1	B-120601002	B-120602002
MF 4 x 0,5	4,0	2,8	63	5	2,1	B-120601003	B-120602003
MF 5 x 0,5	5,0	3,5	70	5	2,7	B-120601004	B-120602004
MF 5 x 0,75	5,0	3,5	70	8	2,7	B-120601005	B-120602005
MF 6 x 0,5	6,0	4,5	80	5	3,4	B-120601006	B-120602006
MF 6 x 0,75	6,0	4,5	80	8	3,4	B-120601007	B-120602007
MF 7 x 0,75	7,0	5,5	80	8	4,3	B-120601008	B-120602008
MF 8 x 0,5	8,0	6,0	80	8	4,9	B-120601009	B-120602009
MF 8 x 0,75	8,0	6,0	80	8	4,9	B-120601010	B-120602010
MF 8 x 1,0	8,0	6,0	90	10	4,9	B-120601011	B-120602011
MF 9 x 0,75	9,0	7,0	80	10	5,5	B-120601012	B-120602012
MF 9 x 1,0	9,0	7,0	90	10	5,5	B-120601013	B-120602013
MF 10 x 0,75	10,0	7,0	90	10	5,5	B-120601014	B-120602014
MF 10 x 1,0	10,0	7,0	90	10	5,5	B-120601015	B-120602015
MF 10 x 1,25	10,0	7,0	100	16	5,5	B-120601016	B-120602016
MF 11 x 1,0	11,0	8,0	90	11	6,2	B-120601017	B-120602017
MF 11 x 1,25	11,0	8,0	90	14	6,2	B-120601018	B-120602018
MF 12 x 0,75	12,0	9,0	100	10	7,0	B-120601019	B-120602019
MF 12 x 1,0	12,0	9,0	100	11	7,0	B-120601020	B-120602020
MF 12 x 1,25	12,0	9,0	100	15	7,0	B-120601021	B-120602021
MF 12 x 1,5	12,0	9,0	100	15	7,0	B-120601022	B-120602022
MF 13 x 1,0	13,0	11,0	100	11	9,0	B-120601023	B-120602023
MF 13 x 1,5	13,0	11,0	100	15	9,0	B-120601024	B-120602024
MF 14 x 0,75	14,0	11,0	100	10	9,0	B-120601025	B-120602025
MF 14 x 1,0	14,0	11,0	100	11	9,0	B-120601026	B-120602026
MF 14 x 1,25	14,0	11,0	100	15	9,0	B-120601027	B-120602027
MF 14 x 1,5	14,0	11,0	100	15	9,0	B-120601028	B-120602028
MF 15 x 1,0	15,0	12,0	100	12	9,0	B-120601029	B-120602029
MF 15 x 1,5	15,0	12,0	100	15	9,0	B-120601030	B-120602030
MF 16 x 1,0	16,0	12,0	100	12	9,0	B-120601031	B-120602031
MF 16 x 1,25	16,0	12,0	100	15	9,0	B-120601032	B-120602032
MF 16 x 1,5	16,0	12,0	100	15	9,0	B-120601033	B-120602033
MF 18 x 1,0	18,0	14,0	110	13	11,0	B-120601034	B-120602034
MF 18 x 1,25	18,0	14,0	110	15	11,0	B-120601035	B-120602035
MF 18 x 1,5	18,0	14,0	110	17	11,0	B-120601036	B-120602036
MF 18 x 2,0	18,0	14,0	125	20	11,0	B-120601037	B-120602037
MF 20 x 1,0	20,0	16,0	125	14	12,0	B-120601038	B-120602038
MF 20 x 1,25	20,0	16,0	125	17	12,0	B-120601039	B-120602039
MF 20 x 1,5	20,0	16,0	125	17	12,0	B-120601040	B-120602040
MF 20 x 2,0	20,0	16,0	140	20	12,0	B-120601041	B-120602041
MF 21 x 1,5	21,0	16,0	125	17	12,0	B-120601042	B-120602042
MF 22 x 1,0	22,0	18,0	125	14	14,5	B-120601043	B-120602043
MF 22 x 1,25	22,0	18,0	125	17	14,5	B-120601044	B-120602044
MF 22 x 1,5	22,0	18,0	125	17	14,5	B-120601045	B-120602045
MF 22 x 2,0	22,0	18,0	140	20	14,5	B-120601046	B-120602046
MF 23 x 1,5	23,0	18,0	125	17	14,5	B-120601047	B-120602047
MF 24 x 1,0	24,0	18,0	140	15	14,5	B-120601048	B-120602048
MF 24 x 1,25	24,0	18,0	140	17	14,5	B-120601049	B-120602049
MF 24 x 1,5	24,0	18,0	140	20	14,5	B-120601050	B-120602050
MF 24 x 2,0	24,0	18,0	140	20	14,5	B-120601051	B-120602051

**Macho Métrica Fina - Ciego C | Derecha / Izquierda**

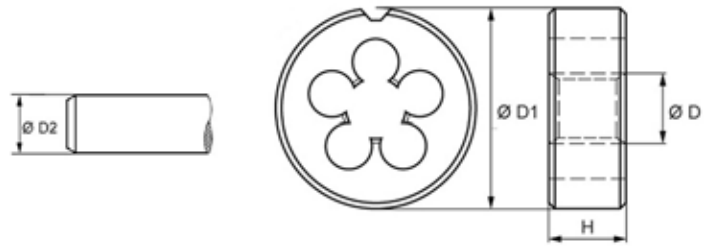
- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma C - 35° - 2-3



MF	D	D1	H	D2	□	DERECHA	IZQUIERDA
MF 25 x 1,0	25,0	18,0	140	15	14,5	B-120601052	B-120602052
MF 25 x 1,5	25,0	18,0	140	20	14,5	B-120601053	B-120602053
MF 26 x 1,0	26,0	18,0	140	15	14,5	B-120601054	B-120602054
MF 26 x 1,5	26,0	18,0	140	20	14,5	B-120601055	B-120602055
MF 26 x 2,0	26,0	18,0	140	20	14,5	B-120601056	B-120602056
MF 27 x 1,0	27,0	20,0	140	15	16,0	B-120601057	B-120602057
MF 27 x 1,5	27,0	20,0	140	20	16,0	B-120601058	B-120602058
MF 27 x 2,0	27,0	20,0	140	20	16,0	B-120601059	B-120602059
MF 28 x 1,0	28,0	20,0	140	15	16,0	B-120601060	B-120602060
MF 28 x 1,5	28,0	20,0	140	20	16,0	B-120601061	B-120602061
MF 28 x 2,0	28,0	20,0	140	20	16,0	B-120601062	B-120602062
MF 29 x 1,5	29,0	22,0	150	22	18,0	B-120601063	B-120602063
MF 30 x 1,0	30,0	22,0	150	17	18,0	B-120601064	B-120602064
MF 30 x 1,5	30,0	22,0	150	22	18,0	B-120601065	B-120602065
MF 30 x 2,0	30,0	22,0	150	22	18,0	B-120601066	B-120602066
MF 30 x 2,5	30,0	22,0	180	27	18,0	B-120601067	B-120602067
MF 30 x 3,0	30,0	22,0	180	30	18,0	B-120601068	B-120602068
MF 32 x 1,5	32,0	22,0	150	22	18,0	B-120601069	B-120602069
MF 32 x 2,0	32,0	22,0	150	22	18,0	B-120601070	B-120602070
MF 32 x 3,0	32,0	22,0	180	30	18,0	B-120601071	B-120602071
MF 33 x 1,5	33,0	25,0	160	24	20,0	B-120601072	B-120602072
MF 33 x 2,0	33,0	25,0	160	24	20,0	B-120601073	B-120602073
MF 33 x 3,0	33,0	25,0	180	30	20,0	B-120601074	B-120602074
MF 34 x 1,5	34,0	28,0	170	24	22,0	B-120601075	B-120602075
MF 34 x 2,0	34,0	28,0	170	24	22,0	B-120601076	B-120602076
MF 35 x 1,5	35,0	28,0	170	24	22,0	B-120601077	B-120602077
MF 36 x 1,5	36,0	28,0	170	24	22,0	B-120601078	B-120602078
MF 36 x 2,0	36,0	28,0	170	24	22,0	B-120601079	B-120602079
MF 36 x 3,0	36,0	28,0	200	30	22,0	B-120601080	B-120602080
MF 38 x 1,5	38,0	28,0	170	24	22,0	B-120601081	B-120602081
MF 39 x 1,5	39,0	32,0	170	25	24,0	B-120601082	B-120602082
MF 39 x 2,0	39,0	32,0	170	25	24,0	B-120601083	B-120602083
MF 39 x 3,0	39,0	32,0	200	30	24,0	B-120601084	B-120602084
MF 40 x 1,5	40,0	32,0	170	25	24,0	B-120601085	B-120602085
MF 40 x 2,0	40,0	32,0	170	25	24,0	B-120601086	B-120602086
MF 40 x 3,0	40,0	32,0	200	30	24,0	B-120601087	B-120602087
MF 42 x 1,5	42,0	32,0	170	25	24,0	B-120601088	B-120602088
MF 42 x 2,0	42,0	32,0	170	25	24,0	B-120601089	B-120602089
MF 42 x 3,0	42,0	32,0	200	30	24,0	B-120601090	B-120602090
MF 45 x 1,5	45,0	36,0	180	27	29,0	B-120601091	B-120602091
MF 45 x 2,0	45,0	36,0	180	27	29,0	B-120601092	B-120602092
MF 45 x 3,0	45,0	36,0	200	30	29,0	B-120601093	B-120602093
MF 48 x 1,5	48,0	36,0	190	27	29,0	B-120601094	B-120602094
MF 48 x 2,0	48,0	36,0	190	27	29,0	B-120601095	B-120602095
MF 48 x 3,0	48,0	36,0	225	33	29,0	B-120601096	B-120602096
MF 50 x 1,5	50,0	36,0	190	27	29,0	B-120601097	B-120602097
MF 50 x 2,0	50,0	36,0	190	27	29,0	B-120601098	B-120602098
MF 50 x 3,0	50,0	36,0	225	33	29,0	B-120601099	B-120602099
MF 52 x 1,5	52,0	40,0	190	27	32,0	B-120601100	B-120602100
MF 52 x 2,0	52,0	40,0	190	27	32,0	B-120601101	B-120602101
MF 52 x 3,0	52,0	40,0	225	33	32,0	B-120601102	B-120602102
MF 63 x 1,5	63,0	50,0	275	40	39,0	B-120601103	-

**Terraja Métrica | Derecha / Izquierda**

- DIN 13
- ISO 2 - 6 g
- HSSE



M	D	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
M 1 x 0,25	1,0	16	5	0,96	B-111401001	
M 1,1 x 0,25	1,1	16	5	1,05	B-111401002	
M 1,2 x 0,25	1,2	16	5	1,15	B-111401003	
M 1,4 x 0,3	1,4	16	5	1,36	B-111401004	
M 1,6 x 0,35	1,6	16	5	1,55	B-111401005	
M 1,7 x 0,35	1,7	16	5	1,64	B-111401006	
M 1,8 x 0,35	1,8	16	5	1,75	B-111401007	
M 2 x 0,4	2,0	16	5	1,95	B-111401008	B-111402001
M 2,2 x 0,45	2,2	16	5	2,15	B-111401009	
M 2,3 x 0,4	2,3	16	5	2,23	B-111401010	
M 2,5 x 0,45	2,5	16	5	2,42	B-111401011	
M 2,6 x 0,45	2,6	16	5	2,53	B-111401012	
M 3 x 0,5	3,0	20	5	2,92	B-111401013	B-111402002
M 3,5 x 0,6	3,5	20	5	3,41	B-111401014	
M 4 x 0,7	4,0	20	5	3,90	B-111401015	B-111402003
M 4,5 x 0,75	4,5	20	7	4,40	B-111401016	
M 5 x 0,8	5,0	20	7	4,90	B-111401017	B-111402004
M 5 x 0,9	5,0	20	7	4,89	B-111401018	
M 5,5 x 0,9	5,5	20	7	5,44	B-111401019	
M 6 x 1,0	6,0	20	7	5,88	B-111401020	B-111402005
M 7 x 1,0	7,0	25	9	6,88	B-111401021	
M 8 x 1,25	8,0	25	9	7,86	B-111401022	B-111402006
M 9 x 1,25	9,0	25	9	8,86	B-111401023	
M 10 x 1,5	10,0	30	11	9,85	B-111401024	B-111402007
M 11 x 1,5	11,0	30	11	10,85	B-111401025	
M 12 x 1,75	12,0	38	14	11,83	B-111401026	B-111402008
M 14 x 2,0	14,0	38	14	13,82	B-111401027	B-111402009
M 15 x 2,0	15,0	38	14	14,91	B-111401028	
M 16 x 2,0	16,0	45	18	15,82	B-111401029	B-111402010
M 18 x 2,5	18,0	45	18	17,79	B-111401030	B-111402011
M 19 x 2,5	19,0	45	18	18,89	B-111401031	
M 20 x 2,5	20,0	45	18	19,79	B-111401032	B-111402012
M 22 x 2,5	22,0	55	22	21,79	B-111402033	B-111402013
M 24 x 3,0	24,0	55	22	23,76	B-111401034	B-111402014
M 27 x 3,0	27,0	65	25	26,76	B-111401035	B-111402015
M 30 x 3,5	30,0	65	25	29,73	B-111401036	B-111402016
M 33 x 3,5	33,0	65	25	32,73	B-111401037	B-111402017
M 36 x 4,0	36,0	65	25	35,70	B-111401038	B-111402018
M 39 x 4,0	39,0	75	30	38,70	B-111401039	B-111402019
M 42 x 4,5	42,0	75	30	41,68	B-111401040	B-111402020
M 45 x 4,5	45,0	90	36	44,68	B-111401041	B-111402021
M 48 x 5,0	48,0	90	36	47,66	B-111401042	B-111402022
M 52 x 5,0	52,0	90	36	51,66	B-111401043	B-111402023
M 56 x 5,5	56,0	105	36	55,65	B-111401044	
M 60 x 5,5	60,0	105	36	59,65	B-111401045	
M 64 x 6,0	64,0	120	36	63,62	B-111401046	
M 68 x 6,0	68,0	120	36	67,62	B-111401047	



**Terraja Métrica Fina | Derecha / Izquierda**

MF	D	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
MF 2,5 x 0,35	2,5	16	5	2,44	B-121401001	
MF 2,6 x 0,35	2,6	16	5	2,54	B-121401002	
MF 3 x 0,35	3,0	20	5	2,94	B-121401003	
MF 3,5 x 0,35	3,5	20	5	3,44	B-121401004	
MF 4 x 0,35	4,0	20	5	3,94	B-121401005	
MF 4 x 0,5	4,0	20	5	3,93	B-121401006	
MF 4,5 x 0,5	4,5	20	5	4,43	B-121401007	
MF 5 x 0,5	5,0	20	5	4,93	B-121401008	
MF 5 x 0,75	5,0	20	5	4,91	B-121401010	
MF 5,5 x 0,5	5,5	20	7	5,43	B-121401009	
MF 6 x 0,5	6,0	20	5	5,93	B-121401011	
MF 6 x 0,75	6,0	20	5	5,90	B-121401012	B-121402001
MF 7 x 0,5	7,0	25	7	6,93	B-121401013	
MF 7 x 0,75	7,0	25	9	6,90	B-121401014	
MF 8 x 0,5	8,0	25	9	7,93	B-121401015	
MF 8 x 0,75	8,0	25	9	7,90	B-121401016	B-121402002
MF 8 x 1,0	8,0	25	9	7,83	B-121401017	B-121402003
MF 9 x 0,5	9,0	25	9	8,93	B-121401018	
MF 9 x 0,75	9,0	25	9	8,90	B-121401019	
MF 9 x 1,0	9,0	25	9	8,88	B-121401020	
MF 10 x 0,5	10,0	30	9	9,93	B-121401021	
MF 10 x 0,75	10,0	30	11	9,90	B-121401022	
MF 10 x 1,0	10,0	30	11	9,88	B-121401023	B-121402004
MF 10 x 1,25	10,0	30	11	9,86	B-121401024	B-121402005
MF 11 x 1,0	11,0	30	11	10,88	B-121401025	
MF 11 x 1,25	11,0	30	11	10,86	B-121401026	
MF 12 x 0,5	12,0	38	11	11,93	B-121401027	
MF 12 x 0,75	12,0	38	10	11,90	B-121401028	
MF 12 x 1,0	12,0	38	10	11,88	B-121401029	B-121402006
MF 12 x 1,25	12,0	38	10	11,86	B-121401030	B-121402007
MF 12 x 1,5	12,0	38	10	11,85	B-121401031	B-121402008
MF 13 x 0,5	13,0	38	10	12,93	B-121401032	
MF 13 x 1,0	13,0	38	10	12,88	B-121401033	
MF 13 x 1,5	13,0	38	10	12,85	B-121401034	
MF 14 x 0,5	14,0	38	10	13,93	B-121401035	
MF 14 x 0,75	14,0	38	10	13,90	B-121401036	
MF 14 x 1,0	14,0	38	10	13,88	B-121401037	
MF 14 x 1,25	14,0	38	10	13,86	B-121401038	B-121402009
MF 14 x 1,5	14,0	38	10	13,85	B-121401039	B-121402010
MF 15 x 0,75	15,0	38	10	14,90	B-121401040	
MF 15 x 1,0	15,0	38	10	14,88	B-121401041	
MF 15 x 1,5	15,0	38	10	14,85	B-121401042	
MF 16 x 0,5	16,0	45	14	15,93	B-121401043	
MF 16 x 0,75	16,0	45	14	15,90	B-121401044	
MF 16 x 1,0	16,0	45	14	15,88	B-121401045	B-121402011
MF 16 x 1,25	16,0	45	14	15,86	B-121401046	
MF 16 x 1,5	16,0	45	14	15,85	B-121401047	B-121402012
MF 17 x 1,0	17,0	45	14	16,88	B-121401048	
MF 17 x 1,5	17,0	45	14	16,85	B-121401049	
MF 18 x 0,5	18,0	45	14	17,93	B-121401050	
MF 18 x 0,75	18,0	45	14	17,90	B-121401051	
MF 18 x 1,0	18,0	45	14	17,88	B-121401052	
MF 18 x 1,25	18,0	45	14	17,86	B-121401053	
MF 18 x 1,5	18,0	45	14	17,85	B-121401054	B-121402013
MF 18 x 2,0	18,0	45	14	17,82	B-121401055	
MF 19 x 1,0	19,0	45	14	18,88	B-121401056	
MF 19 x 1,5	19,0	45	14	18,85	B-121401057	

## Terraaja Métrica Fina | Derecha / Izquierda

MF	D	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
MF 20 x 0,5	20,0	45	14	19,93	B-121401058	
MF 20 x 0,75	20,0	45	14	19,90	B-121401059	
MF 20 x 1,0	20,0	45	14	19,88	B-121401060	
MF 20 x 1,25	20,0	45	14	19,86	B-121401061	
MF 20 x 1,5	20,0	45	14	19,85	B-121401062	B-121402014
MF 20 x 2,0	20,0	45	14	19,82	B-121401063	
MF 21 x 1,0	21,0	45	14	20,88	B-121401064	
MF 21 x 1,5	21,0	45	14	20,85	B-121401065	
MF 22 x 0,5	22,0	55	16	21,93	B-121401066	
MF 22 x 0,75	22,0	55	16	21,90	B-121401067	
MF 22 x 1,0	22,0	55	16	21,88	B-121401068	
MF 22 x 1,25	22,0	55	16	21,86	B-121401069	
MF 22 x 1,5	22,0	55	16	21,85	B-121401070	B-121402015
MF 22 x 2,0	22,0	55	16	21,82	B-121401071	
MF 23 x 1,0	23,0	55	16	22,88	B-121401072	
MF 23 x 1,5	23,0	55	16	22,85	B-121401073	
MF 24 x 0,5	24,0	55	16	23,93	B-121401074	
MF 24 x 0,75	24,0	55	16	23,90	B-121401075	
MF 24 x 1,0	24,0	55	16	23,88	B-121401076	
MF 24 x 1,25	24,0	55	16	23,86	B-121401077	
MF 24 x 1,5	24,0	55	16	23,85	B-121401078	B-121402016
MF 24 x 2,0	24,0	55	16	22,82	B-121401079	B-121402017
MF 25 x 1,0	25,0	55	16	24,88	B-121401080	
MF 25 x 1,5	25,0	55	16	24,85	B-121401081	
MF 26 x 1,0	26,0	55	16	25,88	B-121401082	
MF 26 x 1,5	26,0	55	16	25,85	B-121401083	
MF 26 x 2,0	26,0	55	16	25,82	B-121401084	
MF 27 x 1,0	27,0	65	18	26,88	B-121401085	
MF 27 x 1,5	27,0	65	18	26,85	B-121401086	
MF 27 x 2,0	27,0	65	18	26,82	B-121401087	
MF 28 x 1,0	28,0	65	18	27,88	B-121401088	
MF 28 x 1,5	28,0	65	18	27,85	B-121401089	
MF 28 x 2,0	28,0	65	18	27,82	B-121401090	
MF 29 x 1,5	29,0	65	18	28,85	B-121401091	
MF 30 x 1,0	30,0	65	18	29,88	B-121401092	
MF 30 x 1,5	30,0	65	18	29,85	B-121401093	
MF 30 x 2,0	30,0	65	18	29,82	B-121401094	B-121402018
MF 30 x 2,5	30,0	65	18	29,79	B-121401095	B-121402019
MF 30 x 3,0	30,0	65	25	29,76	B-121401096	B-121402020
MF 32 x 1,0	32,0	65	18	31,88	B-121401098	B-121402021
MF 32 x 1,5	32,0	65	18	31,85	B-121401097	B-121402022
MF 32 x 2,0	32,0	65	18	31,82	B-121401099	B-121402023
MF 32 x 3,0	32,0	65	25	31,77	B-121401100	
MF 33 x 1,5	33,0	65	18	32,85	B-121401101	
MF 33 x 2,0	33,0	65	18	32,82	B-121401102	
MF 33 x 3,0	33,0	65	25	32,76	B-121401103	
MF 34 x 1,0	34,0	65	18	33,88	B-121401104	
MF 34 x 1,5	34,0	65	18	33,85	B-121401105	
MF 34 x 2,0	34,0	65	18	33,82	B-121401106	
MF 35 x 1,0	35,0	65	18	34,88	B-121401107	
MF 35 x 1,5	35,0	65	18	34,85	B-121401108	
MF 35 x 2,0	35,0	65	18	34,82	B-121401109	
MF 36 x 1,0	36,0	65	18	35,88	B-121401110	
MF 36 x 1,5	36,0	65	18	35,85	B-121401111	
MF 36 x 2,0	36,0	65	18	35,82	B-121401112	
MF 36 x 3,0	36,0	65	25	35,76	B-121401113	
MF 37 x 1,5	37,0	65	18	36,85	B-121401114	

**Terraja Métrica Fina | Derecha**

MF	D	D1	H	D2	TERRAJA
MF 38 x 1,0	38,0	75	20	37,88	B-121401115
MF 38 x 1,5	38,0	75	20	37,85	B-121401116
MF 38 x 2,0	38,0	75	20	37,82	B-121401117
MF 38 x 3,0	38,0	75	30	37,77	B-121401118
MF 39 x 1,5	39,0	75	20	38,85	B-121401119
MF 39 x 2,0	39,0	75	20	38,82	B-121401120
MF 39 x 3,0	39,0	75	30	38,76	B-121401121
MF 40 x 1,0	40,0	75	20	39,88	B-121401122
MF 40 x 1,5	40,0	75	20	39,85	B-121401123
MF 40 x 2,0	40,0	75	20	39,82	B-121401124
MF 40 x 3,0	40,0	75	30	39,76	B-121401125
MF 42 x 1,0	42,0	75	20	41,88	B-121401126
MF 42 x 1,5	42,0	75	20	41,85	B-121401127
MF 42 x 2,0	42,0	75	20	41,82	B-121401128
MF 42 x 3,0	42,0	75	30	41,76	B-121401129
MF 44 x 1,5	44,0	90	22	43,85	B-121401130
MF 44 x 2,0	44,0	90	22	43,82	B-121401131
MF 45 x 1,0	45,0	90	22	44,88	B-121401132
MF 45 x 1,5	45,0	90	22	44,85	B-121401133
MF 45 x 2,0	45,0	90	22	44,82	B-121401134
MF 45 x 3,0	45,0	90	36	44,76	B-121401135
MF 46 x 1,5	46,0	90	22	45,85	B-121401136
MF 48 x 1,0	48,0	90	22	47,88	B-121401137
MF 48 x 1,5	48,0	90	22	47,85	B-121401138
MF 48 x 2,0	48,0	90	22	47,82	B-121401139
MF 48 x 3,0	48,0	90	36	47,46	B-121401140
MF 50 x 1,5	50,0	90	22	49,85	B-121401141
MF 50 x 2,0	50,0	90	22	49,82	B-121401142
MF 50 x 3,0	50,0	90	36	49,76	B-121401143
MF 52 x 1,5	52,0	90	22	51,85	B-121401144
MF 52 x 2,0	52,0	90	22	51,82	B-121401145
MF 52 x 3,0	52,0	90	36	51,76	B-121401146
MF 54 x 1,5	54,0	105	22	53,92	B-121401147
MF 54 x 2,0	54,0	105	22	53,91	B-121401148
MF 54 x 3,0	54,0	105	36	53,88	B-121401149
MF 54 x 4,0	54,0	105	36	53,85	B-121401150
MF 55 x 1,5	55,0	105	22	54,85	B-121401151
MF 55 x 2,0	55,0	105	22	54,82	B-121401152
MF 55 x 3,0	55,0	105	36	54,76	B-121401153
MF 55 x 4,0	55,0	105	36	54,73	B-121401154
MF 56 x 1,5	56,0	105	22	55,85	B-121401155
MF 56 x 2,0	56,0	105	22	55,82	B-121401156
MF 56 x 3,0	56,0	105	36	55,76	B-121401157
MF 56 x 4,0	56,0	105	36	55,73	B-121401158
MF 58 x 1,5	58,0	105	22	57,92	B-121401159
MF 58 x 2,0	58,0	105	22	57,91	B-121401160
MF 58 x 3,0	58,0	105	36	57,88	B-121401161
MF 58 x 4,0	58,0	105	36	57,85	B-121401162
MF 60 x 1,5	60,0	105	22	59,92	B-121401163
MF 60 x 2,0	60,0	105	22	59,91	B-121401164
MF 60 x 3,0	60,0	105	36	59,88	B-121401165
MF 60 x 4,0	60,0	105	36	59,85	B-121401166
MF 62 x 1,5	62,0	105	22	61,92	B-121401167
MF 62 x 2,0	62,0	105	22	61,91	B-121401168
MF 62 x 3,0	62,0	105	36	61,88	B-121401169
MF 62 x 4,0	62,0	105	36	61,85	B-121401170
MF 63 x 1,5	63,0	105	22	62,92	B-121401171
MF 64 x 1,5	64,0	120	22	63,92	B-121401172

MF	D	D1	H	D2	TERRAJA
MF 64 x 2,0	64,0	120	22	63,91	B-121401173
MF 64 x 3,0	64,0	120	36	63,88	B-121401174
MF 64 x 4,0	64,0	120	36	63,85	B-121401175
MF 65 x 1,5	65,0	120	22	64,92	B-121401176
MF 65 x 2,0	65,0	120	22	64,91	B-121401177
MF 65 x 3,0	65,0	120	36	64,88	B-121401178
MF 65 x 4,0	65,0	120	36	64,85	B-121401179
MF 68 x 1,5	68,0	120	22	67,92	B-121401180
MF 68 x 2,0	68,0	120	22	67,91	B-121401181
MF 68 x 3,0	68,0	120	36	67,88	B-121401182
MF 68 x 4,0	68,0	120	36	67,85	B-121401183
MF 70 x 1,5	70,0	120	22	69,92	B-121401184
MF 70 x 2,0	70,0	120	22	69,91	B-121401185
MF 70 x 3,0	70,0	120	36	69,88	B-121401186
MF 70 x 4,0	70,0	120	36	69,85	B-121401187
MF 72 x 1,5	72,0	120	22	71,92	B-121401188
MF 72 x 2,0	72,0	120	22	71,91	B-121401189
MF 72 x 3,0	72,0	120	36	71,88	B-121401190
MF 72 x 4,0	72,0	120	36	71,85	B-121401191
MF 74 x 1,5	74,0	120	22	73,92	B-121401192
MF 74 x 2,0	74,0	120	22	73,91	B-121401193
MF 74 x 3,0	74,0	120	36	73,88	B-121401194
MF 74 x 4,0	74,0	120	36	73,85	B-121401195
MF 75 x 1,5	75,0	120	22	74,92	B-121401196
MF 75 x 2,0	75,0	120	22	74,91	B-121401197
MF 75 x 3,0	75,0	120	36	74,88	B-121401198
MF 75 x 4,0	75,0	120	36	74,85	B-121401199
MF 76 x 1,5	76,0	120	22	75,92	B-121401200
MF 76 x 2,0	76,0	120	22	75,91	B-121401201
MF 76 x 3,0	76,0	120	36	75,88	B-121401202
MF 76 x 4,0	76,0	120	36	75,85	B-121401203
MF 78 x 1,5	78,0	120	22	77,92	B-121401204
MF 78 x 2,0	78,0	120	22	77,91	B-121401205
MF 78 x 3,0	78,0	120	36	77,88	B-121401206
MF 78 x 4,0	78,0	120	36	77,85	B-121401207
MF 80 x 1,5	80,0	120	22	79,92	B-121401208
MF 80 x 2,0	80,0	120	22	79,91	B-121401209
MF 80 x 3,0	80,0	120	36	79,88	B-121401210
MF 80 x 4,0	80,0	120	36	79,85	B-121401211
MF 82 x 1,5	82,0	130	25	81,92	B-121401212
MF 82 x 2,0	82,0	130	25	81,91	B-121401213
MF 82 x 3,0	82,0	130	36	81,88	B-12140B-1214
MF 82 x 4,0	82,0	130	36	81,85	B-121401215
MF 84 x 1,5	84,0	130	25	83,92	B-121401216
MF 84 x 2,0	84,0	130	25	83,91	B-121401217
MF 84 x 3,0	84,0	130	36	83,88	B-121401218
MF 84 x 4,0	84,0	130	36	83,85	B-121401219
MF 85 x 1,5	85,0	130	25	84,92	B-121401220
MF 85 x 2,0	85,0	130	25	84,91	B-121401221
MF 85 x 3,0	85,0	130	36	84,88	B-121401222
MF 85 x 4,0	85,0	130	36	84,85	B-121401223
MF 86 x 1,5	86,0	140	22	85,92	B-121401224
MF 86 x 2,0	86,0	140	22	85,91	B-121401225
MF 86 x 3,0	86,0	140	22	85,88	B-121401226
MF 86 x 4,0	86,0	140	22	85,85	B-121401227
MF 88 x 1,5	88,0	140	22	87,92	B-121401228
MF 88 x 2,0	88,0	140	22	87,91	B-121401229
MF 88 x 3,0	88,0	140	22	87,88	B-121401230
MF 88 x 4,0	88,0	140	22	87,85	B-121401231

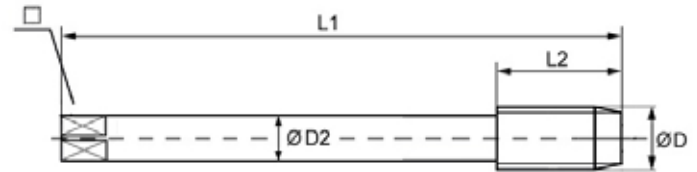
**Terraja Métrica Fina | Derecha**

MF	D	D1	H	D2	TERRAJA
MF 90 x 1,5	90,0	140	22	89,92	B-121401232
MF 90 x 2,0	90,0	140	22	89,91	B-121401233
MF 90 x 3,0	90,0	140	22	89,88	B-121401234
MF 90 x 4,0	90,0	140	22	89,85	B-121401235
MF 92 x 1,5	92,0	140	22	91,92	B-121401236
MF 92 x 2,0	92,0	140	22	91,91	B-121401237
MF 92 x 3,0	92,0	140	22	91,88	B-121401238
MF 92 x 4,0	92,0	140	22	91,85	B-121401239
MF 95 x 1,5	95,0	140	22	94,92	B-121401240
MF 95 x 2,0	95,0	140	22	94,91	B-121401241
MF 95 x 3,0	95,0	140	22	94,88	B-121401242
MF 95 x 4,0	95,0	140	22	94,85	B-121401243
MF 96 x 1,5	96,0	140	22	95,92	B-121401244
MF 96 x 2,0	96,0	140	22	95,91	B-121401245
MF 96 x 3,0	96,0	140	22	95,88	B-121401246
MF 96 x 4,0	96,0	140	22	95,85	B-121401247

MF	D	D1	H	D2	TERRAJA
MF 98 x 1,5	98,0	150	25	94,92	B-121401248
MF 98 x 2,0	98,0	150	25	97,91	B-121401249
MF 98 x 3,0	98,0	150	25	97,88	B-121401250
MF 98 x 4,0	98,0	150	25	97,85	B-121401251
MF 100 x 1,5	100,0	150	25	99,92	B-121401252
MF 100 x 2,0	100,0	150	25	99,91	B-121401253
MF 100 x 3,0	100,0	150	25	99,88	B-121401254
MF 100 x 4,0	100,0	150	25	99,85	B-121401255
MF 105 x 1,5	105,0	150	25	104,92	B-121401256
MF 105 x 2,0	105,0	150	25	104,91	B-121401257
MF 105 x 3,0	105,0	150	25	104,88	B-121401258
MF 105 x 4,0	105,0	150	25	104,85	B-121401259
MF 110 x 1,5	110,0	160	25	109,92	B-121401260
MF 110 x 2,0	110,0	160	25	109,91	B-121401261
MF 110 x 3,0	110,0	160	25	109,88	B-121401262
MF 110 x 4,0	110,0	160	25	109,85	B-121401263

**Macho Métrica - Pasante B / Pasante C | Izquierda**

- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma B - 4-5
- Forma C - 3-4



M	D1	D2	L1	L2	□	FORMA B Rosca Izquierda	FORMA C Rosca Izquierda
DIN 371							
M 3 x 0,5	3,0	3,5	56	11	2,7	B-110402001	B-110502001
M 4 x 0,7	4,0	4,5	63	13	3,4	B-110402002	B-110502002
M 5 x 0,8	5,0	6,0	70	16	4,9	B-110402003	B-110502003
M 6 x 1,0	6,0	6,0	80	19	4,9	B-110402004	B-110502004
M 7 x 1,0	7,0	7,0	80	19	5,5	B-110402005	-
M 8 x 1,25	8,0	8,0	90	22	6,2	B-110402006	B-110502005
M 10 x 1,5	10,0	10,0	100	24	8,0	B-110402007	B-110502006
DIN 376							
M 3 x 0,5	3,0	2,2	56	11	-	B-110402008	
M 4 x 0,7	4,0	2,8	63	13	2,1	B-110402009	
M 5 x 0,8	5,0	3,5	70	16	2,7	B-110402010	
M 6 x 1,0	6,0	4,5	80	19	3,4	B-110402011	
M 8 x 1,25	8,0	6,0	90	22	4,9	B-110402012	
M 10 x 1,5	10,0	7,0	100	24	5,5	B-110402013	
M 12 x 1,75	12,0	9,0	110	29	7,0	B-110402014	B-110502007
M 14 x 2,0	14,0	11,0	110	30	9,0	B-110402015	B-110502008
M 16 x 2,0	16,0	12,0	110	32	9,0	B-110402016	B-110502009
M 18 x 2,5	18,0	14,0	125	34	11,0	B-110402017	B-110502010
M 20 x 2,5	20,0	16,0	140	34	12,0	B-110402018	B-110502011
M 22 x 2,5	22,0	18,0	140	34	14,5	B-110402019	B-110502012
M 24 x 3,0	24,0	18,0	160	38	14,5	B-110402020	B-110502013
M 27 x 3,0	27,0	20,0	160	38	16,0	B-110402021	
M 30 x 3,5	30,0	22,0	180	45	18,0	B-110402022	
M 33 x 3,5	33,0	25,0	180	50	20,0	B-110402023	
M 36 x 4,0	36,0	28,0	200	56	22,0	B-110402024	
M 39 x 4,0	39,0	32,0	200	60	24,0	B-110402025	
M 42 x 4,5	42,0	32,0	200	60	24,0	B-110402026	
M 45 x 4,5	45,0	36,0	220	65	29,0	B-110402027	
M 48 x 5,0	48,0	36,0	250	70	29,0	B-110402028	
M 52 x 5,0	52,0	40,0	250	70	32,0	B-110402029	



**Macho Métrica - Ciego C | Izquierda**

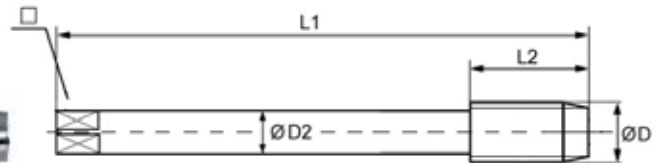
- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma C - 2-3



M	D1	D2	L1	L2	□	FORMA C Rosca Izquierda
DIN 371						
M 3 x 0,5	3,0	3,5	56	6	2,7	B-110602001
M 4 x 0,7	4,0	4,5	63	7	3,4	B-110602002
M 5 x 0,8	5,0	6,0	70	8	4,9	B-110602003
M 6 x 1,0	6,0	6,0	80	10	4,9	B-110602004
M 8 x 1,25	8,0	8,0	90	14	6,2	B-110602005
M 10 x 1,5	10,0	10,0	100	16	8,0	B-110602006
DIN 376						
M 3 x 0,5	3,0	2,2	56	6	-	B-110602007
M 4 x 0,7	4,0	2,8	63	7	2,1	B-110602008
M 5 x 0,8	5,0	3,5	70	8	2,7	B-110602009
M 6 x 1,0	6,0	4,5	80	10	3,4	B-110602010
M 8 x 1,25	8,0	6,0	90	14	4,9	B-110602011
M 10 x 1,5	10,0	7,0	100	16	5,5	B-110602012
M 12 x 1,75	12,0	9,0	110	18	7,0	B-110602013
M 14 x 2,0	14,0	11,0	110	20	9,0	B-110602014
M 16 x 2,0	16,0	12,0	110	22	9,0	B-110602015
M 18 x 2,5	18,0	14,0	125	25	11,0	B-110602016
M 20 x 2,5	20,0	16,0	140	25	12,0	B-110602017
M 22 x 2,5	22,0	18,0	140	27	14,5	B-110602018
M 24 x 3,0	24,0	18,0	160	30	14,5	B-110602019
M 27 x 3,0	27,0	20,0	160	30	16,0	B-110602020
M 30 x 3,5	30,0	22,0	180	35	18,0	B-110602021
M 33 x 3,5	33,0	25,0	180	35	20,0	B-110602022
M 36 x 4,0	36,0	28,0	200	40	22,0	B-110602023
M 39 x 4,0	39,0	32,0	200	40	24,0	B-110602024
M 42 x 4,5	42,0	32,0	200	45	24,0	B-110602025
M 45 x 4,5	45,0	36,0	220	45	29,0	B-110602026
M 48 x 5,0	48,0	36,0	250	50	29,0	B-110602027
M 52 x 5,0	52,0	40,0	250	50	32,0	B-110602028


**Rosca Métrica Izquierda (Machos)**

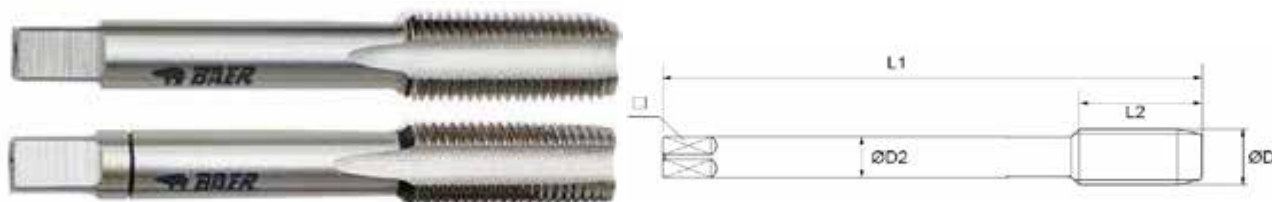
- DIN 13
- ISO 2 - 6H
- HSSE



M	D1	D2	L1	L2	□	Tuerquero
M 3 x 0,5	3,0	2,2	70	22	-	B-110901001
M 4 x 0,7	4,0	2,8	90	25	2,1	B-110901002
M 5 x 0,8	5,0	3,5	100	28	2,7	B-110901003
M 6 x 1,0	6,0	4,5	110	32	3,4	B-110901004
M 8 x 1,25	8,0	6,0	125	40	4,9	B-110901005
M 10 x 1,5	10,0	7,0	140	45	5,5	B-110901006
M 12 x 1,75	12,0	9,0	180	50	7,0	B-110901007
M 14 x 2,0	14,0	11,0	200	56	9,0	B-110901008
M 16 x 2,0	16,0	12,0	200	63	9,0	B-110901009
M 18 x 2,5	18,0	14,0	220	63	11,0	B-110901010
M 20 x 2,5	20,0	16,0	250	70	12,0	B-110901011
M 22 x 2,5	22,0	18,0	280	80	14,5	B-110901012
M 24 x 3,0	24,0	18,0	280	80	14,5	B-110901013

**Rosca Métrica Izquierda (Machos)**

- Forma C
- DIN 13
- ISO 2 - 6H
- HSSG
- Rosca Izquierda

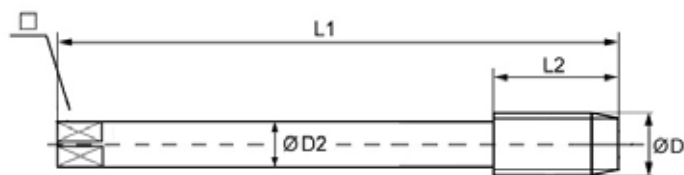


M - MF	D1	D2	L1	L2	□	SET IZQUIERDA
M 3 x 0,5	3,0	3,5	40	11	2,7	B-110302001
M 4 x 0,7	4,0	4,5	45	13	3,4	B-110302002
M 5 x 0,8	5,0	6,0	50	16	4,9	B-110302003
M 6 x 1,0	6,0	6,0	50	19	4,9	B-110302004
MF 6 x 0,75	6,0	6,0	50	14	4,9	B-120302001
M 8 x 1,25	8,0	6,0	56	22	4,9	B-110302005
MF 8 x 0,75	8,0	6,0	50	19	4,9	B-120302002
MF 8 x 1	8,0	6,0	56	22	4,9	B-120302003
M 10 x 1,5	10,0	7,0	70	24	5,5	B-110302006
MF 10 x 1,0	10,0	7,0	63	20	5,5	B-120302004
MF 10 x 1,25	10,0	7,0	70	24	5,5	B-120302005
M 12 x 1,75	12,0	9,0	75	29	7,0	B-110302007
MF 12 x 1,0	12,0	9,0	70	22	7,0	B-120302006
MF 12 x 1,25	12,0	9,0	70	22	7,0	B-120302007
MF 12 x 1,5	12,0	9,0	70	22	7,0	B-120302008
M 14 x 2,0	14,0	11,0	80	30	9,0	B-110302008
MF 14 x 1,25	14,0	11,0	70	22	9,0	B-120302009
MF 14 x 1,5	14,0	11,0	70	22	9,0	B-120302010
M 16 x 2,0	16,0	12,0	80	32	9,0	B-110302009
MF 16 x 1,0	16,0	12,0	70	22	9,0	B-120302011
MF 16 x 1,5	16,0	12,0	70	22	9,0	B-120302012
M 18 x 2,5	18,0	14,0	95	40	11,0	B-110302010
MF 18 x 1,5	18,0	14,0	80	22	11,0	B-120302013
M 20 x 2,5	20,0	16,0	95	40	12,0	B-110302011
MF 20 x 1,5	20,0	16,0	80	22	12,0	B-120302014
M 22 x 2,5	22,0	18,0	100	40	14,5	B-110302012
MF 22 x 1,5	22,0	18,0	80	22	14,5	B-120302015
M 24 x 3,0	24,0	18,0	110	50	14,5	B-110302013
MF 24 x 1,5	24,0	18,0	90	22	14,5	B-120302016
MF 24 x 2,0	24,0	18,0	90	22	14,5	B-120302017
M 27 x 3,0	27,0	20,0	110	50	16,0	B-110302014
M 30 x 3,5	30,0	22,0	125	56	18,0	B-110302015
MF 30 x 1,5	30,0	22,0	90	22	18,0	B-120302018
MF 30 x 2,0	30,0	22,0	90	22	18,0	B-120302019
M 33 x 3,5	33,0	25,0	125	56	20,0	B-110302016
M 36 x 4,0	36,0	28,0	150	63	22,0	B-110302017
M 39 x 4,0	39,0	32,0	150	63	24,0	B-110302018
M 42 x 4,5	42,0	32,0	150	63	24,0	B-110302019
M 45 x 4,5	45,0	36,0	160	70	29,0	B-110302020
M 48 x 5,0	48,0	36,0	180	75	29,0	B-110302021
M 52 x 5,0	52,0	40,0	180	75	32,0	B-110302022



**Macho Métrica - Forma B - Recto | Serie Larga**

- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma B - 4-5


**Modelo L1=100**

M	D1	D2	L1	L2	□	FORMA B Serie Larga Recto
<b>DIN 371</b>						
M 3 x 0,5	3,0	3,5	100	11	2,7	B-110414001
M 4 x 0,7	4,0	4,5	100	13	3,4	B-110414002
M 5 x 0,8	5,0	6,0	100	16	4,9	B-110414003
M 6 x 1,0	6,0	6,0	100	19	4,9	B-110414004
M 8 x 1,25	8,0	8,0	100	22	6,2	B-110414005
M 10 x 1,5	10,0	10,0	100	24	8,0	B-110414006

**Modelo L1=120**

M	D1	D2	L1	L2	□	FORMA B Serie Larga Recto
<b>DIN 371</b>						
M 3 x 0,5	3,0	3,5	120	11	2,7	B-110415001
M 4 x 0,7	4,0	4,5	120	13	3,4	B-110415002
M 5 x 0,8	5,0	6,0	120	16	4,9	B-110415003
M 6 x 1,0	6,0	6,0	120	19	4,9	B-110415004
M 8 x 1,25	8,0	8,0	120	22	6,2	B-110415005
M 10 x 1,5	10,0	10,0	120	24	8,0	B-110415006

**Modelo L1=150**

M	D1	D2	L1	L2	□	FORMA B Serie Larga Recto
<b>DIN 371</b>						
M 3 x 0,5	3,0	3,5	150	11	2,7	B-110416001
M 4 x 0,7	4,0	4,5	150	13	3,4	B-110416002
M 5 x 0,8	5,0	6,0	150	16	4,9	B-110416003
M 6 x 1,0	6,0	6,0	150	19	4,9	B-110416004
M 8 x 1,25	8,0	8,0	150	22	6,2	B-110416005
M 10 x 1,5	10,0	10,0	150	24	8,0	B-110416006

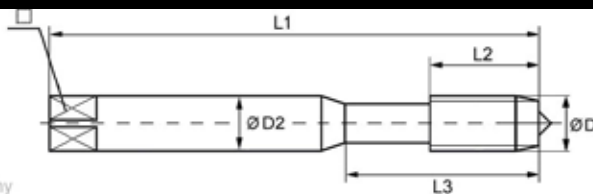

**Macho Métrica - Forma B - Recto | Serie Larga**

- DIN 13
- ISO 2 - 7G - Sobremedida para tratamientos térmicos
- HSSE
- Forma B - 4-5

M	D1	D2	L1	L2	□	FORMA B
<b>DIN 371</b>						
M 3 x 0,5	3,0	3,5	56	11	2,7	B-110418001
M 4 x 0,7	4,0	4,5	63	13	3,4	B-110418002
M 5 x 0,8	5,0	6,0	70	16	4,9	B-110418003
M 6 x 1,0	6,0	6,0	80	19	4,9	B-110418004
M 8 x 1,25	8,0	8,0	90	22	6,2	B-110418005
M 10 x 1,5	10,0	10,0	100	24	8,0	B-110418006
<b>DIN 376</b>						
M 12 x 1,75	12,0	9,0	110	29	7,0	B-110418007

**Macho Métrica - Forma C - Ciego | Serie Larga**

- DIN 13
- ISO 2 - 6 H
- HSSE
- Forma C - 2-3



**Modelo L1=100**

M	D1	D2	L1	L2	□	FORMA C Serie Larga Ciego
DIN 371						
M 3 x 0,5	3,0	3,5	100	6	2,7	B-110614001
M 4 x 0,7	4,0	4,5	100	7	3,4	B-110614002
M 5 x 0,8	5,0	6,0	100	8	4,9	B-110614003
M 6 x 1,0	6,0	6,0	100	10	4,9	B-110614004
M 8 x 1,25	8,0	8,0	100	14	6,2	B-110614005
M 10 x 1,5	10,0	10,0	100	16	8,0	B-110614006

**Modelo L1=120**

M	D1	D2	L1	L2	□	FORMA C Serie Larga Ciego
DIN 371						
M 3 x 0,5	3,0	3,5	120	6	2,7	B-110615001
M 4 x 0,7	4,0	4,5	120	7	3,4	B-110615002
M 5 x 0,8	5,0	6,0	120	8	4,9	B-110615003
M 6 x 1,0	6,0	6,0	120	10	4,9	B-110615004
M 8 x 1,25	8,0	8,0	120	14	6,2	B-110615005
M 10 x 1,5	10,0	10,0	120	16	8,0	B-110615006

**Modelo L1=150**

M	D1	D2	L1	L2	□	FORMA C Serie Larga Ciego
DIN 371						
M 3 x 0,5	3,0	3,5	150	6	2,7	B-110616001
M 4 x 0,7	4,0	4,5	150	7	3,4	B-110616002
M 5 x 0,8	5,0	6,0	150	8	4,9	B-110616003
M 6 x 1,0	6,0	6,0	150	10	4,9	B-110616004
M 8 x 1,25	8,0	8,0	150	14	6,2	B-110616005
M 10 x 1,5	10,0	10,0	150	16	8,0	B-110616006



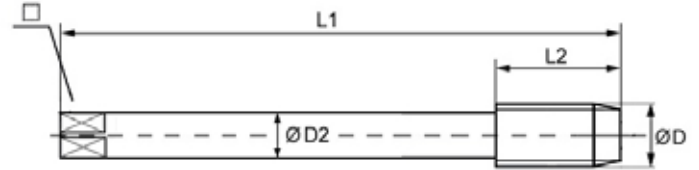
**Macho Métrica - Forma C - Recto | Sobremedida**

- DIN 13
- ISO 2 - 7G - Sobremedida para tratamientos térmicos
- HSSE
- Forma C - 2-3

M	D1	D2	L1	L2	□	FORMA C
DIN 371						
M 3 x 0,5	3,0	3,5	56	6	2,7	B-110618001
M 4 x 0,7	4,0	4,5	63	7	3,4	B-110618002
M 5 x 0,8	5,0	6,0	70	8	4,9	B-110618003
M 6 x 1,0	6,0	6,0	80	10	4,9	B-110618004
M 8 x 1,25	8,0	8,0	90	14	6,2	B-110618005
M 10 x 1,5	10,0	10,0	100	16	8,0	B-110618006
<b>DIN 376</b>						
M 12 x 1,75	12,0	9,0	110	18	7,0	B-110618007

## Rosca BSP "G" - Set Mano/Máquina

- DIN ISO 228 - Clase 2B
- Forma B - 4-5
- HSSEE
- Set de Machos Mano



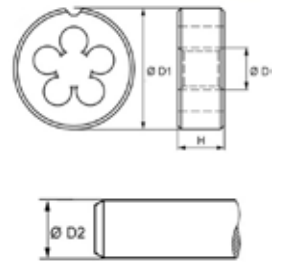
BSP "G"	D1	D2	L1	L2	□	FORMA C
BSP 1" 3/8 x 11	44,32	36,0	140	40	29,0	B-130401011
BSP 1" 5/8 x 11	52,00	40,0	140	40	32,0	B-130401013
BSP 2" x 11	59,61	45,0	160	40	35,0	B-130401015
BSP 2" 1/4 x 11	65,71	50,0	160	40	39,0	B-130401016
BSP 2" 1/2 x 11	75,18	50,0	160	40	39,0	B-130401017
BSP 2" 3/4 x 11	81,53	50,0	160	40	39,0	B-130401018
BSP 3" x 11	87,88	50,0	160	40	39,0	B-130401019
BSP 3" 1/2 x 11	100,3	56,0	180	45	44,0	B-130401020
BSP 4" x 11	113,0	56,0	180	45	44,0	B-130401021

BSP "G"	D1	D2	L1	L2	□	FORMA C - IZQUIERDA
BSP 1/8 x 28	9,73	7,0	63	20	5,5	B-130302001
BSP 1/4 x 19	13,16	11,0	70	22	9,0	B-130302002
BSP 3/8 x 19	16,66	12,0	70	22	9,0	B-130302003
BSP 1/2 x 14	20,95	16,0	80	22	12,0	B-130302004
BSP 5/8 x 14	22,91	18,0	80	22	14,5	B-130302005
BSP 3/4 x 14	26,44	20,0	90	22	16,0	B-130302006
BSP 1" x 11	33,25	25,0	100	25	20,0	B-130302007
BSP 1" 1/8 x 11	37,90	28,0	125	40	22,0	B-130302008
BSP 1" 1/4 x 11	41,91	32,0	125	40	24,0	B-130302009
BSP 1" 1/2 x 11	47,80	36,0	140	40	29,0	B-130302011
BSP 1" 3/4 x 11	53,74	40,0	140	40	32,0	B-130302012
BSP 1" 3/8 x 11	44,32	36,0	140	40	29,0	B-130302010
BSP 2" x 11	59,61	45,0	160	40	35,0	B-130302013



## Rosca BSP "G" - Terraaja

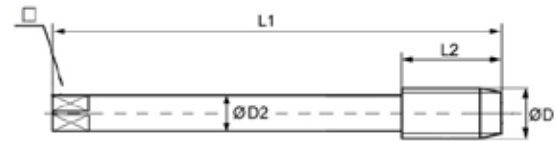
BSP	D	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
BSP 1/8 x 28	9,73	30	11	9,62	B-131401001	B-131402001
BSP 1/4 x 19	13,16	38	10	13,03	B-131401002	B-131402002
BSP 3/8 x 19	16,66	45	14	16,54	B-131401003	B-131402003
BSP 1/2 x 14	20,95	45	14	20,81	B-131401004	B-131402004
BSP 5/8 x 14	22,91	55	16	22,77	B-131401005	B-131402005
BSP 3/4 x 14	26,44	55	16	26,30	B-131401006	B-131402006
BSP 7/8 x 14	30,20	65	18	30,06	B-131401007	B-131402007
BSP 1" x 11	33,25	65	18	33,07	B-131401008	B-131402008
BSP 1" 1/8 x 11	37,90	75	20	37,72	B-131401009	B-131402009
BSP 1" 1/4 x 11	41,91	75	20	41,73	B-131401010	B-131402010
BSP 1" 3/8 x 11	44,32	90	22	44,14	B-131401011	B-131402011
BSP 1" 1/2 x 11	47,80	90	22	47,62	B-131401012	B-131402012
BSP 1" 5/8 x 11	52,00	90	22	51,82	B-131401013	B-131402013
BSP 1" 3/4 x 11	53,74	105	22	53,57	B-131401014	B-131402014
BSP 2" x 11	59,61	90	22	59,43	B-131401015	B-131402015
BSP 2" x 11	59,61	105	22	59,43	B-131401016	
BSP 2" 1/4 x 11	65,71	120	22	65,49	B-131401017	
BSP 2" 1/2 x 11	75,18	120	22	74,97	B-131401018	
BSP 2" 3/4 x 11	81,53	120	22	81,32	B-131401019	
BSP 3" x 11	87,88	130	25	87,67	B-131401020	
BSP 3" 1/2 x 11	100,33	150	25	100,11	B-131401021	
BSP 4" x 11	113,03	160	25	112,81	B-131401022	



**Rosca UNC - Set Rosca Mano**

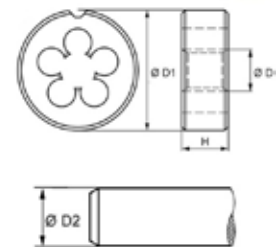
• ANSI B1.1 | - Forma C - 2-3 | - HSSEE - Clase 2B

UNC	D1	D2	L1	L2	□	SET MANO DERECHA
UNC 1" 1/8 x 7	28,58	22	132	56	18,0	B-140301020
UNC 1" 1/4 x 7	31,75	22	132	56	18,0	B-140301021
UNC 1" 3/8 x 6	34,93	28	150	63	22,0	B-140301022
UNC 1" 1/2 x 6	38,10	32	150	63	24,0	B-140301023
UNC 1" 5/8 x 5	41,28	32	160	70	24,0	B-140301024
UNC 1" 3/4 x 5	44,45	36	160	70	29,0	B-140301025
UNC 1" 7/8 x 4,5	47,63	36	190	80	29,0	B-140301026
UNC 2" x 4,5	50,80	40	190	80	32,0	B-140301027
UNC 2" 1/4 x 4,5	57,15	45	220	80	35,0	B-140301028
UNC 2" 1/2 x 4	63,50	50	220	80	39,0	B-140301029
UNC 2" 3/4 x 4	69,85	50	240	80	39,0	B-140301030
UNC 3" x 4	73,20	50	260	80	39,0	B-140301031
UNC	D1	D2	L1	L2	□	SET MANO IZQUIERDA
UNC No 6 x 32	3,51	4,0	45	14	3,0	B-140301006
UNC No 8 x 32	4,17	4,5	45	14	3,4	B-140301007
UNC No 10 x 24	4,83	6,0	50	16	4,9	B-140301008
UNC No 12 x 24	5,49	6,0	50	18	4,9	B-140301009
UNC 1/4 x 20	6,35	6,0	50	19	4,9	B-140301010
UNC 5/16 x 18	7,94	6,0	56	22	4,9	B-140301011
UNC 3/8 x 16	9,53	7,0	70	24	5,5	B-140301012
UNC 7/16 x 14	11,11	8,0	70	24	6,2	B-140301013
UNC 1/2 x 13	12,70	9,0	75	29	7,0	B-140301014
UNC 9/16 x 12	14,29	11,0	80	30	9,0	B-140301015
UNC 5/8 x 11	15,88	12,0	80	32	9,0	B-140301016
UNC 3/4 x 10	19,05	14,0	95	40	11,0	B-140301017
UNC 7/8 x 9	22,23	18,0	100	40	14,5	B-140301018
UNC 1" x 8	25,40	18,0	110	50	14,5	B-140301019



**Rosca UNC - Terraja**

UNC	D	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
UNC No 1 x 64	1,85	16	5	1,79	B-141401001	
UNC No 2 x 56	2,18	16	5	2,12	B-141401002	
UNC No 3 x 48	2,52	16	5	2,44	B-141401003	
UNC No 4 x 40	2,85	20	5	2,76	B-141401004	
UNC No 5 x 40	3,18	20	5	3,09	B-141401005	
UNC No 6 x 32	3,51	20	7	3,41	B-141401006	B-141402001
UNC No 8 x 32	4,17	20	7	4,07	B-141401007	B-141402002
UNC No 10 x 24	4,83	20	7	4,71	B-141401008	B-141402003
UNC No 12 x 24	5,49	20	7	5,37	B-141401009	
UNC 1/4 x 20	6,35	20	7	6,22	B-141401010	B-141402004
UNC 5/16 x 18	7,94	25	9	7,80	B-141401011	B-141402005
UNC 3/8 x 16	9,53	30	11	9,37	B-141401012	B-141402006
UNC 7/16 x 14	11,11	30	11	10,95	B-141401013	B-141402007
UNC 1/2 x 13	12,70	38	14	12,52	B-141401014	B-141402008
UNC 9/16 x 12	14,29	38	14	14,10	B-141401015	B-141402009
UNC 5/8 x 11	15,88	45	18	15,68	B-141401016	B-141402010
UNC 3/4 x 10	19,05	45	18	18,84	B-141401017	B-141402011
UNC 7/8 x 9	22,23	55	22	22,00	B-141401018	B-141402012
UNC 1" x 8	25,40	55	22	25,16	B-141401019	B-141402013
UNC 1" 1/8 x 7	28,58	65	25	28,31	B-141401020	
UNC 1" 1/4 x 7	31,75	65	25	31,49	B-141401021	
UNC 1" 3/8 x 6	34,93	65	25	34,63	B-141401022	
UNC 1" 1/2 x 6	38,10	65	25	37,80	B-141401023	
UNC 1" 1/2 x 6	38,10	75	30	37,80	B-141401024	
UNC 1" 5/8 x 5	41,28	75	30	40,95	B-141401025	
UNC 1" 3/4 x 5	44,45	90	36	44,12	B-141401026	
UNC 1" 7/8 x 4,5	47,63	90	36	47,30	B-141401027	
UNC 2" x 4,5	50,80	90	36	50,45	B-141401028	



## Rosca - 8 UN

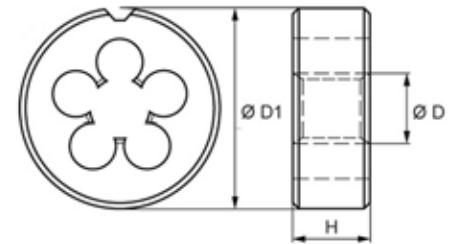
- Paso Unificado 8-UN - Clase 2B
- Forma C - 2-3
- HSSEG



8-UN	D1	D2	L1	L2	□	SET MANO	FORMA C
UN 1" 1/16 x 8	26,99	20,0	138	48	16,0	B-180301001	B-180501001
UN 1" 1/8 x 8	28,58	20,0	138	48	16,0	B-180301002	B-180501002
UN 1" 3/16 x 8	30,16	22,4	151	51	18,0	B-180301003	B-180501003
UN 1" 1/4 x 8	31,75	22,4	151	51	18,0	B-180301004	B-180501004
UN 1" 5/16 x 8	33,34	25,0	162	57	20,0	B-180301005	B-180501005
UN 1" 3/8 x 8	34,93	25,0	162	57	20,0	B-180301006	B-180501006
UN 1" 1/2 x 8	38,10	28,0	170	60	22,4	B-180301007	B-180501007
UN 1" 5/8 x 8	41,28	28,0	170	60	22,4	B-180301008	B-180501008
UN 1" 3/4 x 8	44,45	31,5	187	67	25,0	B-180301009	B-180501009
UN 1" 7/8 x 8	47,63	31,5	187	67	25,0	B-180301010	B-180501010
UN 2" x 8	50,80	35,5	200	70	28,0	B-180301011	B-180501011
UN 2" 1/8 x 8	53,98	35,5	200	70	28,0	B-180301012	B-180501012
UN 2" 1/4 x 8	57,15	40,0	221	76	31,5	B-180301013	B-180501013
UN 2" 1/2 x 8	63,50	40,0	224	79	31,5	B-180301014	B-180501014
UN 2" 3/4 x 8	69,85	45,0	234	79	35,5	B-180301015	B-180501015
UN 3" x 8	76,20	50,0	258	83	40,0	B-180301016	B-180501016
UN 3" 1/4 x 8	82,55	50,0	261	86	40,0	B-180301017	B-180501017
UN 3" 1/2 x 8	88,90	50,0	261	86	40,0	B-180301018	B-180501018
UN 3" 3/4 x 8	95,25	56,0	279	89	45,0	B-180301019	B-180501019
UN 4" x 8	101,60	56,0	279	89	45,0	B-180301020	B-180501020

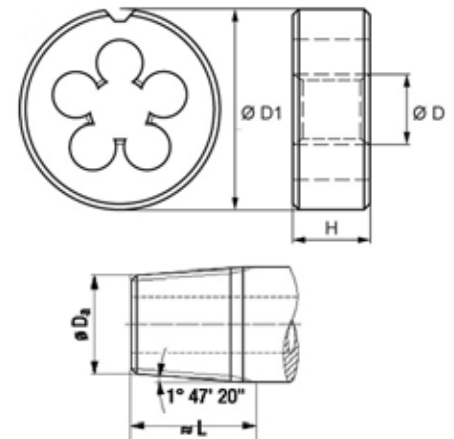


8-UN	D	D1	H	D2	TERRAJA
UN 1" 1/8 x 8	28.58	65	25	28.33	B-181401001
UN 1" 1/4 x 8	31.75	65	25	31.51	B-181401002
UN 1" 3/8 x 8	34.96	65	25	34.68	B-181401003
UN 1" 1/2 x 8	44.45	90	22	44.20	B-181401005
UN 2" x 8	50.80	90	22	50.55	B-181401006



## Terraaja NPT

8-UN	D	D1	H	D2	TERRAJA
NPT 1/16 x 27	7,90	25	9	7,58 x 8,4	B-241401001
NPT 1/8 x 27	10,24	30	11	9,93 x 8,5	B-241401002
NPT 1/4 x 18	13,62	38	14	13,18 x 12,7	B-241401003
NPT 3/8 x 18	17,06	45	14	16,60 x 12,9	B-241401004
NPT 1/2 x 14	21,22	45	18	20,63 x 16,8	B-241401005
NPT 5/8 x 14	23,90	55	22		B-241401006
NPT 3/4 x 14	26,57	55	22	25,95 x 17,1	B-241401007
NPT 7/8 x 14	29,90	65	25		B-241401008
NPT 1" x 11,5	33,23	65	25	32,51 x 21,3	B-241401009
NPT 1" 1/4 x 11,5	41,99	75	26	41,23 x 21,9	B-241401010
NPT 1" 1/2 x 11,5	48,05	90	27	47,30 x 22,3	B-241401011
NPT 2" x 11,5	60,09	105	28	59,31 x 23,1	B-241401012



**Rosca - 11 UN**

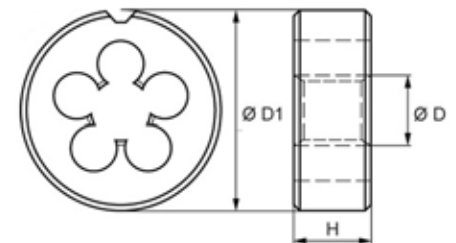
- Paso Unificado 8-UN - Clase 2B
- Forma C - 2-3
- HSSEG



12-UN	D1	D2	L1	L2	□	SET MANO	FORMA C
UN 1/2 x 12	12,70	9,0	75	25	7,0	B-190301001	
UN 5/8 x 12	15,88	12,0	80	25	9,0	B-190301002	
UN 11/16 x 12	17,46	14,0	80	25	11,0	B-190301003	
UN 3/4 x 12	19,05	14,0	80	25	11,0	B-190301004	
UN 13/16 x 12	20,64	16,0	80	25	12,0	B-190301005	
UN 7/8 x 12	22,23	18,0	80	25	14,5	B-190301006	
UN 15/16 x 12	23,81	18,0	90	25	14,5	B-190301007	
UN 1" 1/16 x 12	26,99	20,0	90	28	16,0	B-190301008	
UN 1" 3/16 x 12	30,16	22,0	90	28	18,0	B-190301009	
UN 1" 5/16 x 12	33,34	28,0	125	32	22,0	B-190301010	
UN 1" 7/16 x 12	36,51	28,0	125	32	22,0	B-190301011	
UN 1" 5/8 x 12	41,28	32,0	125	32	24,0	B-190301012	B-190501001
UN 1" 3/4 x 12	44,45	36,0	125	32	29,0	B-190301013	B-190501002
UN 1" 7/8 x 12	47,63	36,0	140	32	29,0	B-190301014	B-190501003
UN 2 x 12	50,80	40,0	140	32	32,0	B-190301015	B-190501004
UN 2" 1/8 x 12	53,98	35,5	200	70	28,0		B-190501005
UN 2" 1/4 x 12	57,15	40,0	221	76	31,5		B-190501006
UN 2" 1/2 x 12	63,50	40,0	224	79	31,5		B-190501007
UN 2" 3/4 x 12	69,85	45,0	234	79	35,5		B-190501008
UN 3" x 12	76,20	50,0	258	83	40,0		B-190501009
UN 3" 1/4 x 12	82,55	50,0	261	86	40,0		B-190501010
UN 3" 1/2 x 12	88,90	50,0	261	86	40,0		B-190501011
UN 3" 3/4 x 12	95,25	56,0	279	89	45,0		B-190501012
UN 4" x 12	101,60	56,0	279	89	45,0		B-190501013

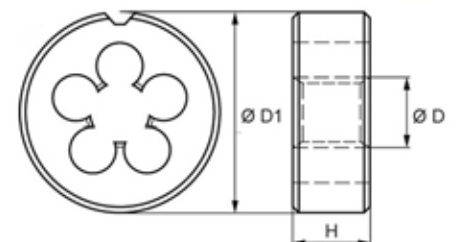


12-UN	D	D1	H	D2	TERRAJA
UN 1" 1/16 x 12	26,99	65	18	26,80	B-191401001
UN 1" 5/16 x 12	33,34	65	18	33,15	B-191401002
UN 1" 5/8 x 12	41,28	75	20	41,09	B-191401003
UN 1" 3/4 x 12	44,45	90	22	44,26	B-191401004
UN 2" x 12	50,80	90	22	50,61	B-191401005



**Rosca - 11 UN**

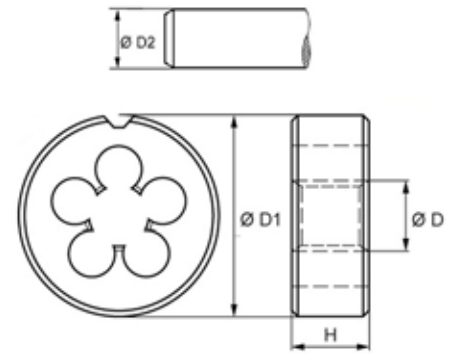
PG	D1	H	D2	□	TERRAJA
PG 7 x 20	12,50	38	10	12,50	B-321401001
PG 9 x 18	15,20	45	14	15,20	B-321401002
PG 11 x 18	18,60	45	14	18,60	B-321401003
PG 13,5 x 18	20,40	45	14	20,40	B-321401004
PG 16 x 18	22,50	55	16	22,50	B-321401005
PG 21 x 16	28,30	65	18	28,30	B-321401006
PG 29 x 16	37,00	65	18	37,00	B-321401007
PG 36 x 16	47,00	90	22	47,00	B-321401008
PG 42 x 16	54,00	105	22	54,00	B-321401009
PG 48 x 16	59,30	105	22	59,30	B-321401010



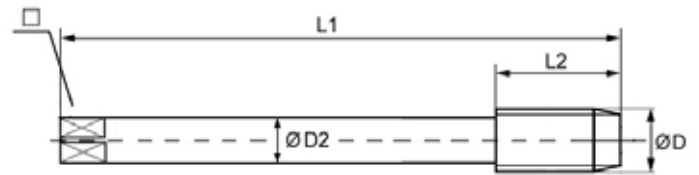


**Rosca VG - Terraja**

VG	D	D1	H	D2	TERRAJA
VG 5 x 36	5,15	20	7	5,15	B-391401001
VG 5,2 x 24	5,23	20	7	5,23	B-391401002
VG 6 x 32	5,98	20	7	5,98	B-391401003
VG 8 x 32	7,68	25	9	9,60	B-391401004
VG 10 x 28	10,27	30	11	10,27	B-391401005
VG 12 x 26	12,17	30	11	12,17	B-391401006


**Rosca RD - Machos**

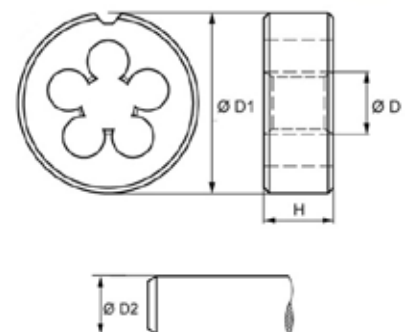
- DIN 405
- Forma C - 2-3
- HSSEG



RD	D1	D2	L1	L2	□	FORMA C
Rd 8 x 1/10	8,25	6,0	90	26	4,9	B-350501001
Rd 9 x 1/10	9,25	7,0	90	26	5,5	B-350501002
Rd 10 x 1/10	10,25	7,0	100	28	5,5	B-350501003
Rd 11 x 1/10	11,25	8,0	100	28	6,2	B-350501004
Rd 12 x 1/10	12,25	9,0	110	28	7,0	B-350501005
Rd 14 x 1/8	14,32	11,0	110	32	9,0	B-350501006
Rd 16 x 1/8	16,32	12,0	110	32	9,0	B-350501007
Rd 18 x 1/8	18,32	14,0	125	32	11,0	B-350501008
Rd 20 x 1/8	20,32	16,0	140	32	12,0	B-350501009
Rd 22 x 1/8	22,32	18,0	140	32	14,5	B-350501010
Rd 24 x 1/8	24,32	18,0	160	34	14,5	B-350501011
Rd 26 x 1/8	26,32	20,0	160	36	16,0	B-350501012
Rd 28 x 1/8	28,32	20,0	160	36	16,0	B-350501013
Rd 30 x 1/8	30,32	22,0	180	36	18,0	B-350501014
Rd 32 x 1/8	32,82	25,0	180	36	20,0	B-350501015
Rd 34 x 1/8	34,32	28,0	200	36	22,0	B-350501016
Rd 36 x 1/8	36,32	28,0	200	36	22,0	B-350501017
Rd 38 x 1/8	38,32	28,0	200	38	22,0	B-350501018
Rd 40 x 1/6	40,42	32,0	200	50	24,0	B-350501019

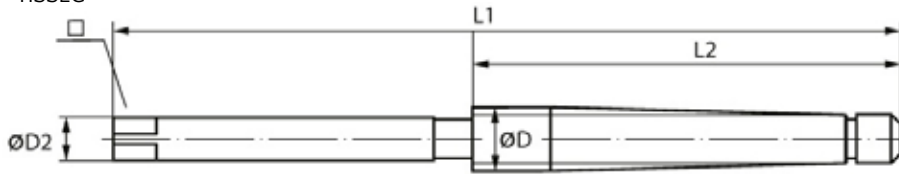
**Rosca RD - Terraja**

RD	D	D1	H	D2	TERRAJA
Rd 10 x 1/10	10,25	38	14	9,84	B-351401001
Rd 11 x 1/10	11,25	38	14	10,84	B-351401002
Rd 12 x 1/10	12,25	38	14	11,84	B-351401003
Rd 14 x 1/8	14,32	45	18	13,82	B-351401004
Rd 16 x 1/8	16,32	45	18	15,82	B-351401005
Rd 18 x 1/8	18,32	45	18	17,82	B-351401006
Rd 20 x 1/8	20,32	55	22	19,82	B-351401007
Rd 22 x 1/8	22,32	55	22	21,82	B-351401008
Rd 24 x 1/8	24,32	55	22	23,82	B-351401009
Rd 26 x 1/8	26,32	65	25	25,82	B-351401010
Rd 28 x 1/8	28,32	65	25	27,82	B-351401011
Rd 30 x 1/8	30,32	65	25	29,82	B-351401012
Rd 32 x 1/8	32,82	65	25	31,82	B-351401013



**Rosca TR Trapezoidal - Machos**

- DIN 103 - Clase 7H
- HSSEG

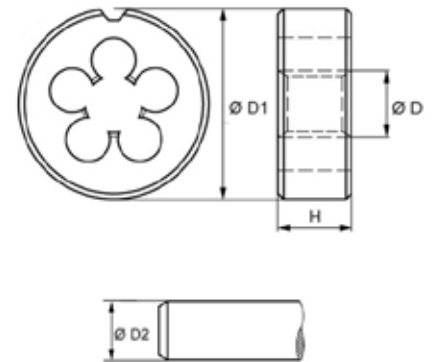


TR	D1	L1	L2	□	DERECHAS	IZQUIERDAS
TR 10 x 2	7,0	110,0	63	5,5	B-230901001	B-230902001
TR 10 x 3	7,0	125,0	75	5,5	B-230901002	B-230902002
TR 12 x 3	8,0	165,0	111	6,2	B-230901003	B-230902003
TR 14 x 3	10,0	140	85	8,0	B-230901004	B-230902004
TR 14 x 4	10,0	170	112	8,0	B-230901005	B-230902005
TR 16 x 4	11,0	180	116	9,0	B-230901006	B-230902006
TR 18 x 4	12,0	190	120	9,0	B-230901007	B-230902007
TR 20 x 4	14,0	200	124	11,0	B-230901008	B-230902008
TR 22 x 4	16,0	210	130	12,0	B-230901009	
TR 22 x 5	16,0	235	155	12,0	B-230901010	B-230902009
TR 24 x 5	18,0	245	160	14,5	B-230901011	B-230902010
TR 26 x 5	20,0	255	165	16,0	B-230901012	B-230902011
TR 28 x 5	22,0	265	170	18,0	B-230901013	B-230902012
TR 30 x 6	22,0	290	185	18,0	B-230901014	B-230902013
TR 32 x 6	25,0	300	191	20,0	B-230901015	B-230902014
TR 36 x 6	28,0	310	200	22,0	B-230901016	B-230902015



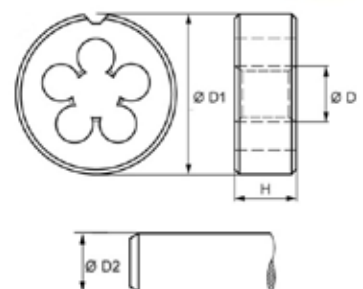
**Rosca TR Trapezoidal - Terraaja**

TR	D1	H	D2	TERRAJA	TERRAJA IZQUIERDA
TR 10 x 2	38,0	14	9,91	B-231401001	B-231402001
TR 10 x 3	38,0	14	9,88	B-231401002	
TR 12 x 2	38,0	14	11,91	B-231401003	
TR 12 x 3	38,0	14	11,88	B-231401004	B-231402004
TR 14 x 2	38,0	14	13,91	B-231401005	
TR 14 x 3	45,0	18	13,88	B-231401006	B-231402006
TR 14 x 4	45,0	18	13,85	B-231401007	B-231402007
TR 16 x 2	45,0	18	15,91	B-231401008	
TR 16 x 4	45,0	18	15,85	B-231401009	B-231402009
TR 18 x 2	45,0	18	17,91	B-231401010	
TR 18 x 4	45,0	18	17,85	B-231401011	B-231402011
TR 20 x 2	45,0	18	19,91	B-231401012	
TR 20 x 4	55,0	22	19,85	B-231401013	B-231402013
TR 22 x 5	55,0	22	21,84	B-231401014	B-231402014
TR 24 x 5	65,0	25	23,84	B-231401015	B-231402015
TR 26 x 5	65,0	25	25,84	B-231401016	B-231402016
TR 28 x 5	65,0	25	27,84	B-231401017	B-231402017
TR 30 x 6	65,0	25	29,82	B-231401018	B-231402018



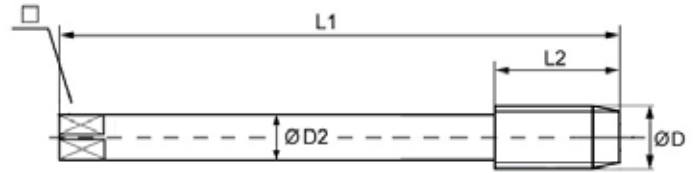
**Rosca NPSM - Terraaja**

NPSM	D	D1	H	D2	TERRAJA
NPSM 1/8 x 27	10,24	30	11	9,99	B-261401001
NPSM 1/4 x 18	13,62	38	10	13,25	B-261401002
NPSM 3/8 x 18	17,06	45	14	16,70	B-261401003
NPSM 1/2 x 14	21,22	45	14	20,78	B-261401004
NPSM 3/4 x 14	26,57	55	16	26,14	B-261401005



## Rosca NPS - Machos

- Forma C - 2-3
- HSSG



NPS	D1	D2	L1	L2	□	FORMA C
NPS 1/16 x 27	7,90	8,0	54	18	6,0	B-260101001
NPS 1/8 x 27	10,24	8,0	55	19	6,0	B-260101002
NPS 1/4 x 18	13,62	11,0	62	28	9,0	B-260101003
NPS 3/8 x 18	17,06	14,0	65	28	11,0	B-260101004
NPS 1/2 x 14	21,22	18,0	80	35	14,0	B-260101005
NPS 3/4 x 14	26,57	23,0	85	35	17,0	B-260101006
NPS 1" x 11,5	33,23	26,0	95	45	21,0	B-260101007
NPS 1,1/4 x 11,5	41,99	32,0	105	45	26,0	B-260101008
NPS 1,1/2 x 11,5	48,05	38,0	110	45	29,0	B-260101009
NPS 2" x 11,5	60,09	46,0	120	50	35,0	B-260101010

## Rosca RC (BSPT) - Machos

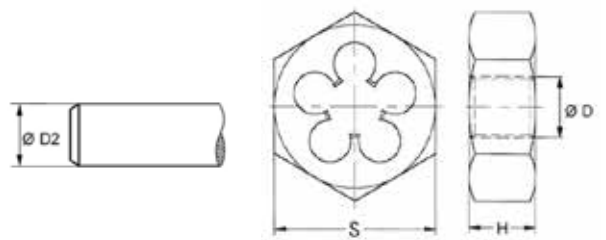
- DIN 2999
- Forma B - 2-3
- HSSG



RC - BSPT	D1	D2	L1	L2	□	FORMA C
RC 1/8 x 28	9,73	8,0	55	19	6,0	B-270101001
RC 1/4 x 19	13,16	11,0	62	28	9,0	B-270101002
RC 3/8 x 19	16,66	14,0	65	28	11,0	B-270101003
RC 1/2 x 14	20,95	18,0	80	35	14,0	B-270101004
RC 3/4 x 14	26,44	23,0	85	35	17,0	B-270101005
RC 1" x 11	33,25	26,0	95	45	21,0	B-270101006

## Rosca BSPT - Terraja

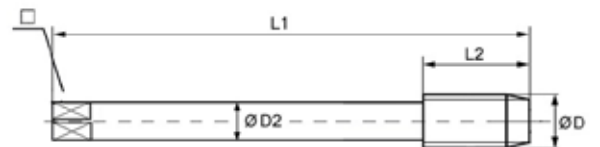
R	D	D1	H	TERRAJA
R 1/8 x 28	9,73	27	11	B-271501001
R 1/4 x 19	13,16	36	14	B-271501002
R 3/8 x 19	16,66	41	15	B-271501003
R 1/2 x 14	20,95	50	19	B-271501004
R 3/4 x 14	26,44	60	20	B-271501005
R 1" x 11	33,25	60	25	B-271501006
R 1.1/4 x 11	41,91	85	26	B-271501007
R 1.1/2 x 11	47,80	85	26	B-271501008
R 2" x 11	59,61	100	31	B-271501009



## Rosca BA - Machos Mano

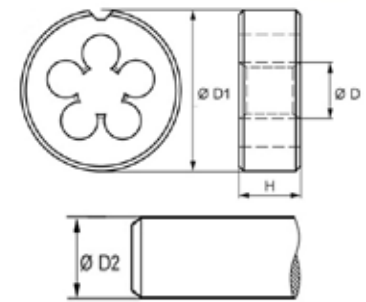
- Norma BS93
- Forma C - 2-3
- HSSG

BA	D1	D2	L1	L2	□	SET MANO
BA 0	6,00	6,3	66	19,0	5,0	B-290313001
BA 1	5,30	5,6	62	17,0	4,5	B-290313002
BA 2	4,70	5,0	58	16,0	4,0	B-290313003
BA 3	4,10	4,5	53	13,0	3,6	B-290313004
BA 4	3,60	3,6	50	13,0	2,8	B-290313005
BA 5	3,20	3,2	48	11,0	2,5	B-290313006
BA 6	2,80	2,8	45	9,5	2,2	B-290313007



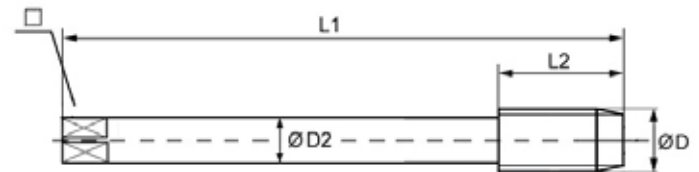
**Rosca BA - Terraja**

BA	D	D1	H	D2	TERRAJA
BA 0	6,00	20,6	6,35	5,90	B-291401001
BA 1	5,30	20,6	6,35	5,21	B-291401002
BA 2	4,70	20,6	6,35	4,61	B-291401003
BA 3	4,10	20,6	6,35	4,02	B-291401004
BA 4	3,60	20,6	6,35	3,52	B-291401005
BA 5	3,20	20,6	6,35	3,14	B-291401006
BA 6	2,80	20,6	6,35	2,74	B-291401007
BA 7	2,50	20,6	6,35	2,44	B-291401008
BA 8	2,20	20,6	6,35	2,15	B-291401009
BA 10	1,70	20,6	6,35	1,66	B-291401010



**Rosca UNS - Machos**

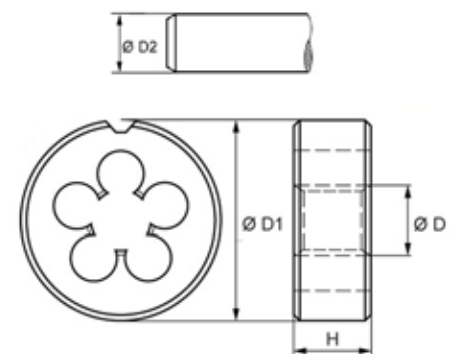
- TPI - Clase 2B
- Forma C - 2-3
- HSSG



UNS	D1	D2	L1	L2	□	FORMA C
UNS 1/4 x 24	6,35	6,3	66	19	5,0	B-160501001
UNS 1/4 x 36	6,35	6,3	66	19	5,0	B-160501002
UNS 1/4 x 40	6,35	6,3	66	19	5,0	B-160501003
UNS 3/8 x 27	9,53	10,0	80	24	8,0	B-160501004
UNS 7/16 x 24	11,11	8,0	85	25	6,3	B-160501005
UNS 1/2 x 24	12,70	9,0	89	29	7,1	B-160501006
UNS 5/8 x 27	15,88	12,5	102	32	10,0	B-160501007
UNS 3/4 x 24	19,05	14,0	112	37	11,2	B-160501008
UNS 7/8 x 18	22,23	16,0	118	38	12,5	B-160501009
UNS 1" x 14	25,40	18,0	130	45	14,0	B-160501010

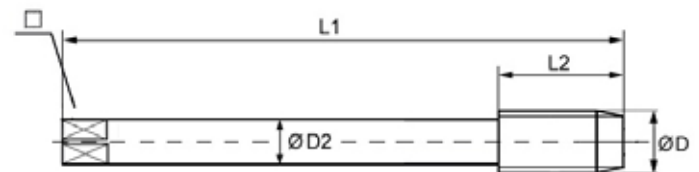
**Rosca UNS - Terraja**

UNS	D	D1	H	D2	TERRAJA
UNS 1/4 x 24	6,35	20	7	6,24	B-161401001
UNS 1/4 x 36	6,35	20	5	6,26	B-161401002
UNS 1/4 x 40	6,35	20	5	6,27	B-161401003
UNS 7/16 x 24	11,11	30	11	11,00	B-161401005
UNS 1/2 x 24	12,70	38	10	12,59	B-161401006
UNS 5/8 x 27	15,88	45	14	15,76	B-161401007
UNS 7/8 x 18	22,23	55	16	22,08	B-161401008
UNS 1" x 14	25,40	55	16	25,23	B-161401009



**Rosca VG - Machos**

- DIN 7756
- Forma D - 4-5 | Forma C - 2-3
- HSSG



VG - DIN 2181	D1	D2	L1 DIN 2181	L1 DIN 374	L2	□	FORMA D DIN 2181	FORMA C DIN 374
VG 5 x 36	5,15	6,0	50	70	12	4,9	B-390301001	B-390501001
VG 5,2 x 24	5,23	6,0	56	80	17	4,9	B-390301002	B-390501002
VG 6 x 32	5,98	6,0	56	80	14	4,9	B-390301003	B-390501003
VG 8 x 32	7,68	7,0	56	80	16	5,5	B-390301004	B-390501004
VG 10 x 28	10,27	8,0	63	90	18	6,2	B-390301005	B-390501005
VG 12 x 26	12,17	9,0	70	100	22	7,0	B-390301006	B-390501006

**Kit Reparación Roscas - Métrica**

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B4001	M 2 X 0.4	EBW01	BZ001	2.1	20
B4002	MF 2.2 X 0.45	EBW01	BZ001	2.3	20
B4003	MF 2.5 X 0.45	EBW02	BZ002	2.6	20
B4005	M 3 X 0.5	EBW03	BZ003	3.2	20
B4006	MF 3.5 X 0.6	EBW03	BZ003	3.7	20
B4007	M 4 X 0.7	EBW04	BZ003	4.2	20
B4009	M 5 X 0.8	EBW05	BZ004	5.2	20
B0675	MF 6 X 0.75	EBW06	BZ005	6.3	20
B4010	M 6 X 1	EBW06	BZ006	6.3	10
B4011	M 7 X 1	EBW06	BZ006	7.3	20
B0875	MF 8 X 0.75	EBW08	BZ008	8.3	10
B4013	MF 8 X 1	EBW08	BZ008	8.3	20
B4012	M 8 X 1.25	EBW08	BZ008	8.3	20
B0091	MF 9 X 1	EBW08	BZ008	9.3	10
B4014	M 9 X 1.25	EBW08	BZ008	9.3	15
B4018	MF 10 X 1	EBW10	BZ010	10.3	15
B4017	MF 10 X 1.25	EBW10	BZ010	10.3	15
B4016	M 10 X 1.5	EBW10	BZ010	10.4	15
B0111	MF 11 X 1	EBW10	BZ010	11.4	5
B1125	MF 11 X 1.25	EBW10	BZ010	11.4	5
B4019	M 11 X 1.5	EBW10	BZ010	11.4	10
B4024	MF 12 X 1	EBW12	BZ012	12.3	10
B4023	MF 12 X 1.25	EBW12	BZ012	12.3	10
B4022	MF 12 X 1.5	EBW12	BZ012	12.4	10
B4021	M 12 X 1.75	EBW12	BZ012	12.4	10
B1315	MF 13 X 1.25	EBW12	-	13.25	5
B1325	MF 13 X 1.5	EBW12	-	13.25	5
B4031	MF 14 X 1	EBW14	-	14.4	10
B4030	MF 14 X 1.25	EBW14	-	14.4	10
B4029	MF 14 X 1.5	EBW14	-	14.4	10
B4028	M 14 X 2	EBW14	-	14.5	10
B1515	MF 15 X 1.5	EBW14	-	-	5
B1520	MF 15 X 2	EBW14	-	-	5
B4033	MF 16 X 1.5	EBW14	-	-	10
B4032	M 16 X 2	EBW14	-	-	10
B4036	MF 18 X 1.5	EBW18	-	-	5
B4035	MF 18 X 2	EBW18	-	-	5
B4034	M 18 X 2.5	EBW18	-	-	5
B4039	MF 20 X 1.5	EBW20	-	-	5
B4038	MF 20 X 2	EBW20	-	-	5
B4037	M 20 X 2.5	EBW20	-	-	5
B4042	MF 22 X 1.5	EBW22	-	-	5
B4041	MF 22 X 2	EBW22	-	-	5
B4040	M 22 X 2.5	EBW22	-	-	5
B4045	MF 24 X 1.5	EBW24	-	-	5
B4044	MF 24 X 2	EBW24	-	-	5
B4043	M 24 X 3	EBW24	-	-	5
B4046	M 30 X 3.5	EBW30	-	-	5
B0392	MF 39 X 2	EBW39	-	-	5
B0394	M 39 X 4	EBW39	-	-	5
B0422	MF 42 X 2	EBW42	-	-	5
B0423	MF 42 X 3	EBW42	-	-	5
B0424	M 42 X 4	EBW42	-	-	5

• Los Kits incluyen broca previa al roscado, macho de roscado, util para insertar los insertos y varias unidades de baercoils. (Excepto los que no se indican código o diámetro de broca)  
Se disponen también packs de recambios de todos los tamaños y longitudes.



### Kit Reparacion Roscas – Kit Machos Mano

Referencia	Medida	Cod. Util	Insertos 1.5D Incluidos
B4049	MF 26 X 1.5	EBW26	5
B4052	MF 27 X 1.5	EBW26	5
B4051	MF 27 X 2	EBW27	5
B4050	M 27 X 3	EBW27	5
B4053	MF 28 X 1.5	EBW27	5
B4056	MF 30 X 1.5	EBW27	5
B4055	MF 30 X 2	EBW27	5
B4054	M 30 X 3.5	EBW27	5
B4058	MF 33 X 2	EBW28	5
B4057	M 33 X 3.5	EBW28	5
B4063	MF 36 X 1.5	EBW30	5
B4062	MF 36 X 2	EBW30	5
B4061	MF 36 X 3	EBW30	5
B0364	M 36 X 4	EBW30	5

• Los Kits incluyen broca previa al roscado, macho de roscado (Manual), util para insertar los insertos y varias unidades de baercoils (Excepto los que no se indican codigo o diametro de broca)  
Se disponen tambien packs de recambios de todos los tamaños y longitudes.



### Kit Reparacion Roscas Metrica – Mix

Referencia	Medida	Cod. Util	Cod. Util	Diametro Broca	Insertos 1.5xD	Insertos 2xD	Insertos 2.5xD
B40052	M 3 x 0,5	EBW03	BZ003	3,2 mm	10	5	5
B40072	M 4 x 0,7	EBW04	BZ004	4,2 mm	10	5	5
B40092	M 5 x 0,8	EBW05	BZ005	5,2 mm	10	5	5
B40102	M 6 x 1,0	EBW06	BZ006	6,3 mm	10	5	5
B40112	M 7 x 1,0	EBW07	BZ006	7,3 mm	10	5	5
B40132	MF 8 x 1,0	EBW08	BZ008	8,3 mm	10	5	5
B40122	M 8 x 1,25	EBW08	BZ008	8,3 mm	10	5	5
B40182	MF 10 x 1,0	EBW10	BZ010	10,3 mm	10	5	5
B40172	MF 10 x 1,25	EBW10	BZ010	10,3 mm	10	5	5
B40162	M10 x 1,5	EBW10	BZ010	10,4 mm	10	5	5
B40232	MF 12 x 1,25	EBW12	BZ012	12,3 mm	10	5	5
B40222	MF 12 x 1,5	EBW12	BZ012	12,4 mm	5	5	5
B40212	M12 x 1,75	EBW12	BZ012	12,4 mm	5	5	5
B40292	MF 14 x 1,5	EBW14	-	14,4 mm	3	3	3
B40282	M14 x 2,0	EBW14	-	14,4 mm	3	3	3

### Kit Reparacion Roscas Metrica – Mix



Referencia UNC	Medida	Cod. Util	Insertos 1.5D Incluidos
B4117	UNC 1-1/8 X 7	EBW26	10
B4118	UNC 1-1/4 X 7	EBW30	10
B4119	UNC 1-3/8 X 6	EBW31	10
B4120	UNC 1-1/2 X 6	EBW36	10

Referencia UNC	Medida	Cod. Util	Insertos 1.5D Incluidos
B4137	UNF 1-1/8 X 12	EBW30	5
B4138	UNF 1-1/4 X 12	EBW31	5
B4139	UNF 1-3/8 X 12	EBW36	5
B4140	UNF 1-1/2 X 12	EBW39	5



**Kit Reparación Roscas – UNC / UNF**


- Los Kits incluyen broca previa al roscado, macho de roscado, util para insertar los insertos y varias unidades de baercoils.  
(Excepto los que no se indican código o diámetro de broca)  
Se disponen también packs de recambios de todos los tamaños y longitudes.



Referencia UNC	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos	Insertos 2xD Incluidos	Insertos 2.5xD Incluidos
B4348	UNC 3 X 48	EBW02	BZ002	2,6	10	5	5
B4101	UNC 4 X 40	EBW03	BZ003	3	20	5	5
B4106	UNC 5 X 40	EBW03	BZ003	3,4	20	5	5
B4102	UNC 6 X 32	EBW03	BZ003	3,7	20	5	5
B4103	UNC 8 X 32	EBW04	BZ004	4,5	20	5	5
B4104	UNC 10 X 24	EBW04	BZ004	5,2	20	5	5
B4105	UNC 12 X 24	EBW05	BZ005	5,8	10	5	5
B4107	UNC 1/2 X 20	EBW06	BZ006	6,7	20	5	5
B4108	UNC 5/66 X 18	EBW07	BZ006	8,3	20	5	5
B4109	UNC 3/8 X 16	EBW08	BZ008	9,9	15	5	5
B4110	UNC 7/16 X 14	EBW10	BZ010	11,6	10	5	5
B4111	UNC 1/2 X 13	EBW12	BZ012	13	10	5	5
B4112	UNC 9/16 X 12	EBW14	-	-	10	5	5
B4113	UNC 5/8 X 11	EBW14	-	-	10	3	3
B41116	UNC 11/16 X 11	EBW16	-	-	5	3	3
B4114	UNC 3/4 X 10	EBW18	-	-	5	-	-
B4115	UNC 7/8 X 9	EBW22	-	-	5	-	-
B4116	UNC 1 X 8	EBW24	-	-	5	-	-

Referencia UNF	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos	Insertos 2xD Incluidos	Insertos 2.5xD Incluidos
B41201	UNF 2 X 64	EBW01	BZ001	2,3	10	5	5
B4356	UNF 3 X 56	EBW02	BZ002	2,6	10	5	5
B41202	UNF 4 X 48	EBW03	BZ003	3	20	5	5
B4121	UNF 6 X 40	EBW03	BZ003	3,7	20	5	5
B4122	UNF 8 X 36	EBW04	BZ004	4,4	20	5	5
B4123	UNF 10 X 32	EBW05	BZ005	5,1	20	5	5
B4125	UNF 1/4 X 28	EBW06	BZ006	6,6	20	5	5
B4126	UNF 5/16 X 24	EBW06	BZ006	8,2	20	5	5
B4127	UNF 3/8 X 24	EBW08	BZ008	9,8	15	5	5
B4128	UNF 7/16 X 20	EBW010	BZ0010	11,5	10	5	5
B4129	UNF 1/2 X 20	EBW012	BZ0012	13	10	5	5
B4130	UNF 9/16 X 18	-	-	-	10	5	5
B4131	UNF 5/8 X 18	-	-	-	10	5	5
B4132	UNF 3/4 X 16	-	-	-	5	3	3
B4133	UNF 7/8 X 14	-	-	-	5	3	3
B4134	UNF - 1 X 12	-	-	-	5	-	-
B41351	UNF 1 X 14	-	-	-	5	-	-

**Kit Reparacion Roscas – Kit Machos Mano BSW / BSF**



• Los Kits incluyen broca previa al roscado, macho de roscado, util para insertar los insertos y varias unidades de baercoils.  
(Excepto los que no se indican codigo o diametro de broca)  
Se disponen tambien packs de recambios de todos los tamaños y longitudes

Referencia BSW	Medida	Cód. Útil	Insertos 1.5D Incluidos
B4154	BSW 1-1/8 X 7	EBW26	5
B4155	BSW 1-1/4 X 7	EBW30	5
B4156	BSW 1-3/8 X 6	EBW31	5
B4157	BSW 1-1/2 X 6	EBW36	5

Referencia BSW	Medida	Cód. Útil	Insertos 1.5D Incluidos
B4179	BSF 1-1/8 X 9	EBW30	5
B4180	BSF 1-1/4 X 9	EBW31	5
B4181	BSF 1-3/8 X 8	EBW36	5
B4182	BSF 1-1/2 X 8	EBW39	5

**Kit Reparacion Roscas – BSW / BSF**

• Los Kits incluyen broca previa al roscado, macho de roscado, util para insertar los insertos y varias unidades de baercoils.  
(Excepto los que no se indican codigo o diametro de broca)  
Se disponen tambien packs de recambios de todos los tamaños y longitudes.

Referencia BSW	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4141	BSW 1/8 X 40	EBW03	BZ003	3,4	20
B4142	BSW 3/6 X 24	EBW05	BZ005	5	20
B4143	BSW 1/4 X 20	EBW06	BZ006	6,7	20
B4144	BSW 5/16 X 18	EBW07	BZ006	8,3	20
B4145	BSW 3/8 X 16	EBW08	BZ008	9,9	15
B4146	BSW 7/16 X 14	EBW10	BZ010	11,6	10
B4147	BSW 1/2 X 12	EBW12	BZ012	13	10
B4148	BSW 9/16 X 12	EBW14	-	-	5
B4149	BSW 5/8 X 11	EBW14	-	-	5
B4153	BSW 11/16 X 11	EBW16	-	-	5
B4150	BSW 3/4 X 10	EBW18	-	-	5
B4151	BSW 7/8 X 9	EBW22	-	-	5
B4152	BSW 1" X 8	EBW24	-	-	4



Referencia BSF	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4162	BSF 3/16 X 32	EBW04	BZ004	5	20
B4177	BSF 7/32 X 28	EBW05	BZ005	5,8	10
B4163	BSF 1/4 X 26	EBW06	BZ006	6,6	20
B4178	BSF 9/32 X 26	EBW06	BZ006	7,3	10
B4165	BSF 5/16 X 22	EBW07	BZ008	8,3	20
B4166	BSF 3/8 X 20	EBW08	BZ008	9,9	15
B4167	BSF 7/16 X 18	EBW10	BZ010	11,5	10
B4168	BSF 1/2 X 16	EBW12	BZ012	13	10
B4169	BSF 9/16 X 16	EBW14	-	-	5
B4170	BSF 5/8 X 14	EBW14	-	-	5
B4171	BSF 11/16 X 14	EBW16	-	-	5
B4172	BSF 3/4 X 12	EBW18	-	-	5
B4173	BSF 13/16 X 12	EBW18	-	-	5
B4174	BSF 7/8 X 11	EBW22	-	-	5
B4176	BSF 1" X 10	EBW24	-	-	4



**Kit Reparacion Roscas – Kit Machos Mano BSW / BSF**


Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4190	G 1/8 X 28	EBW10	BZ010	9,9	5
B4191	G 1/4 X 19	EBW12	BZ012	13,5	5
B4192	G 3/8 X 19	EBW14	-	17	5
B4193	G 1/2 X 14	EBW22	-	-	5
B4194	G 5/8 X 14	EBW24	-	-	5
B4195	G 3/4 X 14	EBW26	-	-	5
B4196	G 7/8 X 14	EBW30	-	-	5
B4197	G 1" X 11	EBW36	-	-	5
B4198	G 1-1/4 X 11	EBW42	-	-	5
B4199	G 1-1/2 X 11	EBW50	-	-	5

**Kit Reparacion Roscas – BA – BSB – BSC**

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4201	BA 0	EBW06	BZ006	6,2	10
B4202	BA 1	EBW05	BZ005	5,5	10
B4203	BA 2	EBW05	BZ005	4,9	10
B4204	BA 3	EBW04	BZ004	4,3	5
B4205	BA 4	EBW03	BZ003	3,8	5
B4206	BA 5	EBW03	BZ003	3,2	5
B4207	BA 6	EBW02	BZ002	2,9	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4208	BSB 1/4 X 26	EBW06	BZ006	6,6	5
B4209	BSB 5/16 X 26	EBW07	BZ006	8,2	5
B4210	BSB 3/8 X 26	EBW08	BZ008	9,8	5
B4211	BSB 7/16 X 26	EBW10	BZ010	11,5	5
B4212	BSB 1/2 X 26	EBW12	BZ012	13	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos
B4220	BSC 5/16 X 26	EBW07	BZ006	8,2	10
B4221	BSC 3/8 X 26	EBW08	BZ008	9,8	10
B4222	BSC 7/16 X 26	EBW10	BZ010	11,5	5
B4223	BSC 1/2 X 26	EBW12	BZ012	13	5

**Kit Reparacion Roscas - NPT**

Referencia	Medida	Cód. Útil	Insertos 1.5D Incluidos	Insertos 2.5xD
B4231	NPT 1/8 X 27	EBW10	10	10
B4232	NPT 1/4 X 18	EBW14	10	10
B4233	NPT 3/8 X 18	EBW14	10	10
B4234	NPT 1/2 X 14	EBW22	5	5
B4235	NPT 3/4 X 14	EBW26	5	5
B4236	NPT 1" X 11.5	EBW36	5	5

## Kit Reparacion Roscas – 8 UN

Referencia	Medida	Cód. Útil	Insertos 1.5D Incluidos
B4240	1-1/8 X 8	EBW26	5
B4241	1-1/4 X 8	EBW30	5
B4242	1-3/8 X 8	EBW31	5
B4243	1-1/2 X 8	EBW36	4
B4244	1-5/8 X 8	EBW39	4
B4245	1-3/4 X 8	EBW42	4
B4246	1-7/8 X 8	EBW42	4
B4247	2" X 8	EBW42	4



## KITS Mixtos de Baercoils



• Los Kits incluyen broca previa al roscado, macho de roscado, util para insertar los insertos y varias unidades de baercoils.

(Excepto los que no se indican codigo o diametro de broca)

Se disponen tambien packs de recambios de todos los tamaños y longitudes.



Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos	Insertos 2.5D Incluidos
B5101	M3 X 0.5	EBW03	BZ003	3,2	10	5
	M4 X 0.7	EBW04	BZ004	4,2	10	5
	M5 X 0.8	EBW05	BZ005	5,2	10	5
	M6 X 1	EBW06	BZ006	6,3	10	5
	M8 X 1.25	EBW08	BZ008	8,3	10	5
	M10 X 1.5	EBW10	BZ010	10,4	5	5
	M12 X 1.75	EBW12	BZ012	12,4	5	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos	Insertos 2.5D Incluidos
B5104	M5 X 0.8	EBW05	BZ005	5,2	10	5
	M6 X 1	EBW06	BZ006	6,3	10	5
	M8 X 1.25	EBW08	BZ008	8,3	10	5
	M10 X 1.5	EBW10	BZ010	10,4	5	5
	M12 X 1.75	EBW12	BZ012	12,4	5	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos	Insertos 2.5D Incluidos
B5131	M5 X 0.8	EBW05	BZ005	5.2	10	5
	M6 X 1	EBW06	BZ006	6.3	10	5
	M8 X 1.25	EBW08	BZ008	8.3	10	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diametro Broca	Insertos 1.5D Incluidos	Insertos 2.5D Incluidos
B5130	M6 X 1	EBW06	BZ006	6,3	10	5
	M8 X 1.25	EBW08	BZ008	8,3	10	5
	M10 X 1.2	EBW10	BZ010	10,4	5	5

**KITS de Baercoils**


- Los Kits incluyen broca previa al roscado, macho de roscado, útil para insertar los insertos y varias unidades de baercoils.  
(Excepto los que no se indican código o diámetro de broca)  
Se disponen también packs de recambios de todos los tamaños y longitudes

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5120 KIT UNC 1/4 - 1/2	UNC 1/4 X 20	EBW06	BZ006	6.7	25
	UNC 5/16 X 18	EBW07	BZ008	8.3	25
	UNC 3/8 X 16	EBW08	BZ008	9.9	25
	UNC 7/16 X 14	EBW10	BZ010	11.6	10
	UNC 1/2 X 13	EBW12	BZ012	13	10

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5121 KIT UNF 1/4 - 1/2	UNF 1/4 X 28	EBW06	BZ006	6.6	25
	UNF 5/16 X 24	EBW07	BZ008	8.3	25
	UNF 3/8 X 24	EBW08	BZ008	9.9	25
	UNF 7/16 X 20	EBW10	BZ010	11.5	10
	UNF 1/2 X 20	EBW12	BZ012	13	10

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5122 KIT BSW 1/4 - 1/2	BSW 1/4 X 20	EBW06	BZ006	6.7	25
	BSW 5/16 X 18	EBW07	BZ008	8.3	25
	BSW 3/8 X 16	EBW08	BZ008	9.9	25
	BSW 7/16 X 14	EBW010	BZ010	11.6	10
	BSW 1/2 X 12	EBW012	BZ012	13	10

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5123 KIT UNC 1/4 - 1/2	BSF 1/4 X 26	EBW06	BZ006	6.6	25
	BSF 5/16 X 22	EBW07	BZ008	8.3	25
	BSF 3/8 X 20	EBW08	BZ008	9.9	25
	BSF 7/16 X 18	EBW10	BZ010	11.5	10
	BS 1/2 X 16	EBW12	BZ012	13	10

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5124 KIT UNC 1/4 - 1/2	G - BSP 1/8 X 28	EBW06	BZ006	6.6	25
	G - BSP 1/4 X 19	EBW07	BZ008	8.3	25
	G - BSP 3/8 X 19	EBW08	BZ008	9.9	25
	G - BSP 1/2 X 14	EBW10	BZ010	11.5	10

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5125 KIT UNC 1/4 - 1/2	BS 0	EBW06	BZ006	6.2	5
	BA 2	EBW05	BZ005	4.9	5
	BA 4	EBW03	BZ003	3.8	5
	BA 6	EBW02	BZ002	2.9	5

Referencia	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B5126 KIT UNC 1/4 - 1/2	NPT 1/8 X 27	EBW10	-	-	5
	BPT 1/4 X 19	EBW14	-	-	5
	NPT 3/8 X 18	EBW14	-	-	5
	NPT 1/2 X 14	EBW22	-	-	5

KITS ESPECIALES	Medida	Cód. Útil	Cód. Varilla	Diámetro Broca	Insertos 1.5D Incluidos
B4225	UNEF 1/4 X 32	EBW06	BZ006	6.6	10
B4226	HARLEY 1/4 X 24	EBW06	BZ006	6.6	10
B4227	HARLEY 7/16 X 16	EBW10	BZ010	11.5	10
B4228	CUMMINS 11/16 X 16	EBW14	-	-	10
B4229	CARBURETOR 7/8 X 20	EBW22	-	-	10
B4230	CARBURETOR 1" X 20	EBW24	-	-	10

## Insertos de Roscado con Ranura - Baerfix

- Modelo Acero: Fabricados en acero tratado y recubiertos en Zinc según norma RohS
- Modelo Inoxidable: Fabricados según norma en Inoxidable 1.4305 (AISI 303)
- Modelo Latón: Fabricados según norma en Latón



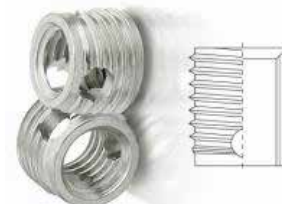
Referencia Acero	Referencia Inox	Referencia Latón	Rosca Interior	Rosca Exterior	Longitud	Unidades/Pack
1-FE02	-	-	M 2 x 0,4*	M 4,5 x 0,5	6 mm	100
1-FE025	-	-	M 2,5 x 0,45	M 4,5 x 0,5	6 mm	100
1-FE03	1-FA03	1-FMS43	M 3 x 0,5	M 5 x 0,5	6 mm	100
1-FE04	1-FA44	1-FMS44	M 4 x 0,7	M 6,5 x 0,75	8 mm	100
1-FE05	1-FA45	1-FMS45	M 5 x 0,8	M 8 x 1,0	10 mm	100
1-FE069	-	-	M 6 x 1,0	M 9 x 1,0	12 mm	100
1-FE06	1-FA46	1-FMS46	M 6 x 1,0	M 10 x 1,5	14 mm	100
1-FE08	1-FA48	1-FMS48	M 8 x 1,25	M 12 x 1,5	15 mm	100
1-FE10	1-FA410	1-FMS410	M 10 x 1,5	M 14 x 1,5	18 mm	100
1-FE125	-	-	M 12 x 1,5	M 16 x 1,5	22 mm	100
1-FE12	1-FA412	-	M 12 x 1,75	M 16 x 1,5	22 mm	100
1-FE14	-	-	M 14 X 2	M 18 X 1.5	24 MM	50
FE145	-	-	M 14 X 1.5	M 18 X 1.5	24 MM	5
1-FE16	1-FA416	-	M 16 x 2,0	M 20 x 1,5	22 mm	50
FE18	-	-	M 18 x 2,5	M 22 x 1,5	24 mm	50
FE20	1-FA420	-	M 20 x 2,5	M 26 x 1,5	27 mm	50
FE22	-	-	M 22 x 2,5	M 26 x 1,5	30 mm	50
FE24	-	-	M 24 x 3,0	M 30 x 1,5	30 mm	50

Modelos UNC	Rosca Interior	Rosca Exterior	Longitud	Unidades/Pack
FE74	UNC 1/4 x 20*	M 10 x 1,5	14 mm	10
FE75	UNC 5/16 x 18*	M 12 x 1,5	15 mm	10
FE76	UNC 3/8 x 16*	M 14 x 1,5	18 mm	5
FE77	UNC 7/16 x 14*	M 16 x 1,5	22 mm	5
FE78	UNC 1/2 x 13*	M 18 x 1,5	22 mm	5

Modelos UNF	Rosca Interior	Rosca Exterior	Longitud	Unidades/Pack
FE84	UNF 1/4 x 28*	M 10 x 1,5	14 mm	10
FE85	UNF 5/16 x 24*	M 12 x 1,5	15 mm	10
FE86	UNF 3/8 x 24*	M 14 x 1,5	18 mm	5
FE87	UNF 7/16 x 20*	M 16 x 1,5	22 mm	5
FE88	UNF 1/2 x 20*	M 18 x 1,5	22 mm	5

## Baerfix – Insertos de Roscado Taladrado

- Fabricados en acero tratado y recubiertos en Zinc según norma RohS o en Inoxidable AISI 306



Referencia Acero	Referencia Inoxidable	Rosca Interior	Rosca Exterior	Longitud	Unidades/Pack
1-FEL03	1-FAL03	M 3 x 0,5	M 5 x 0,6	4 mm	100
1-FEL04	1-FAL04	M 4 x 0,7	M 6,5 x 0,8	6 mm	100
1-FEL05	1-FAL05	M 5 x 0,8	M 8 x 1.0	7 mm	100
1-FEL06	1-FAL06	M 6 x 1,0	M 10 x 1,25	8 mm	100
1-FEL08	1-FAL08	M 8 x 1,25	M 12 x 1,5	9 mm	100
1-FEL10	1-FAL10	M10 x 1.5	M14 x 1.5	10 mm	100
1-FEL12	1-FAL12	M12 X 1.75	M16 X 1.75	12 MM	100
1-FEL16	-	M16 x 2.0	M20 x 2.0	24 mm	50



**Kits Insertos de Roscado con Ranura - Baerfix**

- Fabricados en acero tratado y recubiertos en Zinc según norma RoHS

Kit	Métrica	Código Recambio	Útil	Ø Broca	Insertos
F001	M 2 x 0,4	EBS02*		4,20 mm	5
F002	M 2,5 x 0,45	EBS025*		4,20 mm	5
F003	M 3 x 0,5	KEBW03	NUT	4,70 mm	5
F004	M 4 x 0,7	KEBW04	NUT	6,10 mm	5
F005	M 5 x 0,8	KEBW05	NUT	7,50 mm	5
F006	M 6 x 1,0	KEBW06	NUT	9,30 mm	5
F008	M 8 x 1,25	KEBW08	NUT	11,40 mm	5
F010	M 10 x 1,5	KEBW10	NUT	13,25 mm	5
F0125	M 12 x 1,5	KEBW1215	NUT	15,25 mm	5
F012	M 12 x 1,75	KEBW12	NUT	15,25 mm	5
F0145	M 14 x 1,5	BEBW1415*		17,00 mm	5
F014	M 14 x 2,0	BEBW1420*		17,00 mm	5
F016	M 16 x 2,0	EBS16**		19,00 mm	5
F018	M 18 x 2,5	EBS18**		21,00 mm	5
F020	M 20 x 2,5	EBS20**		25,00 mm	5
F312	M3 a M12	-	-	-	-
F512	M5 a M12	-	-	-	-
F310	M3 a M10	-	-	-	-
<b>Kits UNF</b>					
FF001	UNF 1/4 x 28	KEBW31	NUT	9,30 mm	5
FF002	UNF 5/16 x 24	KEBW32	NUT	11,40 mm	5
FF003	UNF 3/8 x 24	KEBW33	NUT	13,25 mm	5
FF004	UNF 7/16 x 20	KEBW34	NUT	15,25 mm	5
FF005	UNF 1/2 x 20	BEBW35*		17,00 mm	5
FF300	UNF1/4 a UNF1/2	-	-	-	-
<b>Kits UNC</b>					
FC001	UNC 1/4 x 20	KEBW21	NUT	9,30 mm	5
FC002	UNC 5/16 x 18	KEBW22	NUT	11,40 mm	5
FC003	UNC 3/8 x 16	KEBW23	NUT	13,25 mm	5
FC004	UNC 7/16 x 14	KEBW24	NUT	15,25 mm	5
FC005	UNC 1/2 x 13	BEBW25*		17,00 mm	5
FC300	UNC1/4 a UNC1/2	-	-	-	-


**Insertos de Roscado Baercoils - Métrica**


	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
M 2 x 0,4	100	1-B7202-1	1-B7202-15	1-B7202-2	1-B7202-25	1-B7202-3
M 2,2 x 0,45	100	1-B7203-1	1-B7203-15	1-B7203-2	1-B7203-25	1-B7203-3
M 2,5 x 0,45	100	1-B7204-1	1-B7204-15	1-B7204-2	1-B7204-25	1-B7204-3
M 3 x 0,5	100	1-B7205-1	1-B7205-15	1-B7205-2	1-B7205-25	1-B7205-3
M 3,5 x 0,6	100	1-B7206-1	1-B7206-15	1-B7206-2	1-B7206-25	1-B7206-3
M 4 x 0,7	100	1-B7207-1	1-B7207-15	1-B7207-2	1-B7207-25	1-B7207-3
M 5 x 0,8	100	1-B7208-1	1-B7208-15	1-B7208-2	1-B7208-25	1-B7208-3
M 6 x 1,0	100	1-B7209-1	1-B7209-15	1-B7209-2	1-B7209-25	1-B7209-3
M 7 x 1,0	100	1-B7210-1	1-B7210-15	1-B7210-2	1-B7210-25	1-B7210-3
MF 8 x 0,75	100	1-BE875-1	1-BE875-15	1-BE875-2	-	-
MF 8 x 1,0	100	1-B7212-1	1-B7212-15	1-B7212-2	1-B7212-25	1-B7212-3
M 8 x 1,25	100	1-B7211-1	1-B7211-15	1-B7211-2	1-B7211-25	1-B7211-3
MF 9 x 1,0	100	1-BE91-1	1-BE91-15	1-BE91-2	-	-
M 9 x 1,25	100	1-B7213-1	1-B7213-15	1-B7213-2	1-B7213-25	1-B7213-3
MF 10 x 1,0	100	1-B7217-1	1-B7217-15	1-B7217-2	1-B7217-25	1-B7217-3
MF 10 x 1,25	100	1-B7216-1	1-B7216-15	1-B7216-2	1-B7216-25	1-B7216-3
M 10 x 1,5	100	1-B7215-1	1-B7215-15	1-B7215-2	1-B7215-25	1-B7215-3

**Insertos de Roscado Baercoils - Métrica**



	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
MF 11 x 1,0	100	1-BE111-1	1-BE111-15	1-BE111-2	-	-
MF 11 x 1,25	100	-	1-BE1125-15	1-BE1125-2	-	-
M 11 x 1,5	100	1-B7219-1	1-B7219-15	1-B7219-2	1-B7219-25	1-B7219-3
MF 12 x 1,0	100	1-B7224-1	1-B7224-15	1-B7224-2	1-B7224-25	1-B7224-3
MF 12 x 1,25	100	1-B7223-1	1-B7223-15	1-B7223-2	1-B7223-25	1-B7223-3
MF 12 x 1,5	100	1-B7222-1	1-B7222-15	1-B7222-2	1-B7222-25	1-B7222-3
M 12 x 1,75	100	1-B7221-1	1-B7221-15	1-B7221-2	1-B7221-25	1-B7221-3
MF 13 x 1,25	50	1-BE1325-1	1-BE1325-15	1-BE1325-2	-	-
MF 13 x 1,5	50	1-BE1315-1	1-BE1315-15	1-BE1315-2	-	-
MF 14 x 1,0	50	1-B7228-1	1-B7228-15	1-B7228-2	1-B7228-25	1-B7228-3
MF 14 x 1,25	50	1-B7227-1	1-B7227-15	1-B7227-2	1-B7227-25	1-B7227-3
MF 14 x 1,5	50	1-B7226-1	1-B7226-15	1-B7226-2	1-B7226-25	1-B7226-3
M14 x 2,0	50	1-B7225-1	1-B7225-15	1-B7225-2	1-B7225-25	1-B7225-3
MF 15 x 1,5	50	1-BE1515-1	1-BE1515-15	1-BE1515-2	-	-
MF 16 x 1,5	50	1-B7235-1	1-B7235-15	1-B7235-2	1-B7235-25	1-B7235-3
M 16 x 2,0	50	1-B7234-1	1-B7234-15	1-B7234-2	1-B7234-25	1-B7234-3
MF 18 x 1,5	25	1-B7238-1	1-B7238-15	1-B7238-2	1-B7238-25	1-B7238-3
MF 18 x 2,0	25	1-B7237-1	1-B7237-15	1-B7237-2	1-B7237-25	1-B7237-3
M 18 x 2,5	25	1-B7236-1	1-B7236-15	1-B7236-2	1-B7236-25	1-B7236-3
MF 20 x 1,5	25	1-B7241-1	1-B7241-15	1-B7241-2	1-B7241-25	1-B7241-3
MF 20 x 2,0	25	1-B7240-1	1-B7240-15	1-B7240-2	1-B7240-25	1-B7240-3
M 20 x 2,5	25	1-B7239-1	1-B7239-15	1-B7239-2	1-B7239-25	1-B7239-3
MF 22 x 2,0	25	1-B7243-1	1-B7243-15	1-B7243-2	1-B7243-25	1-B7243-3
MF 22 X 1,5	25	1-B7244-1	1-B7244-15	1-B7244-2	1-B7244-25	1-B7244-3
M 22 x 2,5	25	1-B7242-1	1-B7242-15	1-B7242-2	1-B7242-25	1-B7242-3
MF 24 x 1,5	25	1-B7247-1	1-B7247-15	1-B7247-2	1-B7247-25	1-B7247-3
MF 24 x 2,0	25	1-B7246-1	1-B7246-15	1-B7246-2	1-B7246-25	1-B7246-3
M 24 x 3,0	25	1-B7245-1	1-B7245-15	1-B7245-2	1-B7245-25	1-B7245-3
MF 26 x 1,5	5	-	1-B7349-15	-	-	-
MF 27 x 1,5	5	-	1-B7352-15	-	-	-
MF 27 x 2,0	5	-	1-B7351-15	-	-	-
M 27 x 3,0	5	1-BE273-1	1-BE273-15	1-BE273-2	-	-
MF 28 x 1,5	5	1-B7353-1	1-B7353-15	-	-	-
MF 30 x 1,5	5	1-B7356-1	1-B7356-15	-	-	-
MF 30 x 2,0	5	1-B7355-1	1-B7355-15	-	-	-
M 30 x 3,5	5	1-B7354-1	1-B7354-15	1-B7354-2	-	-
MF 33 x 2,0	5	1-B7358-1	1-B7358-15	-	-	-
M 33 x 3,5	5	1-B7357-1	1-B7357-15	1-B7357-2	-	-
MF 36 x 1,5	5	-	1-B7363-15	-	-	-
MF 36 x 2,0	5	-	1-B7362-15	-	-	-
MF 36 x 3,0	5	-	1-B7361-15	-	-	-
M 36 x 4,0	5	1-BE364-1	1-BE364-15	1-BE364-2	-	-
MF 39 x 2,0	5	-	1-BE392-15	-	-	-
M 39 x 4,0	5	-	1-BE394-15	-	-	-
MF 42 x 2,0	5	-	1-BE422-15	-	-	-
MF 42 x 3,0	5	-	1-BE423-15	-	-	-
MF 42 x 4,0	5	-	1-BE424-15	-	-	-

**Baercoils G - BSP**

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
G 1/8 x 28	100	1-B8380-1	1-B8380-15	1-B8380-2	1-B8380-25	1-B8380-3
G 1/4 x 19	100	1-B8381-1	1-B8381-15	1-B8381-2	1-B8381-25	1-B8381-3
G 3/8 x 19	50	1-B8382-1	1-B8382-15	1-B8382-2	1-B8382-25	1-B8382-3
G 1/2 x 14	25	1-B8383-1	1-B8383-15	1-B8383-2	1-B8383-25	1-B8383-3
G 5/8 x 14	10	1-B8384-1	1-B8384-15	1-B8384-2	1-B8384-25	-
G 3/4 x 14	5	1-B8385-1	1-B8385-15	1-B8385-2	1-B8385-25	-
G 7/8 x 14	5	1-B8386-1	1-B8386-15	1-B8386-2	-	-
G 1" x 11	5	1-B8387-1	1-B8387-15	1-B8387-2	-	-

**Baercoils BA**

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BA 0	100	1-B6370-1	1-B6370-15	1-B6370-2	1-B6370-25	1-B6370-3
BA 1	100	1-B6371-1	1-B6371-15	1-B6371-2	1-B6371-25	1-B6371-3
BA 2	100	1-B6372-1	1-B6372-15	1-B6372-2	1-B6372-25	1-B6372-3
BA 3	100	-	1-B6373-15	-	-	-
BA 4	100	1-B6374-1	1-B6374-15	1-B6374-2	1-B6374-25	1-B6374-3
BA 6	100	1-B6376-1	1-B6376-15	1-B6376-2	1-B6376-25	1-B6376-3

**Baercoils BSW**

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BSW 1/8 x 40	100	1-B8241-1	1-B8241-15	1-B8241-2	1-B8241-25	1-B8241-3
BSW 3/16 x 24	100	1-B8242-1	1-B8242-15	1-B8242-2	1-B8242-25	1-B8242-3
BSW 1/4 x 20	100	1-B8243-1	1-B8243-15	1-B8243-2	1-B8243-25	1-B8243-3
BSW 5/16 x 18	100	1-B8244-1	1-B8244-15	1-B8244-2	1-B8244-25	1-B8244-3
BSW 3/8 x 16	100	1-B8245-1	1-B8245-15	1-B8245-2	1-B8245-25	1-B8245-3
BSW 7/16 x 14	100	1-B8246-1	1-B8246-15	1-B8246-2	1-B8246-25	1-B8246-3
BSW 1/2 x 12	100	1-B8247-1	1-B8247-15	1-B8247-2	1-B8247-25	1-B8247-3
BSW 9/16 x 12	50	1-B8248-1	1-B8248-15	1-B8248-2	1-B8248-25	1-B8248-3
BSW 5/8 x 11	50	1-B8249-1	1-B8249-15	1-B8249-2	1-B8249-25	1-B8249-3
BSW 3/4 x 10	25	1-B8251-1	1-B8251-15	1-B8251-2	1-B8251-25	1-B8251-3
BSW 7/8 x 9	10	1-B8253-1	1-B8253-15	1-B8253-2	1-B8253-25	1-B8253-3
BSW 1" x 8	10	1-B8255-1	1-B8255-15	1-B8255-2	1-B8255-25	1-B8255-3
BSW 1.1/8" x 7	10	1-B8256-1	1-B8256-15	1-B8256-2	-	-
BSW 1.1/4" x 7	10	1-B8257-1	1-B8257-15	1-B8257-2	-	-
BSW 1.3/8" x 6	10	-	1-B8258-15	-	-	-
BSW 1.1/2" x 6	10	1-B8259-1	1-B8259-15	1-B8259-2	-	-

**Baercoils BSF**

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BSF 3/16 x 32	100	1-B8262-1	1-B8262-15	1-B8262-2	1-B8262-25	1-B8262-3
BSF 1/4 x 26	100	1-B8263-1	1-B8263-15	1-B8263-2	1-B8263-25	1-B8263-3
BSF 5/16 x 22	100	1-B8265-1	1-B8265-15	1-B8265-2	1-B8265-25	1-B8265-3
BSF 3/8 x 20	100	1-B8266-1	1-B8266-15	1-B8266-2	1-B8266-25	1-B8266-3
BSF 7/16 x 18	100	1-B8267-1	1-B8267-15	1-B8267-2	1-B8267-25	1-B8267-3
BSF 1/2 x 16	100	1-B8268-1	1-B8268-15	1-B8268-2	1-B8268-25	1-B8268-3
BSF 9/16 x 16	100	1-B8269-1	1-B8269-15	1-B8269-2	1-B8269-25	1-B8269-3
BSF 5/8 x 14	50	1-B8270-1	1-B8270-15	1-B8270-2	1-B8270-25	1-B8270-3
BSF 3/4 x 12	50	1-B8272-1	1-B8272-15	1-B8272-2	1-B8272-25	1-B8272-3
BSF 7/8 x 11	25	1-B8274-1	1-B8274-15	1-B8274-2	1-B8274-25	1-B8274-3
BSF 1" x 10	10	1-B8276-1	1-B8276-15	1-B8276-2	1-B8276-25	1-B8276-3
BSF 1.1/8" x 9	10	1-B8277-1	1-B8277-15	-	-	-
BSF 1.1/4" x 9	10	1-B8278-1	1-B8278-15	-	-	-
BSF 1.1/2" x 8	10	-	1-B8279-15	1-B8279-2	-	-

## Baercoils UNF - UNC

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
UNF 2 x 64	100	1-B8287-1	1-B8287-15	1-B8287-2	1-B8287-25	1-B8287-3
UNF 3 x 56	100	1-B8288-1	1-B8288-15	1-B8288-2	-	1-B8288-3
UNF 4 x 48	100	1-B8290-1	1-B8290-15	1-B8290-2	1-B8290-25	1-B8290-3
UNF 5 x 44	100	1-B8289-1	1-B8289-15	1-B8289-2	1-B8289-25	1-B8289-3
UNF 6 x 40	100	1-B8291-1	1-B8291-15	1-B8291-2	1-B8291-25	1-B8291-3
UNF 8 x 36	100	1-B8292-1	1-B8292-15	1-B8292-2	1-B8292-25	1-B8292-3
UNF 10 X 32	100	1-B8293-1	1-B8293-15	1-B8293-2	1-B8293-25	1-B8293-3
UNF 1/4 X 28	100	1-B8225-1	1-B8225-15	1-B8225-2	1-B8225-25	1-B8225-3
UNF 5/16 X 24	100	1-B8226-1	1-B8226-15	1-B8226-2	1-B8226-25	1-B8226-3
UNF 3/8 X 24	100	1-B8227-1	1-B8227-15	1-B8227-2	1-B8227-25	1-B8227-3
UNF 7/16 X 20	100	1-B8228-1	1-B8228-15	1-B8228-2	1-B8228-25	1-B8228-3
UNF 1/2 X 20	100	1-B8229-1	1-B8229-15	1-B8229-2	1-B8229-25	1-B8229-3
UNF 9/16 X 18	50	1-B8230-1	1-B8230-15	1-B8230-2	1-B8230-25	1-B8230-3
UNF 5/8 X 18	50	1-B8231-1	1-B8231-15	1-B8231-2	1-B8231-25	1-B8231-3
UNF 3/4 X 16	25	1-B8233-1	1-B8233-15	1-B8233-2	1-B8233-25	1-B8233-3
UNF 7/8 X 14	10	1-B8235-1	1-B8235-15	1-B8235-2	1-B8235-25	1-B8235-3
UNF 1"	10	1-B8237-1	1-B8237-15	1-B8237-2	1-B8237-25	1-B8237-3
UNF 1-1/8 X 12	5	-	1-B8238-15	-	-	-
UNF 1-1/4 X 12	5	-	1-B8239-15	-	-	-
UNF 1-3/8 X 12	5	-	1-B8240-15	-	-	-
UNF 1-1/2 X 12	5	-	1-B8241-15	-	-	-

	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
UNC 2 X 56	100	1-B8200-1	1-B8200-15	1-B8200-2	1-B8200-25	1-B8200-3
UNC 3 X 48	100	1-B8213-1	1-B8213-15	1-B8213-2	-	1-B8213-3
UNC 4 X 40	100	1-B8201-1	1-B8201-15	1-B8201-2	1-B8201-25	1-B8201-3
UNC 5 X 40	100	1-B8202-1	1-B8202-15	1-B8202-2	1-B8202-25	1-B8202-3
UNC 6 X 32	100	1-B8203-1	1-B8203-15	1-B8203-2	1-B8203-25	1-B8203-3
UNC 8 X 32	100	1-B8204-1	1-B8204-15	1-B8204-2	1-B8204-25	1-B8204-3
UNC 10 X 24	100	1-B8205-1	1-B8205-15	1-B8205-2	1-B8205-25	1-B8205-3
UNC 12 X 24	100	1-B8206-1	1-B8206-15	1-B8206-2	1-B8206-25	1-B8206-3
UNC 1/4 X 20	100	1-B8207-1	1-B8207-15	1-B8207-2	1-B8207-25	1-B8207-3
UNC 5/16 X 18	100	1-B8208-1	1-B8208-15	1-B8208-2	1-B8208-25	1-B8208-3
UNC 3/8 X 16	100	1-B8209-1	1-B8209-15	1-B8209-2	1-B8209-25	1-B8209-3
UNC 7/16 X 14	100	1-B8210-1	1-B8210-15	1-B8210-2	1-B8210-25	1-B8210-3
UNC 1/2 X 13	100	1-B8211-1	1-B8211-15	1-B8211-2	1-B8211-25	1-B8211-3
UNC 9/16 X 12	50	1-B8212-1	1-B8212-15	1-B8212-2	1-B8212-25	1-B8212-3
UNC 5/8 X 11	50	1-B8214-1	1-B8214-15	1-B8214-2	1-B8214-25	1-B8214-3
UNC 3/4 X 10	25	1-B8215-1	1-B8215-15	1-B8215-2	1-B8215-25	1-B8215-3
UNC 7/8 X 9	10	1-B8218-1	1-B8218-15	1-B8218-2	1-B8218-25	1-B8218-3
UNC 1" X 8	10	1-B8219-1	1-B8219-15	1-B8219-2	1-B8219-25	1-B8219-3
UNC 1-1/8 X 7	5	-	1-B8320-15	-	-	-
UNC 1-1/4 X 7	5	-	1-B8321-15	-	-	-
UNC 1-3/8 X 6	5	-	1-B8322-15	-	-	-
UNC 1-1/2 X 6	5	-	1-B8323-15	-	-	-

**Baercoils Autoblocantes - BSW - BSF**


	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BSW 3/16 x 24	100	-	1-B6242-15	1-B6242-2	1-B6242-25	1-B6242-3
BSW 1/4 x 20	100	-	1-B6243-15	1-B6243-2	1-B6243-25	1-B6243-3
BSW 5/16 x 18	100	1-B6244-1	1-B6244-15	1-B6244-2	1-B6244-25	1-B6244-3
BSW 3/8 x 16	100	1-B6245-1	1-B6245-15	1-B6245-2	-	-
BSW 7/16 x 14	100	-	1-B6246-15	1-B6246-2	1-B6246-25	-
BSW 1/2 x 12	100	1-B6247-1	1-B6247-15	1-B6247-2	1-B6247-25	1-B6247-3
BSW 5/8 x 11	50	1-B6249-1	-	-	-	-
	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BSF 1/4 x 26	100	1-B6263-1	1-B6263-15	1-B6263-2	1-B6263-25	1-B6263-3
BSF 5/16 x 22	100	1-B6265-1	1-B6265-15	1-B6265-2	1-B6265-25	1-B6265-3
BSF 3/8 x 20	100	1-B6266-1	1-B6266-15	1-B6266-2	1-B6266-25	1-B6266-3
BSF 7/16 x 18	100	1-B6267-1	1-B6267-15	1-B6267-2	1-B6267-25	-
BSF 1/2 x 16	100	1-B6268-1	1-B6268-15	1-B6268-2	1-B6268-25	-
BSF 9/16 x 16	50	1-B6269-1	1-B6269-15	-	-	-
BSF 5/8 x 14	50	1-B6270-1	1-B6270-15	1-B6270-2	-	-
BSF 3/4 x 12	25	1-B6272-1	1-B6272-15	1-B6272-3	-	-
BSF 7/8 x 11	10	-	1-B6274-15	-	-	-
BSF 1" x 10	10	-	1-B6276-15	1-B6276-2	-	-

**Baercoils Autoblocantes - UNF - UNC**


	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
UNF 6 x 40	100	1-B6291-1	1-B6291-15	1-B6291-2	-	1-B6291-3
UNF 8 x 36	100	1-B6292-1	1-B6292-15	1-B6292-2	1-B6292-25	-
UNF 10 x 32	100	1-B6293-1	1-B6293-15	1-B6293-2	1-B6293-25	1-B6293-3
UNF 1/4 x 28	100	1-B6225-1	1-B6225-15	1-B6225-2	1-B6225-25	1-B6225-3
UNF 5/16 x 24	100	1-B6226-1	1-B6226-15	1-B6226-2	1-B6226-25	1-B6226-3
UNF 3/8 x 24	100	1-B6227-1	1-B6227-15	1-B6227-2	1-B6227-25	-
UNF 7/16 x 20	100	1-B6228-1	1-B6228-15	1-B6228-2	1-B6228-25	1-B6228-3
UNF 1/2 x 20	100	-	1-B6229-15	1-B6229-2	1-B6229-25	1-B6229-3
UNF 9/16 x 18	50	1-B6230-1	1-B6230-15	1-B6230-2	-	-
UNF 5/8 x 18	50	1-B6231-1	1-B6231-15	1-B6231-2	1-B6231-25	1-B6231-3
UNF 3/4 x 16	25	1-B6233-1	1-B6233-15	1-B6233-2	1-B6233-25	1-B6233-3
UNF 7/8 x 14	10	1-B6235-1	1-B6235-15	1-B6235-2	-	-
UNF 1" x 12	10	1-B6237-1	1-B6237-15	1-B6237-2	-	-
	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
UNC 2 x 56	100	-	1-B6200-15	1-B6200-2	1-B6200-25	-
UNC 4 x 40	100	1-B6201-1	1-B6201-15	1-B6201-2	1-B6201-25	1-B6201-3
UNC 6 x 32	100	1-B6203-1	1-B6203-15	1-B6203-2	1-B6203-25	1-B6203-3
UNC 8 x 32	100	1-B6204-1	1-B6204-15	1-B6204-2	1-B6204-25	1-B6204-3
UNC 10 x 24	100	-	1-B6205-15	1-B6205-2	1-B6205-25	1-B6205-3
UNC 1/4 x 20	100	1-B6207-1	1-B6207-15	1-B6207-2	1-B6207-25	1-B6207-3
UNC 5/16 x 18	100	1-B6208-1	1-B6208-15	1-B6208-2	1-B6208-25	1-B6208-3
UNC 3/8 x 16	100	1-B6209-1	1-B6209-15	1-B6209-2	1-B6209-25	1-B6209-3
UNC 7/16 x 14	100	1-B6210-1	1-B6210-15	1-B6210-2	1-B6210-25	1-B6210-3
UNC 1/2 x 13	100	1-B6211-1	1-B6211-15	1-B6211-2	1-B6211-25	1-B6211-3
UNC 5/8 x 11	50	1-B6214-1	1-B6214-15	1-B6214-2	1-B6214-25	1-B6214-3
UNC 3/4 x 10	25	1-B6216-1	1-B6216-15	1-B6216-2	-	-
UNC 7/8 x 9	10	1-B6218-1	1-B6218-15	1-B6218-2	-	-
UNC 1" x 8	10	1-B6219-1	1-B6219-15	1-B6219-2	1-B6219-25	-

## Baercoils Autoblocantes - BA



	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
BA 0	100	1-B6470-1	1-B6470-15	1-B6470-2	1-B6470-25	1-B6470-3
BA 2	100	1-B6471-1	1-B6471-15	1-B6471-2	1-B6471-25	1-B6471-3
BA 3	100	-	1-B6472-15	-	-	-
BA 4	100	1-B6473-1	1-B6473-15	1-B6473-2	1-B6473-25	1-B6473-3
BA 6	100	1-B6474-1	1-B6474-15	1-B6474-2	1-B6474-25	1-B6474-3

## Baercoils Autoblocantes - Métrica



	Pack	1,0 D	1,5 D	2,0 D	2,5 D	3,0 D
M 2 X 0.4	100	1-B6102-1	1-B6102-15	1-B6102-2	1-B6102-25	1-B6102-3
M 2.2 X 0.45	100	1-B6125-1	1-B6125-15	1-B6125-2	1-B6125-25	1-B6125-3
M 2.5 X 0.45	100	1-B6126-1	-	-	-	-
M 3 X 0.5	100	1-B6103-1	1-B6103-15	1-B6103-2	1-B6103-25	-
M 3.5 X 0.6	100	1-B6135-1	1-B6135-15	1-B6135-2	1-B6135-25	1-B6135-3
M 4 X 0.7	100	1-B6104-1	1-B6104-15	1-B6104-2	1-B6104-25	1-B6104-3
M 5 X 0.8	100	1-B6105-1	1-B6105-15	1-B6105-2	1-B6105-25	1-B6105-3
M 6 X 1	100	1-B6106-1	1-B6106-15	1-B6106-2	1-B6106-25	1-B6106-3
M 7 X 1	100	1-B6107-1	1-B6107-15	1-B6107-2	1-B6107-25	1-B6107-3
MF 8 X 1	100	1-B6181-1	1-B6181-15	1-B6181-2	1-B6181-25	1-B6181-3
M 8 X 1.25	100	1-B6108-1	1-B6108-15	1-B6108-2	1-B6108-25	1-B6108-3
MF 10 X 1.25	100	1-B6101-1	1-B6101-15	1-B6101-2	1-B6101-25	1-B6101-3
M 10 X 1.5	100	1-B6110-1	1-B6110-15	1-B6110-2	1-B6110-25	1-B6110-3
MF 12 X 1.25	100	-	1-B6112-15	1-B6112-2	1-B6112-25	-
MF 12 X 1.5	100	-	1-B6115-15	1-B6115-2	-	-
M 12 X 1.75	100	1-B6127-1	1-B6127-15	1-B6127-2	1-B6127-25	1-B6127-3
M 14 X 2	50	1-B6114-1	1-B6114-15	1-B6114-2	1-B6114-25	1-B6114-3
M 16 X 2	50	1-B6116-1	1-B6116-15	1-B6116-2	1-B6116-25	1-B6116-3
M 18 X 2.5	25	1-B6119-1	1-B6119-15	-	-	-
MF 20 X 1.5	25	1-B6120-1	1-B6120-15	1-B6120-2	-	-
M 20 X 2.5	25	1-BS7240-1	1-BS7240-15	1-BS7240-2	1-BS7240-25	-
MF 24 X 2	25	-	-	1-B7246-2	-	-
M 24 X 3	25	1-BS7245-1	1-BS7245-15	1-BS7245-2	1-BS7245-25	-
M 30 X 3.5	5	1-BS7354-1	1-BS7354-15	1-BS7354-2	-	-
M 36 X 4	5	-	1-BES364-15	1-BES364-2	-	-

## Machos para Helicoils - MÉTRICA

- Macho mano/máquina HSSE - Forma D - Pasante/Ciego



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3001	M 2 x 0,4	2,52	2,8	44,5	9,5	2,24	2,1
B3002	M 2,2 x 0,45	2,79	3,15	48	11	2,5	2,3
B3003	M 2,5 x 0,45	3,09	3,15	48	11	2,5	2,6
B3005	M 3 x 0,5	3,65	4	53	13	3,15	3,2
B3006	M 3,5 x 0,6	4,28	4,5	53	13	3,55	3,7
B3007	M 4 x 0,7	4,91	5	58	16	4	4,2
B3008	M 5 x 0,8	6,04	6,3	66	19	5	5,3
B3071	MF 6 x 0,75	6,98	8	72	22	6,3	6,2



**Machos para Helicoils - MÉTRICA**

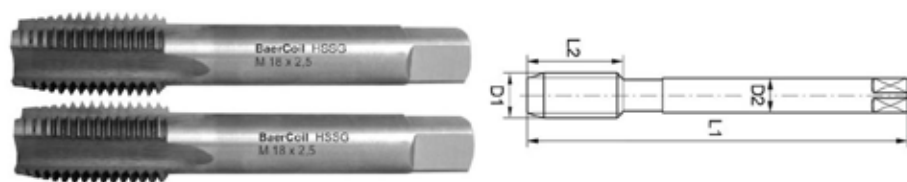
- Macho mano/máquina HSSE - Forma D - Pasante/Ciego



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3009	M 6 x 1,0	7,3	8	72	22	6,3	6,3
B3010	M 7 x 1,0	8,3	9	72	22	7,1	7,3
B3072	MF 8 x 0,75	8,9	9,6	77	33	7,2	8,2
B3012	MF 8 x 1,0	9,3	10	80	24	8	8,3
B3011	M 8 x 1,25	9,62	10	80	24	8	8,3
B3073	MF 9 x 1,0	10,3	8,2	90	35	6,1	9,3
B3013	M 9 x 1,25	10,62	8	85	25	6,3	9,3
B3017	MF 10 x 1,0	11,3	8	85	25	6,3	10,3
B3016	MF 10 x 1,25	11,62	8	85	25	6,3	10,3
B3015	M 10 x 1,5	11,95	9	89	29	7,1	10,4
B3074	MF 11 x 1,0	12,25	9,3	86	42	6,9	11,3
B3075	MF 11 x 1,25	12,62	9	89	29	7,1	11,3
B3018	M 11 x 1,5	12,95	9	89	29	7,1	11,4
B3023	MF 12 x 1,0	13,3	10,9	91	42	8,1	12,3
B3022	MF 12 x 1,25	13,62	11,2	95	30	9	12,3
B3021	MF 12 x 1,5	13,95	11,2	95	30	9	12,4
B3020	M 12 x 1,75	14,27	11,2	95	30	9	12,4
B3076	MF 13 x 1,25	14,62	11,3	95	32	8,9	13,4
B3077	MF 13 x 1,5	14,95	12,5	102	32	11,2	13,4
B3078	M 13 x 1,75	15,25	12,5	102	32	11,2	13,4
B3030	MF 14 x 1,0	15,3	12,5	102	32	10	14,4
B3029	MF 14 x 1,25	15,57	12,5	102	32	10	14,4
B3028	MF 14 x 1,5	15,95	12,5	102	32	10	14,5
B3027	M 14 x 2,0	16,6	12,5	102	32	10	14,5
B3079	MF 15 x 1,5	16,95	12,5	102	32	10	15,5
B3080	M 15 x 2,0	17,6	14	112	37	11,2	15,5
B3034	MF 16 x 1,5	17,95	14	104	29	11,2	16,5
B3033	M 16 x 2,0	18,6	14	112	37	11,2	16,5
B3037	MF 18 x 1,5	19,95	14	104	29	11,2	18,5
B3036	MF 18 x 2,0	20,6	16,6	113	51	12,4	18,5
B3035	M 18 x 2,5	21,25	16	118	38	12,5	18,5
B3040	MF 20 x 1,5	21,95	16	113	33	12,5	20,5
B3039	MF 20 x 2,0	22,6	16	113	33	12,5	20,5
B3038	M 20 x 2,5	23,25	16	118	38	12,5	20,5
B3043	MF 22 x 1,5	23,95	19,3	124	58	14,4	22,5
B3042	MF 22 x 2,0	24,6	20,3	130	64	15,2	22,5
B3041	M 22 x 2,5	25,25	20,3	130	64	15,2	22,5
B3046	MF 24 x 1,5	26,02	18	120	35	14	24,5
B3045	MF 24 x 2,0	26,6	20	127	37	16	24,5
B3044	M 24 x 3,0	27,9	23	138	66	17	24,5
B3056	MF 30 x 1,5	31,95	22,4	137	37	18	30,5
B3081	MF 30 x 3,0	33,9	22,4	137	37	18	30,5
B3054	M 30 x 3,5	34,55	25	162	57	20	30,5
B3066	MF 39 x 2,0	41,6	31,5	187	67	25	39,5
B3065	MF 39 x 3,0	42,9	31,5	187	67	25	39,5
B3064	M 39 x 4,0	44,2	31,5	187	67	25	39,5
B3070	MF 42 x 2,0	44,6	35,5	200	70	28	42,5
B3069	MF 42 x 3,0	45,9	35,5	200	70	28	42,8
B3068	MF 42 x 4,0	47,2	35,5	200	70	28	43
B3067	M 42 x 4,5	47,85	35,5	200	70	28	43

**Machos para Helicoils - Juego de mano - MÉTRICA**

- Juego macho mano 2 piezas HSSE - Forma C - Pasante/Ciego



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3049	M 26 x 1,5	27,95	20	127	37	16	26,5
B3052	MF 27 x 1,5	28,95	20	127	37	16	27,5
B3051	MF 27 x 2,0	29,6	20	127	37	16	27,5
B3050	M 27 x 3,0	30,9	22,4	151	51	18	27,5
B3053	MF 28 x 1,5	29,95	20	127	37	16	28,5
B3056	MF 30 x 1,5	31,95	22,4	137	37	18	30,5
B3055	MF 30 x 2,0	32,6	22,4	137	37	18	30,5
B3054	M 30 x 3,5	34,55	25	162	57	20	30,5
B3058	MF 33 x 2,0	35,6	25	144	37	20	33,5
B3057	M 33 x 3,5	37,55	25	162	57	20	33,5
B3063	MF 36 x 1,5	37,95	28	150	39	22,4	36,5
B3062	MF 36 x 2,0	38,6	28	150	39	22,4	36,5
B3061	MF 36 x 3,0	39,9	28	170	60	22,4	36,5
B3060	M 36 x 4,0	41,2	28	170	60	22,4	36,5
B3066	MF 39 x 2,0	41,6	31,5	187	67	25	39,5
B3065	MF 39 x 3,0	42,9	31,5	187	67	25	39,5
B3064	M 39 x 4,0	44,2	31,5	187	67	25	39,5
B3070	MF 42 x 2,0	44,6	35,5	200	70	28	42,5
B3069	MF 42 x 3,0	45,9	35,5	200	70	28	42,8
B3068	MF 42 x 4,0	47,2	35,5	200	70	28	43
B3067	M 42 x 4,5	47,85	35,5	200	70	28	43

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3100	UNC 2 x 56	2,77	3,2	48	10	2,5	2,3
B3121	UNC 3 x 48	3,2	4	53	13	3,15	2,6
B3101	UNC 4 x 40	3,67	4	53	13	3,15	3
B3102	UNC 5 x 40	4	4	53	13	3,15	3,4
B3103	UNC 6 x 32	4,54	5	58	16	4	3,7
B3104	UNC 8 x 32	5,2	5,6	62	17	4,5	4,4
B3105	UNC 10 x 24	6,2	6,3	66	19	5	5,1
B3106	UNC 12 x 24	6,86	7,1	66	19	5,6	5,7
B3107	UNC 1/4 x 20	8	8	73	30	6	6,7
B3108	UNC 5/16 x 18	9,77	9,6	77	33	7,2	8,3
B3109	UNC 3/8 x 16	11,59	9,3	85	42	6,9	9,9
B3110	UNC 7/16 x 14	13,47	10,8	91	43	8,1	11,6
B3111	UNC 1/2 x 13	15,24	12,1	96	46	9	13
B3112	UNC 9/16 x 12	17,03	14	112	37	11,2	14,8
B3113	UNC 5/8 x 11	18,87	14	112	37	11,2	16,5
B3122	UNC 11/16x11	20,5	14	112	37	11,2	18,5
B3114	UNC 3/4 x 10	22,35	16	118	38	12,5	19,75
B3115	UNC 7/8 x 9	25,89	18	130	45	14	23
B3116	UNC 1" x 8	29,52	20	138	48	16	26,25

**Machos para Helicoils - BA**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3321	BA 0	7,12	7,1	66	19	5,6	6,2
B3322	BA 1	6,33	6,3	66	19	5	5,5
B3323	BA 2	5,61	6,3	66	19	5	4,9
B3324	BA 3	4,92	5	58	16	4	4,2
B3325	BA 4	4,35	4,5	53	13	3,6	3,8
B3326	BA 5	3,87	4	53	13	3,2	3,3
B3327	BA 6	3,4	3,6	50	13	2,8	2,9

**Machos para Helicoils - UNF**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3150	UNF 3 x 56	3,1	4	53	13	3,15	2,6
B3151	UNF 4 x 48	3,53	4	53	13	3,15	3
B3152	UNF 6 x 40	4,33	4,5	53	13	3,55	3,7
B3153	UNF 8 x 36	5,08	5,6	62	17	4,5	4,4
B3154	UNF 10 x 32	5,86	6,3	66	19	5	5,1
B3155	UNF 1/4 x 28	7,53	8	73	30	6	6,6
B3156	UNF 5/16 x 24	9,31	9,6	78	33	7,2	8,2
B3157	UNF 3/8 x 24	10,9	8,1	80	36	6,1	9,8
B3158	UNF 7/16 x 20	12,76	9,25	84	43	6,9	11,5
B3159	UNF 1/2 x 20	14,35	10,8	91	43	8,1	13
B3160	UNF 9/16 x 18	16,12	12,5	104	29	10	14,8
B3161	UNF 5/8 x 18	17,71	14	104	29	11,2	16,3
B3162	UNF 3/4 x 16	21,11	14	104	29	11,2	19,5
B3163	UNF 7/8 x 14	24,58	18	120	35	14	22,8
B3164	UNF 1" x 12	28,15	20	127	37	16	26

**Machos para Helicoils - G - BSP**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3311	G 1/8 x 28	10,82	8	59	15	6,3	10
B3312	G 1/4 x 19	14,74	11,2	67	19	9	13,5
B3313	G 3/8 x 19	18,25	14	75	21	11,2	17
B3314	G 1/2 x 14	23,09	16	87	26	12,5	21,5
B3315	G 5/8 x 14	25,05	18	91	26	14	23,5
B3316	G 3/4 x 14	28,59	20	96	28	16	27
B3318	G 7/8 x 14	32,35	22,4	102	29	18	30,5
B3317	G 1" x 11	35,96	25	109	33	20	33,5
B3319	G 1.1/4 x 11	44,63	36	125	40	29	42,5
B3320	G 1.1/2 x 11	50,53	36	140	40	29	48,5

**Machos para Helicoils - Juego de mano - UNC/UNF**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3117	UNC 1.1/8 x 7	33,29	22,4	151	51	18	29,5
B3118	UNC 1.1/4 x 7	36,46	25	162	57	20	33
B3119	UNC 1.3/8 x 6	40,42	28	170	60	22,4	36
B3120	UNC 1.1/2 x 6	43,6	31,5	187	67	25	39
B3166	UNF 1.1/8 x 12	31,32	22,4	137	37	18	29
B3167	UNF 1.1/4 x 12	34,5	25	144	39	20	32,5
B3168	UNF 1.3/8 x 12	37,68	28	150	39	22,4	35,5
B3169	UNF 1.1/2 x 12	40,85	28	150	39	22,4	38,5

**Machos para Helicoils - BSW**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3201	BSW 1/8 x 40	3,93	4	53	13	3,15	3,4
B3202	BSW 3/16 x 24	6,01	6,3	56	19	6	5,1
B3203	BSW 1/4 x 20	7,84	8	72	22	7,2	6,7
B3204	BSW 5/16 x 18	9,59	10	80	24	6,9	8,3
B3205	BSW 3/8 x 16	11,39	8	85	25	8,1	9,9
B3206	BSW 7/16 x 14	13,24	11,2	95	30	9	11,6
B3207	BSW 1/2 x 12	15,17	12,5	102	32	10	13
B3208	BSW 9/16 x 12	16,76	12,5	102	32	10	14,8
B3209	BSW 5/8 x 11	18,57	14	112	37	11,2	16,7
B3210	BSW 11/16x11	20,2	14	112	37	11,2	18,5
B3211	BSW 3/4 x10	22,02	16	118	38	12,5	20
B3212	BSW 7/8 x 9	25,52	18	130	45	14	23
B3213	BSW 1 x 8	29,1	20	138	48	16	26,5
B3214	BSW 1.1/8 x 7	32,8	22,4	151	51	18	29,5
B3215	BSW 1.1/4 x 7	35,97	25	162	57	20	33
B3216	BSW 1.3/8 x 6	39,88	28	170	60	22,4	36
B3217	BSW 1.1/2 x 6	43,02	31,5	187	67	25	39

**Machos para Helicoils - BSF**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3251	BSF 3/16 x 32	5,71	6,3	66	19	5	5
B3269	BSF 7/32 x 28	6,63	7,1	66	19	5,6	5,8
B3253	BSF 1/4 x 26	7,51	8	72	22	6,3	6,6
B3270	BSF 9/32 x 26	8,31	9	72	22	7,1	7,3
B3255	BSF 5/16 x 22	9,3	10	80	24	8	8,3
B3256	BSF 3/8 x 20	11,02	8	85	25	6,3	9,9
B3257	BSF 7/16 x 18	12,78	9	89	29	7,1	11,6
B3258	BSF 1/2 x 16	14,57	11,2	95	30	9	13
B3259	BSF 9/16 x 16	16,16	12,5	102	32	10	14,8
B3260	BSF 5/8 x 14	18,01	14	112	37	11,2	16,4
B3261	BSF 11/16x 14	1.960	14	112	37	11,2	18
B3262	BSF 3/4 x 12	21,53	16	118	38	12,5	19,5
B3271	BSF 13/16x 12	23,12	16	118	38	12,5	21
B3264	BSF 7/8 x 11	24,94	18	130	45	14	22,7
B3265	BSF 1" x 10	28,38	20	138	48	16	26,5
B3265	BSF 1.1/8 x 9	31,88	22,4	137	37	18	29,5
B3266	BSF 1.1/4 x 9	35,06	25	144	39	20	32,5
B3267	BSF 1.3/8 x 8	38,64	28	150	39	22,4	36
B3268	BSF 1.1/2 x 8	41,82	28	150	39	22,4	39

**Machos para Helicoils - BSB**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3341	BSB 1/4 x 26	7,5	8	69	19	6,3	6,5
B3342	BSB 5/16 x 26	9,1	10	76	20	8	8,2
B3343	BSB 3/8 x 26	10,7	8	82	22	6,3	9,8
B3344	BSB 7/16 x 26	12,3	9	84	24	7,1	11,5
B3345	BSB 1/2 x 26	13,9	11,2	90	25	9	12,8

**Machos para Helicoils - BSC**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3331	BSC 5/16 x 26	9,1	10	76	20	8	8,2
B3332	BSC 3/8 x 26	10,7	8	82	22	6,3	9,8
B3333	BSC 7/16 x 26	12,3	9	84	24	7,1	11,5
B3334	BSC 1/2 x 26	13,9	11,2	90	25	9	12,8

**Machos para Helicoils - NPT**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3370	NPT 1/8 x 27	-	7	65	19	5,5	9,9
B3371	NPT 1/4 x 19	-	11	70	25	9	13,5
B3372	NPT 3/8 x 18	-	12	75	26	9	17
B3373	NPT 1/2 x 14	-	16	80	31	12	21,5
B3374	NPT 3/4 x 14	-	20	100	33	16	27
B3375	NPT 1" x 11,5	-	25	110	38	20	33,5

**Machos para Helicoils - 8 UN**

Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3360	1.1/8 x 8	-	20	138	59	16	28,5
B3361	1.1/4 x 8	-	22,4	151	51	18	32
B3362	1.3/8 x 8	-	25	162	57	20	35
B3363	1.1/2 x 8	-	28	170	60	22,4	38
B3364	1.5/8 x 8	-	28	170	60	22,4	41
B3365	1.3/4 x 8	-	31,5	187	67	25	44,5
B3366	1.7/8 x 8	-	31,5	187	67	25	47,5
B3367	2" x 8	-	35,5	200	70	28	51

**Machos para Helicoils - Métrica (ECO)**

- HSSE- Forma B - Agujeros pasantes



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3505	M 3 X 0.5	3,65	4	53	13	3,15	3,2
B3506	M 3.5 X 0.6	4,28	4,5	53	13	3,55	3,7
B3507	M 4 X 0.7	4,91	5	58	16	4	4,2
B3508	M 5 X 0.8	6,04	6,3	66	19	5	5,3
B3509	M 6 X 1	7,3	8	72	22	6,3	6,3
B3510	M 7 X 1	8,3	9	72	22	7,1	7,3
B9512	M 8 X 1	9,3	10	80	24	8	8,3
B9511	M 8 X 1.25	9,62	10	80	24	8	8,3
B3517	M 10 X 1	11,2	8	85	25	6,3	10,3
B3515	M 10 X 1.5	11,95	9	89	29	7,1	10,4
B3522	M 12 X 1.25	13,62	11,2	95	30	9	12,3
B3521	M 12 X 1.5	13,95	11,2	95	30	9	142,4
B3520	M 12 X 1.75	14,27	11,2	95	30	9	12,4
B3529	M 14 X 1.25	15,57	12,5	102	32	10	14,4
B3528	M 14 X 1.5	15,95	12,5	102	32	10	14,5
B3527	M 14 X 2	16,6	12,5	102	32	10	14,5
B3533	M 16 X 2	18,6	14	112	37	11,2	16,5

### Machos para Helicoils - Métrica (ECO)

• HSSE - Forma C - Agujeros ciegos



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3704	M 2 x 0,4	2,52	2,8	44,5	9,5	2,24	2,1
B3705	M 3 x 0,5	3,65	4	53	13	3,15	3,2
B3706	M 3,5 x 0,6	4,28	4,5	53	13	3,55	3,7
B3707	M 4 x 0,7	4,91	5	58	16	4	4,2
B3708	M 5 x 0,8	6,04	6,3	66	19	5	5,3
B3709	M 6 x 1,0	7,3	8	72	22	6,3	6,3
B3710	M 7 x 1,0	8,3	9,65	72	33	7,3	7,3
B3712	M 8 x 1,0	9,3	10	80	24	8	8,3
B3711	M 8 x 1,25	9,62	10	80	24	8	8,3
B3717	M 10 x 1,0	11,2	8	85	25	6,3	10,3
B3715	M 10 x 1,5	11,95	9	89	29	7,1	10,4
B3722	M 12 x 1,25	13,62	11,2	95	30	9	12,3
B3721	M 12 x 1,5	13,95	11,2	95	30	9	12,4
B3720	M 12 x 1,75	14,27	11,2	95	30	9	12,4
B3729	M 14 x 1,25	15,57	12,5	102	32	10	14,4
B3728	M 14 x 1,5	15,95	12,5	102	32	10	14,5
B3727	M 14 x 2,0	16,6	12,5	102	32	10	14,5
B3733	M 16 x 2,0	18,6	14	112	37	11,2	16,5
B3737	M 18 x 1,5	19,95	16,5	113	51	12,4	18,5

### Machos para Helicoils - Métrica - De Laminación



Referencia	Medida	D1	D2	L1	L2	o	Ø Broca
B3601	M 2 x 0,4	2,54	2,8	50	9	2,1	2,35
B3603	M 2,5 x 0,45	3,11	3,5	56	10	2,7	2,9
B3605	M 3 x 0,8	3,68	4,5	63	12	3,4	3,4
B3607	M 4 x 0,7	4,94	6	70	14	4,9	4,6
B3608	M 5 x 0,8	6,07	6	80	16	4,9	5,65
B3609	M 6 x 1,0	7,34	8	90	18	6,2	6,85
B3611	M 8 x 1,25	9,67	10	99	20	8	9,05
B3615	M 10 x 1,5	11,99	9	100	22	7	11,3
B3620	M 12 x 1,75	14,33	11	110	25	9	13,5



**Útil para insertar Baercoils**


Referencia	M	M	UNC / UNF	BSW / BSF	BA/NPT G- (BSP)	UNEF/HARLEY	Long.	o
EBW03	M 3 x 0,5	M 3,5 x 0,6	UNC 4 x 40 UNC 5 x 40 UNC 6 x 32 UNF 4 x 48 UNF 6 x 40	BSW 1/8 x 40	5BA		100	5
EBW04			UNC 8 x 32 UNC 10 x 24 UNF 8 x 36	BSF 3/16 x 32	4 BA 3 BA		100	5
EBW05	M 5 x 0,8		UNC 12 x 24 UNF 10 x 32	BSW 3/16 x 24 BSF 7/32 x 28	2 BA 1 BA		100	5
EBW06	M 6 x 1,0 M 6 x 0,75		UNC 1/4 x 20 UNF 1/4 x 28	BSW 1/4 x 20 BSF 1/4 x 26 BSF 9/32 x 26	0 BA	UNEF 1/4 x 32 Harley 1/4 x 24 BSB 1/4 x 26	100	5
EBW07	M 7 x 1,0		UNC 5/16 x 18 UNF 5/16 x 24	BSW 5/16 x 18 BSF 5/16 x 22		BSC 5/16 x 26 BSB 5/16 x 26	100	7
EBW08	M 8 x 1,25 M 8 x 1,0 M 8 x 0,75	M 9 x 1,25 M 9 x 1,0	UNC 3/8 x 16 UNF 3/8 x 24	BSW 3/8 x 16 BSF 3/8 x 20		BSC 3/8 x 26 BSB 3/8 x 26	100	7
EBW10	M 10 x 1,5 M 10 x 1,25 M 10 x 1,0	M 11 x 1,5 M 11 x 1,25 M 11 x 1,0	UNC 7/16 x 14 UNF 7/16 x 20	BSW 7/16 x 14 BSF 7/16 x 18	G 1/8 x 28 NPT 1/8 x 27	Harley 7/16 x 16 BSC 7/16 x 26 BSB 7/16 x 26	100	7
EBW12	M 12 x 1,75 M 12 x 1,5 M 12 x 1,25	M 12 x 1,0 M 13 x 1,5 M 13 x 1,25	UNC 1/2 x 13 UNF 1/2 x 20	BSW 1/2 x 12 BSF 1/2 x 16	G 1/4 x 19	BSC 1/2 x 26 BSB 1/2 x 26	100	7
EBW14	M 14 x 2,0 M 14 x 1,5 M 14 x 1,25 M 14 x 1,0	M15 x 2,0 M15 x 1,5 M 16 x 2,0 M16 x 1,5	UNC 9/16 x 12 UNC 5/8 x 11 UNF 9/16 x 18 UNF 5/8 x 18	BSW 9/16 x 12 BSW 5/8 x 11 BSF 9/16 x 16 BSF 5/8 x 14	G 3/8 x 19 NPT 1/4 x 19	11/16 x 16	100	7



Referencia	M	UNC / UNF	BSW / BSF	G (BSP) / NPT	8 - UN
EBW01	M 2 x 0,4 M 2,2 x 0,45	UNC 2 x 56 UNF 2 x 64	-	-	-
EBW02	M 2,5 x 0,45	UNC 3 x 48 UNF 3 x 56	-	BA 6	-
EBW18	M 18 x 2,5 M 18 x 2,0 M 18 x 1,5	UNC 3/4 x 10	BSW 3/4 x 10 BSF 3/4 x 12 BSF 13/16 x 12	-	-
EBW20	M 20 x 2,5 M 20 x 2,0 M 20 x 1,5	UNF 3/4 x 16	-	-	-
EBW22	M 22 x 2,5 M 22 x 2,0 M 22 x 1,5	UNC 7/8 x 9 UNF 7/8 x 14	BSW 7/8 x 9 BSF 7/8 x 11	G 1/2 x 14 NPT 1/2 x 14	-
EBW24	M 24 x 3,0 M 24 x 2,0 M 24 x 1,5	UNC 1" x 8 UNF 1" x 12 UNF 1" x 14	BSW 1" x 8 BSF 1" x 10	-	1" x 20
EBW26	M 26 x 1,5 M 27 x 2,0 M 27 x 1,5	UNC 1.1/8" x 7	BSW 1.1/8" x 7	G 3/4 x 14 NPT 3/4 x 14	UN 1,1/8" x 8
EBW28	M 28 x 1,5				
EBW30	M 30 x 3,5 M 30 x 3,0	UNC 1.1/4" x 7 UNF 1.1/8" x 12	BSW 1.1/4" x 7 BSF 1.1/8" x 9	-	UN 1,1/4" x 8
EBW31	M 30 x 1,5 M 30 x 2,0	UNC 1.3/8" x 6 UNF 1.1/4" x 12	BSW 1.3/8" x 6 BSF 1.1/4" x 9	G 7/8 x 14	UN 1,3/8" x 8
EBW33	M 33 x 3,5 M 33 x 2,0				
EBW36	M 36 x 4,0 M 36 x 3,0	UNC 1.1/2" x 6 UNF 1.3/8" x 12	BSW 1.1/2" x 6 BSF 1.3/8" x 8	G 1" x 11 NPT 1" x 11,5	UN 1,1/2" x 8
EBW39	M 36 x 1,5 M 39 x 4,0 M 39 x 3,0 M 39 x 2,0	UNF 1.1/2" x 12	BSF 1.1/2" x 8	-	UN 1,5/8" x 8
EBW42	M 42 x 4,5 M 42 x 4,0 M 42 x 3,0 M 42 x 2,0	-	-	G 1.1/4 x 11	UN 1,3/4" x 8 UN 1,7/8" x 8 UN 2" x 8

**Útil extractor Baercoils**



Referencia	M	UNC / UNF	BSW / BSF	-	-
B7051	M2 A M4	UNC 2 X 56 UNC 8 X 32 UNF 2 X 64 UNF 8 X 36	BSW 1/8	BA3 A BA6	-
B7052	M3 A M10	UNC 4 X 40 UNC 3/8 UNF 4 X 48 UNF 3/8	BSW 3/16 BSW 3/8 BSF 3/16 BSF 3/8	BA 0 A BA 2 G 1/8 BSB ¼ X 26 BSB 3/8 X 26 BSC 5/16 X 26 BSC 3/8 X 26	NPT 1/8 X 27 UNEF 1/4 X 32 HARLEY 1/4 X 24
B7053	M11 A M24	UNC 3/8 UNC 1" UNF 3/8 UNF 1" UNF 1" X 14	BSW 3/8 BSW 1" BSF 3/8 BSF 1"	G1/4 X 19 G 5/8 X 14 BSB 3/8 X 26 BSB 1/2 X 26 BSB 3/8 X 26 BSB 1/2 X 26 NPT 1/4 X 19 NPT 1/2 X 14	HARLEY 7/16 X 16 CUMMINS 11/16 X 16 CARBURETOR 7/8 X 20 CARBURETOR 1ª X 20
B7054	M20 A M39	UNC 1"-1/8 UNC 1"-1/2 UNF 1"-1/8 UNF 1"-1/8	BSW 1"-1/8 BSW1"-1/2 BSF 1"-1/8 BSF 1"-1/2	G1/2 G 1" NPT 1/2 NPT 1"	UN 1"-1/8 UN 1"-1/2
B7055	M38 A M65				UN 1"-5/8 UN 2"

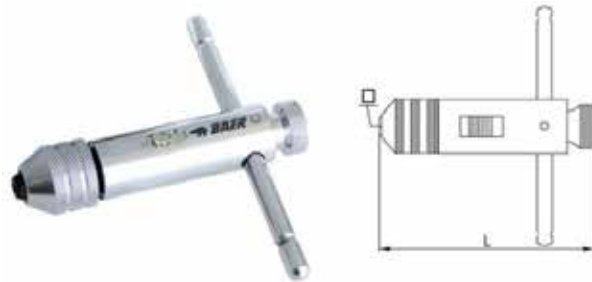
**Útil manual para insertos Baerfix**



Referencia	Modelo	Longitud	Llave	Amarre
KEBW03	M 3 x 0,5	46,00 mm	5,50 mm	1/4"
KEBW04	M 4 x 0,7	48,00 mm	7,00 mm	1/4"
KEBW05	M 5 x 0,8	57,00 mm	8,00 mm	1/4"
KEBW06	M 6 x 1,0	62,00 mm	10,00 mm	1/4"
KEBW07	M 7 x 1,0	72,00 mm	11,00 mm	1/4"
KEBW08	M 8 x 1,25	72,00 mm	13,00 mm	1/4"
KEBW1010	M 10 x 1,0	77,00 mm	17,00 mm	1/4"
KEBW10	M 10 x 1,5	82,00 mm	17,00 mm	1/4"
KEBW1212	M 12 x 1,25	79,00 mm	19,00 mm	1/4"
KEBW1215	M 12 x 1,5	79,00 mm	19,00 mm	1/4"
KEBW12	M 12 x 1,75	92,00 mm	19,00 mm	1/4"
BEBW1415	M 14 x 1,5	114,00 mm	19,00 mm	12 mm
BEBW1420	M 14 x 2,0	114,00 mm	19,00 mm	12 mm
1-KEBW21	UNC 1/4 x 20	62,00 mm	7/16 "	1/4"
1-KEBW22	UNC 5/16 x 18	67,00 mm	1/2 "	1/4"
1-KEBW23	UNC 3/8 x 16	77,00 mm	9/16 "	1/4"
1-KEBW24	UNC 7/16 x 14	87,00 mm	11/16 "	1/4"
BEBW25	UNC 1/2 x 13	117,00 mm	3/4 "	10 mm
1-KEBW31	UNF 1/4 x 28	62,00 mm	7/16 "	1/4"
1-KEBW33	UNF 3/8 x 24	77,00 mm	9/16 "	1/4"
1-KEBW34	UNF 7/16 x 20	87,00 mm	11/16 "	1/4"
BEBW35	UNF 1/2 x 20	117,00 mm	3/4 "	10 mm

**Útil máquina para insertos Baerfix**


Referencia	Métrica	D1	D2	L	Cuadrado
MEBW03	M 3 x 0,5	8 mm	20 mm	90 mm	6,2 mm
MEBW04	M 4 x 0,7	8 mm	20 mm	90 mm	6,2 mm
MEBW05	M 5 x 0,8	12 mm	26 mm	119 mm	10 mm
MEBW06	M 6 x 1,0	12 mm	26 mm	119 mm	10 mm
MEBW08	M 8 x 1,25	12 mm	26 mm	119 mm	10 mm
MEBW10	M 10 x 1,5	16 mm	34 mm	148 mm	12 mm
MEBW12	M 12 x 1,75	16 mm	34 mm	148 mm	12 mm
MEBW14	M 14 x 2,0	22 mm	48 mm	176 mm	18 mm
MEBW16	M 16 x 2,0	22 mm	48 mm	176 mm	18 mm
MEBW18	M 18 x 2,5	22 mm	48 mm	176 mm	18 mm
MEBW20	M 20 x 2,5	22 mm	48 mm	176 mm	18 mm
MEBW22	M 22 x 2,5	36 mm	59 mm	190 mm	29 mm
MEBW24	M 24 x 3,0	36 mm	59 mm	190 mm	29 mm

**Giramachos y Volvedores**


Referencia	Modelo	Para M	Para INCH	Cuadrado	Longitud
B-491625001	1	M3-M10	1/8 - 3/8	2.4-5.5	85
B-491625002	2	M5-M12	7/32 - 1/2	4.5-80	100
B-491625010	10	M3-M10	1/8 - 3/8	2.4-5.5	250
B-491625020	20	M5-M12	7/32 - 1/2	4.5-8.0	300



Referencia	Modelo	Para M	Para INCH	Para GAS	Cuadrado	Longitud
B-491723000	0	M 1 - M8	1/16 - 1/4		2,0 - 5,0	130
B-491723010	1	M 1 - M10	1/16 - 3/8	G 1/8	2,0 - 6,3	176
B-491723015	1.1/2	M 1 - M12	1/16 - 1/2	G 1/8	2,1 - 8,0	176
B-491723020	2	M 4 - M12	5/32 - 1/2	G 1/8	3,0 - 9,0	280
B-491723030	3	M 5 - M20	7/32 - 3/4	G 1/8 - G 1/2	4,9 - 12	380
B-491723040	4	M 11 - M27	7/16 - 1"	G 1/4 - G 3/4	5,5 - 16	505
B-491723050	5	M 13 - M32	1/2 - 1.1/4	G 1/4 - G 1"	7,0 - 20	700
B-491724060	6	M18 - M42	3/4 - 1.1/2	G1/2 - G1.1/4	11 - 24	1000
B-491724070	7	M27 - M52	1.1/8 - 2	G3/4 - G1.3/4	16 - 32	1250
B-491724080	8	M27 - M64	1.1/8 - 3	G3/4 - G3	16 - 40	1250

## Giramachos y Volvedores



Referencia	Modelo	Medidas para M	Medidas para	Longitud
B-491823001	16 x 5	M 1 - M 2,6	BSW 1/16 - BSW 3/32	160
B-491823002	20 x 5	M 3 - M 4	BSW 1/8 - BSW 5/32	200
B-491823003	20 x 7	M 4.5 - M 6	BSW 3/16 - BSW 1/4	200
B-491823004	25 x 9	M 7 - M 9	BSW 5/16	224
B-491823005	30 x 11	M 10 - M 11	BSW 3/8 - BSW 7/16	280
B-491823006	38 x 10	MF 12 - MF 15	G 1/4	315
B-491823007	38 x 14	M 12 - M 14	BSW 1/2 - BSW 9/16	315
B-491823008	45 x 14	MF 16 - MF 20	G 3/8-1/2	450
B-491823009	45 x 18	M 16 - M 20	BSW 5/8 - BSW 13/16	450
B-491823010	55 x 16	MF 22 - MF 26	G 5/8 - G 3/4	560
B-491823011	55 x 22	M 22 - M 24	BSW 7/8 - BSW 1"	560
B-491823012	65 x 18	MF 27 - MF 36	G 7/8 - G 1"	630
B-491823013	65 x 25	M 27 - M 36	BSW 1.1/8 - BSW 1.3/8	630
B-491823014	13/16"	20,6 x 6,35	13/16 x 1/4	200
B-491823015	1"	25,4 x 9,5	1" x 3/8	224
B-491823016	1.5/16"	33,4 x 11,1	1.5/16 x 7/16	270
B-491823017	1.1/2"	38,1 x 12,7	1.1/2 x 1/2	315
B-491823018	2"	50,8 x 15,9	2" x 5/8	560
B-491823019	2.1/4"	57,1 x 17,5	2.1/4 x 11/16	560
B-491823020	2.1/2"	63,5 x 19,0	2.1/2 x 3/4	630
B-491823021	3"	76,2 x 22,2	3" x 7/8	900
B-491823022	3.1/2"	88,9 x 25,4	3.1/2" x 1"	900
B-491823023	4"	101,6 x 25,4	4" x 1"	1000

### Mangueras de 1/4 – Diámetro Interior 6

- Caudal de presión 2 a 3.5 Bar – 900l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia:

**82020A**



20 Rótulas articuladas (Long. Total 300 mm)  
3 Bocas de salida (1.6-3.17-6.35 mm)  
2 Racores 1/4 y 1/8

Referencia:

**82021**



20 Rótulas articuladas  
Longitud Total: 300 mm

Referencia:

**82051**



Rollo de 1524 cm de Rótulas

Referencia	Descripción
	<b>82022</b> Boquilla salida ø1.6 mm 4 Und
	<b>82042</b> Boquilla salida ø1.6 mm 50 Und
	<b>82023</b> Boca de salida ø3,17 4 Und
	<b>82043</b> Boca de salida ø3,17 50 Und
	<b>82024</b> Boca de salida ø6,35 4 Und
	<b>82044</b> Boca de salida ø6,35 50 Und
	<b>82223</b> Boca salida ø1,60 - 90° 4 Und
	<b>82243</b> Boca salida ø1,60 - 90° 20 Und
	<b>82224</b> Boca salida ø3,17 90° 4 Und
	<b>82244</b> Boca salida ø3,17 90° 20 Und
	<b>82225</b> Boca salida ø6,35 - 90° 4 Und
	<b>82245</b> Boca salida ø6,35 - 90° 20 Und
	<b>82226</b> Boca salida 90° - 6 Agujeros ø2,5 2 Und
	<b>82246</b> Boca salida 90° - 6 Agujeros 2,5 20 Und
	<b>82017</b> Boca salida plana recta 2 Und
	<b>82037</b> Boca salida plana recta 20 Und
	<b>82054</b> Boca plana 11x1 2 Und
	<b>82074</b> Boca plana 11x1 20 Und
	<b>82027</b> Boca de salida plana 24x0,8 2 Und
	<b>82047</b> Boca de salida plana 24x0,8 20 Und
	<b>82326</b> Juego de 4 boquillas salida 90° ø1.60 - ø3.17 ø6.35 mm - Plana 6 agujeros
	<b>82220</b> Juego que contiene: 4 Tubos de prolongación, 90 mm 4 Bridas de fijación

Referencia	Descripción
	<b>82053</b> Boca plana 20 2 Und
	<b>82073</b> Boca plana 20 20 Und
	<b>82025A</b> Racor de 1/8 NPT 4 Und
	<b>82035A</b> Racor de 1/8 NPT 50 Und
	<b>82026A</b> Racor de 1/4 NPT 4 Und
	<b>82036A</b> Racor de 1/4 NPT 50 Und
	<b>82028</b> Ramificación Y 1/4 2 Und
	<b>82038</b> Ramificación Y 1/4 20 Und
	<b>82062</b> Conector 1/4 hembra NPTF 4 Und
	<b>82082</b> Conector 1/4 hembra NPTF 50 Und
	<b>82011</b> Enlace recto 1/4 4 Und
	<b>82031</b> Enlace recto 1/4 20 Und
	<b>82013</b> Conector 5/8 hembra UNF 4 Und
	<b>82033</b> Conector 5/8 hembra UNF 20 Und
	<b>82014</b> Conector 7/16 hembra UNF 4 Und
	<b>82034</b> Conector 7/16 hembra UNF 20 Und
	<b>82012</b> Racor hembra 1/8 NPT - 1/4 4 Und
	<b>82032</b> Racor hembra 1/8 NPT - 1/4 20 Und
	<b>82222</b> Bridas de fijación 4 Und
	<b>82242</b> Bridas de fijación 20 Und
	<b>62420</b> Codo macho hembra 1/4 2 Und
	<b>62430</b> Codo macho hembra 1/4 20 Und
	<b>82221</b> 4 Tubos de prolongación fijos de 90 mm
	<b>82241</b> 20 Tubos de prolongación fijos de 90 mm

**Mangueras de 1/4 – Diámetro Interior 6**

- Caudal de presión 2 a 3.5 Bar – 900l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia	Descripción	
	<b>82055</b>	Boca plana 11x1,5 2 Und
	<b>82075</b>	Boca plana 11x1,5 20 Und
	<b>82056</b>	Boca plana - 7 agujeros ø1 2 Und
	<b>82076</b>	Boca plana - 7 agujeros ø1 20 Und
	<b>82057</b>	Boca plana - 5 agujeros ø1 2 Und
	<b>82077</b>	Boca plana - 5 agujeros ø1 20 Und
	<b>62426</b>	Conexión en T 1/4 2 Und
	<b>62436</b>	Conexión en T 1/4 20 Und
	<b>62422</b>	Conexión salida central 1/4 4 Und
	<b>62442</b>	Conexión salida central 1/4 20 Und
	<b>62424</b>	Tapones cierre 1/4 4 und
	<b>62444</b>	Tapones cierre 1/4 20 und
	<b>82227</b>	Boca plana - 20 agujeros 2 Und
	<b>82247</b>	Boca plana - 20 agujeros 20 Und
	<b>82228</b>	Boca plana - 20 agujeros ø1.5 2 Und
	<b>82248</b>	Boca plana - 20 agujeros ø1.5 20 Und
	<b>82229</b>	Boca plana - 20 agujeros ø1 2 Und
	<b>82249</b>	Boca plana - 20 agujeros ø1 20 Und
	<b>26171</b>	Pinza de montaje 1/4

Referencia	Descripción	
	<b>62423</b>	Anillo de 15 conexiones de salida con 1 tapón de cierre
	<b>82721A</b>	Grifo macho 1/4 NPT Adaptador 2 Und
	<b>82731A</b>	Grifo macho 1/4 NPT Adaptador 10 Und
	<b>82722</b>	Grifo en línea 1/4 2 Und
	<b>82732</b>	Grifo en línea 1/4 10 Und
	<b>82723A</b>	Grifo macho 1/4 NPT 2 Und
	<b>82723A</b>	Grifo macho 1/4 NPT 10 Und
	<b>82724A</b>	Grifo hembra 1/4 NPT 2 Und
	<b>82774A</b>	Grifo hembra 1/4 NPT 10 Und
	<b>82725</b>	Válvula de retención 1/4 2 Und
	<b>82745</b>	Válvula de retención 1/4 10 Und
	<b>52400</b>	Conjunto conector modular 1/4
	<b>52410</b>	Conjunto conector modular 1/4 con grifo
	<b>52416</b>	Soporte conector modular 1/4



### Mangueras de 3/8 – Diámetro Interior 9 mm

- Caudal de presión 0.7 a 1.5 Bar – 3700l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 65°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia: **83430A**



8 Rótulas articuladas  
3 Bocas salida ø16 – ø20  
1 Racor 3/8 NPT

Referencia: **83031**



20 Rótulas articuladas

Referencia: **83051**










Rótulas articuladas  
Longitud Total: 762 cm

Referencia: **83091**



Rótulas articuladas  
Longitud Total: 1524 cm

Referencia	Descripción
	<b>83032</b> Bocas de salida ø6.35 - 3/8 4 Und
	<b>83052</b> Bocas de salida ø6.35 - 3/8 50 Und
	<b>83033</b> Boca salida ø9,30 - 3/8 4 Und
	<b>83053</b> Boca salida ø9,30 - 3/8 50 Und
	<b>83034</b> Boca salida ø12,7 - 3/8 4 Und
	<b>83054</b> Boca salida ø12,7 - 1/2 50 Und
	<b>83035A</b> Racor 3/8 NPT 4 Und
	<b>83055A</b> Racor 3/8 NPT 50 Und
	<b>83036A</b> Racor 1/2 NPT 4 Und
	<b>83056A</b> Racor 1/2 NPT 50 Und
	<b>83037</b> Boca salida plana 32x4,5 - 3/8 2 Und
	<b>83057</b> Boca salida plana 32x4,5 - 3/8 20 Und
	<b>83038</b> Ramificación Y 3/8 2 Und
	<b>83058</b> Ramificación Y 3/8 20 Und

Referencia	Descripción
	<b>83011</b> Adaptador 3/8 4 Und
	<b>83041</b> Adaptador 3/8 20 Und
	<b>84445</b> Válvula de retención 3/8 2 Und
	<b>84465</b> Válvula de retención 3/8 10 Und
	<b>83651</b> Adaptador 3/8 a 1/4 2 Und
	<b>83851</b> Adaptador 3/8 a 1/4 10 Und
	<b>83722</b> Válvula conexión línea 2 Und
	<b>83742</b> Válvula conexión línea 10 Und
	<b>83723A</b> Válvula conexión macho NPT 2 Und
	<b>83743A</b> Válvula conexión macho NPT 10 Und
	<b>83724A</b> Válvula conexión hembra 2 Und
	<b>83744A</b> Válvula conexión hembra NPT 10 Und
	<b>26176</b> Pinza de montaje - 3/8

**Mangueras de 1/2 – Diámetro Interior 12 mm**

- Caudal de presión 1.5 a 2 Bar – 1800l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia: **84040A**



12 Rótulas articuladas  
3 Bocas de salida  
(6.35-9.30-12.7mm)  
2 Racores 1/2 y 3/8

Referencia: **84041**



Pack de 2 Rótulas articuladas  
Longitud: 13.5 cm

Referencia: **84081**



Rótulas articuladas Long.  
Total: 1524 cm




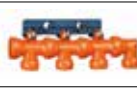






Referencia	Descripción
 <b>84044</b>	Bocas de salida ø6.35 mm 4 Und
 <b>84064</b>	Bocas de salida ø6.35 mm 50 Und
 <b>84042</b>	Boca salida ø9,30 - 1/ 2 4 Und
 <b>84062</b>	Boca salida ø9,30 - 1/ 2 50 Und
 <b>84043</b>	Boca salida ø12,7 - 1/2 4 Und
 <b>84063</b>	Boca salida ø12,7 - 1/2 50 Und
 <b>84443</b>	Boca salida 90° - ø6,35 - 1/2 4 Und
 <b>84463</b>	Boca salida 90° - ø6,35 - 1/2 50 Und
 <b>84055</b>	Boca salida plana 1/2 2 Und
 <b>84075</b>	Boca salida plana 1/2 20 Und
 <b>84056</b>	Boca salida plana - 7 agujeros ø2 2 Und
 <b>84076</b>	Boca salida plana - 7 agujeros ø2 20 Und
 <b>84057</b>	Boca salida plana - 5 agujeros ø3 2 Und
 <b>84077</b>	Boca salida plana - 5 agujeros ø3 20 Und
 <b>84058</b>	Boca salida 32 - 1/2 2 Und
 <b>84078</b>	Boca salida 32 - 1/2 20 Und
 <b>84059</b>	Boca salida 41 - 1/2 2 Und
 <b>84079</b>	Boca salida 41 - 1/2 20 Und
<b>84047</b>	Boca salida plana 32x4,5 2 Und
<b>84067</b>	Boca salida plana 32x4,5 20 Und
<b>84050</b>	Boca salida plana 42x3 2 Und
<b>84070</b>	Boca salida plana 42x3 20 Und

Referencia	Descripción
 <b>84444</b>	Boca salida 90° ø9,3 - 1/2 4 Und
 <b>84464</b>	Boca salida 90° ø9,3 - 1/2 50 Und
 <b>84445</b>	Boca salida 90° ø12,7 - 1/2 4 Und
 <b>84465</b>	Boca salida 90° ø12,7 - 1/2 50 Und
 <b>84446</b>	Boca salida peine 1/2 2 Und
 <b>84466</b>	Boca salida peine 1/2 20 Und
 <b>84054</b>	Boca salida plana 1/2 2 Und
 <b>84074</b>	Boca salida plana 1/2 20 Und
 <b>84011</b>	Adaptador 1/2 4 Und
 <b>84031</b>	Adaptador 1/2 20 Und
 <b>64620</b>	Codo macho hembra 1/2 2 Und
 <b>64640</b>	Codo macho hembra 1/2 20 Und
 <b>64626</b>	Conexión T 1/2 2 Und
 <b>64646</b>	Conexión T 1/2 20 Und
 <b>64622</b>	Conexión con salida central 1/2 4 Und
 <b>64642</b>	Conexión con salida central 1/2 20 Und
 <b>64624</b>	Tapón 1/2 2 Und
 <b>64644</b>	Tapón 1/2 20 Und
<b>84722</b>	Grifo en línea 1/2 2 Und
<b>84742</b>	Grifo en línea 1/2 10 Und
<b>84723A</b>	Grifo macho 1/2 NPT 2 Und
<b>84743A</b>	Grifo macho 1/2 NPT 10 Und

### Mangueras de 1/2 – Diámetro Interior 12 mm

- Caudal de presión 1.5 a 2 Bar – 1800l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia	Descripción	
	<b>84052</b>	Boca salida plana 60x3 2 Und
	<b>84072</b>	Boca salida plana 60x3 20 Und
	<b>84447</b>	Boca plana - 20 agujeros ø2 2 Und
	<b>84467</b>	Boca plana - 20 agujeros 20 Und
	<b>84046A</b>	Conector 3/8 NPT 4 Und
	<b>84066A</b>	Conector 3/8 NPT 50 Und
	<b>84045A</b>	Conector 1/2 NPT 4 Und
	<b>84065A</b>	Conector 1/2 NPT 50 Und
	<b>84048</b>	Ramificación Y 1/2 a 1/2 2 Und
	<b>84068</b>	Ramificación Y 1/2 a 1/2 20 Und
	<b>84049</b>	Ramificación Y 1/2 a 1/4 2 Und
	<b>84069</b>	Ramificación Y 1/2 a 1/4 20 Und
	<b>84651</b>	Reducción 1/2 a 1/4 2 Und
	<b>84851</b>	Reducción 1/2 a 1/4 20 Und
	<b>84441</b>	4 Tubos de prolongación fijos
	<b>84461</b>	20 Tubos de prolongación fijos
	<b>84346</b>	Set de 4 Bocas de salida a 90°
	<b>26172</b>	Pinza de montaje 1/2

Referencia	Descripción	
	<b>84724A</b>	Grifo hembra 1/2 NPT 2 Und
	<b>84744A</b>	Grifo hembra 1/2 NPT 10 Und
	<b>84725</b>	Válvula de retención 1/2 2 Und
	<b>84745</b>	Válvula de retención 1/2 10 Und
	<b>84346</b>	Surtido de 4 Bocas 18x2 – 18x3 – 18x5 y 18x7
	<b>54400</b>	Conjunto conector modular 1/2
	<b>54410</b>	Conjunto conector modular 1/2 Con grifo
	<b>54416</b>	Soporte conector modular 1/2 Set 4
	<b>84440</b>	1 Set Tubos prolongación + 4 Bridas 1/2
	<b>64643</b>	Anillo de 15 Conexiones de salida con 1 tapón de cierre
	<b>84442</b>	Bridas de fijación 4 Und
	<b>84462</b>	Bridas de fijación 20 Und
	<b>84021</b>	Acoplamiento para montaje de 1/2 2 Und

**Mangueras de 3/4 – Diámetro Interior 20 mm**

- Caudal de presión 0.7 a 1.5 Bar – 3700l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.
- Absolutamente hermético y resistente a las vibraciones. Inalterable a los agentes químicos estándar.

Referencia: **86060A**



12 Rótulas articuladas  
(Long. Total 150 mm)  
2 Bocas salida ø16 – ø20  
1 Racor 3/4 NPT

Referencia: **86061**



12 Rótulas articuladas  
Longitud: 150 mm

Referencia: **86081**



Rótulas articuladas  
Longitud Total: 1524 cm

Referencia: **86091**



Rótulas articuladas  
Longitud Total: 2500 cm

Referencia	Descripción	
	<b>86063</b>	Boca de salida ø15.9 4 Und
	<b>86064A</b>	Racor de 3/4 NPT 4 Und
	<b>86074A</b>	Racor de 3/4 NPT 50 Und
	<b>86021</b>	Acoplamiento recto para imán 2 Und
	<b>86022</b>	Base Magnética para Pantalla ø65x10
	<b>86023</b>	Acoplamiento Lateral de Pantalla 2 Und
	<b>86067</b>	Boca plana 75x2 2 Und
	<b>86077</b>	Boca plana 75x2 2 Und
	<b>86068</b>	Ramificación Y 3/4 2 Und
	<b>86078</b>	Ramificación Y 3/4 20 Und
	<b>86069</b>	Reducción Doble 3/4 a 1/2 2 Und
	<b>86079</b>	Reducción Doble 3/4 a 1/2 30 Und

Referencia	Descripción	
	<b>86062</b>	Boca de salida ø19 4 Und
	<b>86051</b>	Reducción 3/4 a 1/2 - 3/4 2 Und
	<b>86071</b>	Reducción 3/4 a 1/2 - 3/4 20 Und
	<b>86011</b>	Enlace Recto 3/4 4 Und
	<b>86031</b>	Enlace Recto 3/4 20 Und
	<b>66620</b>	Codo 3/4 2 Und
	<b>66640</b>	Codo 3/4 20 Und
	<b>86722</b>	Grifo en línea 3/4 – 3/4 2 Und
	<b>86742</b>	Grifo en línea 3/4 – 3/4 10 Und
	<b>86723A</b>	Grifo macho 3/4 NPT - 3/4 2 Und
	<b>86743A</b>	Grifo macho 3/4 NPT - 3/4 10 Und
	<b>86724A</b>	Grifo hembra 3/4 NPT - 3/4 2 Und
	<b>86744A</b>	Grifo hembra 3/4 NPT - 3/4 10 Und
	<b>26177</b>	Pinza de montaje 3/4


### Sistemas de Aspiración 2 1/2"

- La manguera de aspiración Loc-Line esta diseñada para acoplar a sistemas de aspiración con el fin de aspirar humo, polvo, serrín, etc.
- Su fácil montaje hace que su utilización sea muy polivalente en múltiples aplicaciones como: humos de soldadura, rectificadora, electroerosión, maderas...
- Temperatura de fusión: 165° - Temperatura máxima de trabajo: 65° - Resistencia superficial 1000 E3ohm.

Referencia	Descripción
	89091 9 Rótulas
	89191 18 Rótulas
	89291 180 Rótulas
	89094 Boca aspiración ø115 1 Und
	89194 Boca aspiración ø115 10 Und
	89092 Boca aspiración 153 x 89 1 Und
	89192 Boca aspiración 153 x 89 10 Und
	89093 Boca aspiración ovalada 1 Und
	89193 Boca aspiración ovalada 10 Und
	89095 Adaptador para tubo metálico de 3" (76.20 mm) 1 Und
	89195 Adaptador para tubo metálico de 3" (76.20 mm) 10 Und
	89101 Adaptador aspiradora 1 Und
	89102 Adaptador aspiradora 1 Und

Referencia	Descripción
	89722 Válvula en línea 1 Und
	89742 Válvula en línea 10 Und
	89096 Adaptador aspiradora 1 Und
	89196 Adaptador aspiradora 10 Und
	89097 Adaptador aspiradora 1 Und
	89197 Adaptador aspiradora 10 Und
	89099 Adaptador para tubo 1 Und
	89199 Adaptador para tubo 10 Und
	89038 Reductor Y para tubo 4ª a 2,5" 1 Und
	89098 Adaptador aspiradora 1 Und
	89198 Adaptador aspiradora 10 Und
	Ejemplo de aplicación del sistema de aspiración

### Pantallas y Lanzas con Soporte Magnético


Referencia	Descripción	Referencia	Descripción
	<b>34101</b> Conjunto Completo Soporte + Pantalla 150 x 200	34101-8P	Recambio Pantalla 150x200
	<b>34102</b> Conjunto Completo Soporte + Pantalla 190 x 250	34102-10P	Recambio Pantalla 190x250
	<b>34103</b> Conjunto Completo Soporte + Pantalla 215 x 300	34103-12P	Recambio Pantalla 215x300


Referencia	Descripción
	<b>88003</b> Soporte Magnético y Lanza 1/4 - 180 mm
	<b>88005</b> Soporte Magnético y Lanza 1/4 con grifo - 180 mm
	<b>88103</b> Soporte Magnético y Lanza 1/4 - 365 mm
	<b>88105</b> Soporte Magnético y Lanza 1/4 Con Grifo - 365 mm





**Lanzas con Soporte Magnético**

		Referencia	Descripción
		87011	Soporte Magnético y 3 Lanzas 1/4 con grifo - 365 mm
		87002	Soporte Magnético y 2 Lanzas 1/4 con grifo - 365 mm

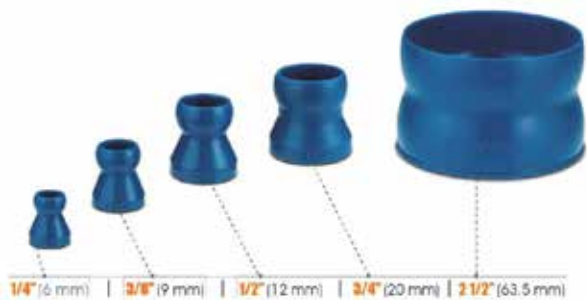
		Referencia	Descripción
		<b>62720A</b>	Lanza 365 mm + Adaptador Hembra 1/4 NPT y Boca 6.35 mm
		<b>62721A</b>	Lanza 365 mm + Adaptador Macho 1/4 NPT y Boca 6.35 mm

		Referencia	Descripción
		<b>63720A</b>	Lanza 315 mm + Adaptador Hembra 3/8 NPT y Boca 6.35 mm
		<b>63721A</b>	Lanza 315 mm + Adaptador Macho 3/8 NPT y Boca 6.35 mm

		Referencia	Descripción
		<b>64720A</b>	Lanza 290 mm + Adaptador Hembra 1/2 NPT y Boca 6.35 mm
		<b>62721A</b>	Lanza 290 mm + Adaptador Macho 1/2 NPT y Boca 6.35 mm

		Referencia	Descripción
		<b>66720A</b>	Lanza 325 mm + Adaptador Hembra 3/4 NPT y Boca 6.35 mm
		<b>66721A</b>	Lanza 325 mm + Adaptador Macho 3/4 NPT y Boca 6.35 mm

**Información Técnica Jeton**



Modelo	Características	
1/4"	2-3 kg/cm <sup>3</sup>	900l/h
3/8"	2-3 kg/cm <sup>3</sup>	1500l/h
1/2"	1.4-2 kg/cm <sup>3</sup>	1700l/h
3/4"	0.7-1.4 kg/cm <sup>3</sup>	1900l/h

¿Cómo Calcular las Longitudes?



Modelo	
<b>1/4"</b>	10.2 mm + (14.8 mm x B) + 35.2 mm = Total
<b>3/8"</b>	12.7 mm + (17.3 mm x B) + 39.2 mm = Total
<b>1/2"</b>	14.8 mm + (21.1 mm x B) + 37.8 mm = Total
<b>3/4"</b>	14.2 mm + (23.7 mm x B) + 43 mm = Total



### Mangueras Resistente Ácidos de 1/4 – Diámetro Interior 6

• Caudal de presión 2 a 3.5 Bar – 900l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.

Referencia:

45463



20 Rótulas articuladas  
3 Bocas de salida  
(1.6 – 3.17 6.35 mm)  
2 Racores 1/4 y 1/8

Referencia:

52021



20 Rótulas articuladas  
Longitud Total: 280 mm

Referencia:

52051



Rollo de 1.524 cm  
de Rótulas

Referencia	Descripción
 52022	Boca de salida ø1.6 mm - 4 Und
 52042	Boca de salida ø1.6 mm - 50 Und
 52024	Boca de salida ø6.35 mm - 4 Und
 52044	Boca de salida ø6.35 mm - 50 Und
 52025A	Racor de 1/8 NPT - 4 Und
 52035A	Racor de 1/8 NPT - 50 Und
 52028	Ramificación Y - 2 Und
 52038	Ramificación Y - 20 Und
 52420	Codos a 90° - 2 Und
 52430	Codos a 90° - 20 Und

Referencia	Descripción
 52403	Boca de salida ø3.17 mm - 4 Und
 52043	Boca de salida ø3.17 mm - 50 Und
 52027	Salida boca plana doble 24 x 0.8 2 Und
 52047	Salida boca plana doble 24x0.8 20 Und
 52026A	Racor de 1/4 NPT - 4 Und
 52036A	Racor de 1/4 NPT - 50 Und
 52011	Enlace Recto - 4 Und
 52031	Enlace Recto - 20 Und
 52426	Conexión en T - 2 Und
 52436	Conexión en T - 20 Und

### Mangueras Resistente Ácidos de 1/2 – Diámetro Interior 12

• Caudal de presión 1.5 a 2 Bar – 1800l/hora. Temperatura de fusión 165° - Temperatura máxima de trabajo 76°C.

Referencia:

56863



20 Rótulas articuladas  
3 Bocas de salida  
(6.35 – 9.30 12.7 mm)  
2 Racores 1/4 y 1/8

Referencia:

54041



12 Rótulas articuladas  
Longitud Total: 270 mm

Referencia:

54081



690 Rótulas articuladas  
Longitud Total: 15 m

Código	Descripción
 54044	Boca de salida ø6.35 mm - 4 Und
 54064	Boca de salida ø6.35 mm - 50 Und
 54043	Boca de salida ø12.7 mm - 4 Und
 54063	Boca de salida ø12.7 mm - 50 Und
 54045A	Racor de 1/2 NPT - 4 Und
 54065A	Racor de 1/2 NPT - 20 Und
 54048	Ramificación Y - 2 Und
 54068	Ramificación Y - 20 Und
 54049	Reducción doble 1/2 a 1/4 - 2 Und
 54069	Reducción doble 1/2 a 1/4 - 20 Und
54626	Conexión en T - 2 Und
54646	Conexión en T - 20 Und

Código	Descripción
 54042	Boca de salida ø9.30 mm - 4 Und
 54062	Boca de salida ø9.30 mm - 50 Und
 54047	Salida Plana doble 24 x 0.8 - 2 Und
 54067	Salida Plana doble 24 x 0.8 - 20 Und
 54050	Boca de salida 32 x 4.5 - 2 Und
 54070	Boca de salida 32 x 4.5 - 20 Und
 54651	Reducción 1/2 a 1/4 - 2 Und
 54851	Reducción 1/2 a 1/4 - 20 Und
 54620	Codo a 90° - 2 Und
 54640	Codo a 90° - 20 Und

**Sistema de Alta Preción Ajustable**

• Presión: 30kg/cm2

Modelo JTSP



Modelo JTASP



Referencia JTSP	Modelo	D	Rosca	L	L1	D1	B1	Hexágono
JTSP-1-8-20-4	Ø4-20L	4	1/8"	20	10	6	6	17
JTSP-1-8-20-2	Ø2-20L	2	1/8"	20	10	6	6	17
JTSP-1-8-20-1	Ø1-20L	1	1/8"	20	10	6	6	17
JTSP-1-8-40-4	Ø4-40L	4	1/8"	40	10	6	6	17
JTSP-1-8-40-2	Ø2-40L	2	1/8"	40	10	6	6	17
JTSP-1-8-40-1	Ø1-40L	1	1/8"	40	10	6	6	17
JTSP-1-8-60-4	Ø4-60L	4	1/8"	60	10	6	6	17
JTSP-1-8-60-2	Ø2-60L	2	1/8"	60	10	6	6	17
JTSP-1-8-60-1	Ø1-60L	1	1/4"	60	10	6	6	17
JTSP-1-4-20-4	Ø4-20L	4	1/4"	20	10	6	6	17
JTSP-1-4-20-2	Ø2-20L	2	1/4"	20	10	6	6	17
JTSP-1-4-20-1	Ø1-20L	1	1/4"	20	10	6	6	17
JTSP-1-4-40-4	Ø4-40L	4	1/4"	40	10	6	6	17
JTSP-1-4-40-2	Ø2-40L	2	1/4"	40	10	6	6	17
JTSP-1-4-40-1	Ø1-40L	1	1/4"	40	10	6	6	17
JTSP-1-4-60-4	Ø4-60L	4	1/4"	60	10	6	6	17
JTSP-1-4-60-2	Ø2-60L	2	1/4"	60	10	6	6	17
JTSP-1-4-60-1	Ø1-60L	1	1/4"	60	10	6	6	17
JTSP-3-8-30-6	Ø6-30L	6	3/8"	30	13	8	10	24
JTSP-3-8-50-6	Ø6-50L	6	3/8"	50	13	8	10	24
JTSP-3-8-70-6	Ø6-70L	6	3/8"	70	13	8	10	24
JTSP-1-2-40-8	Ø8-40L	8	1/2"	40	18	10	12	32
JTSP-1-2-60-8	Ø8-60L	8	1/2"	60	18	10	12	32
JTSP-1-2-80-8	Ø8-80L	8	1/2"	80	18	10	12	32
Referencia JTASP	Modelo	D	Rosca	L	D1	B1	Hexágono	
JTASP-1-8-10-4	Ø4-10L	4	1/8"	10	6	6	17	
JTASP-1-8-10-2	Ø2-10L	2	1/8"	10	6	6	17	
JTASP-1-8-10-1	Ø1-10L	1	1/8"	10	6	6	17	
JTASP-1-8-30-4	Ø4-30L	4	1/8"	30	6	6	17	
JTASP-1-8-30-2	Ø2-30L	2	1/8"	30	6	6	17	
JTASP-1-8-30-1	Ø1-30L	1	1/8"	30	6	6	17	
JTASP-1-8-50-4	Ø4-50L	4	1/8"	50	6	6	17	
JTASP-1-8-50-2	Ø2-50L	2	1/8"	50	6	6	17	
JTASP-1-8-50-1	Ø1-50L	1	1/8"	50	6	6	17	
JTASP-1-4-40-4	Ø4-10L	4	1/8"	10	6	6	17	
JTASP-1-4-40-2	Ø2-10L	2	1/4"	10	6	6	17	
JTASP-1-4-40-1	Ø1-10L	1	1/4"	10	6	6	17	
JTASP-1-4-30-4	Ø4-30L	4	1/4"	30	6	6	17	
JTASP-1-4-30-2	Ø2-30L	2	1/4"	30	6	6	17	
JTASP-14-30-1	Ø1-30L	1	1/4"	30	6	6	17	
JTASP-1-4-50-4	Ø4-50L	4	1/4"	50	6	6	17	
JTASP-1-4-50-2	Ø2-50L	2	1/4"	50	6	6	17	
JTASP-1-4-50-1	Ø1-50L	1	1/4"	50	6	6	17	
JTASP-3-8-10-4	Ø4-10L	4	3/8"	10	6	6	17	
JTASP-3-8-10-2	Ø2-10L	2	3/8"	10	6	6	17	
JTASP-3-8-10-1	Ø1-10L	1	3/8"	10	6	6	17	
JTASP-3-8-30-4	Ø4-30L	4	3/8"	30	6	6	17	
JTASP-3-8-30-2	Ø2-30L	2	3/8"	30	6	6	17	
JTASP-3-8-30-1	Ø1-30L	1	3/8"	30	6	6	17	
JTASP-3-8-50-4	Ø4-50L	4	3/8"	50	6	6	17	
JTASP-3-8-50-2	Ø2-50L	2	3/8"	50	6	6	17	
JTASP-3-8-50-1	Ø1-50L	1	3/8"	50	6	6	17	

### Mangos + Cuchillas para Rebarbado

Referencia		Descripción
EL1100GT		Set de Cuchillas B: (2.6 mm) Incluye: Mango + Extensión + 1 Cuchilla B10 y 1 Cuchilla B20
EL1200GT		Set de Cuchillas E: (3.2 mm) Incluye: Mango + Extensión + 1 Cuchilla GT-E100, 1 Cuchilla GT-E200 y 1 Cuchilla GT-E300
EL1300GT		Set de Cuchillas C: Avellanado Incluye: Mango + Extensión + 1 Cuchilla GT-C20 (ø20 mm)
EL1400GT		Set de Cuchillas N: Chavetero Incluye: Mango + Extensión + Cuchilla GT-N80K
EL1601GT		Set de Cuchillas T: Rasqueta Triangular Incluye: Mango + Extensión + Cuchilla GT-T60 + Funda Protectora
EL1600GT		Set de Cuchillas T: Rasqueta Triangular Incluye: Mango + Extensión + Cuchilla GT-T40 + Funda Protectora
EL1500GT		Set de Cuchillas T: Mini Rasqueta Incluye: Mango + Extensión + Cuchilla GT-D50 + Funda Protectora
EL1501GT		Set de Cuchillas T: Rasqueta Interior Incluye: Mango + Extensión + Cuchilla GT-D66
EL7500GT		Set de Cuchillas C: Avellanado Rotativo Incluye: Mango + Cuchilla GT-C20
EL1705GT		Set de Cuchillas C: Ranuras Incluye: Mango + Extensión + Cuchilla GT-L5
EL1703GT		Set de Cuchillas C: Ranuras Incluye: Mango + Extensión + Cuchilla GT-L3
DB2000GT		Set de Cuchillas N: Incluye: Mango + 2 Cuchillas GT-N80
SC8000GT		Mango Rasqueta + Cuchilla T80 Mango de Aluminio Hexagonal
EL6000GT		Set de Cuchillas E: (3.2 mm) Incluye: Mango + 1 Cuchilla GT-E100 + 1 Cuchilla GT-E200 + 1 Cuchilla GT-E300
EL6500GT		Set de Cuchillas C: Avellanado Rotativo Incluye: Mango + Cuchilla GT-BC1650 (ø16.5 mm)
RB1000GT		Mango Aluminio + Cuchilla GT-E100 (ø3.2 mm)
EO1000GT		Mango Aluminio con clip de un solo uso con Cuchilla GT-E100 (ø3.2 mm)
EO2000GT		Mango Aluminio con soporte plástico y clip + Cuchilla GT-E100 (ø3.2 mm)
NB1108GT		Set de Mango Tipo E (ø3.2 mm) Incluye: Mango + Cuchilla GT-E100S - GT-E200S
RD1040GT		Set Avellanado Tipo C Incluye: Mango + Cuchilla GT-BC1040 de Avellanado 0-10.4 mm

## Mangos + Cuchillas para Rebarbado

Referencia		Descripción
RD4000GT		Set de Avellanado Exterior Tipo C Incluye: Mango + Cuchilla GT-EX2000 de Avellanado 4-18 mm
KW2000GT		Set de Avellanado Ranuras Incluye: Mango + Cuchilla GT-BO1000 para roscas/ranuras
TC1000GT		Set de Avellanado Roscas Interiores Incluye: Mango + Cuchilla GT-BC1000
RC2200GT		Avellanador Largo Reversible con Mango + Cuchilla GT-BR2200 – Rango 10-22 mm
RC2000GT		Avellanador Reversible con Mango + Cuchilla GT-BR2000 – Rango 5.5-10 mm
RC1000GT		Avellanador Mini Reversible con Mango + Cuchilla GT-BR100 – Rango 3-5.5 mm
YT1100GT		Mango con Rasqueta Mini y Cuchilla GT-D75
YT1200GT		Mango con Rasqueta Ajustable y Cuchilla GT-T80
SG1000GT		Kit Mango Doble Adaptador B + E Incluye: Mango con Cuchilla GT-100S + Cuchilla GT-B10S
RB1401GT		Mango Plástico con Cuchilla GT-E100 (ø3.2 mm)
EL5100GT		Kit Uso General Incluye: 1 Mango + Dos Extensiones para Cuchillas E y B + 1 Cuchilla de cada modelo GT-E100 - GT-E200 - GT-E300 - GT-B10 - GT-B20 - GT-B30
EL5065GT		Kit Cerámico Incluye: 1 Mango + Cuchilla GT-CR6001 (65°) para materiales plásticos blandos
EL5075GT		Kit Cerámico Incluye: 1 Mango + Cuchilla GT-CR61001 (75°) para materiales duros blandos
CR1100GT		Mango y Cuchilla de un solo uso para plásticos
CR2000GT		Kit Cerámico Incluye: 1 Mango + 1 Cuchilla en forma de radio R250 mm para todo tipo de plásticos
DB5000GT		Kit Cerámico Incluye: 1 Mango de doble cuchilla para plástico y cuchilla para uso en plásticos
EB1000GT		Mango ergonómico con cuchillas 3.2mm modelo E-100
EB2000GT		Mango ergonómico con cuchilla de 2.6mm modelo B10
EB3000GT		Mango ergonómico con cuuchilla GT-CR26001
EB4000GT		Mango ergonómico con cuchilla rasqueta modelo GT-D50



### Kits de Rebarbado

**Referencia: NB1200GT1**

Set Mango para Cuchillas Tipo E (ø3.2mm)  
Con 20 Cuchillas GT-E100



**Referencia: SG2000GT1**

Set Mango para Cuchillas  
Tipo E (ø3.2 mm) y B (ø2.6 mm)  
Con 11 Cuchillas GT-E100S + 11 Cuchillas GT-B105



**Referencia: EL8300GT**

Set Mango Telescópico  
Tipo B (ø2.6 mm) con 5 Cuchillas GT-B10  
y 5 Cuchillas GT-B-20



**Referencia: EL8350GT**

Set Mango Telescópico  
Tipo E (ø3.2 mm) con 5 Cuchillas GT-E100  
y 5 Cuchillas GT-E-200



**Referencia: YT3000GT**

Set Rasqueta y Lima Diamantada  
Incluye Mango y 7 Limas/Rasquetas



**Referencia: SP1010GT**

Set Pro Grattec  
Incluye: 1 Mango Aluminio  
para Cuchillas E + 6 Cuchillas  
de diferentes tipos



**Referencia: CR5510GT**

Set Cerámico incluye:  
1 Mango  
+ 5 Cuchillas GT-CR6001 (65°)  
+ 5 Cuchillas GT-CR61001 (75°)



**Referencia: SP1700GT**

Grattec 7 Piezas: Kit con 7 Mangos  
y sus 7 cuchillas y extensiones



**Referencia: EL2000GT**

Grattec Box: Kit Universal  
con 2 Mangos, 6 Extensiones  
y sus cuchillas correspondientes



**Referencia: RB4000GT**

Súper Set: 1 Mango Aluminio + 1 Cuchilla  
GT-E100 + 1 Cuchilla GT-D50



**Referencia: YT2000GT1**

Set Mango para Cuchillas Tipo D  
Con 1 Rasqueta Triangular GT-D75 y  
GT-T80













**Referencia: EB7001GT**

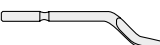

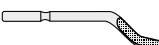

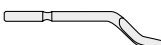










Set de rebarbado para sistemas 3D compuesto  
por los modelos:  
EB1000 + EB2000 + EB3000 + EB4000















**Cuchillas Grattec Tipo B (ø2.6 mm) - Pack 10 Und**

Referencia: GT-B10	Referencia: GT-B10L	Referencia: GT-B10S	Referencia: GT-B10TIN	Referencia: GT-B10D
Uso General	Uso General Izquierda	Cuchilla Cobalto M35	Cuchilla con Recubrimiento	Cuchilla Diamantada
				
Referencia: GT-B10C	Referencia: GT-B20	Referencia: GT-B20C	Referencia: GT-B30	Referencia: GT-B60
Cuchilla Metal Duro	Materiales Blandos Uso Derecha/Izquierda	Cuchilla metal duro para mat. templados y plástico	Interior y Exterior a la vez	Para zonas interiores
				

**Cuchillas Grattec Tipo E (ø3.2 mm) - Pack 10 Und**

Referencia: GT-E100	Referencia: GT-E100L	Referencia: GT-100TIN	Referencia: GT-100D	Referencia: GT-E100C
Cuchilla E100 Uso General	Cuchilla E100-L Uso General Izquierda	Cuchilla E100-Recubierta Uso General	Cuchilla diamantada para cerámica y vidrio	Cuchilla metal duro para mat. templados y plástico
				
Referencia: GT-E101	Referencia: GT-E101L	Referencia: GT-E101TIN	Referencia: GT-E150	Referencia: GT-E200
Cuchilla HSS para aceros y aluminio	Cuchilla HSS para uso Izquierda/Zurdos	Cuchilla N2 *(L/R) Uso Bronce - Fundición	Cuchilla HSS Resistencia para agujeros de ø1.5mm	Cuchilla HSS Para Derechas e Izquierdas
				
Referencia: GT-E200C	Referencia: GT-E202	Referencia: GT-E300	Referencia: GT-E350	Referencia: GT-E600
Cuchilla metal duro para mat. templados y plástico	Cuchilla Hss Para latón y hierro fundido.	Cuchilla HSS para rebarbado int/ext a la vez	Cuchilla N2 TIN *(L/R) Uso Bronce - Fundición	Cuchilla HSS. Para agujeros de difícil acceso
				

**Cuchillas Grattec Tipo C (Avellanado)**

Referencia: GT-BC100	Referencia: GT-BO100	Referencia: GT-C12	Referencia: GT-C20	Referencia: GT-C30
Cuchilla interior para roscas de más de 9mm	Cuchillas Ranuras Angulo hasta 3mm de ancho	Cuchilla C12 - 90° Rango 1-12 mm	Cuchilla C20 - 90° Rango 3-20 mm	Cuchilla C30 - 90° Rango 3-30 mm
				
Referencia: GT-BC3200	Referencia: GT-BC6300	Referencia: GT-BC8300	Referencia: GT-BC1040	Referencia: GT-BC1650
Cuchilla HSS - 0-3mm	Cuchilla HSS - 0-6.3mm	Cuchilla HSS - 0-8.3mm	Cuchilla HSS - 0-10.4mm	Cuchilla HSS - 0-16.5 mm
				
Referencia: GT-EX2000	Referencia: GT-EX30011	NOTA: Cuchillas compatibles con los mangos de otras marcas		
Cuchilla HSS Externa 4-18mm	Cuchilla HSS Externa 8-28mm			
				



### Cuchillas Grattec Tipo L - Tipo BR

Referencia: GT-L1	Referencia: GT-L3	Referencia: GT-L4	Referencia: GT-L5	Referencia: GT-L6
Cuchilla L1 Para claflán 45°	Cuchilla L3 Para Chapa 1-8 mm	Cuchilla L4 Pequeñas esquinas 2.5 mm	Cuchilla L5 Ranuras hasta 5 mm	Cuchilla L6 Limpieza esquinas
Referencia: GT-L7	Referencia: GT-BR2200	Referencia: GT-BR2000	Referencia: GT-GR1000	
Cuchilla L7 Doble Ranura	Cuchilla BR2200 Para agujeros 10-22	Cuchilla BR2000 Para agujeros 5.5-10	Cuchilla BR1000 Para agujeros 3-5.5	

### Cuchillas Grattec Tipo D/Tipo T (Rasquetas)

Referencia: GT-D50	Referencia: GT-D55	Referencia: GT-D75	Referencia: GT-T40	Referencia: GT-T60
Cuchilla D50 Rasqueta 3x2x50	Cuchilla GT-D55 Rasqueta Metal Duro	Cuchilla D75 Rasqueta 3.2x75	Cuchilla T40 Rasqueta 5x40	Cuchilla T60 Rasqueta 7x60
Referencia: GT-D66	Referencia: GT-D77	Referencia: GT-T80		
Cuchilla D66 Rasqueta 3.5x50 a 45°	Cuchilla D77 Rasqueta 3.5x75 a 45°	Cuchilla T80 Rasqueta Doble 80x4.5		

### Cuchillas Grattec Tipo N

Referencia: GT-N80	Referencia: GT-N80M42	Referencia: GT-N80K	Referencia: GT-N80KM42	Referencia: GT-N90K
Cuchilla N80	Cuchilla N80M42	Cuchilla N80K	Cuchilla N80KM42	Cuchilla N90K

### Cuchillas Grattec Tipo CR

Referencia: GT-CR22001	Referencia: GT-CR25001	Referencia: GT-CR51001	Referencia: GT-CR60001	Referencia: GT-CR61001
Cuchilla Cerámica CR22001	Cuchilla Cerámica CR25001	Cuchilla Cerámica CR51001	Cuchilla Cerámica CR6001	Cuchilla Cerámica CR61001
Referencia: GT-CR2600				
Cuchilla Cerámica CR2600				

NOTA: Cuchillas compatibles con los mangos de otras marcas

### Mangos Grattec

Referencia		Descripción
YT1000GT		Mango para Cuchillas tipo Rasqueta
NB1000GT		Mango para Cuchillas tipo E (ø3.2 mm)
SG3000GT		Mango para Cuchillas tipo E (ø3.2 mm) y B (ø2.6 mm)
EL5000GT		Mango para Cuchillas GT-CR6001 y GT-CR6101
EL2100GT		Mango para Cuchillas Tipo E (ø3.2 mm) con almacén interior de cuchillas
EL1000GT		Mango para Cuchillas de todo tipo, libre para poner cualquier adaptador y con almacén interior de cuchillas
EB1000GT		Mango para Cuchillas de todo tipo, y recambio del kit EB7001GT

Mangos compatibles con las cuchillas de otras marcas

### Soportes Magnéticos HOLDTEC



Sistema mecánico con bloque en todas las articulaciones a través de la rueda central.

Referencia	D	L1	L2	L1+L2+L3	N	W x L x H	Ajuste Fino
HT2100	M-5	80	50	201	320	30 X 40 X 35	Superior
HT3200	M-8	110	80	261	800	50 X 60 X 55	Superior
HT4300	M-8	140	110	321	800	50 X 60 X 55	Superior
HT2110	M-5	80	50	152	320	30 X 40 X 35	Base
HT3210	M-8	110	80	212	800	50 X 60 X 55	Base
HT4310	M-8	140	110	272	800	50 X 60 X 55	Base

### Sistemas de Recogevirutas HOOKY

Referencia:	Descripción	Referencia:	Descripción
SP2510GT	Modelo Gancho Longitud: 300 mm	SP2730GT	Modelo con Pala Longitud: 300 mm
SP2560GT	Modelo Gancho Longitud: 500 mm	SP2740GT	Modelo con Pala Longitud: 500 mm
<b>Referencia:</b>	<b>SP2600GT</b>		
Pala de recambio para recogevirutas			

**Características Barras de Metal Duro OKE**

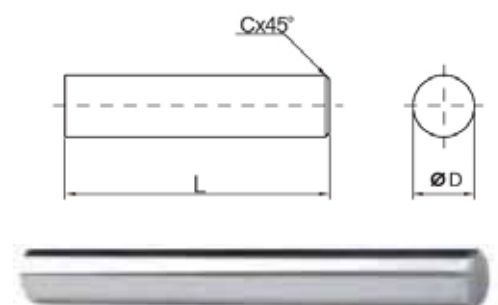
- OKE 805 - Tamaño de grano ultrafino, mayor contenido de Co; con excelente dureza y tenacidad. Se recomienda el uso de fresas de mango y escariadores. Especialmente adecuada para el mecanizado de acabado y el corte de acero (HRC:45-55), aleaciones de aluminio y aleaciones de titanio.  
Calidad: K20-K30 - Grano 0.4um - 12% CO
- OKE 808 - Se recomienda el uso de brocas y fresas. Especialmente adecuada para el mecanizado de acabado y el corte de acero (HRC:45-55), fundición, inoxidables y aceros de alta resistencia.  
Calidad: K30-K40 - Grano 0.7um - 10% CO
- OKE 812 - Se utiliza para fabricar fresas verticales, especialmente adecuadas para acero inoxidable, aleación resistente al calor, casi hierro, etc.  
Calidad: K30-K40 - Grano 0.6um - 10% CO

**Barras de Metal Duro OKE - Barras Enteras**

Referencia	OKE 805	OKE 808	OKE 812
BDMD-D2X330	•	•	
BDMD-D3X330	•	•	•
BDMD-D4X330	•	•	•
BDMD-D5X330	•	•	•
BDMD-D6X330	•	•	•
BDMD-D7X330	•	•	
BDMD-D8X330	•	•	•
BDMD-D9X330	•	•	
BDMD-D10X330	•	•	•
BDMD-D11X330	•	•	
BDMD-D12X330	•	•	•
BDMD-D13X330	•	•	
BDMD-D14X330	•	•	•
BDMD-D15X330	•	•	
BDMD-D16X330	•	•	•
BDMD-D17X330	•	•	
BDMD-D18X330	•	•	•
BDMD-D19X330	•	•	
BDMD-D20X330	•	•	•
BDMD-D25X330	•	•	

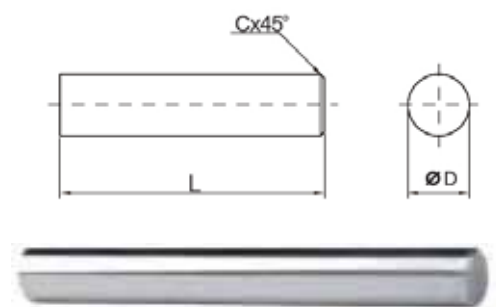

**Barras de Metal Duro - Medidas Cortadas - Chaflán 45°**

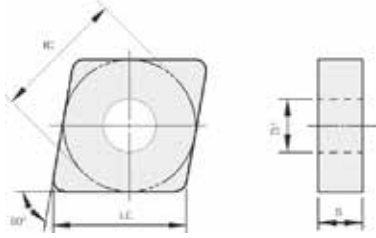
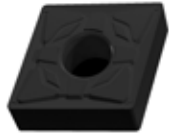
Referencia	OKE 805	OKE 808	L	C
BDMD-D3X40	•	•	40	0.4
BDMD-D3X50	•	•	50	0.4
BDMD-D3X70	•	•	70	0.4
BDMD-D3X100	•	•	100	0.4
BDMD-D4X50	•	•	50	0.4
BDMD-D4X75	•	•	75	0.4
BDMD-D4X100	•	•	100	0.5
BDMD-D5X50	•	•	50	0.5
BDMD-D5X60	•	•	60	0.5
BDMD-D5X70	•	•	70	0.5
BDMD-D5X80	•	•	80	0.5
BDMD-D5X100	•	•	100	0.5
BDMD-D6X50	•	•	50	0.5
BDMD-D6X60	•	•	60	0.5
BDMD-D6X75	•	•	75	0.5
BDMD-D6X100	•	•	100	0.5
BDMD-D7X60	•	•	60	0.6
BDMD-D8X60	•	•	60	0.6
BDMD-D8X80	•	•	80	0.6
BDMD-D8X90	•	•	90	0.6
BDMD-D8X100	•	•	100	0.6




**Barras de Metal Duro - Medidas Cortadas - Chaflán 45°**

Referencia	OKE 805	OKE 808	L	C
BDMD-D10x75	•	•	75	0.6
BDMD-D10x90	•	•	90	0.6
BDMD-D10x100	•	•	100	0.6
BDMD-D11x110	•	•	110	0.8
BDMD-D12x75	•	•	75	0.8
BDMD-D12x90	•	•	90	0.8
BDMD-D12x100	•	•	100	0.8
BDMD-D12x120	•	•	120	0.8
BDMD-D14x75	•	•	75	0.8
BDMD-D14x110	•	•	110	0.8
BDMD-D16x100	•	•	100	0.8
BDMD-D16x150	•	•	150	0.8
BDMD-D18x100	•	•	100	0.8
BDMD-D18x150	•	•	150	0.8
BDMD-D20x100	•	•	100	1.0
BDMD-D20x150	•	•	150	1.0
BDMD-D25x100	•	•	100	1.0
BDMD-D25x150	•	•	150	1.0



**Placas Torneado – CNMG / CNMM - Para Aceros**

**Acabado Fino Aceros**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMG120404-OPF	12,9	12,7	4,76	5,16	0,4	●	●	▲	
CNMG120408-OPF	12,9	12,7	4,76	5,16	0,8	●	●	▲	

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMG120404-OPM	12,9	12,7	4,76	5,16	0,4		●	▲	
CNMG120408-OPM	12,9	12,7	4,76	5,16	0,8		●	▲	
CNMG120412-OPM	12,9	12,7	4,76	5,16	1,2		●	▲	
CNMG120416-OPM	12,9	12,7	4,76	5,16	1,6		●	▲	
CNMG160608-OPM	16,1	15,875	6,35	6,35	0,8		●	▲	
CNMG160612-OPM	16,1	15,875	6,35	6,35	1,2		●	▲	
CNMG160616-OPM	16,1	15,875	6,35	6,35	1,6		●	▲	
CNMG190608-OPM	19,3	19,05	6,35	7,94	0,8		●	▲	▲
CNMG190612-OPM	19,3	19,05	6,35	7,94	0,8		●	▲	▲
CNMG190616-OPM	19,3	19,05	6,35	7,94	0,8		●	▲	▲

**Desbaste Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMG120408-OPR	12,9	12,7	4,76	5,16	0,8		●	▲	
CNMG120412-OPR	12,9	12,7	4,76	5,16	1,2		●	▲	
CNMG120416-OPR	12,9	12,7	4,76	5,16	1,6		●	▲	
CNMG160608-OPR	16,1	15,875	6,35	6,35	0,8		●	▲	
CNMG160612-OPR	16,1	15,875	6,35	6,35	1,2		●	▲	
CNMG160616-OPR	16,1	15,875	6,35	6,35	1,6		●	▲	
CNMG190608-OPR	19,3	19,05	6,35	7,94	0,8		●	▲	▲
CNMG190612-OPR	19,3	19,05	6,35	7,94	1,2		●	▲	▲
CNMG190616-OPR	19,3	19,05	6,35	7,94	1,6		●	▲	▲

**Desbaste Fuerte 1 Cara**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMM190616-PR	19,3	19,05	6,35	7,94	1,6			▲	



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMM250924-PR	25,8	25,4	9,72	9,12	2,4			▲	▲
CNMM250724-PR	25,8	25,4	7,94	9,12	2,4			▲	▲

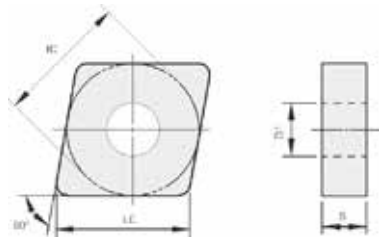
**Placas Torneado – CNMG / CNMM - Para Aceros**

Neutras Semi-Acabado



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CNMG120404	12.9	12.7	4.76	5.16	0.4		●	▲	
CNMG120408	12.9	12.7	4.76	5.16	0.8		●	▲	
CNMG120412	12.9	12.7	4.76	5.16	1.2		●	▲	
CNMG160608	16.1	15.875	6.35	6.35	0.8		●	▲	
CNMG160612	16.1	15.875	6.35	6.35	1.2		●	▲	
CNMG160616	16.1	15.875	6.35	6.35	1.6		●	▲	
CNMG190608	19.3	19.05	6.35	7.94	0.8		●	▲	
CNMG190612	19.3	19.05	6.35	7.94	1.2		●	▲	
CNMG190616	19.3	19.05	6.35	7.94	1.6		●	▲	

**Placas Torneado – CNMG - Para Inoxidable**



Acabado Fino Inoxidable



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CNMG120404-OMF	12,9	12,7	4,76	5,16	0,4	●	▲	●	
CNMG120408-OMF	12,9	12,7	4,76	5,16	0,8	●	▲	●	

Acabado Fino Inoxidable



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CNMG090304-MSF	9,7	9,525	3,18	3,81	0,4	●	▲	●	
CNMG120404-MSF	12,9	12,7	4,76	5,16	0,4	●	▲	●	

Desbaste Medio Inoxidable



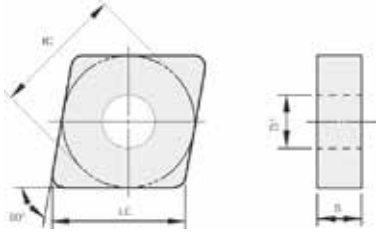
Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CNMG090308-MF	9,7	9,525	3,18	3,81	0,8	●	▲	●	
CNMG120408-MF	12,9	12,7	4,76	5,16	0,8	●	▲	●	
CNMG120412-MF	12,9	12,7	4,76	5,16	1,2	●	▲	●	
CNMG160612-MF	16,1	15,875	6,35	6,35	1,6	●	▲	●	

Desbaste Medio Inoxidable



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CNMG120404-OMM	12,9	12,7	4,76	5,16	0,4	●	▲	●	
CNMG120408-OMM	12,9	12,7	4,76	5,16	0,8	●	▲	●	
CNMG160608-OMM	16,1	15,875	6,35	6,35	0,8	●	▲	●	

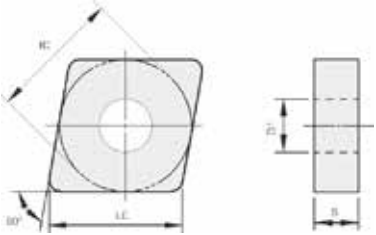


**Placas Torneado – CNMG - Para Materiales Especiales**

**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
CNMG120408-OSM	12,9	12,7	4,76	5,16	0,8	●		
CNMG120412-OSM	12,9	12,7	4,76	5,16	1,2	●	▲	▲

**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
CNMG120404-SMM	12,9	12,7	4,76	5,16	0,4	▲		▲
CNMG120408-SMM	12,9	12,7	4,76	5,16	0,8	▲		▲

**Placas Torneado – CNMG / CNMA - Para Fundición**

**Semi-Acabado Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
CNMG120404-OKM	12,9	12,7	4,76	5,16	0,4	▲		▲
CNMG120408-OKM	12,9	12,7	4,76	5,16	0,8	▲		▲
CNMG120412-OKM	12,9	12,7	4,76	5,16	1,2	▲		▲

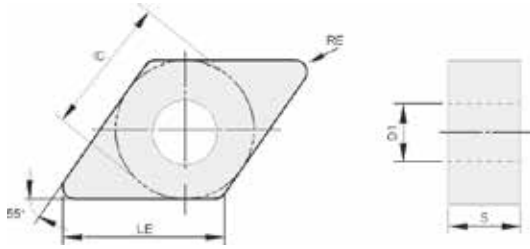
**Desbaste Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
CNMG120408-OKR	12,9	12,7	4,76	5,16	0,4	▲		▲
CNMG120412-OKR	12,9	12,7	4,76	5,16	0,8	▲		▲
CNMG120416-OKR	12,9	12,7	4,76	5,16	0,4	▲		▲
CNMG160612-OKR	16.1	15.8	6.35	6.35	1.2	▲		▲

**Semi-Acabado Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
CNMA120404	12.9	12.7	4.76	5.16	0.4		▲	
CNMA120408	12.9	12.7	4.76	5.16	0.8		▲	
CNMA120412	12.9	12.7	4.76	5.16	1.2		▲	
CNMA120416	12.9	12.7	4.76	5.16	1.6		▲	
CNMA160608	16.1	15.875	6.35	6.35	0.8		▲	
CNMA160612	16.1	15.875	6.35	6.35	1.2		▲	
CNMA160616	16.1	15.875	6.35	6.35	1.6		▲	
CNMA190612	19.3	15.875	6.35	7.94	1.2		▲	
CNMA190616	19.3	15.875	6.35	7.94	1.6		▲	

**Placas Torneado – DNMG - Para Aceros**



**Acabado Fino Aceros**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DNMG110404-OPF	11.6	9.525	4.76	3.81	0.4		●	▲	
DNMG110408-OPF	11.6	9.525	4.76	3.81	0.8		●	▲	
DNMG150404-OPF	15.5	12.7	4.76	5.16	0.4		●	▲	
DNMG150408-OPF	15.5	12.7	4.76	5.16	0.8		●	▲	
DNMG150604-OPF	15.5	12.7	6.35	5.16	0.4		●	▲	
DNMG150608-OPF	15.5	12.7	6.35	5.16	0.8		●	▲	

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DNMG110404-OPM	11.6	9.525	4.76	3.81	0.4		●	▲	
DNMG110408-OPM	11.6	9.525	4.76	3.81	0.8		●	▲	
DNMG110412-OPM	11.6	9.525	4.76	3.81	1.2		●	▲	
DNMG150404-OPM	15.5	12.7	4.76	5.16	0.4		●	▲	
DNMG150408-OPM	15.5	12.7	4.76	5.16	0.8		●	▲	
DNMG150412-OPM	15.5	12.7	4.76	5.16	1.2		●	▲	
DNMG150604-OPM	15.5	12.7	6.35	5.16	0.4		●	▲	
DNMG150608-OPM	15.5	12.7	6.35	5.16	0.8		●	▲	
DNMG150612-OPM	15.5	12.7	6.35	5.16	1.2		●	▲	

**Desbaste Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DNMG150408-OPR	15.5	12.7	4.76	5.16	0.8		●	▲	
DNMG150412-OPR	15.5	12.7	4.76	5.16	1.2		●	▲	
DNMG150608-OPR	15.5	12.7	6.35	5.16	0.8		●	▲	
DNMG150612-OPR	15.5	12.7	6.35	5.16	1.2		●	▲	
DNMG150616-OPR	15.5	12.7	6.35	5.16	1.6		●	▲	

**Neutras Semi-Acabado**



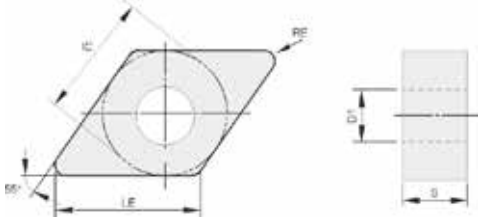
Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DNMG110408	11.6	9.525	4.76	3.81	0.8		●	▲	
DNMG150404	15.5	12.7	4.76	5.16	0.4		●	▲	
DNMG150408	15.5	12.7	4.76	5.16	0.8		●	▲	
DNMG150412	15.5	12.7	4.76	5.16	1.2		●	▲	
DNMG150608	15.5	12.7	6.35	5.16	0.8		●	▲	
DNMG150612	15.5	12.7	6.35	5.16	1.2		●	▲	

**Placas Torneado – DNMG - Para Materiales Especiales**

**Semi-Acabado Materiales Especiales**



Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
DNMG150608-OSM	15.5	12.7	6.35	5.16	0.8	●		

**Placas Torneado – DNMG / DNMA - Para Inoxidables**

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DNMG150604-OMF	15.5	12.7	6.35	5.16	0.4	●	▲	●	
DNMG150608-OMF	15.5	12.7	6.35	5.16	0.8	●	▲	●	

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DNMG110404-MSF	11.6	9.525	4.76	3.81	0.4	●	▲	●	
DNMG150404-MSF	15.5	12.7	4.76	5.16	0.4	●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DNMG110408-MF	11.6	9.525	4.76	3.81	0.8	●	▲	●	
DNMG150408-MF	15.5	12.7	4.76	5.16	0.8	●	▲	●	
DNMG150608-MF	15.5	12.7	6.35	5.16	0.8	●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DNMG110404-OMM	11.6	9.525	4.76	3.81	0.4	●	▲	●	
DNMG110408-OMM	11.6	9.525	4.76	3.81	0.8	●	▲	●	
DNMG150404-OMM	15.5	12.7	4.76	5.16	0.4	●	▲	●	
DNMG150408-OMM	15.5	12.7	4.76	5.16	0.8	●	▲	●	
DNMG150608-OMM	15.5	12.7	6.35	5.16	0.8	●	▲	●	
DNMG150612-OMM	15.5	12.7	6.35	5.16	1.2	●	▲	●	

**Placas Torneado – DNMG / DNMA - Para Fundición**
**Semi-Acabado Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
DNMG150404-OKM	15.5	12.7	4.76	5.16	0.4	▲		▲
DNMG150408-OKM	15.5	12.7	4.76	5.16	0.8	▲		▲
DNMG150604-OKM	15.5	12,7	6.35	5,16	0.4	▲		▲
DNMG150608-OKM	15.5	12,7	6.35	5,16	0.8	▲		▲
DNMG150612-OKM	15.5	12,7	6.35	5,16	1.2	▲		▲

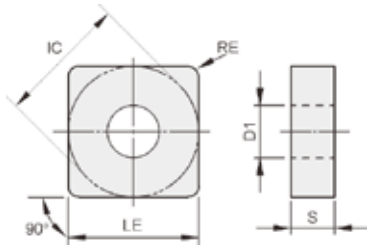
**Desbaste Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
DNMG150408-OKR	15.5	12.7	4.76	5.16	0.8	▲		▲
DNMG150412-OKR	15.5	12.7	4.76	5.16	1.2	▲		▲
DNMG150608-OKR	15.5	12,7	6.35	5,16	0.8	▲		▲
DNMG150612-OKR	15.5	12,7	6.35	5,16	1.2	▲		▲

**Semi-Acabado Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
DNMA150404	15.5	12.7	4.76	5.16	0.4		▲	
DNMA150408	15.5	12.7	4.76	5.16	0.8		▲	
DNMA150604	15.5	12.7	6.35	5.16	0.4		▲	
DNMA150608	15.5	12.7	6.35	5.16	0.8		▲	

## Placas Torneado – SNMG / SNMM - Para Aceros



## Acabado Fino Aceros



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMG120404-OPF	12.7	12.7	4.76	5.16	0.4		●	▲	
SNMG120408-OPF	12.7	12.7	4.76	5.16	0.8		●	▲	

## Acabado Medio Acero



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMG120404-OPM	12.7	12.7	4.76	5.16	0.4		●	▲	
SNMG120408-OPM	12.7	12.7	4.76	5.16	0.8		●	▲	
SNMG120412-OPM	12.7	12.7	4.76	5.16	1.2		●	▲	
SNMG150608-OPM	15.9	15.9	6.35	6.35	0.8		●	▲	
SNMG150612-OPM	15.9	15.9	6.35	6.35	1.2		●	▲	
SNMG190612-OPM	19.1	19.1	6.35	7.94	1.2		●	▲	

## Desbaste Acero



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMG120408-OPR	12.7	12.7	4.76	5.16	0.8		●	▲	
SNMG120412-OPR	12.7	12.7	4.76	5.16	1.2		●	▲	
SNMG150608-OPR	15.9	15.9	6.35	6.35	0.8		●	▲	
SNMG150612-OPR	15.9	15.9	6.35	6.35	1.2		●	▲	
SNMG190612-OPR	19.1	19.1	6.35	7.94	1.2		●	▲	
SNMG190616-OPR	19.1	19.1	6.35	7.94	1.6		●	▲	

## Desbaste Fuerte 1 Cara



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMM190624-OPR	19.05	19.05	6.35	7.94	2.4		●	▲	

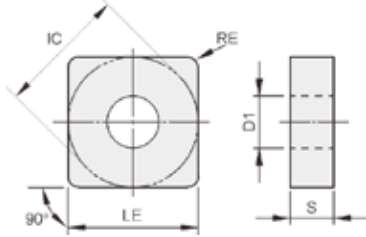


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMM250724-PR	25.4	25.4	9.52	9.13	2.4				▲
SNMM250924-PR	25.4	25.4	9.52	9.13	2.4				▲

## Neutras Semi-Acabado



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SNMG120404	12.7	12.7	4.76	5.16	0.4		●	▲	
SNMG120408	12.7	12.7	4.76	5.16	0.8		●	▲	
SNMG120412	12.7	12.7	4.76	5.16	1.2		●	▲	
SNMG120416	12.7	12.7	4.76	5.16	1.6		●	▲	
SNMG150608	15.9	15.9	6.35	6.35	0.8		●	▲	
SNMG150612	15.9	15.9	6.35	6.35	1.2		●	▲	
SNMG190612	19.1	19.1	6.35	7.94	1.2		●	▲	
SNMG190616	19.1	19.1	6.35	7.94	1.6		●	▲	
SNMG250724	25.4	25.4	7.94	9.12	2.4		●	▲	
SNMG250924	25.4	25.4	9.525	9.12	2.4		●	▲	

**Placas Torneado – SNMG - Para Inoxidables**

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
SNMG120408-OMF	12.7	12.7	4.76	5.16	0.8	●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
SNMG120408-MF	12.7	12.7	4.76	5.16	0.8	●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
SNMG120404-OMM	12.7	12.7	4.76	5.16	0.4	●	▲	●	
SNMG120408-OMM	12.7	12.7	4.76	5.16	0.8	●	▲	●	
SNMG120412-OMM	12.7	12.7	4.76	5.16	1.2	●	▲	●	
SNMG150608-OMM	15.9	15.9	6.35	6.35	1.2	●	▲	●	

**Placas Torneado – SNMG - Para Materialesv Especiales**
**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
SNMG120408-OSM	12.7	12.7	4.76	5.16	0.8	●		

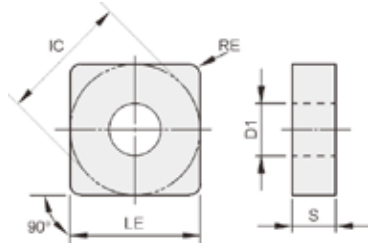
**Placas Torneado – SNMG - Para Fundición**
**Semi-Acabado Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
SNMG120404-OKM	12.7	12.7	4.76	5.16	0.4	▲		▲
SNMG120408-OKM	12.7	12.7	4.76	5.16	0.8	▲		▲
SNMG120412-OKM	12.7	12.7	4.76	5.16	1.2	▲		▲

**Desbaste Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
SNMG120408-OKR	12.7	12.7	4.76	5.16	0.8	▲		▲
SNMG120412-OKR	12.7	12.7	4.76	5.16	1.2	▲		▲
SNMG120416-OKR	12.7	12.7	4.76	5.16	1.6	▲		▲
SNMG150616-OKR	15.875	15.875	6.35	6.35	1.6	▲		▲
SNMG190612-OKR	19.05	19.05	6.35	7.94	1.2	▲		▲

**Placas Torneado – SNMG / SNMA - Para Fundición**



**Neutras Semi-Acabado**



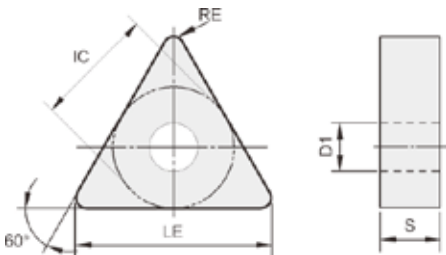
Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
SNMG120404	12.7	12.7	4.76	5.16	0.4		▲	
SNMG120408	12.7	12.7	4.76	5.16	0.8		▲	
SNMG120412	12.7	12.7	4.76	5.16	1.2		▲	
SNMG120416	12.7	12.7	4.76	5.16	1.6		▲	
SNMG150608	15.9	15.9	6.35	6.35	0.8		▲	
SNMG150612	15.9	15.9	6.35	6.35	1.2		▲	
SNMG190612	19.1	19.1	6.35	7.94	1.2		▲	
SNMG190616	19.1	19.1	6.35	7.94	1.6		▲	
SNMG250724	25.4	25.4	7.94	9.12	2.4		▲	
SNMG250924	25.4	25.4	9.525	9.12	2.4		▲	

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
SNMA120408	12.7	12.7	4.76	5.16	0.8		▲	
SNMA120412	12.7	12.7	4.76	5.16	1.2		▲	
SNMA120416	12.7	12.7	4.76	5.16	1.6		▲	

**Placas Torneado – TNMG - Para Aceros**



**Acabado Fino Aceros**



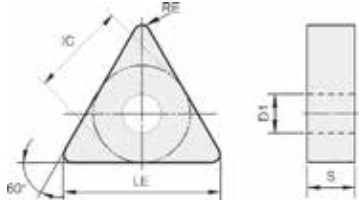
Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TNMG160404-OPF	16.5	9.525	4.76	3.81	0.4		●	▲	
TNMG160408-OPF	16.5	9.525	4.76	3.81	0.8		●	▲	

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TNMG160404-OPM	16.5	9.525	4.76	3.81	0.4		●	▲	
TNMG160408-OPM	16.5	9.525	4.76	3.81	0.8		●	▲	
TNMG160412-OPM	16.5	9.525	4.76	3.81	1.2		●	▲	
TNMG220404-OPM	22	12.7	4.76	5.16	0.4		●	▲	
TNMG220408-OPM	22	12.7	4.76	5.16	0.8		●	▲	
TNMG220412-OPM	22	12.7	4.76	5.16	1.2		●	▲	
TNMG220416-OPM	22	12.7	4.76	5.16	1.6		●	▲	



**Placas Torneado – TNMG - Para Aceros**

**Desbaste Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TNMG160408-OPR	16.5	9.525	4.76	3.81	0.8		●	▲	
TNMG160412-OPR	16.5	9.525	4.76	3.81	1.2		●	▲	
TNMG220408-OPR	22	12.7	4.76	5.16	0.8		●	▲	
TNMG220412-OPR	22	12.7	4.76	5.16	1.2		●	▲	
TNMG220416-OPR	22	12.7	4.76	5.16	1.6		●	▲	
TNMG270612-OPR	27.5	15.9	6.35	6.35	1.2		●	▲	

**Neutras Semi-Acabado**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TNMG160404	16.5	9.525	4.76	3.81	0.4		●	▲	
TNMG160408	16.5	9.525	4.76	3.81	0.8		●	▲	
TNMG160412	16.5	9.525	4.76	3.81	1.2		●	▲	
TNMG220408	22	12.7	4.76	5.16	0.8		●	▲	
TNMG220412	22	12.7	4.76	5.16	1.2		●	▲	

**Placas Torneado – TNMG - Para Materiales Especiales**
**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
TNMG160408-SMM	16.5	9.525	4.76	3.81	0.8	●	▲	▲

**Placas Torneado – TNMG - Para Inoxidables**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160404-OMF	16.5	9.525	4.76	3.81	0.4	●	▲	●	
TNMG160408-OMF	16.5	9.525	4.76	3.81	0.8				

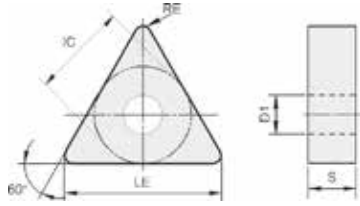
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160404-MSF	16.5	9.525	4.76	3.81	0.4	●	▲	●	
TNMG160408-MSF	16.5	9.525	4.76	3.81	0.8	●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160404-MF	16.5	9.525	4.76	3.81	0.4	●	▲	●	
TNMG160408-MF	16.5	9.525	4.76	3.81	0.8	●	▲	●	
TNMG160412-MF	16.5	9.525	4.76	3.81	1.2	●	▲	●	

**Placas Torneado – TNMG - Para Inoxidables**



**Desbaste Medio Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160404-OMM	16.5	9.525	4.76	3.81	0.4	●	▲	●	
TNMG160408-OMM	16.5	9.525	4.76	3.81	0.8	●	▲	●	
TNMG160412-OMM	16.5	9.525	4.76	3.81	1.2	●	▲	●	
TNMG220404-OMM	22	12.7	4.76	5.16	1.2	●	▲	●	
TNMG220408-OMM	22	12.7	4.76	5.16	0.8				

**Desbaste Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160408-OMR	16.5	9.525	4.76	3.81	0.8	●	▲	●	

**Placas Torneado – TNMG - Para Fundición**

**Semi-Acabado Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
TNMG160404-OKM	16.5	9.525	4.76	3.81	0.4	▲		▲
TNMG160408-OKM	16.5	9.525	4.76	3.81	0.8	▲		▲
TNMG160412-OKM	16.5	9.525	4.76	3.81	1.2	▲		▲

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
TNMG160408-OKR	16.5	9.525	4.76	3.81	0.8	▲		▲
TNMG160412-OKR	16.5	9.525	4.76	3.81	1.2	▲		▲

**Neutras Semi-Acabado**

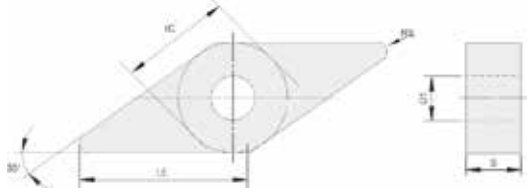


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
TNMG160404	16.5	9.525	4.76	3.81	0.4		▲	
TNMG160408	16.5	9.525	4.76	3.81	0.8		▲	
TNMG160412	16.5	9.525	4.76	3.81	1.2		▲	
TNMG220408	22	12.7	4.76	5.16	0.8		▲	
TNMG220412	22	12.7	4.76	5.16	1.2		▲	
TNMG220416	22	12.7	4.76	5.16	1.6		▲	

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
TNMA160404	16.5	9.525	4.76	3.81	0.4		▲	
TNMA160408	16.5	9.525	4.76	3.81	0.8		▲	
TNMA160412	16.5	9.525	4.76	3.81	1.2		▲	
TNMA220408	22	12.7	4.76	5.16	0.8		▲	
TNMA220412	22	12.7	4.76	5.16	1.2		▲	

**Placas Torneado – VNMG - Para Aceros**

**Acabado Fino Aceros**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VNMG160404-OPF	16.6	9.525	4.76	3.81	0.4		●	▲	
VNMG160408-OPF	16.6	9.525	4.76	3.81	0.8		●	▲	

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VNMG160404-OPM	16.6	9.525	4.76	3.81	0.4		●	▲	
VNMG160408-OPM	16.6	9.525	4.76	3.81	0.8		●	▲	
VNMG160412-OPM	16.6	9.525	4.76	3.81	1.2		●	▲	

**Desbaste Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VNMG160408-OPR	16.6	9.525	4.76	3.81	0.8		●	▲	
VNMG160412-OPR	16.6	9.525	4.76	3.81	1.2		●	▲	

**Placas Torneado – VNMG - Para Inoxidables**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VNMG160404-MSF	16.6	9.525	4.76	3.81	0.4	●	▲	●	

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VNMG160408-MF	16.6	9.525	4.76	3.81	0.8	●	▲	●	

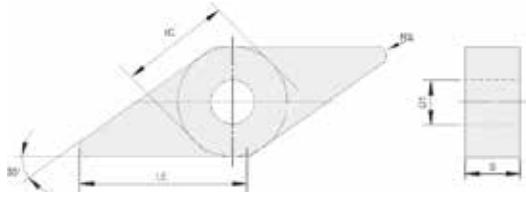
**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VNMG160404-OMM	16.6	9.525	4.76	3.81	0.4	●	▲	●	
VNMG160408-OMM	16.6	9.525	4.76	3.81	0.8				

**Placas Torneado – VNMG - Para Materiales Especiales**
**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
VNMG160408-SMM	16.6	9.525	4.76	3.81	0.8		▲	▲

**Placas Torneado – VNMG / VNMA - Para Fundición**



**Semi-Acabado Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
VNMG160404-OKM	16.6	9.525	4.76	3.81	0.4	▲		▲
VNMG160408-OKM	16.6	9.525	4.76	3.81	0.8	▲		▲

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
VNMG160408-OKR	16.6	9.525	4.76	3.81	0.8	▲		▲
VNMG160412-OKR	16.6	9.525	4.76	3.81	1.2	▲		▲

**Neutras Semi-Acabado**



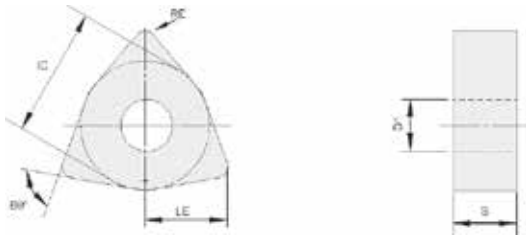
Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
VNMG160404	16.6	9.525	4.76	3.81	0.4		▲	
VNMG160408	16.6	9.525	4.76	3.81	0.8		▲	
VNMG160412	16.6	9.525	4.76	3.81	1.2		▲	

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
VNMA160408	16.6	9.525	4.76	3.81	0.8		▲	

**Placas Torneado – WNMG - Para Aceros**



**Acabado Fino Aceros**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
WNMG060404-OPF	6.5	9.525	3.97	3.81	0.4		●	▲	
WNMG060408-OPF	6.5	9.525	3.97	3.81	0.8		●	▲	

**Acabado Medio Acero**

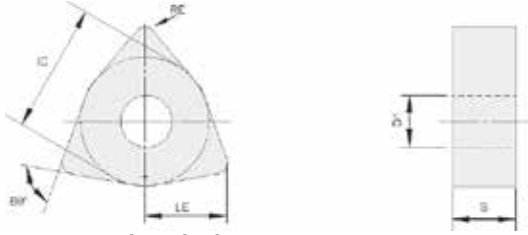


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VNMG160404-OPM	16.6	9.525	4.76	3.81	0.4		●	▲	
VNMG160408-OPM	16.6	9.525	4.76	3.81	0.8		●	▲	
VNMG160412-OPM	16.6	9.525	4.76	3.81	1.2		●	▲	

**Desbaste Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
WNMG080408-OPR	8.7	12.7	4.76	5.16	0.8		●	▲	
WNMG080412-OPR	8.7	12.7	4.76	5.16	1.2		●	▲	

**Placas Torneado – WNMG - Para Aceros**

**Neutras Semi-Acabado**


Referencia	LE	IC	S	D1	Radio		OC2115	OC2125	OC2325S	OC2425
WNMG080404	8.7	12.7	4.76	5.16	0.4			●	▲	
WNMG080408	8.7	12.7	4.76	5.16	0.8			●	▲	
WNMG080412	8.7	12.7	4.76	5.16	1.2			●	▲	

**Placas Torneado – WNMG - Para Inoxidables**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio		OP1215	OP1315	OP1415	OC4315
WNMG060408-OMF	6.5	9.525	4.76	3.81	0.8		●	▲	●	
WNMG080404-OMF	8.7	12.7	4.76	5.16	0.4		●	▲	●	
WNMG080408-OMF	8.7	12.7	4.76	5.16	0.8		●	▲	●	

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio		OP1215	OP1315	OP1415	OC4315
WNMG060304-MSF	6.5	9.525	3.18	3.81	0.4		●	▲	●	
WNMG060404-MSF	6.5	9.525	4.76	3.81	0.4		●	▲	●	
WNMG080404-MSF	8.7	12.7	4.76	5.16	0.4		●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio		OP1215	OP1315	OP1415	OC4315
WNMG060408-OMM	6.5	9.525	4.76	3.81	0.8		●	▲	●	
WNMG060412-OMM	6.5	9.525	4.76	3.81	1.2		●	▲	●	
WNMG080404-OMM	8.7	12.7	4.76	5.16	0.4		●	▲	●	
WNMG080408-OMM	8.7	12.7	4.76	5.16	0.8		●	▲	●	

**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio		OP1215	OP1315	OP1415	OC4315
WNMG060408-MF	6.5	9.525	4.76	3.81	0.8		●	▲	●	
WNMG080408-MF	8.7	12.7	4.76	5.16	0.8		●	▲	●	
WNMG080412-MF	8.7	12.7	4.76	5.16	1.2		●	▲	●	

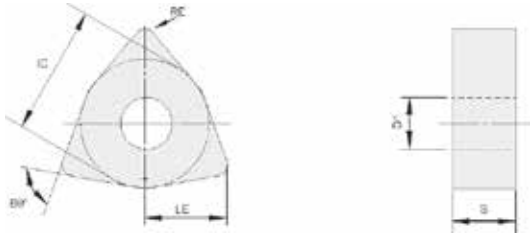
**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio		OP1215	OP1315	OP1415	OC4315
WNMG080408-OMR	8.7	12.7	4.76	5.16	0.8		●	▲	●	
WNMG080412-OMR	8.7	12.7	4.76	5.16	1.2		●	▲	●	

**Placas Torneado – VNMG - Para Materiales Especiales**
**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio		OP1105	OP6115	OP6215
WNMG080408-SMM	8.7	12.7	4.76	5.16	0.8		▲		▲

**Placas Torneado – WNMG / WNMA - Para Fundición**



**Semi-Acabado Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
WNMG080404-OKM	8.7	12.7	4.76	5.16	0.4	▲		▲
WNMG080408-OKM	8.7	12.7	4.76	5.16	0.8	▲		▲
WNMG080412-OKM	8.7	12.7	4.76	5.16	1.2	▲		▲

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
WNMG080408-OKR	8.7	12.7	4.76	5.16	0.8	▲		▲
WNMG080412-OKR	8.7	12.7	4.76	5.16	1.2	▲		▲

**Neutras Semi-Acabado**



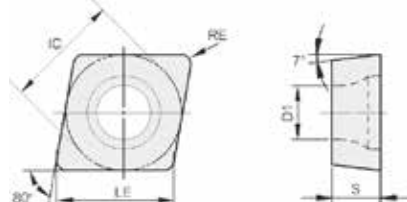
Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
WNMG080404	8.7	12.7	4.76	5.16	0.4		▲	
WNMG080408	8.7	12.7	4.76	5.16	0.8		▲	
WNMG080412	8.7	12.7	4.76	5.16	1.2		▲	

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
WNMA080408	8.7	12.7	4.76	5.16	0.8		▲	
WNMA080412	8.7	12.7	4.76	5.16	1.2		▲	

**Placas Torneado – CCMT - Para Acero**



**Acabado Fino Aceros**



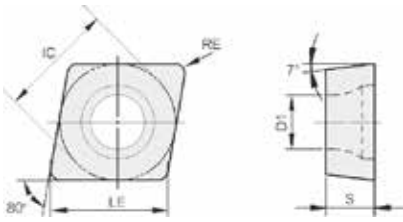
Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CCMT060202-OTF	6.4	6.35	2.38	2.8	0.2	▲	●		
CCMT060204-OTF	6.4	6.35	2.38	2.8	0.4	▲	●		
CCMT09T304-OTF	9.7	9.525	3.97	4.4	0.4	▲	●		
CCMT09T308-OTF	9.7	9.525	3.97	4.4	0.8	▲	●		
CCMT120404-OTF	12.9	12.7	4.76	5.56	0.4	▲	●		
CCMT120408-OTF	12.9	12.7	4.76	5.56	0.8	▲	●		

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CCMT060204-OTM	6.4	6.35	2.38	2.8	0.4	●	●	▲	
CCMT060208-OTM	6.4	6.35	2.38	2.8	0.8	●	●	▲	
CCMT09T304-OTM	9.7	9.525	3.97	4.4	0.4	●	●	▲	
CCMT09T308-OTM	9.7	9.525	3.97	4.4	0.8	●	●	▲	
CCMT120404-OTM	12.9	12.7	4.76	5.56	0.4	●	●	▲	
CCMT120408-OTM	12.9	12.7	4.76	5.56	0.8	●	●	▲	



**Placas Torneado – CCMT - Para Acero**

**Desbaste Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
CCMT060208-OTR	6.4	6.35	2.38	2.8	0.8	●	●	▲	
CCMT09T304-OTR	9.7	9.525	3.97	4.4	0.4	●	●	▲	
CCMT09T308-OTR	9.7	9.525	3.97	4.4	0.8	●	●	▲	
CCMT120408-OTR	12.9	12.7	4.76	5.56	0.8	●	●	▲	
CCMT120412-OTR	12.9	12.7	4.76	5.56	1.2	●	●	▲	

**Placas Torneado – CCMT - Para Inoxidables**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CCMT060202-OTF	6.4	6.35	2.38	2.8	0.2	●	▲	●	
CCMT060204-OTF	6.4	6.35	2.38	2.8	0.4	●	▲	●	
CCMT09T304-OTF	9.7	9.525	3.97	4.4	0.4	●	▲	●	
CCMT09T308-OTF	9.7	9.525	3.97	4.4	0.8	●	▲	●	
CCMT120404-OTF	12.9	12.7	4.76	5.56	0.4	●	▲	●	
CCMT120408-OTF	12.9	12.7	4.76	5.56	0.8	●	▲	●	

**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CCMT060202-MSF	6.4	6.35	2.38	2.8	0.2	●	▲	●	
CCMT060204-MSF	9.7	9.525	3.97	4.4	0.4	●	▲	●	
CCMT09T302-MSF	9.7	9.525	3.97	4.4	0.2	●	▲	●	
CCMT09T304-MSF	9.7	9.525	3.97	4.4	0.4	●	▲	●	
CCMT09T308-MSF	12.9	12.7	4.76	5.56	0.8	●	▲	●	
CCMT120404-MSF	12.9	12.7	4.76	5.56	0.4	●	▲	●	

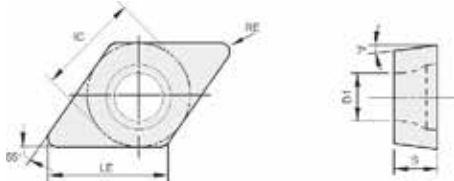
**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
CCMT060204-OTM	6.4	6.35	2.38	2.8	0.4	●	▲	●	
CCMT060208-OTM	6.4	6.35	2.38	2.8	0.8	●	▲	●	
CCMT09T304-OTM	9.7	9.525	3.97	4.4	0.4	●	▲	●	
CCMT09T308-OTM	9.7	9.525	3.97	4.4	0.8	●	▲	●	
CCMT120404-OTM	12.9	12.7	4.76	5.56	0.4	●	▲	●	
CCMT120408-OTM	12.9	12.7	4.76	5.56	0.8	●	▲	●	

**Placas Torneado – CCMT - Para Fundición**
**Desbaste Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
CCMT060208-OTR	6.4	6.35	2.38	2.8	0.8		▲	
CCMT09T304-OTR	9.7	9.525	3.97	4.4	0.4		▲	
CCMT09T308-OTR	9.7	9.525	3.97	4.4	0.8		▲	
CCMT120408-OTR	12.9	12.7	4.76	5.56	0.8		▲	
CCMT120412-OTR	12.9	12.7	4.76	5.56	1.2		▲	

**Placas Torneado – DCMT - Para Acero**



**Acabado Fino Aceros**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DCMT070204-OTF	7.8	6.35	2.38	2.8	0.4	▲			
DCMT11T302-OTF	11.6	9.525	3.97	4.4	0.2	▲			
DCMT11T304-OTF	11.6	9.525	3.97	4.4	0.4	▲			

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DCMT070204-OTM	7.8	6.35	2.38	2.8	0.4	●	●	▲	●
DCMT070208-OTM	7.8	6.35	2.38	2.8	0.8	●	●	▲	●
DCMT11T304-OTM	11.6	9.525	3.97	4.4	0.4	●	●	▲	●
DCMT11T308-OTM	11.6	9.525	3.97	4.4	0.8	●	●	▲	●

**Desbaste Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
DCMT11T304-OTR	11.6	9.525	3.97	4.4	0.4	●	●	▲	
DCMT11T308-OTR	11.6	9.525	3.97	4.4	0.8	●	●	▲	

**Placas Torneado – DCMT - Para Inoxidables**

**Acabado Fino Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DCMT070204-OTF	7.8	6.35	2.38	2.8	0.4	●	▲	●	
DCMT11T302-OTF	11.6	9.525	3.97	4.4	0.2	●	▲	●	
DCMT11T304-OTF	11.6	9.525	3.97	4.4	0.4	●	▲	●	

**Acabado Fino Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DCMT070204-MSF	7.8	6.35	2.38	2.8	0.4	●	▲	●	
DCMT11T304-MSF	11.6	9.525	3.97	4.4	0.4	●	▲	●	

**Desbaste Medio Inoxidable**

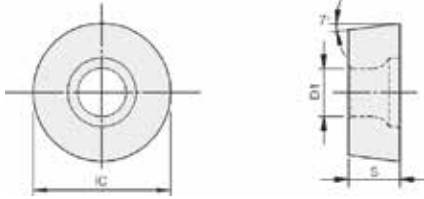


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DCMT070204-OTM	7.8	6.35	2.38	2.8	0.4	●	▲	●	
DCMT070208-OTM	7.8	6.35	2.38	2.8	0.8	●	▲	●	
DCMT11T304-OTM	11.6	9.525	3.97	4.4	0.4	●	▲	●	
DCMT11T308-OTM	11.6	9.525	3.97	4.4	0.8	●	▲	●	

**Desbaste Inoxidable**



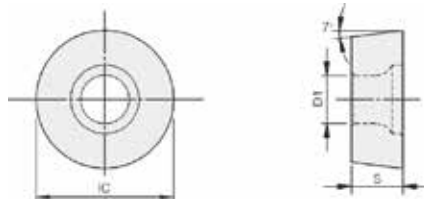
Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
DCMT11T304-OTR	11.6	9.525	3.97	4.4	0.4	●	▲	●	
DCMT11T308-OTR	11.6	9.525	3.97	4.4	0.8	●	▲	●	

**Placas Torneado - RCMX - Para Aceros**

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2025	OC2115	OC2125	OC2325S
RCMX0803MO	8	8	3.18	3.4	-	●	●		▲
RCMX1003MO	10	10	3.18	3.6	-	●	●		▲

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2025	OC2115	OC2125	OC2325S
RCMX1204MO-Q	12	12	4.76	4.4	-	●		▲	●
RCMX1606MO-Q	16	16	6.35	5.5	-	●		▲	●
RCMX2006MO-Q	20	20	6.35	6.5	-	●		▲	●
RCMX2507MO-Q	25	25	7.94	7.2	-	●		▲	●
RCMX3209MO-Q	32	32	9.52	9.5	-	●		▲	●

**Placas Torneado - RCMT - Para Aceros**

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2025	OC2115	OC2125	OC2325S
RCMT0803MO	8.0	8.0	3.18	3.36	-	●	●		▲

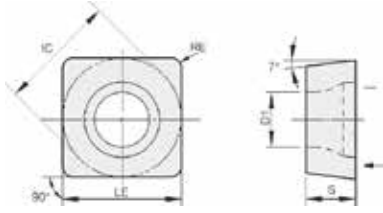
**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2025	OC2115	OC2125	OC2325S
RCMT1606MO-Q	16	16	6.35	5.5	-	●	●		▲

**Placas Torneado - KNUX - Para Aceros**
**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
KNUX160405L11	16.2	9.525	4.76	2.2	0.5		●	▲	
KNUX160405R11	16.2	9.525	4.76	2.2	0.5		●	▲	

**Placas Torneado – SCMT - Para Acero**



**Acabado Fino Aceros**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SCMT09T304-OTF	9.525	9.525	3.97	4.4	0.4	▲			
SCMT09T308-OTF	9.525	9.525	3.97	4.4	0.8	▲			
SCMT120404-OTF	12.7	12.7	4.76	5.56	0.4	▲			

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SCMT09T304-OTM	9.525	9.525	3.97	4.4	0.4	●	●	▲	●
SCMT09T308-OTM	9.525	9.525	3.97	4.4	0.8	●	●	▲	●
SCMT120404-OTM	12.7	12.7	4.76	5.56	0.4	●	●	▲	●
SCMT120408-OTM	12.7	12.7	4.76	5.56	0.8	●	●	▲	●
SCMT120412-OTM	12.7	12.7	4.76	5.56	1.2	●	●	▲	

**Desbaste Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
SCMT09T304-OTR	9.525	9.525	3.97	4.4	0.4	●	●	▲	
SCMT09T308-OTR	9.525	9.525	3.97	4.4	0.8	●	●	▲	
SCMT120404-OTR	12.7	12.7	4.76	5.56	0.4	●	●	▲	
SCMT120408-OTR	12.7	12.7	4.76	5.56	0.8	●	●	▲	
SCMT120412-OTR	12.7	12.7	4.76	5.56	1.2	●	●	▲	

**Placas Torneado – SCMT - Para Inoxidable**

**Acabado Fino Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
SCMT09T304-OTF	9.525	9.525	3.97	4.4	0.4	●	▲	●	
SCMT09T308-OTF	9.525	9.525	3.97	4.4	0.8	●	▲	●	
SCMT120404-OTF	12.7	12.7	4.76	5.56	0.4	●	▲	●	

**Desbaste Medio Inoxidable**



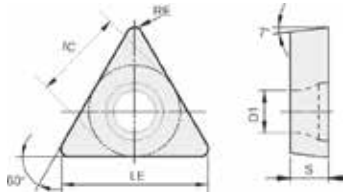
Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
SCMT09T304-OTM	9.525	9.525	3.97	4.4	0.4	●	▲	●	
SCMT09T308-OTM	9.525	9.525	3.97	4.4	0.8	●	▲	●	
SCMT120404-OTM	12.7	12.7	4.76	5.56	0.4	●	▲	●	
SCMT120408-OTM	12.7	12.7	4.76	5.56	0.8	●	▲	●	
SCMT120412-OTM	12.7	12.7	4.76	5.56	1.2	●	▲	●	

**Placas Torneado – SCMT - Para Fundición**

**Desbaste Fundición**



Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
SCMT09T304-OTR	9.525	9.525	3.97	4.4	0.4		▲	
SCMT09T308-OTR	9.525	9.525	3.97	4.4	0.8		▲	
SCMT120404-OTR	12.7	12.7	4.76	5.56	0.4		▲	
SCMT120408-OTR	12.7	12.7	4.76	5.56	0.8		▲	
SCMT120412-OTR	12.7	12.7	4.76	5.56	1.2		▲	

**Placas Torneado – TCMT - Para Acero**

**Acabado Fino Aceros**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TCMT110202-OTF	11	6.35	2.38	2.8	0.2	▲			
TCMT110204-OTF	11	6.35	2.38	2.8	0.4	▲			
TCMT16T304-OTF	16.5	9.525	3.97	4.4	0.4	▲			
TCMT16T308-OTF	16.5	9.525	3.97	4.4	0.8	▲			

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TCMT090204-OTM	9.6	5.56	2.38	2.5	0.4	●	●	▲	●
TCMT090208-OTM	9.6	5.56	2.38	2.5	0.8	●	●	▲	●
TCMT110204-OTM	11	6.35	2.38	2.8	0.4	●	●	▲	●
TCMT110208-OTM	11	6.35	2.38	2.8	0.8	●	●	▲	●
TCMT16T304-OTM	16.5	9.525	3.97	4.4	0.4	●	●	▲	●
TCMT16T308-OTM	16.5	9.525	3.97	4.4	0.8	●	●	▲	●
TCMT16T312-OTM	16.5	9.525	3.97	4.4	1.2	●	●	▲	●

**Desbaste Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TCMT16T308-OTR	16.5	9.525	3.97	4.4	0.8	●	●	▲	
TCMT220408-OTR	22	12.7	4.76	5.5	0.8	●	●	▲	

**Placas Torneado – SCMT - Para Inoxidable**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TCMT110202-OTF	11	6.35	2.38	2.8	0.2	●	▲	●	
TCMT110204-OTF	11	6.35	2.38	2.8	0.4	●	▲	●	
TCMT16T304-OTF	16.5	9.525	3.97	4.4	0.4	●	▲	●	
TCMT16T308-OTF	16.5	9.525	3.97	4.4	0.8	●	▲	●	

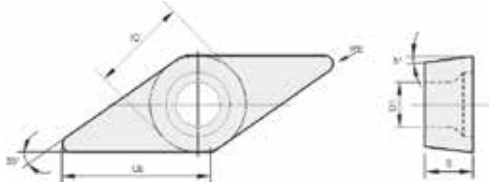
**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TCMT090204-OTM	9.6	5.56	2.38	2.5	0.4	●	▲	●	
TCMT090208-OTM	9.6	5.56	2.38	2.5	0.8	●	▲	●	
TCMT110204-OTM	11	6.35	2.38	2.8	0.4	●	▲	●	
TCMT110208-OTM	11	6.35	2.38	2.8	0.8	●	▲	●	
TCMT16T304-OTM	16.5	9.525	3.97	4.4	0.4	●	▲	●	
TCMT16T308-OTM	16.5	9.525	3.97	4.4	0.8	●	▲	●	
TCMT16T312-OTM	16.5	9.525	3.97	4.4	1.2	●	▲	●	

**Placas Torneado – SCMT - Para Fundición**
**Desbaste Fundición**


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
TCMT16T308-OTR	16.5	9.525	3.97	4.4	0.8		▲	
TCMT220408-OTR	22	12.7	4.76	5.5	0.8		▲	

**Placas Torneado – VBMT - Para Acero**



**Acabado Fino Aceros**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VBMT160404-OTF	16.5	9.525	4.76	4.4	0.4	▲			
VBMT160408-OTF	16.5	9.525	4.76	4.4	0.8	▲			

**Acabado Medio Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VBMT110304-OTM	11	6.35	3.18	2.8	0.4	●	●	▲	●
VBMT110308-OTM	11	6.35	3.18	2.8	0.8	●	●	▲	●
VBMT160404-OTM	16.5	9.525	4.76	4.4	0.4	●	●	▲	●
VBMT160408-OTM	16.5	9.525	4.76	4.4	0.8	●	●	▲	●
VBMT160412-OTM	16.5	9.525	4.76	4.4	1.2	●	●	▲	●

**Desbaste Acero**



Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VBMT160404-OTR	16.5	9.525	4.76	4.4	0.4	●	●	▲	
VBMT160408-OTR	16.5	9.525	4.76	4.4	0.8	●	●	▲	

**Placas Torneado – VBMT - Para Inoxidable**

**Acabado Fino Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VBMT160404-OTF	16.5	9.525	4.76	4.4	0.4	●	▲	●	
VBMT160408-OTF	16.5	9.525	4.76	4.4	0.8	●	▲	●	

**Desbaste Medio Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VBMT110304-OTM	11	6.35	3.18	2.8	0.4	●	▲	●	
VBMT110308-OTM	11	6.35	3.18	2.8	0.8	●	▲	●	
VBMT160404-OTM	16.5	9.525	4.76	4.4	0.4	●	▲	●	
VBMT160408-OTM	16.5	9.525	4.76	4.4	0.8	●	▲	●	
VBMT160412-OTM	16.5	9.525	4.76	4.4	1.2	●	▲	●	

**Desbaste Inoxidable**



Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VBMT160404-OTR	16.5	9.525	4.76	4.4	0.4	●	▲	●	
VBMT160408-OTR	16.5	9.525	4.76	4.4	0.8	●	▲	●	

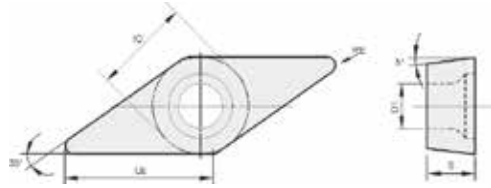
**Placas Torneado – VBMT - Para Fundición**

**Desbaste Fundición**

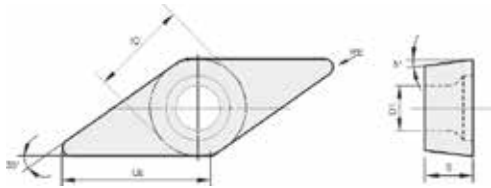


Referencia	LE	IC	S	D1	Radio	OC3210	OC3215	OC3220
VBMT160404-OTR	16.5	9.525	4.76	4.4	0.4		▲	
VBMT160408-OTR	16.5	9.525	4.76	4.4	0.8		▲	



**Placas Torneado – VBMT - Para Materiales Especiales**

**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
VBMT160404-OSM	16.5	9.525	4.76	4.4	0.4	●	▲	▲
VBMT160408-OSM	16.5	9.525	4.76	4.4	0.8	●	▲	▲

**Placas Torneado – VCMT - Para Acero**

**Acabado Fino Aceros**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VCMT110302-OTF	11	6.35	3.18	2.8	0.2	▲			
VCMT110304-OTF	11	6.35	3.18	2.8	0.4	▲			
VCMT160404-OTF	16.5	9.525	4.76	4.4	0.4	▲			

**Acabado Medio Acero**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
VCMT160404-OTM	16.5	9.525	4.76	3.81	0.4	●	●	▲	●
VCMT160408-OTM	16.5	9.525	4.76	3.81	0.8	●	●	▲	●

**Placas Torneado – VCMT - Para Inoxidable**
**Acabado Fino Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VCMT110302-OTF	11	6.35	3.18	2.8	0.2	●	▲	●	
VCMT110304-OTF	11	6.35	3.18	2.8	0.4	●	▲	●	
VCMT160404-OTF	16.5	9.525	4.76	4.4	0.4	●	▲	●	

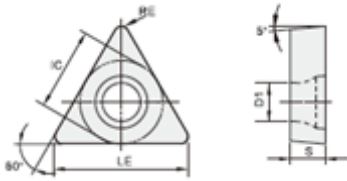
**Desbaste Medio Inoxidable**


Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
VCMT160404-OTM	16.5	9.525	4.76	3.81	0.4	●	▲	●	
VCMT160408-OTM	16.5	9.525	4.76	3.81	0.8	●	▲	●	

**Placas Torneado – VCMT - Para Materiales Especiales**
**Semi-Acabado Materiales Especiales**


Referencia	LE	IC	S	D1	Radio	OP1105	OP6115	OP6215
VCMT160408-OSM	16.5	9.525	4.76	3.81	0.8	●	▲	▲

**Placas Torneado – TBGH - Para Aceros**

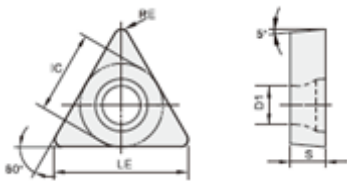


Acabado Fino Aceros



Referencia	LE	IC	S	D1	Radio		OP1205H
TBGH060202L	6.4	3.97	2.38	2.2	0.2		▲

**Placas Torneado – TPGH - Para Aceros**

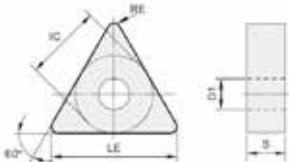


Acabado Fino Aceros



Referencia	LE	IC	S	D1	Radio		OP1205H
TPGH080202L	8.2	4.76	2.38	2.4	0.2		▲
TPGH080204L	8.2	4.76	2.38	2.4	0.4		▲
TPGH090202L	9.3	5.56	2.38	2.8	0.2		▲
TPGH090204L	9.6	5.56	2.38	2.8	0.4		▲
TPGH110302L	11	6.35	3.18	3.18	0.2		▲
TPGH110304L	11	6.35	3.18	3.18	0.4		▲

**Placas Torneado – TNMG - Para Aceros**



Acabado Fino



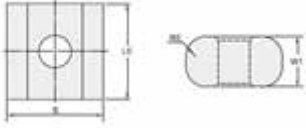
Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
TNMG160404L-ZC	16.5	9.525	4.76	3.81	0.4		●	▲	
TNMG160408L-ZC	16.5	9.525	4.76	3.81	0.4		●	▲	
TNMG160404R-ZC	16.5	9.525	4.76	3.81	0.8		●	▲	
TNMG160408R-ZC	16.5	9.525	4.76	3.81	0.8		●	▲	

**Placas Torneado – TNMG - Para Inoxidables**

Acabado Fino Inoxidable



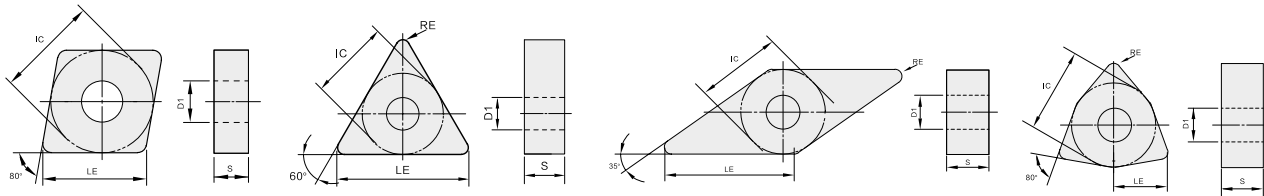
Referencia	LE	IC	S	D1	Radio	OP1215	OP1315	OP1415	OC4315
TNMG160404L-ZC	16.5	9.525	4.76	3.81	0.4		▲	●	
TNMG160408L-ZC	16.5	9.525	4.76	3.81	0.4		▲	●	
TNMG160404R-ZC	16.5	9.525	4.76	3.81	0.8		▲	●	
TNMG160408R-ZC	16.5	9.525	4.76	3.81	0.8		▲	●	

**Placas Torneado – 175.32 - Para Aceros**

**Gran Desbaste**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
175.32-191940-22	19.1	10	19.1	6.35	4			▲	

**Gran Desbaste**


Referencia	LE	IC	S	D1	Radio	OC2115	OC2125	OC2325S	OC2425
175.32-191940-28	19.1	10	19.1	6.35	4			▲	

**Placas de Cermet**

**Modelo CNMG**


Referencia	LE	IC	S	D1	Radio	OKE6210	OKE6220
CNMG120408-SAL	12.9	12.9	4.76	5.16	0.8	▲	▲

**Modelo TNMG**


Referencia	LE	IC	S	D1	Radio	OKE6210	OKE6220
TNMG160404-SAL	16.5	9.525	4.76	3.81	0.4	▲	▲
TNMG160408-SAL	16.5	9.525	4.76	3.81	0.8	▲	▲

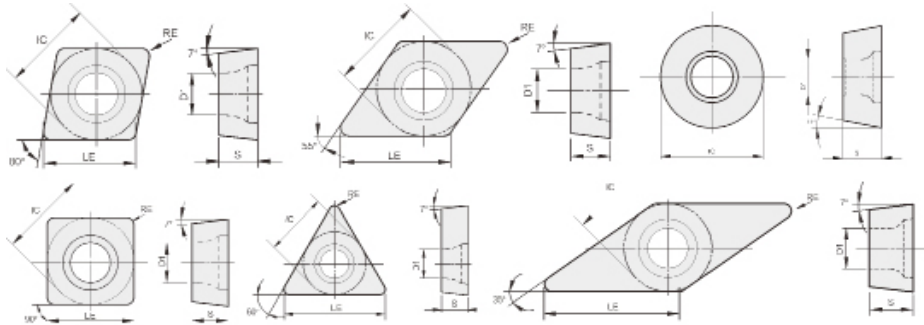
**Modelo VNMG**


Referencia	LE	IC	S	D1	Radio	OKE6210	OKE6220
VNMG160408-SAL	16.6	9.525	4.76	3.81	0.8	▲	▲

**Modelo WNMG**


Referencia	LE	IC	S	D1	Radio	OKE6210	OKE6220
WNMG080404-SAL	8.7	12.7	4.76	5.16	0.4	▲	▲
WNMG080408-SAL	8.7	12.7	4.76	5.16	0.8	▲	▲

Placas de Aluminio



Modelo CCGX



Referencia	LE	IC	S	D1	Radio	OK434
CCGX060202-NL	6.4	6.35	2.38	2.8	0.2	▲
CCGX060204-NL	6.4	6.35	2.38	2.8	0.4	▲
CCGX09T302-NL	9.7	9.525	3.97	4.4	0.2	▲
CCGX09T304-NL	9.7	9.525	3.97	4.4	0.4	▲
CCGX09T308-NL	9.7	9.525	3.97	4.4	0.8	▲
CCGX120404-NL	12.9	12.7	4.76	5.56	0.4	▲
CCGX120408-NL	12.9	12.7	4.76	5.56	0.8	▲

Modelo DCGX



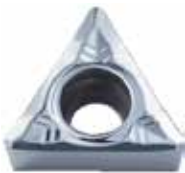
Referencia	LE	IC	S	D1	Radio	OK434
DCGX070202-NL	7.8	6.35	2.38	2.8	0.2	▲
DCGX070204-NL	7.8	6.35	2.38	2.8	0.4	▲
DCGX11T302-NL	11.6	9.525	3.97	4.4	0.2	▲
DCGX11T304-NL	11.6	9.525	3.97	4.4	0.4	▲
DCGX11T308-NL	11.6	9.525	3.97	4.4	0.8	▲

Modelo SCGX



Referencia	LE	IC	S	D1	Radio	OK434
SCGX09T304-NL	9.525	9.525	3.97	4.4	0.4	▲
SCGX09T308-NL	9.525	9.525	3.97	4.4	0.8	▲
SCGX120408-NL	12.7	12.7	4.76	5.56	0.8	▲

Modelo TCGX



Referencia	LE	IC	S	D1	Radio	OK434
TCGX090204-NL	9.6	5.56	2.38	2.5	0.4	▲
TCGX110202-NL	11	6.35	2.38	2.8	0.2	▲
TCGX110204-NL	11	6.35	2.38	2.8	0.4	▲
TCGX16T304-NL	16.5	9.525	3.97	4.4	0.4	▲
TCGX16T308-NL	16.5	9.525	3.97	4.4	0.8	▲

Modelo VCGX

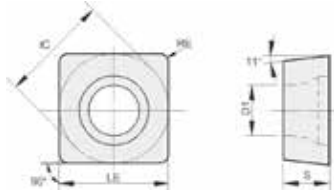


Referencia	LE	IC	S	D1	Radio	OK434
VCGX110302-NL	11	6.35	3.18	2.8	0.2	▲
VCGX110304-NL	11	6.35	3.18	2.8	0.4	▲
VCGX160402-NL	16.6	9.525	4.76	4.4	0.2	▲
VCGX160404-NL	16.6	9.525	4.76	4.4	0.4	▲
VCGX160408-NL	16.6	9.525	4.76	4.4	0.8	▲
VCGX160412-NL	16.6	9.525	4.76	4.4	1.2	▲
VCGX220530-NL	22	12.7	5.56	5.5	3	▲

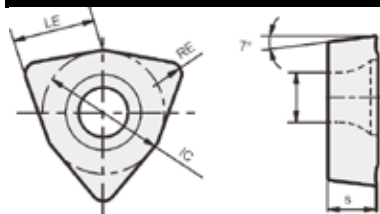
Modelo RCGT



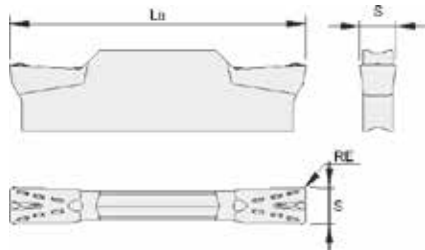
Referencia	LE	IC	S	D1	Radio	OK434
RCGT1204MO-NL	12	12	4.76	4.4	-	▲

**Placas de Taladrado SPGT**


Referencia	LE	IC	S	D1	RE		OP1215	OP1315
SPGT050204-OPM	5	5	2.38	2.2	0.4		▲	●
SPGT060204-OPM	6	6	2.38	2.6	0.4		▲	●
SPGT07T308-OPM	7.94	7.94	3.97	2.8	0.8		▲	●
SPGT090408-OPM	9.8	9.8	4.3	4.1	0.8		▲	●
SPGT110408-OPM	11.5	11.5	4.76	4.6	0.8		▲	●
SPGT140512-OPM	14.3	14.3	5.2	5.75	1.2		▲	●

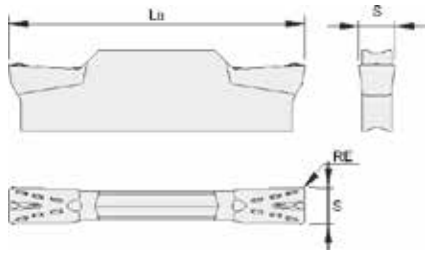
**Placas de Taladrado WCMX**


Referencia	LE	IC	S	DI	RE		OP1215	OP1315
WCMX030208-ZK	3.8	5.56	2.38	2.8	0.8		▲	●
WCMX040208-ZK	4.3	6.35	2.38	3.1	0.8		▲	●
WCMX050308-ZK	5.4	7.94	3.18	3.2	0.8		▲	●
WCMX06T308-ZK	6.4	9.525	3.97	3.7	0.8		▲	●
WCMX080412-ZK	8.6	12.7	4.76	4.3	1.2		▲	●

**Placas Ranurado**


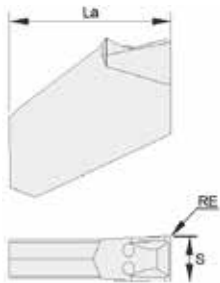
Referencia	S 0/+0.1	RE	LaMAX		OC4020	OP1215
QTED02503N-MG	2.5	0.3	20.5		●	▲
QTFD0303N-MG	3	0.3	20.5		●	▲
QTGD0404N-MG	4	0.4	25.5		●	▲
QTHD0504N-MG	5	0.4	25.5		●	▲
QTKD0608N-MG	6	0.8	25.5		●	▲

**Placas Ranurado**



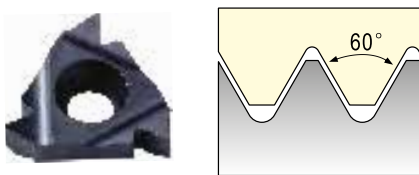
Referencia	S 0/+0.1	RE	LaMAX		OC4020	OP1215
QCFW0202N-OC	2	0.2	16		●	▲
QCFW02502N-OC	2.5	0.2	18.5		●	▲
QCGW0304N-OC	3	0.4	21		●	▲
QCHW0404N-OC	4	0.4	21		●	▲
QCJW0508N-OC	5	0.8	26		●	▲

**Placas Ranurado**



Referencia	S 0/+0.1	RE	LaMAX		OC2025	OP1215
ZQMX3N11-1E	3.1	0.3	11		●	▲
ZQMX4N11-1E	4.1	0.3	11		●	▲
ZQMX5N11-1E	5.1	0.3	11		●	▲
ZQMX6N11-1E	6.4	0.3	11		●	▲

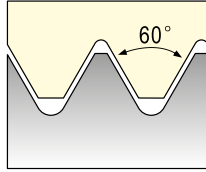
**Roscado General 60° Perfil Parcial - Rosca Exterior**



Referencia Ext Derecha	Paso mm	Paso TPI	Ángulo
RT1601G-A60M	0.5 - 1.5	48 - 16	60° Ext Drch
RT1601G-AG60M	1.75 - 3.0	16 - 8	60° Ext Drch
RT1601G-G60M	0.5 - 3.0	14 - 8	60° Ext Drch
RT2201G-N60M	0.5 - 1.5	7 - 5	60° Ext Drch

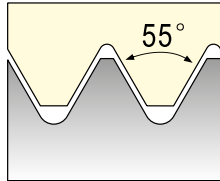
Referencia Ext Izquierda	Paso mm	Paso TPI	Ángulo
LT1601G-A60M	0.5 - 1.5	48 - 16	60° Ext Izq
LT1601G-AG60M	1.75 - 3.0	16 - 8	60° Ext Izq
LT1601G-G60M	0.5 - 3.0	14 - 8	60° Ext Izq
LT2201G-N60M	0.5 - 1.5	7 - 5	60° Ext Izq



**Roscado General 60° Perfil Parcial - Rosca Interior**


Referencia Int Derecha	Paso mm	Paso TPI	Ángulo
RT1101L-AG60M	0.5 - 1.5	48 - 16	60° Int Drch
RT1101L-AG60M	1.0 - 2.5	26 - 9	60° Int Drch
RT1601L-A60M	0.5 - 1.5	48 - 16	60° Int Drch
RT1601L-AG60M	1.0 - 3.0	26 - 8	60° Int Drch
RT1601L-G60M	1.75 - 3.0	14 - 8	60° Int Drch
RT2201L-N60M	3.5 - 5.0	7 - 5	60° Int Drch

Referencia Int Izquierda	Paso mm	Paso TPI	Ángulo
LT1101L-AG60M	0.5 - 1.5	48 - 16	60° Int Izq
LT1101L-AG60M	1.0 - 2.5	26 - 9	60° Int Izq
LT1601L-A60M	0.5 - 1.5	48 - 16	60° Int Izq
LT1601L-AG60M	1.0 - 3.0	26 - 8	60° Int Izq
LT1601L-G60M	1.75 - 3.0	14 - 8	60° Int Izq
LT2201L-N60M	3.5 - 5.0	7 - 5	60° Int Izq

**Roscado General 55° Perfil Parcial - Rosca Exterior**


Referencia Ext Derecha	Paso mm	Paso TPI	Ángulo
RT1601G-A55M	0.5 - 1.5	48 - 16	55° Ext Drch
RT1601G-AG55M	1.0 - 3.0	26 - 8	55° Ext Drch
RT1601G-G55M	1.75 - 3.0	14 - 8	55° Ext Drch
RT2201G-N55M	3.5 - 5.0	7 - 5	55° Ext Drch

Referencia Ext Izquierda	Paso mm	Paso TPI	Ángulo
LT1601G-A55M	0.5 - 1.5	48 - 16	55° Ext Izq
LT1601G-AG55M	1.0 - 3.0	26 - 8	55° Ext Izq
LT1601G-G55M	1.75 - 3.0	14 - 8	55° Ext Izq
LT2201G-N55M	3.5 - 5.0	7 - 5	55° Ext Izq

**Roscado General 55° Perfil Parcial - Rosca Interior**

Referencia Int Derecha	Paso mm	Paso TPI	Ángulo
RT1101L-A55M	0.5 - 1.5	48 - 16	55° Int Drch
RT1101L-AG55M	1.0 - 2.5	26 - 9	55° Int Drch
RT1601L-A55M	0.5 - 1.5	48 - 16	55° Int Drch
RT1601L-AG55M	1.0 - 3.0	26 - 8	55° Int Drch
RT1601L-G55M	1.75 - 3.0	14 - 8	55° Int Drch
RT2201L-N55M	3.5 - 5.0	7 - 5	55° Int Drch

Referencia Int Izquierda	Paso mm	Paso TPI	Ángulo
LT1101L-A55M	0.5 - 1.5	48 - 16	55° Int Izq
LT1101L-AG55M	1.0 - 2.5	26 - 9	55° Int Izq
LT1601L-A55M	0.5 - 1.5	48 - 16	55° Int Izq
LT1601L-AG55M	1.0 - 3.0	26 - 8	55° Int Izq
LT1601L-G55M	1.75 - 3.0	14 - 8	55° Int Izq
LT2201L-N55M	3.5 - 5.0	7 - 5	55° Int Izq

### Roscado General 60° Perfil Completo



Exterior Derecha	Exterior Izquierda	Paso mm	Paso TPI
RT1601G-050ISOM	LT1601G-050ISOM	0.50	0.31
RT1601G-075ISOM	LT1601G-075ISOM	0.75	0.46
RT1601G-080ISOM	LT1601G-080ISOM	0.80	0.49
RT1601G-100ISOM	LT1601G-100ISOM	1.00	0.61
RT1601G-125ISOM	LT1601G-125ISOM	1.25	0.77
RT1601G-150ISOM	LT1601G-150ISOM	1.50	0.92
RT1601G-175ISOM	LT1601G-175ISOM	1.75	1.07
RT1601G-200ISOM	LT1601G-200ISOM	2.00	1.23
RT1601G-250ISOM	LT1601G-250ISOM	2.50	1.53
RT1601G-300ISOM	LT1601G-300ISOM	3.00	1.84
RT1601G-350ISOM	LT1601G-350ISOM	3.50	2.15
RT2201G-350ISOM	LT2201G-350ISOM	3.50	2.15
RT2201G-400ISOM	LT2201G-400ISOM	4.00	2.45
RT2201G-450ISOM	LT2201G-450ISOM	4.50	2.76
RT2201G-500ISOM	LT2201G-500ISOM	5.00	3.07

Interior Derecha	Interior Izquierda	Paso mm	Paso TPI
RT1601L-050ISOM	LT1601L-050ISOM	0.50	0.29
RT1601L-075ISOM	LT1601L-075ISOM	0.75	0.43
RT1601L-080ISOM	LT1601L-080ISOM	0.80	0.46
RT1601L-100ISOM	LT1601L-100ISOM	1.00	0.58
RT1601L-125ISOM	LT1601L-125ISOM	1.25	0.72
RT1601L-150ISOM	LT1601L-150ISOM	1.50	0.87
RT1601L-175ISOM	LT1601L-175ISOM	1.75	1.01
RT1601L-200ISOM	LT1601L-200ISOM	2.00	1.15
RT1601L-250ISOM	LT1601L-250ISOM	2.50	1.44
RT1601L-300ISOM	LT1601L-300ISOM	3.00	1.73
RT1601L-350ISOM	LT1601L-350ISOM	3.50	2.02
RT2201L-350ISOM	LT2201L-350ISOM	3.50	2.02
RT2201L-400ISOM	LT2201L-400ISOM	4.00	2.31
RT2201L-450ISOM	LT2201L-450ISOM	4.50	2.60
RT2201L-500ISOM	LT2201L-500ISOM	5.00	2.89

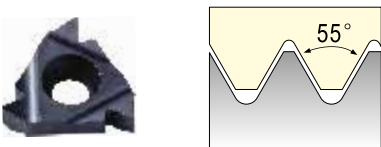
### Set Roscado 60° - Perfil Completo

- Cada ser incluye dos insertos de cada medida entre las indicadas.

SET ROSCADO			
RT1601G-SET1	LT1601G-SET1	1 A 2 MM	
RT1601G-SET2	LT1601G-SET2	2 A 3 MM	-

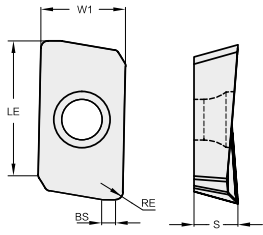
SET ROSCADO			
RT1601L-SET1	LT1601L-SET1	1 A 2 MM	
RT1601L-SET2	LT1601L-SET2	2 A 3 MM	-

### Roscado General 55° Perfil Completo



Exterior Derecha	Exterior Izquierda	Paso mm	Paso TPI
RT1601G-48WM	LT1601G-48WM	48	0.34
RT1601G-40WM	LT1601G-40WM	40	0.41
RT1601G-32WM	LT1601G-32WM	32	0.51
RT1601G-28WM	LT1601G-28WM	28	0.58
RT1601G-26WM	LT1601G-26WM	26	0.63
RT1601G-24WM	LT1601G-24WM	24	0.68
RT1601G-20WM	LT1601G-20WM	20	0.81
RT1601G-19WM	LT1601G-19WM	19	0.90
RT1601G-16WM	LT1601G-16WM	16	1.02
RT1601G-14WM	LT1601G-14WM	14	1.16
RT1601G-12WM	LT1601G-12WM	12	1.36
RT1601G-11WM	LT1601G-11WM	11	1.48
RT1601G-10WM	LT1601G-10WM	10	1.63
RT1601G-9WM	LT1601G-9WM	9	1.81
RT1601G-8WM	LT1601G-8WM	8	2.03
RT2201G-7WM	LT2201G-7WM	7	2.41
RT2201G-6WM	LT2201G-6WM	6	2.71
RT2201G-5WM	LT2201G5-WM	5	3.25

Interior Derecha	Interior Izquierda	Paso mm	Paso TPI
RT1601L-48WM	LT1601L-48WM	48	0.34
RT1601L-40WM	LT1601L-40WM	40	0.41
RT1601L-32WM	LT1601L-32WM	32	0.51
RT1601L-28WM	LT1601L-28WM	28	0.58
RT1601L-26WM	LT1601L-26WM	26	0.63
RT1601L-24WM	LT1601L-24WM	24	0.68
RT1601L-20WM	LT1601L-20WM	20	0.81
RT1601L-19WM	LT1601L-19WM	19	0.90
RT1601L-16WM	LT1601L-16WM	16	1.02
RT1601L-14WM	LT1601L-14WM	14	1.16
RT1601L-12WM	LT1601L-12WM	12	1.36
RT1601L-11WM	LT1601L-11WM	11	1.48
RT1601L-10WM	LT1601L-10WM	10	1.63
RT1601L-9WM	LT1601L-9WM	9	1.81
RT1601L-8WM	LT1601L-8WM	8	2.03
RT2201L-7WM	LT2201L-7WM	7	2.41
RT2201L-6WM	LT2201L-6WM	6	2.71
RT2201L-5WM	LT2201L-5WM	5	3.25

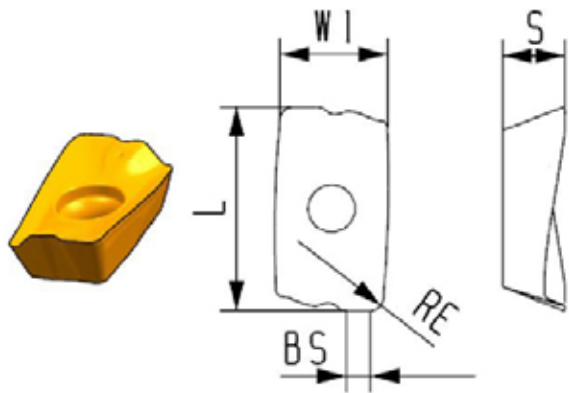
**Placas Fresado**


Referencia	LE	IC	S	BS	RE		OP1215	OP2202
APKT1035PDER	9.52	6.35	3.22	2.5	0.4		▲	▲
APKT1035PDSR	9.52	6.35	3.22	2.5	0.4		▲	▲

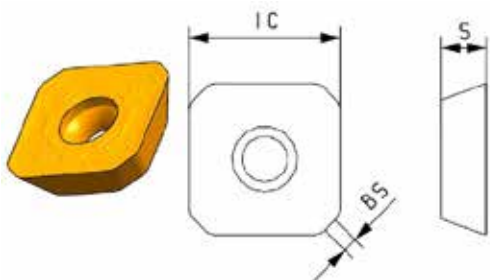
Referencia	LE	IC	S	BS	RE		OP1215	OP2202	OP1620
APMT1135PDER-H	11.40	6.2	3.5	2.8	0.8		▲	▲	
APMT1135PDER-SDX	11.40	6.2	3.5	1.0	0.8		▲	▲	●

Referencia	LE	IC	S	BS	RE		OP1215	OP1315	OP2202	OP1620
APMT160408-ZM	17.56	9.5	5.76	4.4	0.8		▲	▲	▲	●

Referencia	LE	IC	S	BS	RE		OP1215	OP1315	OP2202	OP1620
APMT1604PDER-H2	17.12	9.2	4.76	4.4	0.8		▲	▲		
APMT1604PDER-M2	17.12	9.2	4.76	4.4	0.8		▲	▲	▲	
APMT1604PDER-SDX	17.40	9.27	4.80	1.5	0.8		▲	▲		●

**Placas de Fresado BXKT**


Referencia	L	W1	S	RE	BS		OP1315	OP1325	OP2202
BXKT11T304PER-OM	12.2	6.8	3.7	0.4	1.8		●	▲	
BXKT11T308PER-OM	12.2	6.8	3.7	0.8	1.4		●	▲	

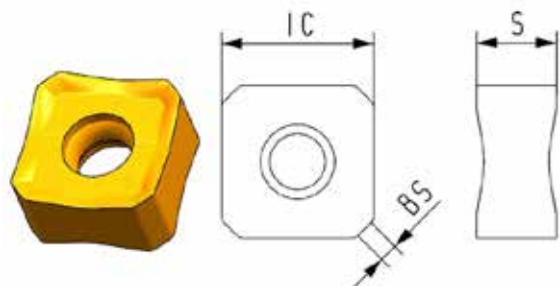
**Placas de Fresado SEET12T3**

**QPF**

**QPM**

**QPR**

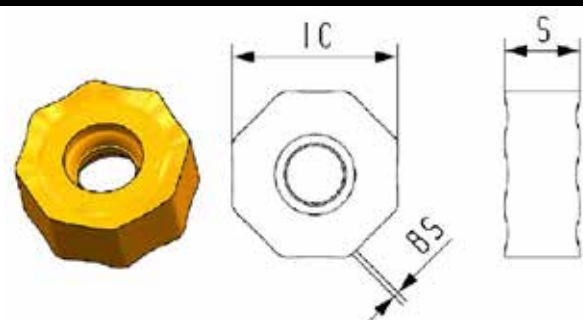
Referencia	IC	S	BS	a		OP1215	OP1315	OP2202
SEET12T3-QPF	13.4	3.97	1.3	-		▲	▲	▲
SEET12T3-QPM	13.4	3.97	1.3			▲	▲	▲
SEET12T3-QPR	13.4	3.97	1.3			▲	▲	▲

**Placas de Fresado SNMX / SNGX**



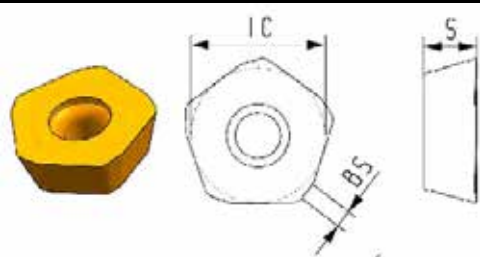
Referencia	IC	S	BS	a	OP1315	OP1325	OP1630
SNMX1306ANN-OL	13	6.8	1.6	-	▲	▲	
SNMX1306ANN-OM	13	6.8	1.6	-	▲	▲	
SNGX1306ANN-LM	13	6.8	1.6	-	▲	▲	
SNMX1306ENN-OM	13	7	1.0	-	▲	▲	

**Placas de Fresado ONMU / ONGU**



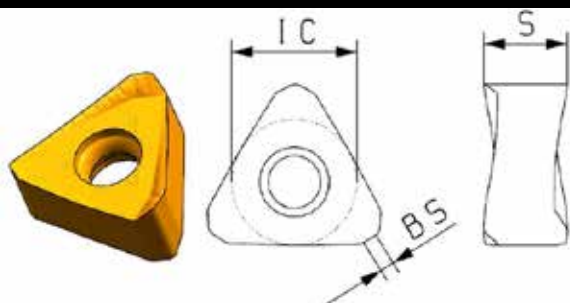
Referencia	IC	S	BS	a	OP1315	OP1325	OP2202
ONMU0504ANN-OL	13	5.9	0.8	-	▲	▲	
ONMU0504ANN-OM	13	5.9	0.4	-	▲	▲	
ONGU0504ANR-W	13	5.9	4.2	-	▲	▲	
ONMU070508-OM	17.5	6.3	-	-	▲	▲	
ONMU0906ANN-OL	20.5	7.2	1.2	-	▲	▲	
ONMU0906ANN-OM	20.5	7.2	1.2	-	▲	▲	

**Placas de Fresado PDMT**

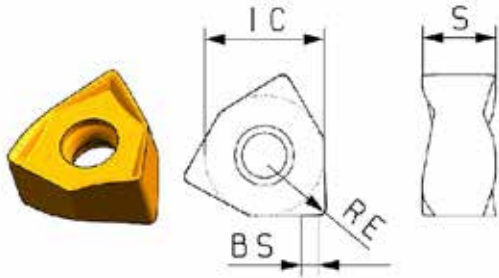


Referencia	IC	S	BS	a	OP1030	OP1215	OP1315
PDMT1305ZDSR-SAM	13	5.1	1.7	-	▲	▲	

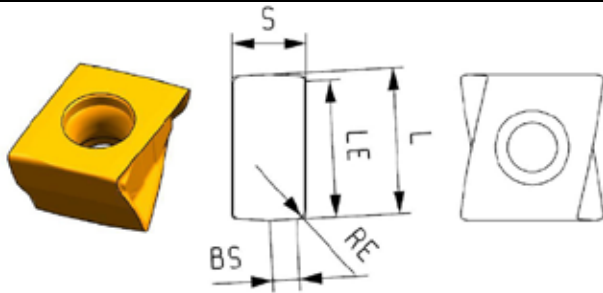
**Placas de Fresado TNGX**



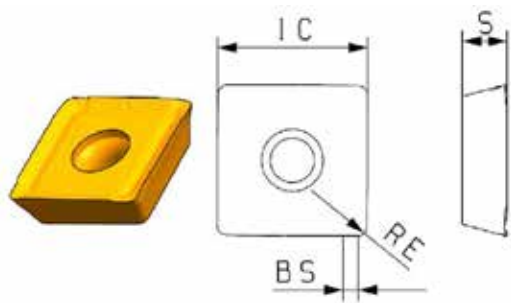
Referencia	IC	S	BS	a	OP1315	OP1325	OP2202
TNGX1306PNFR	11.46	7.6	1.3	-	▲	▲	

**Placas de Fresado WNMX / WNGX**


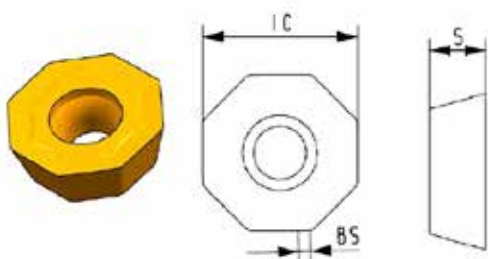
Referencia	IC	S	RE	BS	OP1315	OP1325	OP2202
WNGX040304R-LM	6.5	4	0.4	0.85		▲	
WNMX040308R-OM	6.5	4	0.8	0.5		▲	
WNGX080604R-LM	12.85	6.45	0.4	2.5		▲	
WNMX080608R-OL	12.85	7.8	0.8	1.1		▲	
WNMX080608R-OM	12.85	7.8	0.8	0.8		▲	
WNGX080608R-LF	12.85	6.57	0.8	1.8		▲	
WNGX080608R-LM	12.85	6.45	0.8	2		▲	

**Placas de Fresado LNGX**


Referencia	L	LE	S	RE	BS	OP1315	OP1325	OP2202
LNGX130608PR-LM	13.2	12.4	6.7	0.8	2.4		▲	

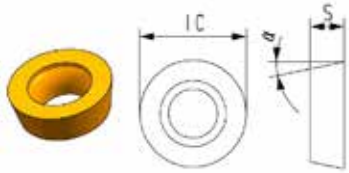
**Placas de Fresado SDKT13T**


Referencia	IC	S	RE	BS	OP1315	OP1325	OP2202
SDKT13T308PER-OM	13.8	4.1	1.2	-		▲	
SDKT13T320PER-OM	13.8	4.1	1.0	-		▲	

**Placas de Fresado SDKT13T**


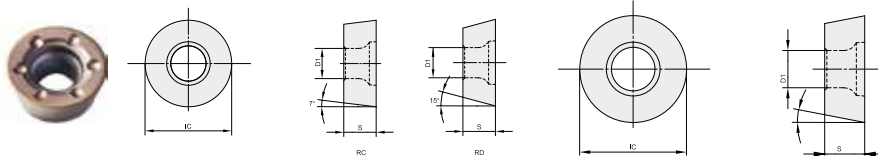
Referencia	IC	S	RE	BS	OP1315	OP1325	OP2202
ODMT0605ADR-OM	16.2	5.9	-	1.2		▲	

**Placas de Fresado RPMW / RPKT**



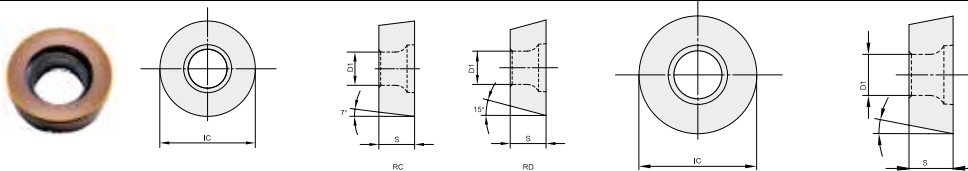
Referencia	IC	S	$\alpha$	BS	OP1315	OP1325	OP1630
RPMW1003MO-SD	10	3.18	11	-		▲	▲
RPKT1204MO-SD	12	4.76	11	-		▲	▲

**Placas de Fresado RDKX**



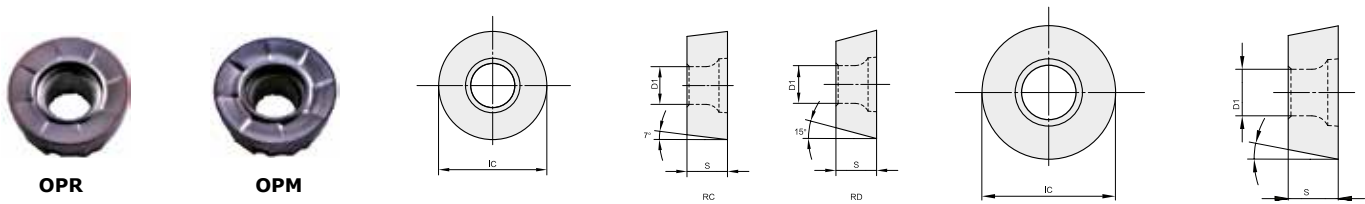
Referencia	IC	S	D1	BS	OP1215	OP1315	OP2202
RDKX10T3MO-BG / QBG	10	3.97	4.4	-	▲	▲	●
RDKX1204MO-BG / QBG	12	4.76	4.4	-	▲	▲	●
RDKX1606MO-BG / QBG	16	6.35	5.56		▲	▲	●

**Placas de Fresado RPEW**



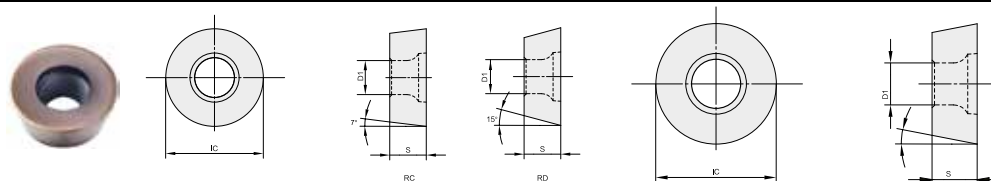
Referencia	IC	S	D1	BS	OP1215	OP1315	OP2202
RPEW0802MO-BG / QBG	8	2.38	3.5	-	▲	▲	●
RPEW1003MO-BG / QBG	10	3.18	4.6	-	▲	▲	●

**Placas de Fresado RCKT**



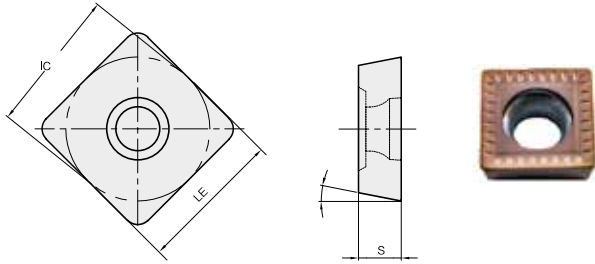
Referencia	IC	S	D1	BS	OP1215	OP1315	OP2202
RCKT1204MO-OPR	12	4.76	4.4	-	▲	▲	
RCKT1606MO-OPR	16	6.35	5.56	-	▲	▲	
RCKT1606MO-OPM	16	6.35	5.56		▲	▲	

**Placas de Fresado RDKW**



Referencia	IC	S	D1	BS	OP1215	OP1315	OP2202
RDKW0803MO-BG / QBG	8	3.18	3.4	-	▲	▲	
RDKW10T3MO-BG / QBG	10	3.97	4.4	-	▲	▲	
RDKW1204MO-BG / QBG	12	4.76	4.4		▲	▲	
RDKW1604MO-BG / QBG	16	4.76	5.2		▲	▲	
RDKW1605MO-BG / QBG	16	5.56	5.56		▲	▲	
RDKW1606MO-BG / QBG	16	6.35	5.56		▲	▲	

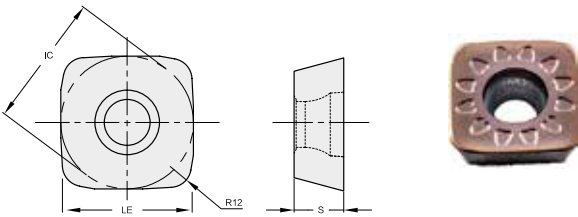


**Placas de Fresado SPMT1204...**


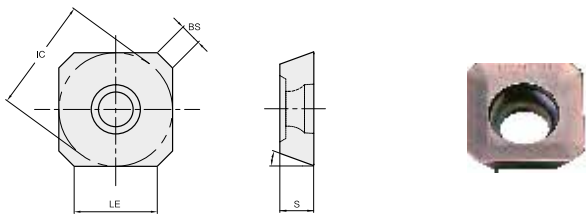
Referencia	LE	W1	S	D1	RE	OP1215	OP1315	OP2202
SPMT120408-HT-1	12.7	12.7	4.76	5.5	0.8	▲	▲	

**Placas de Fresado SEET...**

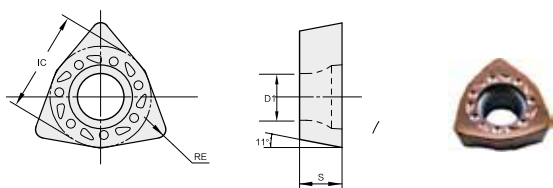

Referencia	LE	IC	S	D1	BS	OP1215	OP1315	OP2202
SEET09T308PER-OPR	9.525	9.525	4.01	3.3	0.786	▲		▲
SEET120308PER-OPF	13.29	13.29	4.042	4.1	0.784	▲		▲
SEET120308PER-OPM	13.29	13.29	4.042	4.1	0.784	▲		▲

**Placas de Fresado SDMT**


Referencia	IC	LE	D1	S	RE	OP1215	OP1315	OP2202
SDMT120412-OPM	12.7	12.7	4.4	4.76	2	▲	▲	●

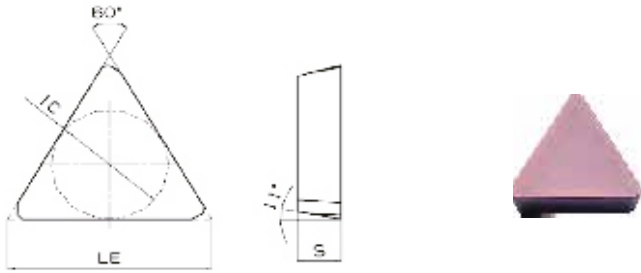
**Placas de Fresado SEKT1204..**


Referencia	IC	S	D1	BS	OP1205	OP1215	OP1315
SEKT1204-OPM	12.7	12.7	4.85	2.10		▲	

**Placas de Fresado WPGT08...**


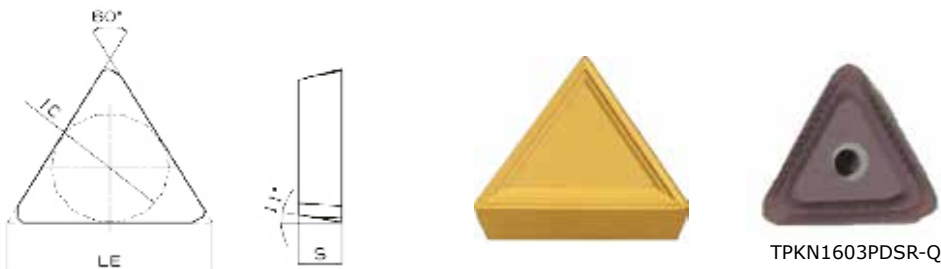
Referencia	IC	LE	D1	S	RE	OP1215	OP1315	OP2202
WPGT080520ZSR	12.85	2	5.5	5.5	11°	▲	▲	
WPGT080615ZSR	12.85	1.5	6.35	5.5	11°	▲	▲	

**Placas de Fresado TPKN2204**



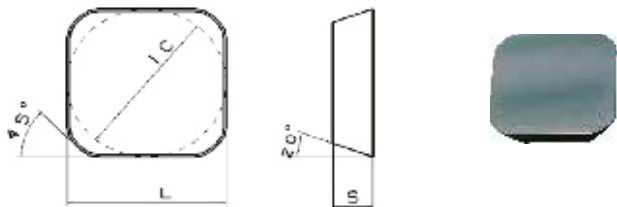
Referencia	IC	IE	S	BS	OP1215	OP1315	OP1325
TPKN2204PDSKR	22	12.7	4.76	-	▲		

**Placas de Fresado TPKN2204**



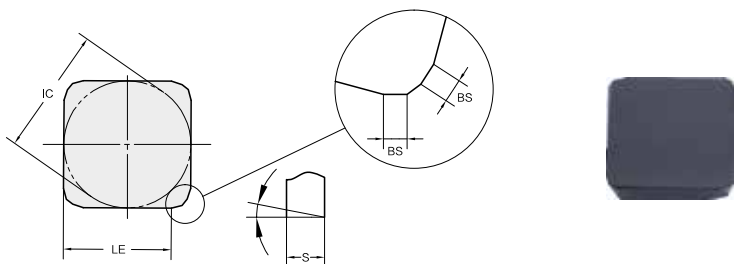
Referencia	IC	IE	S	BS	OP1215	OP1315	OP1325
TPKN160308	16.5	9.52	3.18	0.8	▲		
TPKN1603PDSR-Q	16.5	9.52	3.18	0.8		▲	
TPMR160304	16.5	9.52	3.18	0.8	▲		

**Placas de Fresado TPKN2204**



Referencia	IC	IE	S	BS	OP1215	OP1315	OP1325
TPKN160308	16.5	9.52	3.18	0.8	▲		
TPKN1603PDSR-Q (Agujero Central)	16.5	9.52	3.18	0.8		▲	
TPMR160304	16.5	9.52	3.18	0.8	▲		

**Placas de Fresado SPKN..**

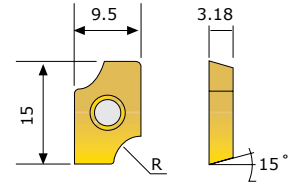


Referencia	IC	IE	S	BS	OP1205	OP1215	OP1315
SPKN120304	12.7	12.7	3.18	1.481	●	▲	
SPKN1203EDSR	12.7	12.7	3.18	1.481	●	▲	
SPKN150404	15.875	15.875	4.76	1.4		▲	

**Placa de radio NXDCW1503F**

- Venta de placas en caja de 5 Unidades
- Modelo Set - 1 placa de cada modelo

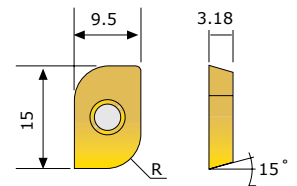
Referencia	Ancho	Alto	Espesor	Radio
NXDCW1503F-R1	9.5	15	3.18	1
NXDCW1503F-R15	9.5	15	3.18	1.5
NXDCW1503F-R2	9.5	15	3.18	2
NXDCW1503F-R25	9.5	15	3.18	2.5
NXDCW1503F-R3	9.5	15	3.18	3
NXDCW1503F-R35	9.5	15	3.18	3.5
NXDCW1503F-R4	9.5	15	3.18	4
NXDCW1503F-SET				1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4



**Placa de radio NXDCW1503M**

- Venta de placas en caja de 5 Unidades
- Modelo Set - 1 placa de cada modelo

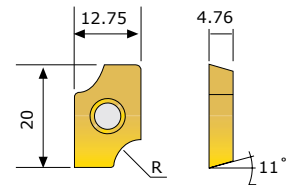
Referencia	Ancho	Alto	Espesor	Radio
NXDCW1503M-R1	9.5	15	3.18	1
NXDCW1503M-R15	9.5	15	3.18	1.5
NXDCW1503M-R2	9.5	15	3.18	2
NXDCW1503M-R25	9.5	15	3.18	2.5
NXDCW1503M-R3	9.5	15	3.18	3
NXDCW1503M-R35	9.5	15	3.18	3.5
NXDCW1503M-R4	9.5	15	3.18	4
NXDCW1503M-RSET				1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4



**Placa de radio NXPCW2004F**

- Venta de placas en caja de 5 Unidades
- Modelo Set - 1 placa de cada modelo

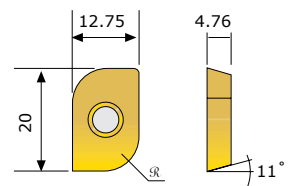
Referencia	Ancho	Alto	Espesor	Radio
NXPCW2004F-R45	12.75	20	4.76	4.5
NXPCW2004F-R5	12.75	20	4.76	5
NXPCW2004F-R55	12.75	20	4.76	5.5
NXPCW2004F-R6	12.75	20	4.76	6
NXPCW2004F-R65	12.75	20	4.76	6.5
NXPCW2004F-R7	12.75	20	4.76	7
NXPCW2004F-RSET				4.5 - 5 - 5.5 - 6 - 6.5 - 7



**Placa de radio NXPCW2004M**

- Venta de placas en caja de 5 Unidades
- Modelo Set - 1 placa de cada modelo

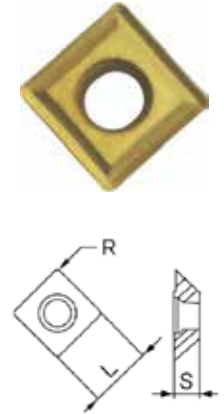
Referencia	Ancho	Alto	Espesor	Radio
NXPCW2004M-R45	12.75	20	4.76	4.5
NXPCW2004M-R5	12.75	20	4.76	5
NXPCW2004M-R55	12.75	20	4.76	5.5
NXPCW2004M-R6	12.75	20	4.76	6
NXPCW2004M-R65	12.75	20	4.76	6.5
NXPCW2004M-R7	12.75	20	4.76	7
NXPCW2004M-RSET				4.5 - 5 - 5.5 - 6 - 6.5 - 7



### Placas para Chaflanado NDXP

- Venta de placas en caja de 5 Unidades
- Modelo PMC - Set con 4 Placas Acero, 2 de Inoxidable y 2 de Fundición

Referencia	L	S	R	Para Materiales	Cantidad/Caja
NDXP11T308-P	11	3.97	0.8	Acero	5 Unidades
NDXP11T308-M	11	3.97	0.8	Inoxidable	5 Unidades
NDXP11T308-C	11	3.97	0.8	Fundición	5 Unidades
NDXP11T308-PMC	11	3.97	0.8	Acero - Inoxidable y Fundición	4 - Uso Acero 2 - Inoxidable 2 - Fundición



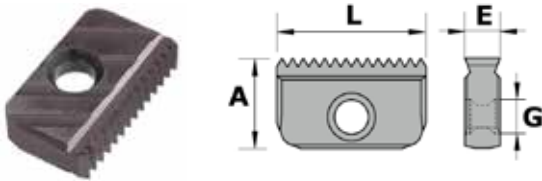
### Placas para Punteado NXXN

- Venta de placas en caja de 5 Unidades
- Modelo Set - Set con 2 Placas de cada medida

Referencia	D	L	T	Ángulo
NXXN4-200	2	20.6	4	60°
NXXN4-250	2.5	20.6	4	60°
NXXN4-300	3	20.6	4	60°
NXXN4-400	4	20.6	4	60°
NXXN4-SET	2-2.5-3-4	20.6	4	60°



### Placas de Roscado Int/Ext CPT..



Modelo	Dimensiones			
	L	A	E	G
NCPT14	14	7.5	3.1	3.3
NCPT21	21	12	4.7	4.7

Referencia	Tipo	Paso mm
NCPT14-075E	14 - Exterior	0.75
NCPT14-100E	14 - Exterior	1.0
NCPT14-125E	14 - Exterior	1.25
NCPT14-150E	14 - Exterior	1.50
NCPT14-175E	14 - Exterior	1.75
NCPT14-200E	14 - Exterior	2.0
NCPT14-250E	14 - Exterior	2.5
NCPT21-100E	21 - Exterior	1.0
NCPT21-125E	21 - Exterior	1.25
NCPT21-150E	21 - Exterior	1.50
NCPT21-175E	21 - Exterior	1.75
NCPT21-200E	21 - Exterior	2.0
NCPT21-250E	21 - Exterior	2.5
NCPT21-300E	21 - Exterior	3.0

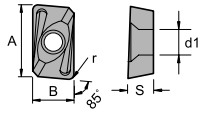
Referencia	Tipo	Paso mm
NCPT14-075I	14 - Interior	0.75
NCPT14-100I	14 - Interior	1.0
NCPT14-125I	14 - Interior	1.25
NCPT14-150I	14 - Interior	1.50
NCPT14-175I	14 - Interior	1.75
NCPT14-200I	14 - Interior	2.0
NCPT14-250I	14 - Interior	2.5
NCPT21-100I	21 - Interior	1.0
NCPT21-125I	21 - Interior	1.25
NCPT21-150I	21 - Interior	1.50
NCPT21-175I	21 - Interior	1.75
NCPT21-200I	21 - Interior	2.0
NCPT21-250I	21 - Interior	2.5
NCPT21-300I	21 - Interior	3.0

### Placa Para Porta de Fresado-Marcado 60° XCEX11T3

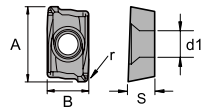
- Venta de placas en caja de 10 Unidades

Referencia	Radio	Cantidad/Caja
XCEX11T3-01	0.1	10
XCEX11T3-02	0.2	10
XCEX11T3-04	0.4	10
XCEX11T3-08	0.8	10
XCEX11T3-SET	0.1 A 0.8	2 de cada radio

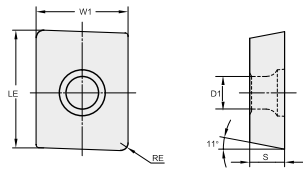


**Placas de Fresado APKT...**


Referencia	A	B	S	r	d1		NP1232	NP1233
APKT100304-MXG	10.5	6.7	3.5	0.4	2.8		▲	▲
APKT100308-MXG	10.5	6.7	3.5	0.8	2.8		▲	▲

**Placas de Fresado AXMT...**


Referencia	A	B	S	r	d1		NP1232	NP1233
AXMT123508-MRX	12.18	6.93	3.58	0.8	3.4		▲	▲
AXMT170508-MRX	17.50	10.2	5.56	0.8	4.6		▲	▲
AXMT170516-MRX	17.50	10.2	5.56	1.6	4.6			

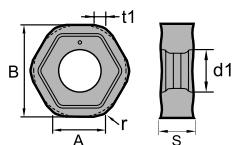
**Placas de Fresado ADKT...**

**ADKT15**

**APKT17**

Referencia	LE	W1	S	D1	RE		NP1215	NP1630
ADKT1505PDR	9.65	14.20	5.65	4.45	0.8		▲	
APKT170408PDR	10.70	18.50	5.70	0.80	4.70		▲	▲

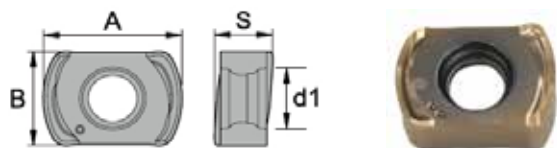
**Placas de Fresado BPKT...**


Referencia	d	a	ap	-	-		NP1315	NP2202
BPKT100404-RM	6.9	4	7				▲	●
BPKT150508-RM	10.7	5	11				▲	●

**Placas de Fresado HXMX...**


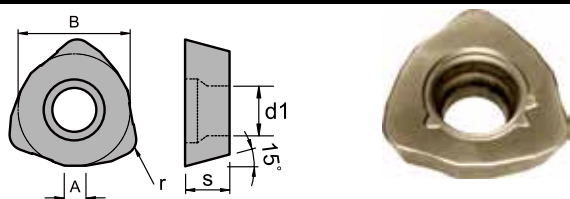
Referencia	A	B	S	r	d1	t1	NP1232	NP1233
HXMX0704-SXG	6.8	12.7	4.45	1.2	4.9	1.4	▲	▲

### Placas de Fresado (Alto Avance) BXNMX...



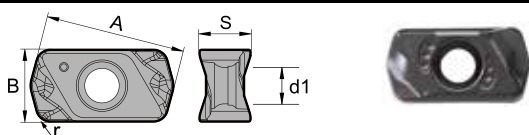
Referencia	A	B	S	r	d1		NP1232	NP1233
BXMX0603-MXG	9.0	6.38	3.75	-	3.2		▲	▲
BXMX0603-MRX	9.0	6.38	3.75	-	3.2		▲	▲
BXMG0904-MXG	11.9	9.18	4.8	-	4.2		▲	▲

### Placas de Fresado JDMX...



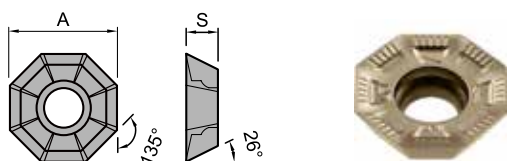
Referencia	A	B	S	r	d1		NP1232	NP1233
JDMX120420-MRX	2.5	12.0	4.76	2.0	4.75		▲	▲
JDMX140520-MRX	2.8	1.4	5.56	2.0	5.75		▲	▲

### Placas de Fresado LNMU



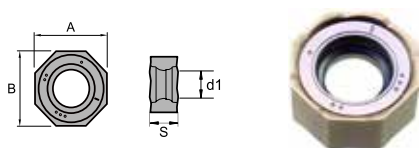
Referencia	A	B	T	r	-	-	NP1232	NP1233
LNMU0303ZER-MXJ	11.60	6	4.30	1.2			▲	▲

### Placas de Fresado OFXT05T3



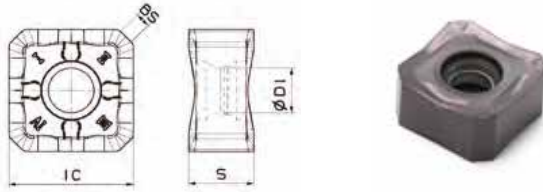
Referencia	A	B	S	r	d1	-	NP1232	NP1233
OFXT05T3-MGX	12.7	-	3.8	0.6	4.6		▲	▲
OFXT05T3-RGX	12.7	-	3.8	0.6	4.6		▲	▲

### Placas de Fresado ONMX0505

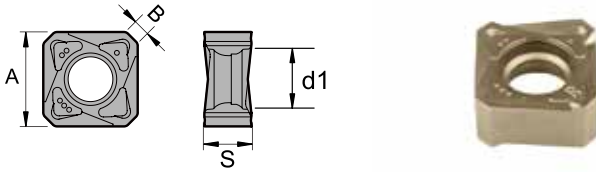


Referencia	A	B	S	r	d1	-	NP1232	NP1233
ONMX0505-RGX	12.7	12.7	6.4	-	6		▲	▲

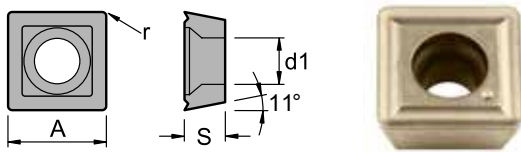


**Placas de Fresado SNBX...**


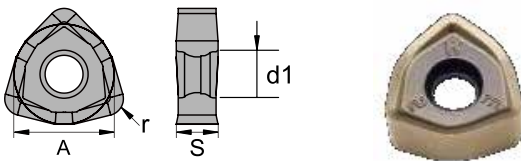
Referencia	d	I	s	r	d1	-	NP1215	NP1233
SNBX1206-A1	12.70	12.70	6.35	0.80	4.40		▲	

**Placas de Fresado SNXX...**


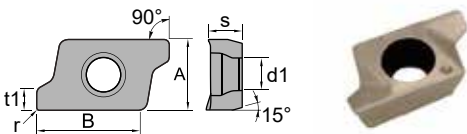
Referencia	A	B	S	r	d1	-	NP1232	NP1233
SNXX1205-MXG	12.7	1.5	6.4	-	6			▲
SNXX1205-RXG	12.7	1.5	6.4	-	6			▲

**Placas de Taladrado SPMG...**


Referencia	A	B	S	r	d1	-	NP1232	NP1233
SPMG050204	5	5	2.38	0.4	2.2		▲	
SPMG060204	6	6	2.38	0.4	2.7		▲	
SPMG07T308	8	7	3.97	0.8	2.8		▲	
SPMG090408	9.8	9.8	4.30	0.8	3.7		▲	
SPMG110408	11.5	11.5	4.98	0.8	4.2		▲	

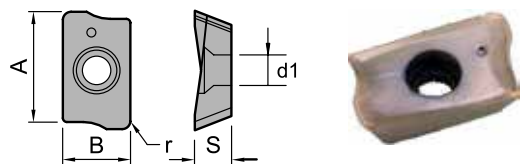
**Placas de Fresado WNMX...**


Referencia	d	I	s	r	d1	-	NP1232	NP1233
WNMX09T316-MXG	9.525	-	3.97	1.6	3.6			▲
WNMX130516-MXG	12.7	-	6.02	1.6	4.7			▲

**Placas de Fresado RTX07... / RTX10...**


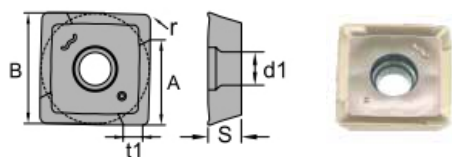
Referencia	A	B	S	r	d1	-	NP1232	NP1233
RTX070204-RXG	4.30	6.40	2.38	0.4	2.2			▲
RTX100308-RXG	6.35	9.3	3.4	0.8	2.9			▲

**Placas de Fresado X390...**



Referencia	d	I	s	r	d1	-	NP1232	NP1233
X39011T308-MXG	11	6.9	3.59	0.8	2.8		▲	▲
X39011T320-MXG	11	6.9	3.59	2.0	2.8		▲	▲
X390180612-SXG	15.4	11	6.33	1.2	4.2		▲	▲
X390180612-MXG	15.4	11	6.33	1.2	4.2		▲	▲

**Placas de Fresado X490...**



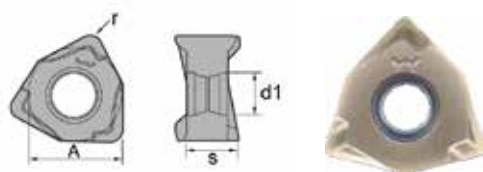
Referencia	A	B	S	R	d1	-	NP1232	NP1233
X49008T308-SXG	5.6	8.5	3.3	0.5	2.8			▲
X490140408-SXG	10.3	13.8	3.9	0.8	4.1			▲

**Placas de Fresado W32...**



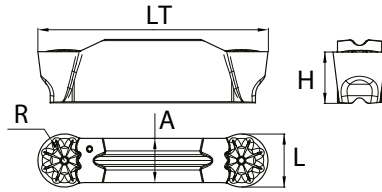
Referencia	A	B	S	d1	-	-	NP1232	NP1233
WP3212-NX	12	6	2.5	5				▲
WP3216-NX	16	6	3	5				▲
WP3220-NX	20	6	3	5				▲
WP3225-NX	25	9	4	6				▲
WP3232-NX	32	10	5	8				▲
WP3212-SX	12	6	2.5	5				▲
WP3216-SX	16	6	3	5				▲
WP3220-SX	20	6	3	5				▲
WP3225-SX	25	9	4	6				▲
WP3232-SX	32	10	5	8				▲

**Placas de Fresado XNMX...**



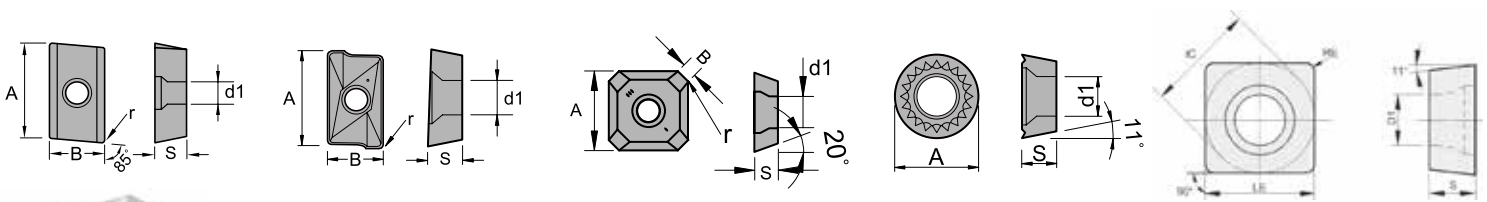
Referencia	A	S	-	r	d1	-	NP1232	NP1233
XNMX040304-SXG	6.70	3.285		0.4	3.15		▲	▲
XNMX040304-MXG	6.70	3.285		0.8	3.15		▲	▲

**Placas Ranurado - MRNX**



Referencia	L	R	LT	A	H	Para Portas	NP1232
MRNX2010	2.0	1.0	16.0	1.2	3.5	NPDRA-MGM...	▲
MRNX3015	3.0	1.5	21.2	2.35	4.8	NPDRA-MGM...	▲
MRNX4020	4.0	2.0	21.0	3.3	4.8	NPDRA-MGM...	▲
MRNX5025	5.0	2.5	26.0	4.1	5.8	NPDRA-MGM...	▲
MRNX6030	6.0	3.0	26.0	5.0	5.8	NPDRA-MGM...	▲

**Placas de Aluminio Para Fresado / Taladrado**



Referencia	A	B	S	d1	r	NXK-343
SEKT1204-NL	13.4	13.4	3.97	4.1	2.55	▲



Referencia	A	B	S	d1	r	NXK-343
APKT1003-NL	10.5	6.7	3.5	0.4	2.8	▲



Referencia	A	B	S	d1	r	NXK-343
APKT1035-NL	9.52	6.35	3.22	2.5	0.4	▲



Referencia	A	B	S	d1	r	NXK-343
APGT1135PDER-NL	11.39	6.2	3.5	2.8	0.4	▲



Referencia	A	B	S	d1	r	NXK-343
APKT160402-NL	16.3	9.525	5.25	4.4	0.2	▲



Referencia	A	B	S	d1	r	NXK-343
APKT160404-NL	16.3	9.525	5.25	4.4	0.4	▲



Referencia	A	B	S	d1	r	NXK-343
APKT160408PDFR	16.3	9.525	5.25	4.4	0.8	▲

Referencia	A	B	S	d1	r	NXK-343
RCGT1004MO	-	10	-	-	-	▲

Referencia	LE	IC	S	D1	RE	NXK-343
SPGT050204-OPM	5	5	2.38	2.2	0.4	▲
SPGT060204-OPM	6	6	2.38	2.6	0.4	▲
SPGT07T308-OPM	7.94	7.94	3.97	2.8	0.8	▲
SPGT090408-OPM	9.8	9.8	4.3	4.1	0.8	▲
SPGT110408-OPM	11.5	11.5	4.76	4.6	0.8	▲
SPGT140512-OPM	14.3	14.3	5.2	5.75	1.2	▲

## Cuchilla para broca intercambiable CPX

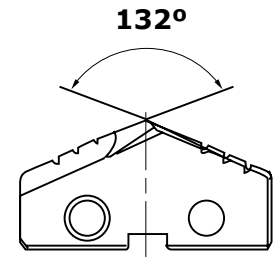
Tipo	HSS		MD		
	Diámetro Ø	Acero CPX-H	Acero CPX-P	Inox CPX-M	Fundición CPX-K
10.00	CPX-H100	CPX-P100	CPX-M100	CPX-K100	CPX-N100
10.20	CPX-H102	CPX-P102	CPX-M102	CPX-K102	CPX-N102
10.50	CPX-H105	CPX-P105	CPX-M105	CPX-K105	CPX-N105
11.00	CPX-H110	CPX-P110	CPX-M110	CPX-K110	CPX-N110
11.50	CPX-H115	CPX-P115	CPX-M115	CPX-K115	CPX-N115
12.00	CPX-H120	CPX-P120	CPX-M120	CPX-K120	CPX-N120
12.50	CPX-H125	CPX-P125	CPX-M125	CPX-K125	CPX-N125
13.00	CPX-H130	CPX-P130	CPX-M130	CPX-K130	CPX-N130
13.50	CPX-H135	CPX-P135	CPX-M135	CPX-K135	CPX-N135
14.00	CPX-H140	CPX-P140	CPX-M140	CPX-K140	CPX-N140
14.50	CPX-H145	CPX-P145	CPX-M145	CPX-K145	CPX-N145
15.00	CPX-H150	CPX-P150	CPX-M150	CPX-K150	CPX-N150
15.50	CPX-H155	CPX-P155	CPX-M155	CPX-K155	CPX-N155
16.00	CPX-H160	CPX-P160	CPX-M160	CPX-K160	CPX-N160
16.50	CPX-H165	CPX-P165	CPX-M165	CPX-K165	CPX-N165
17.00	CPX-H170	CPX-P170	CPX-M170	CPX-K170	CPX-N170
17.50	CPX-H175	CPX-P175	CPX-M175	CPX-K175	CPX-N175
18.00	CPX-H180	CPX-P180	CPX-M180	CPX-K180	CPX-N180
18.50	CPX-H185	CPX-P185	CPX-M185	CPX-K185	CPX-N185
19.00	CPX-H190	CPX-P190	CPX-M190	CPX-K190	CPX-N190
19.50	CPX-H195	CPX-P195	CPX-M195	CPX-K195	CPX-N195
20.00	CPX-H200	CPX-P200	CPX-M200	CPX-K200	CPX-N200
20.50	CPX-H205	CPX-P205	CPX-M205	CPX-K205	CPX-N205
21.00	CPX-H210	CPX-P210	CPX-M210	CPX-K210	CPX-N210
21.50	CPX-H215	CPX-P215	CPX-M215	CPX-K215	CPX-N215
22.00	CPX-H220	CPX-P220	CPX-M220	CPX-K220	CPX-N220
22.50	CPX-H225	CPX-P225	CPX-M225	CPX-K225	CPX-N225
23.00	CPX-H230	CPX-P230	CPX-M230	CPX-K230	CPX-N230
23.50	CPX-H235	CPX-P235	CPX-M235	CPX-K235	CPX-N235
24.00	CPX-H240	CPX-P240	CPX-M240	CPX-K240	CPX-N240
24.50	CPX-H245	CPX-P245	CPX-M245	CPX-K245	CPX-N245
25.00	CPX-H250	CPX-P250	CPX-M250	CPX-K250	CPX-N250
25.50	CPX-H255	CPX-P255	CPX-M255	CPX-K255	CPX-N255
26.00	CPX-H260	CPX-P260	CPX-M260	CPX-K260	CPX-N260
26.50	CPX-H265	CPX-P265	CPX-M265	CPX-K265	CPX-N265
27.00	CPX-H270	CPX-P270	CPX-M270	CPX-K270	CPX-N270
27.50	CPX-H275	CPX-P275	CPX-M275	CPX-K275	CPX-N275
28.00	CPX-H280	CPX-P280	CPX-M280	CPX-K280	CPX-N280
28.50	CPX-H285	CPX-P285	CPX-M285	CPX-K285	CPX-N285
29.00	CPX-H290	CPX-P290	CPX-M290	CPX-K290	CPX-N290
29.50	CPX-H295	CPX-P295	CPX-M295	CPX-K295	CPX-N295
30.00	CPX-H300	CPX-P300	CPX-M300	CPX-K300	CPX-N300
30.50	CPX-H305	CPX-P305	CPX-M305	CPX-K305	CPX-N305
31.00	CPX-H310	CPX-P310	CPX-M310	CPX-K310	CPX-N310
31.50	CPX-H315	CPX-P315	CPX-M315	CPX-K315	CPX-N315
32.00	CPX-H320	CPX-P320	CPX-M320	CPX-K320	CPX-N320
32.50	CPX-H325	CPX-P325	CPX-M325	CPX-K325	CPX-N325
33.00	CPX-H330	CPX-P330	CPX-M330	CPX-K330	CPX-N330
33.50	CPX-H335	CPX-P335	CPX-M335	CPX-K335	CPX-N335
34.00	CPX-H340	CPX-P340	CPX-M340	CPX-K340	CPX-N340
34.50	CPX-H345	CPX-P345	CPX-M345	CPX-K345	CPX-N345
35.00	CPX-H350	CPX-P350	CPX-M350	CPX-K350	CPX-N350
35.50	CPX-H355	CPX-P355	CPX-M355	CPX-K355	CPX-N355
36.00	CPX-H360	CPX-P360	CPX-M360	CPX-K360	CPX-N360
36.50	CPX-H365	CPX-P365	CPX-M365	CPX-K365	CPX-N365
37.00	CPX-H370	CPX-P370	CPX-M370	CPX-K370	CPX-N370
37.50	CPX-H375	CPX-P375	CPX-M375	CPX-K375	CPX-N375
38.00	CPX-H380	CPX-P380	CPX-M380	CPX-K380	CPX-N380
39.00	CPX-H390	CPX-P390	CPX-M390	CPX-K390	CPX-N390



## Cuchilla para broca intercambiable NPX25

- HSS - Recubierta - Ángulo corte 132°
- Compatible con: Modelos de Brocas NIXA / Karnasch / YG / ACME

Tipo	HSS		MD	
	NPX	NPX-P	NPX-K	NPX-N
9.50	NPX25-095	NPX25-P095	NKX25-K095	NNX25-N095
10.00	NPX25-100	NPX25-P100	NKX25-K100	NNX25-N100
10.20	NPX25-102	NPX25-P102	NKX25-K102	NNX25-N102
10.50	NPX25-105	NPX25-P105	NKX25-K105	NNX25-N105
11.00	NPX25-110	NPX25-P110	NKX25-K110	NNX25-N110
11.50	NPX25-115	NPX25-P115	NKX25-K115	NNX25-N115
12.00	NPX25-120	NPX25-P120	NKX25-K120	NNX25-N120
12.50	NPX25-125	NPX25-P125	NKX25-K125	NNX25-N125
13.00	NPX25-130	NPX25-P130	NKX25-K130	NNX25-N130
13.50	NPX25-135	NPX25-P135	NKX25-K135	NNX25-N135
14.00	NPX25-140	NPX25-P140	NKX25-K140	NNX25-N140
14.50	NPX25-145	NPX25-P145	NKX25-K145	NNX25-N145
15.00	NPX25-150	NPX25-P150	NKX25-K150	NNX25-N150
15.50	NPX25-155	NPX25-P155	NKX25-K155	NNX25-N155
16.00	NPX25-160	NPX25-P160	NKX25-K160	NNX25-N160
16.50	NPX25-165	NPX25-P165	NKX25-K165	NNX25-N165
17.00	NPX25-170	NPX25-P170	NKX25-K170	NNX25-N170
17.50	NPX25-175	NPX25-P175	NKX25-K175	NNX25-N175
18.00	NPX25-180	NPX25-P180	NKX25-K180	NNX25-N180
18.50	NPX25-185	NPX25-P185	NKX25-K185	NNX25-N185
19.00	NPX25-190	NPX25-P190	NKX25-K190	NNX25-N190
19.50	NPX25-195	NPX25-P195	NKX25-K195	NNX25-N195
20.00	NPX25-200	NPX25-P200	NKX25-K200	NNX25-N200
20.50	NPX25-205	NPX25-P205	NKX25-K205	NNX25-N205
21.00	NPX25-210	NPX25-P210	NKX25-K210	NNX25-N210
21.50	NPX25-215	NPX25-P215	NKX25-K215	NNX25-N215
22.00	NPX25-220	NPX25-P220	NKX25-K220	NNX25-N220
22.50	NPX25-225	NPX25-P225	NKX25-K225	NNX25-N225
23.00	NPX25-230	NPX25-P230	NKX25-K230	NNX25-N230
23.50	NPX25-235	NPX25-P235	NKX25-K235	NNX25-N235
24.00	NPX25-240	NPX25-P240	NKX25-K240	NNX25-N240
24.50	NPX25-245	NPX25-P245	NKX25-K245	NNX25-N245
25.00	NPX25-250	NPX25-P250	NKX25-K250	NNX25-N250
25.50	NPX25-255	NPX25-P255	NKX25-K255	NNX25-N255
26.00	NPX25-260	NPX25-P260	NKX25-K260	NNX25-N260
26.50	NPX25-265	NPX25-P265	NKX25-K265	NNX25-N265
27.00	NPX25-270	NPX25-P270	NKX25-K270	NNX25-N270
27.50	NPX25-275	NPX25-P275	NKX25-K275	NNX25-N275
28.00	NPX25-280	NPX25-P280	NKX25-K280	NNX25-N280
28.50	NPX25-285	NPX25-P285	NKX25-K285	NNX25-N285
29.00	NPX25-290	NPX25-P290	NKX25-K290	NNX25-N290
29.50	NPX25-295	NPX25-P295	NKX25-K295	NNX25-N295
30.00	NPX25-300	NPX25-P300	NKX25-K300	NNX25-N300
30.50	NPX25-305	NPX25-P305	NKX25-K305	NNX25-N305
31.00	NPX25-310	NPX25-P310	NKX25-K310	NNX25-N310
31.50	NPX25-315	NPX25-P315	NKX25-K315	NNX25-N315
32.00	NPX25-320	NPX25-P320	NKX25-K320	NNX25-N320
32.50	NPX25-325	NPX25-P325	NKX25-K325	NNX25-N325
33.00	NPX25-330	NPX25-P330	NKX25-K330	NNX25-N330
33.50	NPX25-335	NPX25-P335	NKX25-K335	NNX25-N335
34.00	NPX25-340	NPX25-P340	NKX25-K340	NNX25-N340
34.50	NPX25-345	NPX25-P345	NKX25-K345	NNX25-N345
35.00	NPX25-350	NPX25-P350	NKX25-K350	NNX25-N350
36.00	NPX25-360	-	-	-
37.00	NPX25-370	-	-	-
38.00	NPX25-380	-	-	-
39.00	NPX25-390	-	-	-
40.00	NPX25-400	-	-	-
41.00	NPX25-410	-	-	-
42.00	NPX25-420	-	-	-



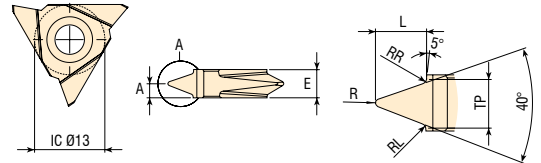
**Cuchilla para broca intercambiable NPX25 - Continuación**

Tipo	HSS
Diámetro ø	NPX
43.00	NPX25-430
44.00	NPX25-440
45.00	NPX25-450
46.00	NPX25-460
47.00	NPX25-470
48.00	NPX25-480
49.00	NPX25-490
50.00	NPX25-500

Tipo	HSS
Diámetro ø	NPX
51.00	NPX25-510
52.00	NPX25-520
53.00	NPX25-530
54.00	NPX25-540
55.00	NPX25-550
56.00	NPX25-560
57.00	NPX25-570

Tipo	HSS
Diámetro ø	NPX
58.00	NPX25-580
59.00	NPX25-590
60.00	NPX25-600
61.00	NPX25-610
62.00	NPX25-620
63.00	NPX25-630
64.00	NPX25-640
65.00	NPX25-650

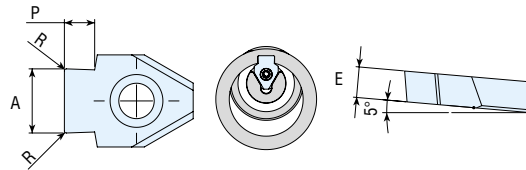
**Cuchilla Ranurado Polly - RBNX**



Referencia	DIN	TP	E	R	RR/RL	A	L	Para Modelo
RBNX12-0234	PJ	2.34	5.20	0.36	0.24	2.60	2.08	NPDR-RBNX12
RBNX12-0356	PK	3.56	5.20	0.44	0.35	2.60	3.40	
RBNX12-0470	PL	4.70	5.20	0.36	0.45	2.60	4.90	

**Cuchillas para Brochado**

• Según Norma DIN 6885



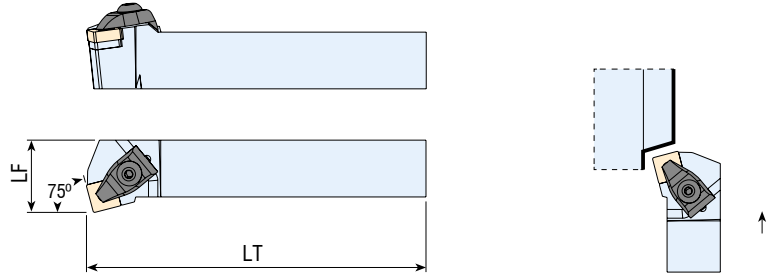
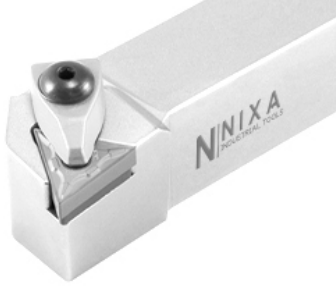
Referencia	A	R	P	E	DMin	Para Modelo	Tolerancia
CBNX1-0612	6.12	0.85	2.6	4	22	NPDB-NX1-D22-D25-L50 NPDB-NX1-D22-D25-L70	C11
CBNX1-0713	7.13	0.85	3.3	4	22		
CBNX1-0813	8.13	1.05	3.4	4	22		
CBNX2-1013	10.13	1.05	4.2	6	30	NPDB-NX2-D30-D32-L110 NPDB-NX2-D30-D32-L50 NPDB-NX2-D30-D32-L75	
CBNX2-1215-51	12.15	1.35	5.1	6	38	NPDB-NX2-D38-D32-L50 NPDB-NX2-D38-D32-L75	
CBNX2-1215-66	12.15	1.75	6.6	6	38		
CBNX2-1215-85	12.15	2.25	8.5	6	38		

Referencia	A	R	P	E	DMin	Para Modelo	Tolerancia
CBNX1-0498	4.98	0.2	2.7	4	17	NPDB-NX1-D17-D25-L90 NPDB-NX1-D17-D25-L105	P9
CBNX1-0598	5.98	0.2	3.4	4	17		
CBNX1-0798	7.98	0.2	4.1	4	22	NPDB-NX1-D22-D25-L50 NPDB-NX1-D22-D25-L70	
CBNX2-0998	9.98	0.3	4.2	6	30	NPDB-NX2-D30-D32-L50 NPDB-NX2-D30-D32-L75 NPDB-NX2-D30-D32-L110	
CBNX2-1197	11.97	0.3	5.7	6	38	NPDB-NX2-D38-D32-L50 NPDB-NX2-D38-D32-L75	
CBNX2-1397	13.97	0.3	6.8	6	40	NPDB-NX2-D40-D32-L50 NPDB-NX2-D40-D32-L75	

Referencia	A	R	P	E	DMin	Para Modelo	Tolerancia
CBNX1-0501	5.01	0.2	2.7	4	17	NPDB-NX1-D17-D25-L90 NPDB-NX1-D17-D25-L105	JS9
CBNX1-0601	6.01	0.2	3.4	4	17		
CBNX1-0801	8.01	0.2	4.1	4	22	NPDB-NX1-D22-D25-L50 NPDB-NX1-D22-D25-L70	
CBNX2-1001	10.01	0.3	4.2	6	30	NPDB-NX2-D30-D32-L50 NPDB-NX2-D30-D32-L75 NPDB-NX2-D30-D32-L110	
CBNX2-1200	12.00	0.5	8.5	6	38	NPDB-NX2-D38-D32-L50 NPDB-NX2-D38-D32-L75	
CBNX2-1201	12.01	0.3	5.7	6	38		
CBNX2-1401	14.01	0.3	6.8	6	40	NPDB-NX2-D40-D32-L50 NPDB-NX2-D40-D32-L75	

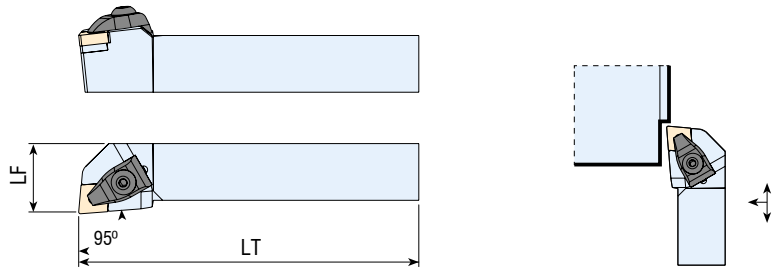


**TCKNR/L - 75°**



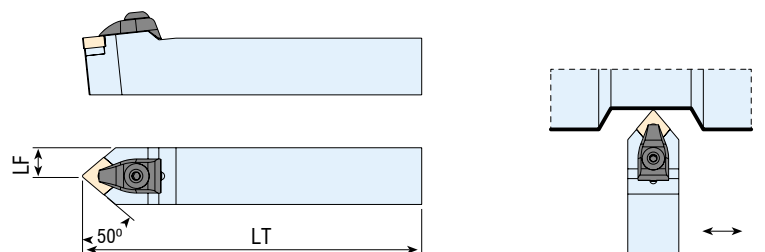
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TCKNR/L 2020-K12	125	25	CNM..1204..	BDA-02	TAB-018	PB-015	TPB-002	MDP-015	MDP-009	LLA-3
TCKNR/L 2525-M12	150	32								
TCKNR/L 3232-P12	170	40								
TCKNR/L 2525-M16	150	32	CNM..1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016	MDP-010	LLA-5
TCKNR/L 3232-P16	170	40								

**TCLNR/L - 95°**



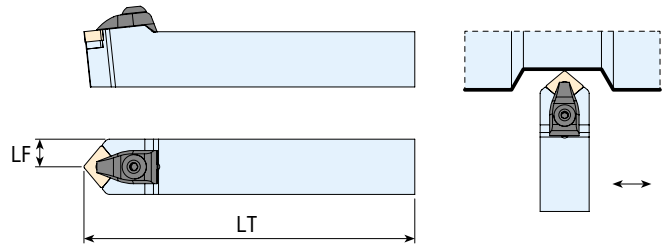
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TCLNR/L 2020-K12	125	25	CNM..1204..	BDA-02	TAB-018	PB-015	TPB-002	MDP-015	MDP-009	LLA-3
TCLNR/L 2525-M12	150	32								
TCLNR/L 3232-P12	170	40								
TCLNR/L 4040-S12	250	50								
TCLNR/L 2525-M16	150	32	CNM..1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016	MDP-010	LLA-4
TCLNR/L 3232-P16	170	40								

**TCMNN - 50°**



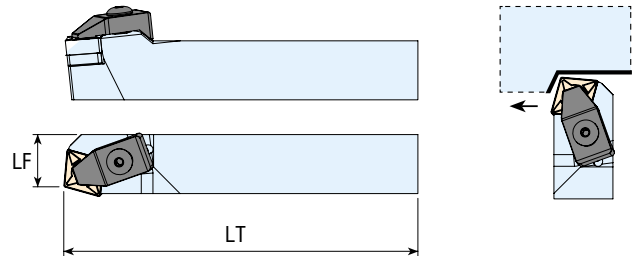
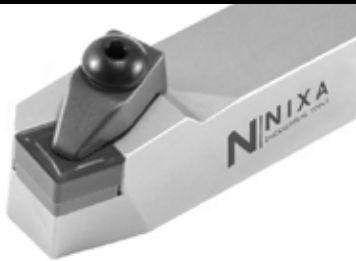
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TCMNN 2020-K12	100	10	CNM..1204..	BDA-02	TAB-018	PB-015	TPB-002	MDP-015	MDP-009	LLA-3
TCMNN 2525-M12	125	12.5								
TCMNN 3232-P12	150	16								
TCMNN 2525-M16	170	12.5	CNM..1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016	MDP-010	LLA-4
TCMNN 3232-P16	150	16								

**TCZNN - 40°**



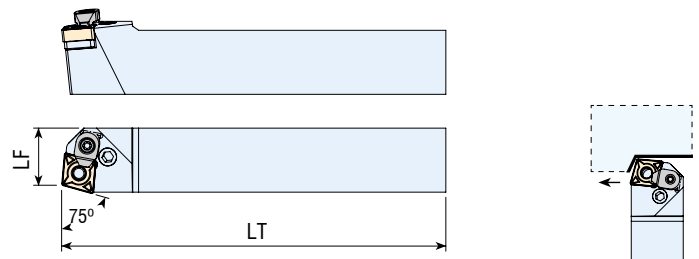
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TCZNN 2020-K12	125	10	CNM..1204..	BDA-02	TAB-018	PB-015	TPB-002	MDP-015	MDP-009	LLA-3
TCZNN 2525-M12	150	12.5								
TCZNN 3232-P12	170	16								
TCZNN 2525-M16	150	12.5	CNM..1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016	MDP-010	LLA-5
TCZNN 3232-P16	170	16								

**TCBNR/L - 75°**



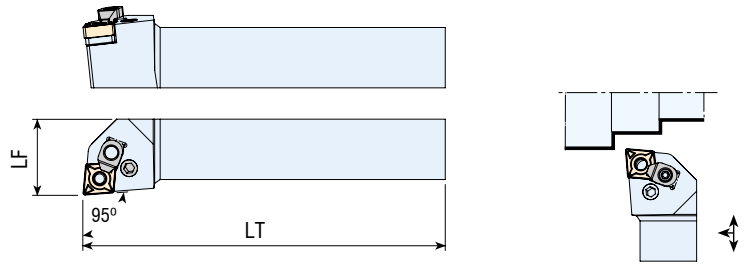
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	MUELLE	ARANDELA	LLAVE
TCBNR/L 2525-M16	150	22	CNM..1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016	MDP-010	LLA-4

**PCBNR/L - 75°**



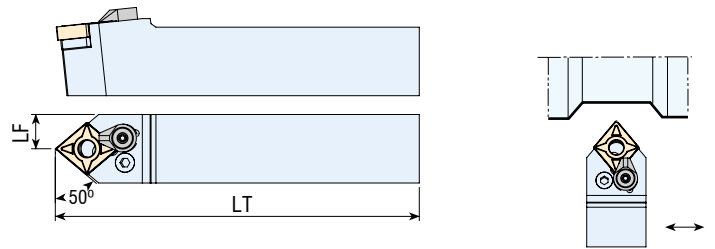
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PCBNR/L 2020-K12	125	17.5	CNM..1204..	PDP-002	TPA-025	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
PCBNR/L 2525-M12	150	22.5								
PCBNR/L 3232-P12	170	29.5								
PCBNR/L 2525-M16	150	22	CNM..1606..	PDP-004	TPA-026	PB-016	MDP-006	BDA-22	TPB-003	LLA-4
PCBNR/L 3232-P16	170	27								
PCBNR/L 3232-P19	170	27	CNM..1906..	PDP-005	TPA-027	PB-017	MDP-007	BDA-22	TPB-003	LLA-4
PCBNR/L 4040-S19	250	37								
PCBNR/L 4040-S25	250	37	CNM..2509	PDP-006	TPA-028	PB-018	MDP-008	BDA-17	TPB-005	LLA-5

**PCLNR/L - 95°**



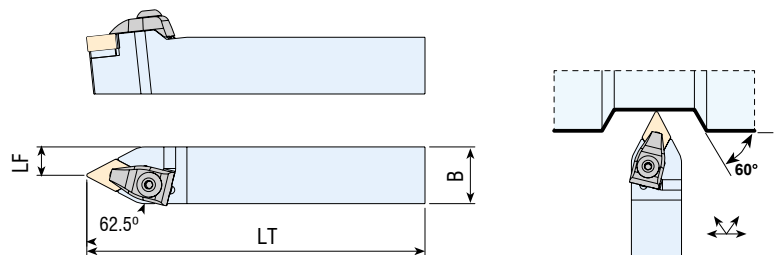
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PCLNR/L 1616-H09	100	20	CNM..0903	PDP-001	TPA-024	PB-014	MDP-003	-	-	LLA-2
PCLNR/L 2020-K09	125	25								
PCLNR/L 2525-M09	150	32								
PCLNR/L 1616-H12	100	20	CNM..1204..	PDP-002	TPA-025	PB-015	MDP-005	-	-	LLA-3
PCLNR/L 2020-K12	125	25	CNM..1204..	PDP-002	TPA-025	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
PCLNR/L 2525-M12	150	32								
PCLNR/L 3232-P12	170	40								
PCLNR/L 2525-M16	150	32	CNM..1606..	PDP-004	TPA-026	PB-016	MDP-006	BDA-22	TPB-003	LLA-3
PCLNR/L 3232-P16	170	40								
PCLNR/L 2525-M19	150	32	CNM..1906..	PDP-005	TPA-027	PB-017	MDP-007	BDA-22	TPB-003	LLA-4
PCLNR/L 3232-P19	170	40								
PCLNR/L 4040-S19	250	50								
PCLNR/L 4040-S25	250	50	CNM..2509	PDP-006	TPA-028	PB-018	MDP-008	BDA-17	TPB-005	LLA-5

**PCMNN - 50°**



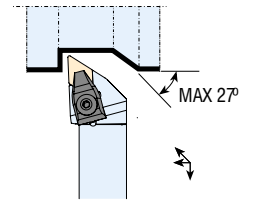
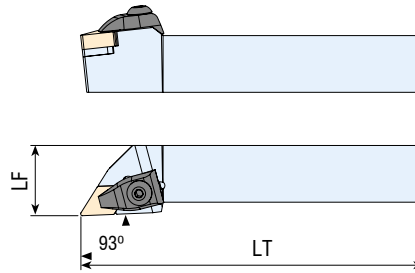
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PCMNN 2020-K12	125	10	CNM..1204..	PDP-002	TPA-025	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
PCMNN 2525-M12	150	12.5								
PCMNN 3232-P12	170	16								
PCMNN 2525-M16	150	12.5	CNM..1606..	PDP-004	TPA-026	PB-016	MDP-006	BDA-22	TPB-003	LLA-4
PCMNN 3232-P16	170	16								
PCMNN 3232-P19	170	16	CNM..1906..	PDP-005	TPA-027	PB-017	MDP-007	BDA-22	TPB-003	LLA-4
PCMNN 4040-S19	250	20								
PCMNN 4040-S25	250	20	CNM..2509	PDP-006	TPA-028	PB-018	MDP-008	BDA-17	TPB-005	LLA-5

**TDNNN - 62.5°**



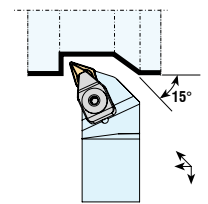
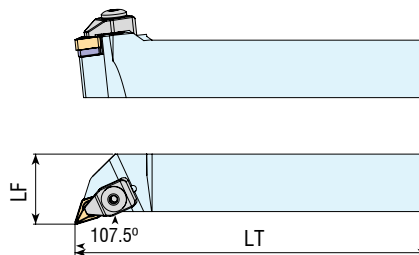
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TDNNN 2020-K11	125	10	DNM..1104..	BDA-01	TAB-001	PB-034	TPB-009	-	MDP-009	LLA-3
TDNNN 2525-M11	150	12.5								
TDNNN 2020-K15	125	10	DNM..1506..	BDA-02	TAB-018	PB-036	TPB-002	MDP-015	MDP-009	LLA-3
TDNNN 2525-M15	150	12.5								
TDNNN 3232-P15	170	16								

**TDJNR/L - 93°**



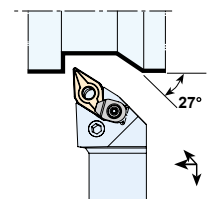
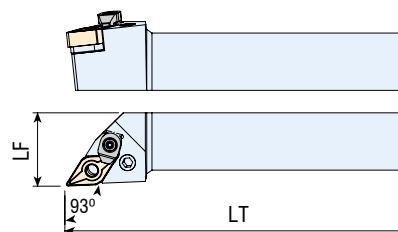
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TDJNR/L 1616-H11	100	20	DNM..1104	BDA-01	TAB-001	PB-034	TPB-009	-	MDP-009	LLA-3
TDJNR/L 2020-K11	125	25								
TDJNR/L 2525-M11	150	32								
TDJNR/L 2020-K154	125	25	DNM..1504	BDA-02	TAB-018	PB-037	TPB-002	MDP-015	MDP-009	LLA-3
TDJNR/L 2525-M154	150	32								
TDJNR/L 3232-P154	170	40								
TDJNR/L 4040-S154	250	50								
TDJNR/L 2020-K15	125	25	DNM..1506	BDA-02	TAB-018	PB-036	TPB-002	MDP-015	MDP-009	LLA-3
TDJNR/L 2525-M15	150	32								
TDJNR/L 3232-P15	170	40								
TDJNR/L 4040-S15	250	50								

**TDHNR/L - 107.5°**



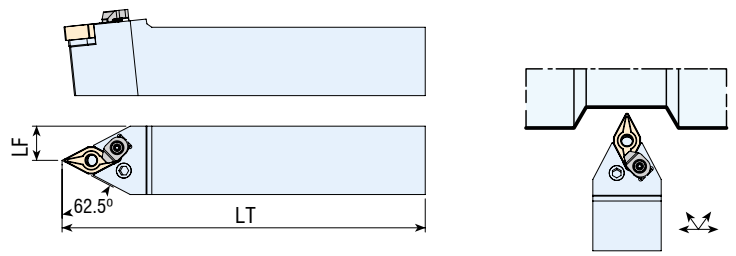
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TDHNR/L 2020-K15	125	31	DNM..1506..	BDA-02	TAB-018	PB-036	TPB-002	MDP-015	MDP-009	LLA-3
TDHNR/L 2525-M15	150	32								
TDHNR/L 3232-P15	170	40								

**PDJNR/L - 93°**



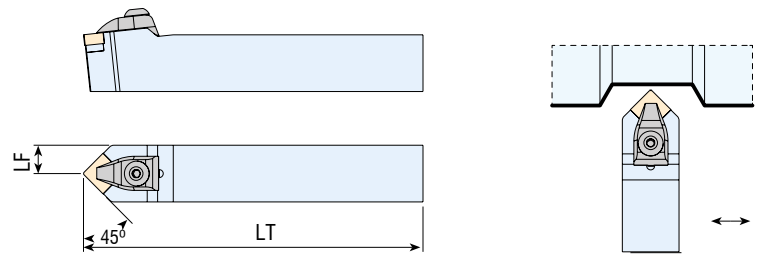
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PDJNR/L 1616-H11	100	20	DNM..1104..	PDP-001	TPA-024	PB-035	MDP-003	-	-	LLA-2
PDJNR/L 2020-K11	125	25								
PDJNR/L 2525-M11	150	32								
PDJNR/L 2020-K15	125	25	DNM..1506..	PDP-003	TPA-025	PB-036	MDP-005	BDA-18	TDA-066	LLA-3
PDJNR/L 2525-M15	150	32								
PDJNR/L 3232-P15	170	40								
PDJNR/L 4040-S15	250	50								

**PDNNN 62,5<sup>a</sup>**



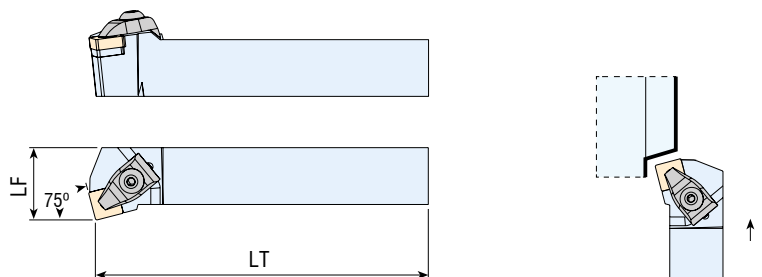
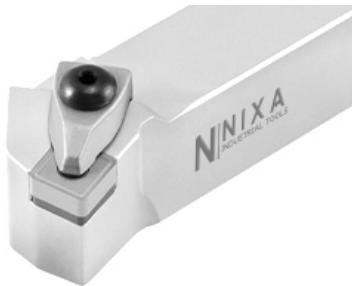
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PDNNN 1616-H11	100	8	DNM..1104..	PDP-001	TPA-024	PB-035	MDP-003	-	-	LLA-2
PDNNN 2020-K11	125	10								
PDNNN 2525-M11	150	12.5								
PDNNN 2020-K15	125	10	DNM..1506..	PDP-003	TPA-025	PB-036	MDP-005	BDA-18	TDA-066	LLA-3
PDNNN 2525-M15	150	12.5								
PDNNN 3232-P15	170	16								

**TSDNN - 45°**



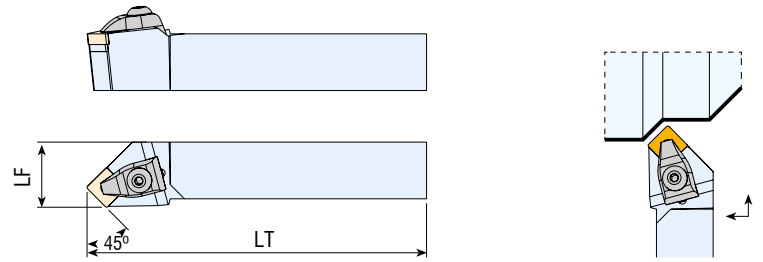
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TSDNN 2020-K12	125	10	SNM..1204..	BDA-02	TAB-018	PB-029	TPB-002	MDP-015	MDP-009	LLA-3
TSDNN 2525-M12	150	12.5								
TSDNN 3232-P12	170	16								
TSDNN 2525-M15	150	12.5	SNM..1506..	BDA-04	TAB-013	PB-030	TPB-003	MDP-016	MDP-010	LLA-4
TSDNN 3232-P15	170	16								

**TSKNR/L - 75°**



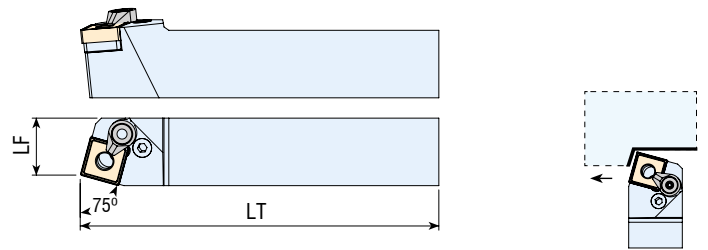
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TSKNR/L 2020-K12	125	25	SNM..1204..	BDA-02	TAB-018	PB-029	TPB-002	MDP-015	MDP-009	LLA-3
TSKNR/L 2525-M12	150	32								
TSKNR/L 3232-P12	170	40								
TSKNR/L 3232-P15	170	40	SNM..1506..	BDA-04	TAB-013	PB-030	TPB-003	MDP-016	MDP-010	LLA-4

**TSSNR/L - 45°**



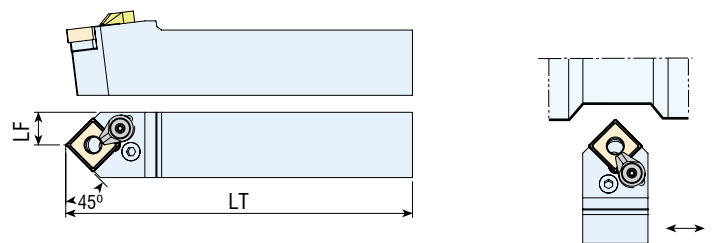
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TSSNR/L 2020-K12	125	25	SNM..1204..	BDA-02	TAB-018	PB-029	TPB-002	MDP-015	MDP-009	LLA-3
TSSNR/L 2525-M12	150	32								
TSSNR/L 3232-P12	170	40								
TSSNR/L 2525-M15	150	32	SNM..1506..	BDA-04	TAB-013	PB-030	TPB-003	MDP-016	MDP-010	LLA-4
TSSNR/L 3232-P15	170	40								

**PSBNR/L - 75°**



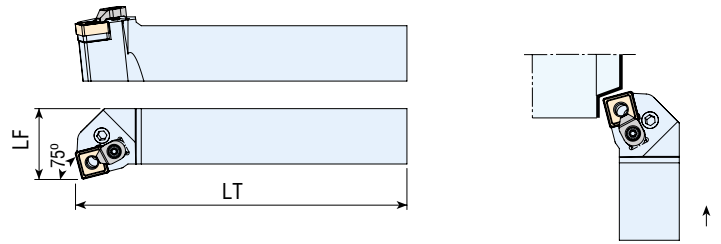
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PSBNR/L 1616-H09	100	13	SNM..0903..	PDP-001	TPA-024	PB-027	MDP-003	-	-	LLA-2.5
PSBNR/L 2020-K09	125	17								LLA-2.5
PSBNR/L 2020-K12	125	17	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	-	-	LLA-3
PSBNR/L 2525-M12	150	22	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
PSBNR/L 3232-P12	170	27								LLA-3
PSBNR/L 2525-M15	150	22	SNM..1506..	PDP-004	TPA-026	PB-030	MDP-006	-	-	LLA-3
PSBNR/L 3232-P15	170	27						BDA-22	TPB-003	LLA-4
PSBNR/L 3232-P19	170	27	SNM..1906..	PDP-005	TPA-027	PB-031	MDP-007	BDA-22	TPB-003	LLA-4
PSBNR/L 4040-S19	250	35								LLA-4
PSBNR/L 4040-S25	250	35	SNM..2509..	PDP-006	TPA-028	PB-032	MDP-008	BDA-17	TPB-005	LLA-5

**PSDNN - 45°**

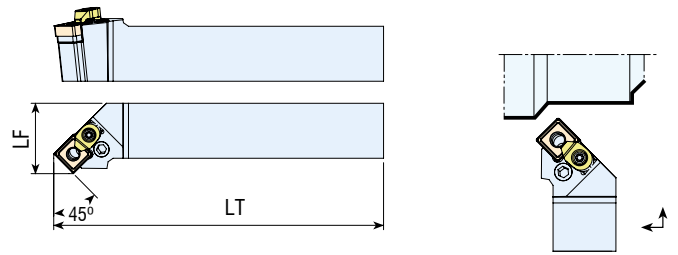


REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PSDNN 1616-H09	100	8	SNM..0903..	PDP-001	TPA-024	PB-027	MDP-003	-	-	LLA-2
PSDNN 2020-K12	125	10	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	-	-	LLA-3
PSDNN 2525-M12	150	12.5	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
PSDNN 3232-P12	170	16								LLA-3
PSDNN 2525-M15	150	12.5	SNM..1506..	PDP-004	TPA-026	PB-030	MDP-006	-	-	LLA-3
PSDNN 3232-P19	170	16	SNM..1906..	PDP-005	TPA-027	PB-031	MDP-007	BDA-22	TPB-003	LLA-4
PSDNN 4040-S25	250	20	SNM..2509..	PDP-006	TPA-028	PB-032	MDP-008	BDA-17	TPB-005	LLA-5



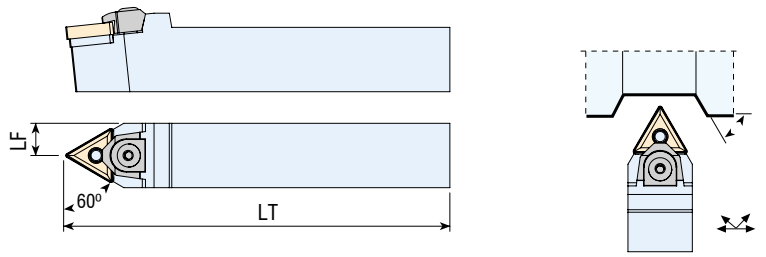
**PSKNR/L - 75°**


REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PSKNR/L 2020-K09	125	25	SNM..0903..	PDP-001	TPA-024	PB-027	MDP-003	-	-	LLA-2.5
PSKNR/L 2020-K12	125	25	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
PSKNR/L 2525-M12	150	32								
PSKNR/L 3232-P12	170	40								
PSKNR/L 2525-M15	150	32	SNM..1506..	PDP-004	TPA-026	PB-030	MDP-006	BDA-22	TPB-003	LLA-3
PSKNR/L 3232-P15	170	40								
PSKNR/L 3232-P19	170	40	SNM..1906..	PDP-005	TPA-027	PB-031	MDP-007	BDA-22	TPB-003	LLA-4
PSKNR/L 4040-S19	250	50								
PSKNR/L 4040-S25	250	50	SNM..2509..	PDP-006	TPA-028	PB-032	MDP-008	BDA-17	TPB-005	LLA-5

**PSSNR/L - 45°**


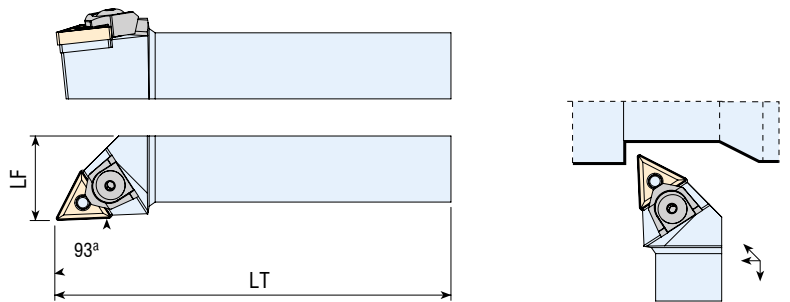
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PSSNR/L 1616-H09	100	20	SNM..0903..	PDP-001	TPA-024	PB-027	MDP-003	-	-	LLA-2.5
PSSNR/L 2020-K09	125	25								
PSSNR/L 2020-K12	125	25	SNM..1204..	PDP-002	TPA-025	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
PSSNR/L 2525-M12	150	32								
PSSNR/L 3232-P12	170	40								
PSSNR/L 3232-P15	170	40	SNM..1506..	PDP-004	TPA-026	PB-030	MDP-006	BDA-22	TPB-003	LLA-3
PSSNR/L 3232-P19	170	40	SNM..1906..	PDP-005	TPA-027	PB-031	MDP-007	BDA-22	TPB-003	LLA-4
PSSNR/L 4040-S19	250	50								
PSSNR/L 4040-S25	250	50	SNM..2509..	PDP-006	TPA-028	PB-032	MDP-008	BDA-17	TPB-005	LLA-5

**MTENN - 60°**



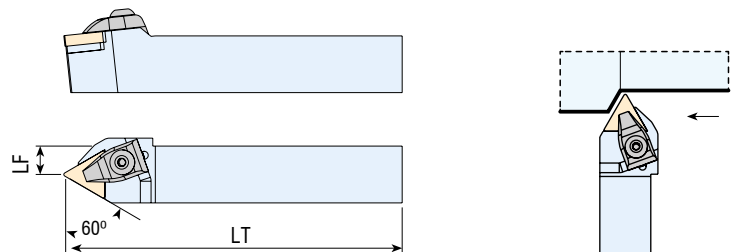
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
MTENN 2020-K16	125	10	TNM..1604..	BDA-10	TAB-018	PB-002	PDP-010	MDP-015	MDP-009	LLA-3
MTENN 2525-M16	150	12.5								
MTENN 3232-P16	170	16								
MTENN 2525-M22	150	12.5	TNM..2204..	BDA-13	TAB-018	PB-004	PDP-011	MDP-015	MDP-009	LLA-3
MTENN 3232-P22	170	16								
MTENN 4040-S22	250	20								

**MTJNR/L - 93°**

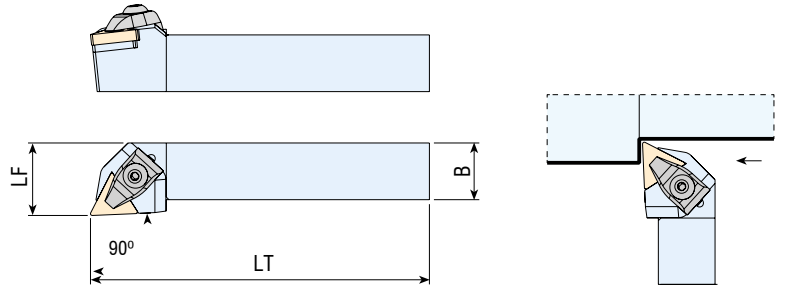
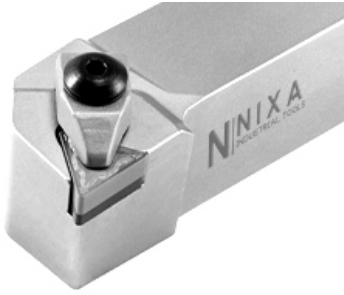


REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
MTJNR/L 2020-K16	125	25	TNM..1604..	BDA-10	TAB-018	PB-002	PDP-010	MDP-015	MDP-009	LLA-3
MTJNR/L 2525-M16	150	32								
MTJNR/L 3232-P16	170	40								
MTJNR/L 2525-M22	150	32	TNM..2204..	BDA-13	TAB-018	PB-004	PDP-011	MDP-015	MDP-009	LLA-3
MTJNR/L 3232-P22	170	40								
MTJNR/L 4040-S22	250	50								

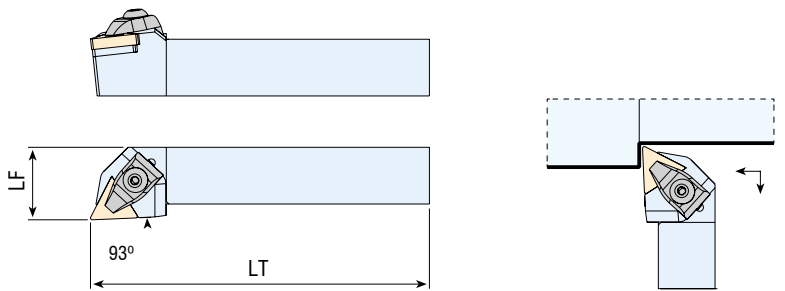
**TTENN - 60°**



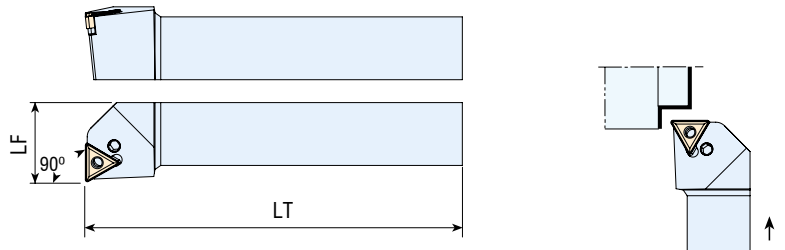
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TTENN 2020-K16	125	10	TNM..1604..	BDA-01	TAB-001	PB-002	TPB-008	-	MDP-009	LLA-3
TTENN 2525-M16	150	12.5								
TTENN 3232-P16	170	16								
TTENN 2525-M22	150	12.6	TNM..2204..	BDA-02	TAB-018	PB-004	TPB-002	MDP-015	MDP-009	LLA-3
TTENN 3232-P22	170	16								

**TTGNR/L/L - 90°**


REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TTGNR/L 2020-K16	125	25	TNM..1604..	BDA-01	TAB-001	PB-002	TPB-008	-	MDP-009	LLA-3
TTGNR/L 2525-M16	150	32								
TTGNR/L 3232-P16	170	40								
TTGNR/L 2525-M22	150	32	TNM..2204..	BDA-02	TAB-018	PB-004	TPB-002	MDP-015	MDP-009	LLA-3
TTGNR/L 3232-P22	170	40								
TTGNR 4040-S22	250	50								

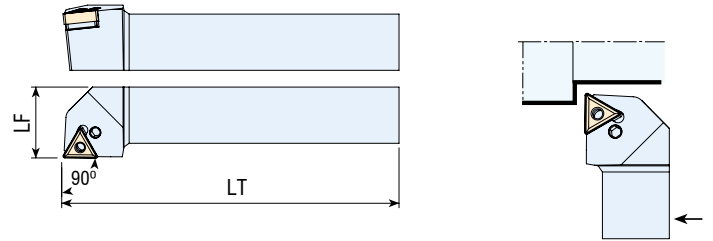
**TTJNR/L - 93°**


REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TTJNR/L 2020-K16	125	25	TNM..1604..	BDA-01	TAB-001	PB-002	TPB-008	-	MDP-009	LLA-3
TTJNR/L 2525-M16	150	32								
TTJNR/L 3232-P16	170	40								
TTJNR/L 2525-M22	150	32	TNM..2204..	BDA-02	TAB-018	PB-004	TPB-002	MDP-015	MDP-009	LLA-3
TTJNR/L 3232-P22	170	40								

**PTFNR/L - 90°**


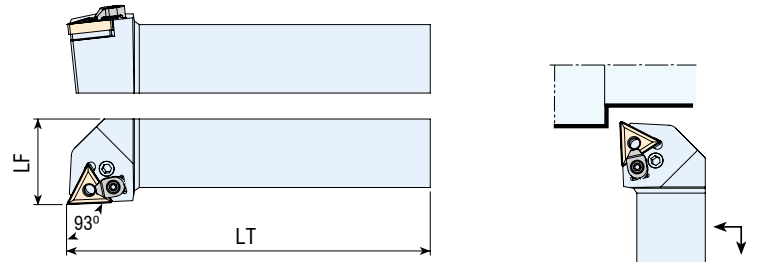
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PTFNR/L 1616-H16	100	20	TNM..1604..	PDP-001	TPA-024	PB-003	MDP-003	-	-	LLA-2.5
PTFNR/L 2020-K16	125	25								
PTFNR/L 2525-M16	150	32								
PTFNR/L 3232-P16	170	40								
PTFNR/L 2525-M22	150	32	TNM..2204	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
PTFNR/L 3232-P22	170	40								

**PTGNR/L- 60°**



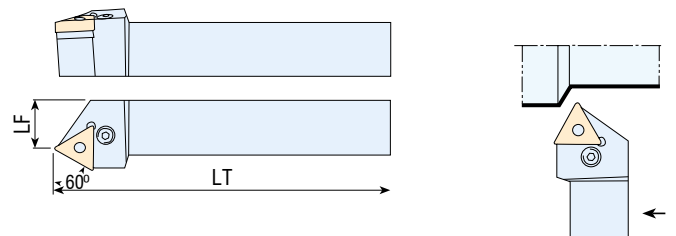
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PTGNR/L 1616-H16	100	20	TNM..1604..	PDP-001	TPA-024	PB-003	MDP-003	-	-	LLA-2.5
PTGNR/L 2020-K16	125	25								
PTGNR/L 2525-M16	150	32								
PTGNR/L 2525-M22	170	40	TNM..2204	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
PTGNR/L 3232-P22	150	32								

**PTJNR/L - 93°**



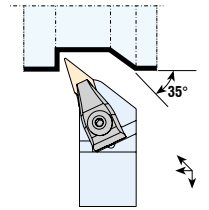
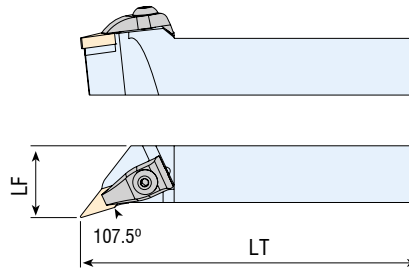
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PTJNR/L 1616-H16	100	20	TNM..1604..	PDP-001	TPA-024	PB-003	MDP-003	-	-	LLA-2.5
PTJNR/L 2020-K16	125	25								
PTJNR/L 2525-M16	150	32								
PTJNR/L 3232-P16	170	40								
PTJNR/L 2525-M22	150	32	TNM..2204	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
PTJNR/L 3232-P22	170	40								

**PTTNR/L - 60°**



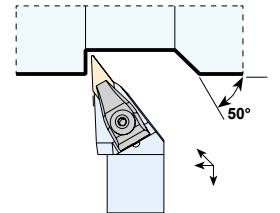
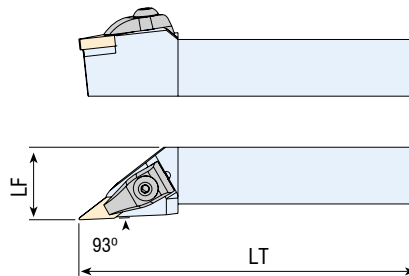
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PTTNR/L 1616-H16	100	13	TNM..1604..	PDP-001	TPA-024	PB-003	MDP-003	-	-	LLA-2.5
PTTNR/L 2020-K16	125	17								
PTTNR/L 2525-M16	150	21.5								
PTTNR/L 3232-P16	170	31								
PTTNR/L 2525-M22	150	20.5	TNM..2204	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
PTTNR/L 3232-P22	170	29								

**TVHNR/L - 107.5°**



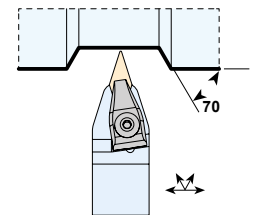
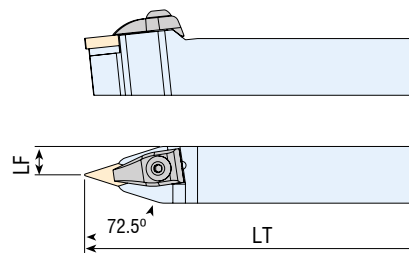
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TVHNR/L 2020-K16	125	25	VNM..1604..	BDA-03	TAB-018	PB-038	TPB-009	MDP-015	MDP-009	LLA-3
TVHNR/L 2525-M16	150	32								
TVHNR/L 3232-P16	170	40								

**TVJNR/L - 93°**



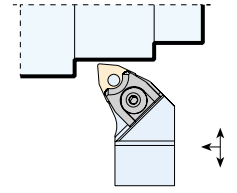
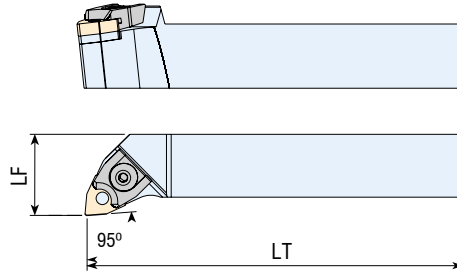
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TVJNR/L 2020-K16	125	25	VNM..1604..	BDA-03	TAB-018	PB-038	TPB-009	MDP-015	MDP-009	LLA-3
TVJNR/L 2525-M16	150	32								
TVJNR/L 3232-P16	170	40								

**TVVNN - 72.5°**



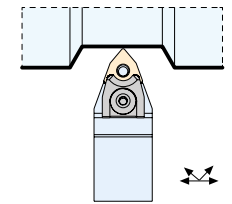
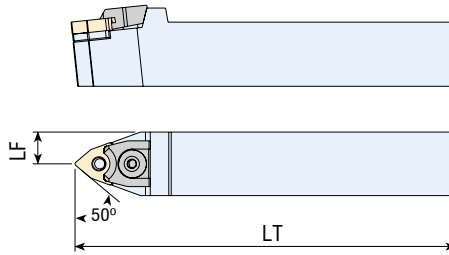
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TVVNN 2020-K16	125	25	VNM..1604..	BDA-03	TAB-018	PB-038	TPB-009	MDP-015	MDP-009	LLA-3
TVVNN 2525-M16	150	32								
TVVNN 3232-P16	170	40								

**MWLN/L - 95°**



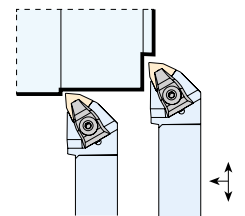
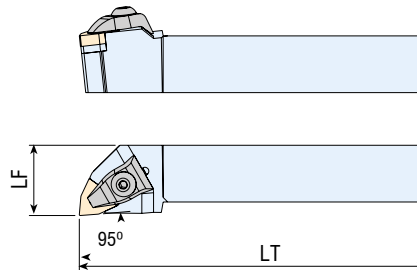
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
MWLN/L 2020-K06	125	20	WNM..0604..	BDA-07	TAB-006	-	PDP-017	-	-	LLA-3
MWLN/L 2525-M06	150	25								
MWLN/L 2020-K08	125	32	WNM..0804..	BDA-11	TAB-005	PB-020	PDP-011	MDP-015	MDP-009	LLA-3
MWLN/L 2525-M08	150	25								
MWLN/L 3232-P08	170	32								

**MWMN - 50°**



REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
MWMN 2020-K06	125	10	WNM..0604..	BDA-07	TAB-006	-	PDP-017	-	-	LLA-3
MWMN 2525-M06	150	12.5								
MWMN 2020-K08	125	10	WNM..0804..	BDA-11	TAB-005	PB-020	PDP-011	MDP-015	MDP-009	LLA-3
MWMN 2525-M08	150	12.6								
MWMN 3232-P08	170	16								

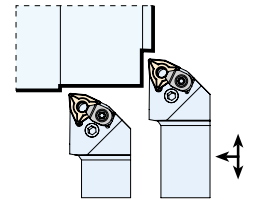
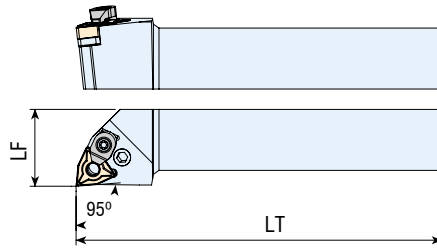
**TWLN/L - 95°**



REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	ANILLO	ARANDELA	LLAVE
TWLN/L 2020-K06	125	25	WNM..0604..	BDA-01	TAB-001	PB-021	TPB-001	-	MDP-009	LLA-3
TWLN/L 2525-M06	150	32								
TWLN/L 2020-K08	125	25	WNM..0804..	BDA-02	TAB-018	PB-020	TPB-002	MDP-015	MDP-009	LLA-3
TWLN/L 2525-M08	150	32								
TWLN/L 3232-P08	170	40								
TWLN/L 4040-S08	250	50								

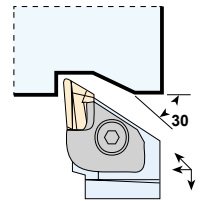
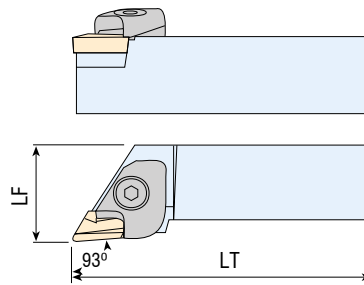


**PWLNLR/L - 95°**



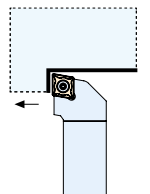
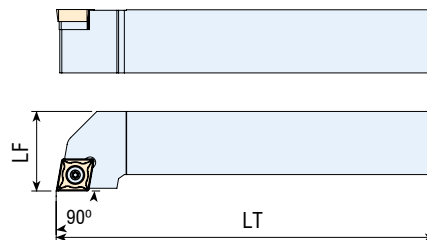
REFERENCIA	LT	LF	INSERTO	PALANCA PLACA	TORNILLO BRIDA	PLACA BASE	CASQUILLO PLACA BASE	BRIDA PLACA	TORNILLO BRIDA	LLAVE
PWLNLR/L 1616-H06	100	20	WNM..0604..	PDP-001	TPA-024	PB-021	MDP-003	-	-	LLA-2.5
PWLNLR/L 2020-K06	125	25								
PWLNLR/L 2525-M06	150	32								
PWLNLR/L 1616-H08	100	20	WNM..0804..	PDP-002	TPA-025	PB-020	MDP-005	BDA-18	TDA-066	LLA-3
PWLNLR/L 2020-K08	125	25								
PWLNLR/L 2525-K08	150	32								
PWLNLR/L 3232-P08	170	40								

**CKJNR/L - 93°**



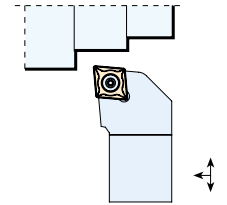
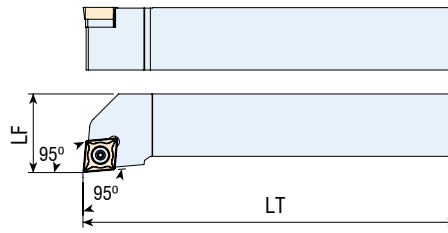
REFERENCIA	LT	LF	INSERTO	BRIDA PLACA	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA	MUELLE	ARANDELA	LLAVE
CKJNR/L 2020-K16	100	20	KNUX1604..	BDA-14 BDA-15	TAB-008	PB-023 PB-022	TPB-001	MDP-002	MDP-009	LLA-4
CKJNR/L 2525-M16	125	25								
CKJNR/L 3232-P16	150	32								
CKJNR/L 4040-S16	100	20								

**SCACR/L - 90°**



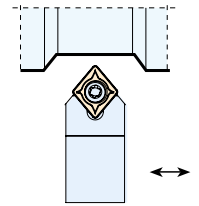
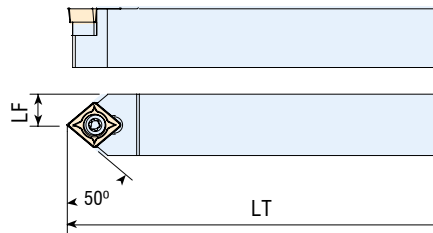
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SCACR/L 1212-F09	80	16	CC.T09T3..	TDA-049	-	-	LLT-15
SCACR/L 1616-H09	100	20		TDA-051	PB-013	TPB-011	LLT-15
SCACR/L 2020-K09	125	25					
SCACR/L 2020-K12	125	25	CC.T1204..	TDA-074	PB-045	TPB-012	LLT-20
SCACR/L 2525-M12	150	32					

**SCLCR/L - 95°**



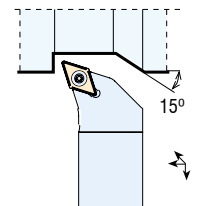
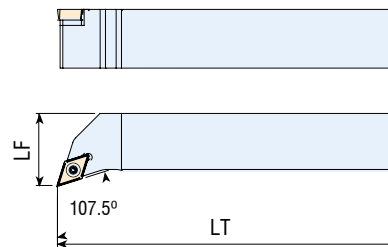
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SCLCR/L 1212-F09	80	16	CC.T09T3..	TDA-049	-	-	LLT-15
SCLCR/L 1616-H09	100	20		TDA-051	PB-013	TPB-011	LLT-15
SCLCR/L 2020-K09	125	25					
SCLCR/L 2525-M09	150	32					
SCLCR/L 2020-K12	125	25	CC.T1204..	TDA-074	PB-045	TPB-012	LLT-20
SCLCR/L 2525-K12	150	32					

**SCMCN - 50°**



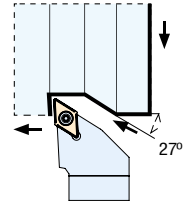
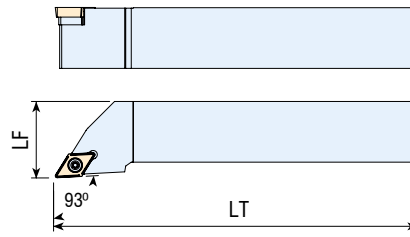
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SCMCN 1212-F09	80	6	CC.T09T3..	TDA-049	-	-	LLT-15
SCMCN 1616-H09	100	8		TDA-051	PB-013	TPB-011	LLT-15
SCMCN 2020-K12	125	10	CC.T1204..	TDA-074	PB-045	TPB-012	LLT-20
SCMCN 2525-M12	150	12.5					

**SDHCR/L - 107.5°**



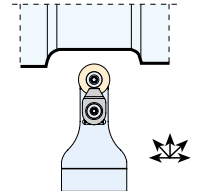
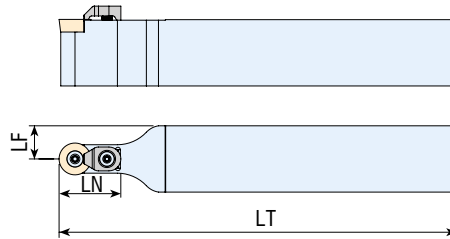
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SDHCR/L 1616-H11	80	16	DC.T11T3..	TDA-051	PB-034	TPB-011	LLT-15
SDHCR/L 2020-K11	100	20					
SDHCR/L 2525-M11	125	25					
SDHCR/L 3232-P11	150	32					

**SDJCR/L - 93°**



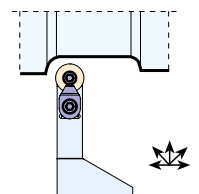
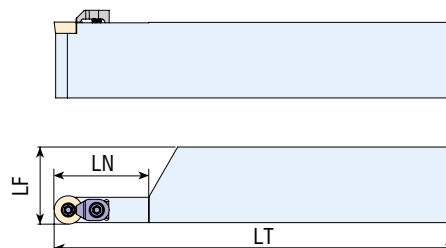
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SDJCR/L 1616-H11	80	16	DC.T11T3..	TDA-051	PB-034	TPB-011	LLT-15
SDJCR/L 2020-K11	100	20					
SDJCR/L 2525-M11	125	25					
SDJCR/L 3232-P11	150	32					

**SRDCN - Frontal**



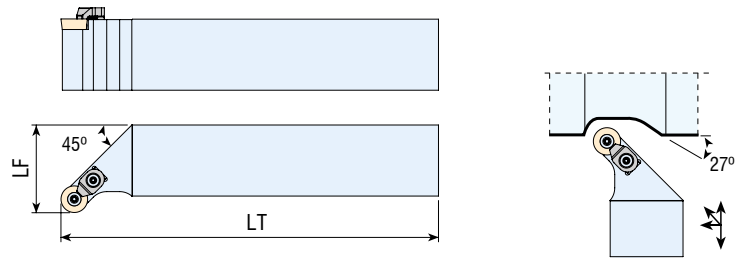
REFERENCIA	LT	LN	LF	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
SRDCN 1616-H06	100	15	8	RC.T0602..	TDA-014	-	-	LLT-8
SRDCN 2020-K06	125	17	10					
SRDCN 2525-M06	150	17	12.5					
SRDCN 1616-H08	100	15	8	RC.T0803..	TDA-027	BDA-26	TDA-049	LLT-8
SRDCN 2020-K08	125	20	10					
SRDCN 2525-M08	150	20	12.5					
SRDCN 1616-H10	100	20	8	RC.T10T3..	TDA-049	BDA-26	TDA-049	LLT-15
SRDCN 2020-K10	125	20	10					
SRDCN 2525-M10	150	20	12.5					
SRDCN 3232-P10	170	20	16					
SRDCN 2020-K12	125	22	10	RC.1204..	TDA-049	BDA-18	TDA-066	LLT-15
SRDCN 2525-M12	150	22	12.5					
SRDCN 3232-P12	170	22	16					
SRDCN 2525-M16	150	32	12.5	RC.T1605..	TDA-081	BDA-18	TDA-066	LLT-20
SRDCN 3232-P16	170	35	16					
SRDCN 2525-M20	150	32	12.5	RC.T2006..	TDA-089	BDA-22	TPB-003	LLT-20
SRDCN 3232-P20	170	40	16					

**SRDCR/L - Lateral**



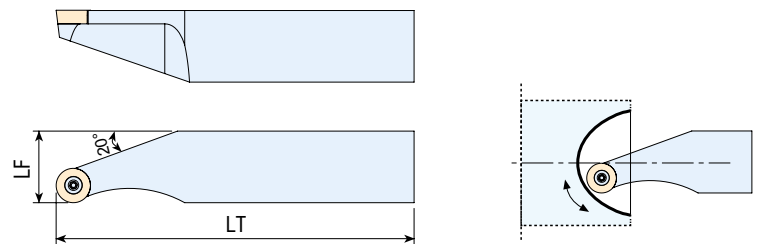
REFERENCIA	LT	LN	LF	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
SRDCR/L 3232-P12	170	40	32.65	RC.1204..	TDA-049	BDA-18	TDA-066	LLT-15

**SRGCR/L - Ángulo**



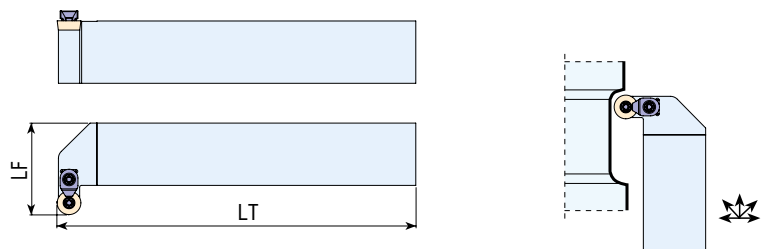
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
SRGCR/L 1616-H06	100	20	RC.T0602..	TDA-014	-	-	LLT-8
SRGCR/L 2020-K06	125	25					
SRGCR/L 1616-H08	100	20	RC.T0803..	TDA-027	BDA-26	TDA-049	LLT-8
SRGCR/L 2020-K08	125	25					
SRGCR/L 2525-M08	150	32					
SRGCR/L 1616-H10	100	20	RC.T10T3..	TDA-049	BDA-26	TDA-049	LLT-15
SRGCR/L 2020-K10	125	25					
SRGCR/L 2525-M10	150	32					
SRGCR/L 3232-P10	170	40					
SRGCR/L 2020-K12	125	25	RC.1204..	TDA-049	BDA-18	TDA-066	LLT-15
SRGCR/L 2525-M12	150	32					
SRGCR/L 3232-P12	170	40					

**SRHCR/L - Ángulo 20°**



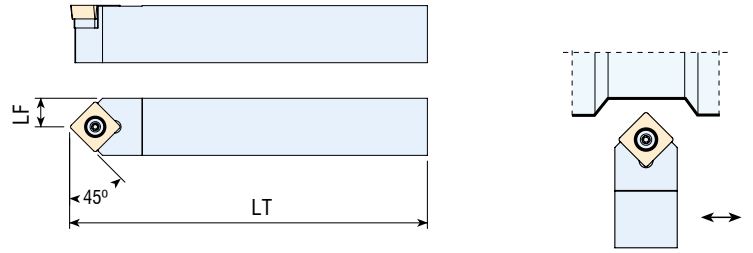
REFERENCIA	LT	LF	MIN R	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
SRHCR/L 2525-K08	125	25	32.5	RCM.0803..	TDA-027	-	-	LLT-8
SRHCR/L 2525-K10	125	25	36	RCM.10T3..	TDA-049	-	-	LLT-15
SRHCR/L 2525-K12	125	25	40	RCM.1204..	TDA-049	-	-	LLT-15
SRHCR/L 2525-K16	125	25	47.5	RCM.1606..	TDA-081	-	-	LLT-20

**SRXCR/L - Ángulo 90°**



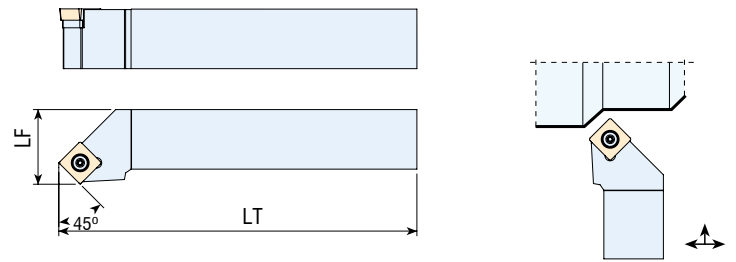
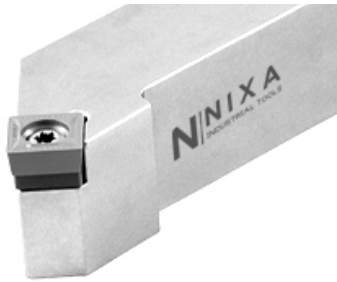
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
SRXCR/L 3232-K08	220	47	RCM.0803..	TDA-027	BDA-26	TDA-049	LLT-8
SRXCR/L 3232-K10	220	47	RCM.10T3..	TDA-049	BDA-26	TDA-049	LLT-15
SRXCR/L 3232-K12	220	47	RCM.1204..	TDA-049	BDA-18	TDA-066	LLT-15

**SSDCN - 45°**



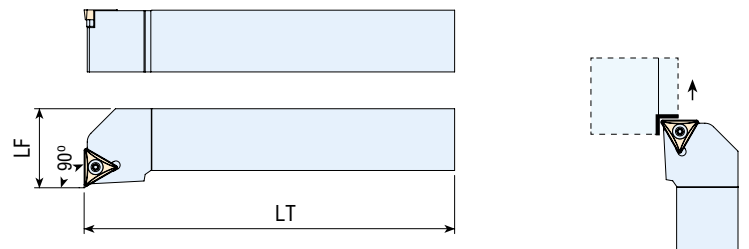
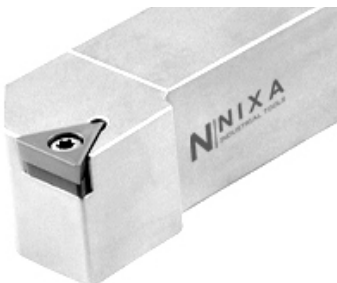
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SSDCN 1212-F09	80	6	SC.T09T3..	TDA-051	-	-	LLT-15
SSDCN 1616-H09	100	8		TDA-051	PB-026	TPB-011	
SSDCN 2020-K09	125	10		TDA-051	PB-026	TPB-011	
SSDCN 1616-H12	100	8	SC.T1204..	TDA-079	PB-028	TPB-014	LLT-20
SSDCN 2020-K12	125	10		TDA-074	PB-028	TPB-012	
SSDCN 2525-K12	150	12.5		TDA-074	PB-028	TPB-012	

**SSSCR/L - 45°**



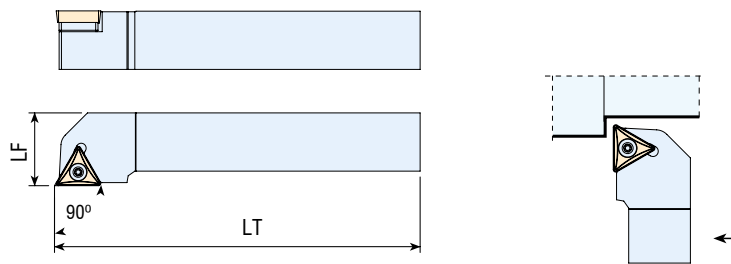
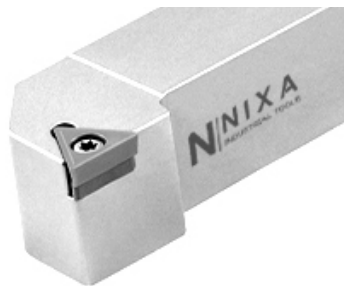
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SSSCR/L 1212-F09	80	16	SC.T09T3..	TDA-051	-	-	LLT-15
SSSCR/L 1616-H09	100	20		TDA-051	PB-026	TPB-011	
SSSCR/L 2020-K09	125	25		TDA-051	PB-026	TPB-011	
SSSCR/L 1616-H12	100	20	SC.T1204..	TDA-079	PB-028	TPB-014	LLT-20
SSSCR/L 2020-K12	125	25		TDA-074	PB-028	TPB-012	
SSSCR/L 2525-K12	150	32		TDA-074	PB-028	TPB-012	

**STFCR/L - 90°**



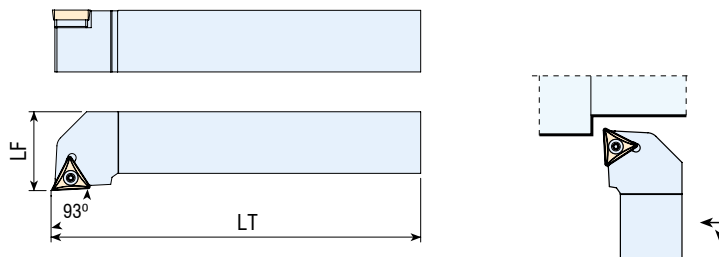
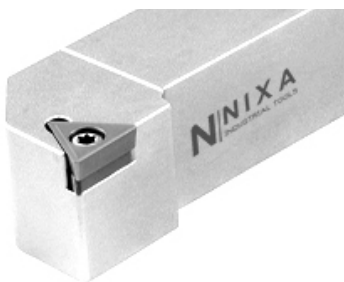
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
STFCR/L 1212-F11	80	16	TC.T1102..	TDA-018	-	-	LLT-8
STFCR/L 1616-H11	100	20					
STFCR/L 1616-H16	100	20	TC.T16T3..	TDA-051	PB-001	TPB-011	LLT-15
STFCR/L 2020-K16	125	25					
STFCR/L 2525-M16	150	32					
STFCR/L 3232-P16	170	40					

**STGCR/L - 90°**



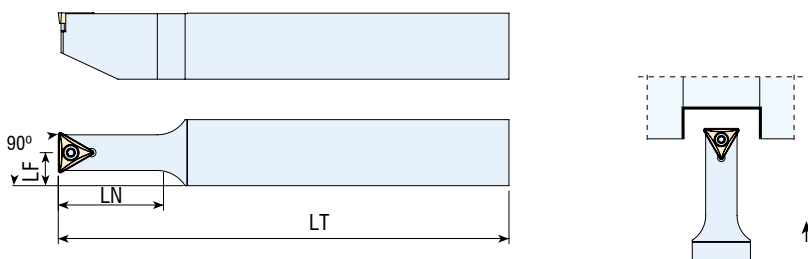
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
STGCR/L 1212-F11	80	16	TC.T1102..	TDA-018	-	-	LLT-8
STGCR/L 1616-H11	100	20					
STGCR/L 1616-H16	100	20	TC.T16T3..	TDA-051	PB-001	TPB-011	LLT-15
STGCR/L 2020-K16	125	25					
STGCR/L 2525-M16	150	32					
STGCR/L 3232-P16	170	40					

**STJCR/L - 93°**



REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
STJCR/L 1212-F11	80	16	TC.T1102..	TDA-018	-	-	LLT-8
STJCR/L 1616-H11	100	20					
STJCR/L 1616-H16	100	20	TC.T16T3..	TDA-051	PB-001	TPB-011	LLT-15
STJCR/L 2020-K16	125	25					
STJCR/L 2525-M16	150	32					
STJCR/L 3232-P16	170	40					

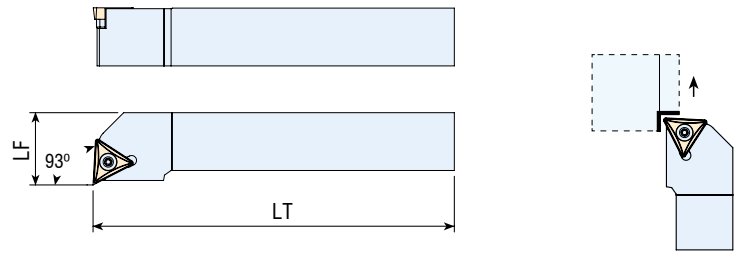
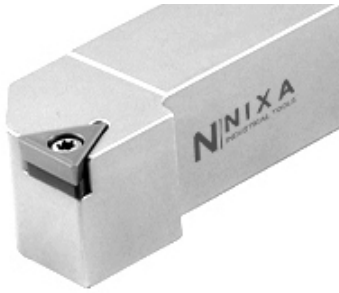
**STCCN - 90°**



REFERENCIA	LT	LF	LN	INSERTO	TORNILLO PLACA	BRIDA PLACA	TORNILLO BRIDA	LLAVE
STCCN 2020-L11	140	10	50	TC.T1102..	TDA-018	-	-	LLT-8
STCCN 2020-K16	150	10	30	TC.T16T3..	TDA-051	PB-001	TPB-011	LLT-15
STCCN 2525-M16	170	12.5	37.5					
STCCN 3232-R16	200	16	48					

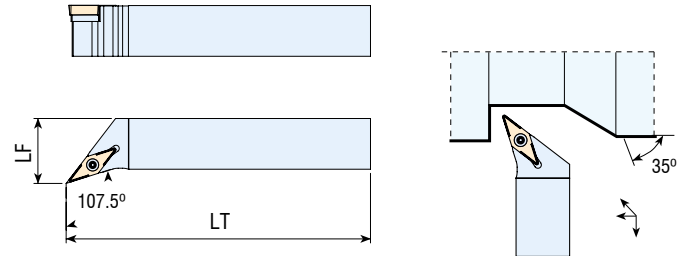
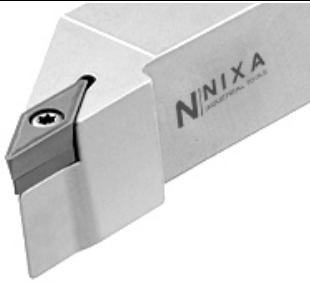


**STUCR/L - 93°**



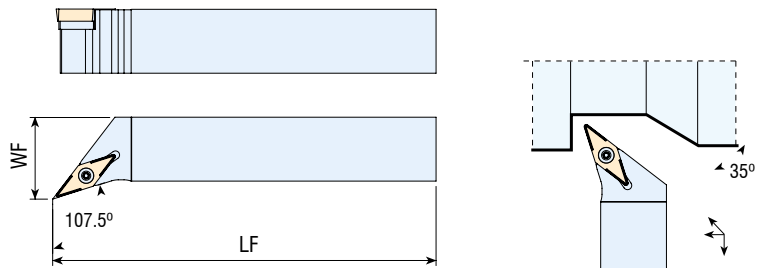
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
STUCR/L 1212-F11	80	16	TC.T1102..	TDA-018	-	-	LLT-8
STUCR/L 1616-H11	100	20					
STUCR/L 2020-K16	125	25	TC.T16T3..	TDA-051	PB-038	TPB-011	LLT-15
STUCR/L 2525-M16	150	32					
STUCR/L 3232-P16	170	40					

**SVHBR/L - 107.5°**



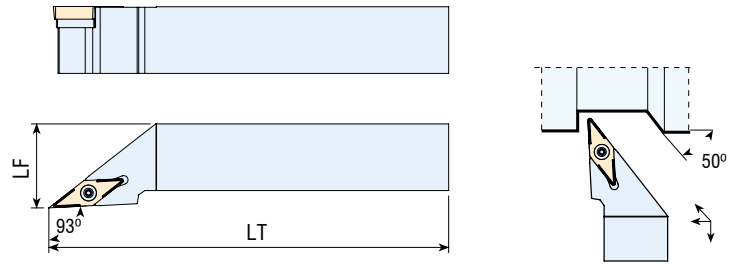
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVHBR/L 1212-F11	80	16	VBM.1103..	TDA-018	-	-	LLT-8
SVHBR/L 1616-H11	100	20					
SVHBR/L 2020-K16	125	25	VBM.1604..	TDA-051	PB-038	TPB-011	LLT-15
SVHBR/L 2525-M16	150	32					
SVHBR/L 3232-P16	170	40					

**SVHCR/L - 107.5°**



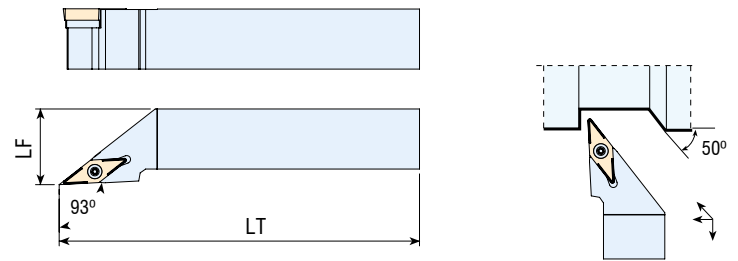
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVHCR/L 1212-F11	80	16	VC.T1103..	TDA-018	-	-	LLT-8
SVHCR/L 1616-H11	100	20					
SVHCR/L 2020-K16	125	25	VC.T1604..	TDA-051	PB-038	TPB-011	LLT-15
SVHCR/L 2525-M16	150	32					
SVHCR/L 3232-P16	170	40					

**SVJBR/L - 93°**



REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVJBR/L 1212-F11	80	16	VB.T1103..	TDA-018	-	-	LLT-8
SVJBR/L 1616-H11	100	20					
SVJBR/L 2020-K16	125	25	VB.T1604..	TDA-051	PB-038	TPB-011	LLT-15
SVJBR/L 2525-M16	150	32					
SVJBR/L 3232-P16	170	40					

**SVJCR/L - 93°**



REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVJCR/L 1212-F11	80	16	VC.T1103..	TDA-018	-	-	LLT-8
SVJCR/L 1616-H11	100	20					
SVJCR/L 2020-K16	125	25	VC.T1604..	TDA-051	PB-038	TPB-011	LLT-15
SVJCR/L 2525-M16	150	32					
SVJCR/L 3232-P16	170	40					

**SVVBN - 72.5°**

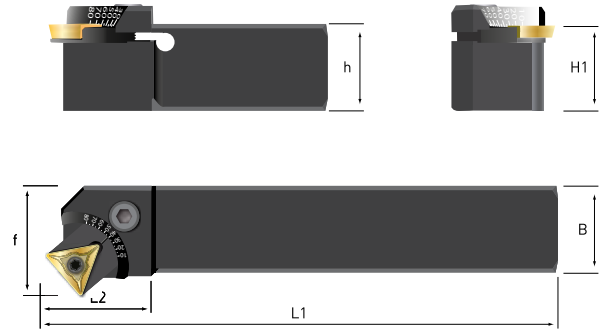
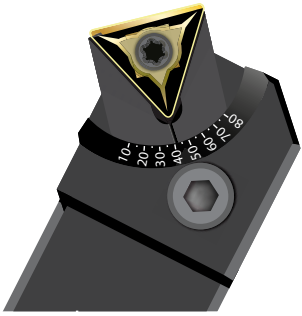


REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVVBN 1212-F11	80	6	VBM.1103..	TDA-018	-	-	LLT-8
SVVBN 1616-H11	100	8					
SVVBN 2020-K11	125	10					
SVVBN 2020-K16	125	10	VB.T1604..	TDA-051	PB-038	TPB-011	LLT-15
SVVBN 2525-M16	150	12.5					
SVVBN 3232-P16	170	16					

**SVVCN - 72.5°**

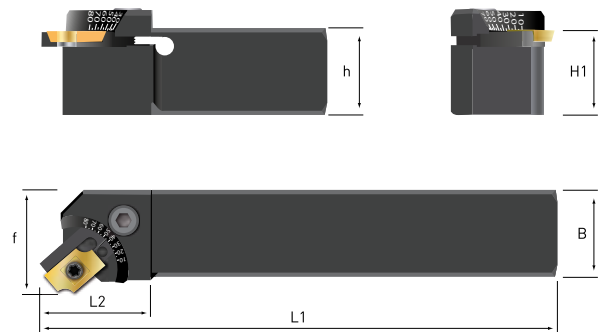
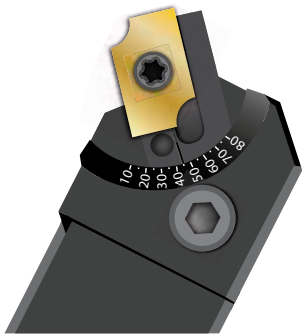
REFERENCIA	LT	LF	INSERTO	TORNILLO PLACA	PLACA BASE	TORNILLO PLACA BASE	LLAVE
SVVCN 1212-F11	80	6	VC.T1103..	TDA-018	-	-	LLT-8
SVVCN 1616-H11	100	8					
SVVCN 2020-K11	125	10					
SVVCN 2020-K16	125	10	VC.T1604..	TDA-051	PB-038	TPB-011	LLT-15
SVVCN 2525-M16	150	12.5					
SVVCN 3232-P16	170	16					

**Portaherramientas exterior regulable - Placa TC.T16T3**



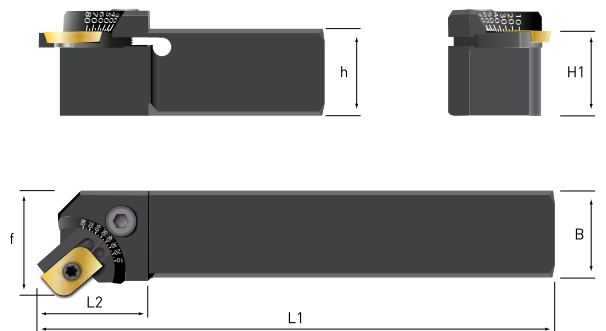
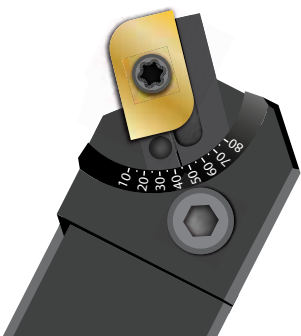
Referencia	h	B	l1	f	H1	L2	Tornillo Placa	Llave tornillo	Para Placa
NPT-NTXCR/L-2020	20	20	140	25	20	27	TDA-097	LLT-15	TC.T16T3
NPT-NTXCR/L-2525	25	25	150	32	25	27	TDA-097	LLT-15	TC.T16T3

**Portaherramientas exterior regulable - Placa NXDCW1503F**



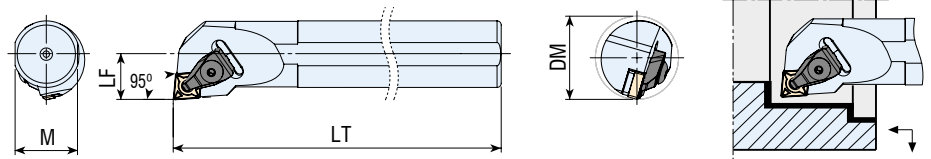
Referencia	h	B	l1	f	H1	L2	Tornillo Placa	Llave Tornillo	Para Placa
NPT-NRXDRF-2020	20	20	140	25	20	27	TDA-097	LLT-15	NXDCW1503F
NPT-NRXDRF-2525	25	25	150	32	25	27	TDA-097	LLT-15	NXDCW1503F

**Portaherramientas exterior regulable - Placa NXDCW1503M**



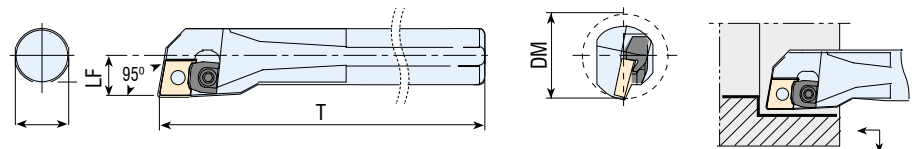
Referencia	h	B	l1	f	H1	L2	Tornillo Placa	Llave Tornillo	Para Placa
NPT-NRXDRM-2020	20	20	140	25	20	27	TDA-097	LLT-15	NXDCW1503M
NPT-NRXDRM-2525	25	25	150	32	25	27	TDA-097	LLT-15	NXDCW1503M

**TCLNR/L - INT 95°**



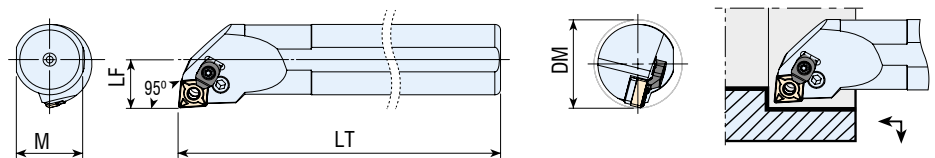
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TCLNR/L 12	23	250	17	32	CNM.1204..	BDA-02	TAB-018	PB-015	TPB-006	MDP-015 MDP-009	LLA-3
S32T-TCLNR/L 12	30	300	22	40					TPB-002		
S40U-TCLNR/L 12	37.5	350	27	50							
S50V-TCLNR/L 12	47	400	35	63							
S32T-TCLNR/L 16	30	300	22	40	CNM.1606..	BDA-04	TAB-013	PB-016	TPB-003	MDP-016 MDP-010	LLA-4
S40U-TCLNR/L 16	37.5	350	27	50							
S50V-TCLNR/L 16	47	400	35	63							

**TCLNR/L - INT 95°**

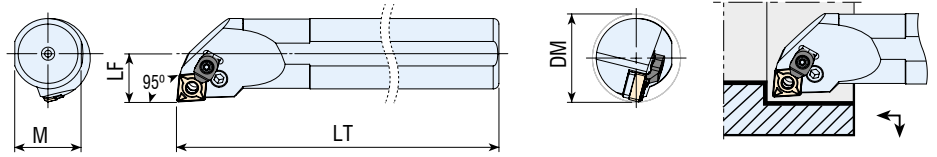


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MCLNR/L 12	18.3	200	13	25	CNM.1204..	BDA-12	TAB-006	-	PDP-021	-	LLA-3
S25S-MCLNR/L 12	23	250	17	32		BDA-09		PB-015	PDP-022		
S32T-MCLNR/L 12	30	300	22	40					PDP-013		

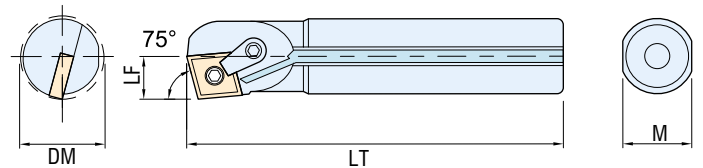
**PCLNR/L - INT 95°**



REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S16P-PCLNR/L 09	14.8	170	11	20	CNM.0903..	PDP-007	TPA-029	-	MDP-004	-	-	LLA-2.5
S20R-PCLNR/L 09	18.3	200	13	25				PB-014	MDP-003			
S25S-PCLNR/L 09	23	250	17	32				PB-014	MDP-003			
S25S-PCLNR/L 12	23	250	17	32	CNM.1204..	PDP-002	TPA-030	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
S32T-PCLNR/L 12	30	300	22	40			TPA-025					
S40U-PCLNR/L 12	37.5	350	27	50								
S50V-PCLNR/L 12	47	400	35	63								
S32T-PCLNR/L 16	30	300	22	40	CNM.1606..	PDP-004	TPA-026	PB-016	MDP-006	BDA-22	TPB-003	LLA-3
S40U-PCLNR/L 16	37.5	350	27	50								
S50V-PCLNR/L 16	47	400	35	63								
S40U-PCLNR/L 19	37.5	350	27	50	CNM.1906..	PDP-005	TPA-027	PB-017	MDP-007	BDA-22	TPB-003	LLA-4
S50V-PCLNR/L 19	47	400	35	63								

**PCLNR/L - INT 95° - CON REFRIGERACIÓN INTERIOR**


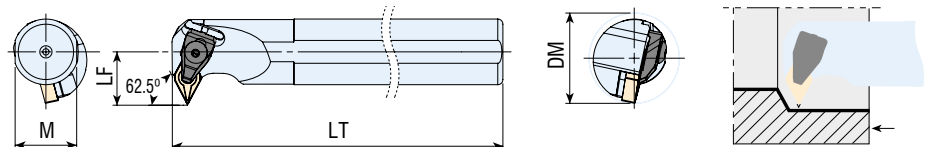
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R20P-PCLNR/L 09	14.8	170	11	20	CNM.0903..	PDP-001	TPA-024	PB-014	MDP-003	-	-	LLA-2.5
R25R-PCLNR/L 12	23	250	17	32	CNM.1204..	PDP-002	TPA-030	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
R32S-PCLNR/L 12	30	300	22	40			TPA-025					
R40T-PCLNR/L 12	37.5	350	27	50								
R50U-PCLNR/L 12	47	400	35	63								
R32S-PCLNR/L 16	30	300	22	40	CNM.1606..	PDP-004	TPA-026	PB-016	MDP-006	BDA-22	TPB-003	LLA-3
R40T-PCLNR/L 16	37.5	350	27	50								
R50U-PCLNR/L 16	47	400	35	63								
R40T-PCLNR/L 19	37.5	300	27	50	CNM.1906..	PDP-005	TPA-027	PB-017	MDP-007	BDA-22	TPB-003	LLA-4
R50U-PCLNR/L 19	47	350	35	63								

**PCKNR - 75°**


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S32S-PCKNR-12	30	48	19.5	40	CN..1204	PDP-025	-	PB-046	-	BDA-35	TDA-107	LLT-15
S40U-PCKNR-12	337	55	25.5	50	CN..1204	PDP-002	TPA-025	PB-015	MDP-005	BDA-18	TDA-066	LLA-3
S50V-PCKNR-12	47	60	30.5	60	CN..1204	PDP-025	-	PB-046	-	BDA-35	TDA-107	LLT-15

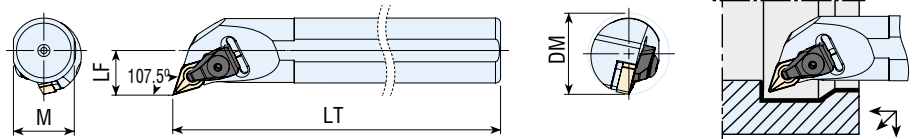
**PCKNR 75° - CON REFRIGERACIÓN**

REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R32S-PCKNR-12	30	48	19.5	40	CN..1204	PDP-025	-	PB-046	-	BDA-35	TDA-107	LLT-15
R40U-PCKNR-12	337	55	25.5	50	CN..1204	PDP-025	-	PB-046	-	BDA-35	TDA-107	LLT-15
R50V-PCKNR-12	47	60	30.5	60	CN..1204	PDP-025	-	PB-046	-	BDA-35	TDA-107	LLT-15

**TD-NR/L - INT 62.5°**


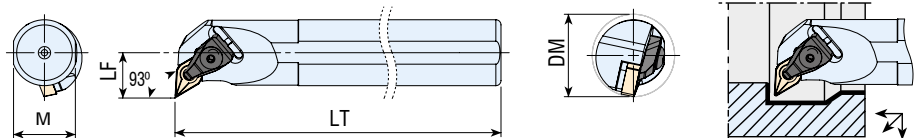
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S32T-TD-NR/L 15	30	300	26	44	DNM.1506..	BDA-02	TAB-018	PB-036	TPB-002	MDP-015 MDP-009	LLA-3
S40U-TD-NR/L 15	37.5	350	29	52							
S50V-TD-NR/L 15	47	400	35	63							

**TDQNR/L - INT 107.5°**



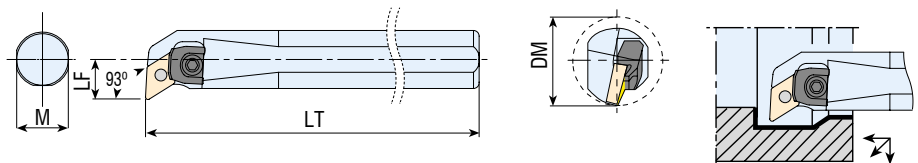
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TDQNR/L 11	23	250	17	32	DNM.1104..	BDA-01	TAB-001	PB-034	TPB-010	MDP-009	LLA-3
S32T-TDQNR/L 11	30	300	22	40					TPB-009		
S25S-TDQNR/L 15	23	250	17	32	DNM.1506..	BDA-02	TAB-018	PB-036	TPB-006		
S32T-TDQNR/L 15	30	300	22	40					TPB-002	MDP-015 MDP-009	LLA-3
S40U-TDQNR/L 15	37.5	350	27	50							
S50V-TDQNR/L 15	47	400	35	63							

**TDUNR/L - INT 93°**



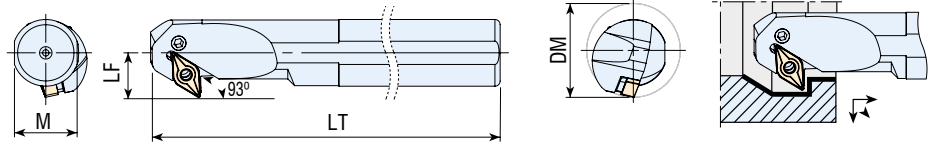
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TDUNR/L 11	23	250	17	32	DNM.1104..	BDA-01	TAB-001	PB-034	TPB-010	MDP-009	LLA-3
S32T-TDUNR/L 11	30	300	22	40					TPB-009		
S25S-TDUNR/L 15	23	250	17	32	DNM.1506..	BDA-02	TAB-018	PB-036	TPB-006		
S32T-TDUNR/L 15	30	300	22	40					TPB-002	MDP-015 MDP-009	LLA-3
S40U-TDUNR/L 15	37.5	350	27	50							
S50V-TDUNR/L 15	47	400	35	63							

**MDUNR/L - INT 93°**



REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MDUNR/L 11	18.3	200	13	25	DNM.1104..	BDA-09	TAB-012	-	PDP-012	-	LLA-3
S25S-MDUNR/L 11	23	250	17	32			TAB-006				
S32T-MDUNR/L 11	30	300	22	40							
S25S-MDUNR/L 15	23	250	17	32	DNM.1506..	BDA-10	TAB-014	PB-036	PDP-013	MDP-009	LLA-3
S32T-MDUNR/L 15	30	300	22	40			TAB-018			MDP-015 MDP-009	
S40U-MDUNR/L 15	37.5	350	27	50							
S50V-MDUNR/L 15	47	400	35	63							

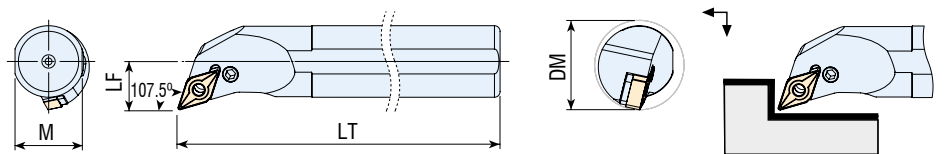


**PDXNR/L - INT 93°**


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S32T-PDXNR/L 15	30	300	22	45	DNM.1506..	PDP-003	TPA-025	PB-036	MDP-005	-	-	LLA-3
S40U-PDXNR/L 15	37.5	350	27	50			TPA-025					
S50V-PDXNR/L 15	47	400	35	63								

**PDXNR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R32S-PDXNR/L 15	30	250	22	45	DNM.1506..	PDP-003	TPA-025	PB-036	MDP-005	-	-	LLA-3
R40T-PDXNR/L 15	37.5	300	27	50			TPA-025					
R50U-PDXNR/L 15	47	350	35	63								

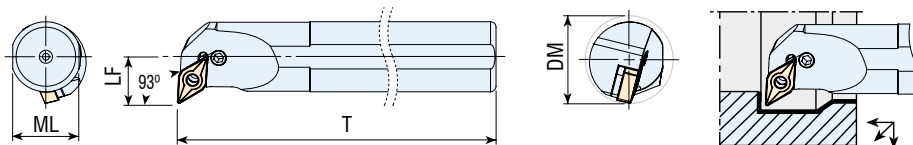
**PDQNR/L - INT 107.5°**


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S20R-PDQNR/L 11	18.3	200	13	25	DNM.1104..	PDP-001	TPA-023	PB-035	MDP-003	-	-	LLA-2.5
S25S-PDQNR/L 11	23	250	17	32			TPA-024					
S32T-PDQNR/L 154	30	300	22	40	DNM.1504..	PDP-003	TPA-025	PB-037	MDP-005	-	-	LLA-3
S40U-PDQNR/L 154	37.5	350	27	50								
S50V-PDQNR/L 154	47	400	35	63								
S32T-PDQNR/L 15	30	300	22	40	DNM.1506..	PDP-003	TPA-025	PB-036	MDP-005	-	-	LLA-3
S40U-PDQNR/L 15	37.5	350	27	50								
S50V-PDQNR/L 15	47	400	35	63								

**PDQNR/L - INT 107.5° - CON REFRIGERACIÓN INTERIOR**

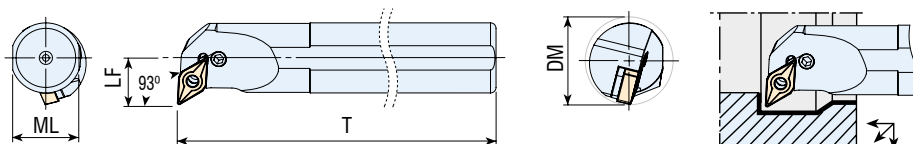
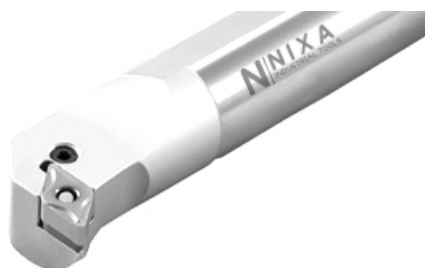
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R20P-PDQNR/L 11	18.3	170	13	25	DNM.1104..	PDP-001	TPA-023	PB-035	MDP-003	-	-	LLA-2.5
R25R-PDQNR/L 11	23	200	17	32			TPA-024					
R32S-PDQNR/L 154	30	250	22	40	DNM.1504..	PDP-003	TPA-025	PB-037	MDP-005	-	-	LLA-3
R40T-PDQNR/L 154	37.5	300	27	50								
R32S-PDQNR/L 15	30	350	22	40	DNM.1506..	PDP-003	TPA-025	PB-036	MDP-005	-	-	LLA-3
R40T-PDQNR/L 15	37.5	250	27	50								
R50U-PDQNR/L 15	47	300	35	63								

**PDUNR/L - INT 93°**



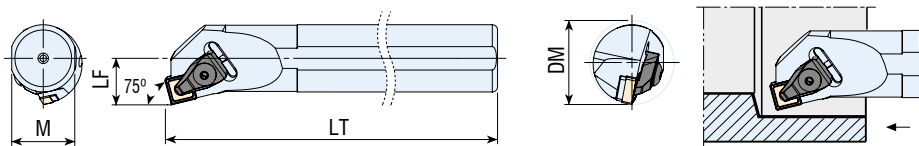
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S20R-PDUNR/L 11	18.3	200	13	25	DNM.1104..	PDP-001	TPA-023	PB-035	MDP-003	-	-	LLA-2.5
S25S-PDUNR/L 11	23	250	17	32			TPA-024					
S25S-PDUNR/L 15	23	250	19	32	DNM.1506..	PDP-003	TPA-030	PB-036				
S32T-PDUNR/L 15	30	300	22	40			TPA-025		MDP-005	-	-	LLA-3
S40U-PDUNR/L 15	37.5	350	27	50								
S50V-PDUNR/L 15	47	400	35	63								

**PDUNR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

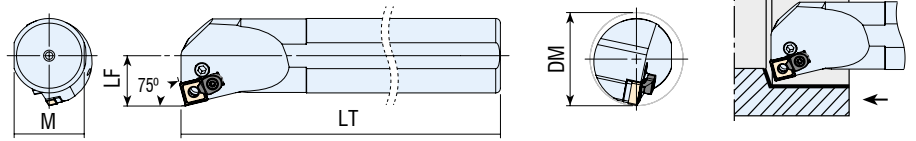


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R20P-PDUNR/L 11	18.3	170	13	25	DNM.1104..	PDP-001	TPA-023	PB-035	MDP-003	-	-	LLA-2.5
R25R-PDUNR/L 11	23	200	17	32			TPA-024					
R32S-PDUNR/L 11	30	250	22	40								
R32S-PDUNR/L 15	30	250	22	40	DNM.1506..	PDP-003	TPA-025	PB-036	MDP-005	-	-	LLA-3
R40T-PDUNR/L 15	37.5	300	27	50								
R50U-PDUNR/L 15	47	350	35	63								

**TSKNR/L - INT 75°**



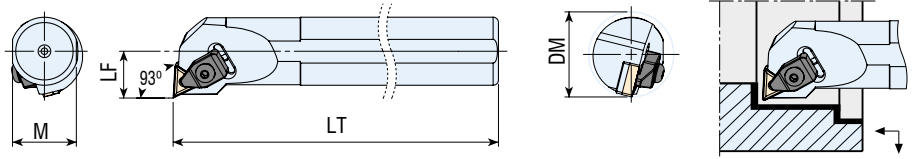
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA x AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TSKNR/L 12	23	250	17	32	SNM.1204..	BDA-02	TAB-018	PB-029	TPB-006	MDP-015 MDP-009	LLA-3
S32T-TSKNR/L 12	30	300	22	40					TPB-002		
S40U-TSKNR/L 12	37.5	350	27	50							

**PSKNR/L - INT 75°**


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S25S-PSKNR/L-12	23	250	17	32	SNM.1204..	PDP-002	TPA-030	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
S32T-PSKNR/L-12	30	300	22	40			TPA-025					
S40U-PSKNR/L-12	37.5	350	27	50								
S50V-PSKNR/L-12	47	400	35	63								
S32T-PSKNR/L-15	30	300	22	40	SNM.1506	PDP-004	TPA-026	PB-030	MDP-006	BDA-22	TPB-003	LLA-3
S40U-PSKNR/L-15	37.5	350	27	50								
S50V-PSKNR/L-15	47	400	35	63								

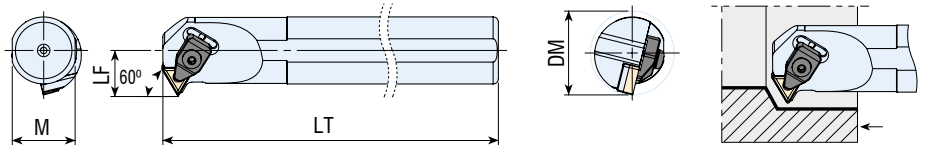
**PSKNR/L - INT 75° - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R25R-PSKNR/L-12	23	200	17	32	SNM.1204..	PDP-002	TPA-030	PB-029	MDP-005	BDA-18	TDA-066	LLA-3
R32S-PSKNR/L-12	30	250	22	40			TPA-025					
R40T-PSKNR/L-12	37.5	300	27	50								
R50U-PSKNR/L-12	47	350	35	63								
R32S-PSKNR/L-15	30	250	22	40	SNM.1506	PDP-004	TPA-026	PB-030	MDP-006	BDA-22	TPB-003	LLA-3
R40T-PSKNR/L-15	37.5	300	27	50								
R50U-PSKNR/L-15	47	350	35	63								

**TTUNR/L - INT 93°**


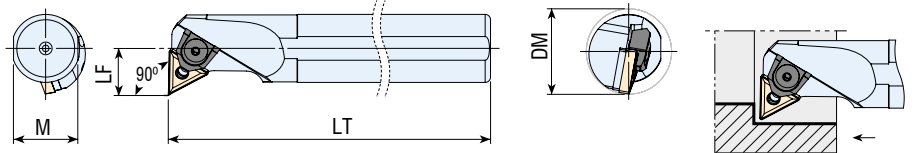
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ARANDELA	LLAVE
S25S-TTUNR/L 16	23	250	17	32	TNM.1604..	BDA-01	TAB-001	PB-002	TPB-008	MDP-009	LLA-3
S32T-TTUNR/L 16	30	300	22	40							
S25S-TTUNR/L 22	23	250	17	32	TNM.2204..	BDA-02	TAB-018	PB-004	TPB-002	MDP-015 MDP-009	LLA-3
S32T-TTUNR/L 22	30	300	22	40							
S40U-TTUNR/L 22	37.5	350	27	50							
S50V-TTUNR/L 22	47	400	35	63							

**TT-NR/L - INT 60°**



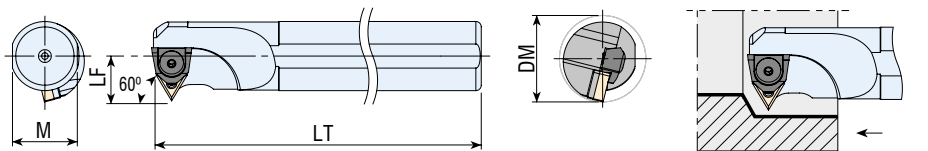
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ARANDELA	LLAVE
S25S-TT-NR/L 16	23	250	17	32	TNM.1604..	BDA-01	TAB-001	PB-002	TPB-008	MDP-009	LLA-3
S32T-TT-NR/L 16	30	300	22	40							

**MTFNR/L - INT 90°**

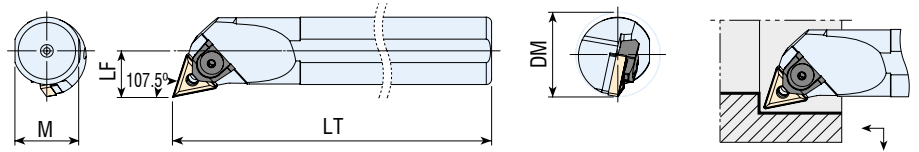


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MTFNR/L 16	18.3	200	13	25	TNM.1604..	BDA-08	TAB-012	-	PDP-012	-	LLA-3
S25S-MTFNR/L 16	23	250	17	32			TAB-018	PB-002	PDP-023	MDP-015 MDP-009	
S32T-MTFNR/L 16	30	300	22	40					PDP-010		
S32T-MTFNR/L 22	30	300	22	40	TNM.2204..	BDA-10	TAB-018	PB-004	PDP-011	MDP-015 MDP-009	LLA-3
S40U-MTFNR/L 22	37.5	350	27	50							
S50V-MTFNR/L 22	47	400	35	63							

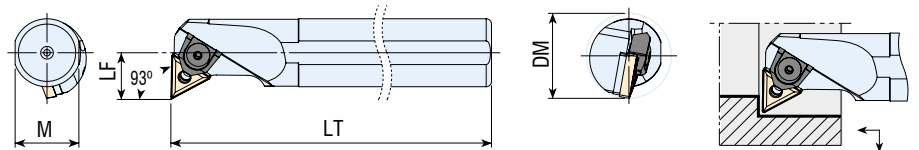
**MT-NR/L - INT 60°**



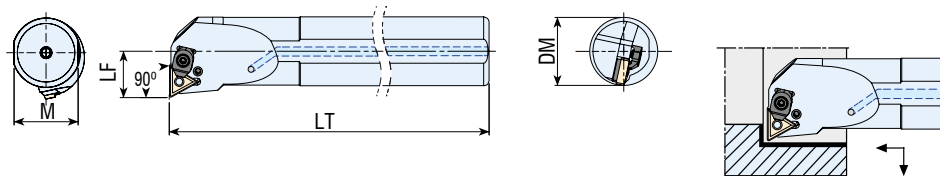
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MT-NR/L 16	18.3	200	13	25	TNM.1604..	BDA-08	TAB-006	-	PDP-012	-	LLA-3
S25S-MT-NR/L 16	23	250	17	32				PB-002	PDP-023	MDP-015 MDP-009	
S32T-MT-NR/L 16	30	300	22	40		BDA-10	TAB-018	PB-002	PDP-010		
S32T-MT-NR/L 22	30	300	22	40	TNM.2204..	BDA-10	TAB-018	PB-004	PDP-011	MDP-015 MDP-009	LLA-3
S40U-MT-NR/L 22	37.5	350	27	50							
S50V-MT-NR/L 22	47	400	35	63							

**MTQNR/L - INT 107.5°**


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MTQNR/L 16	18.3	200	13	25	TNM.1604..	BDA-08	TAB-012	-	PDP-020	-	LLA-3
S25S-MTQNR/L 16	23	250	17	32		BDA-10	TAB-018	PB-002	PDP-023	MDP-015 MDP-009	
S32T-MTQNR/L 16	30	300	22	40					PDP-023		
S40U-MTQNR/L 16	37.5	350	27	50					PDP-010		
S32T-MTQNR/L 22	30	300	22	40	TNM.2204..	BDA-10	TAB-018	PB-004	PDP-011	MDP-015 MDP-009	LLA-3
S40U-MTQNR/L 22	37.5	350	27	50							
S50V-MTQNR/L 22	47	400	35	63							

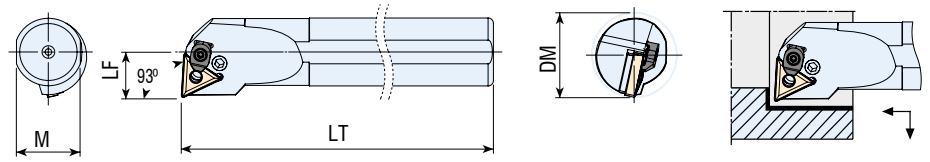
**MTUNR/L - INT 93°**


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S20R-MTUNR/L 16	18.3	200	13	25	TNM.1604..	BDA-08	TAB-012	-	PDP-012	-	LLA-3
S25S-MTUNR/L 16	23	250	17	32		BDA-10	TAB-018	PB-002	PDP-023	MDP-015 MDP-009	
S32T-MTUNR/L 16	30	300	22	40					PDP-023		
S40U-MTUNR/L 16	37.5	350	27	50					PDP-010		
S32T-MTUNR/L 22	30	300	22	40	TNM.2204..	BDA-10	TAB-018	PB-004	PDP-011	MDP-015 MDP-009	LLA-3
S40U-MTUNR/L 22	37.5	350	27	50							
S50V-MTUNR/L 22	47	400	35	63							

**PTFNR/L - INT 90° - CON REFRIGERACIÓN INTERIOR**


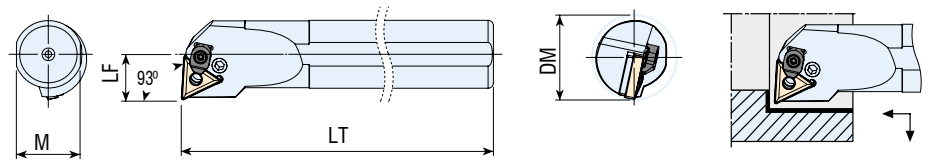
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R25R-PTFNR/L-16	23	200	17	32	TNM.1604..	PDP-001	TPA-024	PB-003	MDP-003	BDA-18	TDA-066	LLA-3
R32S-PTFNR/L-16	30	250	22	40			TPA-025					

**PTUNR/L - INT 93°**



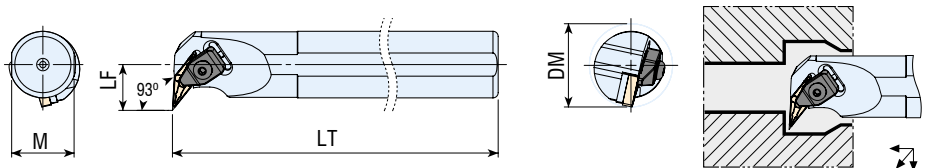
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S16P-PTUNR/L-16	14.8	170	11	20	TNM.1604..	PDP-008	TPA-029	-	MDP-004	-	-	LLA-2.5
S20R-PTUNR/L-16	18.3	200	13	25		PDP-001	TPA-023	PB-003	MDP-003	-	-	
S25S-PTUNR/L-16	23	250	17	32			TPA-024			BDA-18	TDA-066	
S32T-PTUNR/L-16	30	300	22	40								
S40U-PTUNR/L-16	37.5	350	27	50								
S32T-PTUNR/L-22	30	300	22	40	TNM.2204..	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
S40U-PTUNR/L-22	37.5	350	27	50								
S50V-PTUNR/L-22	47	400	35	63								

**PTUNR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**



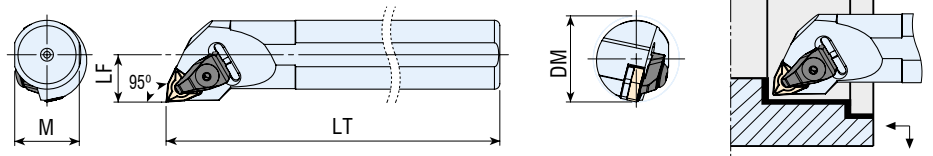
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R16M-PTUNR/L-16	14.8	150	11	20	TNM.1604..	PDP-008	TPA-029	-	MDP-004	-	-	LLA-2.5
R20P-PTUNR/L-16	18.3	170	13	25		PDP-001	TPA-023	PB-003	MDP-003	-	-	
R25R-PTUNR/L-16	23	200	17	32			TPA-024			BDA-18	TDA-066	
R32S-PTUNR/L-16	30	250	22	40								
R40T-PTUNR/L-16	37.5	300	27	50								
R32S-PTUNR/L-22	30	250	22	40	TNM.2204..	PDP-002	TPA-025	PB-004	MDP-005	BDA-18	TDA-066	LLA-3
R40T-PTUNR/L-22	37.5	300	27	50								

**TVUNR/L - INT 93°**

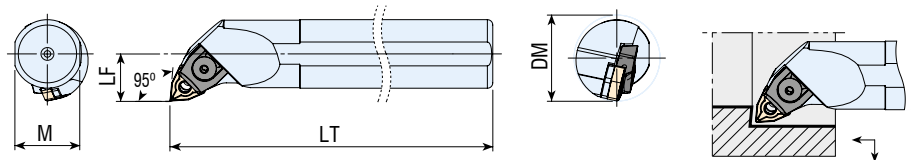


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TVUNR/L 16	23	250	20	36	VNM.1604..	BDA-01	TAB-001	PB-038	TPB-009	MDP-009	LLA-3
S32T-TVUNR/L 16	30	300	22	40							
S40U-TVUNR/L 16	37.5	350	27	50							

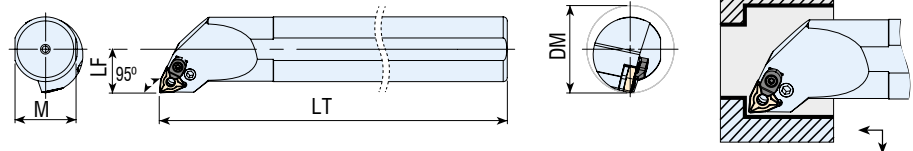


**TWLNLR/L - INT 95°**


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S25S-TWLNLR/L 06	23	250	17	32	WNM.0604..	BDA-01	TAB-001	PB-021	TPB-001	MDP-009	LLA-3
S32T-TWLNLR/L 06	30	300	22	40					TPB-006		
S25S-TWLNLR/L 08	23	250	17	32	WNM.0804..	BDA-02	TAB-018	PB-020	TPB-002	MDP-015 MDP-009	LLA-3
S32T-TWLNLR/L 08	30	300	22	40							
S40U-TWLNLR/L 08	37.5	350	27	50							
S50V-TWLNLR/L 08	47	400	35	63							

**MWLNLR/L - INT 95°**


REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	ANILLO/ ARANDELA	LLAVE
S16P-MWLNLR/L 06	18.3	200	13	25	WNM.0604..	BDA-07	TAB-012	-	APM-09	-	LLA-3
S20R-MWLNLR/L 06	23	250	17	32			TAB-006	-	APM-10	-	
S25S-MWLNLR/L 06	30	300	22	40				-	PDP-017	-	
S25S-MWLNLR/L 08	37.5	350	27	50	WNM.0804..	BDA-11	TAB-017	PB-020	PDP-013	MDP-015 MDP-009	LLA-3
S32T-MWLNLR/L 08	30	300	22	40			TAB-005		PDP-011		
S40U-MWLNLR/L 08	37.5	350	27	50							

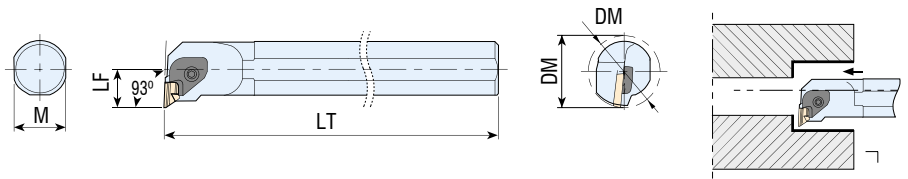
**PWLNLR/L - INT 95°**


REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
S20R-PWLNLR/L-06	18.3	200	13	25	WNM.0604	PDP-001	TPA-023	PB-021	MDP-003	-	-	LLA-2.5
S25S-PWLNLR/L-06	23	250	17	32			TPA-024					
S32T-PWLNLR/L-06	30	300	22	40								
S25S-PWLNLR/L-08	23	250	17	32	WNM.0804..	PDP-002	TPA-025	PB-020	MDP-005	BDA-18	TDA-066	LLA-3
S32T-PWLNLR/L-08	30	300	22	40								
S40U-PWLNLR/L-08	37.5	350	27	50								
S50V-PWLNLR/L-08	47	400	35	63								

**PWLN/R/L - INT 95° - CON REFRIGERACIÓN INTERIOR**

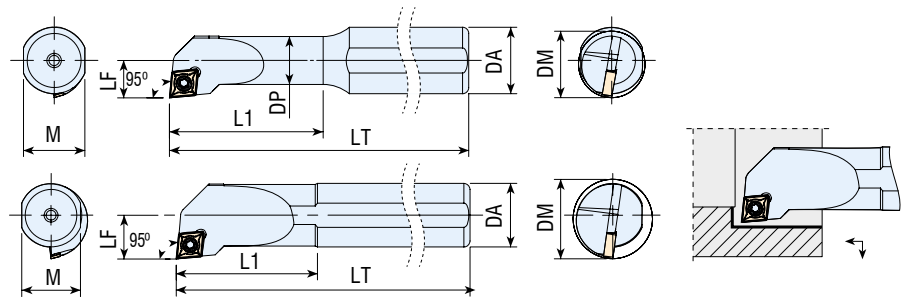
REFERENCIA	M	LT	LF	DM	INSERTO	PALANCA AMARRE	TORNILLO AMARRE	PLACA BASE	ARANDELA PLACA BASE	BRIDA AMARRE	TORNILLO BRIDA	LLAVE
R16M-PWLN/R/L-06	14.8	150	11	20	WNM.0604	PDP-008	TPA-029	-	MDP-004	-	-	LLA-2.5
R20P-PWLN/R/L-06	18.3	200	13	25		PDP-001	TPA-023	PB-021	MDP-003			LLA-2.5
R25R-PWLN/R/L-06	23	250	17	32			TPA-024					
R32S-PWLN/R/L-06	30	300	22	40								
R40T-PWLN/R/L-06	37.5	300	27	50								
R25R-PWLN/R/L-08	23	250	17	32	WNM.0804..	PDP-002	TPA-025	PB-020	MDP-005	BDA-18	TDA-066	LLA-3
R32S-PWLN/R/L-08	30	300	22	40								
R40T-PWLN/R/L-08	37.5	350	27	50								
R50V-PWLN/R/L-08	47	350	35	63								

**CKUNR/L - INT 93°**



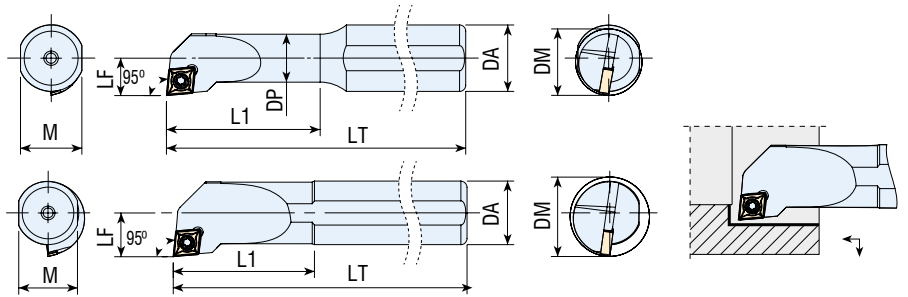
REFERENCIA	M	LT	LF	DM	INSERTO	BRIDA AMARRE	TORNILLO BRIDA	PLACA BASE	TORNILLO PLACA BASE	MUELLE/ ARANDELA	LLAVE
S25S-CKUNR/L 16	23	250	19	38	KNUX1604..	BDA-14 (R) BDA-15 (L)	TAB-008	PB-023 (R) PB-022 (L)	TPB-001	MDP-002 MDP-009	LLA-4
S32T-CKUNR/L 16	30	300	22	40							
S40U-CKUNR/L 16	37.5	350	27	50							
S50V-CKUNR/L 16	50	400	35	63							

**SCLCR/L - INT 95°**



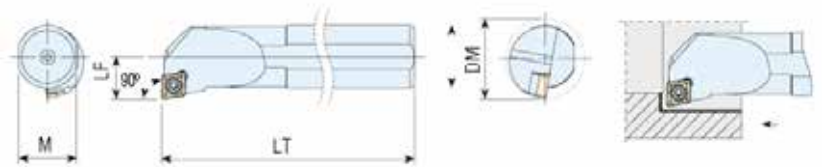
REFERENCIA	M	LT	LF	DM	DA	DP	L1	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S0608H-SCLCR/L-03	7.3	100	3	6	8	5	18	CC.T030102	TDA-001	-	-	LLT-6
S0608H-SCLCR/L-06	7.3	100	4.5	8	8	6	25	CC.T0602..	TDA-017			LLT-8
S08H-SCLCR/L-06	7.3	100	6	11	8	8	20		TDA-018			
S10K-SCLCR/L-06	9	125	7	13	10	10	25					
S12K-SCLCR/L-06	11	125	9	16	12	12	25					
S1612P-SCLCR/L-06	14.8	170	9	16	16	11.5	37					
S16P-SCLCR/L-06	14.8	170	11	20	16	16	35					
S12K-SCLCR/L-09	11	125	9	16	12	12	30	CC.T09T3..	TDA-046			LLT-15
S1614K-SCLCR/L-09	14.8	170	9.5	17	16	14	45		TDA-047			
S16P-SCLCR/L-09	14.8	170	11	20	16	16	35					
S2016R-SCLCR/L-09	18.3	200	11	20	20	16	50					
S20R-SCLCR/L-09	18.3	200	13	25	20	20	40					
S25S-SCLCR/L-09	23	250	17	32	25	25	50		TDA-050	PB-013	TPB-013	LLT-15
S32T-SCLCR/L-09	30	300	22	40	32	32	60					
S25S-SCLCR/L-12	23	250	17	32	25	25	50	CC.T1204..	TDA-079	PB-045	TPB-014	LLT-20
S32T-SCLCR/L-12	30	300	22	40	32	32	60					
S40U-SCLCR/L-12	37.5	350	27	50	40	40	70		TDA-074		TPB-012	

**SCLCR/L - INT 95° - CON REFRIGERACIÓN INTERIOR**



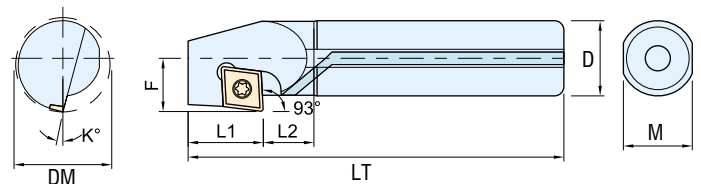
REFERENCIA	M	LT	LF	DM	DA	DP	L1	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R08H-SCLCR/L-06	7.3	100	6	11	8	8	20	CC.T0602	TDA-018	-	-	LLT-8
R10H-SCLCR/L-06	9	100	7	13	10	10	25					
R12K-SCLCR/L-06	11	100	9	16	12	12	25					
R16M-SCLCR/L-09	14.8	150	11	20	16	16	35	CC.T09T3..	TDA-050	PB-013	TPB-013	LLT-15
R20P-SCLCR/L-09	18.3	170	13	25	20	20	40					
R25R-SCLCR/L-09	23	200	17	32	25	25	50					
R32S-SCLCR/L-09	30	250	22	40	32	32	60					
R25R-SCLCR/L-12	23	200	17	32	25	25	50	CC.T1204..	TDA-079	PB-045	TPB-014	LLT-20

**SCFCR/L - INT 90°**



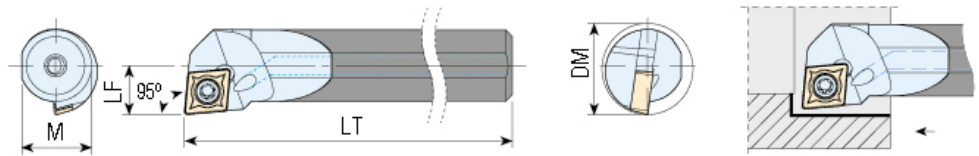
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S08H-SCFCR/L-06	7.3	100	6	11	CC.T0602..	TDA-018	-	-	LLT-8
S10K-SCFCR/L-06	9	125	7	13					
S12K-SCFCR/L-06	11	125	9	16					
S12K-SCLCR/L-09	11	125	9	16	CC.T09T3..	TDA-046	-	-	LLT-15
S16P-SCLCR/L-09	14.8	170	11	20		TDA-047			
S20R-SCLCR/L-09	18.3	200	13	25					
S25S-SCLCR/L-09	23	250	17	32		TDA-050	PB-013	TPB-013	LLT-15
S25S-SCLCR/L-12	23	250	17	32	CC.T1204..	TDA-079	PB-045	TPB-014	LLT-20
S32T-SCLCR/L-12	30	300	22	40					
S40U-SCLCR/L-12	37.5	350	27	50		TDA-074		TPB-012	

**SCZCR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**



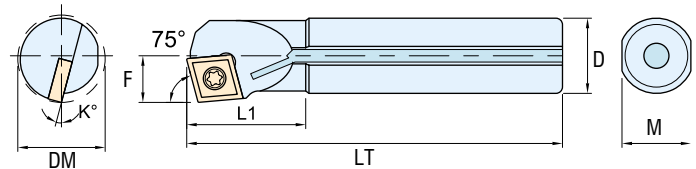
REFERENCIA	D	LT	L1	L2	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
R08K-SCZCR/L-06	8	125	12	18	6	7	15	11	CC.T0602..	TDA-140	LLT-9
R10K-SCZCR/L-06	10	125	12	18	7.5	9	13	14			
R12M-SCZCR/L-06	12	150	12	20	8.5	11	10	16			
R16Q-SCZCR/L-09	16	180	18	22	11.5	15	7	21	CC.T09T3..	TDA-141	LLT-15
R20R-SCZCR/L-09	20	200	18	22	13.5	18	7	25			
R25R-SCZCR/L-09	25	200	18	22	16	23	7	30	CC.T09T3..	TDA-142	LLT-15

**SCLCR/L - INT 95° - METAL DURO CON REFRIGERACIÓN INTERIOR**



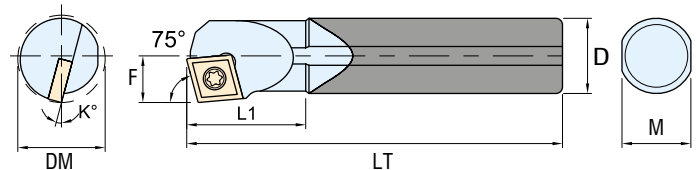
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
MD06J-SCLCR/L-06	5.7	110	4.5	8	CC.T0602..	TDA-018	-	-	LLT-8
MD08K-SCLCR/L-06	7.5	125	6	11					
MD10M-SCLCR/L-06	9.5	150	7	13					
MD12Q-SCLCR/L-06	11	180	9	16					
MD16R-SCLCR/L-09	15	200	11	20	CC.T09T3..	TDA-047	-	-	LLT-15
MD20S-SCLCR/L-09	19	250	13	24					

**SCKCR/L - INT 75° - CON REFRIGERACIÓN INTERIOR**



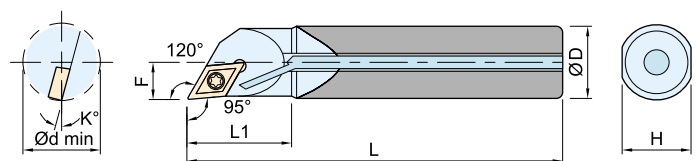
REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
R10K-SCKCR/L-06	8	125	20	5	7	15	10	CC.T0602..	TDA-140	LLT-9
R10K-SCKCR/L-06	10	125	22	6	9	13	12			
R12M-SCKCR/L-06	12	150	26	8	11	10	16			
R16Q-SCKCR/L-06	16	180	32	10	15	7	20			
R12M-SCKCR/L-09	12	150	28	8	11	11	16	CC.T09T3..	TDA-141	LLT-15
R16Q-SCKCR/L-09	16	180	32	10	15	7	20			
R20M-SCKCR/L-09	20	200	40	12.5	18	5	25			

**SCKCR - INT 75° - METAL DURO CON REFRIGERACIÓN INTERIOR**

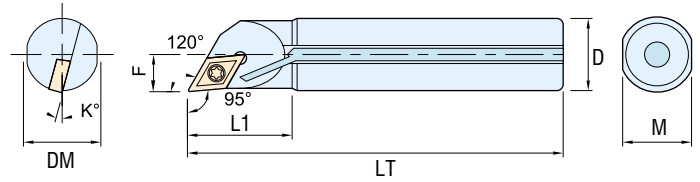


REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
MD08K-SCKCR-06	8	125	20	5	7.2	15	10	CC.T0602..	TDA-140	LLT-9
MD12Q-SCKCR-06	12	180	26	8	11.2	10	16			

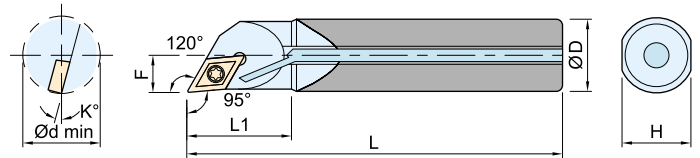
**SDJCR/L - 95° - METAL DURO INTERIOR SIN REFRIGERACIÓN**



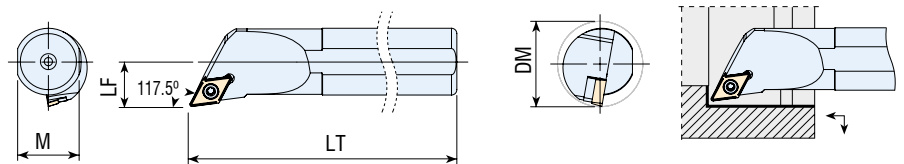
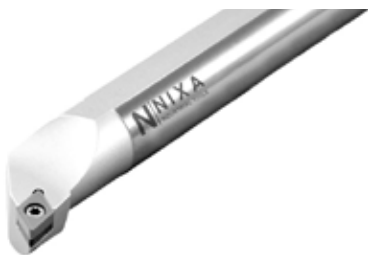
REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
MD16R-SDJCR-11	16	200	38	9.5	15.2	7	19	DC.T11T3	TDA-141	LLT-15
MD20R-SDJCR-11	20	200	42	11.5	19.2	7	23			
MD25S-SDJCR-11	25	250	45	14	24.2	5	58			

**SDJCR/L - 95° - CON REFRIGERACIÓN INTERIOR**


REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
R08K-SDJCR/L-07	8	125	22	5	7	15	10	DC.T0702..	TDA-140	LLT-9
R10K-SDJCR/L-07	10	125	25	6	9	13	12			
R12M-SDJCR/L-07	12	150	30	7	11	10	14			
R16Q-SDJCR/L-07	16	180	38	9.5	15	7	19			
R16Q-SDJCR/L-11	16	180	38	9.5	15	7	19	DC.T11T3	TDA-141	LLT-15
R20R-SDJCR/L-11	20	200	42	11.5	18	7	23			
R25R-SDJCR/L-11	25	200	45	14	23	5	28			
R25S-SDJCR/L-11	25	250	45	14	23	5	28			
R32S-SDJCR/L-11	32	250	48	17.5	30	5	35			

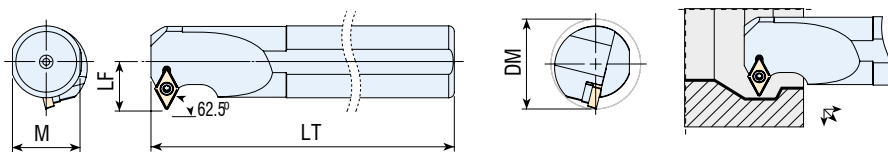
**SDJCR/L - 95° - METAL DURO CON REFRIGERACIÓN INTERIOR**


REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
MD08K-SDJCR-07	8	125	22	5	7.2	15	10	DC.T0702..	TDA-140	LLT-9
MD10K-SDJCR-07	10	125	25	6	9.2	13	12			
MD10M-SDJCR-07	10	150	25	6	9.2	13	12			
MD12M-SDJCR-07	12	150	30	7	11.2	10	14			
MD12Q-SDJCR-07	12	180	30	7	11.2	10	14			

**SDPCR/L - INT 117.5°**


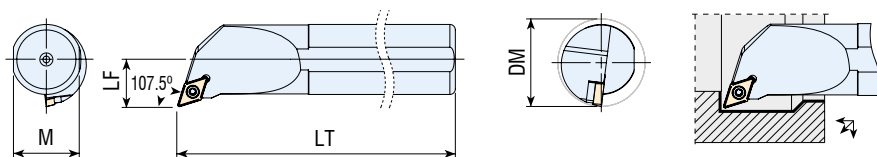
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S10K-SDPCR/L-07	9	125	7	14	DC.T0702..	TDA-018	-	-	LLT-8
S12K-SDPCR/L-07	11	125	9	16					
S16P-SDPCR/L-11	14.8	170	14	22	DC.T11T3..	TDA-047	-	-	LLT-15
S20R-SDPCR/L-11	18.3	200	15	25		TDA-049			
S25S-SDPCR/L-11	23	250	18	32		TDA-050	PB-034	TPB-013	LLT-15

**SD-CR/L - INT 62.5°**



REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S10K-SD-CR/L-07	9	125	7	14	DC.T0702..	TDA-018	-	-	LLT-8
S12K-SD-CR/L-07	11	125	9	16					
S16P-SD-CR/L-07	14.8	170	11	20					
S20R-SD-CR/L-07	18.3	200	13	25					
S16P-SD-CR/L-11	14.8	170	14	22	DC.T11T3..	TDA-049	-	-	LLT-15
S20R-SD-CR/L-11	18.3	200	15	25					
S25S-SD-CR/L-11	23	250	18	32		TDA-051	PB-034	TPB-011	LLT-15
S32T-SD-CR/L-11	30	300	22	40					
S40U-SD-CR/L-11	37.5	350	27	50					

**SDQCR/L - INT 107.5°**

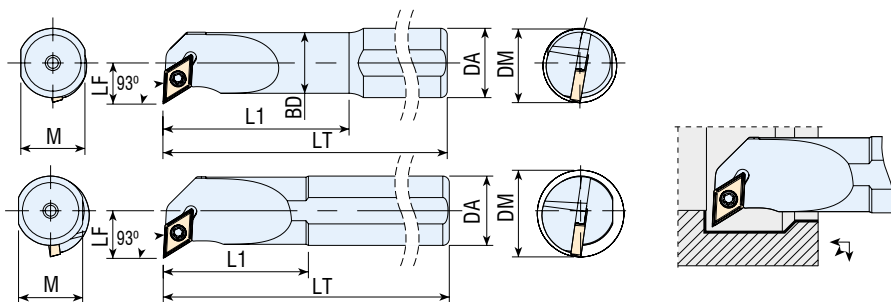


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S10K-SDQCR/L-07	9	125	7	13	DC.T0702..	TDA-018	-	-	LLT-8
S12K-SDQCR/L-07	11	125	9	16					
S16P-SDQCR/L-07	14.8	170	11	20					
S20R-SDQCR/L-07	18.3	200	13	25					
S16P-SDQCR/L-11	14.8	170	11	20	DC.T11T3..	TDA-047			LLT-15
S20R-SDQCR/L-11	18.3	20	13	25		TDA-049			
S25S-SDQCR/L-11	23	250	17	32		TDA-050	PB-034	TPB-013	
S32T-SDQCR/L-11	30	300	22	40		TDA-051		TPB-011	
S40U-SDQCR/L-11	37.5	350	27	50					

**SDQCR/L - INT 107.5° - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R10H-SDQCR/L-07	9	100	7	13	DC.T0702..	TDA-018	-	-	LLT-8
R12H-SDQCR/L-07	11	100	9	16					
R16M-SDQCR/L-07	14.8	150	11	20					
R20P-SDQCR/L-07	18.3	170	13	25					
R16M-SDQCR/L-11	14.8	150	11	20	DC.T11T3..	TDA-047			LLT-15
R20P-SDQCR/L-11	18.3	170	13	25		TDA-049			
R25R-SDQCR/L-11	23	200	17	32		TDA-050	PB-034	TPB-013	
R32S-SDQCR/L-11	30	250	22	40		TDA-051		TPB-011	

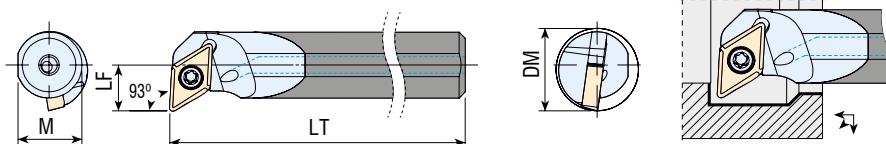


**SDUCR/L - INT 93°**


REFERENCIA	M	LT	LF	DM	DA	DB	L1	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S1008K-SDUCR/L-07	9	125	8	13	10	8	30	DC.T0702..	TDA-018	-	-	LLT-8
S10K-SDUCR/L-07	9	125	8	13	10	10	25					
S12K-SDUCR/L-07	11	125	9	16	12	12	25					
S1612P-SDUCR/L-07	14.8	170	9	16	16	11.5	37					
S1614P-SDUCR/L-07	14.8	170	9.5	17	16	14	45					
S16P-SDUCR/L-07	14.8	170	11	20	16	16	35					
S20R-SDUCR/L-07	18.3	200	13	25	20	20	40					
S1614P-SDUCR/L-11	14.8	170	11	18	16	14	45	DC.T11T3	TDA-047	-	-	LLT-15
S16P-SDUCR/L-11	14.8	170	11	20	16	16	35					
S2016R-SDUCR/L-11	18.3	200	11	20	20	16	50					
S20R-SDUCR/L-11	18.3	200	13	25	20	20	40		TDA-049	PB-034	TPB-013	
S25S-SDUCR/L-11	23	250	17	32	25	25	50		TDA-050		TPB-011	
S32T-SDUCR/L-11	30	300	22	40	32	32	60		TDA-051			
S40U-SDUCR/L-11	37.5	350	27	50	40	40	70					
S50V-SDUCR/L-11	47	400	35	63	50	50	80					

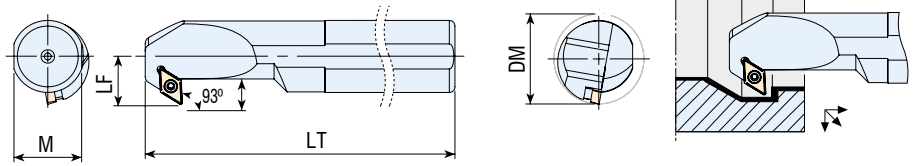
**SDUCR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	M	LT	LF	DM	DA	DB	L1	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R1008H-SDUCR/L-07	9	100	8	13	10	8	30	DC.T0702..	TDA-018	-	-	LLT-8
R10H-SDUCR/L-07	9	100	8	13	10	10	25					
R12H-SDUCR/L-07	11	100	9	16	12	12	25					
R16M-SDUCR/L-07	14.8	150	11	20	16	16	35					
R20P-SDUCR/L-07	18.3	170	13	25	20	20	40					
R16M-SDUCR/L-11	14.8	150	11	20	16	16	35	DC.T11T3	TDA-047	-	-	LLT-15
R20P-SDUCR/L-11	18.3	170	13	25	20	20	40		TDA-049			
R25R-SDUCR/L-11	23	200	17	32	25	25	50		TDA-050	PB-034	TPB-013	
R32S-SDUCR/L-11	30	250	22	40	32	32	60		TDA-051		TPB-011	

**SDUCR/L - INT 93° - METAL DURO INTERIOR CON REFRIGERACIÓN**


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
MD10M-SDUCR/L-07	9.5	150	8	13	DC.T0702..	TDA-018	-	-	LLT-8
MD12Q-SDUCR/L-07	11	180	9	16					
MD16R-SDUCR/L-11	15	200	11	20	DC.T11T3..	TDA-047	-	-	LLT-15
MD20S-SDUCR/L-11	18.3	250	12	23					

**SDXCR/L - INT 93°**

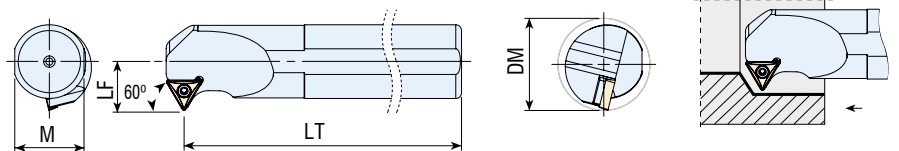


REFERENCIA	M	LT	LF	L1	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S12K-SDXCR/L-07	11	125	9	4.5	16	DC.T0702..	TDA-018	-	-	LLT-8
S16P-SDXCR/L-07	14.8	170	11	6.5	20					
S20R-SDXCR/L-07	18.3	200	13	6.5	25					
S16P-SDXCR/L-11	14.8	170	11	6.5	20	DC.T11T3..	TDA-049	-	-	LLT-15
S20R-SDXCR/L-11	18.3	200	14	7.5	25					
S25S-SDXCR/L-11	23	250	17	9	32		TDA-051	PB-034	TPB-013	
S32T-SDXCR/L-11	30	300	22	12.5	40				TPB-011	
S40U-SDXCR/L-11	37.5	350	27	14.5	50					

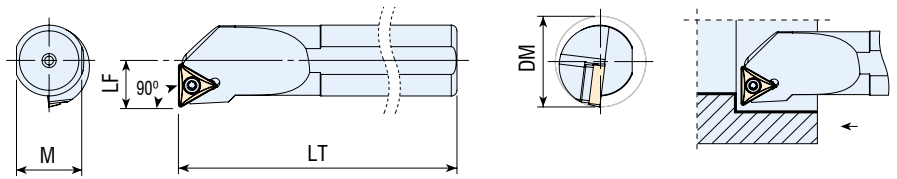
**SDXCR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	M	LT	LF	L1	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R12H-SDXCR/L-07	11	100	9	4.5	16	DC.T0702..	TDA-018	-	-	LLT-8
R16M-SDXCR/L-07	14.8	150	11	6.5	20					
R20P-SDXCR/L-07	18.3	170	13	6.5	25					
R16M-SDXCR/L-11	14.8	150	11	6.5	20	DC.T11T3..	TDA-049	-	-	LLT-15
R20P-SDXCR/L-11	18.3	170	14	7.5	25					
R25R-SDXCR/L-11	23	200	17	9	32		TDA-051	PB-034	TPB-013	
R32S-SDXCR/L-11	30	250	22	12.5	40				TPB-011	

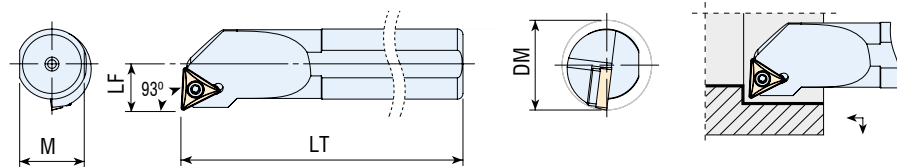
**ST-CR/L - INT 60°**



REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S12K-ST-CR/L-11	11	125	9	17	TC.T1102..	TDA-018	-	-	LLT-8
S16P-ST-CR/L-11	14.8	170	11	20					
S20R-ST-CR/L-11	18.3	200	13	25					
S16P-ST-CR/L-16	14.8	170	11	20	TC.T16T3..	TDA-047	-	-	LLT-15
S20R-ST-CR/L-16	18.3	200	13	25		TDA-049			
S25S-ST-CR/L-16	23	250	17	32		TDA-051	PB-001	TPB-013	
S32T-ST-CR/L-16	30	300	22	40				TPB-011	
S40U-ST-CR/L-16	37.5	350	27	50					

**STFCR/L - INT 90°**


REFERENCIA	M	LT	LF	DM	DMIN	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S08H-STFCR/L-06	7.3	100	6	8	11	TC.T06T1..	TDA-006	-	-	LLT-6
S1006H-STFCR/L-06	9	80	4.5	10	8					
S10K-STFCR/L-09	10	125	7	10	13	TC.T0902..	TDA-008			LLT-7
S12K-STFCR/L-09	12	125	9	12	17					
S12K-STFCR/L-11	12	125	9	12	17	TC.T1102..	TDA-018			LLT-8
S16P-STFCR/L-11	16	170	11	16	20					
S20R-STFCR/L-11	20	200	13	20	25					
S16P-STFCR/L-16	14.8	170	11	16	20	TC.T16T3..	TDA-047			LLT-15
S20R-STFCR/L-16	18.3	200	13	20	25		TDA-049			
S25S-STFCR/L-16	23	250	17	25	32		TDA-051	PB-001	TPB-013	
S32T-STFCR/L-16	30	300	22	32	40				TPB-011	

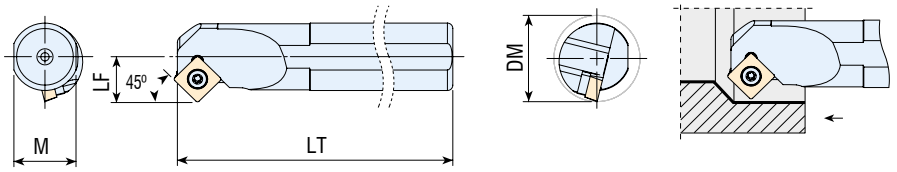
**STUCR/L - INT 93°**


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S10K-STUCR/L-09	9	125	7	13	TC.T0902..	TDA-008	-	-	LLT-7
S12K-STUCR/L-09	11	125	9	16					
S12K-STUCR/L-11	11	125	9	17	TC.T1102..	TDA-018	-	-	LLT-8
S16P-STUCR/L-11	14.8	170	11	20					
S20R-STUCR/L-11	18.3	200	13	25					
S16P-STUCR/L-16	14.8	170	11	20	TC.T16T3..	TDA-047	-	-	LLT-15
S20R-STUCR/L-16	18.3	200	13	25		TDA-049			
S25S-STUCR/L-16	23	250	17	32		TDA-051	PB-001	TPB-013	
S32T-STUCR/L-16	30	300	22	40				TPB-011	
S40U-STUCR/L-16	37.5	350	27	50					

**STUCR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

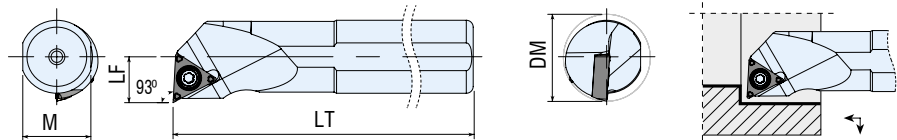
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R10H-STUCR/L-09	9	100	7	13	TC.T0902..	TDA-008	-	-	LLT-7
R12H-STUCR/L-09	11	100	9	16					
R12H-STUCR/L-11	11	100	9	17	TC.T1102..	TDA-018	-	-	LLT-8
R16M-STUCR/L-11	14.8	150	11	20					
R20P-STUCR/L-11	18.3	170	13	25					
R16M-STUCR/L-16	14.8	150	11	20	TC.T16T3..	TDA-047	-	-	LLT-15
R20P-STUCR/L-16	18.3	170	13	25		TDA-049			
R25R-STUCR/L-16	23	200	17	32		TDA-051	PB-001	TPB-013	
R32S-STUCR/L-16	30	250	22	40				TPB-011	

**SSSCR/L - INT 45°**



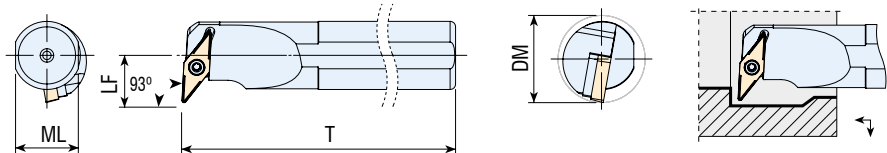
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SSSCR/L-09	14.8	170	11	20	SC.T09T3..	TDA-047	-	-	LLT-15
S20R-SSSCR/L-09	18.3	200	13	25		TDA-049	-		
S25S-SSSCR/L-09	23	250	17	32		TDA-050	PB-026	TPB-013	
S25S-SSSCR/L-12	23	250	17	32	SC.T1204..	TDA-079	PB-028	TPB-014	LLT-20
S32T-SSSCR/L-12	30	300	22	40		TDA-074		TPB-012	
S40U-SSSCR/L-12	37.5	350	27	50		TDA-074			

**STUPR/L - INT 93°**



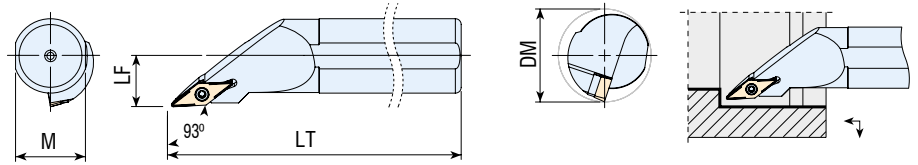
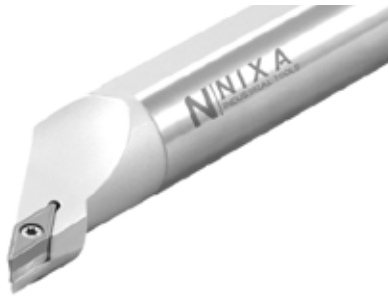
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S08H-STUPR/L-08	7.3	100	5	10	TP..0802..	TDA-006	-	-	LLT-6
S10H-STUPR/L-11	9	125	6	12	TP..1103..	TDA-031	-	-	LLT-10
S12K-STUPR/L-11	11	125	8	16			-	-	LLT-8
S16P-STUPR/L-11	14.8	170	10	20		TDA-032	-	-	LLT-8

**SVUBR/L - INT 93°**



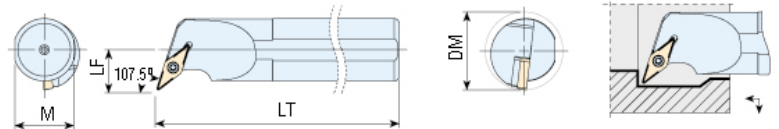
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVUBR/L-11	14.8	170	12.5	20	VB.T1103..	TDA-018	-	-	LLT-8
S20R-SVUBR/L-11	18.3	200	13	25					
S25S-SVUBR/L-16	23	250	19	32	VB.T1604..	TDA-051	PB-038	TPB-011	LLT-15
S32T-SVUBR/L-16	30	300	22	40					
S40U-SVUBR/L-16	37.5	350	27	50					

**SVJBR/L - INT 93°**



REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S25S-SVJBR/L-16	23	250	17	32	VB.T1604..	TDA-050	PB-038	TPB-013	LLT-15
S32T-SVJBR/L-16	30	300	22	40					
S40U-SVJBR/L-16	37.5	350	27	50		TDA-051	PB-038	TPB-013	LLT-15

**SVQBR/L - INT 107.5°**

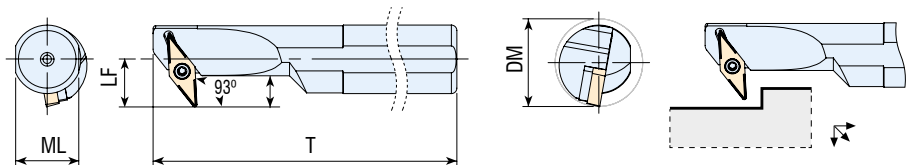


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVQBR/L-11	14.8	170	11	20	VB.T1103..	TDA-018	-	-	LLT-8
S20R-SVQBR/L-11	18.3	200	13	25					
S25S-SVQBR/L-16	23	250	17	32	VB.T1604..	TDA-051	PB-038	TPB-013	LLT-15
S32T-SVQBR/L-16	30	300	22	40				TPB-011	
S40U-SVQBR/L-16	37.5	350	27	50					

**SVQBR/L - INT 107.5° - CON REFRIGERACIÓN INTERIOR**

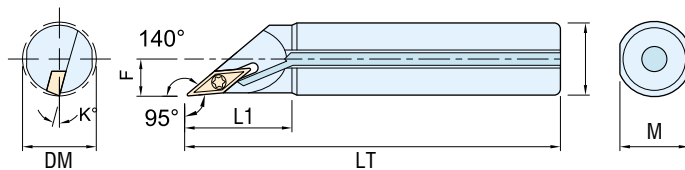
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R20Q-SVQBR/L-11	18.5	180	13	25	VB.T1103..	TDA-018	-	-	LLT-8
R20Q-SVQBR/L-16	18.5	180	20	30	VB.T1604..	TDA-049	-	-	LLT-15
R25S-SVQBR/L-16	23	250	17	32		TDA-051	PB-038	TPB-011	LLT-15
R32S-SVQBR/L-16	30	250	22	40					

**SVXBR/L - INT 93°**



REFERENCIA	M	LT	LF	L1	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVXBR/L-112	14.8	170	12.5	7.2	20	VBM.1102..	TDA-018	-	-	LLT-8
S20R-SVXBR/L-112	18.3	200	13	5.7	25					

**SVJBR/L - INT 95° - CON REFRIGERACIÓN INTERIOR**

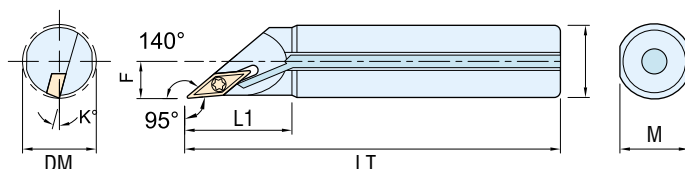


REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
R10K-SVJBR/L-11	10	125	25	6	9	13	12	VB..1103..	TDA-140	LLT-9
R12M-SVJBR/L-11	12	150	30	7	11	10	14			
R16Q-SVJBR/L-11	16	180	38	9.5	15	7	19			
R20R-SVJBR/L-11	20	200	42	11.5	18	7	23			
R16Q-SVJBR/L-16	16	180	38	9.5	15	7	19	VB..1604..	TDA-143	LLT-15
R20R-SVJBR/L-16	20	200	42	11.5	18	7	23			
R25R-SVJBR/L-16	25	200	45	14	23	5	28			
R32S-SVJBR/L-16	32	250	50	17.5	30	4	35			
R40T-SVJBR/L-16	40	300	60	21.5	37	2	43			

**SVJBR/L - INT 95° - METAL DURO - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
MD10K-SVJBR/L-11	10	125	25	6	9.2	13	12	VB..1103..	TDA-140	LLT-9
MD12M-SVJBR/L-11	12	150	30	7	11.2	10	14			
MD16Q-SVJBR/L-11	16	200	38	9.5	15.2	7	19			
MD16Q-SVJBR/L-16	16	200	38	9.5	15.2	7	19	VB..1604..	TDA-143	LLT-15

**SVJCR/L - INT 95° - CON REFRIGERACIÓN INTERIOR**

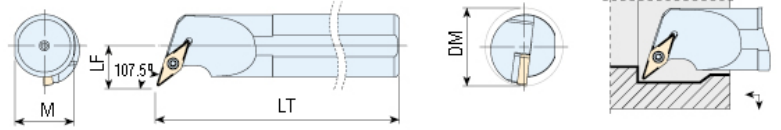


REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
R10K-SVJCR/L-11	10	125	25	6	9	13	12	VC..1103..	TDA-140	LLT-9
R12M-SVJCR/L-11	12	150	30	7	11	10	14			
R16Q-SVJCR/L-11	16	180	38	9.5	15	7	19			
R20R-SVJCR/L-11	20	200	42	11.5	18	7	23			
R16Q-SVJCR/L-16	16	180	38	9.5	15	7	19	VC..1604..	TDA-143	LLT-15
R20R-SVJCR/L-16	20	200	42	11.5	18	7	23			
R25R-SVJCR/L-16	25	200	45	14	23	5	28			
R32S-SVJCR/L-16	32	250	50	17.5	30	4	35			
R40T-SVJCR/L-16	40	300	60	21.5	37	2	43			

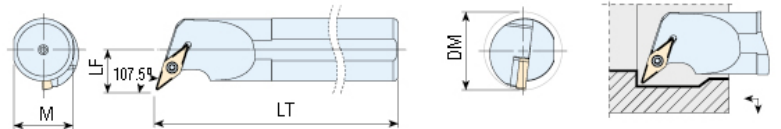
**SVJCR/L - INT 95° - METAL DURO - CON REFRIGERACIÓN INTERIOR**

REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
MD10K-SVJCR/L-11	10	125	25	6	9.2	13	12	VC..1103..	TDA-140	LLT-9
MD12M-SVJCR/L-11	12	150	30	7	11.2	10	14			
MD16Q-SVJCR/L-11	16	200	38	9.5	15.2	7	19			
MD16Q-SVJCR/L-16	16	200	38	9.5	15.2	7	19	VC..1604..	TDA-143	LLT-15

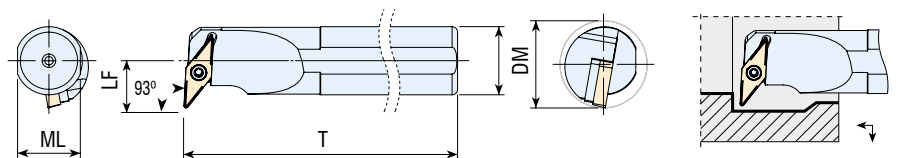


**SVQCR/L - INT 107.5°**


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVQCR/L-11	14.8	170	11	20	VC.T1103..	TDA-018	-	-	LLT-8
S20R-SVQCR/L-11	18.3	200	13	25					
S25S-SVQCR/L-16	23	250	17	32	VC.T1604..	TDA-051	PB-038	TPB-013	LLT-15
S32T-SVQCR/L-16	30	300	22	40				TPB-011	
S40U-SVQCR/L-16	37.5	350	27	50					

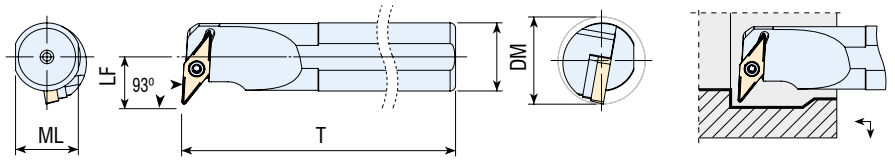
**SVQCR/L - INT 107.5° - CON REFRIGERACIÓN INTERIOR**


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R16M-SVQCR/L-11	14.8	150	11	20	VC.T1103..	TDA-018	-	-	LLT-8
R20P-SVQCR/L-11	18.3	170	13	25					
R25R-SVQCR/L-16	23	200	17	32	VC.T1604..	TDA-051	PB-038	TPB-013	LLT-15
R32S-SVQCR/L-16	30	250	22	40				TPB-011	
R40T-SVQCR/L-16	37.5	300	27	50					

**SVUCR/L - INT 93°**


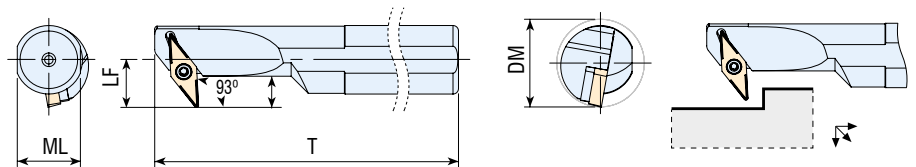
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVUCR/L-11	14.8	170	12.5	20	VC.T1103..	TDA-018	-	-	LLT-8
S20R-SVUCR/L-11	18.3	200	13	25					
S25S-SVUCR/L-16	23	250	19	32	VC.T1604..	TDA-051	PB-038	TPB-011	LLT-15
S32T-SVUCR/L-16	30	300	22	40					
S40U-SVUCR/L-16	37.5	350	27	50					

**SVUCR/L - INT 93° - REFRIGERACIÓN INTERIOR**



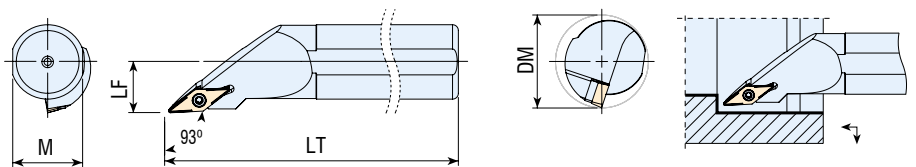
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R12K-SVUCR/L-07	11	125	9	16	VC.T0702..	TDA-006	-	-	LLT-6
R20Q-SVUCR/L-11	18.3	170	13	25	VC.T1103..	TDA-018	-	-	LLT-8
R25R-SVUCR/L-16	23	200	19	32	VC.T1604..	TDA-051	PB-038	TPB-011	LLT-15

**SVXBR/L - INT 93°**



REFERENCIA	M	LT	LF	L1	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S16P-SVXBR/L-112	14.8	170	12.5	7.2	20	VBM.1102..	TDA-018	-	-	LLT-8
S20R-SVXBR/L-112	18.3	200	13	5.7	25					
S16P-SVXBR/L-11	14.8	170	12.5	7.2	20	VB.T1103..	TDA-018	-	-	LLT-8
S20R-SVXBR/L-11	18.3	200	13	5.7	25					
S25S-SVXBR/L-16	23	250	19	10.2	32	VB.T1604..	TDA-051	PB-038	TPB-011	LLT-15
S32T-SVXBR/L-16	30	300	22	11.7	40					
S40U-SVXBR/L-16	37.5	350	27	14.3	50					

**SVJCR/L - INT 93°**

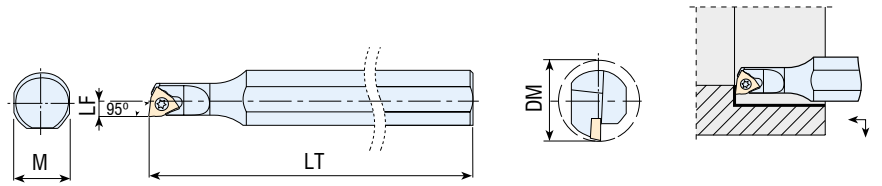


REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S12K-SVJCR/L-11	11	125	7	13	VC.T1103..	TDA-018	-	-	LLT-8
S16P-SVJCR/L-11	14.8	170	11	20					
S20R-SVJCR/L-11	18.3	200	13	25					

**SVJCR/L - INT 93° - CON REFRIGERACIÓN INTERIOR**

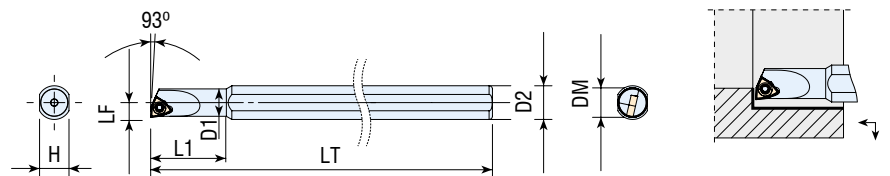
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
R12H-SVJCR/L-11	11	100	7	13	VC.T1103..	TDA-018	-	-	LLT-8
R16M-SVJCR/L-11	14.8	105	11	20					
R20P-SVJCR/L-11	18.3	170	13	25					

**SWLCR/L - INT 95°**



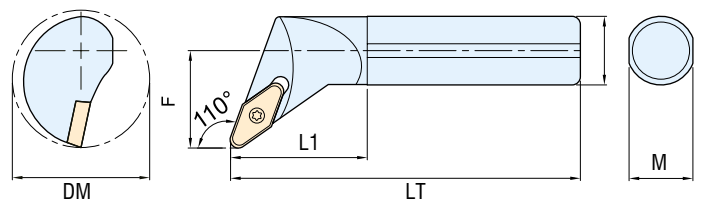
REFERENCIA	M	LT	LF	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	LLAVE
S0806H-SWLCR/L-03	7.3	100	4	8	WC..0302..	TDA-016	-	-	LLT-8
S1008K-SWLCR/L-03	9	125	6	10		TDA-017			

**SWUBR/L - INT 93°**



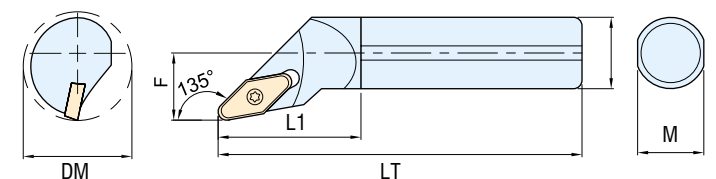
REFERENCIA	H	LT	LF	D2	D1	L1	DM	INSERTO	TORNILLO AMARRE	LLAVE
S1006H-SWUBR/L-06	7.3	100	3	10	5	18	6	WBG060102-L	TDA-004	LLT-6
S0855H-SWUBR/L-06	7.3	100	2.75	8	5	18	5.7		TDA-006	
S0807H-SWUBR/L-06	7.3	100	3.5	8	6.5	18	7			

**SVXCR - INT 110°**



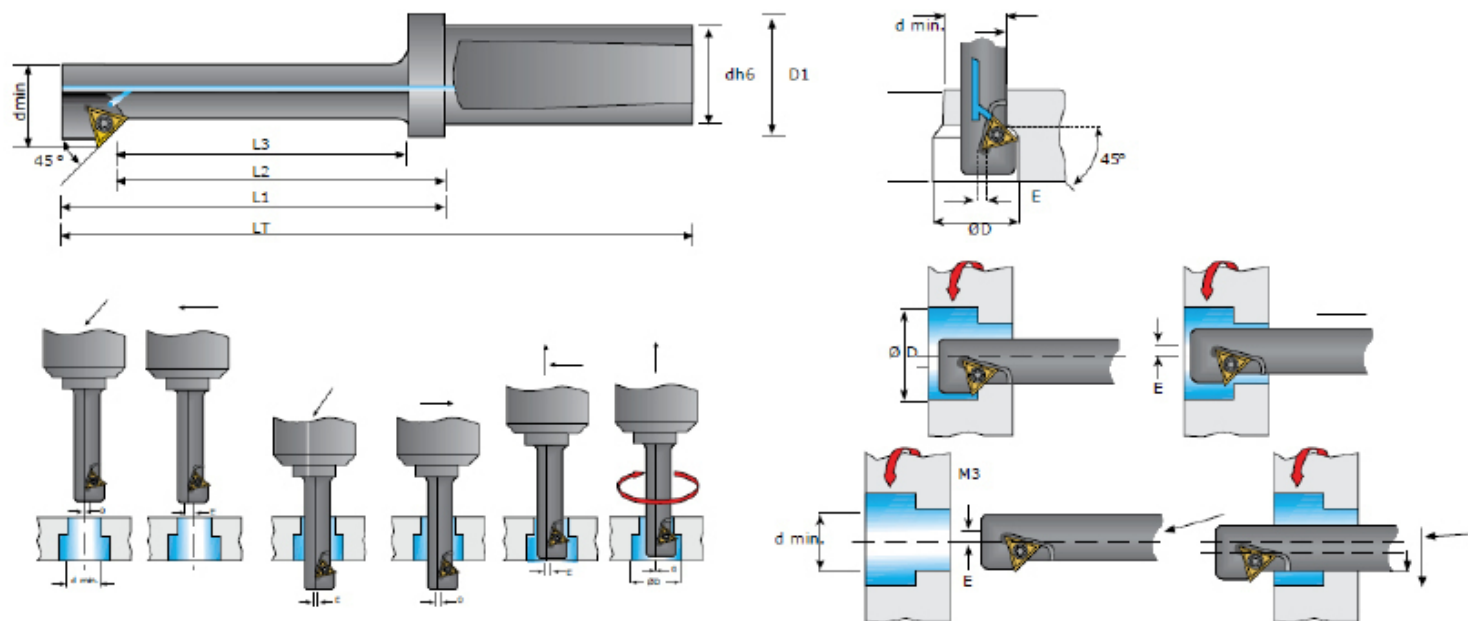
REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
S25N-SVXCR-VC22-A125	25	160	50	35.5	23	-	50	VC..2205	TDA-144	LLT-20

**SVXCR - INT 135°**



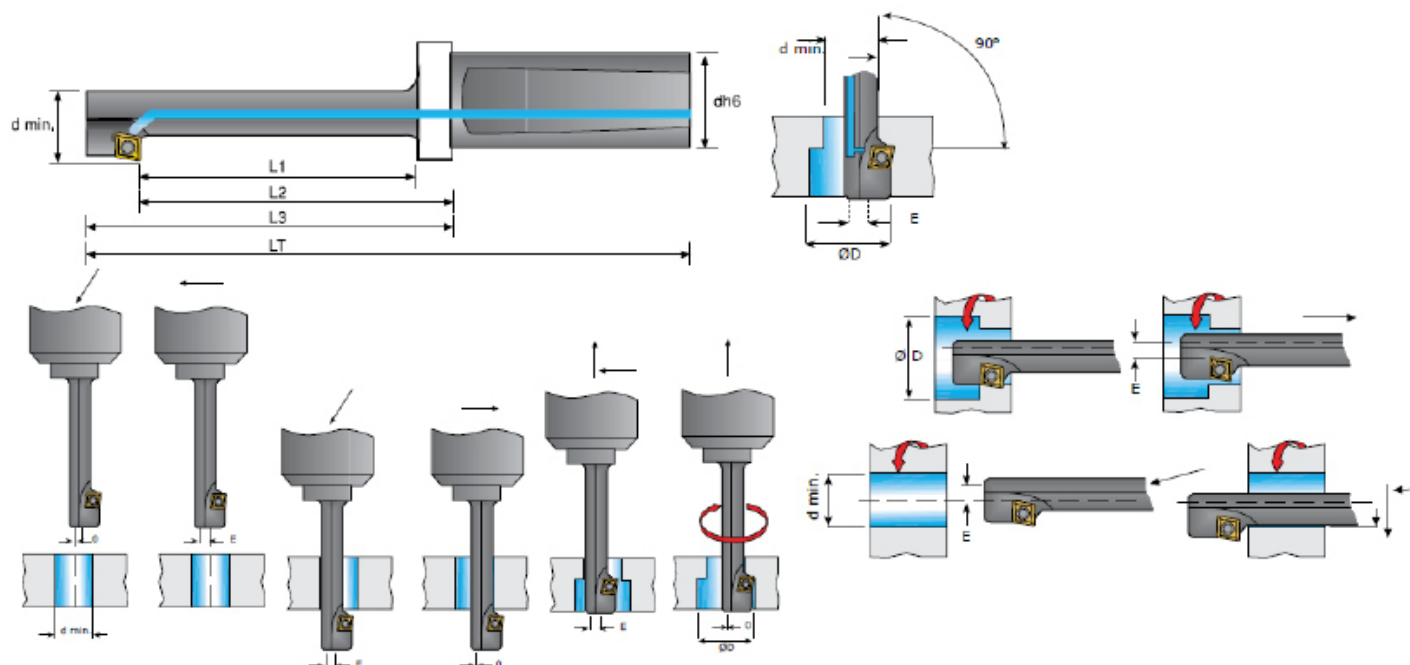
REFERENCIA	D	LT	L1	F	M	K°	DM	INSERTO	TORNILLO AMARRE	LLAVE
S25N-SVXCR-VC22-A100	25	160	50	23.5	23	-	38	VC..2205	TDA-144	LLT-20

**Portaherramientas para Chaflán 45° Int/Ext**



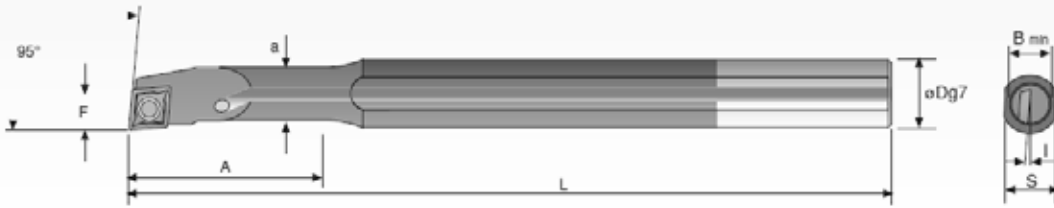
Referencia	D	dmin	dh6	L1	L2	L3	LT	D1	E	Para Placa	Tornillo Placa
PTED15-T08	15	10	20	55	42	35	105	25	2.70	TCMT0802	TDA-103
PTED20-T08	20	14	20	60	47	40	110	25	3.20	TCMT0802	TDA-103
PTED23-T11	23	17	20	70	57	50	120	25	3.20	TCMT1102	TDA-099
PTED27-T11	27	21	20	90	77	70	140	25	3.20	TCMT1102	TDA-099
PTED31-T11	31	24	20	100	87	80	150	25	3.70	TCMT1102	TDA-099

**Portaherramientas para Mecanizado Int/Ext**



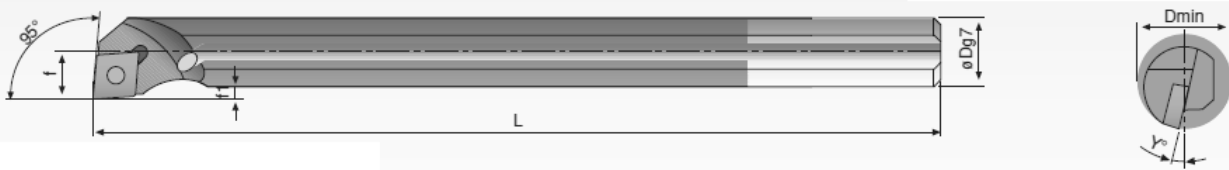
Referencia	D	dmin	dh6	L1	L2	L3	LT	D1	E	Para Placa	Tornillo Placa
PTED18-C06	18	10.5	20	40	47	62	112	4	NO	CCMT060204	TDA-099
PTED20-C06	20	13	20	45	52	67	117	3.75	SI	CCMT060204	TDA-099
PTED24-C06	24	15	20	50	57	72	122	4.75	SI	CCMT060204	TDA-099
PTED26-C06	26	17	20	60	67	82	132	5	SI	CCMT060204	TDA-099
PTED30-C06	30	19	20	65	77	92	142	6	SI	CCMT060204	TDA-099
PTED33-C09	33	21	20	75	82	102	152	6.5	SI	CCMT09T304	TDA-097

**Portaherramienta Anti-Vibratorio TIN 95° - Cuerpo Reducido - SCLCR/L**



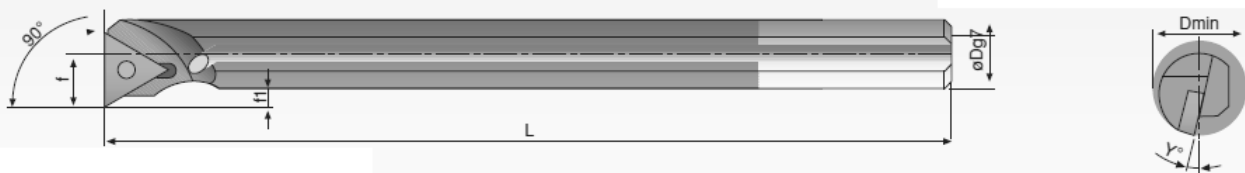
Referencia	ØDg7	a	L	F	B	A	I	S	Tornillo Porta	Para Placa
AR0806H-SCLCR/L-06	8	6	100	4	8	25	18	7	TDA-099	CC..0602
AR1008J-SCLCR/L-06	10	8	110	6	12	32	15	9	TDA-099	
AR1210K-SCLCR/L-06	12	10	125	7	14	38	13	11	TDA-099	
AR1612M-SCLCR/L-06	16	12	150	9	18	50	10	15	TDA-099	

**Portaherramienta Anti-Vibratorio TIN 95° - SCLCR/L**



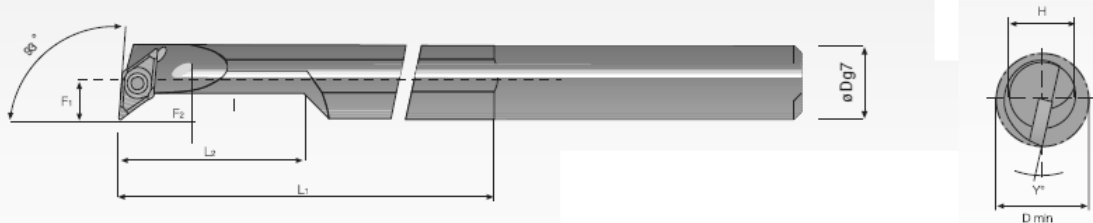
Referencia	ØDg7	f	L	f1	Dmin	Y°	Tornillo Porta	Para Placa
AR08H-SCLCR/L 06	8	4.5	100	0.5	9	15	TDA-099	CC..0602
AR10K-SCLCR/L 06	10	6.5	125	0.5	11	13	TDA-099	CC..0602
AR12M-SCLCR/L 06	12	6.5	150	0.5	13	10	TDA-099	CC..0602
AR16R-SCLCR/L 09	16	8.5	200	0.5	17	7	TDA-097	CC..09T3
AR20S-SCLCR/L 09	20	10.5	220	0.5	21	7	TDA-097	CC..09T3

**Portaherramienta Anti-Vibratorio TIN 90° - STFCL/L**



Referencia	ØDg7	f	L	f1	Dmin	Y°	Tornillo Porta	Para Placa
AR10K-STFCL/L 11	10	5.5	125	0.5	11	13	TDA-099	TC..1102
AR12M-STFCL/L 11	12	6.5	150	0.5	13	10	TDA-099	TC..1102
AR16R-STFCL/L 11	16	8.5	200	0.5	17	7	TDA-099	TC..1102
AR20S-STFCL/L 16	20	10.5	220	0.5	21	7	TDA-097	TC..16T3

**Portaherramienta Anti-Vibratorio TIN 90° - SDUCR/L**



Referencia	ØDg7	L1	L2	F1	F2	D-min	Y°	H	Tornillo Porta	Para Placa
AR1008K-SDUCR/L 07	10	125	22	6.5	4.5	12	15	9	TDA-099	DCMT0702
AR1210M-SDUCR/L 07	12	150	28	6.5	4.5	12	15	11	TDA-099	DCMT0702
AR1612R-SDUCR/L 07	16	200	36	8.5	4.5	18	10	15	TDA-099	DCMT0702
AR2016S-SDUCR/L 11	20	220	40	10.5	4.5	22	7	19	TDA-099	DCMT11T3

**Sets de Portaherramientas de interior - Placas CC..T**



Referencia	INCLUYE PORTAS	Refrigeración Interior	Incluye
<b>SET-SCLCR</b>	S08H-SCLCR-06 S10K-SCLCR-06 S12K-SCLCR-06 S16P-SCLCR-09	NO	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-SCLCL</b>	S08H-SCLCL-06 S10K-SCLCL-06 S12K-SCLCL-06 S16P-SCLCL-09	NO	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-RSCLCR</b>	R08H-SCLCR-06 R10K-SCLCR-06 R12H-SCLCR-06 R16M-SCLCR-09	SI	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-RSCLCL</b>	R08H-SCLCR-06 R10K-SCLCR-06 R12H-SCLCR-06 R16M-SCLCR-09	SI	2 tornillos recambio 2 llaves apriete 1 bote de molykote

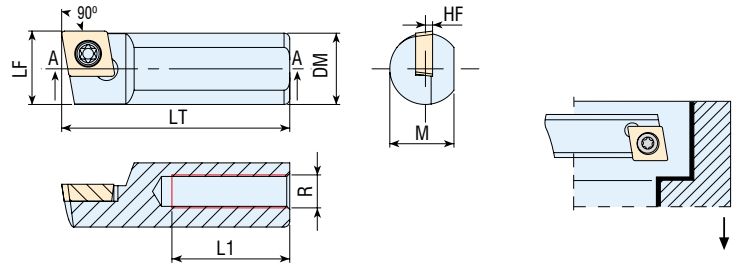
**Sets de Portaherramientas de interior - Placas DC..T**

Referencia	INCLUYE PORTAS	Refrigeración Interior	Incluye
<b>SET-SDUCR</b>	S10K-SDUCR-07 S12K-SDUCR-07 S16P-SDUCR-11	NO	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-SDUCL</b>	S10K-SDUCL-07 S12K-SDUCL-07 S16P-SDUCL-11	NO	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-RSDUCR</b>	R10H-SDUCR-07 R12H-SDUCR-07 R16M-SDUCR-11	SI	2 tornillos recambio 2 llaves apriete 1 bote de molykote
<b>SET-RSDUCL</b>	R10H-SDUCL-07 R12H-SDUCL-07 R16M-SDUCL-11	SI	2 tornillos recambio 2 llaves apriete 1 bote de molykote



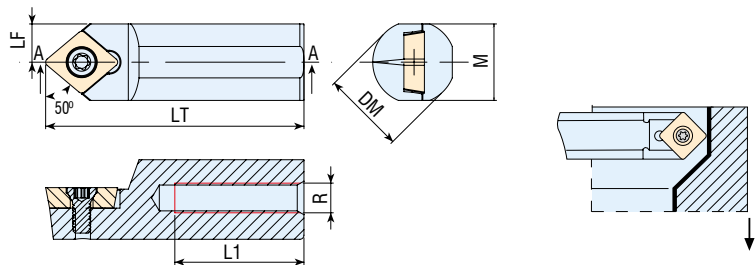


**SCACR/L - INT 90° - CARTUCHOS DE TORNEADO**



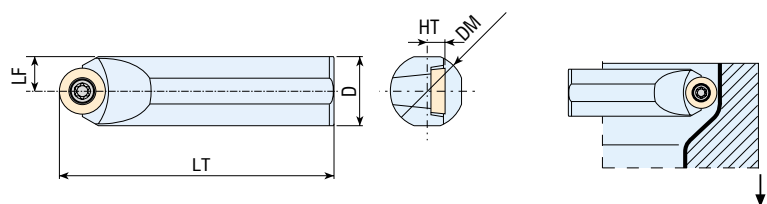
REFERENCIA	DM	M	LT	L1	LF	R	INSERTO	TORNILLO AMARRE PLACA	LLAVE
S10X-SCACR/L-06	10	9	25	10	10.3	M5X0.8	CC..0602..	TDA-018	LLT-8
S10A-SCACR/L-06	10	9	32	15	10.3	M5X0.8			
S10C-SCACR/L-06	10	9	50	25	10.3	M5X0.8			
S12B-SCACR/L-06	12	11	40	25	12.3	M5X0.8			
S12D-SCACR/L-06	12	11	60	25	12.3	M5X0.8			
S12D-SCACR/L-09	12	11	60	25	12.2	M5X0.8	CC.09T3..	TDA-046	LLT-15
S12H-SCACR/L-09	12	11	100	25	12.2	M5X0.8			
S15C-SCACR/L-09	15	14	50	25	15.3	M8X1.25			
S15E-SCACR/L-09	15	14	70	45	15.3	M8X1.25			
S15D-SCACR/L-09	15	14	60	30	15.3	M8X1.25			
S16A-SCACR/L-09	16	15	32	15	16.5	M6X1			
S16B-SCACR/L-09	16	15	40	20	16.5	M6X1			
S16C-SCACR/L-09	16	15	50	25	16.5	M6X1			
S16D-SCACR/L-09	16	15	60	30	16.5	M6X1			
S16E-SCACR/L-09	16	15	70	30	16.5	M6X1			
S16G-SCACR/L-09	16	15	90	30	16.5	M6X1			
S16H-SCACR/L-09	16	15	100	35	16.5	M6X1			
S18E-SCACR/L-09	18	17	70	30	18.5	M8X1.25			
S20E-SCACR/L-09	20	18.3	70	30	20.5	M6X1			

**SCMCN - INT 50° - CARTUCHOS DE TORNEADO**



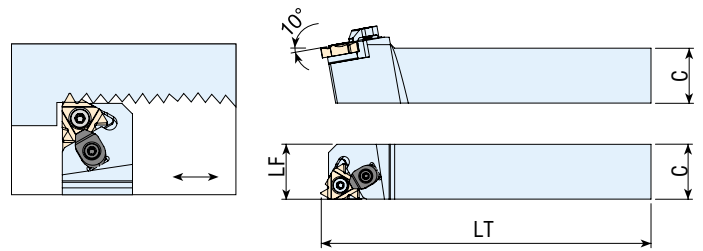
REFERENCIA	DM	M	LT	L1	LF	R	INSERTO	TORNILLO VVAMARRE PLACA	LLAVE
S10X-SCMCN-06	10	9	25	10	5	M5X0.8	CC..0602..	TDA-018	LLT-8
S12D-SCMCN-06	12	11	60	25	6	M5X0.8			
S16C-SCMCN-09	16	15	50	25	8	M6X1	CC..09T3..	TDA-049	LLT-15
S16D-SCMCN-09	16	15	60	25	8	M6X1			

**SRSCN - INT 0° - CARTUCHOS DE TORNEADO**



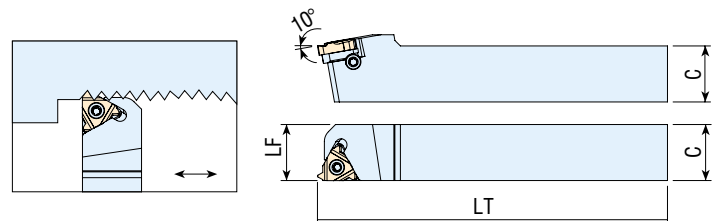
REFERENCIA	DM	D	LT	HT	LF	INSERTO	TORNILLO AMARRE PLACA	LLAVE
S12D-SRSCN-10	12	11	60	6	6	RC.10T3	TDA-047	LLT-15
S14D-SRSCN-10	14	13	60	7	7		TDA-049	
S16D-SRSCN-10	16	15	60	8	8			

**ROSCADO EXTERIOR - NER/NEL**



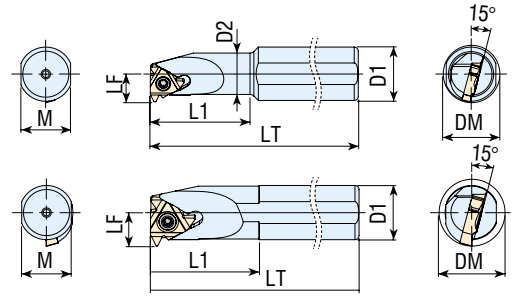
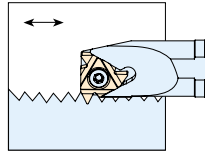
REFERENCIA	C	LF	WF	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	BRIDA AMARRE PLACA	TORNILLO AMARRE BRIDA	LLAVE
NER/L0808-E11	8	70	11	11ER-11EL	TDA-018	-	-	-	-	LLT-8
NER/L1010-E11	10	70	11							
NER/L1212-F11	12	80	12							
NER/L1616-H11	16	100	16							
NER/L2020-H11	20	100	20							
NER/L1616-H16	16	100	16	16ER-16EL	TDA-051	PB-005	TPB-011	BDA-18	TDA-066	LLT-15
NER/L2020-K16	20	125	20							
NER/L2525-M16	25	150	25							
NER/L3232-P16	32	170	32							
NER/L2525-M22	25	150	25	22ER-22EL	TDA-074	PB-006	TPB-012	BDA-18	TDA-066	LLT-20
NER/L3232-P22	32	170	32							
NER/L4040-S22	40	250	40							

**ROSCADO EXTERIOR - PLACA BASE 1.5°**



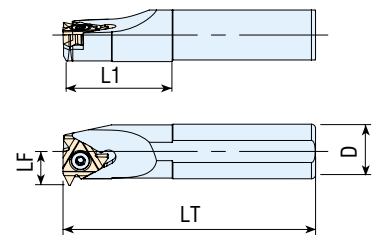
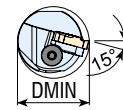
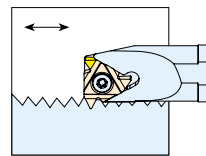
REFERENCIA	H / B	LF	WF	INSERTO	TORNILLO AMARRE	PLACA BASE DERECHA	PLACA BASE IZQUIERDA	TORNILLO LATERAL	ARANDELA	LLAVE
NXER/L1616-H16	16	100	16	16..	TDA-091	PB-007	PB-008	TEA-041	MDP-011	LLT-10
NXER/L2020-K16	20	125	20							
NXER/L2525-M16	25	150	25							
NXER/L3232-P16	32	170	32							
NXER/L2525-M22	25	150	25	22..	TDA-093	PB-009	PB-010	TEA-042	MDP-012	LLT-20
NXER/L3232-P22	32	170	32							
NXER/L4040-S22	40	250	40							
NXER/L2525-M27	25	150	25	27..	TDA-086	PB-011	PB-012	TEA-043	MDP-013	LLT-20
NXER/L3232-P27	32	170	32							
NXER/L4040-S27	40	250	40							

**ROSCADO INTERIOR - NIR/NIL**



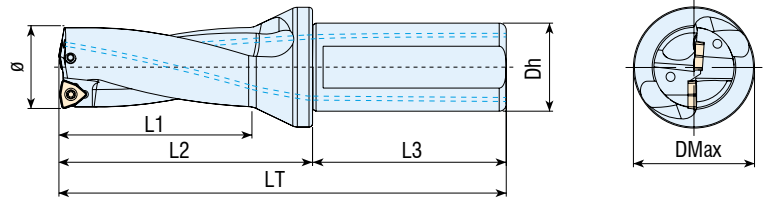
REFERENCIA	D1	D2	LT	LF	L1	DM	INSERTO	TORNILLO AMARRE	PLACA BASE	TORNILLO PLACA BASE	BRIDA AMARRE PLACA	TORNILLO AMARRE BRIDA	LLAVE
NIR/LS12-H06	12	5	100	4.3	15	6.4	06..	TDA-005	-	-	-	-	LLT-6
NIR/LS16-H06	16	5	100	4.3	15	6.4							
NIR/LS16-M08	16	7	150	5.3	18	7.8	08..	TDA-008	-	-	-	-	LLT-7
NIR/LS10-H11	10	10	100	7.4	-	12	11..	TDA-018	-	-	-	-	LLT-8
NIR/LS12-K11	12	12	125	8.4	-	16							
NIR/LS1610-M11	16	10	150	7.4	25	12							
NIR/LS1613-M11	16	13	150	8.9	32	15							
NIR/LS16-M11	16	16	150	11.7	-	19							
NIR/LS1613-M16	16	13	150	10.2	32	16	16..	TDA-047	-	-	-	-	LLT-15
NIR/LS16-M16	16	16	150	11.7	-	19							
NIR/LS2016-P16	20	16	170	11.7	40	19		TDA-049					
NIR/LS20-P16	20	20	170	13.7	-	24							
NIR/LS25-R16	25	25	200	16.2	-	29		TDA-051	PB-005	TPB-013	BDA-18	TDA-066	LLT-15
NIR/LS32-S16	32	32	250	19.7	-	36							
NIR/LS40-T16	40	40	300	23.7	-	44				TPB-011			
NIR/LS50-U16	50	50	350	28.7	-	54							
NIR/LS20-P22	20	20	170	15.7	-	24	22..	TDA-079	-	-	-	-	LLT-20
NIR/LS25-R22	25	25	200	18.1	-	29		TDA-074	PB-006	TPB-014	BDA-18	TDA-066	LLT-20
NIR/LS32-S22	32	32	250	21.6	-	38							
NIR/LS40-T22	40	40	300	25.6	-	46				TPB-012			
NIR/LS50-U22	50	50	350	30.6	-	58							

**ROSCADO INTERIOR - PLACA BASE 1.5°**



REFERENCIA	D	LF	LT	DM	INSERTO	TORNILLO AMARRE	PLACA BASE DERECHA	PLACA BASE IZQUIERDA	TORNILLO LATERAL	ARANDELA	LLAVE
NXIR/LS25-R16	25	16.2	200	29	16..	TDA-091	PB-007	PB-008	TEA-041	MDP-011	LLT-10
NXIR/LS32-S16	32	19.7	250	36							
NXIR/LS40-T16	40	23.7	300	44							
NXIR/LS50-U16	50	28.7	350	54							
NXIR/LS25-R22	25	18.1	200	29	22..	TDA-093	PB-009	PB-010	TEA-042	MDP-012	LLT-20
NXIR/LS32-S22	32	21.6	250	38							
NXIR/LS40-T22	40	25.6	300	46							
NXIR/LS50-U22	50	30.6	350	58							
NXIR/LS32-S27	32	22.6	250	40	27..	TDA-085	PB-011	PB-012	TEA-043	MDP-013	LLT-20
NXIR/LS40-T27	40	26.6	300	48		TDA-086					
NXIR/LS50-U27	50	31.6	350	58							

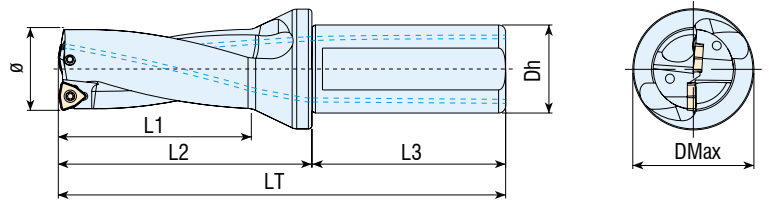
**Porta Taladrado 2XD - Placa WCM..**



REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-16XD2-WC03	16	25	34	110	32	54	56	WCM.030208	TDA-014	LLT-8
NPDT-16.5XD2-WC03	16.5	25	34	110	32	54	56			
NPDT-17XD2-WC03	17	25	34	112	34	56	56			
NPDT-17.5XD2-WC03	17.5	25	34	112	34	56	56			
NPDT-18XD2-WC03	18	25	34	114	36	58	56			
NPDT-18.5XD2-WC03	18.5	25	34	114	36	58	56			
NPDT-19XD2-WC03	19	25	34	116	38	60	56			
NPDT-19.5XD2-WC03	19.5	25	34	116	38	60	56			
NPDT-20XD2-WC04	20	25	34	118	40	62	56	WCM.040208	TDA-014	LLT-8
NPDT-20.5XD2-WC04	20.5	25	34	118	40	62	56			
NPDT-21XD2-WC04	21	25	34	120	42	64	56			
NPDT-21.5XD2-WC04	21.5	25	34	120	42	64	56			
NPDT-22XD2-WC04	22	25	34	122	44	66	56			
NPDT-22.5XD2-WC04	22.5	25	34	122	44	66	56			
NPDT-23XD2-WC04	23	25	34	124	46	68	56			
NPDT-23.5XD2-WC04	23.5	25	34	124	46	68	56			
NPDT-24XD2-WC05	24	25	34	126	48	70	56	WCM.050308	TDA-027	LLT-8
NPDT-24.5XD2-WC05	24.5	25	34	126	48	70	56			
NPDT-25XD2-WC05	25	25	34	128	50	72	56			
NPDT-25.5XD2-WC05	25.5	25	34	128	50	72	56			
NPDT-26XD2-WC05	26	25	34	130	52	74	56			
NPDT-26.5XD2-WC05	26.5	25	34	130	52	74	56			
NPDT-27XD2-WC05	27	25	34	132	54	76	56			
NPDT-27.5XD2-WC05	27.5	25	34	132	54	76	56			
NPDT-28XD2-WC05	28	25	34	134	56	78	56			
NPDT-28.5XD2-WC05	28.5	25	34	134	56	78	56			
NPDT-29XD2-WC05	29	25	34	136	58	80	56			
NPDT-29.5XD2-WC05	29.5	25	34	136	58	80	56			
NPDT-30XD2-WC06	30	32	44	147	60	87	60	WCM.06T308	TDA-044	LLT-10
NPDT-31XD2-WC06	31	32	44	149	62	89	60			
NPDT-32XD2-WC06	32	32	44	151	64	91	60			
NPDT-33XD2-WC06	33	32	44	153	66	93	60			
NPDT-34XD2-WC06	34	32	44	155	68	95	60			
NPDT-35XD2-WC06	35	32	44	157	70	97	60			
NPDT-36XD2-WC06	36	32	44	159	72	99	60			
NPDT-37XD2-WC06	37	32	44	161	74	101	60			
NPDT-38XD2-WC06	38	32	44	163	76	103	60			
NPDT-39XD2-WC06	39	32	44	165	78	105	60			
NPDT-40XD2-WC06	40	32	44	167	80	107	60			
NPDT-41XD2-WC06	41	32	44	169	82	109	60			
NPDT-42XD2-WC06	42	32	44	171	84	111	60			
NPDT-43XD2-WC06	43	32	44	173	86	113	60			
NPDT-44XD2-WC06	44	32	44	175	88	115	60			

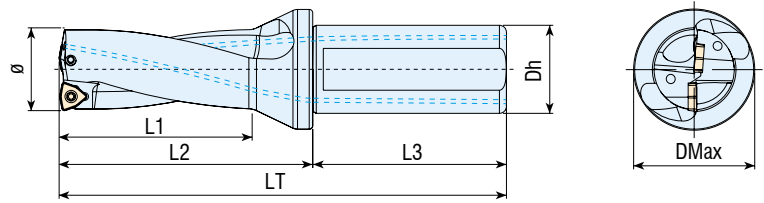
**Porta Taladrado 2XD - Placa WCM.. (ø45 A 60 mm)**

REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-45XD2-WC08	45	40	54	192	90	122	70	WCM.080412	TDA-066	LLT-15
NPDT-46XD2-WC08	46	40	54	194	92	124	70			
NPDT-47XD2-WC08	47	40	54	196	94	126	70			
NPDT-48XD2-WC08	48	40	54	198	96	128	70			
NPDT-49XD2-WC08	49	40	54	200	98	130	70			
NPDT-50XD2-WC08	50	40	54	202	100	132	70			
NPDT-51XD2-WC08	51	40	54	204	102	134	70			
NPDT-52XD2-WC08	52	40	54	206	104	136	70			
NPDT-53XD2-WC08	53	40	54	208	106	138	70			
NPDT-54XD2-WC08	54	40	54	210	108	140	70			
NPDT-55XD2-WC08	55	40	54	212	110	142	70			
NPDT-56XD2-WC08	56	40	64	214	112	144	70			
NPDT-57XD2-WC08	57	40	64	216	114	146	70			
NPDT-58XD2-WC08	58	40	64	218	116	148	70			
NPDT-59XD2-WC08	59	40	64	220	118	150	70			
NPDT-60XD2-WC08	60	40	64	222	120	152	70			

**Porta Taladrado 3XD - Placa WCM.. (ø16 A 29 mm)**


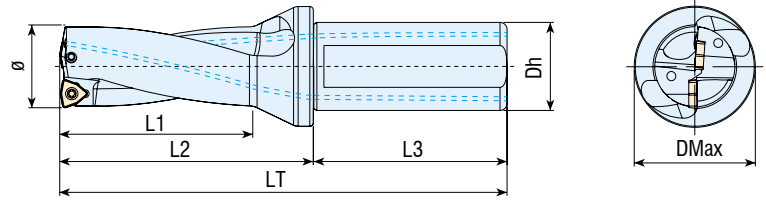
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-16XD3-WC03	16	25	34	126	48	70	56	WCM.030208	TDA-014	LLT-8
NPDT-16.5XD3-WC03	16.5	25	34	126	48	70	56			
NPDT-17XD3-WC03	17	25	34	129	51	73	56			
NPDT-17.5XD3-WC03	17.5	25	34	129	51	73	56			
NPDT-18XD3-WC03	18	25	34	132	54	76	56			
NPDT-18.5XD3-WC03	18.5	25	34	132	54	76	56			
NPDT-19XD3-WC03	19	25	34	135	57	79	56			
NPDT-19.5XD3-WC04	19.5	25	34	135	57	79	56			
NPDT-20XD3-WC04	20	25	34	138	60	82	56	WCM.040208	TDA-014	LLT-8
NPDT-20.5XD3-WC04	20.5	25	34	138	60	82	56			
NPDT-21XD3-WC04	21	25	34	141	63	85	56			
NPDT-21.5XD3-WC04	21.5	25	34	141	63	85	56			
NPDT-22XD3-WC04	22	25	34	144	66	88	56			
NPDT-22.5XD3-WC04	22.5	25	34	144	66	88	56			
NPDT-23XD3-WC04	23	25	34	147	69	91	56			
NPDT-23.5XD3-WC04	23.5	25	34	147	69	91	56			
NPDT-24XD3-WC05	24	25	34	150	72	94	56	WCM.050308	TDA-027	LLT-8
NPDT-24.5XD3-WC05	24.5	25	34	150	72	94	56			
NPDT-25XD3-WC05	25	25	34	153	75	97	56			
NPDT-25.5XD3-WC05	25.5	25	34	153	75	97	56			
NPDT-26XD3-WC05	26	25	34	156	78	100	56			
NPDT-26.5XD3-WC05	26.5	25	34	156	78	100	56			
NPDT-27XD3-WC05	27	25	34	159	81	103	56			
NPDT-27.5XD3-WC05	27.5	25	34	159	81	103	56			
NPDT-28XD3-WC05	28	25	34	162	84	106	56			
NPDT-28.5XD3-WC05	28.5	25	34	162	84	106	56			
NPDT-29XD3-WC05	29	25	34	165	87	109	56			
NPDT-29.5XD3-WC05	29.5	25	34	165	87	109	56			

**Porta Taladrado 3XD - Placa WCM.. (ø30 A 60 mm)**



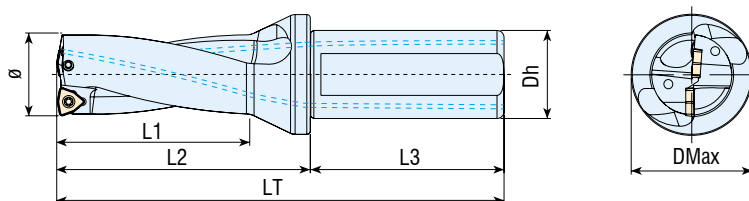
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-30XD3-WC06	30	32	44	177	90	117	60	WCM.06T308	TDA-044	LLT-10
NPDT-30.5XD3-WC06	30.5	32	44	177	90	117	60			
NPDT-31XD3-WC06	31	32	44	180	93	120	60			
NPDT-31.5XD3-WC06	31.5	32	44	180	93	120	60			
NPDT-32XD3-WC06	32	32	44	183	96	123	60			
NPDT-32.5XD3-WC06	32.5	32	44	183	96	123	60			
NPDT-33XD3-WC06	33	32	44	186	99	126	60			
NPDT-33.5XD3-WC06	33.5	32	44	186	99	126	60			
NPDT-34XD3-WC06	34	32	44	189	102	129	60			
NPDT-34.5XD3-WC06	34.5	32	44	189	102	129	60			
NPDT-35XD3-WC06	35	32	44	192	105	132	60			
NPDT-35.5XD3-WC06	35.5	32	44	192	105	132	60			
NPDT-36XD3-WC06	36	32	44	195	108	135	60			
NPDT-36.5XD3-WC06	36.5	32	44	195	108	135	60			
NPDT-37XD3-WC06	37	32	44	198	111	138	60			
NPDT-37.5XD3-WC06	37.5	32	44	198	111	138	60			
NPDT-38XD3-WC06	38	32	44	201	114	141	60			
NPDT-38.5XD3-WC06	38.5	32	44	201	114	141	60			
NPDT-39XD3-WC06	39	32	44	204	117	144	60			
NPDT-39.5XD3-WC06	39.5	32	44	204	117	144	60			
NPDT-40XD3-WC06	40	32	44	207	120	147	60			
NPDT-40.5XD3-WC06	40.5	32	44	207	120	147	60			
NPDT-41XD3-WC06	41	32	44	210	123	150	60			
NPDT-41.5XD3-WC06	41.5	32	44	210	123	150	60			
NPDT-42XD3-WC06	42	32	44	213	126	153	60			
NPDT-42.5XD3-WC06	42.5	32	44	213	126	153	60			
NPDT-43XD3-WC06	43	32	44	216	129	156	60			
NPDT-43.5XD3-WC06	43.5	32	44	216	129	156	60			
NPDT-44XD3-WC06	44	32	44	219	132	159	60			
NPDT-44.5XD3-WC06	44.5	32	44	219	132	159	60			
NPDT-45XD3-WC08	45	40	54	237	135	167	70	WCM.080412	TDA-066	LLT-15
NPDT-45.5XD3-WC08	45.5	40	54	237	135	167	70			
NPDT-46XD3-WC08	46	40	54	240	138	170	70			
NPDT-47XD3-WC08	47	40	54	243	141	173	70			
NPDT-48XD3-WC08	48	40	54	246	144	176	70			
NPDT-49XD3-WC08	49	40	54	249	147	179	70			
NPDT-50XD3-WC08	50	40	54	252	150	182	70			
NPDT-51XD3-WC08	51	40	54	255	153	185	70			
NPDT-52XD3-WC08	52	40	54	258	156	188	70			
NPDT-53XD3-WC08	53	40	54	261	159	191	70			
NPDT-54XD3-WC08	54	40	54	264	162	194	70			
NPDT-55XD3-WC08	55	40	54	267	165	197	70			
NPDT-56XD3-WC08	56	40	64	270	168	200	70			
NPDT-57XD3-WC08	57	40	64	273	171	203	70			
NPDT-58XD3-WC08	58	40	64	276	174	206	70			
NPDT-59XD3-WC08	59	40	64	279	177	209	70			
NPDT-60XD3-WC08	60	40	64	282	180	212	70			



**Porta Taladrado 4XD - Placa WCM..**


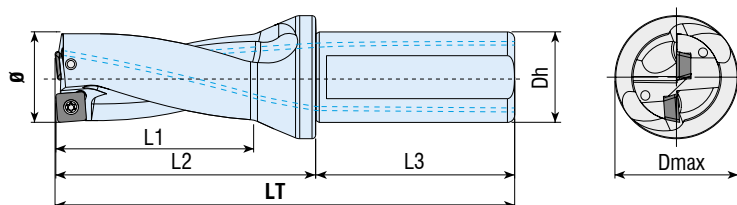
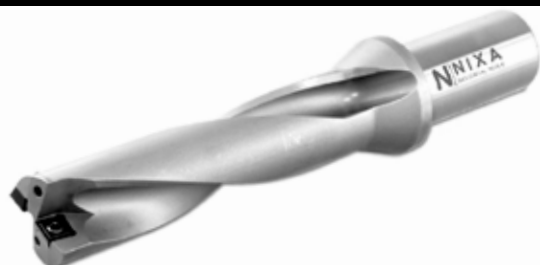
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-16XD4-WC03	16	25	34	142	64	86	56	WCM.030208	TDA-014	LLT-8
NPDT-16.5XD4-WC03	16.5	25	34	142	64	86	56			
NPDT-17XD4-WC03	17	25	34	146	68	90	56			
NPDT-17.5XD4-WC03	17.5	25	34	146	68	90	56			
NPDT-18XD4-WC03	18	25	34	150	72	94	56			
NPDT-18.5XD4-WC03	18.5	25	34	150	72	94	56			
NPDT-19XD4-WC03	19	25	34	154	76	98	56			
NPDT-19.5XD4-WC03	19.5	25	34	154	76	98	56			
NPDT-20XD4-WC04	20	25	34	158	80	102	56	WCM.040208	TDA-014	LLT-8
NPDT-20.5XD4-WC04	20.5	25	34	158	80	102	56			
NPDT-21XD4-WC04	21	25	34	162	84	106	56			
NPDT-21.5XD4-WC04	21.5	25	34	162	84	106	56			
NPDT-22XD4-WC04	22	25	34	166	88	110	56			
NPDT-22.5XD4-WC04	22.5	25	34	166	88	110	56			
NPDT-23XD4-WC04	23	25	34	170	92	114	56			
NPDT-23.5XD4-WC04	23.5	25	34	170	92	114	56			
NPDT-24XD4-WC05	24	25	34	174	96	118	56	WCM.050308	TDA-027	LLT-8
NPDT-24.5XD4-WC05	24.5	25	34	174	96	118	56			
NPDT-25XD4-WC05	25	25	34	178	100	122	56			
NPDT-25.5XD4-WC05	25.5	25	34	178	100	122	56			
NPDT-26XD4-WC05	26	25	34	182	104	126	56			
NPDT-26.5XD4-WC05	26.5	25	34	182	104	126	56			
NPDT-27XD4-WC05	27	25	34	186	108	130	56			
NPDT-27.5XD4-WC05	27.5	25	34	186	108	130	56			
NPDT-28XD4-WC05	28	25	34	190	112	134	56			
NPDT-28.5XD4-WC05	28.5	25	34	190	112	134	56			
NPDT-29XD4-WC05	29	25	34	194	116	138	56			
NPDT-29.5XD4-WC05	29.5	25	34	194	116	138	56			
NPDT-30XD4-WC06	30	32	44	207	120	147	60	WCM.06T308	TDA-044	LLT-10
NPDT-31XD4-WC06	31	32	44	211	124	151	60			
NPDT-32XD4-WC06	32	32	44	215	128	155	60			
NPDT-33XD4-WC06	33	32	44	219	132	159	60			
NPDT-33.5XD4-WC06	33.5	32	44	219	132	159	60			
NPDT-34XD4-WC06	34	32	44	223	136	163	60			
NPDT-35XD4-WC06	35	32	44	227	140	167	60			
NPDT-36XD4-WC06	36	32	44	231	144	171	60			
NPDT-37XD4-WC06	37	32	44	235	148	175	60			
NPDT-38XD4-WC06	38	32	44	239	152	179	60			
NPDT-38.5XD4-WC06	38.5	32	44	239	152	179	60			
NPDT-39XD4-WC06	39	32	44	243	156	183	60			
NPDT-40XD4-WC06	40	32	44	247	160	187	60			
NPDT-41XD4-WC06	41	32	44	251	164	191	60			
NPDT-42XD4-WC06	42	32	44	255	168	195	60			
NPDT-43XD4-WC06	43	32	44	259	172	199	60			
NPDT-44XD4-WC06	44	32	44	263	176	203	60			
NPDT-45XD4-WC08	45	40	54	282	180	212	70	WCM.080412	TDA-066	LLT-15
NPDT-46XD4-WC08	46	40	54	286	184	216	70			
NPDT-47XD4-WC08	47	40	54	290	188	220	70			
NPDT-48XD4-WC08	48	40	54	294	192	224	70			
NPDT-49XD4-WC08	49	40	54	298	196	228	70			
NPDT-50XD4-WC08	50	40	54	302	200	232	70			

**Porta Taladrado 5XD - Placa WCM..**

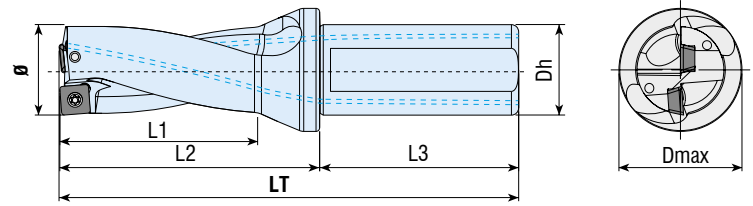


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-20XD5-WC04	20	25	34	178	100	122	56	WCM.040208	TDA-014	LLT-8
NPDT-21XD5-WC04	21	25	34	183	105	127	56			
NPDT-22XD5-WC04	22	25	34	188	110	132	56			
NPDT-23XD5-WC04	23	25	34	193	115	137	56			
NPDT-24XD5-WC05	24	25	34	198	120	142	56	WCM.050308	TDA-027	LLT-8
NPDT-25XD5-WC05	25	25	34	203	125	147	56			
NPDT-26XD5-WC05	26	25	34	208	130	152	56			
NPDT-27XD5-WC05	27	25	34	213	135	157	56			
NPDT-28XD5-WC05	28	25	34	218	140	162	56			
NPDT-29XD5-WC05	29	25	34	223	145	167	56			
NPDT-30XD5-WC06	30	32	44	237	150	177	60	WCM.06T308	TDA-044	LLT-10
NPDT-31XD5-WC06	31	32	44	242	155	182	60			
NPDT-32XD5-WC06	32	32	44	247	160	187	60			
NPDT-33XD5-WC06	33	32	44	252	165	192	60			
NPDT-34XD5-WC06	34	32	44	257	170	197	60			
NPDT-35XD5-WC06	35	32	44	262	175	202	60			
NPDT-37XD5-WC06	37	32	44	272	185	212	60			
NPDT-38XD5-WC06	38	32	44	277	190	217	60			

**Porta Taladrado 2XD - Placa SP.. (Ø12.5 A 21.5 mm)**

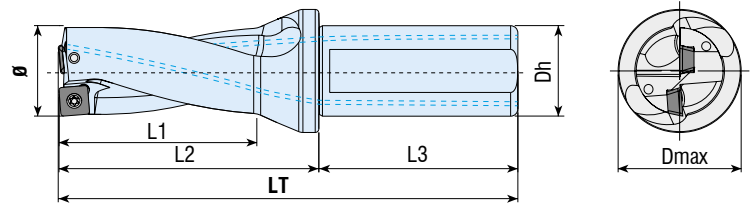


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-12.5XD2-SP05	12.5	20	25	96	24	46	50	SP..050204	TDA-006	LLT-6
NPDT-13XD2-SP05	13	20	25	98	26	48	50			
NPDT-13.5XD2-SP05	13.5	20	25	98	26	48	50			
NPDT-14XD2-SP05	14	20	25	100	28	50	50			
NPDT-14.5XD2-SP05	14.5	20	25	100	28	50	50			
NPDT-15XD2-SP05	15	20	25	102	30	52	50			
NPDT-15.5XD2-SP06	15.5	20	25	102	30	52	50	SP..060204	TDA-008	LLT-7
NPDT-16XD2-SP06	16	25	34	110	32	54	56			
NPDT-16.5XD2-SP06	16.5	25	34	110	32	54	56			
NPDT-17XD2-SP06	17	25	34	112	34	56	56			
NPDT-17.5XD2-SP06	17.5	25	34	112	34	56	56			
NPDT-18XD2-SP06	18	25	34	114	36	58	56			
NPDT-18.5XD2-SP06	18.5	25	34	114	36	58	56			
NPDT-19XD2-SP06	19	25	34	116	38	60	56			
NPDT-19.5XD2-SP06	19.5	25	34	116	38	60	56			
NPDT-20XD2-SP06	20	25	34	118	40	62	56			
NPDT-20.5XD2-SP06	20.5	25	34	118	40	62	56			
NPDT-21XD2-SP06	21	25	34	120	42	64	56			
NPDT-21.5XD2-SP06	21.5	25	34	120	42	64	56			

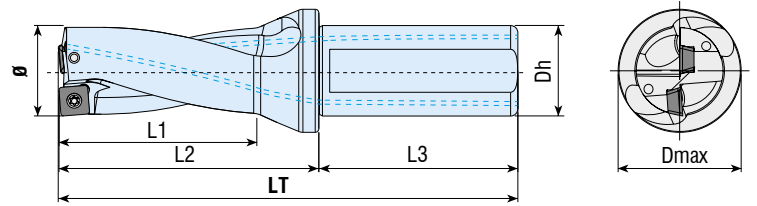
**Porta Taladrado 2XD - Placa SP.. (ø22 A 50 mm)**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-22XD2-SP07	22	25	34	122	44	66	56	SP..07T308	TDA-014	LLT-8
NPDT-22.5XD2-SP07	22.5	25	34	122	44	66	56			
NPDT-23XD2-SP07	23	25	34	124	46	68	56			
NPDT-23.5XD2-SP07	23.5	25	34	124	46	68	56			
NPDT-24XD2-SP07	24	25	34	126	48	70	56			
NPDT-24.5XD2-SP07	24.5	25	34	126	48	70	56			
NPDT-25XD2-SP07	25	25	34	128	50	72	56			
NPDT-25.5XD2-SP07	25.5	25	34	128	50	72	56			
NPDT-26XD2-SP07	26	25	34	130	52	74	56			
NPDT-26.5XD2-SP07	26.5	25	34	130	52	74	56			
NPDT-27XD2-SP07	27	25	34	132	54	76	56			
NPDT-27.5XD2-SP07	27.5	25	34	132	54	76	56			
NPDT-28XD2-SP09	28	25	34	134	56	78	56	SP..090408	TDA-047	LLT-15
NPDT-28.5XD2-SP09	28.5	25	34	134	56	78	56			
NPDT-29XD2-SP09	29	25	34	136	58	80	56			
NPDT-29.5XD2-SP09	29.5	25	34	136	58	80	56			
NPDT-30XD2-SP09	30	32	44	147	60	87	60			
NPDT-31XD2-SP09	31	32	44	149	62	89	60			
NPDT-32XD2-SP09	32	32	44	151	64	91	60			
NPDT-33XD2-SP09	33	32	44	153	66	93	60			
NPDT-34XD2-SP11	34	32	44	155	68	95	60	SP..110408	TDA-066	LLT-15
NPDT-35XD2-SP11	35	32	44	157	70	97	60			
NPDT-36XD2-SP11	36	32	44	159	72	99	60			
NPDT-37XD2-SP11	37	32	44	161	74	101	60			
NPDT-38XD2-SP11	38	32	44	163	76	103	60			
NPDT-39XD2-SP11	39	32	44	165	78	105	60			
NPDT-40XD2-SP11	40	32	44	167	80	107	60			
NPDT-41XD2-SP11	41	32	44	169	82	109	60			
NPDT-42XD2-SP14	42	32	44	171	84	111	60	SP..140512	TDA-082	LLT-20
NPDT-43XD2-SP14	43	32	44	173	86	113	60			
NPDT-44XD2-SP14	44	32	44	175	88	115	60			
NPDT-45XD2-SP14	45	40	54	192	90	122	70			
NPDT-46XD2-SP14	46	40	54	194	92	124	70			
NPDT-47XD2-SP14	47	40	54	196	94	126	70			
NPDT-48XD2-SP14	48	40	54	198	96	128	70			
NPDT-49XD2-SP14	49	40	54	200	98	130	70			
NPDT-50XD2-SP14	50	40	54	202	100	132	70			

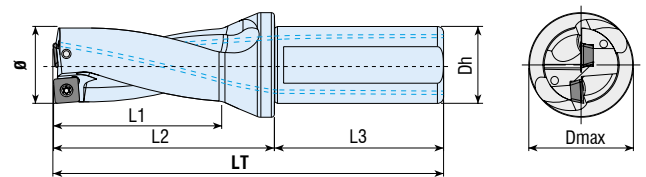
**Porta Taladrado 3XD - Placa SP.. (ø12.5 A 37.5 mm)**



REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-12.5XD3-SP05	12.5	20	25	108	36	58	50	SP..050204	TDA-006	LLT-6
NPDT-13XD3-SP05	13	20	25	111	39	61	50			
NPDT-13.5XD3-SP05	13.5	20	25	111	39	61	50			
NPDT-14XD3-SP05	14	20	25	114	42	64	50			
NPDT-14.5XD3-SP05	14.5	20	25	114	42	64	50			
NPDT-15XD3-SP05	15	20	25	117	45	67	50			
NPDT-15.5XD3-SP06	15.5	20	25	117	45	67	50	SP..060204	TDA-008	LLT-7
NPDT-16XD3-SP06	16	25	34	126	48	70	56			
NPDT-16.5XD3-SP06	16.5	25	34	126	48	70	56			
NPDT-17XD3-SP06	17	25	34	129	51	73	56			
NPDT-17.5XD3-SP06	17.5	25	34	129	51	73	56			
NPDT-18XD3-SP06	18	25	34	132	54	76	56			
NPDT-18.5XD3-SP06	18.5	25	34	132	54	76	56			
NPDT-19XD3-SP06	19	25	34	135	57	79	56			
NPDT-19.5XD3-SP06	19.5	25	34	135	57	79	56			
NPDT-20XD3-SP06	20	25	34	138	60	82	56			
NPDT-20.5XD3-SP06	20.5	25	34	138	60	82	56			
NPDT-21XD3-SP06	21	25	34	141	63	85	56			
NPDT- 21.5 XD3-SP06	21.5	25	34	141	63	85	56			
NPDT-22XD3-SP07	22	25	34	144	66	88	56	SP..07T308	TDA-014	LLT-8
NPDT-22.5XD3-SP07	22.5	25	34	144	66	88	56			
NPDT-23XD3-SP07	23	25	34	147	69	91	56			
NPDT-23.5XD3-SP07	23.5	25	34	147	69	91	56			
NPDT-24XD3-SP07	24	25	34	150	72	94	56			
NPDT-24.5XD3-SP07	24.5	25	34	150	72	94	56			
NPDT-25XD3-SP07	25	25	34	153	75	97	56			
NPDT-25.5XD3-SP07	25.5	25	34	153	75	97	56			
NPDT-26XD3-SP07	26	25	34	156	78	100	56			
NPDT-26.5XD3-SP07	26.5	25	34	156	78	100	56			
NPDT-27XD3-SP07	27	25	34	159	81	103	56			
NPDT- 27.5 XD3-SP07	27.5	25	34	159	81	103	56			
NPDT-28XD3-SP09	28	25	34	162	84	106	56	SP..090408	TDA-047	LLT-15
NPDT-28.5XD3-SP09	28.5	25	34	162	84	106	56			
NPDT-29XD3-SP09	29	25	34	165	87	109	56			
NPDT-29.5XD3-SP09	29.5	25	34	165	87	109	56			
NPDT-30XD3-SP09	30	32	44	177	90	117	60			
NPDT-30.5XD3-SP09	30.5	32	44	177	90	117	60			
NPDT-31XD3-SP09	31	32	44	180	93	120	60			
NPDT-31.5XD3-SP09	31.5	32	44	180	93	120	60			
NPDT-32XD3-SP09	32	32	44	183	96	123	60			
NPDT-32.5XD3-SP09	32.5	32	44	183	96	123	60			
NPDT-33XD3-SP09	33	32	44	186	99	126	60			
NPDT- 33.5 XD3-SP079	33.5	32	44	186	99	126	60			
NPDT- 34XD3-SP11	34	32	44	189	102	129	60	SP..110408	TDA-066	LLT-15
NPDT- 34.5XD3-SP11	34.5	32	44	189	102	129	60			
NPDT- 35XD3-SP11	35	32	44	189	102	129	60			
NPDT- 35.5XD3-SP11	35.5	32	44	192	105	132	60			
NPDT- 36XD3-SP11	36	32	44	192	105	132	60			
NPDT- 36.5XD3-SP11	36.5	32	44	195	108	135	60			
NPDT- 37XD3-SP11	37	32	44	195	108	135	60			
NPDT- 37.5XD3-SP11	37.5	32	44	198	111	138	60			

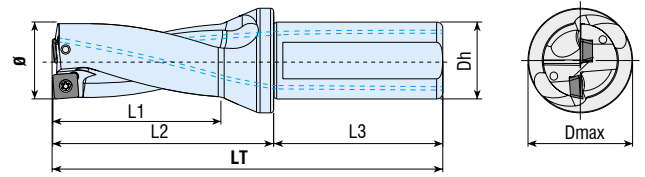
**Porta Taladrado 3XD - Placa SP.. (ø38 A 52 mm)**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-38XD3-SP	38	32	44	201	114	141	60	SP..110408	TDA-066	LLT-15
NPDT-38.5XD3-SP	38.5	32	44	201	114	141	60			
NPDT-39XD3-SP	39	32	44	204	117	144	60			
NPDT-39.5XD3-SP	39.5	32	44	204	117	144	60			
NPDT-40XD3-SP	40	32	44	207	120	147	60			
NPDT-40.5XD3-SP	40.5	32	44	207	120	147	60			
NPDT-41XD3-SP	41	32	44	210	123	150	60			
NPDT- 41.5 XD3-SP	41.5	32	44	210	123	150	60			
NPDT-42XD3-SP	42	32	44	213	126	153	60	SP..140512	TDA-081	LLT-20
NPDT-42.5XD3-SP	42.5	32	44	213	126	153	60			
NPDT-43XD3-SP	43	32	44	216	129	156	60			
NPDT-43.5XD3-SP	43.5	32	44	216	129	156	60			
NPDT-44XD3-SP	44	32	44	219	132	159	60			
NPDT-44.5XD3-SP	44.5	32	44	219	132	159	60			
NPDT-45XD3-SP	45	40	54	237	135	167	70			
NPDT-45.5XD3-SP	45.5	40	54	237	135	167	70			
NPDT-46XD3-SP	46	40	54	240	138	170	70			
NPDT-47XD3-SP	47	40	54	243	141	173	70			
NPDT-48XD3-SP	48	40	54	246	144	176	70			
NPDT-49XD3-SP	49	40	54	249	147	179	70			
NPDT-50XD3-SP	50	40	54	252	150	182	70			
NPDT-51XD3-SP	51	40	54	255	153	185	70			
NPDT -52XD3-SP	52	40	54	258	156	188	70			

**Porta Taladrado 4XD - Placa SP.. (ø13 A 22 mm)**


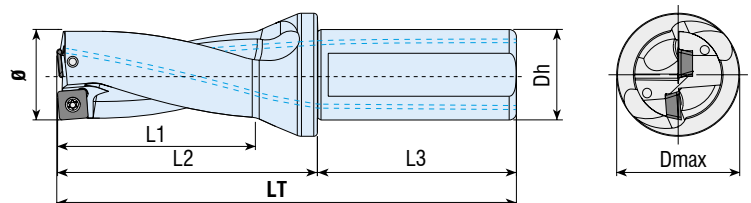
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-13XD4-SP05	13	20	25	124	52	74	50	SP..050204	TDA-006	LLT-6
NPDT-14XD4-SP05	14	20	25	128	56	78	50			
NPDT-14.5XD4-SP05	14.5	20	25	128	56	78	50			
NPDT-15XD4-SP05	15	20	25	132	60	82	50			
NPDT-16XD4-SP06	16	25	34	142	64	86	56	SP..060204	TDA-008	LLT-7
NPDT-17XD4-SP06	17	25	34	146	68	90	56			
NPDT-17XD4-SP06	17	25	34	146	68	90	56			
NPDT-18XD4-SP06	18	25	34	150	72	94	56			
NPDT-19XD4-SP06	19	25	34	154	76	98	56			
NPDT-19.5XD4-SP06	19.5	25	34	154	76	98	56			
NPDT-20XD4-SP06	20	25	34	158	80	102	56			
NPDT-21XD4-SP06	21	25	34	162	84	106	56			
NPDT-22XD4-SP07	22	25	34	166	88	110	56	SP..07T308	TDA-014	LLT-8

**Porta Taladrado 4XD - Placa SP.. (ø23 A 46 mm)**



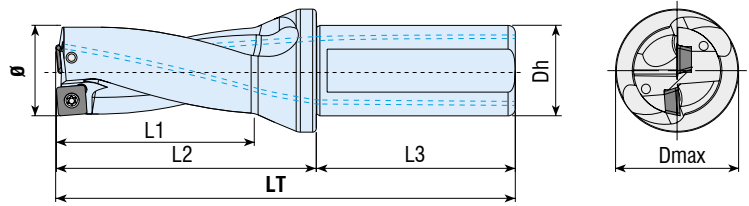
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-23XD4-SP07	23	25	34	170	92	114	56	SP..07T308	TDA-014	LLT-8
NPDT-23.5XD4-SP07	23.5	25	34	170	92	114	56			
NPDT-24XD4-SP07	24	25	34	174	96	118	56			
NPDT-25XD4-SP07	25	25	34	178	100	122	56			
NPDT-26XD4-SP07	26	25	34	182	104	126	56			
NPDT-27XD4-SP07	27	25	34	186	108	130	56			
NPDT-27.5XD4-SP07	27.5	25	34	186	108	130	56			
NPDT-28XD4-SP09	28	25	34	190	112	134	56	SP..090408	TDA-047	LLT-15
NPDT-29XD4-SP09	29	25	34	194	116	138	56			
NPDT-30XD4-SP09	30	32	44	207	120	147	60			
NPDT-31XD4-SP09	31	32	44	211	124	151	60			
NPDT-32XD4-SP09	32	32	44	215	128	155	60			
NPDT-33XD4-SP09	33	32	44	219	132	159	60			
NPDT-33.5XD4-SP09	33.5	32	44	219	132	159	60			
NPDT-34XD4-SP11	34	32	44	223	136	163	60	SP..110408	TDA-066	LLT-15
NPDT-35XD4-SP11	35	32	44	227	140	167	60			
NPDT-36XD4-SP11	36	32	44	231	144	171	60			
NPDT-37XD4-SP11	37	32	44	235	148	175	60			
NPDT-38XD4-SP11	38	32	44	239	152	179	60			
NPDT-39XD4-SP11	39	32	44	243	156	183	60			
NPDT-40XD4-SP11	40	32	44	247	160	187	60			
NPDT-41XD4-SP11	41	32	44	251	164	191	60			
NPDT-42XD4-SP14	42	32	44	255	168	195	60	SP..140512	TDA-081	LLT-20
NPDT-43XD4-SP14	43	32	44	259	172	199	60			
NPDT-44XD4-SP14	44	32	44	263	176	203	60			
NPDT-46XD4-SP14	46	40	54	286	184	216	70			

**Porta Taladrado 5XD - Placa SP.. (ø14 A 23 mm)**

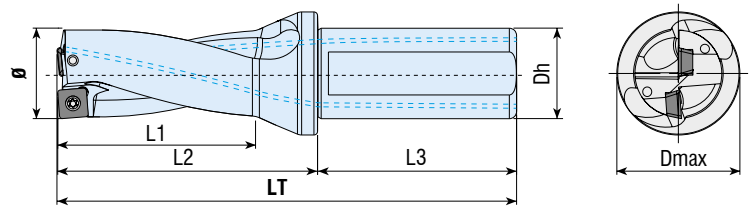


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-14XD5-SP05	14	20	25	142	70	92	50	SP..050204	TDA-006	LLT-6
NPDT-15XD5-SP06	15	20	25	147	75	97	50			
NPDT-16XD5-SP06	16	25	34	158	80	102	56	SP..060204	TDA-008	LLT-7
NPDT-17XD5-SP06	17	25	34	163	85	107	56			
NPDT-18XD5-SP06	18	25	34	168	90	112	56			
NPDT-19XD5-SP06	19	25	34	173	95	117	56			
NPDT-20XD5-SP06	20	25	34	178	100	122	56			
NPDT-21XD5-SP06	21	25	34	183	105	127	56			
NPDT-22XD5-SP07	22	25	34	188	110	132	56	SP..07T308	TDA-014	LLT-8
NPDT-22XD5-32-SP07	22	32	44	197	110	137	60			
NPDT-23XD5-SP07	23	25	34	193	115	137	56			
NPDT-23XD5-32-SP07	23	32	44	202	115	142	60			



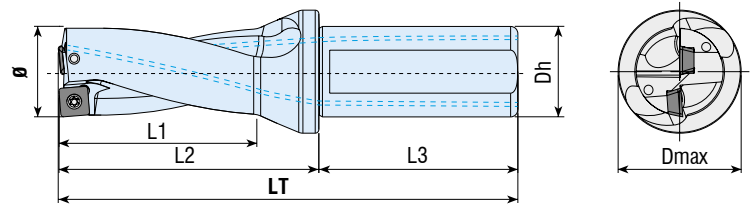
**Porta Taladrado 5XD - Placa SP.. (ø24 a 33 mm)**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-24XD5-SP07	24	32	44	207	120	147	60	SP..07T308	TDA-014	LLT-8
NPDT-25XD5-SP07	25	25	34	203	125	147	56			
NPDT-25XD5-32-SP07	25	32	44	212	125	152	60			
NPDT-26XD5-SP07	26	25	34	208	130	152	56			
NPDT-26XD5-32-SP07	26	32	44	217	130	157	60			
NPDT-27XD5-SP07	27	25	34	213	135	157	56			
NPDT-27XD5-32-SP07	27	32	44	222	135	162	60			
NPDT-28XD5-SP09	28	32	44	227	140	167	60	SP..090408	TDA-047	LLT-15
NPDT-29XD5-SP09	29	32	44	232	145	172	60			
NPDT-30XD5-SP09	30	32	44	237	150	177	60			
NPDT-31XD5-SP09	31	32	44	242	155	182	60			
NPDT-32XD5-SP09	32	32	44	247	160	187	60			
NPDT-33XD5-SP09	33	32	44	252	165	192	60			

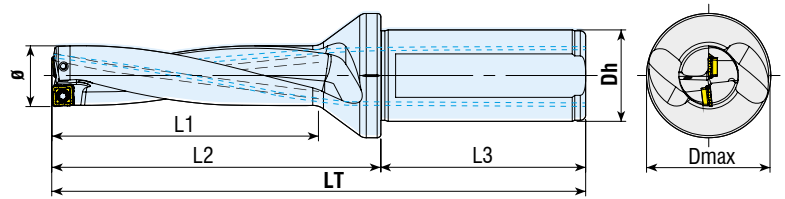
**Porta Taladrado 2XD - Placa SPGT..**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-12.5XD2-SPGT05	12.5	20	25	96	24	46	50	SPGT050204	TDA-006	LLT-6
NPDT-13XD2-SPGT05	13	20	25	98	26	48	50			
NPDT-13.5XD2-SPGT05	13.5	20	25	98	26	48	50			
NPDT-14XD2-SPGT05	14	20	25	100	28	50	50			
NPDT-15XD2-SPGT06	15	20	25	102	30	52	50			
NPDT-16XD2-SPGT06	16	25	34	110	32	54	56	SPGT060204	TDA-008	LLT-7
NPDT-16.5XD2-SPGT06	16.5	25	34	110	32	54	56			
NPDT-17XD2-SPGT06	17	25	34	112	34	56	56			
NPDT-17.5XD2-SPGT06	17.5	25	34	112	34	56	56			
NPDT-18XD2-SPGT06	18	25	34	114	36	58	56			
NPDT-19XD2-SPGT06	19	25	34	116	38	60	56			
NPDT-20XD2-SPGT06	20	25	34	118	40	62	56			
NPDT-21XD2-SPGT06	21	25	34	120	42	64	56			
NPDT-22XD2-SPGT07	22	25	34	122	44	66	56	SPGT07T308	TDA-014	LLT-8
NPDT-22.5XD2-SPGT07	22.5	25	34	122	44	66	56			
NPDT-23XD2-SPGT07	23	25	34	124	46	68	56			
NPDT-24XD2-SPGT07	24	25	34	126	48	70	56			
NPDT-25XD2-SPGT07	25	25	34	128	50	72	56			
NPDT-26XD2-SPGT07	26	25	34	130	52	74	56			
NPDT-28XD2-SPGT09	28	25	34	134	56	78	56	SPGT090408	TDA-047	LLT-15
NPDT-29XD2-SPGT09	29	25	34	136	58	80	56			
NPDT-30XD2-SPGT09	30	32	44	147	60	87	60			
NPDT-31XD2-SPGT09	31	32	44	149	62	89	60			
NPDT-32XD2-SPGT09	32	32	44	151	64	91	60			
NPDT-35XD2-SPGT11	35	32	44	157	70	97	60	SPGT110408	TDA-066	LLT-15
NPDT-36XD2-SPGT11	36	32	44	159	72	99	60			
NPDT-40XD2-SPGT11	40	32	44	167	80	107	60			

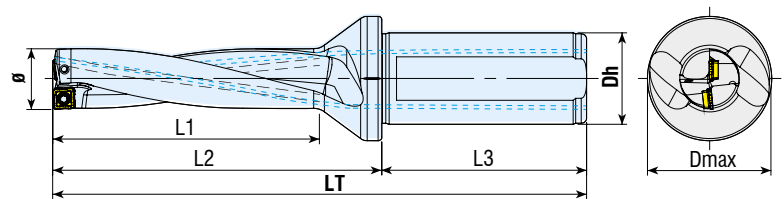
**Porta Taladrado 3XD - Placa SPGT..**



REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-12.5XD3-SPGT05	12.5	20	25	108	36	58	50	SPGT050204	TDA-006	LLT-6
NPDT-13XD3-SPGT05	13	20	25	111	39	61	50			
NPDT-13.5XD3-SPGT05	13.5	20	25	111	39	61	50			
NPDT-14XD3-SPGT05	14	20	25	114	42	64	50			
NPDT-14.5XD3-SPGT05	14.5	20	25	114	42	64	50			
NPDT-15XD3-SPGT05	15	20	25	117	45	67	50			
NPDT-15.5XD3-SPGT06	15.5	20	25	117	45	67	50	SPGT060204	TDA-008	LLT-7
NPDT-16XD3-SPGT06	16	25	34	126	48	70	56			
NPDT-16.5XD3-SPGT06	16.5	25	34	126	48	70	56			
NPDT-17XD3-SPGT06	17	25	34	129	51	73	56			
NPDT-17.5XD3-SPGT06	17.5	25	34	129	51	73	56			
NPDT-18XD3-SPGT06	18	25	34	132	54	76	56			
NPDT-18.5XD3-SPGT06	18.5	25	34	132	54	76	56			
NPDT-19XD3-SPGT06	19	25	34	135	57	79	56			
NPDT-19.5XD3-SPGT06	19.5	25	34	135	57	79	56			
NPDT-20XD3-SPGT06	20	25	34	138	60	82	56			
NPDT-20.5XD3-SPGT06	20.5	25	34	138	60	82	56			
NPDT-21XD3-SPGT06	21	25	34	141	63	85	56			
NPDT- 21.5 XD3-SPGT06	21.5	25	34	141	63	85	56			
NPDT-22XD3-SPGT07	22	25	34	144	66	88	56	SPGT07T308	TDA-014	LLT-8
NPDT-22.5XD3-SPGT07	22.5	25	34	144	66	88	56			
NPDT-23XD3-SPGT07	23	25	34	147	69	91	56			
NPDT-23.5XD3-SPGT07	23.5	25	34	147	69	91	56			
NPDT-24XD3-SPGT07	24	25	34	150	72	94	56			
NPDT-24.5XD3-SPGT07	24.5	25	34	150	72	94	56			
NPDT-25XD3-SPGT07	25	25	34	153	75	97	56			
NPDT-25.5XD3-SPGT07	25.5	25	34	153	75	97	56			
NPDT-26XD3-SPGT07	26	25	34	156	78	100	56			
NPDT-26.5XD3-SPGT07	26.5	25	34	156	78	100	56			
NPDT-27XD3-SPGT07	27	25	34	159	81	103	56			
NPDT- 27.5-XD3-SPGT07	27.5	25	34	159	81	103	56			
NPDT-28XD3-SPGT09	28	25	34	162	84	106	56	SPGT090408	TDA-047	LLT-15
NPDT-28.5XD3-SPGT09	28.5	25	34	162	84	106	56			
NPDT-29XD3-SPGT09	29	25	34	165	87	109	56			
NPDT-29.5XD3-SPGT09	29.5	25	34	165	87	109	56			
NPDT-30XD3-SPGT09	30	32	44	177	90	117	60			
NPDT-31XD3-SPGT09	31	32	44	180	93	120	60			
NPDT-32XD3-SPGT09	32	32	44	183	96	123	60			
NPDT-33XD3-SPGT09	33	32	44	186	99	126	60			
NPDT-34XD3-SPGT11	34	32	44	189	102	129	60	SPGT110408	TDA-066	LLT-15
NPDT-35XD3-SPGT11	35	32	44	192	105	132	60			
NPDT-36XD3-SPGT11	36	32	44	195	108	135	60			
NPDT-37XD3-SPGT11	37	32	44	198	111	138	60			
NPDT-38XD3-SPGT11	38	32	44	201	114	141	60			
NPDT-39XD3-SPGT11	39	32	44	204	117	144	60			
NPDT-40XD3-SPGT11	40	32	44	207	120	147	60			
NPDT-42XD3-SPGT14	42	32	44	213	126	153	60	SPGT140512	TDA-081	LLT-20
NPDT-43XD3-SPGT14	43	32	44	216	129	156	60			
NPDT-44XD3-SPGT14	44	32	44	219	132	159	60			
NPDT-49XD3-SPGT14	49	40	54	249	147	179	70			
NPDT-50XD3-SPGT14	50	40	54	252	150	182	70			

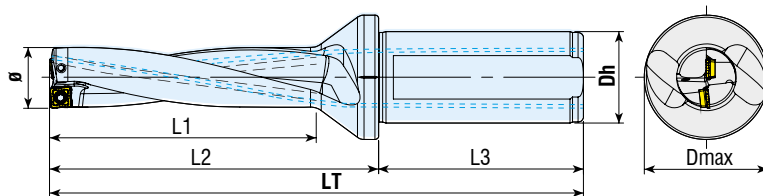
**Porta Taladrado 2XD - Placa SOMT..**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-14XD2-SOMT	14	20	25	100	28	50	50	SOMT050204	TDA-006	LLT-6
NPDT-16XD2-SOMT	16	25	34	110	32	54	56			
NPDT-17XD2-SOMT	17	25	34	112	34	56	56	SOMT060204	TDA-008	LLT-7
NPDT-18XD2-SOMT	18	25	34	114	36	58	56			
NPDT-20XD2-SOMT	20	25	34	118	40	62	56	SOMT070306	TDA-008	LLT-7
NPDT-22XD2-SOMT	22	25	34	122	44	66	56			
NPDT-23XD2-SOMT	23	25	34	124	46	68	56	SOMT08T306	TDA-014	LLT-8
NPDT-24XD2-SOMT	24	25	34	126	48	70	56			
NPDT-25XD2-SOMT	25	25	34	128	50	72	56			
NPDT-26XD2-SOMT	26	25	34	130	52	74	56			
NPDT-27XD2-SOMT	27	25	34	132	54	76	56	SOMT09T308	TDA-047	LLT-15
NPDT-28XD2-SOMT	28	25	34	134	56	78	56			
NPDT-29XD2-SOMT	29	25	34	136	58	80	56			
NPDT-30XD2-SOMT	30	32	44	147	60	87	60			
NPDT-32XD2-SOMT	32	32	44	151	64	91	60	SOMT11T308	TDA-047	LLT-15
NPDT-33XD2-SOMT	33	32	44	153	66	93	60			
NPDT-34XD2-SOMT	34	32	44	155	68	95	60			
NPDT-35XD2-SOMT	35	32	44	157	70	97	60			
NPDT-37XD2-SOMT	37	32	44	161	74	101	60	SOMT130408	TDA-066	LLT-15
NPDT-38XD2-SOMT	38	32	44	163	76	103	60			
NPDT-40XD2-SOMT	40	32	44	167	80	107	60			
NPDT-45XD2-SOMT	45	40	54	192	90	122	70	SOMT150510	TDA-081	LLT-20
NPDT-47XD2-SOMT	47	40	54	196	94	126	70			

**Porta Taladrado 3XD - Placa SOMT.. (Ø14 a Ø19.5 mm)**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-14XD3-SOMT05	14	20	25	114	42	64	50	SOMT050204	TDA-006	LLT-6
NPDT-14.5XD3-SOMT05	14.5	20	25	114	42	64	50			
NPDT-15XD3-SOMT05	15	20	25	117	45	67	50			
NPDT-15.5XD3-SOMT05	15.5	20	25	117	45	67	50			
NPDT-16XD3-SOMT05	16	25	34	126	48	70	56			
NPDT-16.5XD3-SOMT06	16.5	25	34	126	48	70	56	SOMT060204	TDA-008	LLT-7
NPDT-17XD3-SOMT06	17	25	34	129	51	73	56			
NPDT-17.5XD3-SOMT06	17.5	25	34	129	51	73	56			
NPDT-18XD3-SOMT06	18	25	34	132	54	76	56			
NPDT-18.5XD3-SOMT06	18.5	25	34	132	54	76	56			
NPDT-19XD3-SOMT06	19	25	34	135	57	79	56			
NPDT-19.5XD3-SOMT07	19.5	25	34	135	57	79	56	SOMT070306	TDA-008	LLT-7

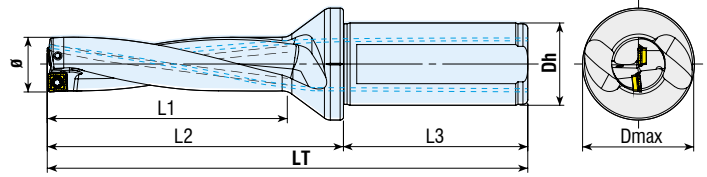
**Porta Taladrado 3XD - Placa SOMT.. (ø20 a ø50 mm)**



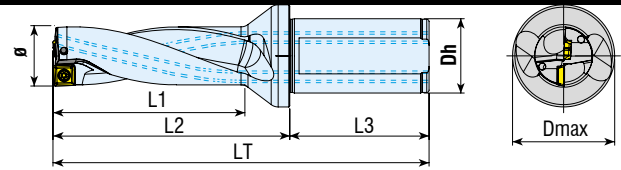
REFERENCIA	ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-20XD3-SOMT07	20	25	34	138	60	82	56	SOMT070306	TDA-008	LLT-7
NPDT-20.5XD3-SOMT07	20.5	25	34	138	60	82	56			
NPDT-21XD3-SOMT07	21	25	34	141	63	85	56			
NPDT-22XD3-SOMT07	22	25	34	144	66	88	56			
NPDT-22.5XD3-SOMT08	22.5	25	34	144	66	88	56	SOMT08T306	TDA-014	LLT-8
NPDT-23XD3-SOMT08	23	25	34	147	69	91	56			
NPDT-23.5XD3-SOMT08	23.5	25	34	147	69	91	56			
NPDT-24XD3-SOMT08	24	25	34	150	72	94	56			
NPDT-24.5XD3-SOMT08	24.5	25	34	150	72	94	56			
NPDT-25XD3-SOMT08	25	25	34	153	75	97	56			
NPDT-26XD3-SOMT08	26	25	34	156	78	100	56			
NPDT-27XD3-SOMT09	27	25	34	159	81	103	56	SOMT09T308	TDA-047	LLT-15
NPDT-27.5XD3-SOMT09	27.5	25	34	159	81	103	56			
NPDT-28XD3-SOMT09	28	25	34	162	84	106	56			
NPDT-29XD3-SOMT09	29	25	34	165	87	109	56			
NPDT-30XD3-SOMT09	30	32	44	177	90	117	60			
NPDT-32XD3-SOMT11	32	32	44	183	96	123	60	SOMT11T308	TDA-047	LLT-15
NPDT-33XD3-SOMT11	33	32	44	186	99	126	60			
NPDT-34XD3-SOMT11	34	32	44	189	102	129	60			
NPDT-35XD3-SOMT11	35	32	44	192	105	132	60			
NPDT-36XD3-SOMT11	36	32	44	195	108	135	60			
NPDT-37XD3-SOMT13	37	32	44	198	111	138	60	SOMT130408	TDA-066	LLT-15
NPDT-38XD3-SOMT13	38	32	44	201	114	141	60			
NPDT-39XD3-SOMT13	39	32	44	204	117	144	60			
NPDT-40XD3-SOMT13	40	32	44	207	120	147	60			
NPDT-45XD3-SOMT15	45	40	54	237	135	167	70	SOMT150510	TDA-081	LLT-20
NPDT-49XD3-SOMT15	49	40	54	249	147	179	70			
NPDT-50XD3-SOMT15	50	40	54	252	150	182	70			

**Porta Taladrado 5XD - Placa SOMT.. (ø14 a ø29 mm)**

REFERENCIA	ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-14XD5-SOMT05	14	20	25	142	70	92	50	SOMT050204	TDA-006	LLT-8
NPDT-15XD5-SOMT05	15	20	25	147	75	97	50			
NPDT-15.5XD5-SOMT05	15.5	20	25	147	75	97	50			
NPDT-16XD5-SOMT05	16	25	34	158	80	102	56			
NPDT-16.5XD5-SOMT06	16.5	25	34	158	80	102	56	SOMT060204	TDA-008	LLT-7
NPDT-17.5XD5-SOMT06	17.5	25	34	163	85	107	56			
NPDT-18XD5-SOMT06	18	25	34	168	90	112	56			
NPDT-18.5XD5-SOMT06	18.5	25	34	168	90	112	56			
NPDT-19XD5-SOMT06	19	25	34	173	95	117	56			
NPDT-19.5XD5-SOMT07	19.5	25	34	173	95	117	56	SOMT070306	TDA-008	LLT-7
NPDT-20XD5-SOMT07	20	25	34	178	100	122	56			
NPDT-21XD5-SOMT07	21	25	34	183	105	127	56			
NPDT-22XD5-SOMT07	22	25	34	188	110	132	56			
NPDT-23XD5-SOMT08	23	25	34	193	115	137	56	SOMT08T306	TDA-014	LLT-8
NPDT-24XD5-SOMT08	24	25	34	198	120	142	56	SOMT08T306	TDA-014	LLT-8
NPDT-25XD5-SOMT08	25	25	34	203	125	147	56			
NPDT-26XD5-SOMT08	26	25	34	208	130	152	56			
NPDT-27XD5-SOMT09	27	25	34	213	135	157	56	SOMT09T308	TDA-047	LLT-15
NPDT-28XD5-SOMT09	28	25	34	218	140	162	56			
NPDT-29XD5-SOMT09	29	25	34	223	145	167	56			

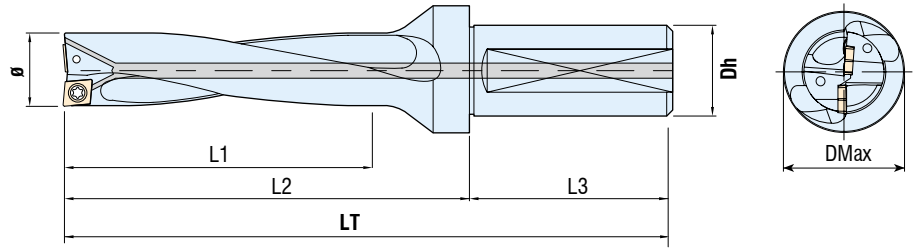
**Porta Taladrado 5XD - Placa SOMT.. (ø30 a ø36 mm)**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-30XD5-SOMT09	30	32	44	237	150	177	60	SOMT09T308	TDA-047	LLT-15
NPDT-33XD5-SOMT11	33	32	44	252	165	192	60	SOMT11T308	TDA-047	LLT-15
NPDT-34XD5-SOMT11	34	32	44	257	170	197	60			
NPDT-35XD5-SOMT11	35	32	44	262	175	202	60			
NPDT-36XD5-SOMT11	36	32	44	267	180	207	60			

**Porta Taladrado 3XD - Placa 880..**


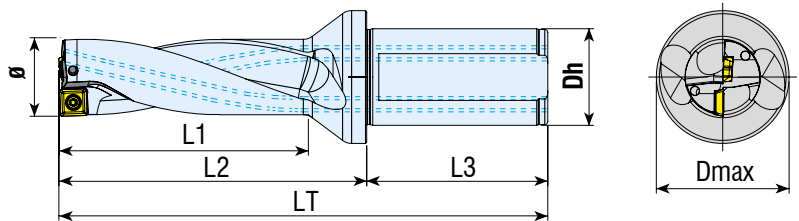
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-14XD3-880	14	20	25	108	42	58	50	880-02	TDA-006	LLT-6
NPDT-14.5XD3-880	14.5	20	25	110	46	60	50			
NPDT-15XD3-880	15	20	25	112	48	62	50			
NPDT-15.5XD3-880	15.5	20	25	114	50	64	50			
NPDT-16XD3-880	16	20	25	116	51	66	50			
NPDT-16.5XD3-880	16.5	20	25	118	53	68	50	880-03	TDA-008	LLT-7
NPDT-17XD3-880	17	20	25	119	54	69	50			
NPDT-17.5XD3-880	17.5	25	32	128	56	72	56			
NPDT-18XD3-880	18	25	32	129	57	73	56			
NPDT-18.5XD3-880	18.5	25	32	131	59	75	56			
NPDT-19XD3-880	19	25	32	132	60	76	56			
NPDT-19.5XD3-880	19.5	25	32	135	62	79	56			
NPDT-20XD3-880	20	25	32	137	64	81	56	880-04	TDA-014	LLT-8
NPDT-20.5XD3-880	20.5	25	32	138	65	82	56			
NPDT-21XD3-880	21	25	32	140	66	84	56			
NPDT-21.5XD3-880	21.5	25	32	142	68	86	56			
NPDT-22XD3-880	22	25	32	143	69	87	56			
NPDT-22.5XD3-880	22.5	25	32	146	71	90	56			
NPDT-23XD3-880	23	25	32	147	72	91	56			
NPDT-23.5-XD3-880	23.5	25	34	149	69	93	56			
NPDT-24XD3-880	24	25	32	151	76	95	56	880-05	TDA-032	LLT-10
NPDT-25XD3-880	25	25	32	155	79	99	56			
NPDT-26XD3-880	26	32	44	162	81	102	60			
NPDT-27XD3-880	27	32	44	165	84	105	60			
NPDT-28XD3-880	28	32	44	169	87	109	60			
NPDT-29XD3-880	29	32	44	172	90	112	60			
NPDT-30XD3-880	30	32	44	177	94	117	60	880-06	TDA-044	LLT-10
NPDT-31XD3-880	31	40	54	191	97	121	70			
NPDT-32XD3-880	32	40	54	194	100	124	70			
NPDT-33XD3-880	33	40	54	198	103	128	70			
NPDT-34XD3-880	34	40	54	201	106	131	70			
NPDT-35XD3-880	35	40	54	205	109	135	70			
NPDT-36XD3-880	36	40	54	209	112	139	70	880-07	TDA-044	LLT-10
NPDT-38XD3-880	38	40	54	216	118	146	70			
NPDT-39XD3-880	39	40	54	219	121	149	70			
NPDT-40XD3-880	40	40	54	223	124	153	70			
NPDT-41XD3-880	41	40	54	227	127	157	70			
NPDT-42XD3-880	42	40	54	230	130	160	70			
NPDT-45XD3-880	45	40	54	242	140	172	70	880-08	TDA-066	LLT-15
NPDT-46XD3-880	46	40	54	246	143	176	70			
NPDT-48XD3-880	48	40	54	253	149	183	70			
NPDT-50XD3-880	50	40	54	260	155	190	70			

**Porta Taladrado 3XD - Placa WD..**



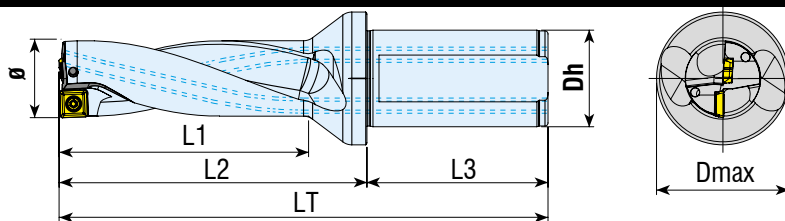
REFERENCIA	Ø	Dh	L1	L2	L3	LT	Dmax	INSERTO	TORNILLO PLACA	LLAVE
NPDT-13XD3-WD04	13	25	39	63	56	119	33	WD..04..	TDA-201	LLT-6
NPDT-14XD3-WD04	14	25	42	66	56	122	33			
NPDT-15XD3-WD04	15	25	45	69	56	125	33			
NPDT-16XD3-WD05	16	25	48	72	56	128	33	WD..05..	TDA-007	LLT-6
NPDT-17XD3-WD05	17	25	51	75	56	131	33			
NPDT-18XD3-WD05	18	25	54	78	56	134	35			
NPDT-18XD3-WD06	19	25	57	81	56	137	35	WD..06..	TDA-010	LLT-7
NPDT-20XD3-WD06	20	25	60	84	56	140	35			
NPDT-21XD3-WD06	21	25	63	87	56	143	35			
NPDT-22XD3-WD06	22	25	66	90	56	146	35			
NPDT-23XD3-WD07	23	25	69	93	56	149	35	WD..07..	TDA-014	LLT-8
NPDT-24XD3-WD07	24	25	72	96	56	152	35			
NPDT-25XD3-WD07	25	25	75	99	56	155	35			
NPDT-26XD3-WD07	26	32	78	107	60	167	43			
NPDT-27XD3-WD07	27	32	81	110	60	170	43			
NPDT-28XD3-WD07	28	32	84	113	60	173	43			
NPDT-29XD3-WD09	29	32	87	116	60	176	43	WD..09..	TDA-047	LLT-15
NPDT-30XD3-WD09	30	32	90	119	60	179	43			
NPDT-31XD3-WD09	31	32	93	122	60	182	43			
NPDT-32XD3-WD09	32	32	96	125	60	185	43			
NPDT-33XD3-WD09	33	32	99	128	60	188	43			
NPDT-34XD3-WD09	34	32	102	131	60	191	43			
NPDT-35XD3-WD09	35	32	105	134	60	194	43			
NPDT-36XD3-WD09	36	32	108	137	60	197	43			
NPDT-37XD3-WD12	37	32	111	140	60	200	43	WD..12..	TDA-081	LLT-20
NPDT-38XD3-WD12	38	32	114	143	60	203	43			
NPDT-39XD3-WD12	39	32	117	146	60	206	43			

**Porta Taladrado 2XD - Placa SOMX..**

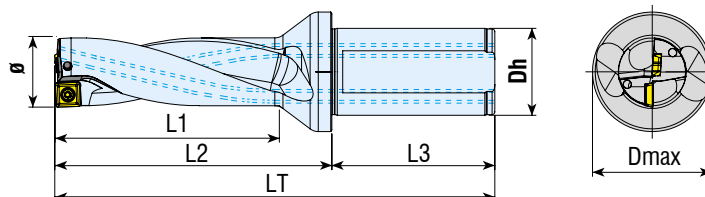


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-2XD-D14-SO052704	14	20	25	100	28	50	50	SOMX052704	TDA-124	LLT2-08
NPDT-2XD-D15-SO052704	15	20	25	102	30	52	50			
NPDT-2XD-D16-SO052704	16	25	34	110	32	54	56			
NPDT-2XD-D17-SO063005	17	25	34	112	34	56	56	SOMX063005	TDA-014	LLT2-08
NPDT-2XD-D18-SO063005	18	25	34	114	36	58	56			
NPDT-2XD-D19-SO063005	19	25	34	116	38	60	56			
NPDT-2XD-D20-SO073505	20	25	34	118	40	62	56	SOMX073505	TDA-031	LLT2-10
NPDT-2XD-D21-SO073505	21	25	34	120	42	64	56			
NPDT-2XD-D22-SO073505	22	25	34	122	44	66	56			
NPDT-2XD-D23-SO084005	23	25	34	124	46	68	56	SOMX084005	TDA-043	LLT2-10
NPDT-2XD-D24-SO084005	24	25	34	126	48	70	56			
NPDT-2XD-D25-SO084005	25	25	34	128	50	72	56			
NPDT-2XD-D26-SO084005	26	25	34	130	52	74	56			
NPDT-2XD-D28-SO094506	28	25	34	134	56	78	56	SOMX094506	TDA-063	LLT-15
NPDT-2XD-D30-SO094506	30	32	44	147	60	87	60			



**Porta Taladrado 3XD - Placa SOMX..**


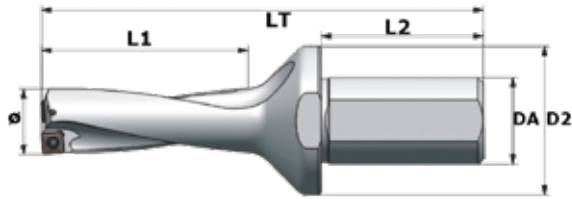
REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-3XD-14-SO052704	14	20	25	114	42	64	50	SOMX052704	TDA-124	LLT2-08
NPDT-3XD-14.5-SO052704	14.5	20	25	114	43.5	64	50			
NPDT-3XD-15-SO052704	15	20	25	117	45	67	50			
NPDT-3XD-15.5-SO052704	16.5	25	34	126	49.5	70	56			
NPDT-3XD-16-SO052704	16	25	34	126	48	70	56			
NPDT-3XD-16.5-SO052704	16.5	25	34	126	49.5	70	56			
NPDT-3XD-17-SO063005	17	25	34	129	51	73	56	SOMX063005	TDA-014	LLT2-08
NPDT-3XD-17.5-SO063005	17.5	25	34	129	52.5	73	56			
NPDT-3XD-18-SO063005	18	25	34	132	54	76	56			
NPDT-3XD-18.5-SO063005	18.5	25	34	132	55.5	76	56			
NPDT-3XD-19-SO063005	19	25	34	135	57	79	56			
NPDT-3XD-19.5-SO063005	19.5	25	34	135	58.5	79	56			
NPDT-3XD-20-SO073505	20	25	34	138	60	82	56	SOMX073505	TDA-031	LLT2-10
NPDT-3XD-20.5-SO073505	20.5	25	34	138	61.5	82	56			
NPDT-3XD-21-SO073505	21	25	34	141	63	85	56			
NPDT-3XD-21.5-SO073505	21.5	25	34	141	64.5	85	56			
NPDT-3XD-22-SO073505	22	25	34	144	66	88	56			
NPDT-3XD-22.5-SO073505	22.5	25	34	144	67.5	88	56			
NPDT-3XD-23-SO084005	23	25	34	147	69	91	56	SOMX084005	TDA-043	LLT2-10
NPDT-3XD-23.5-SO084005	23.5	25	34	147	70.5	91	56			
NPDT-3XD-24-SO084005	24	25	34	150	72	94	56			
NPDT-3XD-24.5-SO084005	24.5	25	34	150	73.5	94	56			
NPDT-3XD-25-SO084005	25	25	34	153	75	97	56			
NPDT-3XD-26-SO084005	26	25	34	156	78	100	56			
NPDT-3XD-27-SO084005	27	25	34	159	81	103	56			
NPDT-3XD-28-SO094506	28	25	34	162	84	106	56	SOMX094506	TDA-063	LLT-15
NPDT-3XD-29-SO094506	29	25	34	165	87	109	56			
NPDT-3XD-30-SO094506	30	32	44	177	90	117	60			
NPDT-3XD-32-SO094506	32	32	44	183	96	123	60			

**Porta Taladrado 4XD - Placa SOMX..**


REFERENCIA	Ø	Dh	DMax	LT	L1	L2	L3	INSERTO	TORNILLO PLACA	LLAVE
NPDT-4XD-D14-SO052704	14	20	25	128	56	78	50	SOMX052704	TDA-124	LLT2-08
NPDT-4XD-D15-SO052704	15	20	25	132	60	82	50			
NPDT-4XD-D16-SO052704	16	25	34	142	64	86	56			
NPDT-4XD-D17-SO063005	17	25	34	146	68	90	56	SOMX063005	TDA-014	LLT2-08
NPDT-4XD-D18-SO063005	18	25	34	150	72	94	56			
NPDT-4XD-D19-SO063005	19	25	34	154	76	98	56			
NPDT-4XD-D20-SO073505	20	25	34	158	80	102	56	SOMX073505	TDA-031	LLT2-10
NPDT-4XD-D21-SO073505	21	25	34	162	84	106	56			
NPDT-4XD-D22-SO073505	22	25	34	166	88	110	56			
NPDT-4XD-D23-SO084005	23	25	34	170	92	114	56	SOMX084005	TDA-043	LLT2-10
NPDT-4XD-D24-SO084005	24	25	34	174	96	118	56			
NPDT-4XD-D25-SO084005	25	25	34	178	100	122	56			
NPDT-4XD-D26-SO084005	26	25	34	182	104	126	56			
NPDT-4XD-D28-SO094506	28	25	34	190	112	134	56	SOMX094506	TDA-063	LLT-15
NPDT-4XD-D30-SO094506	30	32	44	207	120	147	60			

**Porta Taladrado 2XD OKE Line - Placa SPGT..**

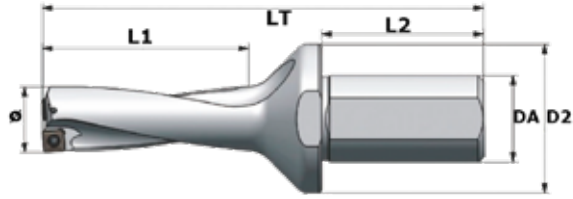
- Línea de Portas de Taladrado NIXA-OKE - Basic Line
- Para Placa SPGT..



REFERENCIA	Ø	DA	D2	L1	L2	LT	INSERTO	TORNILLO PLACA	LLAVE
NOPT-2XD-D13-W20-SPGT05	13	20	25	32	50	96	SPGT05..	TDA-006	LLT-6
NOPT-2XD-D14-W20-SPGT05	14	20	25	34	50	98			
NOPT-2XD-D15-W20-SPGT05	15	20	25	36	50	100			
NOPT-2XD-D16-W20-SPGT05	16	20	25	38	50	102			
NOPT-2XD-D17-W25-SPGT06	17	25	32	40	56	118	SPGT06..	TDA-008	LLT-7
NOPT-2XD-D18-W25-SPGT06	18	25	32	42	56	120			
NOPT-2XD-D19-W25-SPGT06	19	25	32	44	56	121			
NOPT-2XD-D20-W25-SPGT06	20	25	32	46	56	123			
NOPT-2XD-D21-W25-SPGT06	21	25	32	48	56	125			
NOPT-2XD-D22-W25-SPGT07	22	25	32	50	56	128	SPGT07..	TDA-014	LLT-8
NOPT-2XD-D23-W25-SPGT07	23	25	32	52	60	130			
NOPT-2XD-D24-W25-SPGT07	24	25	32	54	60	132			
NOPT-2XD-D25-W25-SPGT07	25	25	32	56	60	134			
NOPT-2XD-D26-W32-SPGT07	26	32	40	58	60	136			
NOPT-2XD-D27-W32-SPGT07	27	32	40	60	60	138			
NOPT-2XD-D28-W32-SPGT09	28	32	40	62	60	147	SPGT09...	TDA-047	LLT-15
NOPT-2XD-D29-W32-SPGT09	29	32	40	64	60	149			
NOPT-2XD-D30-W32-SPGT09	30	32	40	66	60	151			
NOPT-2XD-D31-W40-SPGT09	31	40	50	68	60	153			
NOPT-2XD-D32-W40-SPGT09	32	40	50	70	60	155			
NOPT-2XD-D33-W40-SPGT09	33	40	50	72	60	157			
NOPT-2XD-D34-W40-SPGT11	34	40	50	74	60	174	SPGT11...	TDA-066	LLT-15
NOPT-2XD-D35-W40-SPGT11	35	40	50	76	60	176			
NOPT-2XD-D36-W40-SPGT11	36	40	50	78	60	178			
NOPT-2XD-D37-W40-SPGT11	37	40	50	80	70	180			
NOPT-2XD-D38-W40-SPGT11	38	40	50	82	70	182			
NOPT-2XD-D39-W40-SPGT11	39	40	50	84	70	184			
NOPT-2XD-D40-W40-SPGT11	40	40	50	86	70	186			
NOPT-2XD-D41-W40-SPGT11	41	40	50	88	70	188			
NOPT-2XD-D42-W40-SPGT14	42	40	60	90	70	200	SPGT14...	TDA-081	LLT-20
NOPT-2XD-D43-W40-SPGT14	43	40	60	92	70	202			
NOPT-2XD-D44-W40-SPGT14	44	40	60	94	70	204			
NOPT-2XD-D45-W40-SPGT14	45	40	60	96	70	206			
NOPT-2XD-D46-W40-SPGT14	46	40	60	98	70	208			
NOPT-2XD-D47-W40-SPGT14	47	40	60	100	70	210			
NOPT-2XD-D48-W40-SPGT14	48	40	60	102	70	212			
NOPT-2XD-D49-W40-SPGT14	49	40	60	104	70	214			
NOPT-2XD-D50-W40-SPGT14	50	40	60	106	70	216			

**Porta Taladrado 3xD OKE Line - Placa SPGT..**

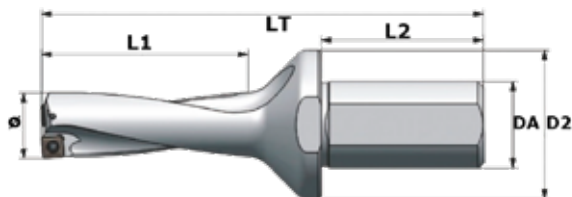
- Línea de Portas de Taladrado NIXA-OKE - Basic Line
- Para Placa SPGT...



REFERENCIA	Ø	DA	D2	L1	L2	LT	INSERTO	TORNILLO PLACA	LLAVE
NOPT-3XD-D13-W20-SPGT05	13	20	25	44	50	111	SPGT05..	TDA-006	LLT-6
NOPT-3XD-D14-W20-SPGT05	14	20	25	47	50	114			
NOPT-3XD-D15-W20-SPGT05	15	20	25	50	50	117			
NOPT-3XD-D16-W20-SPGT05	16	20	25	53	50	120			
NOPT-3XD-D17-W25-SPGT06	17	25	32	56	56	135	SPGT06..	TDA-008	LLT-7
NOPT-3XD-D18-W25-SPGT06	18	25	32	59	56	138			
NOPT-3XD-D19-W25-SPGT06	19	25	32	62	56	140			
NOPT-3XD-D20-W25-SPGT06	20	25	32	65	56	143			
NOPT-3XD-D21-W25-SPGT06	21	25	32	68	56	146			
NOPT-3XD-D22-W25-SPGT07	22	25	32	71	56	149	SPGT07..	TDA-014	LLT-8
NOPT-3XD-D23-W25-SPGT07	23	25	32	74	60	153			
NOPT-3XD-D24-W25-SPGT07	24	25	32	77	60	156			
NOPT-3XD-D25-W25-SPGT07	25	25	32	80	60	159			
NOPT-3XD-D26-W32-SPGT07	26	32	40	83	60	162			
NOPT-3XD-D27-W32-SPGT07	27	32	40	86	60	165			
NOPT-3XD-D28-W32-SPGT09	28	32	40	89	60	168	SPGT09...	TDA-047	LLT-15
NOPT-3XD-D29-W32-SPGT09	29	32	40	92	60	178			
NOPT-3XD-D30-W32-SPGT09	30	32	40	95	60	181			
NOPT-3XD-D31-W40-SPGT09	31	40	50	98	60	184			
NOPT-3XD-D32-W40-SPGT09	32	40	50	101	60	187			
NOPT-3XD-D33-W40-SPGT09	33	40	50	104	60	190			
NOPT-3XD-D34-W40-SPGT11	34	40	50	107	60	193	SPGT11...	TDA-066	LLT-15
NOPT-3XD-D35-W40-SPGT11	35	40	50	110	60	196			
NOPT-3XD-D36-W40-SPGT11	36	40	50	113	60	199			
NOPT-3XD-D37-W40-SPGT11	37	40	50	117	70	217			
NOPT-3XD-D38-W40-SPGT11	38	40	50	119	70	220			
NOPT-3XD-D39-W40-SPGT11	39	40	50	122	70	223			
NOPT-3XD-D40-W40-SPGT11	40	40	50	125	70	231			
NOPT-3XD-D41-W40-SPGT11	41	40	50	128	70	229			
NOPT-3XD-D42-W40-SPGT14	42	40	60	131	70	232	SPGT14...	TDA-081	LLT-20
NOPT-3XD-D43-W40-SPGT14	43	40	60	134	70	240			
NOPT-3XD-D44-W40-SPGT14	44	40	60	138	70	248			
NOPT-3XD-D45-W40-SPGT14	45	40	60	141	70	251			
NOPT-3XD-D46-W40-SPGT14	46	40	60	144	70	254			
NOPT-3XD-D47-W40-SPGT14	47	40	60	147	70	257			
NOPT-3XD-D48-W40-SPGT14	48	40	60	149	70	260			
NOPT-3XD-D49-W40-SPGT14	49	40	60	152	70	263			
NOPT-3XD-D50-W40-SPGT14	50	40	60	155	70	266			

**Porta Taladrado 4xD OKE Line - Placa SPGT..**

- Línea de Portas de Taladrado NIXA-OKE - Basic Line
- Para Placa SPGT...



REFERENCIA	Ø	DA	D2	L1	L2	LT	INSERTO	TORNILLO PLACA	LLAVE
NOPT-4XD-D13-W20-SPGT05	13	20	25	57	50	124	SPGT05..	TDA-006	LLT-6
NOPT-4XD-D14-W20-SPGT05	14	20	25	61	50	128			
NOPT-4XD-D15-W20-SPGT05	15	20	25	65	50	132			
NOPT-4XD-D16-W20-SPGT05	16	20	25	69	50	136			
NOPT-4XD-D17-W25-SPGT06	17	25	32	73	56	152	SPGT06..	TDA-008	LLT-7
NOPT-4XD-D18-W25-SPGT06	18	25	32	77	56	156			
NOPT-4XD-D19-W25-SPGT06	19	25	32	81	56	159			
NOPT-4XD-D20-W25-SPGT06	20	25	32	85	56	163			
NOPT-4XD-D21-W25-SPGT06	21	25	32	89	56	167			
NOPT-4XD-D22-W25-SPGT07	22	25	32	93	56	172	SPGT07..	TDA-014	LLT-8
NOPT-4XD-D23-W25-SPGT07	23	25	32	97	56	176			
NOPT-4XD-D24-W25-SPGT07	24	25	32	101	56	180			
NOPT-4XD-D25-W25-SPGT07	25	25	32	105	56	184			
NOPT-4XD-D26-W32-SPGT07	26	32	40	109	56	188			
NOPT-4XD-D27-W32-SPGT07	27	32	40	113	60	192			
NOPT-4XD-D28-W32-SPGT09	28	32	40	118	60	203	SPGT09...	TDA-047	LLT-15
NOPT-4XD-D29-W32-SPGT09	29	32	40	122	60	207			
NOPT-4XD-D30-W32-SPGT09	30	32	40	125	60	211			
NOPT-4XD-D31-W40-SPGT09	31	40	50	129	60	2115			
NOPT-4XD-D32-W40-SPGT09	32	40	50	133	60	219			
NOPT-4XD-D33-W40-SPGT09	33	40	50	137	70	223			
NOPT-4XD-D34-W40-SPGT11	34	40	50	142	70	242	SPGT11...	TDA-066	LLT-15
NOPT-4XD-D35-W40-SPGT11	35	40	50	146	70	246			
NOPT-4XD-D36-W40-SPGT11	36	40	50	150	70	250			
NOPT-4XD-D37-W40-SPGT11	37	40	50	154	70	254			
NOPT-4XD-D38-W40-SPGT11	38	40	50	158	70	258			
NOPT-4XD-D39-W40-SPGT11	39	40	50	162	70	262			
NOPT-4XD-D40-W40-SPGT11	40	40	50	166	70	266			
NOPT-4XD-D41-W40-SPGT11	41	40	50	170	70	270			
NOPT-4XD-D42-W40-SPGT14	42	40	60	174	70	284	SPGT14...	TDA-081	LLT-20
NOPT-4XD-D43-W40-SPGT14	43	40	60	178	70	288			
NOPT-4XD-D44-W40-SPGT14	44	40	60	182	70	292			
NOPT-4XD-D45-W40-SPGT14	45	40	60	186	70	296			
NOPT-4XD-D46-W40-SPGT14	46	40	60	190	70	300			
NOPT-4XD-D47-W40-SPGT14	47	40	60	194	70	304			
NOPT-4XD-D48-W40-SPGT14	48	40	60	198	70	307			
NOPT-4XD-D49-W40-SPGT14	49	40	60	202	70	312			
NOPT-4XD-D50-W40-SPGT14	50	40	60	206	70	316			

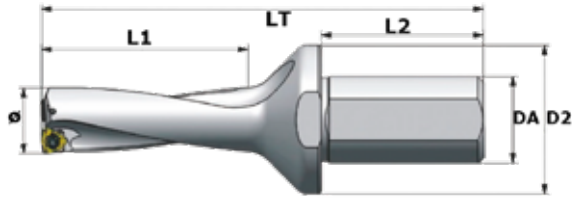
**Adaptador para Mango Porta Taladrado**



REFERENCIA	DCOM	DB	LF
CAT-2025	20	25	44
CAT-2532	25	32	46
CAT-3240	32	40	55

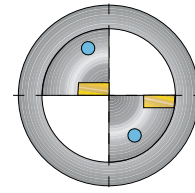
**Porta Taladrado 3xD OKE Line - Placa WCMX..**

- Línea de Portas de Taladrado NIXA-OKE - Basic Line
- Para Placa ISO WCMX...

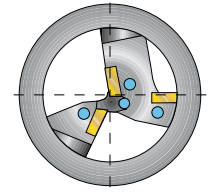


REFERENCIA	Ø	DA	D2	L1	L2	LT	INSERTO	TORNILLO PLACA	LLAVE
NOPT-3XD-D16-W25-WCMX03	16	25	32	52	56	129	WCMX03..	TDA-014	LLT-8
NOPT-3XD-D17-W25-WCMX03	17	25	32	55	56	133			
NOPT-3XD-D18-W25-WCMX03	18	25	32	58	56	137			
NOPT-3XD-D19-W25-WCMX03	19	25	32	61	56	140			
NOPT-3XD-D20-W25-WCMX03	20	25	32	64	56	143			
NOPT-3XD-D21-W25-WCMX04	21	25	32	67	56	153	WCMX04..	TDA-014	LLT-8
NOPT-3XD-D22-W25-WCMX04	22	25	32	70	56	156			
NOPT-3XD-D23-W25-WCMX04	23	25	32	73	56	159			
NOPT-3XD-D24-W25-WCMX04	24	25	32	76	56	162			
NOPT-3XD-D25-W25-WCMX04	25	25	32	79	56	165			
NOPT-3XD-D26-W32-WCMX05	26	32	40	83	60	176	WCMX05..	TDA-027	LLT-8
NOPT-3XD-D27-W32-WCMX05	27	32	40	86	60	180			
NOPT-3XD-D28-W32-WCMX05	28	32	40	89	60	184			
NOPT-3XD-D29-W32-WCMX05	29	32	40	92	60	188			
NOPT-3XD-D30-W32-WCMX05	30	32	40	95	60	192			
NOPT-3XD-D31-W40-WCMX06	31	40	50	98	70	203	WCMX06..	TDA-044	LLT-10
NOPT-3XD-D32-W40-WCMX06	32	40	50	101	70	206			
NOPT-3XD-D33-W40-WCMX06	33	40	50	104	70	209			
NOPT-3XD-D34-W40-WCMX06	34	40	50	107	70	212			
NOPT-3XD-D35-W40-WCMX06	35	40	50	110	70	215			
NOPT-3XD-D36-W40-WCMX06	36	40	50	113	70	218			
NOPT-3XD-D37-W40-WCMX06	37	40	50	116	70	221			
NOPT-3XD-D38-W40-WCMX06	38	40	50	119	70	225			
NOPT-3XD-D39-W40-WCMX06	39	40	50	122	70	228			
NOPT-3XD-D40-W40-WCMX06	40	40	50	125	70	231			
NOPT-3XD-D41-W40-WCMX06	41	40	50	128	70	234			
NOPT-3XD-D42-W40-WCMX08	42	40	60	131	70	239			
NOPT-3XD-D43-W40-WCMX08	43	40	60	134	70	242	WCMX08..	TDA-066	LLT-15
NOPT-3XD-D44-W40-WCMX08	44	40	60	137	70	245			
NOPT-3XD-D45-W40-WCMX08	45	40	60	140	70	248			
NOPT-3XD-D46-W40-WCMX08	46	40	60	143	70	251			
NOPT-3XD-D47-W40-WCMX08	47	40	60	146	70	253			
NOPT-3XD-D48-W40-WCMX08	48	40	60	149	70	255			
NOPT-3XD-D49-W40-WCMX08	49	40	60	152	70	257			
NOPT-3XD-D50-W40-WCMX08	50	40	60	155	70	259			
NOPT-3XD-D51-W50-WCMX08	51	50	60	158	70	261			
NOPT-3XD-D52-W50-WCMX08	52	50	60	161	70	263			
NOPT-3XD-D53-W50-WCMX08	53	50	60	164	70	265			
NOPT-3XD-D54-W50-WCMX08	54	50	60	167	70	267			
NOPT-3XD-D55-W50-WCMX08	55	50	60	170	70	269			
NOPT-3XD-D56-W50-WCMX08	56	50	60	173	70	271			
NOPT-3XD-D57-W50-WCMX08	57	50	60	176	70	273			
NOPT-3XD-D58-W50-WCMX08	58	50	60	179	70	275			

**Broca de Taladrado - Placa CCMT0602..**



**Modelo: Z-2**



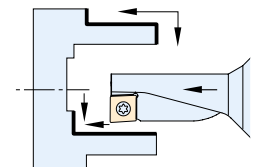
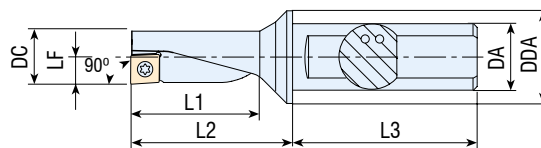
**Modelo: Z-3**

- Para Placa ISO - CCMT060204
- Tornillo Recambio Placa: TDA-099
- Llave Apriete: LLT-8

Referencia	øD	øD1	L1	L2	L3	LT	Z
NPDT-3XD-17CC	17	20	51	70	45	115	2
NPDT-3XD-18CC	18	20	54	73	45	118	2
NPDT-3XD-19CC	19	20	57	76	45	121	2
NPDT-3XD-20CC	20	20	60	79	45	124	2
NPDT-3XD-21CC	21	25	63	85	54	139	2
NPDT-3XD-22CC	22	25	66	88	54	142	2
NPDT-3XD-23CC	23	25	69	91	54	145	2
NPDT-3XD-24CC	24	25	72	94	54	148	2
NPDT-3XD-25CC	25	25	75	97	54	151	2
NPDT-3XD-26CC	26	25	78	100	54	154	3
NPDT-3XD-27CC	27	25	84	103	54	157	3
NPDT-3XD-28CC	28	25	84	106	54	160	3
NPDT-3XD-29CC	29	25	87	109	54	163	3
NPDT-3XD-30CC	30	32	90	110	54	164	3
NPDT-3XD-31CC	31	32	93	113	54	167	3
NPDT-3XD-32CC	32	32	96	116	54	170	3
NPDT-3XD-33CC	33	32	99	119	54	173	3
NPDT-3XD-34CC	34	32	102	122	54	176	3
NPDT-3XD-35CC	35	32	105	125	54	179	3

**Broca de Taladrado y Torneado Interior/Frontal/Exterior - Placa XC..**

- Orificio Lateral, A partir del Modelo XC08
- Compatible con: CRTZT - ISCR - TGTC - KRLY
- Placas No Disponibles

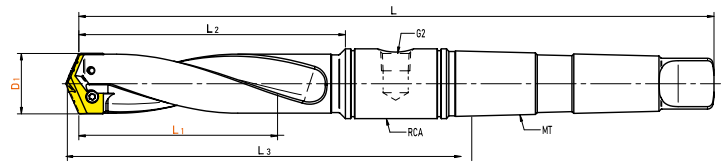


Referencia	DC	DCON	DDA	L1	L2	L3	LF
NPDTT-R/L8-XC04	8	10	12	18	22	38	4
NPDTT-R/L10-XC05	10	12	16	22.5	27.5	42	5
NPDTT-R/L12-XC06	12	16	20	27	33	45	6
NPDTT-R/L14-XC07	14	16	20	31.5	38	45	7
NPDTT-R/L16-XC08	16	20	25	36	44	50	8
NPDTT-R/L18-XC09	18	25	32	40.5	53.5	56	9
NPDTT-R/L20-XC10	20	25	32	45	55	56	10
NPDTT-R/L25-XC13	25	32	40	56.5	69	60	12.5
NPDTT-R/L32-XC17	32	32	50	72	88	60	16



### Brocas punta intercambiable Amarre Cono Morse - Tipo Espiral

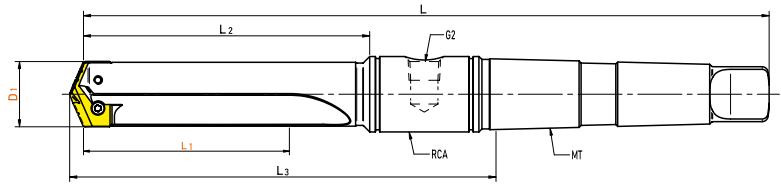
- Compatible con: KRNCH - NIXA - YG - ACME
- Placas Disponibles: Ver Sección Placas



REFERENCIA	D1	L1	L2	L3	L	MT	G2	ANILLO	TORNILLO	LLAVE
BPN-CM2-E001	9.5-11	32	52	88	160	2	1/16"	BDP-AR1905	TDA-120	LLT-7
BPN-CM2-E002		60	80	117	189	2	1/16"			
BPN-CM2-E003		111	131	167	240	2	1/16"			
BPN-CM2-E004	11.5-12.5	32	52	88	160	2	1/16"	BDP-AR1905	TDA-121	LLT-7
BPN-CM2-E005		60	80	117	189	2	1/16"			
BPN-CM2-E006		111	131	167	240	2	1/16"			
BPN-CM2-E007	13-15	35	56	92	164	2	1/16"	BDP-AR1905	TDA-122	LLT-8
BPN-CM2-E008		64	84	121	193	2	1/16"			
BPN-CM2-E009		114	135	172	244	2	1/16"			
BPN-CM2-E010		178	199	235	307	2	1/16"			
BPN-CM2-E011	15.5-17.5	35	56	92	164	2	1/16"	BDP-AR1905	TDA-123	LLT-8
BPN-CM2-E012		64	84	121	193	2	1/16"			
BPN-CM2-E013		114	135	172	244	2	1/16"			
BPN-CM2-E014		178	199	235	307	2	1/16"			
BPN-CM3-E001	18-21	70	98	143	233	3	1/8"	BDP-AR2504	TDA-116	LLT-9
BPN-CM3-E002		121	149	193	283	3	1/8"			
BPN-CM3-E003		172	200	244	334	3	1/8"			
BPN-CM3-E004		273	302	346	436	3	1/8"			
BPN-CM3-E005	22-24	70	98	142	232	3	1/8"	BDP-AR2504	TDA-116	LLT-9
BPN-CM3-E006		121	149	193	283	3	1/8"			
BPN-CM3-E007		172	200	244	334	3	1/8"			
BPN-CM3-E008		273	302	346	436	3	1/8"			
BPN-CM4-E001	25-29	86	114	160	274	4	1/4"	BDP-AR2504	TDA-117	LLT-15
BPN-CM4-E002		137	165	211	325	4	1/4"			
BPN-CM4-E003		187	216	262	375	4	1/4"			
BPN-CM4-E004		289	318	364	477	4	1/4"			
BPN-CM4-E005	30-35	86	114	168	281	4	1/4"	BDP-AR3175	TDA-117	LLT-15
BPN-CM4-E006		137	165	218	332	4	1/4"			
BPN-CM4-E007		187	216	269	383	4	1/4"			
BPN-CM4-E008		289	318	371	484	4	1/4"			
BPN-CM4-E009	35.5-41	121	152	206	319	4	1/4"	BDP-AR3175	TDA-118	LLT-20
BPN-CM4-E010		165	197	251	364	4	1/4"			
BPN-CM4-E011		210	241	295	408	4	1/4"			
BPN-CM4-E012		349	381	435	548	4	1/4"			
BPN-CM4-E013	42-47.5	121	152	206	319	4	1/4"	BDP-AR3175	TDA-118	LLT-20
BPN-CM4-E014		165	197	251	364	4	1/4"			
BPN-CM4-E015		210	241	295	408	4	1/4"			
BPN-CM4-E016		349	384	435	548	4	1/4"			
BPN-CM5-E001	48-55	130	165	219	364	5	1/4"	BDP-AR4445	TDA-118	LLT-20
BPN-CM5-E002		232	267	321	465	5	1/4"			
BPN-CM5-E003		422	457	511	656	5	1/4"			
BPN-CM5-E004	56-65	130	165	219	364	5	1/4"	BDP-AR4445	TDA-118	LLT-20
BPN-CM5-E005		232	267	321	465	5	1/4"			
BPN-CM5-E006		422	457	511	656	5	1/4"			
BPN-CM5-E007	65-76	172	216	287	430	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-E008		273	318	389	532	5	1/2"			
BPN-CM5-E009		464	508	579	722	5	1/2"			
BPN-CM5-E010	77-89	172	216	287	430	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-E011		273	318	389	532	5	1/2"			
BPN-CM5-E012		464	508	579	722	5	1/2"			
BPN-CM5-E013	89-101	172	225	297	440	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-E014		273	327	388	541	5	1/2"			
BPN-CM5-E015		556	610	681	824	5	1/2"			
BPN-CM5-E016	102-114	172	225	297	440	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-E017		273	327	399	541	5	1/2"			
BPN-CM5-E018		556	610	681	824	5	1/2"			

**Brocas punta intercambiable - Amarre Cono Morse - Tipo Recto**

- Compatible con: KRNCH - NIXA - YG - ACME
- Placas Disponibles: Ver Sección Placas



REFERENCIA	D1	L1	L2	L3	L	MT	G2	ANILLO	TORNILLO	LLAVE
BPN-CM2-R001	9.5-11	32	52	88	160	2	1/16"	BDP-AR1905	TDA-120	LLT-7
BPN-CM2-R002	11.5-12.5	32	52	88	160	2	1/16"	BDP-AR1905	TDA-121	LLT-7
BPN-CM2-R003	13-15	35	56	92	164	2	1/16"	BDP-AR1905	TDA-122	LLT-8
BPN-CM2-R004	15.5-17.5	35	56	92	164	2	1/16"	BDP-AR1905	TDA-123	LLT-8
BPN-CM3-R001	18-21.5	70	98	143	233	3	1/8"	BDP-AR2504	TDA-116	LLT-9
BPN-CM3-R002	22-24.5	70	98	143	233	3	1/8"	BDP-AR2504	TDA-116	LLT-9
BPN-CM4-R001	24.5-29.5	86	114	160	274	4	1/8"	BDP-AR2504	TDA-117	LLT-15
BPN-CM4-R002	30-35.5	86	114	168	281	4	1/4"	BDP-AR3175	TDA-117	LLT-15
BPN-CM4-R003	35.5-41	121	152	206	319	4	1/4"	BDP-AR3175	TDA-118	LLT-20
BPN-CM4-R004		349	381	435	548	4	1/4"			
BPN-CM4-R005		559	591	644	757	4	1/4"			
BPN-CM4-R006		787	819	873	986	4	1/4"			
BPN-CM4-R007	42-47	121	152	206	319	4	1/4"	BDP-AR3175	TDA-118	LLT-20
BPN-CM4-R008		349	381	435	548	4	1/4"			
BPN-CM4-R009		559	591	645	757	4	1/4"			
BPN-CM4-R010		787	819	873	986	4	1/4"			
BPN-CM5-R001	48-55	130	165	219	364	5	1/4"	BDP-AR4445	TDA-118	LLT-20
BPN-CM5-R001		422	457	511	656	5	1/4"			
BPN-CM5-R002		625	660	714	859	5	1/4"			
BPN-CM5-R003		879	914	968	1113	5	1/4"			
BPN-CM5-R004	56-65	130	165	219	364	5	1/4"	BDP-AR4445	TDA-118	LLT-20
BPN-CM5-R005		422	457	511	656	5	1/4"			
BPN-CM5-R006		625	660	714	859	5	1/4"			
BPN-CM5-R007		879	914	968	1113	5	1/4"			
BPN-CM5-R008	64-76	172	216	287	430	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-R009		464	508	579	722	5	1/2"			
BPN-CM5-R010		660	705	776	919	5	1/2"			
BPN-CM5-R011		889	933	1005	1148	5	1/2"			
BPN-CM5-R012	77-89	172	216	287	430	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-R013		464	508	579	722	5	1/2"			
BPN-CM5-R014		660	705	776	919	5	1/2"			
BPN-CM5-R015		889	933	1005	1148	5	1/2"			
BPN-CM5-R016	89-101	172	225	297	440	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-R017		556	610	681	824	5	1/2"			
BPN-CM5-R018		685	740	811	954	5	1/2"			
BPN-CM5-R019		939	994	1065	1208	5	1/2"			
BPN-CM5-R020	101-114	172	225	297	440	5	1/2"	BDP-AR5715	TDA-119	LLT-25
BPN-CM5-R021		556	610	681	824	5	1/2"			
BPN-CM5-R022		685	740	811	954	5	1/2"			
BPN-CM5-R023		939	994	1065	1208	5	1/2"			

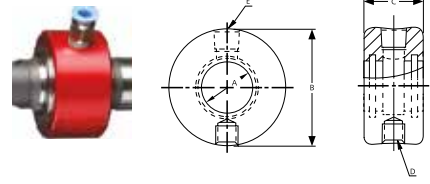
**Varilla de tope para Broca de Punta Intercambiable**



REFERENCIA	Rosca	Longitud	Para Modelo
BPN-M8-250	M8X1.25	250	BDP-AR1905
BPN-M8-250	M8X1.25	250	BDP-AR2504
BPN-M10-250	M10X1.5	250	BDP-AR3175
BPN-M10-250	M10X1.5	250	BDP-AR4445
BPN-M12-250	M12X1.75	250	BDP-AR5715

## Anillo para Refrigeración de brocas

REFERENCIA	A	B	C	D	E
BDP-AR1905	19.05	44.45	22.23	M8X1.25	1/8"
BDP-AR2504	25.40	53.97	28.57	M8X1.25	1/8"
BDP-AR3175	31.75	63.50	34.92	M10X1.5	1/4"
BDP-AR4445	44.45	76.20	34.92	M10X1.5	1/4"
BDP-AR5715	57.15	95.27	44.45	M12X1.75	1/2"



## Tornillos / Llave de recambio para Brocas de punta Intercambiable

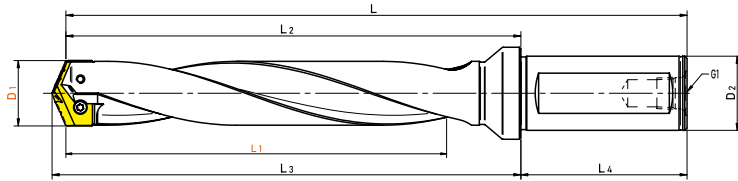
REFERENCIA
TDA-116
TDA-117
TDA-118
TDA-119
TDA-120
TDA-121
TDA-122
TDA-123



REFERENCIA	Par Apriete N/m
LLT-7	0.5
LLT-8	1.0
LLT-9	1.8
LLT-15	3.5
LLT-20	5.0
LLT-25	7.0

## Brocas punta intercambiable - Amarre Plano - Tipo Espiral

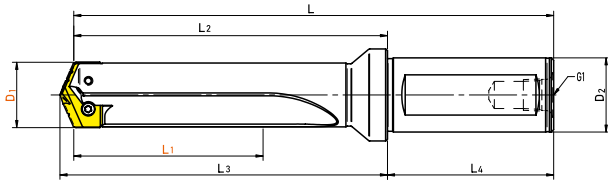
- Compatible con: KRNC - NIXA - YG - ACME
- Placas Disponibles: Ver Sección Placas



REFERENCIA	D1	L1	L2	L3	L	D2	L4	G1	TORNILLO	LLAVE
BPN-D20-E001	9.5-11	60	90	92	140	20	50	1/8"	TDA-120	LLT-7
BPN-D20-E002		111	141	143	191					
BPN-D20-E003	11.5-12.5	60	90	92	140	20	50	1/8"	TDA-121	LLT-7
BPN-D20-E004		111	141	143	191					
BPN-D20-E005	13-15	64	92	95	142	20	50	1/8"	TDA-122	LLT-8
BPN-D20-E006		114	143	146	193					
BPN-D20-E007		178	206	209	256					
BPN-D20-E008	15.5-17.5	64	92	95	142	20	50	1/8"	TDA-123	LLT-8
BPN-D20-E009		114	143	143	193					
BPN-D20-E010		178	206	209	256					
BPN-D25-E001	18-21.5	118	155	158	211	25	56	1/8"	TDA-116	LLT-9
BPN-D25-E002		168	206	209	262					
BPN-D25-E003		270	307	311	363					
BPN-D25-E004	22-24	118	155	158	211	25	56	1/8"	TDA-116	LLT-9
BPN-D25-E005		168	206	209	262					
BPN-D25-E006		270	307	311	363					
BPN-D25-E007	25-29	137	179	183	239	32	60	1/4"	TDA-117	LLT-15
BPN-D32-E001		187	230	234	290					
BPN-D32-E002		289	332	335	392					
BPN-D32-E003	30-35	137	179	183	239	32	60	1/4"	TDA-117	LLT-15
BPN-D32-E004		187	230	234	290					
BPN-D32-E005		289	332	335	392					
BPN-D32-E006	36-41	165	218	222	288	40	70	1/4"	TDA-118	LLT-20
BPN-D40-E001		210	262	267	332					
BPN-D40-E002	42-47	165	218	222	288	40	70	1/4"	TDA-118	LLT-20
BPN-D40-E003		210	262	267	332					
BPN-D40-E004	48-55	232	284	286	351	40	70	1/4"	TDA-118	LLT-20
BPN-D40-E005	56-65	232	281	286	351	40	70	1/4"	TDA-118	LLT-20

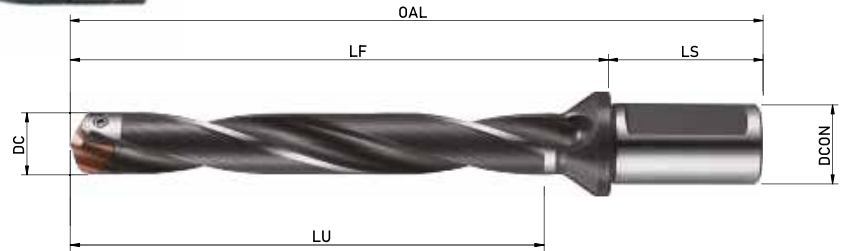
**Brocas punta intercambiable - Amarre Plano - Tipo Recto**

- Compatible con: KRCH - NIXA - YG - ACME
- Placas Disponibles: Ver Sección Placas



REFERENCIA	D1	L1	L2	L3	L	D2	L4	G1	TORNILLO	LLAVE
BPN-D16-R001	9.5-11	19	48	50	96	16	48	1/16"	TDA-120	LLT-7
BPN-D20-R001		32	61	64	111	20	50	1/8"		
BPN-D20-R002		222	252	254	302					
BPN-D20-R003		290	320	322	370					
BPN-D16-R002	11.5-12.5	19	48	50	96	16	48	1/16"	TDA-121	LLT-7
BPN-D20-R004		32	61	64	111	20	50	1/8"		
BPN-D20-R005		222	252	254	310					
BPN-D20-R006		290	320	322	370					
BPN-D20-R007	13-15	22	48	50	98	20	50	1/8"	TDA-122	LLT-8
BPN-D20-R008		35	64	66	114					
BPN-D20-R009		295	324	327	374					
BPN-D20-R010		387	416	419	466					
BPN-D20-R011	15.5-17.5	22	48	50	98	20	50	1/8"	TDA-123	LLT-8
BPN-D20-R012		35	64	66	114					
BPN-D20-R013		295	324	327	374					
BPN-D20-R014		387	416	419	466					
BPN-D25-R001	18-21	48	76	79	132	25	56	1/8"	TDA-116	LLT-9
BPN-D25-R002		67	107	111	163					
BPN-D25-R003		457	495	498	551					
BPN-D25-R004		569	603	606	659					
BPN-D25-R005	22-24.5	48	76	79	132	25	56	1/8"	TDA-116	LLT-9
BPN-D25-R006		67	107	111	163					
BPN-D25-R007		457	495	498	551					
BPN-D25-R008		569	603	606	659					
BPN-D32-R001	25-29	57	89	92	149	32	60	1/4"	TDA-117	LLT-15
BPN-D32-R002		86	129	132	189					
BPN-D32-R003		511	554	558	614					
BPN-D32-R004		692	735	739	795					
BPN-D32-R005	30-35	57	89	92	149	32	60	1/4"	TDA-117	LLT-15
BPN-D32-R006		86	129	132	189					
BPN-D32-R007		511	554	558	614					
BPN-D32-R008		692	735	739	795					
BPN-D40-R001	36-41	76	125	130	195	40	70	1/4"	TDA-118	LLT-20
BPN-D40-R002		121	173	178	243					
BPN-D40-R003		349	402	406	472					
BPN-D40-R004		559	611	616	681					
BPN-D40-R005		787	840	845	910					
BPN-D40-R006	42-47	76	125	130	195	40	70	1/4"	TDA-118	LLT-20
BPN-D40-R007		121	173	178	243					
BPN-D40-R008		349	402	406	472					
BPN-D40-R009		559	611	616	681					
BPN-D40-R010		787	840	845	910					
BPN-D40-R011	48-55	130	179	184	249	40	70	1/4"	TDA-118	LLT-20
BPN-D40-R012		422	472	476	545					
BPN-D40-R013		625	675	680	745					
BPN-D40-R014		879	929	934	999					
BPN-D40-R015	56-65	130	179	184	249	40	70	1/4"	TDA-118	LLT-20
BPN-D40-R016		422	472	476	545					
BPN-D40-R017		625	675	680	745					
BPN-D40-R018		879	929	934	999					

## BPN - Broca Intercambiable Inserto - 3xD / 5xD / 8xD



- LU - Longitud de Corte
- øDcon - Diámetro Amarre Weldon
- LF - Longitud hasta tope amarre
- LS - Longitud mango de amarre
- OAL - Longitud total broca

- Compatible con: KRNCH - NIXA
- Placas Disponibles: Ver Sección Placas

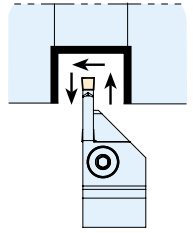
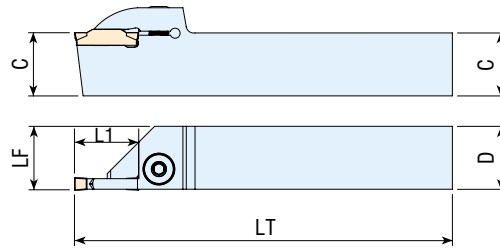
Referencia	Rango	Rango	LU	øDcon	LF	OAL	LS	Tornillo
BPN3XD-10	10-10.2	3D	31.5	16	48	96	48	
BPN5XD-10		5D	52.5	16	69	117	48	
BPN8XD-10		8D	84.0	16	100	148	48	
BPN3XD-105	10.5	3D	33.0	16	50	98	48	
BPN5XD-105		3D	55.0	16	50	98	48	
BPN8XD-105		5D	88.0	16	105	153	48	
BPN3XD-11	11.0	3D	34.5	16	52	100	48	
BPN5XD-11		5D	57.5	16	75	123	48	
BPN8XD-11		8D	92.0	16	110	158	48	
BPN3XD-115	11.5	3D	36.0	16	54	102	48	
BPN5XD-115		5D	60.0	16	78	126	48	
BPN8XD-115		8D	96.0	16	114	162	48	
BPN3XD-12	12.0	3D	37.5	16	57	105	48	
BPN5XD-12		5D	62.5	16	82	130	48	
BPN8XD-12		8D	100.0	16	119	167	48	
BPN3XD-125	12.5	3D	39.0	16	59	107	48	
BPN5XD-125		5D	65.0	16	85	133	48	
BPN8XD-125		8D	104.0	16	124	172	48	
BPN3XD-13	13.0	3D	40.5	16	61	109	48	
BPN5XD-13		5D	67.5	16	88	136	48	
BPN8XD-13		8D	108.0	16	128	176	48	
BPN3XD-135	13.5	3D	42.0	16	63	111	48	
BPN5XD-135		5D	70.0	16	91	139	48	
BPN8XD-135		8D	112.0	16	133	181	48	
BPN3XD-14	14.0	3D	43.5	16	65	113	48	
BPN5XD-14		5D	72.5	16	94	142	48	
BPN8XD-14		8D	116.0	16	138	186	48	
BPN3XD-145	14.5	3D	45.0	16	67	115	48	
BPN5XD-145		5D	75.0	16	97	145	48	
BPN8XD-145		8D	120.0	16	142	190	48	
BPN3XD-15	15.0/15.5	3D	48.0	20	72	122	50	
BPN5XD-15		5D	80.0	20	104	154	50	
BPN8XD-15		8D	128.0	20	152	202	50	
BPN3XD-16	16.0/16.5	3D	51.0	20	77	127	50	
BPN5XD-16		5D	85.0	20	111	161	50	
BPN8XD-16		8D	140.0	20	162	212	50	
BPN3XD-17	17.0/17.5	3D	54.0	20	81	131	50	
BPN5XD-17		5D	90.0	20	117	167	50	
BPN8XD-17		8D	144.0	20	171	221	50	
BPN3XD-18	18.0/18.5	3D	57.0	25	85	141	56	
BPN5XD-18		5D	95.0	25	123	179	56	
BPN8XD-18		8D	152.0	25	180	236	56	
BPN3XD-19	19.0/19.5	3D	60.0	25	90	146	56	
BPN5XD-19		5D	100.0	25	130	186	56	
BPN8XD-19		8D	160.0	25	190	246	56	

**BPN - Broca Intercambiable Inserto - 3xD / 5xD / 8xD - CONTINUACIÓN**

Referencia	Rango	Rango	LU	∅Dcon	LF	OAL	LS	Tornillo
BPN3XD-20	20.0/20.5	3D	63.0	25	94	150	56	
BPN5XD-20		5D	105.0	25	136	192	56	
BPN8XD-20		8D	168.0	25	199	255	56	
BPN3XD-21	21.0/21.5	3D	66.0	25	98	154	56	
BPN5XD-21		5D	110.0	25	142	198	56	
BPN8XD-21		8D	176.0	25	208	264	56	
BPN3XD-22	22.0/22.5	3D	69.0	25	102	158	56	
BPN5XD-22		5D	115.0	25	148	204	56	
BPN8XD-22		8D	184.0	25	217	273	56	
BPN3XD-23	23.0/23.5	3D	72.0	25	107	163	56	
BPN5XD-23		5D	120.0	25	155	211	56	
BPN8XD-23		8D	192.0	25	227	283	56	
BPN3XD-24	24.0/24.5	3D	75.0	32	112	172	60	
BPN5XD-24		5D	125.0	32	162	222	60	
BPN8XD-24		8D	200.0	32	237	297	60	
BPN3XD-25	25.0/25.5	3D	78.0	32	116	176	60	
BPN5XD-25		5D	130.0	32	168	228	60	
BPN8XD-25		8D	208.0	32	246	306	60	
BPN3XD-26	26.0/26.5	3D	81.0	32	121	181	60	
BPN5XD-26		5D	135.0	32	175	235	60	
BPN8XD-26		8D	216.0	32	256	316	60	
BPN3XD-27	27.0/27.5	3D	84.0	32	125	185	60	
BPN5XD-27		5D	140.0	32	181	241	60	
BPN8XD-27		8D	224.0	32	265	325	60	
BPN3XD-28	28.0/28.5	3D	87.0	32	129	189	60	
BPN5XD-28		5D	145.0	32	187	247	60	
BPN8XD-28		8D	232.0	32	274	334	60	
BPN3XD-29	29.0/29.5	3D	90.0	32	133	193	60	
BPN5XD-29		5D	150.0	32	193	253	60	
BPN8XD-29		8D	240.0	32	283	343	60	
BPN3XD-30	30.0/30.5	3D	93.0	32	138	198	60	
BPN5XD-30		5D	155.0	32	200	260	60	
BPN8XD-30		8D	248.0	32	293	353	60	
BPN3XD-31	31.0/31.5	3D	96.0	32	142	202	60	
BPN5XD-31		5D	160.0	32	206	266	60	
BPN8XD-31		8D	256.0	32	302	362	60	
BPN3XD-32	32.0/32.5	3D	96.0	32	146	206	60	
BPN5XD-32		5D	165.0	32	212	272	60	
BPN8XD-32		8D	264.0	32	311	371	60	
BPN3XD-33	33.0/33.5	3D	102.0	32	151	211	60	
BPN5XD-33		5D	170.0	32	219	279	60	
BPN8XD-33		8D	272.0	32	321	381	60	
BPN3XD-34	34.0/34.5	3D	105.0	40	156	226	70	
BPN5XD-34		5D	175.0	40	224	294	70	
BPN8XD-34		8D	280.0	40	329	399	70	
BPN3XD-35	35.0/35.5	3D	108.0	40	160	230	70	
BPN5XD-35		5D	180.0	40	230	300	70	
BPN8XD-35		8D	288.0	40	338	408	70	
BPN3XD-36	36.0/36.5	3D	110.0	40	164	234	70	
BPN5XD-36		5D	185.0	40	236	306	70	
BPN8XD-36		8D	296.0	40	347	417	70	
BPN3XD-37	37.0/37.5	3D	114.0	40	169	239	70	
BPN5XD-37		5D	190.0	40	243	313	70	
BPN8XD-37		8D	304.0	40	357	427	70	
BPN3XD-38	38.0/38.5	3D	117.0	40	173	243	70	
BPN5XD-38		5D	195.0	40	249	319	70	
BPN8XD-38		8D	312.0	40	366	436	70	
BPN5XD-39	39.0	3D	123.0	40	182	252	70	
BPN5XD-395	39.5	5D	205.0	40	262	332	70	



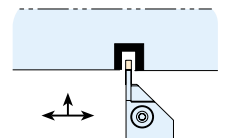
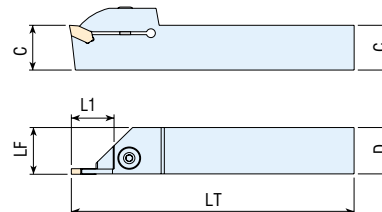
## Porta de Ranurado Exterior - Placa OKE Z..D



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-OK-R/L 1616-2-L15	16	16	125	16.2	15	Z.DB-2	TAB-003	MDP-009	LLA-3
NPDR-OK-R/L 2020-2-L7	20	20	125	20.2	7				
NPDR-OK-R/L 2020-2-L15	20	20	125	20.2	15				
NPDR-OK-R/L 2525-2-L15	25	25	150	25.2	15				
NPDR-OK-R/L 1616-2.5-L15	16	16	125	16.3	15	Z.ED-2.5	TPA-019	-	LLA-4
NPDR-OK-R/L 2020-2.5-L17	20	20	125	20.3	17				
NPDR-OK-R/L 2525-2.5-L15	25	25	150	25.3	15				
NPDR-OK-R/L 1616-3-L15	16	16	125	16.3	15	Z.FD-3	TPA-019	-	LLA-4
NPDR-OK-R/L 1616-3-L17	16	16	125	16.3	17				
NPDR-OK-R/L 1616-3-L20	16	16	125	16.3	20				
NPDR-OK-R/L 2020-3-L12	20	20	125	20.3	12				
NPDR-OK-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-OK-R/L 2020-3-L21	20	20	125	20.3	21				
NPDR-OK-R/L 2020-3-L25	20	20	125	20.3	25				
NPDR-OK-R/L 2525-3-L12	25	25	150	25.3	12				
NPDR-OK-R/L 2525-3-L22	25	25	150	25.3	22				
NPDR-OK-R/L 2525-3-L30	25	25	150	25.3	30				
NPDR-OK-R/L 2020-4-L12	20	20	125	20.5	12	Z.GD-4	TPA-019	-	LLA-4
NPDR-OK-R/L 2020-4-L20	20	20	125	20.5	20				
NPDR-OK-R/L 2525-4-L12	25	25	150	25.5	12				
NPDR-OK-R/L 2525-4-L22	25	25	150	25.5	22				
NPDR-OK-R/L 2020-5-L12	20	20	125	20.5	12	Z.HD-5	TPA-019	-	LLA-4
NPDR-OK-R/L 2020-5-L20	20	20	125	20.5	20				
NPDR-OK-R/L 2525-5-L12	25	25	150	25.5	12				
NPDR-OK-R/L 2525-5-L25	25	25	150	25.5	25				
NPDR-OK-R/L 3232-5-L25	32	32	170	32.5	25				
NPDR-OK-R/L 2020-6-L20	20	20	125	20.6	20	Z.KD-6	TPA-019	-	LLA-4
NPDR-OK-R/L 2525-6-L25	25	25	150	25.6	25				
NPDR-OK-R/L 3232-6-L25	32	32	170	32.6	25				
NPDR-OK-R/L 3232-6-L30	32	32	170	32.6	30				

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

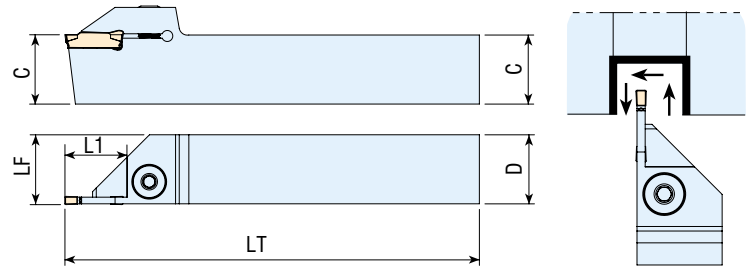
## Porta de Ranurado Exterior - Placa ZQMX..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-ZQMX-R/L 2020-3-L20	20	20	125	20.3	20	ZQMX-3	TPA-019	-	LLA-4
NPDR-ZQMX-R/L 2525-3-L22	25	25	150	25.3	22				
NPDR-ZQMX-R/L 2020-4-L20	20	20	125	20.4	20	ZQMX-4	TPA-019	-	LLA-4
NPDR-ZQMX-R/L 2525-4-L22	25	25	150	25.4	22				

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

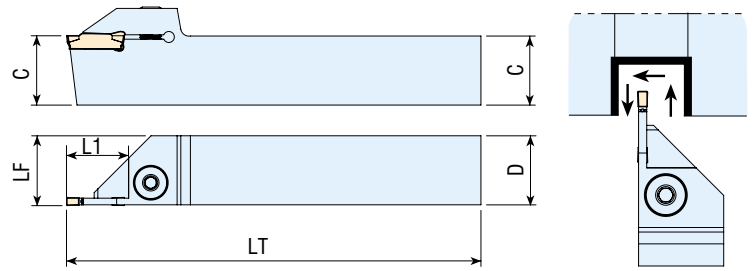
**Porta de Ranurado Exterior - Placa MGM..**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDRA-MGM-R/L 1616-2-L10	16	16	125	16.3	10	MGM..2	TAB-003	MDP-009	LLA-3
NPDRA-MGM-R/L 1616-2-L15	16	16	125	16.3	15				
NPDRA-MGM-R/L 2020-2-L15	20	20	150	20.3	15				
NPDRA-MGM-R/L 2525-2-L15	25	25	150	25.3	15				
NPDRA-MGM-R/L 3232-2-L15	32	32	170	32.3	15				
NPDRA-MGM-R/L 1212-3-L15	12	12	100	12.3	15	MGM..3	TPA-019	-	LLA-4
NPDRA-MGM-R/L 1616-3-L15	16	16	125	16.3	15				
NPDRA-MGM-R/L 2020-3-L10	20	20	125	20.3	10				
NPDRA-MGM-R/L 2020-3-L20	20	20	125	20.3	20				
NPDRA-MGM-R/L 2020-3-L28	20	20	125	20.3	28				
NPDRA-MGM-R/L 2525-3-L10	25	25	150	25.3	10				
NPDRA-MGM-R/L 2525-3-L15	25	25	150	25.3	15				
NPDRA-MGM-R/L 2525-3-T22	25	25	150	25.3	22				
NPDRA-MGM-R/L 3232-3-L10	32	32	170	32.3	10				
NPDRA-MGM-R/L 3232-3-L22	32	32	170	32.3	22				
NPDRA-MGM-R/L 2020-4-L10	20	20	125	20.4	10	MGM..4	TPA-019	-	LLA-4
NPDRA-MGM-R/L 2020-4-L20	20	20	125	20.4	20				
NPDRA-MGM-R/L 2020-4-L25	20	20	125	20.4	25				
NPDRA-MGM-R/L 2525-4-L10	25	25	150	25.4	10				
NPDRA-MGM-R/L 2525-4-L18	25	25	150	25.4	18				
NPDRA-MGM-R/L 2525-4-L22	25	25	150	25.4	22				
NPDRA-MGM-R/L 3232-4-L10	32	32	170	32.4	10				
NPDRA-MGM-R/L 3232-4-L22	32	32	170	32.4	22				
NPDRA-MGM-R/L 2020-5-L20	20	20	125	20.5	20	MGM..5	TPA-019	-	LLA-4
NPDRA-MGM-R/L 2525-5-L15	25	25	150	25.5	15				
NPDRA-MGM-R/L 2525-5-L18	25	25	150	25.5	18				
NPDRA-MGM-R/L 2525-5-L25	25	25	150	25.5	25				
NPDRA-MGM-R/L 3232-5-L15	32	32	170	32.5	15				
NPDRA-MGM-R/L 3232-5-L25	32	32	170	32.5	25				
NPDRA-MGM-R/L 2525-6-L15	25	25	150	25.6	15	MGM..6	TPA-019	-	LLA-4
NPDRA-MGM-R/L 2525-6-L25	25	25	150	25.6	25				
NPDRA-MGM-R/L 3232-6-L25	32	32	170	32.6	25				

- Compatible con: KRLY - NIXA
- Placas Disponibles: Ver Sección Placas

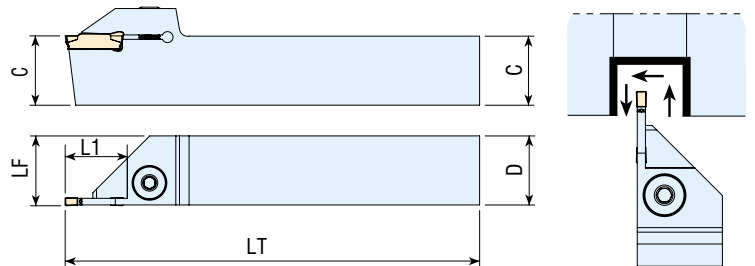
## Porta de Ranurado Exterior - Placa KG..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-KGR/L 2020-2-L15	20	20	125	20.2	15	KG..2	TAB-003	MDP-009	LLA-3
NPDR-KGR/L 2525-2-L8	25	25	150	25.2	8				
NPDR-KGR/L 2525-2-L15	25	25	150	25.2	15				
NPDR-KGR/L 2525-2-L17	25	25	150	25.2	17				
NPDR-KGR/L 1616-3-L20	16	16	125	16.3	20	KG..3	TPA-019	-	LLA-4
NPDR-KGR/L 2020-3-L20	20	20	125	20.3	20				
NPDR-KGR/L 2525-3-L10	25	25	150	25.3	10				
NPDR-KGR/L 2525-3-L13	25	25	150	25.3	13				
NPDR-KGR/L 2525-3-L22	25	25	150	25.3	22				
NPDR-KGR/L 2020-4-L20	20	20	125	20.4	20	KG..4	TPA-019	-	LLA-4
NPDR-KGR/L 2525-4-L10	25	25	150	25.4	10				
NPDR-KGR/L 2525-4-L16	25	25	150	25.4	16				
NPDR-KGR/L 2525-4-L22	25	25	150	25.4	22				
NPDR-KGR/L 2525-5-L12	25	25	150	25.5	12	KG..5	TPA-019	-	LLA-4
NPDR-KGR/L 2525-5-L15	25	25	150	25.5	15				
NPDR-KGR/L 2525-5-L25	25	25	150	25.5	25				
NPDR-KGR/L 2525-6-L25	25	25	150	25.6	25	KG..6	TPA-019	-	LLA-4

- Compatible con: KRLY
- Placas NO Disponibles

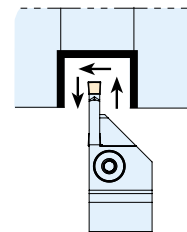
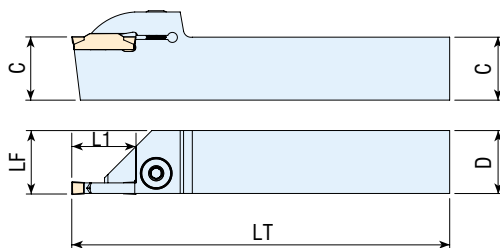
## Porta de Ranurado Exterior - Placa GCM..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-GCM-R/L 1616-2-L15	16	16	125	16.2	15	GCM-N20	TAB-003	MDP-009	LLA-3
NPDR-GCM-R/L 2020-2-L20	20	20	125	20.2	20				
NPDR-GCM-R/L 2525-2-L20	25	25	150	25.2	20				
NPDR-GCM-R/L 1616-3-L15	16	16	125	16.3	15	GCM-N30	TPA-019	-	LLA-4
NPDR-GCM-R/L 2020-3-L22	20	20	125	20.3	22				
NPDR-GCM-R/L 2525-3-L15	25	25	150	25.3	15				
NPDR-GCM-R/L 2525-3-L22	25	25	150	25.3	22				
NPDR-GCM-R/L 2525-4-L25	25	25	150	25.4	25	GCM-N40	TPA-019	-	LLA-4

- Compatible con: KRLY
- Placas NO Disponibles: Ver Sección Placas

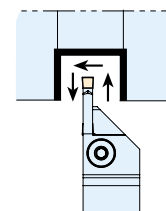
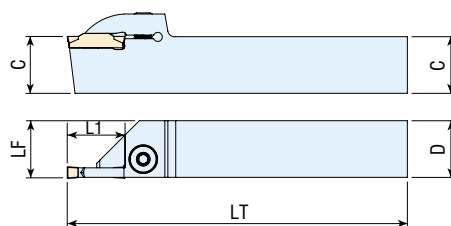
**Porta de Ranurado Exterior - Placa TGM..**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-TGM-R/L 2020-3-L8	20	20	125	20.3	8	TGM..-3	TPA-019	-	LLA-4
NPDR-TGM-R/L 2525-3-L8	25	25	150	25.3	8				
NPDR-TGM-R/L 3232-3-L8	32	32	170	32.3	8				
NPDR-TGM-R/L 2020-4-L9	20	20	125	20.4	9	TGM..-4	TPA-019	-	LLA-4
NPDR-TGM-R/L 2525-4-L17	25	25	150	25.4	17				
NPDR-TGM-R/L 3232-4-L17	32	32	170	32.4	17				
NPDR-TGM-R/L 3232-5-L25	32	32	170	32.5	25	TGM..-5	TPA-019	-	LLA-4

- Compatible con: ISCR
- Placas NO Disponibles

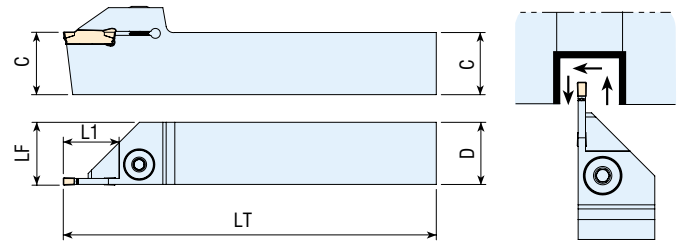
**Porta de Ranurado Exterior - Placa DGN..**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVEV
NPDR-DGN-R/L 1212-2-L15	12	12	125	16.3	15	DGN-2	TAB-003	MDP-009	LLA-3
NPDR-DGN-R/L 1616-2-L15	16	16	100	16.3	15				
NPDR-DGN-R/L 2020-2-L15	20	20	125	20.3	15				
NPDR-DGN-R/L 2525-2-L15	25	25	150	25.3	15				
NPDR-DGN-R/L 3232-2-L15	32	32	170	32.3	15				
NPDR-DGN-R/L 1212-3-L15	12	12	100	16.3	15	DGN-3	TPA-019	-	LLA-4
NPDR-DGN-R/L 1616-3-L15	16	16	125	16.3	15				
NPDR-DGN-R/L 2020-3-L12	20	20	125	20.3	12				
NPDR-DGN-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-DGN-R/L 2525-3-L12	25	25	150	25.3	12				
NPDR-DGN-R/L 2522-3-L22	25	25	150	25.3	22				
NPDR-DGN-R/L 3232-3-L22	32	32	170	32.3	22				
NPDR-DGN-R/L 2020-4-L20	20	20	125	20.4	20	DGN-4 GRP-4	TPA-019	-	LLA-4
NPDR-DGN-R/L 2525-4-L12	25	25	150	25.4	12				
NPDR-DGN-R/L 2525-4-L22	25	25	150	25.4	22				
NPDR-DGN-R/L 3232-4-L25	32	32	170	32.4	25				
NPDR-DGN-R/L 2020-5-L20	20	20	125	20.5	20	DGN-5 GRP-5	TPA-019	-	LLA-4
NPDR-DGN-R/L 2525-5-L12	25	25	150	25.5	12				
NPDR-DGN-R/L 2525-5-L25	25	25	150	25.5	25				

- Compatible con: ISCR
- Placas NO Disponibles

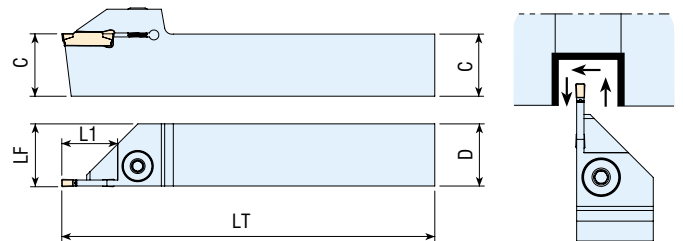
## Porta de Ranurado Exterior - Placa TD..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-TD-R/L 1212-2-L15	12	12	100	12.2	15	TD..-2	TAB-003	MDP-009	LLA-3
NPDR-TD-R/L 1616-2-L8	16	16	125	16.2	8				
NPDR-TD-R/L 1616-2-L15	16	16	125	16.2	15				
NPDR-TD-R/L 2020-2-L9	20	20	125	20.2	9				
NPDR-TD-R/L 2020-2-L15	20	20	125	20.2	15				
NPDR-TD-R/L 2020-2-L17	20	20	125	20.2	17				
NPDR-TD-R/L 2020-2-L20	20	20	125	20.2	20				
NPDR-TD-R/L 2525-2-L8	25	25	150	25.2	8				
NPDR-TD-R/L 2525-2-L17	25	25	150	25.2	17				
NPDR-TD-R/L 1212-3-L15	12	12	100	12.4	15	TD..-3	TPA-019	-	LLA-4
NPDR-TD-R/L 1616-3-L15	16	16	125	16.4	15				
NPDR-TD-R/L 2020-3-L12	20	20	125	20.4	12				
NPDR-TD-R/L 2020-3-L20	20	20	125	20.4	20				
NPDR-TD-R/L 2020-3-L25	20	20	125	20.4	25				
NPDR-TD-R/L 2020-3-L30	20	20	125	20.4	30				
NPDR-TD-R/L 2525-3-L9	25	25	150	25.4	9				
NPDR-TD-R/L 2525-3-L12	25	25	150	25.4	12				
NPDR-TD-R/L 2525-3-L22	25	25	150	25.4	22				
NPDR-TD-R/L 2525-3-L25	25	25	150	25.4	25				
NPDR-TD-R/L 2525-3-L30	25	25	150	25.4	30				
NPDR-TD-R/L 3232-3-L25	32	32	170	32.4	25				
NPDR-TD-R/L 2525-4-L10	25	25	150	25.5	10	TD..-4	TPA-019	-	LLA-4
NPDR-TD-R/L 2525-4-L15	25	25	150	25.5	15				
NPDR-TD-R/L 2525-4-L22	25	25	150	25.5	22				
NPDR-TD-R/L 2525-4-L25	25	25	150	25.5	25				
NPDR-TD-R/L 2525-4-L30	25	25	150	25.5	30				
NPDR-TD-R/L 2525-5-L25	25	25	150	25.5	25	TD..-5	TPA-019	-	LLA-4

- Compatible con: TGTC
- Placas NO Disponibles

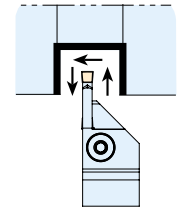
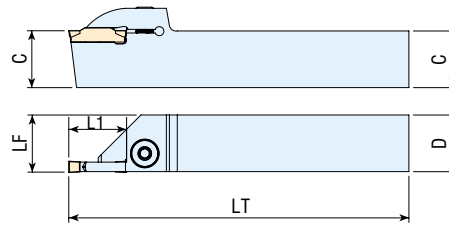
## Porta de Ranurado Exterior - Placa GX16.. / GX24..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-GX16-R/L 2020-2-L16	20	20	125	20.2	16	GX16..-2	TAB-003	MDP-009	LLA-3
NPDR-GX16-R/L 2525-2-L16	25	25	150	25.2	16				
NPDR-GX24-R/L 2020-3-L20	20	20	125	20.4	20	GX24..-3	TPA-019	-	LLA-4
NPDR-GX24-R/L 2525-3-L12	25	25	150	25.4	12				
NPDR-GX24-R/L 2525-3-L22	25	25	150	25.4	22				
NPDR-GX24-R/L 3232-3-L22	32	32	170	32.4	22				
NPDR-GX24-R/L 2525-4-L22	25	25	150	25.5	22	GX24..-4	TPA-019	-	LLA-4
NPDR-GX24-R/L 2525-5-L25	25	25	150	25.5	25	GX24..-5	TPA-019	-	LLA-4
NPDR-GX24-R/L 3232-5-L25	32	32	170	32.5	25				

- Compatible con: WLTR
- Placas NO Disponibles

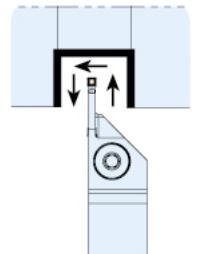
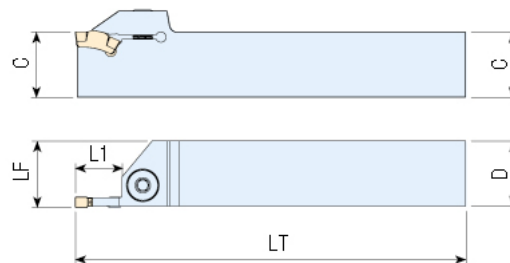
**Porta de Ranurado Exterior - Placa GRP-3..**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-GRP-R/L 1616-3-L18	16	16	125	16.3	18	GRP-3	TAB-003	MDP-009	LLA-3
NPDR-GRP-R/L 2020-3-L12	20	20	125	20.3	12				
NPDR-GRP-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-GRP-R/L 2525-3-L12	25	25	150	25.3	12				
NPDR-GRP-R/L 2525-3-L22	25	25	150	25.3	22				

- Compatible con: ISCR
- Placas NO Disponibles

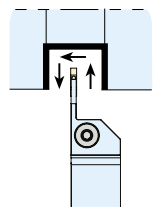
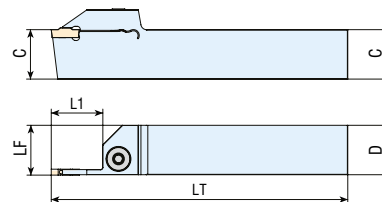
**Porta de Ranurado Exterior - Placa GIM./GIP.**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-GIM-R/L 2020-2-L15	20	20	125	16.3	15	GIM/GIP 2	TAB-003	MDP-009	LLA-3
NPDR-GIM-R/L 2525-2-L15	25	25	150	20.3	15				
NPDR-GIM-R/L 1616-3-L15	16	16	125	16.3	15	GIM/GIP 3	TPA-019	-	LLA-4
NPDR-GIM-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-GIM-R/L 2525-3-L9	25	25	150	25.3	9				
NPDR-GIM-R/L 2525-3-L22	25	25	150	25.3	22				
NPDR-GIM-R/L 2525-4-L22	25	25	150	25.4	22	GIM/GIP 4	TPA-019	-	LLA-4
NPDR-GIM-R/L 2525-5-L25	25	25	150	25.5	25	GIM/GIP 5	TPA-019	-	LLA-4

- Compatible con: ISCR
- Placas NO Disponibles

**Porta de Ranurado Exterior - Placa RD..**

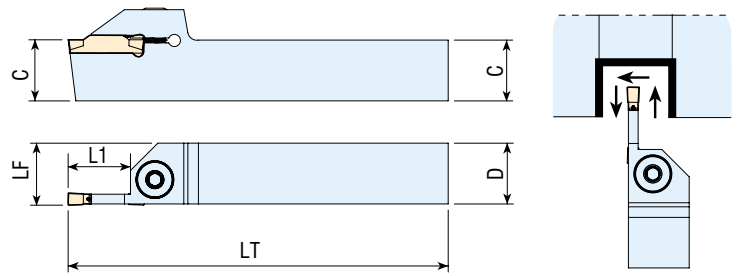


REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-RD-R/L 1616-2-L17	16	16	125	16.2	17	RD..-2	TAB-003	MDP-009	LLA-3
NPDR-RD-R/L 2020-2-L17	20	20	125	20.2	17				
NPDR-RD-R/L 2525-2-L17	25	25	150	25.2	17				
NPDR-RD-R/L 1616-3-L20	16	16	125	16.3	20	RD..-3	TPA-019	-	LLA-4
NPDR-RD-R/L 2020-3-L25	20	20	125	20.3	25				
NPDR-RD-R/L 2525-3-L25	25	25	150	25.3	25				
NPDR-RD-R/L 2020-4-L30	20	20	125	20.5	30	RD..-4	TPA-019	-	LLA-4
NPDR-RD-R/L 2525-4-L30	25	25	150	25.5	30				

- Compatible con: ISCR
- Placas NO Disponibles



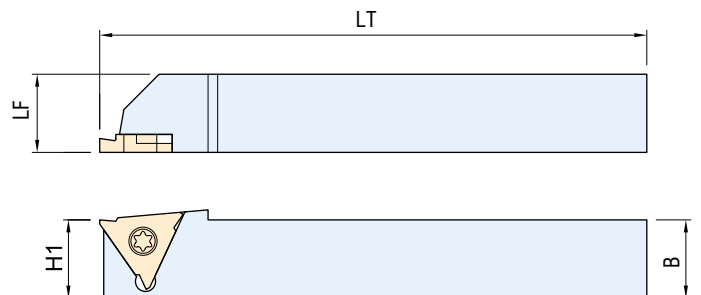
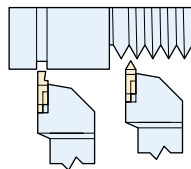
## Porta de Ranurado Exterior - Placa 123..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-123-R/L 1212-1.5-L15	12	12	100	12.2	15	123-1.5	TAB-003	MDP-009	LLA-3
NPDR-123-R/L 1616-1.5-L15	16	16	125	16.2	15				
NPDR-123-R/L 1616-2-L15	16	16	125	16.2	15	123-2	TAB-003	MDP-009	LLA-3
NPDR-123-R/L 2020-2-L8	20	20	125	20.2	8				
NPDR-123-R/L 2020-2-L15	20	20	125	20.2	15				
NPDR-123-R/L 2525-2-L8	25	25	150	25.2	8				
NPDR-123-R/L 2525-2-L15	25	25	150	25.2	15				
NPDR-123-R/L 3232-2-L15	32	32	170	32.2	15				
NPDR-123-R/L 1616-3-L10	16	16	125	16.3	15	123-3	TPA-019	-	LLA-4
NPDR-123-R/L 1616-3-L15	16	16	125	16.3	15				
NPDR-123-R/L 2020-3-L10	20	20	125	20.3	10				
NPDR-123-R/L 2020-3-L15	20	20	125	20.3	15				
NPDR-123-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-123-R/L 2525-3-L10	25	25	150	25.3	10				
NPDR-123-R/L 2525-3-L15	25	25	150	25.3	15				
NPDR-123-R/L 2525-3-L22	25	25	150	25.3	22				
NPDR-123-R/L 2020-4-L20	20	20	125	20.4	20	123-4	TPA-019	-	LLA-4
NPDR-123-R/L 2525-4-L13	25	25	150	25.4	13				
NPDR-123-R/L 2525-4-L22	25	25	150	25.4	22				
NPDR-123-R/L 3232-4-L25	32	32	170	32.4	25				
NPDR-123-R/L 2020-5-L20	20	20	125	20.5	20	123-5	TPA-019	-	LLA-4
NPDR-123-R/L 2525-5-L25	25	25	150	25.5	25				
NPDR-123-R/L 3232-6-L15	32	32	170	32.5	15	123-6	TPA-019	-	LLA-4

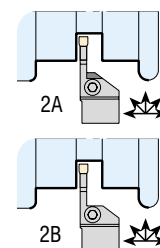
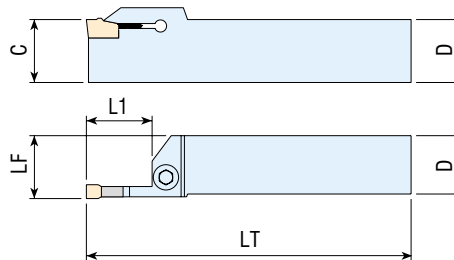
- Compatible con: SNDVK
- Placas NO Disponibles

## Portaherramientas exterior para ranuras - Placas XGTR16 Y XTTR16



Referencia	B / H1	B	LT	H2	LF	Para Placa	Tornillo Porta	Llave
XSGHR1212-K16	12	12	125	2	16	XGTR16 Y XTTR16	TDA-128	LLT-10
XSGHR1616-K16	16	16	125	-	20			
XSGHR2020-K16	20	20	125	-	25			
XSGHR2525-K16	25	25	150	-	32			
XSGSL1616-K16	16	16	125	-	22			
XSGSL2020-K16	20	20	125	-	26			

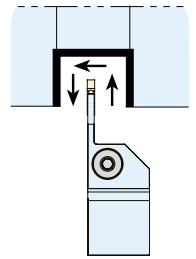
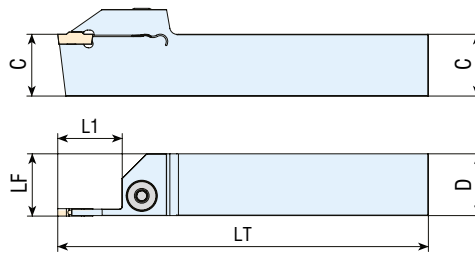
**Porta de Ranurado Exterior - Placa 151..**



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-151-2A-R/L 1616-2-L15	16	16	125	16.3	15	151.2-2	TAB-003	MDP-009	LLA-3
NPDR-151-2A-R/L 2020-2-L15	20	20	125	20.3	15				
NPDR-151-2A-R/L 2525-2-L15	25	25	150	25.3	15				
NPDR-151-2A-R/L 1616-3-L15	16	16	125	16.4	15	151.2-3	TPA-019	-	LLA-4
NPDR-151-2A-R/L 2020-3-L20	20	20	125	20.4	20				
NPDR-151-2A-R/L 2525-3-L20	25	25	150	25.4	22				
NPDR-151-2A-R/L 1616-4-L15	16	16	125	16.4	15	151.2-4	TPA-019	-	LLA-4
NPDR-151-2A-R/L 2020-4-L20	20	20	125	20.4	20				
NPDR-151-2A-R/L 2525-4-L22	25	25	150	25.4	22				
NPDR-151-2A-R/L 2020-5-L20	20	20	125	20.5	20	151-2-5	TPA-019	-	LLA-4
NPDR-151-2A-R/L 2525-5-L25	25	25	150	25.5	25				
NPDR-151-2B-R/L 1616-2-L15	16	16	125	16.3	15	151.2-2	TAB-003	MDP-009	LLA-3
NPDR-151-2B-R/L 2020-2-L15	20	20	125	20.3	15				
NPDR-151-2B-R/L 2525-2-L15	25	25	150	25.3	15				
NPDR-151-2B-R/L 1616-2.5-L15	16	16	125	16.3	15	151-2-2.5	TPA-019	-	LLA-4
NPDR-151-2B-R/L 2020-2.5-L15	20	20	125	20.3	15				
NPDR-151-2B-R/L 2525-2.5-L15	25	25	150	25.3	15				
NPDR-151-2B-R/L 1212-3-L15	12	12	100	16.4	15	151-2-3	TPA-019	-	LLA-4
NPDR-151-2B-R/L 1616-3-L15	16	16	125	16.4	15				
NPDR-151-2B-R/L 2020-3-L20	20	20	125	20.4	20				
NPDR-151-2B-R/L 2525-3-L20	25	25	150	25.4	20				
NPDR-151-2B-R/L 2525-3-L22	25	25	150	25.4	22				
NPDR-151-2B-R/L 1616-4-L15	16	16	125	16.4	15	151-2-4	TPA-019	-	LLA-4
NPDR-151-2B-R/L 2020-4-L20	20	20	125	20.4	20				
NPDR-151-2B-R/L 2525-4-L22	25	25	150	25.4	22				
NPDR-151-2B-R/L 2020-5-L20	20	20	125	20.5	20	151-2-5	TPA-019	-	LLA-4
NPDR-151-2B-R/L 2525-5-L15	25	25	150	25.5	25				

- Compatible con: SNDVK
- Placas NO Disponibles

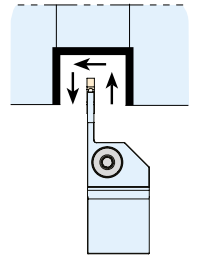
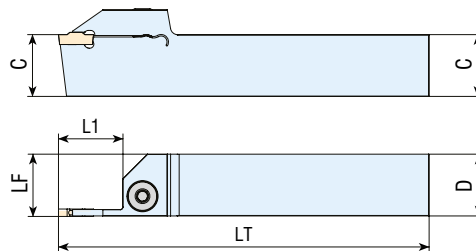
## Porta de Ranurado Exterior - Placa DGM..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-DGM-R/L 1616-2-L17	16	16	125	16.2	17	DGM2-020	TAB-003	MDP-009	LLA-3
NPDR-DGM-R/L 2020-2-L8	20	20	125	20.2	8				
NPDR-DGM-R/L 2020-2-L12	20	20	125	20.2	12				
NPDR-DGM-R/L 2020-2-L17	20	20	125	20.2	17				
NPDR-DGM-R/L 2525-2-L12	25	25	150	25.2	12				
NPDR-DGM-R/L 2525-2-L17	25	25	150	25.2	17	DGM3-020	TPA-019	-	LLA-4
NPDR-DGM-R/L 1616-3-L20	16	16	125	16.3	20				
NPDR-DGM-R/L 2020-3-L12	20	20	125	20.3	12				
NPDR-DGM-R/L 2020-3-L20	20	20	125	20.3	20				
NPDR-DGM-R/L 2525-3-L9	25	25	150	25.3	9				
NPDR-DGM-R/L 2525-3-L20	25	25	150	25.3	20				
NPDR-DGM-R/L 2525-3-L25	25	25	150	25.3	25				
NPDR-DGM-R/L 2525-4-L15	25	25	150	25.5	15	DGM4-030	TPA-019	-	LLA-4
NPDR-DGM-R/L 2525-4-L20	25	25	150	25.5	20				
NPDR-DGM-R/L 2525-4-L25	25	25	150	25.5	25				
NPDR-DGM-R/L 2525-5-L12	25	25	150	25.5	12	DGM5-030	TPA-019	-	LLA-4
NPDR-DGM-R/L 2525-5-L25	25	25	150	25.5	25				
NPDR-DGM-R/L 2525-5-L32	25	25	150	25.5	32				

- Compatible con: TNGLY
- Placas NO Disponibles

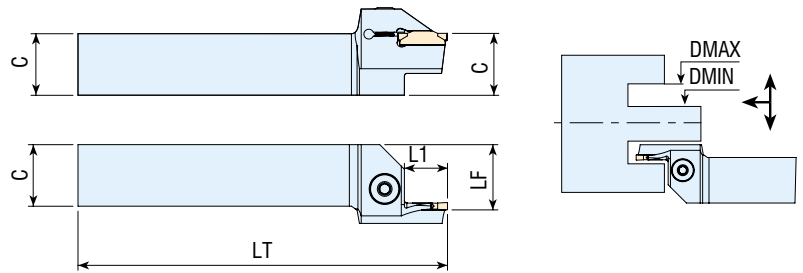
## Porta de Ranurado Exterior - Placa GP..



REFERENCIA	C	D	LT	LF	L1	INSERTO	TORNILLO	ARANDELA	LLAVE
NPDR-GP-R/L 2020-2-L15	20	20	125	20.2	16	GP-2	TAB-003	MDP-009	LLA-3
NPDR-GP-R/L 2525-2-L15	25	25	150	25.2	16				
NPDR-GP-R/L 2020-3-L20	20	20	125	20.4	20	GP-3	TPA-019	-	LLA-4
NPDR-GP-R/L 2525-3-L22	25	25	150	25.4	12				
NPDR-GP-R/L 2525-4-L22	25	25	150	25.4	22	GP-4	TPA-019	-	LLA-4
NPDR-GP-R/L 2525-5-L25	32	32	170	32.4	22	GP-5	TPA-019	-	LLA-4

- Compatible con: PLBT
- Placas NO Disponibles

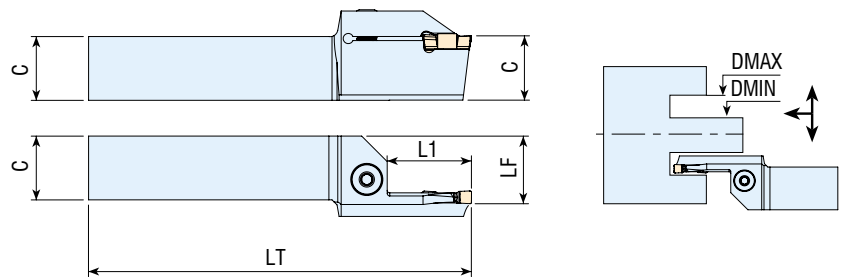
**Porta de Ranurado Frontal - Placa - Placa Z..BD / Z..FD / Z..GD / Z..HD / Z..KD**



REFERENCIA	C	LT	LF	L1	DMIN	DMAX	INSERTO	TORNILLO	LLAVE
NPDRF-OK-R/L 2525-140-2-L4	25	150	26.5	4	140	180	Z.BD-2	TPA-019	LLA-4
NPDRF-OK-R/L 2525-35-3-L17	25	150	26.5	17	35	45	Z.FD-3	TPA-019	LLA-4
NPDRF-OK-R/L 2525-39-3-L17	25	150	26.5	17	39	55			
NPDRF-OK-R/L 2525-49-3-L17	25	150	26.5	17	49	80			
NPDRF-OK-R/L 2525-70-3-L15	25	150	26.5	15	70	110			
NPDRF-OK-R/L 2525-70-3-L17	25	150	26.5	17	70	110			
NPDRF-OK-R/L 2525-100-3-L17	25	150	26.5	17	100	150			
NPDRF-OK-R/L 2525-40-4-L22	25	150	26.5	22	40	60	Z.GD-4	TPA-019	LLA-4
NPDRF-OK-R/L 2525-52-4-L22	25	150	26.5	22	52	80			
NPDRF-OK-R/L 2525-72-4-L22	25	150	26.5	22	72	110			
NPDRF-OK-R/L 2525-100-4-L22	25	150	26.5	22	100	150			
NPDRF-OK-R/L 2525-140-4-L22	25	150	26.5	22	140	200			
NPDRF-OK-R/L 2525-55-5-L25	25	150	26.5	25	55	95	Z.HD-5	TPA-019	LLA-4
NPDRF-OK-R/L 2525-85-5-L25	25	150	26.5	25	85	140			
NPDRF-OK-R/L 2525-130-5-L25	25	150	26.5	25	130	200			
NPDRF-OK-R/L 2525-190-5-L25	25	150	26.5	25	190	400			
NPDRF-OK-R/L 2525-190-5-L35	25	150	26.5	35	190	400			
NPDRF-OK-R/L 2525-200-5-L17	25	150	26.5	17	200	500			
NPDRF-OK-R/L 2525-60-6-L15	25	150	26,5	15	60	110	Z.KD-6	TPA-019	LLA-4

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

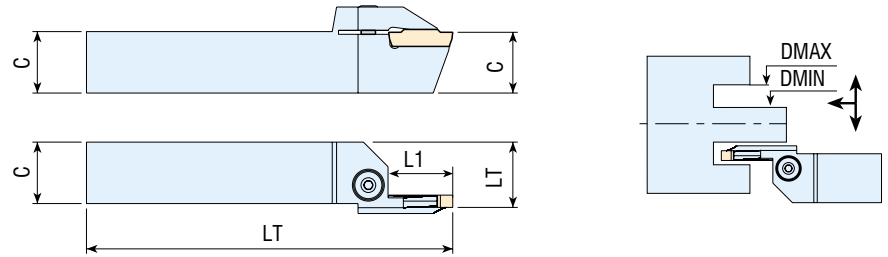
**Porta de Ranurado Frontal - Placa DGN / GRP**



REFERENCIA	C	LF	WF	CDX	DAXN	DAXX	INSERTO	TORNILLO	LLAVE
NPDRF-DGGR-R/L 2525-40-4-L25	25	150	26.5	25	40	60	DGN/GRP-4	TPA-019	LLA-4
NPDRF-DGGR-R/L 2525-52-4-L25	25	150	26.5	25	52	80			
NPDRF-DGGR-R/L 2525-70-4-L28	25	150	26.5	28	70	110			
NPDRF-DGGR-R/L 2525-72-4-L25	25	150	26.5	25	72	110			
NPDRF-DGGR-R/L 2525-100-4-L25	25	150	26.5	25	100	150			
NPDRF-DGGR-R/L 2525-110-4-L28	25	150	26.5	28	110	200			
NPDRF-DGGR-R/L 2525-110-4-L32	25	150	26.5	32	110	200			
NPDRF-DGGR-R/L 2525-140-4-L25	25	150	26.5	25	140	200			
NPDRF-DGGR-R/L 2525-180-4-L28	25	150	26.5	28	180	800			
NPDRF-DGGR-R/L 2525-200-4-L25	25	150	26.5	25	200	800			
NPDRF-DGGR-R/L 2525-70-5-L32	25	150	26.5	32	70	110	DGN/GRP-5	TPA-019	LLA-4
NPDRF-DGGR-R/L 2525-110-5-L9	25	150	26.5	9	110	200			
NPDRF-DGGR-R/L 2525-110-5-L32	25	150	26.5	32	110	200			
NPDRF-DGGR-R/L 2525-180-5-L32	25	150	26.5	32	180	800			
NPDRF-DGGR-R/L 2525-58-6-L32	25	150	26.5	32	58	100	DGN/GRP-6	TPA-019	LLA-4
NPDRF-DGGR-R/L 2525-88-6-L32	25	150	26.5	32	88	180			

- Compatible con: ISCR
- Placas NO Disponibles

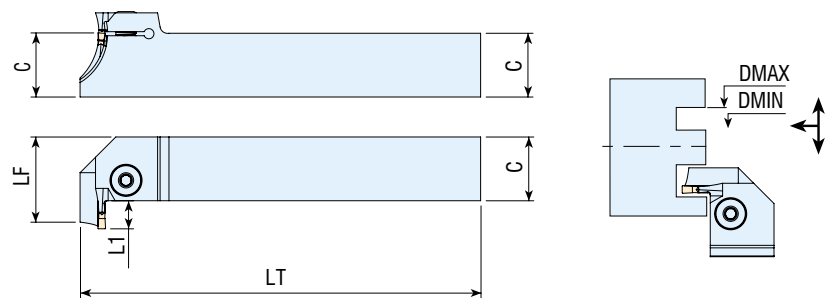
## Porta de Ranurado Frontal - Placa MGM



REFERENCIA	C	LT	LF	L1	DMIN	DMAX	INSERTO	TORNILLO	LLAVE
NPDRF-MGM-R/L 2525-34-3-L17	25	150	26.5	17	34	45	MGM...-3	TPA-019	LLA-4
NPDRF-MGM-R/L 2525-39-3-L17	25	150	26.5	17	39	55			
NPDRF-MGM-R/L 2525-49-3-L17	25	150	26.5	17	49	80			
NPDRF-MGM-R/L 2525-70-3-L17	25	150	26.5	17	70	110			
NPDRF-MGM-R/L 2525-100-3-L17	25	150	26.5	17	100	150			
NPDRF-MGM-R/L 2525-80-3-L32	25	150	26.5	32	80	180			
NPDRF-MGM-R/L 2525-175-3-L22	25	150	26.5	22	175	215			
NPDRF-MGM-R/L 2525-700-3-L17	25	150	26.5	17	700	800			
NPDRF-MGM-R/L 2525-50-4-L22	25	150	26.5	22	50	85	MGM...-4	TPA-019	LLA-4
NPDRF-MGM-R/L 2525-70-4-L22	25	150	26.5	22	70	110			
NPDRF-MGM-R/L 2525-100-4-L22	25	150	26.5	22	100	150			
NPDRF-MGM-R/L 2525-80-4-L32	25	150	26.5	32	80	180			
NPDRF-MGM-R/L 2525-180-4-L32	25	150	26.5	32	180	800			
NPDRF-MGM-R/L 2525-70-5-L25	25	150	26.5	25	70	110	MGM...-5	TPA-019	LLA-4
NPDRF-MGM-R/L 2525-100-5-L25	25	150	26.5	25	100	150			
NPDRF-MGM-R/L 2525-80-5-L32	25	150	26.5	32	80	180			
NPDRF-MGM-R/L 2525-140-5-L25	25	150	26.5	25	140	200			
NPDRF-MGM-R/L 2525-180-5-L32	25	150	26.5	32	180	800			
NPDRF-MGM-R/L 2525-60-6-L25	25	150	26.5	25	60	100	MGM...-6	TPA-019	LLA-4
NPDRF-MGM-R/L 2525-60-6-L35	25	150	26.5	35	60	100			
NPDRF-MGM-R/L 2525-100-6-L25	25	150	26.5	25	100	200			
NPDRF-MGM-R/L 2525-100-6-L35	25	150	26.5	35	100	200			
NPDRF-MGM-R/L 2525-100-6-L45	25	150	26.5	45	100	200			
NPDRF-MGM-R/L 2525-140-6-L35	25	150	26.5	35	140	300			
NPDRF-MGM-R/L 2525-140-8-L35	25	150	26.5	35	140	300	MGM...-8	TPA-019	LLA-4
NPDRF-MGM-R/L 3232-140-8-L35	32	150	33.5	35	140	350			

- Compatible con: KRLY
- Placas Disponibles: Ver Sección Placas

## Porta de Ranurado Frontal 90° - Placa Z..BD / Z..FD / Z..GD / Z..HD / Z..KD

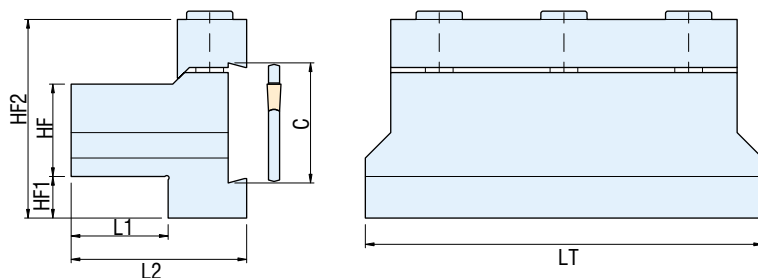


REFERENCIA	C	LT	LF	L1	DMIN	DMAX	INSERTO	TORNILLO	LLAVE
NPDRF90-OK-R/L 2525-35-3-L10	25	150	36	10	35	45	Z.FD-3	TPA-019	LLA-4
NPDRF90-OK-R/L 2525-39-3-L10	25	150	36	10	39	55			
NPDRF90-OK-R/L 2525-35-3-L4	25	150	30	4	35	∞			
NPDRF90-OK-R/L 2525-40-4-L14	25	150	40	14	40	60	Z.GD-4	TPA-019	LLA-4
NPDRF90-OK-R/L 2525-52-4-L14	25	150	40	14	52	80			
NPDRF90-OK-R/L 2525-72-4-L14	25	150	40	14	72	110			
NPDRF90-OK-R/L 2525-100-4-L14	25	150	40	14	100	230			
NPDRF90-OK-R/L 2525-40-4-L4	25	150	30	4	40	∞			

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

### Portalamas

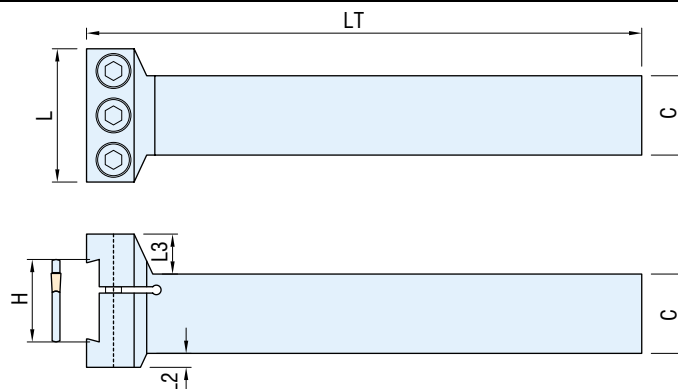
- Compatible con todas las lamas del mercado de esas medidas



REFERENCIA	HF	C	L1	L2	LT	HF2	HF1	Pletina Superior	TORNILLO	LLAVE
NPL-1626	16	26	8	35	86	43	8	RLR-00	TEA-026	LLA-5
NPL-2026	20	26	9	38	86	43	9	RLR-01	TEA-026	LLA-5
NPL-2526	25	26	5	42	110	45	5	RLR-02	TEA-027	LLA-5
NPL-2032	20	32	13	38	100	50	13	RLR-03	TEA-027	LLA-5
NPL-2532	25	32	8	42	110	50	8	RLR-04	TEA-027	LLA-5
NPL-3232	32	32	5	48	110	54	5	RLR-04	TEA-027	LLA-5

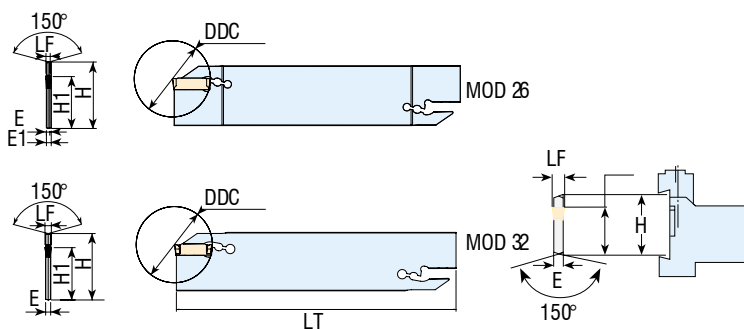
### Portaherramientas de amarre de amarre lateral para lama de tronzado

- Compatible con todas las lamas del mercado de esas medidas



REFERENCIA	C	C	H	L	LT	L2	L3	Tornillo
NPL-LT2526	25	25	26	42	125	4.4	11.6	HTM630

### Lama de Ranurado - Placa GCM-N30

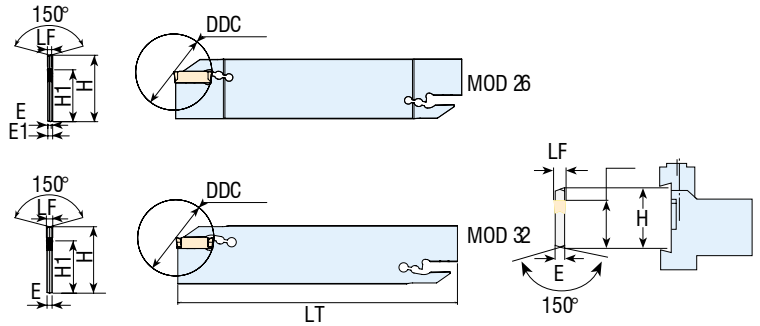


REFERENCIA	A	LF	E1	E	LT	A1	DDC	INSERTO	LLAVE
LDR-GCM-26-3	32	3	2.4	-	110	21.4	39	CGM-N30	LLL-02
LDR-GCM-32-3	32	3	2.4	-	150	25	39	CGM-N30	LLL-02

- Compatible con: SMTM
- Placas NO Disponibles



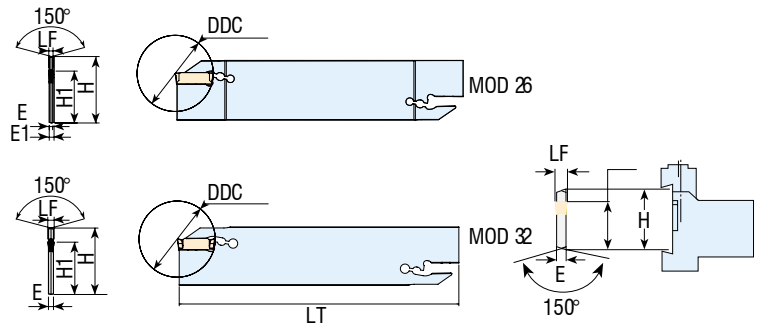
**Lama de Ranurado - Placa TD..**



REFERENCIA	A	LF	E1	E	LT	A1	DDC	INSERTO	LLAVE
LDR-TD-32-2	32	2	2.4	1.6	150	25	39	TD..-2	LLL-02
LDR-TD-26-3	26	3	-	2.4	150	26	40	TD..-3	LLL-02
LDR-TD-32-3	32	3	2.4	-	150	25	39	TD..-3	LLL-02
LDR-TD-26-4	26	4	-	3.2	150	26	40	TD..-4	LLL-02
LDR-TD-32-5	32	5	-	4	150	25	40	TD..-5	LLL-02

- Compatible con: TGTC
- Placas NO Disponibles

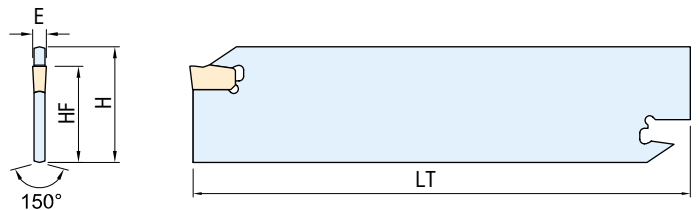
**Lama de Ranurado - Placa DGN..**



REFERENCIA	A	LF	E1	E	LT	A1	DDC	INSERTO	LLAVE
LDR-DG-26-2	26	1.9-2.5	1.6	-	110	21.4	39	DGN-2	LLL-02
LDR-DG-32-2	32	1.9-2.5	1.8	2.4	150	25	39		
LDR-DG-26-3	26	3-3.18	2.4	-	110	21.5	39	DGN-3	LLL-02
LDR-DG-32-3	32	3-3.18	2.4	-	150	25	39		
LDR-DG-26-4	26	4	3.2	-	110	21.4	80	DGN-4	LLL-02
LDR-DG-32-4	32	4	3.2	-	150	25	100		

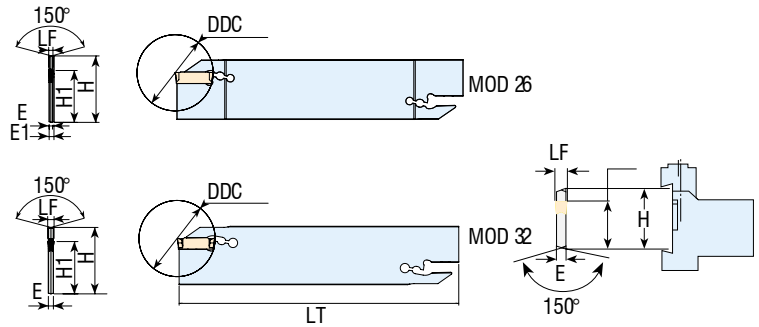
- Compatible con: ISCR
- Placas NO Disponibles

**Lama de Ranurado - Placa GTN..**



REFERENCIA	H	HF	LT	E	INSERTO	LLAVE
LDR-GTN-26-2	26	21.4	110	2.2/2.4	GTN-2/2.4	LLL-03
LDR-GTN-26-3	26	21.4	110	3.1	GTN-3	LLL-03
LDR-GTN-26-4	26	21.4	110	4.1	GTN-4	LLL-03
LDR-GTN-32-2	32	25	150	2.2/2.4	GTN-2/2.4	LLL-03
LDR-GTN-32-3	32	25	150	3.1	GTN-3	LLL-03
LDR-GTN-32-4	32	25	150	4.1	GTN-4	LLL-03

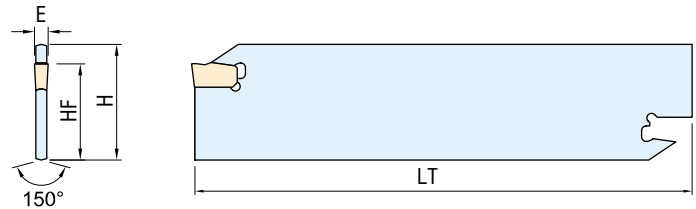
**Lama de Ranurado - Placa 123..**



REFERENCIA	A	LF	E1	E	LT	A1	DDC	INSERTO	LLAVE
LDR-123-32-2	32	2	2.4	1.6	150	25	39	123-2	LLL-02
LDR-123-32-3	32	3	2.4	-	150	25	39	123-3	LLL-02
LDR-123-32-4	32	4	3.2	-	150	25	39	123-4	LLL-02

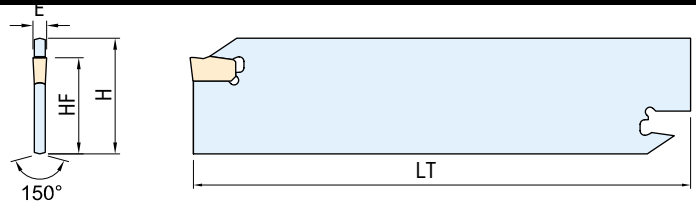
- Compatible con: SNDVK
- Placas NO Disponibles

**Lama de Ranurado - Placa WCF..**



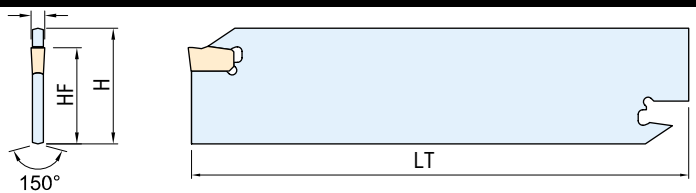
REFERENCIA	H	HF	LT	E	INSERTO	LLAVE
LDR-WCF-26-3	26	21.4	110	3	WCF-3	LLL-03
LDR-WCF-32-3	32	25	150	3		

**Lama de Ranurado - Placa TKN..**



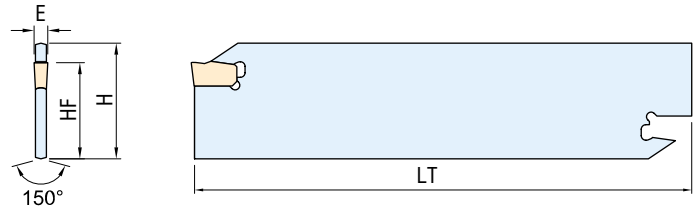
REFERENCIA	H	HF	LT	E	INSERTO	LLAVE
LDR-TKN-26-3	26	21.4	110	3.1	TKN-3	LLL-03
LDR-TKN-26-4	26	21.4	110	4.1	TKN-4	LLL-03
LDR-TKN-32-3	32	25	150	3.1	TKN-3	
LDR-TKN-32-4	32	25	150	4.1	TKN-3	

**Lama de Ranurado - Placa GFN..**



REFERENCIA	H	HF	LT	E	INSERTO	LLAVE
LDR-GFN-26-2	26	21.4	110	2.2/2.4	TKN-3	LLL-03
LDR-GFN-26-3	26	21.4	110	3	TKN-4	LLL-03
LDR-GFN-32-2	32	25	150	2.2/2.4	TKN-3	LLL-03
LDR-GFN-32-3	32	25	150	3	TKN-3	LLL-03

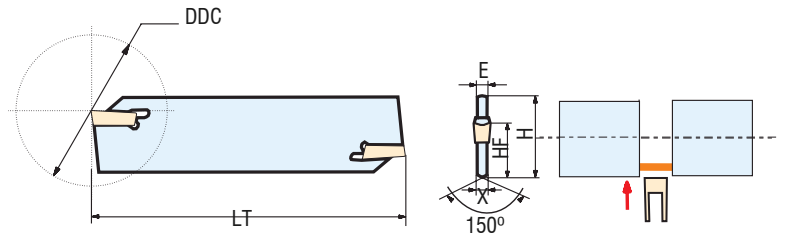
### Lama de Ranurado - Placa ZQMX



REFERENCIA	H	E	LT	HF	Para Placa	Llave
SPB-326-S	26	2.4	110	21.6	ZQMX3N11	LLL-04
SPB-426-S	26	3.2	110	21.6	ZQMX4N11	LLL-04
SPB-526-S	26	4	110	21.6	ZQMX5N11	LLL-04
SPB-626-S	26	5.2	110	21.6	ZQMX6N11	LLL-04
SPB-332-S	32	2.4	150	25	ZQMX3N11	LLL-04
SPB-432-S	32	3.2	150	25	ZQMX4N11	LLL-04
SPB-532-S	32	4	150	25	ZQMX5N11	LLL-04
SPB-632-S	32	5.2	150	25	ZQMX6N11	LLL-04

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

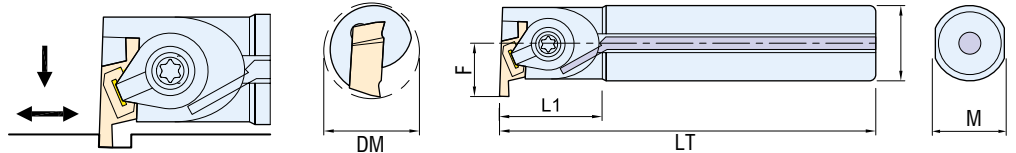
### Lama de Ranurado - Placa QT..D



REFERENCIA	LT	H	HF	X	E	DDC	Para Placa	Llave
QEES26N	110	26	19	2	2.5	60	QTED02503N-MG	LLL-04
QEFS26N	110	26	19	2.4	3	60	QTFD0303N-MG	LLL-04
QEGS26N	110	26	19	3.2	4	70	QTGD0404N-MG	LLL-04
QEHS26N	110	26	19	4	5	70	QTHD0504N-MG	LLL-04
QEKS26N	110	26	19	5	6	70	QTKD0608N-MG	LLL-04
QEES32N	150	32	24.6	2	2.5	100	QTED02503N-MG	LLL-04
QEFS32N	150	32	24.6	2.4	3	100	QTFD0303N-MG	LLL-04
QEGS32N	150	32	24.6	3.2	4	120	QTGD0404N-MG	LLL-04
QEHS32N	150	32	24.6	4	5	120	QTHD0504N-MG	LLL-04
QEKS32N	150	32	24.6	5	6	120	QTKD0608N-MG	LLL-04

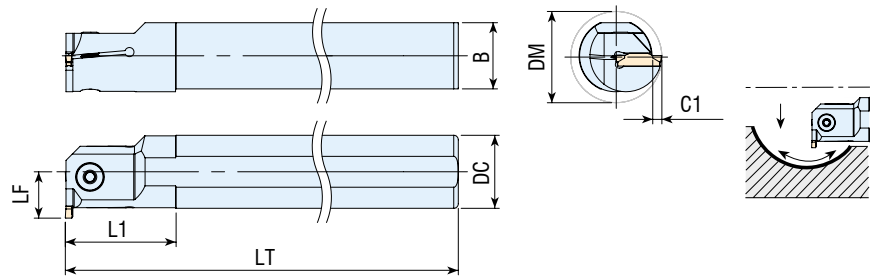
- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

### Portaherramientas interior para ranuras - Placas MGTR16 Y XMTR16



Referencia	D	LT	L1	F	DM	Para Placa	Tornillo Porta	Llave
XGIVR08K-1SS	8	125	20	7	11	XGVR-100SS-300S	TDA-129	LLT-10
XGIVR10K-1S	10	125	25	8	14	XGVR-100S-340S	TDA-130	LLT-15
XGIVR12M-1A	12	150	30	9	15	XGVR-100A-340A	TDA-131	
XGIVR16Q-1A	16	180	35	11	20	XGVR-100A-340A	TDA-132	
XGIVR20R-1B	20	200	40	14	25	XGVR-145B-400B	TDA-133	
XGIVR25R-1C	25	200	40	19.5	32	XGVR-280C-500C	TDA-134	
XGIVR32S-2C	32	250	48	23	40	XGVR-340C-500C	TDA-134	
XGIVL16Q-1SS	16	140	20	7	11	XGVR-100SS-300S	TDA-129	LLT-10
XGIVL16Q-1S	16	140	25	8	13	XGVR-100S-340S	TDA-130	LLT-15
XGIVL16Q-1A	16	140	30	9	15	XGVR-100A-340A	TDA-131	

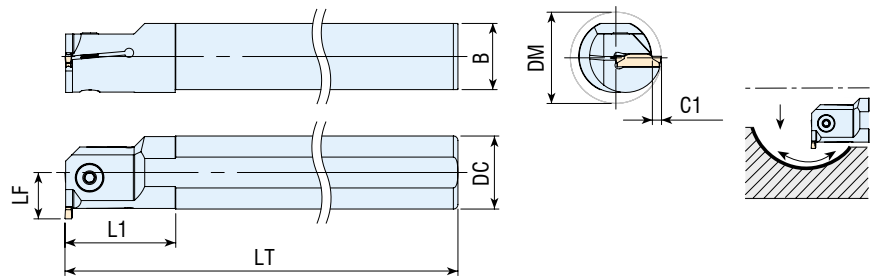
**Porta de Ranurado Interior - Placa 123..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-123R/L 20-2-L6	20	32	170	30	6	18.3	16	123-2	TEA-019	LLA-3
NPDRI-123R/L 25-2-L6	25	32	200	40	6	18.3	18.5		TEA-022	LLA-4
NPDRI-123R/L 32-2-L7	32	41	250	45	7	30	23		TPA-019	LLA-4
NPDRI-123R/L 20-3-L6	20	32	170	30	6	18.3	16	123-3	TEA-021	LLA-4
NPDRI-123R/L 25-3-L7	25	32	200	40	7	23	19.5			
NPDRI-123R/L 32-3-L9	32	41	250	50	9	30	25		TPA-019	LLA-4
NPDRI-123R/L 20-4-L8	20	29	170	30	8	18.3	18	123-4	TEA-021	LLA-4
NPDRI-123R/L 25-4-L7	25	32	200	40	7	23	19.5			
NPDRI-123R/L 32-4-L7	32	41	250	45	7	30	23		TPA-019	LLA-4
NPDRI-123R/L 32-4-L10	32	43	250	50	10	30	26			
NPDRI-123R/L 25-5-L8	25	34	200	40	8	23	20.5	123-5	TEA-021	LLA-4
NPDRI-123R/L 32-5-L11	32	43	250	50	11	30	27		TPA-019	LLA-4

- Compatible con: SNDVK
- Placas NO Disponibles

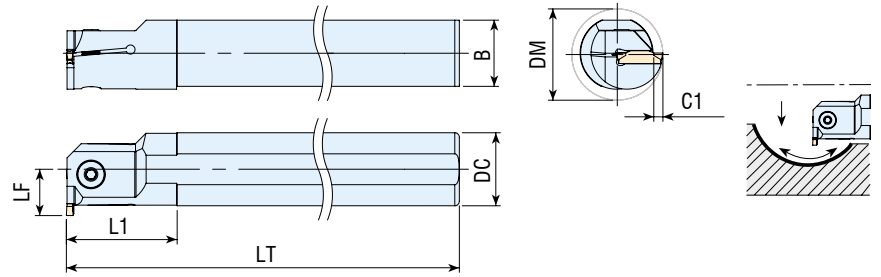
**Porta de Ranurado Interior - Placa RD..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-RDR/L 16-2-L6	16	24	150	28	6	14.8	14	RD..-2	TEA-016	LLA-3
NPDRI-RDR/L 20-2-L6	20	28	170	28	6	18.3	16		TEA-016	LLA-3
NPDRI-RDR/L 25-2-L6	25	33	200	28	6	23	18.5		TEA-021	LLA-3
NPDRI-RDR/L 16-3-L6	16	24	150	28	6	14.8	14	RD..-3	TEA-016	LLA-4
NPDRI-RDR/L 20-3-L6	20	28	170	28	6	18.3	16		TEA-022	LLA-4
NPDRI-RDR/L 25-3-L6	25	33	200	28	6	23	18.5		TEA-021	LLA-4
NPDRI-RDR/L 32-3-L6	32	40	250	50	6	30	22		TPA-019	LLA-4
NPDRI-RDR/L 20-4-L6	20	28	170	28	6	18.3	16	RD..-4	TEA-022	LLA-4
NPDRI-RDR/L 25-4-L6	25	33	200	28	6	23	18.5		TEA-021	LLA-4
NPDRI-RDR/L 32-4-L6	32	40	250	50	6	30	22		TPA-019	LLA-4

- Compatible con: TGTC
- Placas NO Disponibles

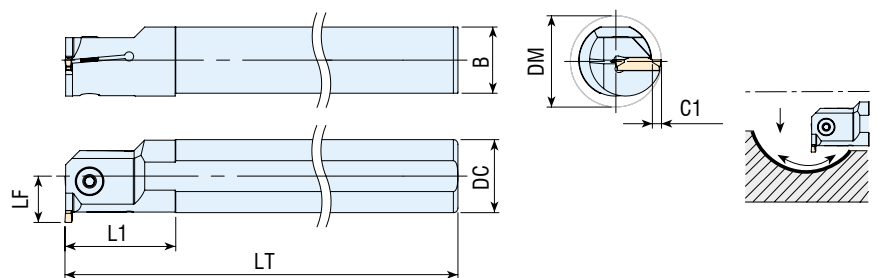
## Porta de Ranurado Interior - Placa MGM



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-MGMR/L 16-2-L4	16	21	150	28	4	14.8	12	MGM-2	TEA-016	LLA-3
NPDRI-MGMR/L 20-2-L4	20	25	170	30	4	18.3	14		TEA-019	LLA-4
NPDRI-MGMR/L 25-2-L6	25	32	200	40	6	23	18.5		TEA-022	LLA-4
NPDRI-MGMR/L 20-3-L7	20	25	170	38	7	18.3	13	MGM-3	TEA-022	LLA-4
NPDRI-MGMR/L 25-3-L6	25	32	200	40	6	23	18.5		TEA-021	LLA-4
NPDRI-MGMR/L 25-3-L10	25	32	200	48	10	23	17			
NPDRI-MGMR/L 32-3-L6	32	39	250	50	6	30	22		TPA-019	LLA-4
NPDRI-MGMR/L 32-3-L12	32	39	250	53	12	30	22			
NPDRI-MGMR/L 40-3-L6	40	47	300	55	6	37.5	26			
NPDRI-MGMR/L 40-3-L12	40	48	300	63	12	37.5	27			
NPDRI-MGMR/L 20-4-L7	20	25	170	38	7	18.3	13	MGM-4	TEA-022	LLA-4
NPDRI-MGMR/L 25-4-L6	25	32	200	40	6	23	18.5		TEA-021	LLA-4
NPDRI-MGMR/L 25-4-L10	25	32	200	49	10	23	17			
NPDRI-MGMR/L 32-4-L6	32	39	250	50	6	30	22		TPA-019	LLA-4
NPDRI-MGMR/L 32-4-L12	32	39	250	53	12	30	22			
NPDRI-MGMR/L 40-4-L6	40	47	300	55	6	37.5	26			
NPDRI-MGMR/L 40-4-L12	40	48	300	63	12	37.5	27			
NPDRI-MGMR/L 25-5-L7	25	33	200	40	7	23	19.5	MGM-5	TEA-021	LLA-4
NPDRI-MGMR/L 32-5-L7	32	40	250	50	7	30	23		TPA-019	LLA-4
NPDRI-MGMR/L 40-5-L7	40	48	300	55	7	37.5	27			
NPDRI-MGMR/L 40-5-L12	40	48	300	63	12	37.5	27			

- Compatible con: KRLY
- Placas Disponibles: Ver Sección Placas

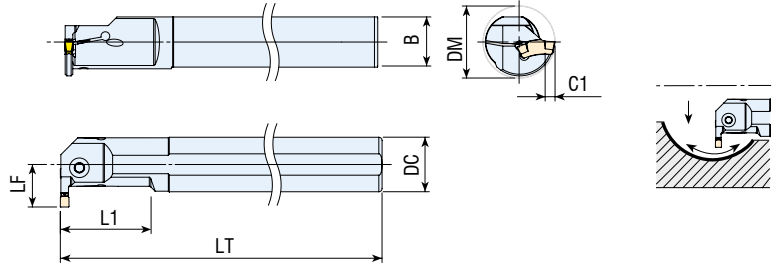
## Porta de Ranurado Interior - Placa KG..



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-KGR/L 25-2-T7	25	33	200	40	7	23	19.5	KG..-2	TEA-022	LLA-4
NPDRI-KGR/L 20-3-L6	20	27.5	170	30	6.5	18.3	16.5	KG..-3	TEA-021	LLA-4
NPDRI-KGR/L 25-3-L7	25	33	200	40	7	23	19.5			
NPDRI-KGR/L 40-3-L8	40	50	300	55	8	37.5	28		TPA-019	LLA-4
NPDRI-KGR/L 25-4-L8	25	34	200	40	8	23	20.5	KG..-4	TEA-021	LLA-4

- Compatible con: KRLY
- Placas NO Disponibles

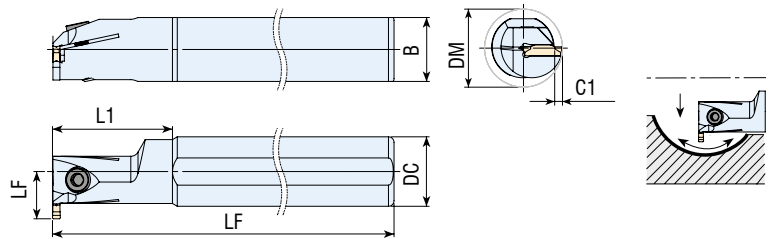
**Porta de Ranurado Interior - Placa TGM..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-TGM-R/L 16-3-L6	16	20	150	25	6	14.8	12	TGM-3	TDA-073	LLT-20
NPDRI-TGM-R/L 20-3-L6	20	25	170	32	6	18.3	14.2		TDA-074	LLT-20
NPDRI-TGM-R/L 25-3-L8	25	32	200	40	8	23	18.8		TEA-021	LLA-4
NPDRI-TGM-R/L 32-3-L8	32	38	250	49	8	30	22		TPA-019	LLA-4
NPDRI-TGM-R/L 20-4-L6	20	25	170	33	6	18.3	14.2	TGM-4	TDA-074	LLT-20
NPDRI-TGM-R/L 25-4-L7	25	31	200	41	7	23	17.5		TEA-021	LLA-4
NPDRI-TGM-R/L 25-4-L9	25	32.5	200	41	9	23	19.5			
NPDRI-TGM-R/L 32-4-L11	32	42	250	50	11	30	25.5		TPA-019	LLA-4
NPDRI-TGM-R/L 40-4-L11	40	53	300	50	11	37.5	32			

- Compatible con: ISCR
- Placas NO Disponibles

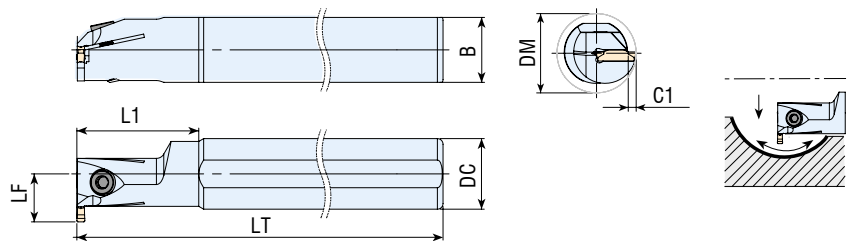
**Porta de Ranurado Interior - Placa GP..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-GP-R/L 20-2-L4	20	25	170	30	4	18.3	14.5	GP-2	TEA-019	LLA-3
NPDRI-GP-R/L 25-2-L6	25	32	200	40	6	23	18.5		TEA-021	LLA-4
NPDRI-GP-R/L 20-3-L6	20	27	170	30	6	18.3	16	GP-3	TEA-021	LLA-4
NPDRI-GP-R/L 25-3-L6	25	32	200	40	6	23	18.5			
NPDRI-GP-R/L 32-3-L6	32	39	250	50	6	30	22		TPA-019	LLA-4
NPDRI-GP-R/L 20-4-L6	20	27	170	30	6	18.3	16	GP-4	TEA-021	LLA-4
NPDRI-GP-R/L 25-4-L6	25	32	200	40	6	23	18.5		TPA-019	LLA-4
NPDRI-GP-R/L 32-4-L6	32	39	250	50	6	30	22			

- Compatible con: PLBT
- Placas NO Disponibles

**Portas De Ranurado Interior - Placa Gcm-N30**

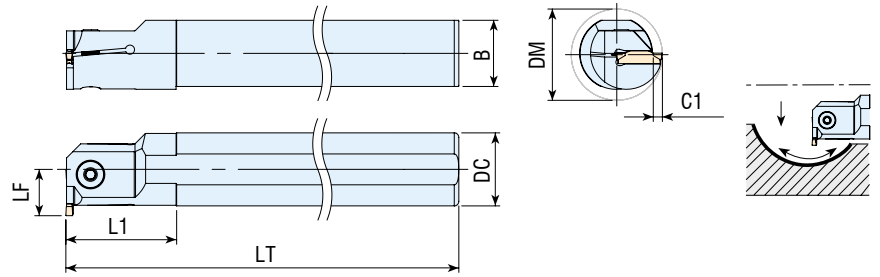


REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-GCM-R/L 25-3-L6	25	32	200	40	6	23	18.5	GCM-N30	TEA-021	LLA-4
NPDRI-GCM-R/L 32-3-L6	32	39	250	50	6	30	22		TPA-019	LLA-4
NPDRI-GCM-R/L 40-3-L6	40	47	300	55	6	37.5	26		TPA-019	LLA-4

- Compatible con: SMNT
- Placas NO Disponibles



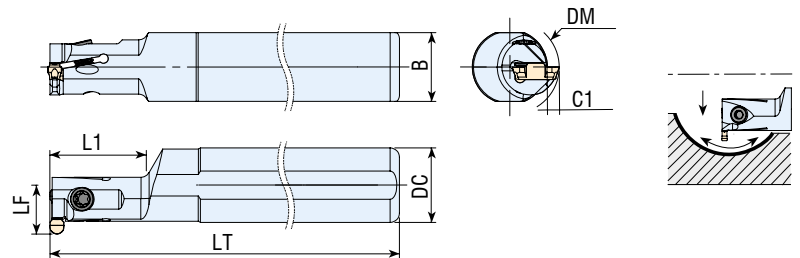
## Porta de Ranurado Interior - Placa TD..



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-TDR/L 16-2-L6	16	25	150	28	8.5	14.8	16.5	TD..-2	TEA-016	LLA-3
NPDRI-TDR/L 20-3-L6	20	25	170	40	6	18.3	16	TD..-3	TEA-022	LLA-4
NPDRI-TDR/L 25-3-L6	25	25	200	40	6	23	18.5		TEA-021	LLA-4
NPDRI-TDR/L 32-3-L5	32	31	250	60	5	30	21		TPA-019	LLA-4

- Compatible con: TGTC
- Placas NO Disponibles

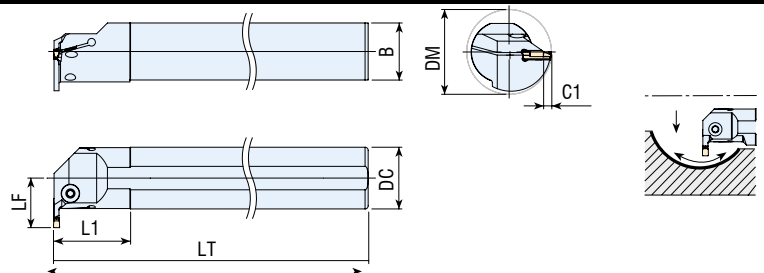
## Porta de Ranurado Interior - Placa GIMIY / GIPI



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-GIMP-R/L 20-3-L4	20	20	170	25	4	18.3	14.5	GIMIY/GIPI-3	TDA-082	LLT-20
NPDRI-GIMP-R/L 25-3-L5	25	23	200	30	5	23	17		TEA-021	LLA-4
NPDRI-GIMP-R/L 32-3-L5	32	31	250	30	5	30	21		TPA-019	
NPDRI-GIMP-R/L 40-3-L5	40	50	300	50	5	37.5	25			
NPDRI-GIMP-R/L 20-4-L4	20	20	170	25	4	18.3	14.5	GIMIY/GIPI-4	TDA-082	LLT-20
NPDRI-GIMP-R/L 25-5-L10	25	32	200	25	10	23	22.5	GIMIY/GIPI-5	TEA-021	LLA-4
NPDRI-GIMP-R/L 25-5-L15	25	37	200	25	15	23	27.5			

- Compatible con: ISCR
- Placas NO Disponibles

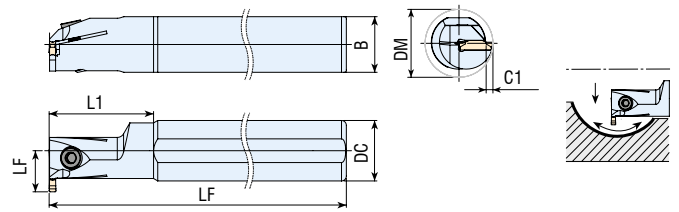
## Porta de Ranurado Interior - Placa DGN/GRP



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-DGGR-R/L 20-3-L5	20	26	170	25	5	18.3	15.5	DGN-3	TEA-022	LLA-4
NPDRI-DGGR-R/L 25-3-L6	25	32	200	40	6	23	19			
NPDRI-DGGR-R/L 25-4-L10	25	36	200	40	10	23	22.7	DGN/GRP-4	TEA-021	LLA-4
NPDRI-DGGR-R/L 32-4-L10	32	43	250	45	10	30	26.2			
NPDRI-DGGR-R/L 40-4-L12	40	53	250	50	12	37.5	32.2		TPA-019	LLA-4
NPDRI-DGGR-R/L 25-5-L10	25	36	200	40	10	23	22.7	DGN/GRP-5	TEA-021	LLA-4
NPDRI-DGGR-R/L 32-5-L10	32	43	250	45	10	30	26.2		TPA-019	LLA-4
NPDRI-DGGR-R/L 40-5-L12	40	53	250	50	12	37.5	32.2			
NPDRI-DGGR-R/L 50-5-L12	50	63	300	60	12	47	37.2			

- Compatible con: ISCR
- Placas NO Disponibles

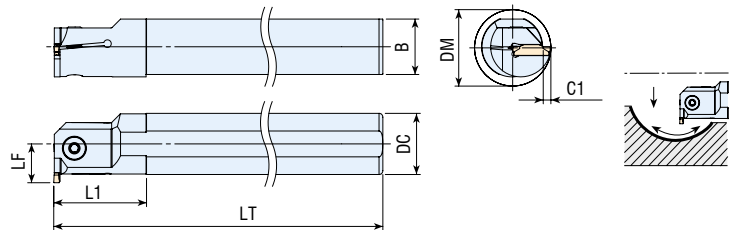
**Porta de Ranurado Interior - Placa DTX..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-DTX-R/L 20-3-L6	20	28	160	28	6	18.3	15.8	DTX3-030	TEA-022	LLA-4
NPDRI-DTX-R/L 25-3-L8	25	35	200	28	8	23	21.5		TEA-021	LLA-4
NPDRI-DTX-R/L 32-3-L10	32	43	250	50	10	30	27		TPA-019	LLA-4
NPDRI-DTX-R/L 32-3-L12	32	45	250	50	12	30	27			
NPDRI-DTX-R/L 32-4-L10	32	43	250	50	10	30	27	DTX4-040	TPA-019	LLA-4
NPDRI-DTX-R/L 32-5-L10	32	43	250	50	10	30	27	DTX5-040	TPA-019	LLA-4

- Compatible con: TNGLY
- Placas NO Disponibles

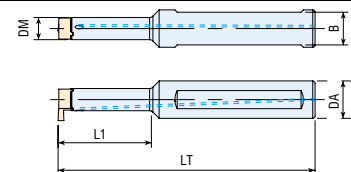
**Porta de Ranurado Interior - Placa Z.BD / Z.FD / Z.GD / Z.HD..**



REFERENCIA	DC	DM	LT	L1	C1	B	LF	INSERTO	TORNILLO	LLAVE
NPDRI-OK R/L 16-2-L4	16	21	150	28	4	14.8	12	Z.BD-2	TEA-016	LLA-3
NPDRI-OK R/L 20-3-L5	20	27	170	30	5	18.3	15	Z.FD-3	TEA-022	
NPDRI-OK R/L 20-3-L8	20	29	170	30	8	18.3	18			
NPDRI-OK R/L 25-3-L5	25	31	200	40	5	23	17.5		TEA-021	LLA-4
NPDRI-OK R/L 25-3-L10	25	36	200	40	10	23	22.5		TPA-019	LLA-4
NPDRI-OK R/L 32-3-L6	32	39	250	50	6	30	22			
NPDRI-OK R/L 32-3-L8	32	41	250	50	8	30	24			
NPDRI-OK R/L 32-3-L13	32	46	250	50	13	30	29		TEA-022	LLA-4
NPDRI-OK R/L 40-3-L12	40	53	300	55	12	37.5	32			
NPDRI-OK R/L 25-4-L6	25	32	200	40	6	23	18.5	Z.GD-4	TEA-021	LLA-4
NPDRI-OK R/L 32-4-L7	32	40	250	50	7	30	23		TPA-019	LLA-4
NPDRI-OK R/L 32-4-L8	32	41	250	50	8	30	24			
NPDRI-OK R/L 32-4-L10	32	43	250	50	10	30	26			
NPDRI-OK R/L 32-5-L7	32	40	250	50	7	30	23	Z.HD-5	TPA-019	LLA-4
NPDRI-OK R/L 32-5-L8	32	41	250	50	8	30	24			
NPDRI-OK R/L 40-5-L8	40	49	300	55	8	37.5	28			
NPDRI-OK R/L 40-5-L10	40	51	300	55	10	37.5	30			

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

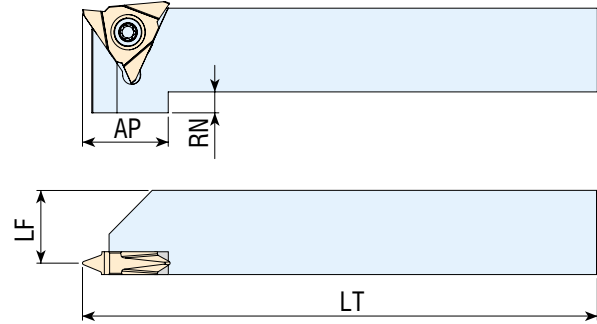
**Porta de Ranurado Interior - Placa MB..**



REFERENCIA	DA	DM	LT	L1	B	INSERTO	TORNILLO	LLAVE
NPDRI-MB07-16-90-15	16	7.4	90	15	14	MB-07	TDA-030	LLT-8
NPDRI-MB07-16-90-22	16	7.4	90	22	14			
NPDRI-MB09-16-90-19	16	9.5	90	19	14	MB-09	TDA-066	LLT-15
NPDRI-MB09-16-95-28	16	9.5	95	28	14			
NPDRI-MB09-16-110-40	16	9.5	110	40	14			

- Compatible con: SNDVK
- Placas NO Disponibles

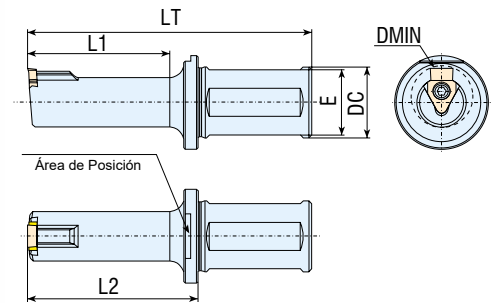
**Portaherramientas Roscado Exterior Poleas Poly V**



Referencia	L	L	LF	LT	AP	RN	Inserto	Tornillo	Llave
NPDR-RBNX12-R1616	16	16	13.50	125	21	5	RBNX12	TDA-082	LLT-20
NPDR-RBNX12-R2020	20	20	17.50	125	21	5			
NPDR-RBNX12-R2525	25	25	22.50	150	-	-			
NPDR-RBNX12-R3232	32	32	29.50	170	-	-			
NPDR-RBNX12-L1616	16	16	13.50	125	21	5	RBNX12	TDA-082	LLT-20
NPDR-RBNX12-L2020	20	20	17.50	125	21	5			
NPDR-RBNX12-L2525	25	25	22.50	150	-	-			
NPDR-RBNX12-L3232	32	32	29.50	170	-	-			

- Compatible con: NIXA
- Placas Disponibles: Ver Sección Placas

**Portaherramientas de Chavetero - NX1 / NX2**

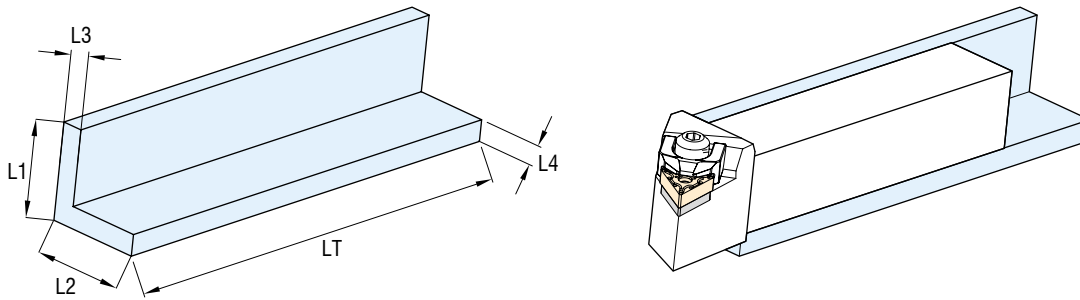


Referencia	DMIN	L1	DC	LT	L2	E	Inserto	Tornillo	Llave
NPDB-NX1-D17-D25-L90	17	40	25	90	50	23	CBNX1	TDA-066	LLT-15
NPDB-NX1-D17-D25-L105	17	65	25	105	75	23			
NPDB-NX1-D22-D25-L50	22	50	25	100	60	23			
NPDB-NX1-D22-D25-L70	22	70	25	125	80	23			
NPDB-NX2-D30-D32-L50	30	50	32	100	60	30	CBNX2	TDA-082	LLT-20
NPDB-NX2-D30-D32-L75	30	75	32	125	85	30			
NPDB-NX2-D30-D32-L110	30	110	32	170	120	30			
NPDB-NX2-D38-D32-L50	38	50	32	100	60	30			
NPDB-NX2-D38-D32-L75	38	75	32	125	85	30			
NPDB-NX2-D40-D32-L50	40	50	32	100	60	30			
NPDB-NX2-D40-D32-L75	40	75	32	125	85	30			

- Compatible con: NIXA
- Placas Disponibles: Ver Sección Placas

### Bloque en L para regular altura adicional en portaherramientas

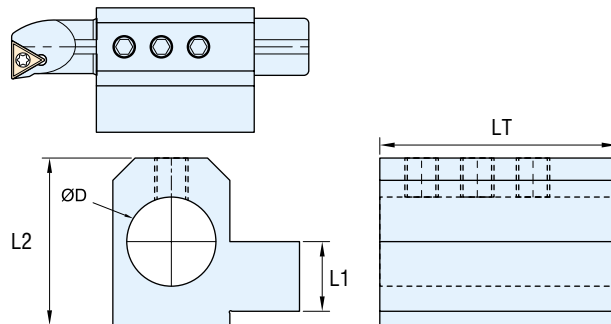
- Compatible con: Cualquier Portaherramienta



REFERENCIA	L1	L2	LT	L3	L4
LMH-16-20	19.8	19.8	90	4	4
LMH-20-25	24.8	24.8	100	5	5
LMH-25-32	31.8	31.8	150	7	7

### Soporte de Centrado de Portas Cilíndricas

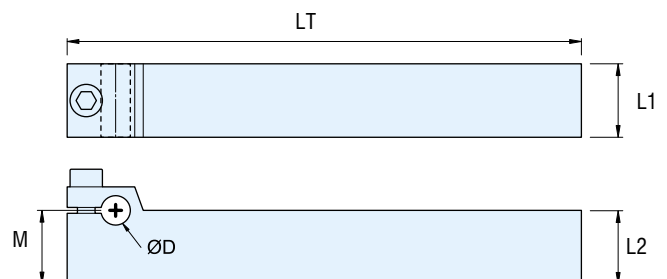
- Compatible con: Cualquier Portaherramienta



REFERENCIA	L1	D	L2	LT	Tornillo	Llave
SNPD-16-32	16	32	55	85	TDA-145	ALLEN 6
SNPD-20-32	20	32	55	85		
SNPD-20-40	20	40	60	90		
SNPD-25-32	25	32	60	85		
SNPD25-40	25	40	65	90		
SNPD32-40	32	40	72	90		

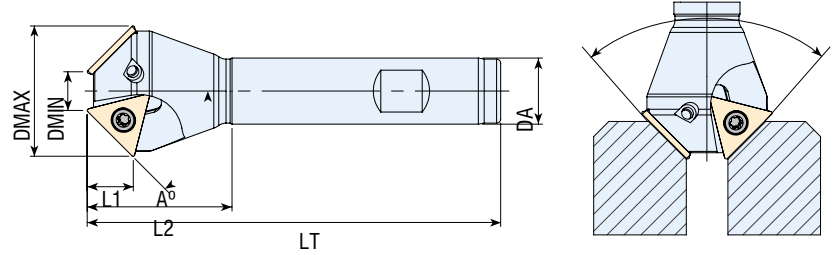
### Soporte de Amarre - Para Mini Herramientas Metal Duro

- Compatible con: Cualquier Portaherramienta



REFERENCIA	D	L2	L1	LT	M	Tornillo	Llave
SNMH-2020-5	5	20	20	125	20	TDA-146	ALLEN 5
SNMH-2020-6	6						
SNMH-2020-8	8						
SNMH-2020-10	10						
SNMH-2525-5	5	25	25	150	25	TDA-146	ALLEN 5
SNMH-2525-6	6						
SNMH-2525-8	8						
SNMH-2525-10	10						
SNMH-2525-12	12						

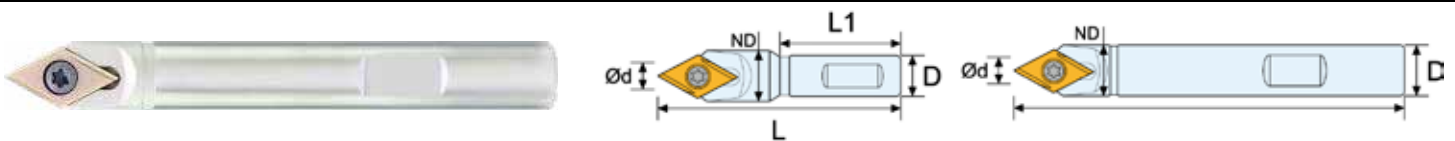
## Porta de Fresado Chaflanes - Placa TC...



REFERENCIA	A°	DMIN	DMAX	DA	LT	L2	Z	L1	PLACA	TORNILLO	LLAVE
NPDF10-TC16-D17X22-W16-L90-1	10°	17	22	16	90	30	1	15.5	TC.T16T304	TDA-047	LLT-15
NPDF15-TC16-D17X24-W16-L90-1	15°	17	24	16	90	30	1	14.9			
NPDF15-TC16-D22X29-W16-L100-1	15°	22	29	16	100	30	1	14.9			
NPDF15-TC16-D30X37-W20-L100-2	15°	30	37	20	100	35	2	14.9			
NPDF15-TC16-D35X42-W20-L100-3	15°	35	42	20	100	38	3	14.9			
NPDF15-TC16-D52X59-W25-L110-3	15°	52	59	25	110	40	3	14.9			
NPDF17.5-TC16-D17X25-W16-L90-1	17.5°	17	25	16	90	30	1	14.7			
NPDF18.5-TC16-D21.3X30-W20-L100-2	18.5°	21.3	30	20	100	30	2	13.5	TC.T16T308	TDA-047	LLT-15
NPDF20-TC16-D12X22-W16-L100-1	20°	12	22	16	100	30	1	14.4	TC.T16T304	TDA-047	LLT-15
NPDF20-TC16-D17X27-W16-L100-1	20°	17	27	16	100	30	1	14.4			
NPDF20-TC16-D23X33-W20-L100-2	20°	23	33	20	100	30	2	14.4			
NPDF20-TC16-D28X38-W20-L100-2	20°	28	38	20	100	35	2	14.4			
NPDF20-TC16-D35X45-W20-L100-3	20°	35	45	20	100	40	3	14.4			
NPDF20-TC16-D39X49-W20-L100-3	20°	39	49	20	100	40	3	14.4			
NPDF20-TC16-D45X55-W25-L110-3	20°	45	55	25	110	40	3	14.4			
NPDF20-TC16-D51X61-W25-L110-3	20°	51	61	25	110	40	3	14.4			
NPDF22.5-TC16-D17X28-W16-L100-1	22.5°	17	28	16	100	30	1	14.2			
NPDF25-TC16-D17X29-W16-L100-1	25°	17	29	16	100	30	1	13.9			
NPDF30-TC16-D6X20-W16-L100-1	30°	6	20	16	100	30	1	13.3			
NPDF30-TC16-D15X30-W16-L100-1	30°	15	30	16	100	30	1	13.3			
NPDF30-TC16-D17.5X32.5-W20-L100-2	30°	17.5	32.5	20	100	30	2	13.3			
NPDF30-TC16-D20X35-W16-L100-2	30°	20	35	16	100	35	2	13.3			
NPDF30-TC16-D30X45-W20-L100-2	30°	30	45	20	100	40	2	13.3			
NPDF30-TC16-D35X50-W20-L100-3	30°	35	50	20	100	40	3	13.3			
NPDF30-TC16-D45X60-W25-L110-3	30°	45	60	25	110	40	3	13.3			
NPDF45-TC09-D7X18-W16-L100-2	45°	7	18	16	100	25	2	5.9	TC.T090204	TDA-008	80-T07
NPDF45-TC11-D11X24-W16-L100-2	45°	11	24	16	100	25	2	6.9	TC.T110204	TDA-014	LLT-8
NPDF45-TC16-D5X26-W16-L100-1	45°	5	26	16	100	30	1	10.8	TC.T16T304	TDA-047	LLT-15
NPDF45-TC16-D10X31-W16-L100-2	45°	10	31	16	100	35	2	10.8			
NPDF45-TC16-D10X31-W20-L100-2	45°	10	31	20	100	35	2	10.8			
NPDF45-TC16-D18X39-W16-L100-2	45°	18	39	16	100	40	2	10.8			
NPDF45-TC16-D18X39-W20-L100-2	45°	18	39	20	100	40	2	10.8			
NPDF45-TC16-D20X41-W20-L100-2	45°	20	41	20	100	40	2	10.8			
NPDF45-TC16-D30X51-W20-L100-2	45°	30	51	20	100	40	2	10.8			
NPDF55-TC16-D16X40-W20-L100-3	55°	16	40	20	100	40	3	8.7			
NPDF62-TC16-D14X40-W20-L100-3	62°	14	40	20	100	40	3	7.1			
NPDF72-TC16-D14X42-W20-L100-3	72°	14	42	20	100	40	3	4.6			

• Compatible con: PLACA ISO • Placas Disponibles: Ver Sección Placas

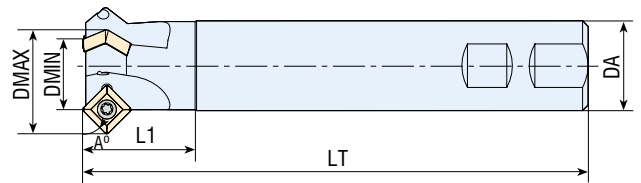
## Portaherramientas de Marcado



Referencia	D	ND	L	L1	Grados	INSERTO	TORNILLO	LLAVE
NPCX-101260	10	12	60	30	60°	XCEX11T3	TDA-113	LLT-15
NPCX-1212100	12	12	100	-	60°			

• Compatible con: NIXA  
• Placas Disponibles: Ver Sección Placas

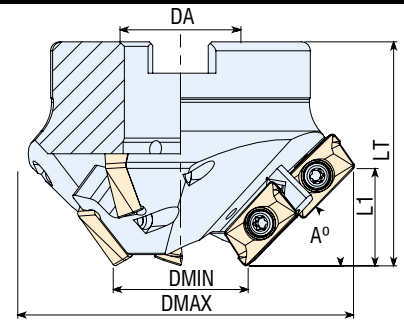
**Porta de Fresado Chalfanes 45° - Placa SPGT...**



REFERENCIA	A°	DMIN	DMAX	DA	LT	L1	Z	PLACA	TORNILLO	LLAVE
NPDF45-SP11-D12X26-W20-L150-1	45°	12	26	20	150	30	1	SPGT110408	TDA-064	LLT-15
NPDF45-SP11-D25X39-W25-L150-2	45°	25	39	25	150	35	2			
NPDF45-SP11-D32X46-W32-L150-3	45°	32	46	32	150	40	3			

- Compatible con: ZCC - OKE
- Placas Disponibles: Ver Sección Placas

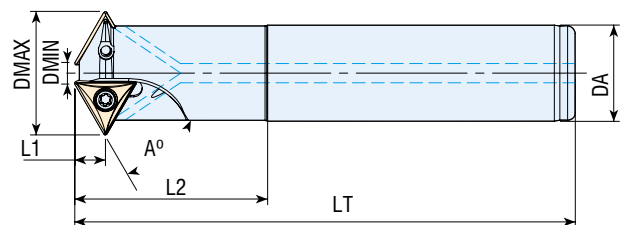
**Plato de Fresado Chaflanes - Placa AP..1604**



REFERENCIA	Z	A°	DMIN	DMAX	DA	L1	LT	INSERTO	TORNILLO	LLAVE
NPDFA15-AP16-D35X93-E27-Z3R	3-6	15	35	93	27	8	50	AP..1604	TDA-066	LLT-08
NPDFA30-AP16-D35X87-E27-Z3R	3-6	30	35	87	27	15	50			
NPDFA45-AP16-D35X77-E27-Z3R	3-6	45	35	77	27	21.5	50			
NPDFA60-AP16-D35X65-E22-Z3R	3-6	60	35	65	22	26.5	50			
NPDFA75-AP16-D35X50-E22-Z3R	3-6	75	35	50	22	29.5	50			

- Compatible con: PLACA ISO
- Placas Disponibles: Ver Sección Placas

**Portaherramientas de Avellanado - Placa TB.. TC..**

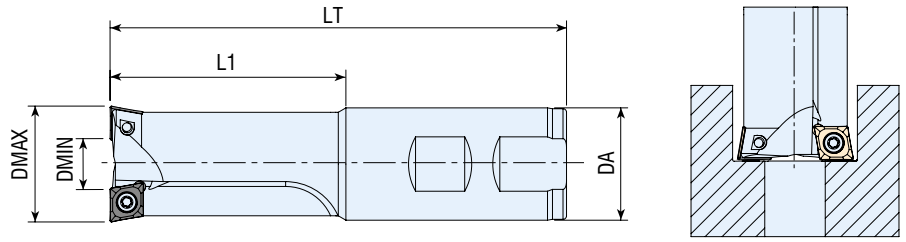


REFERENCIA	A°	Dmax	DA	Dmin	LT	L2	Z	L1	INSERTO	TORNILLO	LLAVE
NPDF60-TB0601-D13-C10-L150-2R	60	13	10	2.5	150	40	2	3.3	TBGT060102	TDA-006	LLT-6
NPDF60-TC0902-D20.5-C16-L150-2R	60	20.5	16	5.2	150	40	2	4.7	TC.T090202	TDA-008	80-T07
NPDF60-TC1102-D26-C20-L150-3R	60	26	20	8.3	150	50	3	5.4	TC.T110202	TDA-014	LLT-8
NPDF60-TC16T3-D32-C25-L150-2R	60	32	25	6.4	150	50	2	8	TC.T16T304	TDA-047	LLT-15
NPDF60-TC16T3-D40-C32-L250-3R	60	40	32	13.7	250	50	3	8	TC.T16T304	TDA-047	LLT-15

- Compatible con: PLACA ISO
- Placas Disponibles: Ver Sección Placas



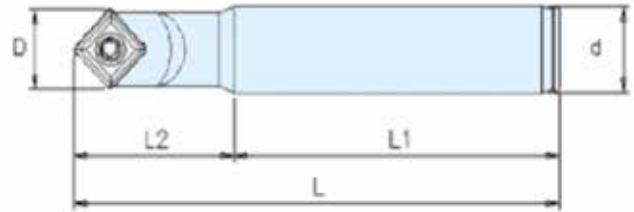
**Porta de Fresado Cabeza Tornillo DIN 974-1 - Placa CC.. / SP..**



REFERENCIA	DMIN	DMAX	DA	L1	LT	PARA TORNILLO	PLACA	TORNILLO	LLAVE
NPCF-CC06-D27X6-W16-L150-2	6	17	16	30	150	-	CC..060204	TDA-014	LLT-8
NPCF-CC06-D18X7-W16-L100-2R	7	18	16	32	100	M-10			
NPCF-CC06-D18X7-W16-L160-2R	7	18	16	32	160	M-10			
NPCF-CC06-D20X9-W20-L100-2R	9	20	20	40	100	M-12			
NPCF-CC06-D20X9-W20-L160-2R	9	20	20	38	160	M-12			
NPCF-CC09-D26X8.5-W25-L130-2R	8.5	26	25	50	130	M-16	CC..09T304	TDA-047	LLT-15
NPCF-CC09-D26X8.5-W25-L200-2R	8.5	26	25	50	200	M-16			
NPCF-CC09-D30X12.5-W32-L130-2R	12.5	30	32	65	130	-			
NPCF-CC09-D33X15.5-W32-L130-2R	15.5	33	32	65	130	M-20			
NPCF-CC09-D33X15.5-W32-L200-2R	15.5	33	32	65	200	M-20			
NPCF-SP06-D15X4-W16-L150-2R	4	15	16	80	160	M-8	SP..060204	TDA-008	80-T07

- Compatible con: PLACA ISO
- Placas Disponibles: Ver Sección Placas

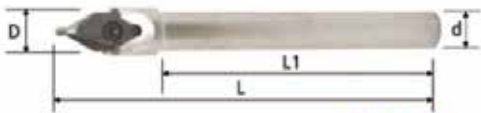
**Porta de Chaflanado / Punteado**



Referencia	D	d	L	L1	L2	Inserto	Tornillo Recambio
NCCX-1412100	14	12	100	67	33	NDXP11T308	TDA-104
NCCX-1416100	14	16	100	67	33	NDXP11T308	TDA-104
NCCX-1416150	14	16	150	117	33	NDXP11T308	TDA-104
NCCX-1416220	14	16	220	187	33	NDXP11T308	TDA-104

- Compatible con: NIXA - N9
- Placas Disponibles: Ver Sección Placas

**Portaherramientas de Punteado**



▲ Fig.1



▲ Fig.2



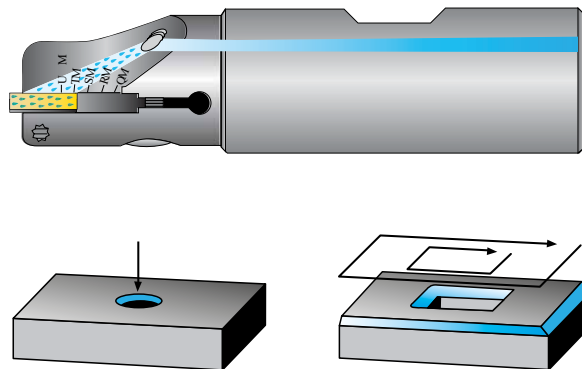
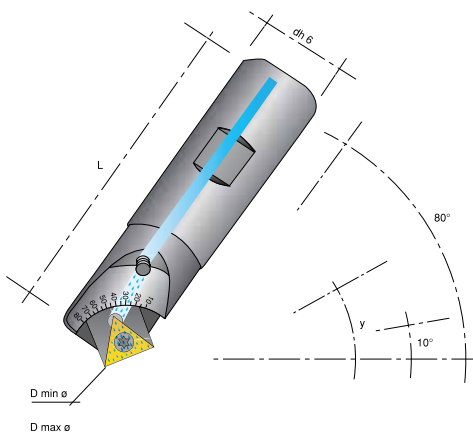
▲ Fig.3

Referencia	D	d	L	L1	Tipo	Inserto	Tornillo Recambio
NQCX-8100	12	8	100	73	1	NDXN04-200 NDXN04-250 NDXN04-300 NDXN04-400	TDA-105
NQCX-10100	12	10	100	74	1		TDA-105
NQCX-12100	12	12	100	-	2		TDA-105
NQCX-16120	12	16	120	48	3		TDA-105
NQCX-20150	12	20	150	50	3		TDA-105
NQCX-25180	12	25	180	56	3		TDA-105
NQCX-32200	12	32	200	60	3		TDA-105

- Compatible con: NIXA
- Placas Disponibles: Ver Sección Placas

**Portaherramientas de fresado regulable en ángulo - Placa TCMT**

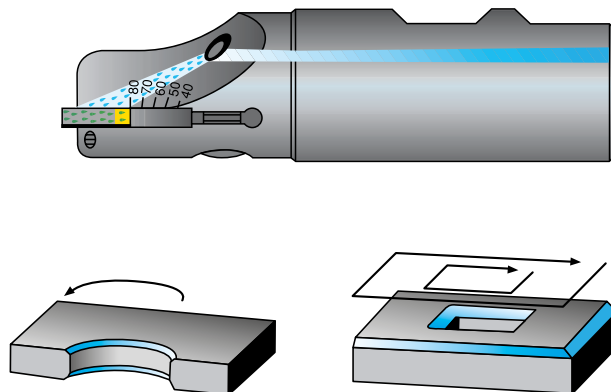
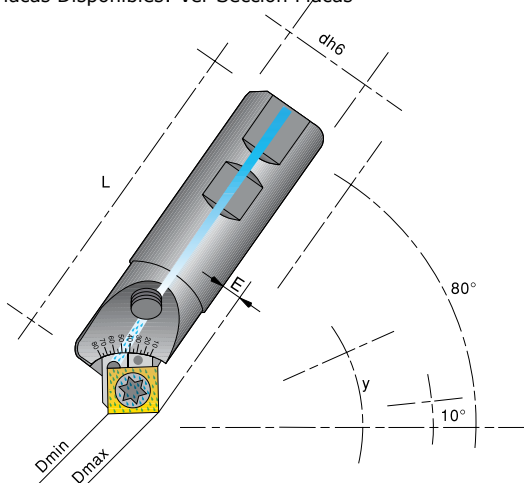
- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas



Referencia	dh6	L	Y°	D-Min ø	D-Max ø	Ref. Int	Tornillo Placa	Tornillo Porta	Para Placa
NPDF-FD16-L100-TC11	16	100	10°-80°	ø5	ø27	NO	TDA-099	TDA-100	TCMT1102..
NPDF-FD20-L100-TC11	20	100	10°-80°	ø5	ø27	SI	TDA-099	TDA-100	TCMT1102..
NPDF-FD20-L150-TC11	20	150	10°-80°	ø5	ø27	NO	TDA-099	TDA-100	TCMT1102..
NPDF-FD20-L100-TC16	20	100	10°-80°	ø5	ø34	NO	TDA-097	TDA-101	TCMT16T3..
NPDF-FD25-L100-TC16	25	100	10°-80°	ø5	ø34	SI	TDA-097	TDA-101	TCMT16T3..
NPDF-FD25-L150-TC16	25	150	10°-80°	ø5	ø34	NO	TDA-097	TDA-101	TCMT16T3..
NPDF-FD25-L200-TC16	25	200	10°-80°	ø5	ø34	NO	TDA-097	TDA-101	TCMT16T3..

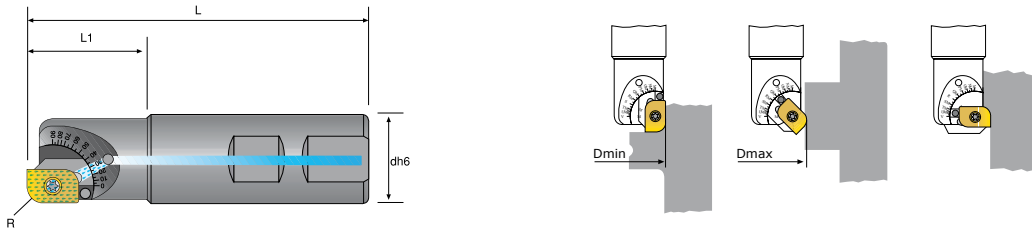
**Portaherramientas de fresado regulable en ángulo - Placa SCMT**

- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas



Referencia	dh6	L	Y°	D-Min	D-Max	E	Ref. Int	Tornillo Placa	Tornillo Porta	Para Placa
NPDF-FD20-L100-SC12	20	100	-	-	-	-	NO	TDA-100	TDA-101	SCMT1204..
NPDF-FD25-L100-SC12	25	100	-	-	-	-	SI	TDA-100	TDA-101	SCMT1204..
NPDF-FD25-L150-SC12	25	150	-	-	-	-	NO	TDA-100	TDA-101	SCMT1204..
NPDF-FD25-L200-SC12	25	200	-	-	-	-	NO	TDA-100	TDA-101	SCMT1204..
<b>DATOS DE ÁNGULOS</b>			10°	7.5	30	2.7				
			20°	10	32	3.6				
			30°	13	32.5	4.3				
			40°	16.5	33.5	4.5				
			50°	19	33.5	4.6				
			60°	22	33.5	4.3				
			70°	24.5	32.5	3.8				
			80°	27	31	3				

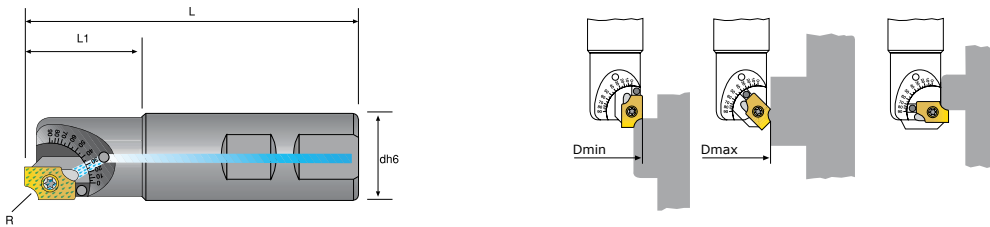
**Portaherramientas de fresado regulable para radio - Placa NXDCW1503M**



Referencia	dh6	L	L1	D-Min ø	D-Max ø	Ref. Int	Soporte Placa	Tornillo Porta	Para Placa
NPDF-FD20-L100-NXD15M	20	100	37	26.5	34	NO	PB-043	TDA-102	NXDCW1503M
NPDF-FD25-L100-NXD15M	25	100	37	26.5	34	SI	PB-043	TDA-102	NXDCW1503M
NPDF-FD25-L150-NXD15M	25	150	37	26.5	34	NO	PB-043	TDA-102	NXDCW1503M
NPDF-FD25-L200-NXD15M	25	200	37	26.5	34	NO	PB-043	TDA-102	NXDCW1503M

- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas

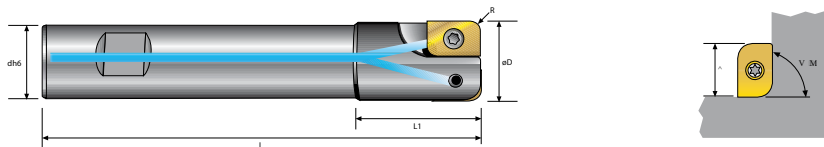
**Portaherramientas de fresado regulable para radio - Placa NXDCW1503F**



Referencia	dh6	L	L1	D-Min ø	D-Max ø	Ref. Int	Soporte Placa	Tornillo Porta	Para Placa
NPDF-FD20-L100-NXD15F	20	100	37	26.5	33	NO	PB-044	TDA-102	NXDCW1503F
NPDF-FD25-L100-NXD15F	25	100	37	26.5	33	SI	PB-044	TDA-102	NXDCW1503F
NPDF-FD25-L150-NXD15F	25	150	37	26.5	33	NO	PB-044	TDA-102	NXDCW1503F
NPDF-FD25-L200-NXD15F	25	200	37	26.5	33	NO	PB-044	TDA-102	NXDCW1503F

- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas

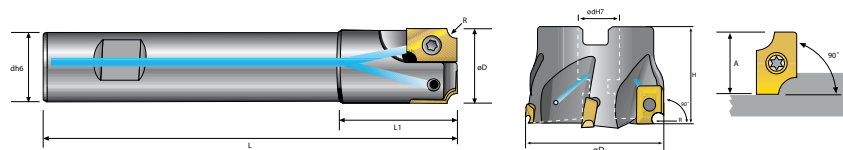
**Portaherramientas de fresado para radio - Placa NXDCW1503M y NXPCW2004M**



Referencia	øD	dh6	L	L1	A	Z	Tornillo Porta	Para Placa
NPDF-FD17-NX15M	17	16	120	30	15	1	TDA-102	NXDCW1503M
NPDF-FD22-NX20M	22	20	120	35	15	2	TDA-102	NXPCW2004M
NPDF-FD32-NX20M	32	25	120	40	20	2	TDA-100	NXPCW2004M

- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas

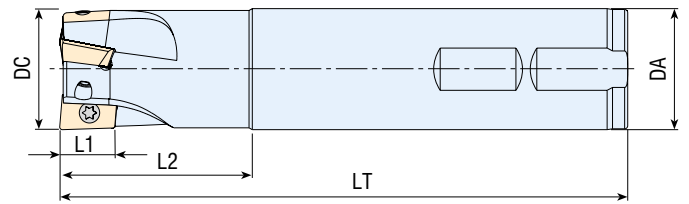
**Portaherramientas de fresado para radio - Placa NXDCW1503F y NXPCW2004F**



Referencia	øD	dh6	dH7	L	L1	H	A	Z	Tornillo Porta	Para Placa
NPDF-FD17-NX15F	17	16	-	120	30	-	15	1	TDA-102	NXDCW1503F
NPDF-FD22-NX15F	22	20	-	120	35	-	15	2	TDA-102	NXDCW1503F
NPDF-FD32-NX15F	32	25	-	120	40	-	20	2	TDA-102	NXDCW1503F
NPDF-FD40-NX20F	40	-	16	-	-	40	15	4	TDA-100	NXPCW2004F
NPDF-FD50-NX20F	50	-	22	-	-	50	20	4	TDA-100	NXPCW2004F

- Compatible con: PLACA NIXA
- Placas Disponibles: Ver Sección Placas

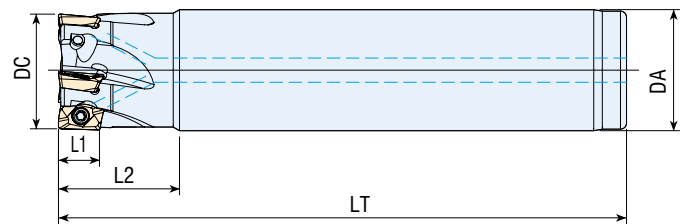
**Portaherramientas de fresado 90° - AD..1505**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AD1505-D25-W25-L150-2	25	2	25	150	50	14.3	AD..1505..	TDA-064	LLT-15
NPDF90-AD1505-D30-W25-L150-3	30	3	25	150	40	14.3			
NPDF90-AD1505-D32-W32-L150-3	32	3	25	150	50	14.3			

- Compatible con: ISCR
- Placas NO Disponible

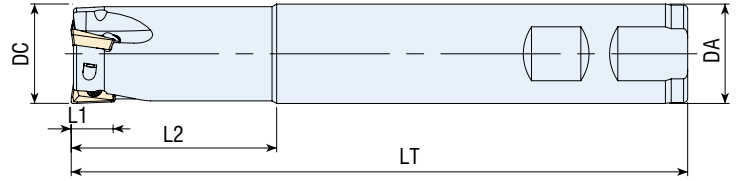
**Portaherramientas de fresado 90° - ADMX0702.. / ADMX11T30..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AD07-D10-C08-L90-2R	10	2	8	90	16	6	ADMX0702..	TDA-004	LLT-6
NPDF90-AD07-D10-C10-L80-2R	10	2	10	80	16	6		TDA-003	
NPDF90-AD07-D12-C10-L80-3R	12	3	10	80	18	6		TDA-004	
NPDF90-AD07-D12-C12-L90-3R	12	3	12	90	18	6		TDA-005	
NPDF90-AD07-D16-C16-L110-4R	16	4	16	110	19	6		TDA-006	
NPDF90-AD07-D20-C20-L125-5R	20	5	20	125	20	6			
NPDF90-AD07-D25-C25-L140-6R	25	6	25	140	24	6			
NPDF90-AD11-D16-C16-L135-2R	16	2	16	135	24	9	ADMX11T30..	TDA-013	LLT-8
NPDF90-AD11-D18-C16-L135-2R	18	2	16	135	15	9			
NPDF90-AD11-D18-C16-L160-2R	18	2	16	160	15	9			
NPDF90-AD11-D20-C20-L150-2R	20	2	20	150	50	9			
NPDF90-AD11-D20-C20-L150-3R	20	3	20	150	50	9			
NPDF90-AD11-D22-C20-L150-3R	22	3	20	150	15	9		TDA-014	LLT-8
NPDF90-AD11-D22-C20-L200-3R	22	3	20	200	15	9			
NPDF90-AD11-D25-C25-L170-3R	25	3	25	170	50	9			
NPDF90-AD11-D25-C25-L170-4R	25	4	25	170	50	9			
NPDF90-AD11-D28-C25-L165-4R	28	4	25	165	17	9			
NPDF90-AD11-D28-C25-L200-4R	28	4	25	200	17	9			
NPDF90-AD11-D30-C25-L165-4R	30	4	25	165	19	9			
NPDF90-AD11-D30-C25-L200-4R	30	4	25	200	19	9			
NPDF90-AD11-D32-C32-L195-5R	32	5	32	195	50	9			

- Compatible con: PRMT
- Placas NO Disponible

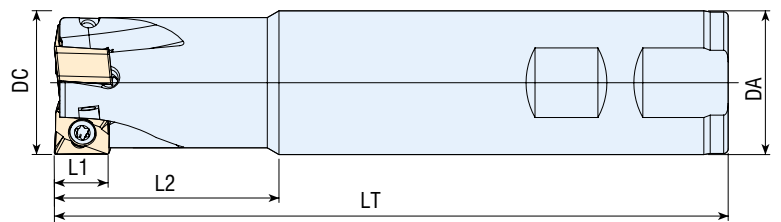
Portaherramientas de fresado 90° - ADMT08 / ADMT10 ADMT / ADMT



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-ADMT08-D16-W16-L150-2	16	2	16	150	30	8	ADMT0803..	TDA-013	LLT-8
NPDF90-ADMT08-D17-W16-L150-2	17	2	16	150	30	8			
NPDF90-ADMT08-D17-W16-L200-2	17	2	16	200	30	8			
NPDF90-ADMT08-D20-W20-L150-3	20	3	20	150	30	8			
NPDF90-ADMT08-D21-W20-L200-3	21	3	20	200	30	8			
NPDF90-AD10T3-D16-W16-L100-2R	16	2	16	100	30	10	ADMT10T3..	TDA-014	LLT-8
NPDF90-AD10T3-D16-W16-L150-2	16	2	16	150	40	10			
NPDF90-AD10T3-D16-C16-L200-2	16	2	16	200	50	10			
NPDF90-AD10T3-D17-W16-L150-2	17	2	16	150	30	10			
NPDF90-AD10T3-D17-W16-L200-2	17	2	16	200	30	10			
NPDF90-AD10T3-D20-W20-L30-3	20	3	20	70	30	10			
NPDF90-AD10T3-D20-W20-L100-3R	20	3	20	100	30	10			
NPDF90-AD10T3-D20-W20-L150-3	20	3	20	150	40	10			
NPDF90-AD10T3-D20-C20-L150-3	20	3	20	150	40	10			
NPDF90-AD10T3-D20-C20-L200-3	20	3	20	200	50	10			
NPDF90-AD10T3-D25-W25-L100-3R	25	3	25	100	30	10			
NPDF90-AD10T3-D25-W25-L100-4R	25	4	25	100	30	10			
NPDF90-AD10T3-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-AD1204-D20-W20-L150-2	20	2	20	150	50	12	ADMT1204..	TDA-031	LLT-10
NPDF90-AD1204-DD21-C20-L150-2	21	2	20	150	30	12			
NPDF90-AD1204-D22-C20-L150-2	22	2	20	150	30	12			
NPDF90-AD1204-D25-W25-L150-3	25	3	25	150	50	12			
NPDF90-AD1204-D26-W25-L180-3	26	3	25	180	30	12			
NPDF90-AD1204-D32-W32-L150-4	32	4	32	150	50	12			
NPDF90-AD1606-D25-W25-L150-2	25	2	25	150	50	12	ADMT1606..	TDA-064	LLT-15
NPDF90-AD1606-D32-W32-L150-3	32	3	32	150	50	15			

- Compatible con: WLTR
- Placas NO Disponible

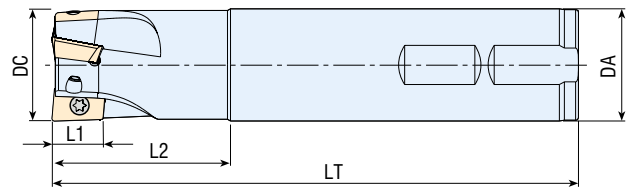
Portaherramientas de fresado 90° - ANKX1207..



REFERENCIA	DA	Z	DC	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-ANKX1207-D25-W25-L150-2	25	2	25	150	40	10	ANKX1207..	TDA-066	LLT-15
NPDF90-ANKX1207-D32-W32-L150-3	32	3	32	150	50	10			
NPDF90-ANKX1207-D40-W32-L150-4	40	4	32	150	40	10			

- Compatible con: XTC - GSC
- Placas NO Disponible

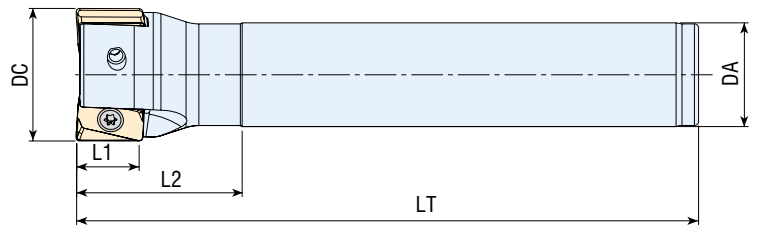
**Portaherramientas de fresado 90° - ADMT1003 / ADKT1505**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AD1003-D16-C16-L150-2	16	2	16	150	30	8	ADMT1003..	TDA-013	LLT-8
NPDF90-AD1003-D17-C16-L150-2	17	2	16	150	25	8			
NPDF90-AD1003-D20-C20-L200-3	20	3	20	200	50	8		TDA-014	LLT-8
NPDF90-AD1003-D21-C20-L150-3	21	3	20	150	25	8			
NPDF90-AD1003-D21-C20-L200-3	21	3	20	200	25	8		TDA-006	LLT-8
NPDF90-AD1003-D25-C25-L200-3	25	3	25	200	50	8			
NPDF90-AD1003-D26-C25-L150-3	26	3	25	150	30	8			
NPDF90-AD1003-D26-C25-L200-3	26	3	25	200	30	8			
NPDF90-AD1505D-D25-W25-L150-2	25	2	25	150	50	14.3	ADKT1505..	TDA-066	
NPDF90-AD1505D-D32-W32-L150-3	32	3	32	150	50	14.3		TDA-066	

- Compatible con: DJT
- Placas NO Disponible

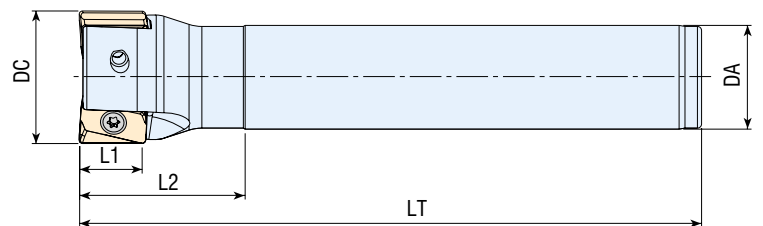
**Portaherramientas de fresado 90° - ANGX1105**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AN11-D22-W20-L150-2	22	2	20	150	30	11	ANGX1105..	TDA-032	LLT-10
NPDF90-AN11-D25-W25-L150-2	25	2	25	150	40	11			
NPDF90-AN11-D25-C25-L200-2	25	2	25	200	40	11			
NPDF90-AN11-D26-W25-L150-2	26	2	25	150	40	11			
NPDF90-AN11-D28-W25-L150-2	28	2	25	150	25	11			
NPDF90-AN11-D32-W32-L150-3	32	3	32	150	50	11			
NPDF90-AN11-D32-C32-L200-3	32	3	32	200	50	11			
NPDF90-AN11-D40-W32-L150-4	40	4	32	150	40	11			

- Compatible con: ZCC
- Placas NO Disponible

**Portaherramientas de fresado 90° - AN.X1607..**

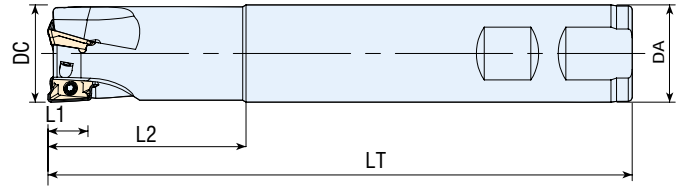


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AN1607-D32-C25-L150-2	32	2	25	150	50	15	AN.X1607..	TDA-066	LLT-15
NPDF90-AN1607-D40-C32-L150-3	40	3	32	150	50	15			

- Compatible con: TGTC
- Placas NO Disponible



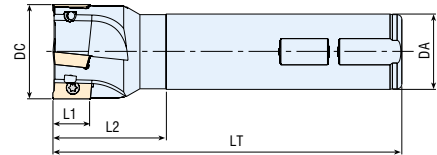
## Portaherramientas de fresado 90° - AO..1236..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AO1236-D16-C16-L85-2R	16	2	16	85	30	12	AO..1236..	TDA-014	LLT-8
NPDF90-AO1236-D16-W16-L150-2	16	2	16	150	50	10			
NPDF90-AO1236-D16-C16-L160-2R	16	2	16	160	25	10			
NPDF90-AO1236-D17-C16-L150-2R	17	2	16	150	25	10			
NPDF90-AO1236-D18-C16-L160-2R	18	2	16	160	25	10			
NPDF90-AO1236-D20-C20-L100-2R	20	2	20	100	30	12			
NPDF90-AO1236-D20-C20-L100-2	20	2	20	100	30	10			
NPDF90-AO1236-D20-C20-L160-3R	20	3	20	160	30	10			
NPDF90-AO1236-D21-C20-L220-3R	21	3	20	220	30	10			
NPDF90-AO1236-D22-C20-L160-3R	22	3	20	160	30	10			
NPDF90-AO1236-D25-C25-L115-2	25	2	25	150	50	10			
NPDF90-AO1236-D25-C25-L115-2R	25	2	25	150	50	10			
NPDF90-AO1236-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-AO1236-D25-C25-L160-4R	25	4	25	160	50	10			
NPDF90-AO1236-D26-C25-L150-4R	26	4	25	150	35	10			
NPDF90-AO1236-D26-C25-L160-4R	26	4	25	160	35	10			
NPDF90-AO1236-D32-W32-L150-4	32	4	32	150	50	10			
NPDF90-AO1236-D32-C32-L160-5R	32	5	32	160	50	10			

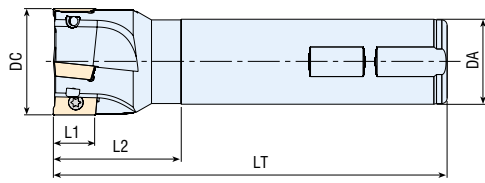
- Compatible con: MTSBH
- Placas NO Disponible

## Portaherramientas de fresado 90° - APMT0602.. / APMT0903.. / APKT09T3..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	ALLAVE
NPDF90-AP06-D10-C10-L120-2	10	2	10	120	20	5.6	APMT0602..	TDA-002	LLT-6
NPDF90-AP06-D12-C12-L120-2	12	2	12	120	20	5.6			
NPDF90-AP0903-D12-C16-L080-1R	12	1	16	80	30	9	APMT0903..	TDA-013	LLT-8
NPDF90-AP0903-D16-C16-L090-2	16	2	16	90	30	9			
NPDF90-AP0903-D16-C16-L150-2	16	2	16	150	30	9			
NPDF90-AP0903-D17-C16-L150-2	17	2	16	150	30	9			
NPDF90-AP0903-D18-C16-L090-2R	18	2	16	90	30	9	APMT0903..	TDA-014	LLT-8
NPDF90-AP0903-D20-C20-L110-3	20	3	20	110	30	9			
NPDF90-AP0903-D20-C20-L150-2	20	2	20	150	30	9			
NPDF90-AP0903-D20-C20-L200-2	20	2	20	200	100	9			
NPDF90-AP0903-D21-C20-L150-2	21	2	20	150	30	9			
NPDF90-AP0903-D25-C25-L120-3	25	3	25	120	30	9			
NPDF90-AP0903-D25-C25-L150-3	25	3	25	150	30	9			
NPDF90-AP0903-D25-C25-L200-2	25	2	25	200	100	9			
NPDF90-AP09-D16-C16-L100-2R	16	2	16	100	30	8.8	APKT09T3..	TDA-013	LLT-8
NPDF90-AP09-D16-C15-L150-2	16	2	15	150	25	8.8			
NPDF90-AP09-D16-W16-L150-2R	16	2	16	150	25	8.8			
NPDF90-AP09-D16-C16-L200-2R	16	2	16	200	100	8.8			
NPDF90-AP09-D17-C16-L150-2	17	2	16	150	25	8.8	APKT09T3..	TDA-014	LLT-8
NPDF90-AP09-D17-C16-L180-2R	17	2	16	180	25	8.8			
NPDF90-AP09-D20-C20-L150-3R	20	3	20	150	50	8.8			
NPDF90-AP09-D20-C20-L200-3R	20	3	20	200	100	8.8			
NPDF90-AP09-D20-C20-L250-2R	20	2	20	250	150	8.8			
NPDF90-AP09-D21-C20-L150-3	21	3	20	150	25	8.8			
NPDF90-AP09-D26-C25-L150-4	26	4	25	150	30	8.8			

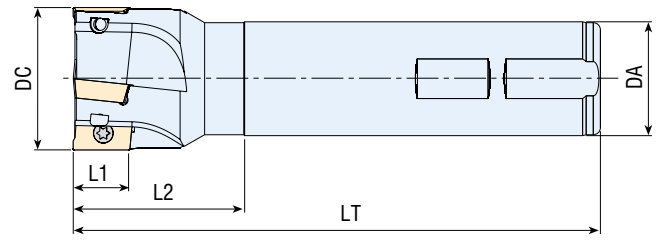
**Portaherramientas de fresado 90° - AP..1003**



- Compatible con: PLACA ISO
- Placas Disponibl: Ver Sección Placas

REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AP10-D10-C10-L100-1	10	1	10	100	20	10	AP..1003..	TDA-013	LLT-8
NPDF90-AP10-D12-C16-L100-1R	12	1	16	100	30	10			
NPDF90-AP10-D12-W16-L100-1R	12	1	16	100	30	10			
NPDF90-AP10-D12-W16-L150-1	12	1	16	150	38	10			
NPDF90-AP10-D14-W16-L100-1R	14	1	16	100	30	10			
NPDF90-AP10-D14-W16-L150-1	14	1	16	150	38	10			
NPDF90-AP10-D16-C16-L100-2R	16	2	16	100	30	10			
NPDF90-AP10-D16-W16-L100-2R	16	2	16	100	30	10			
NPDF90-AP10-D16-W16-L200-2	16	2	16	200	100	10			
NPDF90-AP10-D16-C16-L120-2R	16	2	16	120	30	10			
NPDF90-AP10-D16-C16-L150-2	16	2	16	150	50	10			
NPDF90-AP10-D16-C16-L150-2R	16	2	16	150	50	10			
NPDF90-AP10-D16-W16-L150-2	16	2	16	150	50	10			
NPDF90-AP10-D16-C16-L200-2	16	2	16	200	100	10			
NPDF90-AP10-D16-C16-L200-2R	16	2	16	200	100	10			
NPDF90-AP10-D16-C16-L250-2	16	2	16	250	150	10			
NPDF90-AP10-D18-W16-L100-2R	18	2	16	100	30	10			
NPDF90-AP10-D18-W16-L150-2	18	2	16	150	30	10			
NPDF90-AP10-D20-C20-L100-3R	20	3	20	100	30	10			
NPDF90-AP10-D20-W20-L100-3R	20	3	20	100	30	10			
NPDF90-AP10-D20-C20-L120-3R	20	3	20	120	30	10			
NPDF90-AP10-D20-C20-L150-3	20	3	20	150	50	10			
NPDF90-AP10-D20-C20-L150-3R	20	3	20	150	50	10			
NPDF90-AP10-D20-W20-L150-3	20	3	20	150	50	10			
NPDF90-AP10-D20-C20-L200-2	20	2	20	200	100	10			
NPDF90-AP10-D20-C20-L200-3R	20	3	20	200	100	10			
NPDF90-AP10-D20-C20-L250-2	20	2	20	250	150	10			
NPDF90-AP10-D20-C20-L250-2R	20	2	20	250	150	10	AP..1003..	TDA-014	LLT-8
NPDF90-AP10-D21-C20-L200-3	21	3	20	200	30	10			
NPDF90-AP10-D21-W20-L150-3	21	3	20	150	30	10			
NPDF90-AP10-D22-W20-L100-3R	22	3	20	100	30	10			
NPDF90-AP10-D22-W20-L150-3	22	3	20	150	30	10			
NPDF90-AP10-D23-W20-L150-3	23	3	20	150	30	10			
NPDF90-AP10-D24-W20-L150-3	24	3	20	150	30	10			
NPDF90-AP10-D25-W25-L100-4R	25	4	25	100	30	10			
NPDF90-AP10-D25-C25-L100-3R	25	3	25	100	30	10			
NPDF90-AP10-D25-W25-L100-3R	25	3	25	100	30	10			
NPDF90-AP10-D25-C25-L120-3R	25	3	25	120	30	10			
NPDF90-AP10-D25-C25-L150-3	25	3	25	150	50	10			
NPDF90-AP10-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-AP10-D25-C25-L200-2	25	2	25	200	100	10			
NPDF90-AP10-D25-C25-L200-3	25	3	25	200	100	10			
NPDF90-AP10-D25-C25-L250-2	25	2	25	250	100	10			
NPDF90-AP10-D30-C25-L100-4R	30	5	25	100	30	10	AP..1003..	TDA-014	LLT-8
NPDF90-AP10-D30-C25-L120-4R	30	5	25	120	30	10			
NPDF90-AP10-D30-C25-L150-4	30	5	25	150	30	10			
NPDF90-AP10-D32-C25-L100-4R	32	5	25	100	35	10			
NPDF90-AP10-D32-C25-L120-4R	32	5	25	120	35	10			
NPDF90-AP10-D32-C25-L150-4	32	5	25	150	35	10			
NPDF90-AP10-D32-W25-L150-4	32	5	25	150	35	10			
NPDF90-AP10-D32-C32-L130-5	32	5	32	130	30	10			
NPDF90-AP10-D32-W32-L150-4	32	5	32	150	50	10			
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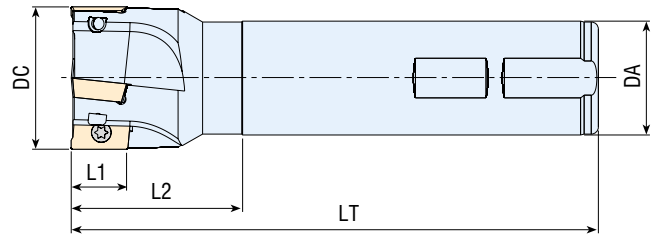
## Portaherramientas de fresado 90° - AP..11T3.. / APM..1204..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AP11-D16-C16-L150-2	16	2	16	150	50	11	AP..11T3..	TDA-014	LLT-8
NPDF90-AP11-D16-C16-L150-2R	16	2	16	150	50	11			
NPDF90-AP11-D16-W16-L150-2	16	2	16	150	50	11			
NPDF90-AP11-D16-W16-L150-2R	16	2	16	150	50	11			
NPDF90-AP11-D16-C16-L200-2	16	2	16	200	100	11			
NPDF90-AP11-D17-C16-L150-2	17	2	16	150	30	11			
NPDF90-AP11-D17-C16-L200-2	17	2	16	200	30	11			
NPDF90-AP11-D20-C20-L150-3	20	3	20	150	50	11			
NPDF90-AP11-D20-W20-L150-3	20	3	20	150	50	11			
NPDF90-AP11-D20-W20-L150-3R	20	3	20	150	50	11			
NPDF90-AP11-D20-C20-L200-3	20	3	20	200	100	11			
NPDF90-AP11-D21-C20-L150-3	21	3	20	150	30	11			
NPDF90-AP11-D21-W20-L150-3	21	3	20	150	30	11			
NPDF90-AP11-D21-W20-L150-3R	21	3	20	150	30	11			
NPDF90-AP11-D21-C20-L200-3	21	3	20	200	30	11			
NPDF90-AP11-D25-C25-L150-3	25	3	25	150	50	11			
NPDF90-AP11-D25-W25-L150-3	25	3	25	150	50	11			
NPDF90-AP11-D25-W25-L150-3R	25	3	25	150	50	11			
NPDF90-AP11-D26-C25-L150-3	26	3	25	150	35	11			
NPDF90-AP11-D26-C24-L150-3	26	3	24	150	35	11			
NPDF90-AP11-D32-W25-L150-4	32	4	25	150	35	11			
NPDF90-AP11-D32-W32-L150-3R	32	3	32	150	50	11			
NPDF90-AP11-D32-W32-L150-4	32	4	32	150	50	11			
NPDF90-AP1204-D20-C20-L150-2	20	2	20	150	30	12	APM..1204..	TDA-043	LLT-10
NPDF90-AP1204-D21-C20-L150-2	21	2	20	150	30	12			
NPDF90-AP1204-D21-C20-L200-2	21	2	20	200	30	12	APM..1204..	TDA-044	LLT-10
NPDF90-AP1204-D25-C25-L150-3	25	3	25	150	40	12			
NPDF90-AP1204-D26-C25-L250-2	26	2	25	250	35	12			
NPDF90-AP1204-D32-C25-L150-3	32	5	25	150	35	12			

- Compatible con: ZCC - OKE - ACHTK
- Algunos Modelos de Placas Disponibles: Ver Sección Placas

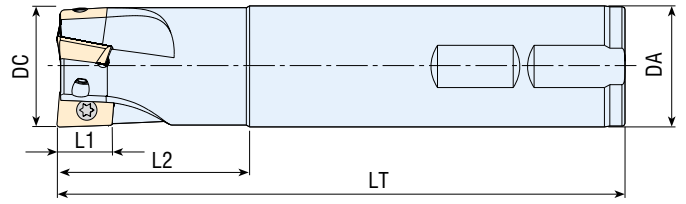
**Portaherramientas de fresado 90° - AP..1604.. / AP..1705..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AP16-D25-C20-L100-2	25	2	20	100	35	16	AP..1604..	TDA-064	LLT-15
NPDF90-AP16-D25-W25-L100-2R	25	2	25	100	35	16			
NPDF90-AP16-D25-W25-L150-2	25	2	25	150	50	16			
NPDF90-AP16-D25-C25-L250-2	25	2	25	250	100	16			
NPDF90-AP16-D28-W25-L100-3R	28	3	25	100	40	16			
NPDF90-AP16-D28-W25-L150-3	28	3	25	150	40	16			
NPDF90-AP16-D30-W25-L110-3R	30	3	25	110	40	16			
NPDF90-AP16-D30-W25-L150-2	30	2	25	150	40	16			
NPDF90-AP16-D30-W25-L150-3	30	3	25	150	40	16			
NPDF90-AP16-D32-W32-L110-3R	32	3	32	110	40	16			
NPDF90-AP16-D32-C32-L150-3	32	3	32	150	50	16			
NPDF90-AP16-D32-W25-L150-3	32	3	25	150	40	16			
NPDF90-AP16-D32-W32-L150-3	32	3	32	150	50	16			
NPDF90-AP16-D32-W32-L150-3R	32	3	32	150	50	16			
NPDF90-AP16-D32-C25-L200-3R	32	3	25	200	40	16			
NPDF90-AP16-D32-C32-L250-2	32	2	32	250	100	16			
NPDF90-AP16-D32-C32-L250-3	32	3	32	250	100	16			
NPDF90-AP16-D35-W32-L150-3	35	3	32	150	40	16			
NPDF90-AP16-D36-W32-L110-3R	36	3	32	110	40	16			
NPDF90-AP16-D36-W32-L150-3	36	3	32	150	40	16			
NPDF90-AP16-D40-W32-L110-4R	40	4	32	110	40	16			
NPDF90-AP16-D40-C32-L150-4	40	4	32	150	40	16			
NPDF90-AP16-D40-W32-L150-4	40	4	32	150	40	16			
NPDF90-AP16-D40-C32-L250-2	40	2	32	250	40	16			
NPDF90-AP16-D40-C32-L250-4	40	4	32	250	40	16			
NPDF90-AP1705-D25-C25-L120-2	25	2	25	120	40	16	AP..1705..	TDA-064	LLT-15
NPDF90-AP1705-D26-C25-L200-2	26	2	25	200	40	16			
NPDF90-AP1705-D26-C25-L250-2	26	2	25	250	40	16			
NPDF90-AP1705-D26-C25-L300-2	26	2	25	300	40	16			
NPDF90-AP1705-D28-W25-L075-2	28	2	25	75	20	16			
NPDF90-AP1705-D32-C25-L150-3	32	3	25	150	40	16			
NPDF90-AP1705-D33-C32-L250-3	33	3	32	250	40	16			
NPDF90-AP1705-D33-C32-L300-2	33	2	32	300	40	16			

- Compatible con: PLACA ISO
- Placas Disponibles: Ver Sección Placas

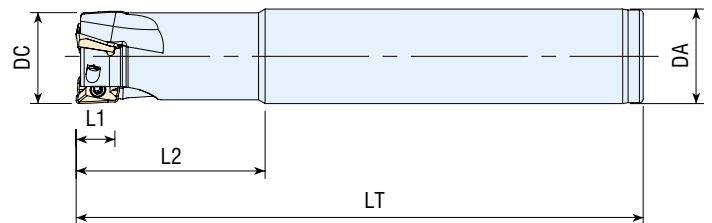
## Portaherramientas de fresado 90° - AX..0602 / AX..0903



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AX0602-D10-C09-L120-2	10	2	9	120	20	5.7	AX..0602	TDA-002	LLT-6
NPDF90-AX0602-D10-C10-L080-2	10	2	10	80	20	5.7			
NPDF90-AX0602-D10-C10-L120-2	10	2	10	120	20	5.7			
NPDF90-AX0602-D12-C11-L120-2	12	2	11	120	20	5.7			
NPDF90-AX0602-D12-C12-L080-2	12	2	12	80	20	5.7			
NPDF90-AX0602-D12-C12-L120-2	12	2	12	120	20	5.7			
NPDF90-AX0602-D14-C12-L120-3	14	3	12	120	20	5.7			
NPDF90-AX0602-D16-W16-L120-4R	16	4	16	120	20	5.7			
NPDF90-AX0602-D16-W16-L150-4R	16	4	16	150	20	5.7			
NPDF90-AX0602-D20-W20-L120-5R	20	5	20	120	25	5.7			
NPDF90-AX0602-D20-W20-L150-5R	20	5	20	150	25	5.7			
NPDF90-AX0903-D16-C16-L120-2	16	2	16	120	30	8.8	AX..0903	TDA-013	LLT-8
NPDF90-AX0903-D16-C16-L180-2	16	2	16	180	30	8.8			
NPDF90-AX0903-D17-C16-L120-2	17	2	16	120	25	8.8			
NPDF90-AX0903-D17-C16-L180-2	17	2	16	180	25	8.8			
NPDF90-AX0903-D20-C20-L120-3	20	3	20	120	30	8.8	AX..0903	TDA-014	LLT-8
NPDF90-AX0903-D20-C20-L200-2	20	2	20	200	30	8.8			
NPDF90-AX0903-D21-C20-L120-3	21	3	20	120	25	8.8			
NPDF90-AX0903-D21-C20-L200-2	21	2	20	200	25	8.8			
NPDF90-AX0903-D25-C25-L150-3	25	3	25	150	30	8.8			
NPDF90-AX0903-D25-C25-L250-2	25	2	25	250	40	8.8			
NPDF90-AX0903-D26-C25-L150-3	26	3	25	150	30	8.8			

- Compatible con: TGTC
- Placas NO Disponibles

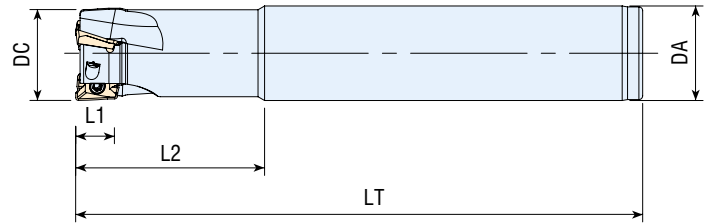
## Portaherramientas de fresado 90° - AX.T1235..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AX1235-D16-C14-L120-2R	16	2	14	120	25	10	AX.T1235..	TDA-025	LLT-8
NPDF90-AX1235-D16-C15-L145-2R	16	2	15	145	30	10		TDA-028	LLT-8
NPDF90-AX1235-D16-C16-L100-2R	16	2	16	100	30	10		TDA-028	LLT-8
NPDF90-AX1235-D16-C16-L140-2R	16	2	16	140	30	10		TDA-025	LLT-8
NPDF90-AX1235-D16-C16-L145-2R	16	2	16	145	30	10		TDA-028	LLT-8
NPDF90-AX1235-D16-C16-L150-2	16	2	16	150	30	10		TDA-025	LLT-8
NPDF90-AX1235-D20-C19-L150-2R	20	2	19	150	40	10		TDA-028	LLT-8
NPDF90-AX1235-D20-C20-L110-3R	20	3	20	110	40	10		TDA-028	LLT-8
NPDF90-AX1235-D20-C20-L150-2	20	2	20	150	40	10		TDA-025	LLT-8
NPDF90-AX1235-D20-C20-L150-2R	20	2	20	150	40	10		TDA-025	LLT-8
NPDF90-AX1235-D20-C20-L150-3	20	3	20	150	40	10		TDA-025	LLT-8

- Compatible con: SMTM - NIXA
- Placas Disponibles: Ver Sección Placas

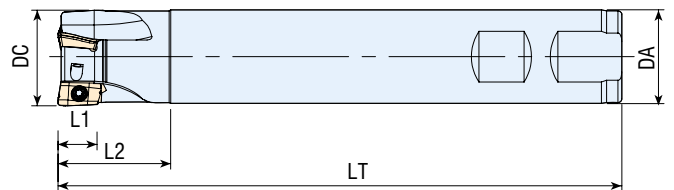
**Portaherramientas de fresado 90° - AX.T1235.. / AX.T1705..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AX1235-D25-C20-L120-4R	25	4	20	120	30	10	AX.T1235..	TDA-025	LLT-8
NPDF90-AX1235-D25-C20-L150-4R	25	4	20	150	30	10		TDA-025	LLT-8
NPDF90-AX1235-D25-C24-L170-2R	25	2	24	170	50	10		TDA-025	LLT-8
NPDF90-AX1235-D25-C25-L120-4R	25	4	25	120	40	10		TDA-025	LLT-8
NPDF90-AX1235-D25-C25-L150-3	25	3	25	150	50	10		TDA-028	LLT-8
NPDF90-AX1235-D25-C25-L170-2R	25	2	25	170	50	10		TDA-028	LLT-8
NPDF90-AX1235-D25-W25-L100-4R	25	4	25	100	30	10		TDA-028	LLT-8
NPDF90-AX1235-D32-C32-L130-5R	32	5	32	130	40	10		TDA-028	LLT-8
NPDF90-AX1235-D32-C32-L180-2R	32	2	32	180	50	10		TDA-028	LLT-8
NPDF90-AX1705-D25-C25-L150-2	25	2	25	150	50	14	A.XT1705..	TDA-064	LLT-15
NPDF90-AX1705-D28-W25-L115-2R	28	2	25	115	35	14			
NPDF90-AX1705-D32-C32-L150-3	32	3	32	150	50	14			
NPDF90-AX1705-D32-C32-L180-2R	32	2	32	180	50	14			

- Compatible con: SMTM - NIXA
- Placas Disponibles: Ver Sección Placas

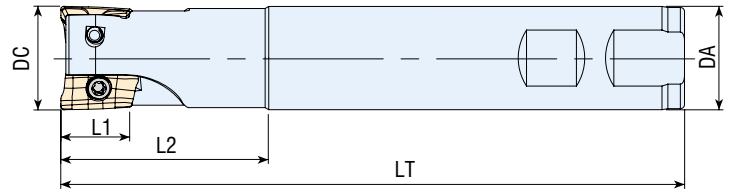
**Portaherramientas de fresado 90° - AZGT1135..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-AZ11-D12-W16-L90-1	12	1	16	90	30	11	AZGT1135..	TDA-013	LLT-8
NPDF90-AZ11-D16-C16-L200-2	16	2	16	200	100	11			
NPDF90-AZ11-D16-W15-L170-2	16	2	15	170	50	11			
NPDF90-AZ11-D16-W16-L100-2	16	2	16	100	35	11			
NPDF90-AZ11-D16-W16-L150-2	16	2	16	150	50	11			
NPDF90-AZ11-D17-C16-L150-2	17	2	16	150	30	11			
NPDF90-AZ11-D17-C16-L180-2	17	2	16	180	50	11			
NPDF90-AZ11-D17-W16-L100-2	17	2	16	100	30	11			
NPDF90-AZ11-D18-W16-L120-2	18	2	16	120	18	11			
NPDF90-AZ11-D20-C20-L200-3	20	3	20	200	100	11	AZGT1135..	TDA-014	LLT-8
NPDF90-AZ11-D20-W19-L170-3	20	3	19	170	50	11			
NPDF90-AZ11-D20-W20-L110-2	20	2	20	110	35	11			
NPDF90-AZ11-D21-C20-L150-3	21	3	20	150	30	11			
NPDF90-AZ11-D21-C20-L180-3	21	3	20	180	50	11			
NPDF90-AZ11-D21-W20-L110-3	21	3	20	110	35	11			
NPDF90-AZ11-D22-C20-L150-2	22	2	20	150	30	11			
NPDF90-AZ11-D25-C24-L180-4	25	4	24	180	50	11			
NPDF90-AZ11-D25-W25-L110-4	25	4	25	110	40	11			
NPDF90-AZ11-D26-C25-L250-2	26	2	25	250	50	11			
NPDF90-AZ11-D26-W25-L120-3	26	3	25	120	30	11			
NPDF90-AZ11-D26-W25-L120-4	26	4	25	120	40	11			
NPDF90-AZ11-D28-C25-L180-3	28	3	25	180	50	11			
NPDF90-AZ11-D28-C25-L250-2	28	2	25	250	50	11			
NPDF90-AZ11-D33-W32-L130-4	33	4	32	130	50	11			

- Compatible con: ZCC • Placas NO Disponibles

## Portaherramientas de fresado 90° - BDMT11T3 / BDMT1704

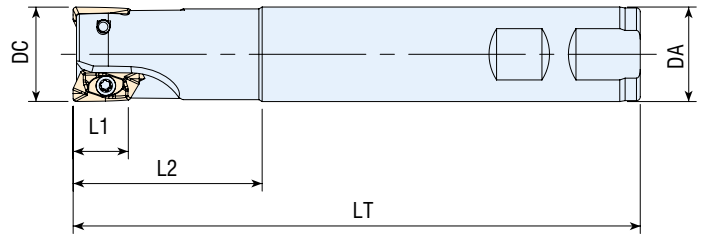


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-BD11T3-D16-C16-L100-2R	16	2	16	100	30	10	BDMT11T3..	TDA-013	LLT-8
NPDF90-BD11T3-D16-W16-L100-2R	16	2	16	100	30	10			
NPDF90-BD11T3-D16-W16-L150-2	16	2	16	150	50	10			
NPDF90-BD11T3-D16-C16-L160-2R	16	2	16	160	50	10			
NPDF90-BD11T3-D16-C15-L180-2	16	2	15	180	50	10			
NPDF90-BD11T3-D17-W16-L150-2	17	2	16	150	25	10			
NPDF90-BD11T3-D17-C16-L180-2	17	2	16	180	25	10			
NPDF90-BD11T3-D18-W16-L100-2	18	2	16	100	25	10			
NPDF90-BD11T3-D18-W16-L100-2R	18	2	16	100	25	10			
NPDF90-BD11T3-D20-W20-L81-3R	20	3	20	81	30	10	BDMT11T3..	TDA-014	LLT-8
NPDF90-BD11T3-D20-W20-L100-2R	20	2	20	100	30	10			
NPDF90-BD11T3-D20-W20-L100-3R	20	3	20	100	30	10			
NPDF90-BD11T3-D20-C20-L110-3R	20	3	20	110	30	10			
NPDF90-BD11T3-D20-W20-L150-2	20	2	20	150	50	10			
NPDF90-BD11T3-D20-W20-L150-3	20	3	20	150	50	10			
NPDF90-BD11T3-D20-W20-L150-3R	20	3	20	150	50	10			
NPDF90-BD11T3-D20-C20-L170-3R	20	3	20	170	50	10			
NPDF90-BD11T3-D21-W20-L150-3	21	3	20	150	25	10			
NPDF90-BD11T3-D21-C20-L200-2	21	2	20	200	25	10			
NPDF90-BD11T3-D22-W20-L090-2R	22	2	20	90	25	10			
NPDF90-BD11T3-D25-W25-L100-3R	25	3	25	100	30	10			
NPDF90-BD11T3-D25-C20-L120-3R	25	3	20	120	30	10			
NPDF90-BD11T3-D25-C25-L120-3R	25	3	25	120	30	10			
NPDF90-BD11T3-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-BD11T3-D26-W25-L150-3	26	3	25	150	35	10			
NPDF90-BD11T3-D26-C25-L250-2	26	2	25	250	35	10			
NPDF90-BD11T3-D32-W32-L110-4R	32	4	32	110	40	10			
NPDF90-BD11T3-D32-C32-L130-4R	32	4	32	130	40	10			
NPDF90-BD11T3-D32-W32-L150-4	32	4	32	150	50	10			
NPDF90-BD11T3-D40-W32-L110-4R	40	4	32	110	35	10			
NPDF90-BD1704-D25-W25-L100-2R	25	2	25	100	35	15.7	BDMT1704..	TDA-063	LLT-15
NPDF90-BD1704-D25-W25-L150-2	25	2	25	150	50	15.7			
NPDF90-BD1704-D25-C25-L210-2R	25	2	25	210	100	15.7			
NPDF90-BD1704-D32-W32-L110-3R	32	3	32	110	40	15.7			
NPDF90-BD1704-D32-C32-L130-3R	32	3	32	130	40	15.7			
NPDF90-BD1704-D32-W32-L130-3R	32	3	32	130	40	15.7			
NPDF90-BD1704-D32-W32-L150-3	32	3	32	150	50	15.7			
NPDF90-BD1704-D40-W32-L110-4R	40	4	32	110	40	15.7			
NPDF90-BD1704-D40-W32-L150-4	40	4	32	150	40	15.7			

- Compatible con: KYCR
- Placas NO Disponibles



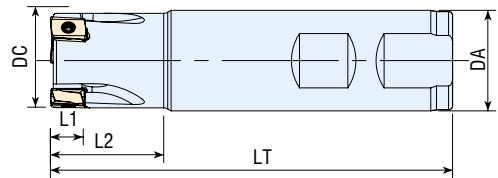
**Portaherramientas de fresado 90° - EDPT10T3.. / EDPT1404..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-ED10T3-D16-W16-L120-2	16	2	16	120	30	30	EDP10T3..	TDA-013	LLT-8
NPDF90-ED10T3-D20-W20-L120-2	20	2	20	120	30	30		TDA-014	
NPDF90-ED1404-D20-W20-L150-2	20	2	20	150	50	14.5	EDPT1404..	TDA-025	LLT-8
NPDF90-ED1404-D25-W25-L150-2	25	2	25	150	50	14.5			
NPDF90-ED1404-D30-C25-L150-3	30	3	25	150	50	14.5			

- Compatible con: KNMTL
- Placas NO Disponibles

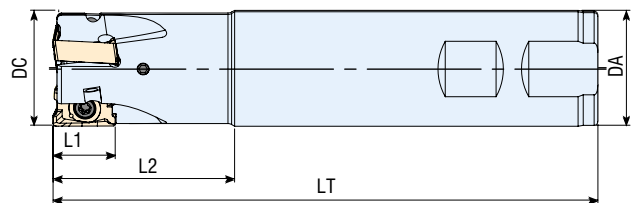
**Portaherramientas de fresado 90° - LNMT0804..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LN08-D16-W16-L100-2R	16	2	16	100	28	8	LNMT0804..	TDA-094	LLT-8
NPDF90-LN08-D16-W16-L150-2	16	2	16	150	40	8			
NPDF90-LN08-D20-W20-L100-3R	20	3	20	100	28	8			
NPDF90-LN08-D25-W25-L100-3R	20	3	25	100	30	8	LNMT0804..	TDA-096	LLT-8
NPDF90-LN08-D32-W32-L110-5R	25	5	32	110	30	8			

- Compatible con: ISCR • Placas NO Disponibles

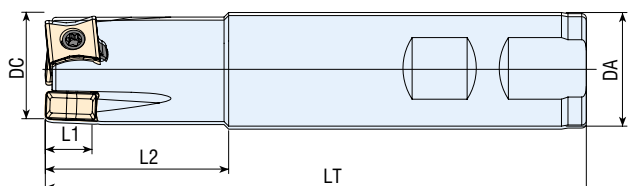
**Portaherramientas de fresado 90° - LNGU15T6**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LN15T6-D25-W25-L150-2R	25	2	25	150	50	15.5	LNGU15T6..	TDA-067	LLT-15
NPDF90-LN15T6-D32-W32-L150-3R	32	3	32	150	50	15.5			
NPDF90-LN15T6-D40-W32-L150-3R	40	3	32	150	40	15.5			

- Compatible con: KNMTL • Placas NO Disponibles

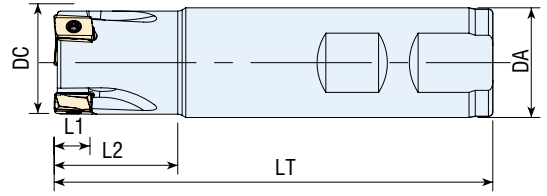
**Portaherramientas de fresado 90° - LNMT1106..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LN1106-D25-W25-L150-3	25	3	25	150	40	10	LNMT1106	TDA-049	LLT-15
NPDF90-LN1106-D32-W32-L150-4	32	4	32	150	40	10			
NPDF90-LN1106-D40-W32-L150-5	40	5	32	150	40	10			

- Compatible con: ISCR - XTC - GSC • Placas NO Disponibles

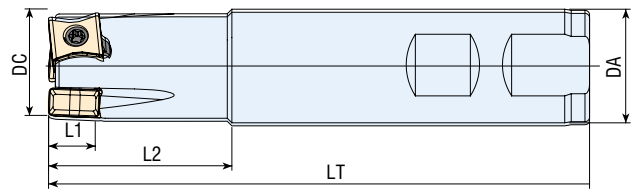
**Portaherramientas de fresado 90° - LNMT1306..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LN1306-D32-W32-L150-3	32	3	32	150	50	12.5	LNMT 1306..	TDA-066	LLT-15
NPDF90-LN1306-D32-C32-L110-3R	32	3	32	110	40	12.5			

• Compatible con: ISCR • Placas NO Disponibles

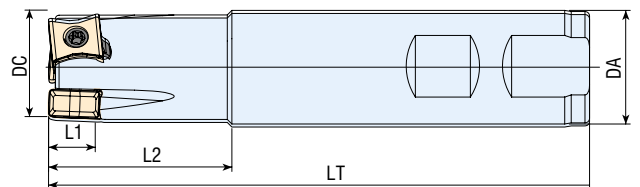
**Portaherramientas de fresado 90° - LOGU0904..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LOGU0904-D16-C16-L160-2R	16	2	16	160	60	8	LOGU..0904..	TDA-125	LLT2-08
NPDF90-LOGU0904-D18-C16-L160-2R	18	2	16	160	25	8			
NPDF90-LOGU0904-D20-C20-L160-3R	20	3	20	160	60	8			
NPDF90-LOGU0904-D20-W20-L100-3R	20	3	20	100	30	8			
NPDF90-LOGU0904-D22-C20-L160-3R	22	3	20	160	30	8	LOGU..0904..	TDA-126	LLT2-07
NPDF90-LOGU0904-D25-C25-L160-4R	25	4	25	160	70	8			
NPDF90-LOGU0904-D25-W25-L091-3R	25	3	25	91	30	8			
NPDF90-LOGU0904-D32-C32-L160-5R	32	5	32	160	70	8			

• Compatible con: MTSBH • Placas NO Disponibles

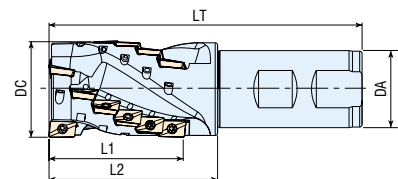
**Portaherramientas de fresado 90° - LOMU1004..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LOMU10-D16-W16-L100-2	16	2	16	100	30	10	LOMU1004..	TDA-024	LLT2-08
NPDF90-LOMU10-D16-W16-L160-2	16	2	16	160	50	10			
NPDF90-LOMU10-D20-W20-L130-3	20	3	20	130	40	10			
NPDF90-LOMU10-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-LOMU10-D32-W32-L150-4	32	4	32	150	50	10			

• Compatible con: KYCR • Placas NO Disponibles

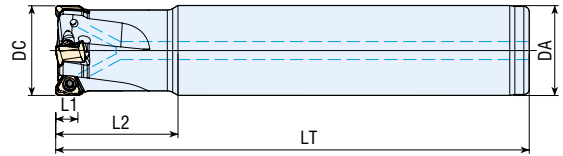
**Portaherramientas de Fresado - Placa AP..1204...**



REFERENCIA	Z	DC	DA	L1	L2	LT	INSERTO	TORNILLO	LLAVE
NPDF90-AP1204-D32-W32-L140-0212R	12-2	32	32	68	80	140	AP..1204..	TDA-044	LLT-10
NPDF90-AP1204-D40-W32-L160-0321R	21-3	40	32	79	100	160			

• Compatible con: TGTC • Placas NO Disponibles

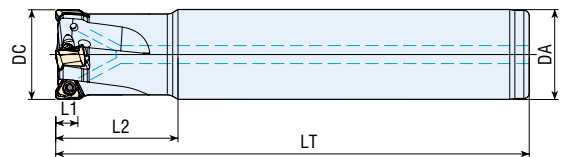
**Portaherramientas de fresado 90° - TNGX1004..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-TNG10-D20-W20-L90-2R	20	2	20	90	32	5	TNGX1004..	TDA-014	LLT-8
NPDF90-TNG10-D20-W20-L90-3R	20	3	20	90	32	5			
NPDF90-TNG10-D20-C20-L125-2R	20	2	20	125	29	5			
NPDF90-TNG10-D20-C20-L125-3R	20	3	20	125	29	5			
NPDF90-TNG10-D20-C20-L150-3R	20	3	20	150	50	5			
NPDF90-TNG10-D21-C20-L200-3R	21	3	20	200	30	5			
NPDF90-TNG10-D25-W25-L100-3R	25	3	25	100	42	5			
NPDF90-TNG10-D25-W25-L100-4R	25	4	25	100	42	5			
NPDF90-TNG10-D25-C25-L150-3R	25	3	25	150	34	5			
NPDF90-TNG10-D25-C25-L150-4R	25	4	25	150	34	5			
NPDF90-TNG10-D25-C25-L170-4R	25	4	25	170	50	5			
NPDF90-TNG10-D26-C25-L250-4R	26	4	25	250	35	5			
NPDF90-TNG10-D28-W25-L100-4R	28	4	25	100	29	5			
NPDF90-TNG10-D32-W32-L110-5R	32	5	32	110	42	5			
NPDF90-TNG10-D32-C32-L170-4R	32	4	32	170	37	5			
NPDF90-TNG10-D32-C32-L170-5R	32	5	32	170	37	5			
NPDF90-TNG10-D33-C32-L250-5R	33	5	32	250	35				

• Compatible con: PRMT • Placas NO Disponibles

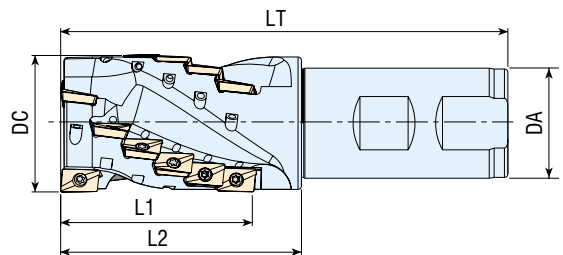
**Portaherramientas de fresado 90° - TNGX1606..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-TNG16-D25-C25-L170-2R	25	2	25	170	34	10	TNGX1606..	TDA-062	LLT-15
NPDF90-TNG16-D25-W25-L110-2R	25	2	25	110	42	10			
NPDF90-TNG16-D32-C32-L195-2R	32	2	32	195	34	10			
NPDF90-TNG16-D32-C32-L195-3R	32	3	32	195	34	10			
NPDF90-TNG16-D32-W32-L110-3R	32	3	32	110	42	10			
NPDF90-TNG16-D35-C32-L195-4R	35	4	32	195	34	10			
NPDF90-TNG16-D40-W32-L120-4R	40	4	32	120	50	10			

• Compatible con: PRMT • Placas NO Disponibles

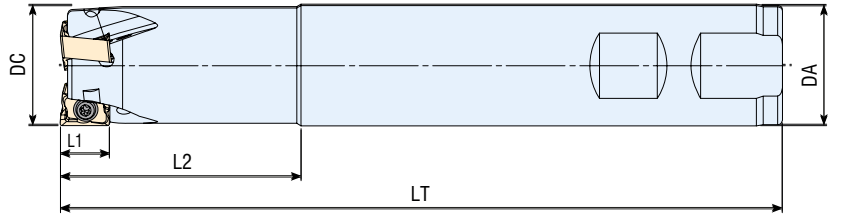
**Portaherramientas de Fresado - Placa AP..1003..**



REFERENCIA	Z	DC	DA	L1	L2	LT	INSERTO	TORNILLO	LLAVE
NPDF90-AP10-D20-W20-L087-0204	4-2	20	20	28	37	87	AP..1003..	TDA-014	LLT-8
NPDF90-AP10-D20-W20-L087-0206	6-2	20	20	28	37	87			
NPDF90-AP10-D25-W25-L105-0208R	8-2	25	25	37	50	105			
NPDF90-AP10-D32-W32-L115-0315R	15-3	32	32	46	55	115			
NPDF90-AP10-D40-W32-L130-0318R	18-3	40	32	55	70	130			

• Compatible con: PLACA ISO • Placas Disponibles: Ver Sección Placas

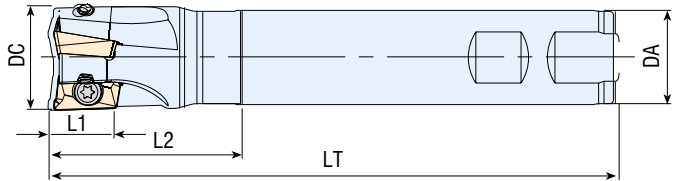
## Portaherramientas de fresado 90° - LN.X1006



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-LN1006-D16-W16-L120-1R	16	1	16	120	30	9	LN.X1006..	TDA-032	LLT-10
NPDF90-LN1006-D16-W16-L150-1	16	1	16	150	50	9			
NPDF90-LN1006-D18-W16-L120-2R	18	2	16	120	30	9			
NPDF90-LN1006-D20-W20-L120-2R	20	2	20	120	30	9			
NPDF90-LN1006-D20-W20-L150-2	20	2	20	150	50	9			
NPDF90-LN1006-D25-W25-L120-3R	25	3	25	120	30	9			
NPDF90-LN1006-D25-W25-L150-3	25	3	25	150	50	9			
NPDF90-LN1006-D32-W32-L120-4R	32	4	32	120	30	9			
NPDF90-LN1006-D32-W32-L150-4	32	4	32	150	50	9			

• Compatible con: KRLY • Placas NO Disponibles

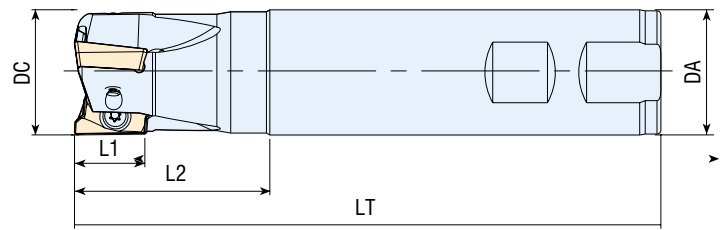
## Portaherramientas de fresado 90° - R390-11T3.. / R390-1704.. / R390-1806..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-R390.11-D12-W12-L100-1	12	1	12	100	25	10	R390-11T3..	TDA-013	LLT-8
NPDF90-R390.11-D16-W16-L100-2R	16	2	16	100	30	10			
NPDF90-R390.11-D16-W16-L150-2	16	2	16	150	50	10			
NPDF90-R390.11-D16-W16-L150-2R	16	2	16	150	50	10			
NPDF90-R390.11-D20-W20-L090-2R	20	2	20	90	30	10			
NPDF90-R390.11-D20-W20-L100-3R	20	3	20	100	30	10			
NPDF90-R390.11-D20-W20-L150-3	20	3	20	150	50	10	R390-11T3..	TDA-014	LLT-8
NPDF90-R390.11-D20-W20-L150-3R	20	3	20	150	50	10			
NPDF90-R390.11-D20-C20-L150-3	20	3	20	150	30	10			
NPDF90-R390.11-D22-W20-L090-2R	22	2	20	90	30	10			
NPDF90-R390.11-D25-C20-L150-3	25	3	20	150	40	10			
NPDF90-R390.11-D25-W25-L100-3R	25	3	25	100	30	10			
NPDF90-R390.11-D25-W25-L150-3	25	3	25	150	50	10			
NPDF90-R390.11-D25-W25-L150-3R	25	3	25	150	50	10			
NPDF90-R390.11-D30-W25-L150-4R	30	4	25	150	30	10			
NPDF90-R390.11-D32-C25-L200-3	32	3	25	200	40	10			
NPDF90-R390.11-D32-W32-L150-5R	32	5	32	150	50	10			
NPDF90-R390.17-D25-W25-L150-2	25	2	25	150	50	15.4	R390-1704..	TDA-046	LLT-15
NPDF90-R390.17-D25-W25-L150-2R	25	2	25	150	50	15.4			
NPDF90-R390.17-D30-W25-L150-3	30	3	25	150	40	15.4			
NPDF90-R390.17-D30-W25-L150-3R	30	3	25	150	40	15.4		TDA-047	LLT-15
NPDF90-R390.17-D32-W32-L150-3R	32	3	32	150	40	15.4			
NPDF90-R390.18-D32-C32-L150-3	32	3	32	150	45	15.4	R390-1806..	TDA-066	LLT-15

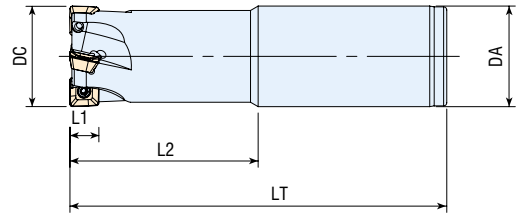
• Compatible con: SNDVK - NIXA  
 • Algunos Modelos de Placas Disponibles: Ver Sección Placas

**Portaherramientas de fresado 90° - RT0702 / RT1003 / RT1606**



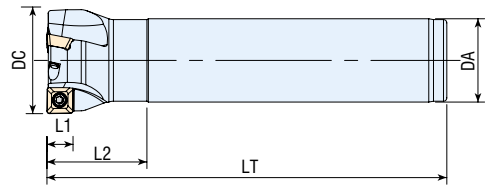
REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-RT07-D10-W10-L120-2	10	2	10	120	30	7	RT0702	TDA-006	LLT-6
NPDF90-RT07-D12-C12-L120-2	12	2	12	120	30	7			
NPDF90-RT07-D12-W12-L120-2	12	2	12	120	30	7			
NPDF90-RT07-D14-W12-L120-2	14	2	12	120	30	7			
NPDF90-RT10-D16-C15-L160-2	16	2	15	160	30	10	RT1003	TDA-014	LLT-8
NPDF90-RT10-D16-W16-L120-2R	16	2	16	120	30	10			
NPDF90-RT10-D16-W16-L150-2	16	2	16	150	30	10			
NPDF90-RT10-D16-C16-L200-2	16	2	16	200	100	10			
NPDF90-RT10-D17-W16-L160-2	17	2	16	160	30	10			
NPDF90-RT10-D17-C16-L200-2	17	2	16	200	30	10			
NPDF90-RT10-D18-W16-L120-2R	18	2	16	120	30	10			
NPDF90-RT10-D20-C19-L200-3	20	3	19	200	30	10			
NPDF90-RT10-D20-C20-L110-3	20	3	20	110	30	10			
NPDF90-RT10-D20-W20-L120-3R	20	3	20	120	30	10			
NPDF90-RT10-D20-W20-L150-3	20	3	20	150	50	10			
NPDF90-RT10-D20-C20-L200-3	20	3	20	200	100	10			
NPDF90-RT10-D21-W20-L200-3	21	3	20	200	30	10			
NPDF90-RT10-D22-W20-L120-3R	22	3	20	120	30	10			
NPDF90-RT10-D22-C20-L150-3	22	3	20	150	30	10			
NPDF90-RT10-D22-C20-L200-3	22	3	20	200	30	10			
NPDF90-RT10-D25-W25-L120-4R	25	4	25	120	40	10			
NPDF90-RT10-D25-W25-L150-4	25	4	25	150	50	10			
NPDF90-RT10-D25-C25-L200-4	25	4	25	200	100	10			
NPDF90-RT10-D26-C25-L250-4	26	4	25	250	32	10			
NPDF90-RT10-D32-W32-L120-5R	32	5	32	120	50	10			
NPDF90-RT10-D32-W32-L150-5	32	5	32	150	50	10			
NPDF90-RT10-D32-C32-L200-5	32	5	32	200	100	10			
NPDF90-RT10-D33-C32-L250-4	33	4	32	250	32	10			
NPDF90-RT16-D25-W25-L120-2R	25	2	25	120	40	16	RT1606	TDA-064	LLT-15
NPDF90-RT16-D25-W25-L150-2	25	2	25	150	50	16			
NPDF90-RT16-D25-C25-L200-2	25	2	25	200	100	16			
NPDF90-RT16-D32-W32-L120-3R	32	3	32	120	50	16			
NPDF90-RT16-D32-W32-L150-3	32	3	32	150	50	16			
NPDF90-RT16-D32-C32-L200-3	32	3	32	200	100	16			
NPDF90-RT16-D32-C32-L250-3	32	3	32	250	100	16			
NPDF90-RT16-D32-C32-L270-3	32	3	32	270	100	16			
NPDF90-RT16-D40-W32-L120-4R	40	4	32	120	50	16		TDA-066	LLT-15
NPDF90-RT16-D40-W32-L150-4	40	4	32	150	50	16			
NPDF90-RT16-D40-C32-L200-4	40	4	32	200	100	16			

- Compatible con: SFTY
- Placas Disponibles: Ver Sección Placas

**Portaherramientas de fresado 90° - SEET09T3..**


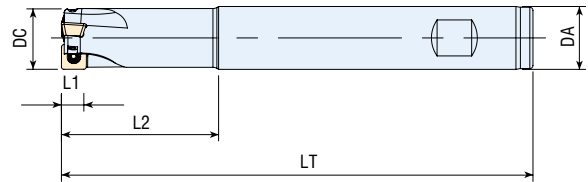
REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-SE09-D25-C25-L120-3R	25	3	25	120	60	6.7	SEET 09T3..	TDA-027	LLT-8
NPDF90-SE09-D25-C25-L150-2	25	2	25	150	50	6.7			
NPDF90-SE09-D32-C32-L120-4R	32	4	32	120	60	6.7			
NPDF90-SE09-D32-C32-L150-3	32	3	32	150	50	6.7			

• Compatible con: ZCC • Placas NO Disponibles

**Portaherramientas de fresado 90° - SOMT0803..**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-SOMT08-D20-C16-L110-2R	20	2	16	110	25	7	SOMT0803..	TDA-027	LLT-8
NPDF90-SOMT08-D25-C20-L110-2R	25	2	20	110	25	7			
NPDF90-SOMT08-D32-C25-L120-3R	32	3	25	120	30	7			

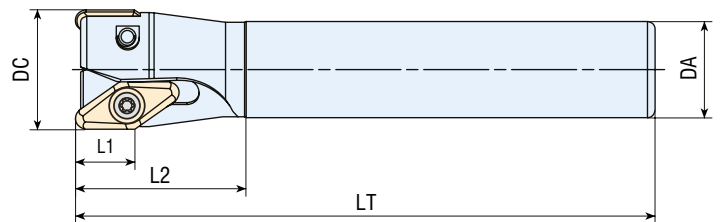
• Compatible con: SMNT • Placas NO Disponibles

**Portaherramientas de fresado 90° - SPGT..**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-SPGT0602-D16-W16-L150-2	16	2	16	150	50	5.5	SPGT060204	TDA-008	LLT-7
NPDF90-SPGT07T3-D20-W20-L150-3	20	3	20	150	50	7	SPGT07T308	TDA-014	LLT-8
NPDF90-SPGT07T3-D25-W25-L150-3	25	3	25	150	50	7			
NPDF90-SPGT0904-D30-W32-L150-3	30	3	32	150	50	9	SPGT090408	TDA-047	LLT-15

• Compatible con: ZCC - OKE

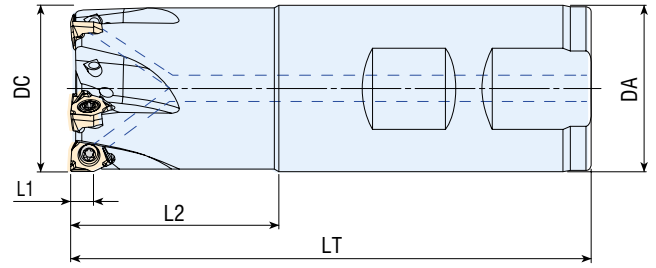
• Placas Disponibles: Ver Sección Placas

**Portaherramientas de fresado 90° - VCKT2205..**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-VC2205-D32-C25-L150-2R	32	2	25	150	50	15	VCKT2205..	TDA-077	LLT-15
NPDF90-VC2205-D40-C32-L150-3R	40	3	32	150	50	15			

• Compatible con: PLACA ISO • Placas NO Disponibles

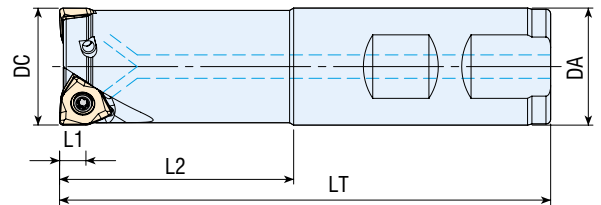
**Portaherramientas de fresado 90° - WNGU0403 / WNGU0806**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-WNG04-D20-W20-L81-3R	20	3	20	81	31	4	WNGU0403..	TDA-014	LLT-8
NPDF90-WNG04-D20-C20-L170-3R	20	3	20	170	50	4			
NPDF90-WNG04-D25-W25-L88-3R	25	3	25	88	32	4			
NPDF90-WNG04-D25-W25-L88-4R	25	4	25	88	32	4			
NPDF90-WNG04-D25-C25-L170-3R	25	3	25	170	50	4			
NPDF90-WNG04-D32-W25-L100-5R	32	5	25	100	35	4			
NPDF90-WNG04-D32-W32-L100-5R	32	5	32	100	40	4			
NPDF90-WNG04-D32-C25-L170-4R	32	4	25	170	35	4			
NPDF90-WNG04-D32-C32-L170-4R	32	4	32	170	50	4			
NPDF90-WNG08-D32-C32-L170-2R	32	2	32	170	50	7.5	WNGU0806..	TDA-066	LLT-15
NPDF90-WNG08-D40-W32-L100-3R	40	3	32	100	35	7.5			
NPDF90-WNG08-D40-W40-L110-3R	40	3	40	110	40	7.5			
NPDF90-WNG08-D40-C32-L170-3R	40	3	32	170	35	7.5			

- Compatible con: XTC-GSC
- Placas NO Disponibles

**Portaherramientas de fresado 90° - WNHU0604..**

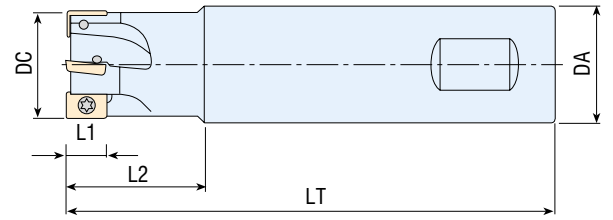


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-WNHU06-D25-W25-L150-2R	25	2	25	150	50	5.7	WNGU0403..	TDA-014	LLT-8
NPDF90-WNHU06-D32-W32-L150-3R	32	3	32	150	50	5.7			
NPDF90-WNHU06-D40-W32-L150-4R	40	4	32	150	35	5.7			

- Compatible con: ZCC
- Placas NO Disponibles



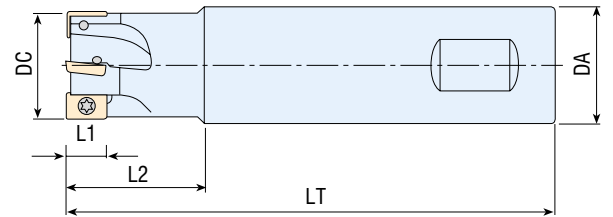
## Portaherramientas de fresado 90° - XD.T11T3..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-XD11T3-D16-W16-L150-2	16	2	16	150	30	10	XD.T11T3..	TDA-013	LLT-8
NPDF90-XD11T3-D17-C16-L150-2	17	2	16	150	30	10			
NPDF90-XD11T3-D20-W20-L150-3	20	3	20	150	50	10		TDA-014	LLT-8
NPDF90-XD11T3-D21-C20-L080-3R	21	3	20	80	25	10			
NPDF90-XD11T3-D21-C20-L150-3	21	3	20	150	30	10			
NPDF90-XD11T3-D25-W25-L150-4	25	4	25	150	50	10			
NPDF90-XD11T3-D30-W25-L120-4	30	4	25	120	30	10			
NPDF90-XD11T3-D32-W32-L150-4	32	4	32	150	50	10			
NPDF90-XD11T3-D33-C20-L080-4R	33	4	20	80	30	10			

• Compatible con: CRTZT • Placas NO Disponibles

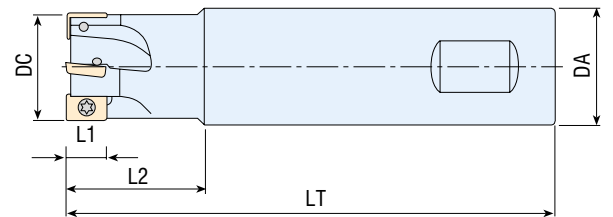
## Portaherramientas de fresado 90° - XCKX13T3



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-XC13-D20-W20-L150-2	20	2	20	150	60	13	XCKX13T3..	TDA-025	LLT-8
NPDF90-XC13-D25-W25-L150-3	25	3	25	150	60	13		TDA-027	LLT-8
NPDF90-XC13-D32-W32-L150-Z	32	4	32	150	60	13			

• Compatible con: SC • Placas NO Disponibles

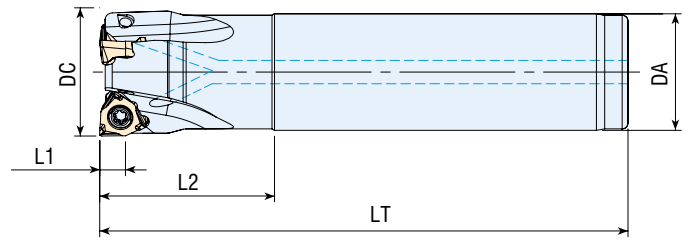
## Portaherramientas de fresado 90° - XO..0602.. / XO..0903.. / XO..1204..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-XO06-D10-C12-L120-2	10	2	12	120	50	5	XO..0602..	TDA-002	LLT-6
NPDF90-XO06-D12-C12-L120-2	12	2	12	120	25	5			
NPDF90-XO09-D16-W16-L150-2	16	2	16	150	50	8	XO..0903..	TDA-013	LLT-8
NPDF90-XO09-D20-W20-L150-3	20	3	20	150	50	8			
NPDF90-XO12-D20-W20-L150-2	20	2	20	150	50	11	XO..1204..	TDA-043	LLT-10
NPDF90-XO12-D20-C20-L200-2	20	2	20	200	100	11			
NPDF90-XO12-D22-W20-L150-2	22	2	20	150	30	11			
NPDF90-XO12-D25-W25-L150-3	25	3	25	150	50	11			
NPDF90-XO12-D25-C25-L200-3	25	3	25	200	100	11			
NPDF90-XO12-D32-C25-L150-4	32	4	25	150	40	11			
NPDF90-XO12-D32-W32-L150-4	32	4	32	150	50	11			
NPDF90-XO12-D32-C32-L250-4	32	4	32	250	100	11			

• Compatible con: SC • Placas NO Disponibles

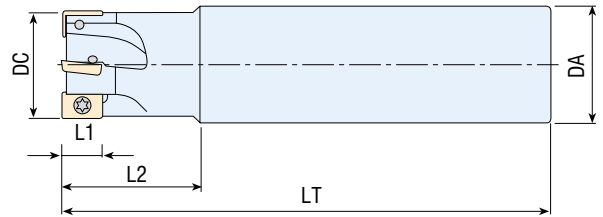
**Portaherramientas de fresado 90° - XNEX0403.. / XNEX0806..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-XN0403-D16-C16-L100-1R	16	1	16	100	30	4	XNEX0403..	TDA-014	LLT-8
NPDF90-XN0403-D22-C20-L110-3R	22	3	20	110	30	4			
NPDF90-XN0806-D32-C32-L110-2R	32	2	32	110	40	7.5	XNEX0806..	TDA-066	LLT-15

- Compatible con: SC
- Placas NO Disponibles

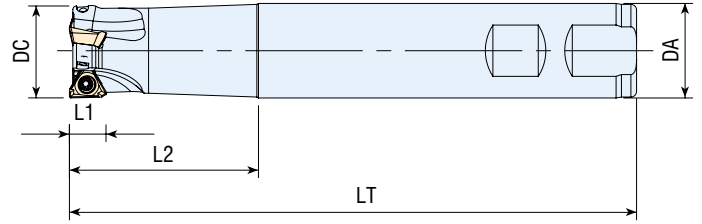
**Portaherramientas de fresado 90° - ZCMT1003R**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-ZC1003-D16-C14-L150-2	16	2	14	150	25	9	ZCMT100308R	TDA-014	LLT-8
NPDF90-ZC1003-D16-C14-L200-2	16	2	14	200	25	9			
NPDF90-ZC1003-D16-C15-L150-2	16	2	15	150	25	9			
NPDF90-ZC1003-D16-C16-L150-2	16	2	16	150	25	9			
NPDF90-ZC1003-D16-C16-L200-2	16	2	16	200	50	9			
NPDF90-ZC1003-D17-C16-L150-2	17	2	16	150	25	9			
NPDF90-ZC1003-D17-C16-L200-2	17	2	16	200	25	9			
NPDF90-ZC1003-D20-C18-L150-3	20	3	18	150	25	9			
NPDF90-ZC1003-D20-C18-L200-2	20	2	18	200	25	9			
NPDF90-ZC1003-D20-C20-L150-3	20	3	20	150	40	9			
NPDF90-ZC1003-D20-C18-L200-3	20	3	18	200	25	9			
NPDF90-ZC1003-D21-C20-L150-2	21	2	20	150	30	9			
NPDF90-ZC1003-D21-C20-L150-3	21	3	20	150	30	9			
NPDF90-ZC1003-D21-C20-L200-3	21	3	20	200	30	9			
NPDF90-ZC1003-D25-C20-L150-3	25	3	20	150	30	9			
NPDF90-ZC1003-D25-C20-L200-3	25	3	20	200	30	9			
NPDF90-ZC1003-D25-C25-L150-3	25	3	25	150	40	9			
NPDF90-ZC1003-D26-C25-L170-3	26	3	25	170	25	9			
NPDF90-ZC1003-D26-C25-L200-3	26	3	25	200	25	9			
NPDF90-ZC1003-D32-C25-L180-4	32	4	25	180	30	9			
NPDF90-ZC1003-D33-C32-L200-4	33	4	32	200	25	9			

- Compatible con: ZCC
- Placas NO Disponibles

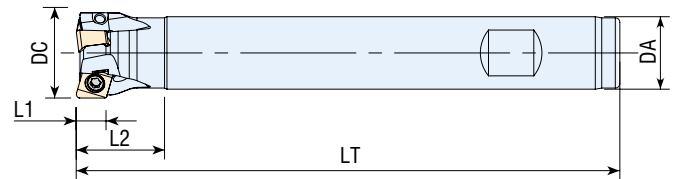
## Portaherramientas de fresado 90° - 3P..0603 / 3P..1004 / 3P..1505



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-3P0603-D12-C12-L120-1R	12	1	12	120	25	4.7	3P.T0603..	TDA-006	LLT-6
NPDF90-3P0603-D16-W16-L120-3R	16	3	16	120	25	4.7			
NPDF90-3P0603-D20-W20-L150-3R	20	3	20	150	25	4.7			
NPDF90-3P0603-D25-W25-L150-5R	25	5	25	150	25	4.7			
NPDF90-3P1004-D20-W20-L150-2	20	2	20	150	40	7	3P.T1004	TDA-012	LLT-8
NPDF90-3P1004-D21-C20-L200-2	21	2	20	200	30	7			
NPDF90-3P1004-D22-W20-L150-2	22	2	20	150	30	7			
NPDF90-3P1004-D25-W25-L150-3	25	3	25	150	40	7			
NPDF90-3P1505-D32-W32-L150-3	32	3	32	150	50	11	3P.T1505	TDA-056	LLT-15
NPDF90-3P1505-D38-W32-L150-3	38	3	32	150	35	11			
NPDF90-3P1505-D40-W32-L150-4	40	4	32	150	35	11			

- Compatible con: TGTC - NIXA
- Algunos Modelos de Placas Disponibles: Ver Sección Placas

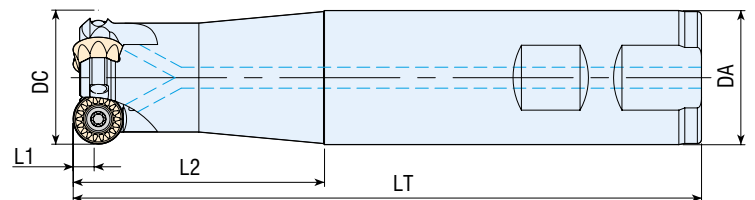
## Portaherramientas de fresado 90° - 4NK0603..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF90-4N06-D16-W16-L120-2R	16	2	16	120	25	6	4NK0603..	TDA-024	LLT-8
NPDF90-4N06-D16-W16-L160-2	16	2	16	160	25	6			
NPDF90-4N06-D20-W16-L120-3R	20	3	16	120	20	6			
NPDF90-4N06-D20-W16-L160-3	20	3	16	160	2	6			
NPDF90-4N06-D20-W20-L160-3	20	3	20	160	25	6			

- Compatible con: TGTC • Placas NO Disponibles

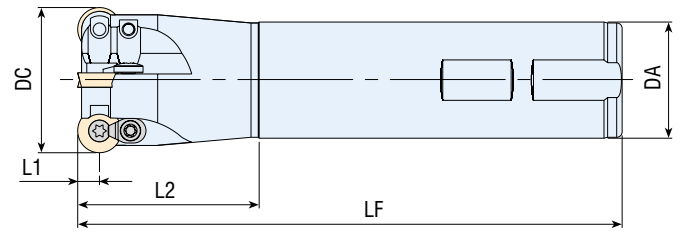
## Portaherramientas de fresado - Placa Redonda RPMT



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDFC-RP08T2M-D20-W20-L150-2R	20	2	20	150	60	4	RPMT08T2..	TDA-014	LLT-8
NPDFC-RP08T2M-D25-W25-L200-3R	25	3	25	200	100	4			
NPDFC-RP10T3M-D25-W25-L200-2R	25	2	25	200	100	5	RPMT10T3..	TDA-047	LLT-15
NPDFC-RP10T3M-D32-W32-L200-3R	32	3	32	200	100	5			
NPDFC-RP1204M-D32-W32-L150-3R	32	3	32	150	60	6	RPMT1204..	TDA-064	LLT-15
NPDFC-RP1204M-D32-W32-L200-3R	32	3	32	200	100	6			
NPDFC-RP1606M-D40-W32-L150-2R	40	2	16	150	35	8	RPMT1606	TDA-081	LLT-20
NPDFC-RP1606M-D40-W32-L200-2R	40	2	16	200	35	8			

- Compatible con: MTSBH • Placas NO Disponibles

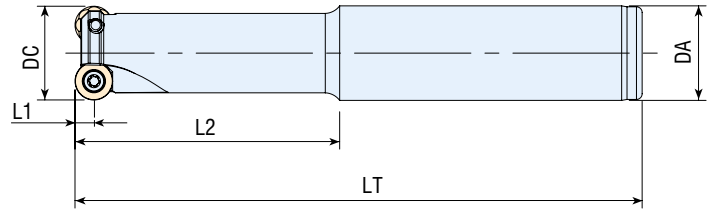
Portaherramientas de fresado - Placa Redonda RD...



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	BRIDA	TORNILLO BRIDA	LLAVE
NPDFC-RD0501-D08-W10-L100-1R	8	1	10	100	20	2.5	RD..0501	TDA-005	-	-	LLT-6
NPDFC-RD0501-D10-W12-L100-2R	10	2	12	100	20	2.5		TDA-006	-	-	LLT-6
NPDFC-RD0501-D12-W12-L120-2R	12	2	12	120	20	2.5					
NPDFC-RD0803-D16-W16-L150-2	16	2	16	150	60	4	RD..0803	TDA-025	-	-	LLT-8
NPDFC-RD0803-D16-C20-L200-2	16	2	20	200	60	4					
NPDFC-RD0803-D20-W20-L150-3	20	3	20	150	60	4					
NPDFC-RD08T2-D16-W16-L150-2	16	2	16	150	60	4	RD..08T2	TDA-014	-	-	LLT-8
NPDFC-RD08T2-D20-W20-L150-2	20	2	20	150	60	4					
NPDFC-RD1003-D20-W20-L150-2	20	2	20	150	60	5	RD..1003	TDA-047	BDA-26	TDA-049	LLT-15
NPDFC-RD1003-D20-C20-L160-2	20	2	20	160	70	5					
NPDFC-RD1003-D20-C20-L250-2	20	2	20	250	150	5					
NPDFC-RD1003-D21-C20-L160-2	21	2	20	160	70	5					
NPDFC-RD1003-D25-W25-L150-2	25	2	25	150	60	5					
NPDFC-RD1003-D25-C25-L160-2	25	2	25	160	70	5					
NPDFC-RD1003-D25-W25-L200-2	25	2	25	200	100	5					
NPDFC-RD1003-D25-C25-L200-2	25	2	25	200	100	5					
NPDFC-RD1003-D25-C25-L250-2	25	2	25	250	150	5					
NPDFC-RD1003-D26-C25-L160-2	26	2	25	160	70	5					
NPDFC-RD1003-D32-W32-L150-3	32	3	32	150	60	5					
NPDFC-RD1003-D32-C32-L250-2	32	2	32	250	150	5					
NPDFC-RD1003-D33-C32-L160-3	33	3	32	160	70	5					
NPDFC-RD1003-D40-W32-L150-4	40	4	32	150	35	5					
NPDFC-RD1003-D40-C32-L250-2	40	2	32	250	50	5					
NPDFC-RD10T3-D20-C20-L150-2	20	2	20	150	60	5	RD..10T3	TDA-047	BDA-26	TDA-049	LLT-15
NPDFC-RD10T3-D20-W20-L150-2	20	2	20	150	60	5					
NPDFC-RD10T3-D25-C25-L150-2	25	2	25	150	60	5					
NPDFC-RD10T3-D25-C25-L200-2R	25	2	25	200	100	5					
NPDFC-RD10T3-D25-W25-L150-2	25	2	25	150	60	5					
NPDFC-RD10T3-D32-C25-L250-3R	32	3	25	250	35	5					
NPDFC-RD10T3-D32-W32-L150-3	32	3	32	150	60	5					
NPDFC-RD12T3-D25-W25-L150-2	25	2	25	150	60	6	RD..12T3	TDA-047	BDA-26	TDA-049	LLT-15
NPDFC-RD12T3-D25-W25-L200-2	25	2	25	200	100	6					
NPDFC-RD12T3-D25-C25-L250-2	25	2	25	250	150	6					
NPDFC-RD12T3-D25-C25-L300-2	25	2	25	300	200	6					
NPDFC-RD12T3-D32-W32-L150-3	32	3	32	150	60	6					
NPDFC-RD12T3-D32-C32-L250-2	32	2	32	250	150	6					
NPDFC-RD12T3-D40-W32-L150-4	40	4	32	150	50	6					
NPDFC-RD12T3-D40-C32-L250-2	40	2	32	250	50	6					
NPDFC-RD1204-D32-C32-L160-3	32	3	32	160	70	6	RD..1204	TDA-047	BDA-26	TDA-049	LLT-15
NPDFC-RD1204-D32-W32-L160-3	32	3	32	160	70	6					
NPDFC-RD1204-D33-C32-L160-3	33	3	32	160	70	6					
NPDFC-RD1604-D40-W32-L150-2	40	2	32	150	35	8	RD..1604	TDA-077	BDA-18	TDA-066	LLT-15

• Compatible con: PLACA ISO • Placas Disponibles: Ver Sección Placas

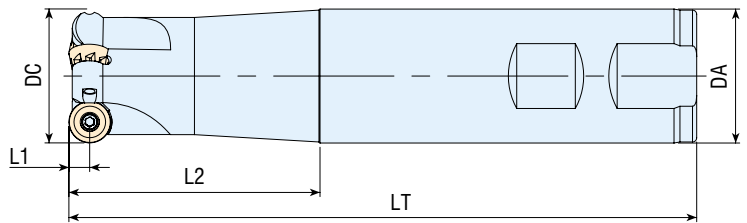
**Portaherramientas de fresado - Placa Redonda QP..10T3 / QP..1204**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDFC-QP10T3-D20-C20-L150-1R	20	1	20	150	70	5	QP..10T3..	TDA-047	LLT-15
NPDFC-QP10T3-D25-C25-L120-2R	25	2	25	120	40	5			
NPDFC-QP10T3-D25-C25-L150-2R	25	2	25	150	70	5			
NPDFC-QP10T3-D25-C25-L170-2	25	2	25	170	90	5			
NPDFC-QP10T3-D32-C32-L150-3R	32	3	32	150	70	5			
NPDFC-QP10T3-D32-C32-L170-3	32	3	32	170	90	5			
NPDFC-QP1204-D25-C25-L150-2R	25	2	25	150	70	6	QP..1204..	TDA-064	LLT-15

• Compatible con: SMTM • Placas NO Disponibles

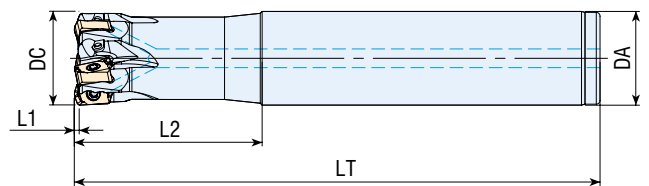
**Portaherramientas de fresado - Placa Redonda RPNX10T3**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDFC-RP10T3-D25-W25-L125-2	25	2	25	125	60	5	RPNX10T3..	TDA-032	80-T10
NPDFC-RP10T3-D25-W25-L150-2	25	2	25	150	60	5			
NPDFC-RP10T3-D32-W32-L150-3	32	3	32	150	60	5			

• Compatible con: CRTZT • Placas NO Disponibles

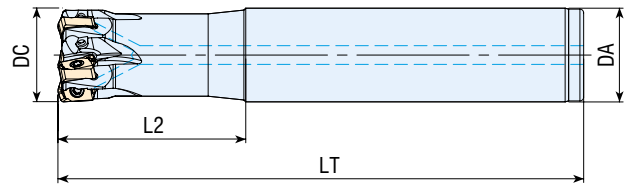
**Portaherramientas de fresado - Placa BNGX10T3**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-BN10T3-D16-C16-L100-2R	16	2	16	100	30	1	BNGX10T3..	TDA-014	LLT-8
NPDF-BN10T3-D16-C16-L150-2R	16	2	16	150	50	1			
NPDF-BN10T3-D20-C20-L130-3R	20	3	20	130	40	1			
NPDF-BN10T3-D20-C20-L130-4R	20	4	20	130	40	1			
NPDF-BN10T3-D20-C20-L160-3R	20	3	20	160	80	1			
NPDF-BN10T3-D25-C25-L140-4R	25	4	25	140	50	1			
NPDF-BN10T3-D25-W25-L140-4R	25	4	25	140	50	1			
NPDF-BN10T3-D25-C25-L140-5R	25	5	25	140	50	1			
NPDF-BN10T3-D25-C25-L180-4R	25	4	25	180	100	1			
NPDF-BN10T3-D32-C32-L150-5R	32	5	32	150	70	1			
NPDF-BN10T3-D32-C32-L150-6R	32	6	32	150	70	1			
NPDF-BN10T3-D35-C32-L200-6R	35	6	32	200	50	1			

• Compatible con: PRMT • Placas NO Disponibles

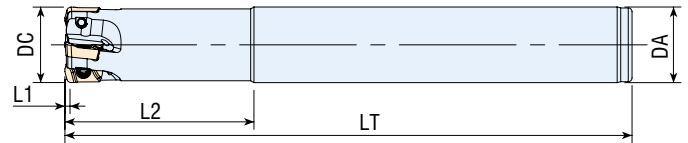
**Portaherramientas de fresado - Placa EO..0602 / ZOMT0602..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-EO0602-D10-C10-L080-2	10	2	10	80	20	-	EO..0602..	TDA-002	LLT-6
NPDF-EO0602-D10-C09-L120-2	10	2	9	120	15	-	ZOMT0602..		
NPDF-EO0602-D10-C10-L120-2	10	2	10	120	60	-			
NPDF-EO0602-D12-C12-L080-2	12	2	12	80	20	-			
NPDF-EO0602-D12-C12-L080-3	12	3	12	80	20	-			
NPDF-EO0602-D12-C11-L120-2	12	2	11	120	15	-			
NPDF-EO0602-D12-C11-L120-3	12	3	11	120	15	-			
NPDF-EO0602-D12-C12-L120-2	12	2	12	120	60	-			
NPDF-EO0602-D12-C12-L120-3	12	3	12	120	60	-			
NPDF-EO0602-D16-C16-L150-4	16	4	16	150	60	-			

• Compatible con: DJT • Placas NO Disponibles

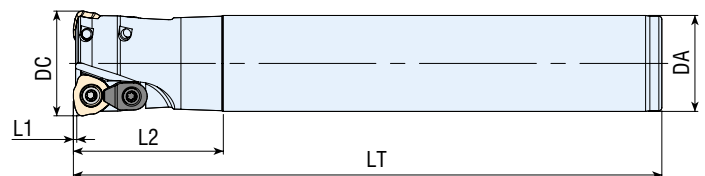
**Portaherramientas de fresado - Placa EP..1003 / ZPMT1003 / YPHW1003**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-EP1003-D16-C16-L150-2R	16	2	16	150	50	1	EP.. 1003..	TDA-013	LLT-3
NPDF-EP1003-D17-C16-L150-2R	17	2	16	150	20	1	ZPMT 1003..		
NPDF-EP1003-D20-C20-L150-4R	20	4	20	150	50	1	YPHW 1003..		
NPDF-EP1003-D21-C20-L150-4R	21	4	20	150	20	1			
NPDF-EP1003-D25-C25-L200-4R	25	4	25	200	100	1			
NPDF-EP1003-D25-C25-L250-4R	25	4	25	250	100	1			

• Compatible con: DJT • Placas NO Disponibles

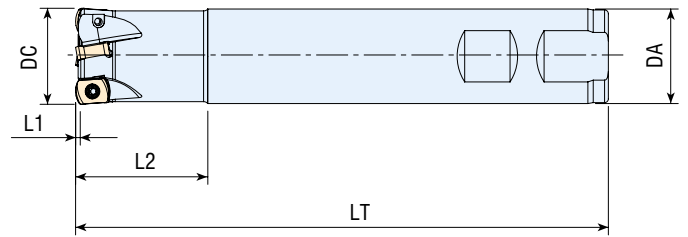
**Portaherramientas de fresado - Placa JDMW1204..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	BRIDA	TORNILLO BRIDA	LLAVE
NPDFC-JD1204-D32-C32-L150-2	32	2	32	150	50	1	JDMW 1204..	TDA-071	BDA-18	TDA-066	LLT-15
NPDFC-JD1204-D32-C32-L200-2	32	2	32	200	50	1					
NPDFC-JD1204-D35-C32-L200-2	35	2	32	200	50	1					
NPDFC-JD1204-D35-C32-L250-2	35	2	32	250	50	1					

• Compatible con: MTSBH • Placas NO Disponibles

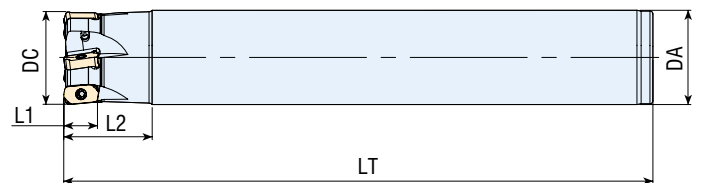
## Portaherramientas de fresado - Placa BLMP0603..



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-BL0603-D16-C15-L150-2	16	2	15	150	20	1	BLMP0603..	TDA-014	LLT-8
NPDF-BL0603-D16-C16-L100-2R	16	2	16	100	30	1			
NPDF-BL0603-D16-C16-L150-2	16	2	16	150	50	1			
NPDF-BL0603-D17-C16-L150-2	17	2	16	150	20	1			
NPDF-BL0603-D17-W16-L170-2	17	2	16	170	20	1			
NPDF-BL0603-D17-W16-L170-2R	17	2	16	170	20	1			
NPDF-BL0603-D17-C16-L200-2	17	2	16	200	30	1			
NPDF-BL0603-D18-C16-L150-2	18	2	16	150	20	1			
NPDF-BL0603-D18-W16-L150-2R	18	2	16	150	20	1			
NPDF-BL0603-D20-C20-L130-3	20	3	20	130	50	1			
NPDF-BL0603-D20-C20-L160-3	20	3	20	160	50	1			
NPDF-BL0603-D21-C20-L200-3	21	3	20	200	25	1			
NPDF-BL0603-D21-W20-L200-3	21	3	20	200	25	1			
NPDF-BL0603-D22-W20-L150-3	22	3	20	150	20	1			
NPDF-BL0603-D25-C25-L250-4	25	4	25	250	40	1			
NPDF-BL0603-D26-C25-L200-4	26	4	25	200	35	1			
NPDF-BL0603-D26-W25-L200-4	26	4	25	200	35	1			
NPDF-BL0603-D26-C25-L250-4	26	4	25	250	35	1			
NPDF-BL0603-D32-C32-L150-5	32	5	32	150	70	1			
NPDF-BL0603-D32-C32-L200-5	32	5	32	200	120	1			
NPDF-BL0603-D33-C32-L150-5	33	5	32	150	40	1			
NPDF-BL0603-D33-C32-L200-5	33	5	32	200	40	1			
NPDF-BL0603-D33-C32-L250-5	33	5	32	250	40	1			

• Compatible con: TGTC - NIXA • Placas Disponibles: Ver Sección Placas

## Portaherramientas de fresado - Placa LNMU0303..

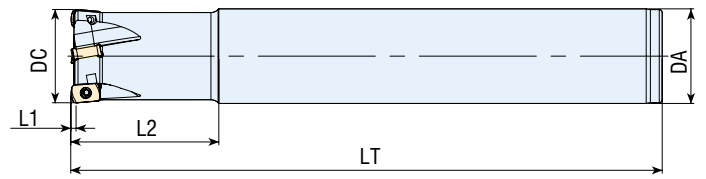


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-LN0303-D16-C15-L150-2	16	2	15	150	30	12	LNMU0303	TDA-014	LLT-8
NPDF-LN0303-D16-W16-L150-2R	16	2	16	150	50	12			
NPDF-LN0303-D17-C16-L150-2R	17	2	16	150	30	12			
NPDF-LN0303-D20-W20-L150-3R	20	3	20	150	50	12			
NPDF-LN0303-D21-C20-L150-3	21	3	20	150	30	12			
NPDF-LN0303-D25-W25-L150-4R	25	4	25	150	50	12			
NPDF-LN0303-D26-C25-L150-4	26	4	25	150	30	12			
NPDF-LN0303-D28-C25-L180-3	28	3	25	180	30	12			
NPDF-LN0303-D33-C32-L200-5	33	5	32	200	30	12			

• Compatible con: TNGLY - NIXA • Placas Disponibles: Ver Sección Placas



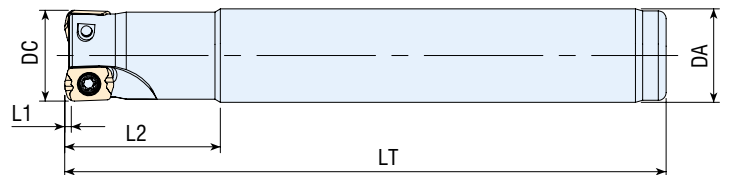
**Portaherramientas de fresado - Placa ENMU1004..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-EN1004-D16-C15-L150-2	16	2	15	150	25	1	ENMU1004..	TDA-013	LLT-8
NPDF-EN1004-D16-C16-L150-2	16	2	16	150	25	1			
NPDF-EN1004-D16-C16-L250-2	16	2	16	250	70	1			
NPDF-EN1004-D17-C16-L150-2R	17	2	16	150	25	1			
NPDF-EN1004-D17-C16-L150-2	17	2	16	150	25	1			
NPDF-EN1004-D17-C16-L200-2	17	2	16	200	25	1			
NPDF-EN1004-D18-C16-L150-2	18	2	16	150	25	1			
NPDF-EN1004-D20-C20-L150-3	20	3	20	150	40	1			
NPDF-EN1004-D20-C20-L250-3	20	3	20	250	70	1			
NPDF-EN1004-D21-C20-L150-2	21	2	20	150	30	1			
NPDF-EN1004-D21-C20-L150-3	21	3	20	150	30	1			
NPDF-EN1004-D21-C20-L150-3R	21	3	20	150	30	1			
NPDF-EN1004-D21-C20-L200-3	21	3	20	200	30	1			
NPDF-EN1004-D22-C20-L150-3	22	3	20	150	30	1	ENMU1004..	TDA-014	LLT-8
NPDF-EN1004-D25-C25-L150-3	25	3	25	150	40	1			
NPDF-EN1004-D25-C25-L150-4	25	4	25	150	40	1			
NPDF-EN1004-D26-C25-L150-3	26	3	25	150	30	1			
NPDF-EN1004-D26-C25-L150-4	26	4	25	150	30	1			
NPDF-EN1004-D26-C25-L200-3	26	3	25	150	30	1			
NPDF-EN1004-D26-C25-L200-3R	26	3	25	200	30	1			
NPDF-EN1004-D26-C25-L250-3R	26	3	25	250	30	1			
NPDF-EN1004-D28-C25-L200-4	28	4	25	200	30	1			
NPDF-EN1004-D32-C32-L200-4	32	4	32	200	50	1			
NPDF-EN1004-D33-C32-L200-4	33	4	32	200	30	1			
NPDF-EN1004-D33-C32-L200-4R	33	4	32	200	30	1			

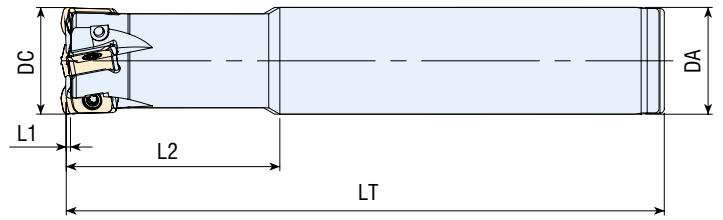
• Compatible con: DJT • Placas NO Disponibles

**Portaherramientas de fresado - Placa LPGT0102....**



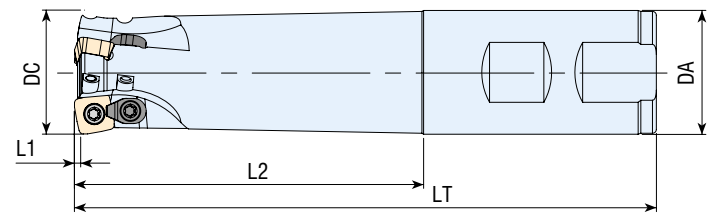
REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-LP0102-D10-C09-L120-2	10	2	9	120	20	0.5	LPGT0102..	TDA-002	LLT-6
NPDF-LP0102-D10-C10-L120-2	10	2	10	120	20	0.5			
NPDF-LP0102-D12-C11-L120-2	12	2	11	120	20	0.5			
NPDF-LP0102-D12-C12-L120-2	12	2	12	120	20	0.5			

• Compatible con: KYCR • Placas NO Disponibles

**Portaherramientas de fresado - Placa LOGU0303..**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-LO03-D16-C15-L160-2	16	2	15	15	30	1	LOGU0303..	TDA-024	LLT-8
NPDF-LO03-D16-C16-L100-2	16	2	16	16	30	1			
NPDF-LO03-D16-C16-L130-2R	16	2	16	16	40	1			
NPDF-LO03-D16-C16-L160-2	16	2	16	16	50	1			
NPDF-LO03-D16-C16-L160-2R	16	2	16	16	100	1			
NPDF-LO03-D17-C16-L180-2	17	2	16	16	30	1			
NPDF-LO03-D20-C20-L130-3	20	3	20	20	40	1			
NPDF-LO03-D20-C20-L130-3R	20	3	20	20	40	1			
NPDF-LO03-D20-C20-L160-3	20	3	20	20	80	1			
NPDF-LO03-D20-C20-L160-3R	20	3	20	20	100	1			
NPDF-LO03-D21-C20-L150-3R	21	3	20	20	30	1			
NPDF-LO03-D21-C20-L200-3	21	3	20	20	30	1			
NPDF-LO03-D21-C20-L200-3R	21	3	20	20	30	1			
NPDF-LO03-D25-C25-L140-4	25	4	25	25	50	1			
NPDF-LO03-D25-C25-L180-4	25	4	25	25	100	1			
NPDF-LO03-D26-C25-L250-4	26	4	25	25	40	1			
NPDF-LO03-D32-C32-L200-5	32	5	32	32	120	1			
NPDF-LO03-D33-C32-L250-5	33	5	32	32	40	1			

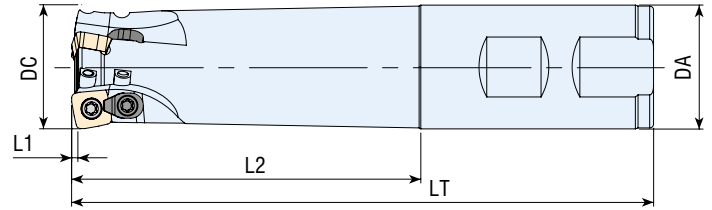
• Compatible con: KYCR • Placas NO Disponibles

**Portaherramientas de fresado - Placa SD..06T2**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-SD06T2-D16-C16-L100-2R	16	2	16	100	50	0.8	SD..06T2..	TDA-008	LLT-7
NPDF-SD06T2-D16-C16-L150-2R	16	2	16	150	50	0.8			
NPDF-SD06T2-D16-C16-L200-2	16	2	16	200	100	0.8			
NPDF-SD06T2-D17-C16-L150-2R	17	2	16	150	50	0.8			
NPDF-SD06T2-D20-C20-L150-3R	20	3	20	150	50	0.8			
NPDF-SD06T2-D20-C20-L200-3	20	3	20	200	100	0.8			
NPDF-SD06T2-D21-C20-L150-3R	21	3	20	150	50	0.8			
NPDF-SD06T2-D25-C25-L150-4R	25	4	25	150	60	0.8			
NPDF-SD06T2-D26-C25-L150-4R	26	4	25	150	60	0.8			

• Compatible con: ZCC • Placas NO Disponibles

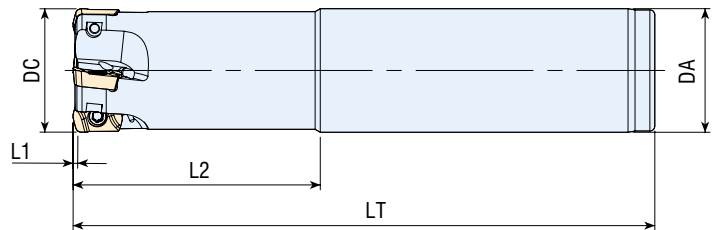
**Portaherramientas de fresado - Placa SD..09T3**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	BRIDA	TORNILLO BRIDA	LLAVE
NPDF-SD09T3-D22-W20-L150-2	22	2	20	150	30	1.4	SD..09T3..	TDA-044	BDA-26	TDA-039	LLT-10
NPDF-SD09T3-D25-C25-L150-2	25	2	25	150	94	1.4					
NPDF-SD09T3-D25-W25-L150-2	25	2	25	150	94	1.4					
NPDF-SD09T3-D28-C25-L150-2	28	2	25	150	30	1.4					
NPDF-SD09T3-D32-C32-L150-3	32	3	32	150	100	1.4					
NPDF-SD09T3-D32-W32-L150-3	32	3	32	150	90	1.4					
NPDF-SD09T3-D25-C25-L150-3	25	3	25	150	60	1.4			-	-	
NPDF-SD09T3-D32-C32-L150-4	32	4	25	150	60	1.4			-	-	

• Compatible con: ZCC - OKE • Placas Disponibles: Ver Sección Placas

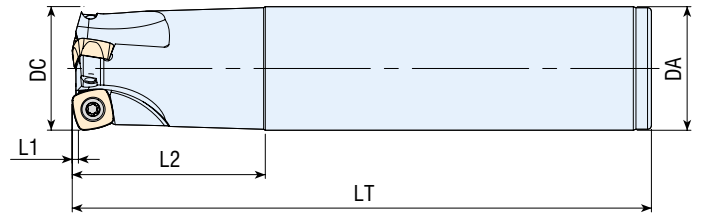
**Portaherramientas de fresado - Placa EP..1003.. / YPHW1003.. / ZPMT1003..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-YP1003-D16-C15-L150-2	16	2	15	150	20	1	EP..1003..	TDA-013	LLT-8
NPDF-YP1003-D16-C15-L200-2	16	2	15	200	20	1	YPHW1003..		
NPDF-YP1003-D16-C16-L150-2	16	2	16	150	50	1	ZPMT1003..		
NPDF-YP1003-D17-C16-L150-2	17	2	16	150	20	1			
NPDF-YP1003-D17-C16-L200-2	17	2	16	200	20	1			
NPDF-YP1003-D20-C18-L150-3	20	3	18	150	25	1			
NPDF-YP1003-D20-C18-L200-3	20	3	18	200	25	1			
NPDF-YP1003-D20-C20-L150-3	20	3	20	150	50	1			
NPDF-YP1003-D21-C20-L150-3	21	3	20	150	20	1			
NPDF-YP1003-D21-C20-L150-3R	21	3	20	150	20	1			
NPDF-YP1003-D21-C20-L150-4	21	4	20	150	20	1			
NPDF-YP1003-D21-C20-L200-3	21	3	20	200	20	1			
NPDF-YP1003-D21-C20-L200-3	21	3	20	200	20	1			
NPDF-YP1003-D25-C20-L150-4	25	4	20	150	25	1			
NPDF-YP1003-D25-C20-L200-4	25	4	20	200	25	1			
NPDF-YP1003-D25-C25-L150-4	25	4	25	150	50	1			
NPDF-YP1003-D26-C25-L150-4	26	4	25	150	30	1			
NPDF-YP1003-D26-C25-L150-4	26	4	25	150	30	1			
NPDF-YP1003-D26-C25-L200-3	26	3	25	200	30	1			
NPDF-YP1003-D26-C25-L200-4	26	4	25	200	30	1			

• Compatible con: DJT • Placas NO Disponibles

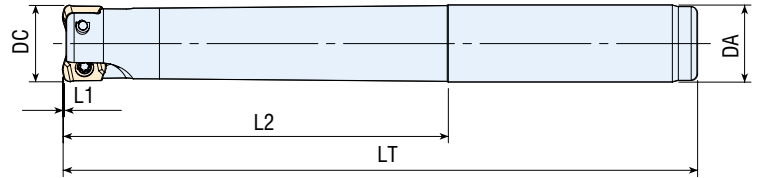
**Portaherramientas de fresado - Placa SPNW1004..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-SP1004-D25-C25-L150-2	25	2	25	150	50	1.5	SPNW1004..	TDA-045	LLT-15
NPDF-SP1004-D32-C32-L150-3	32	3	32	150	50	1.5			

• Compatible con: DJT • Placas NO Disponibles

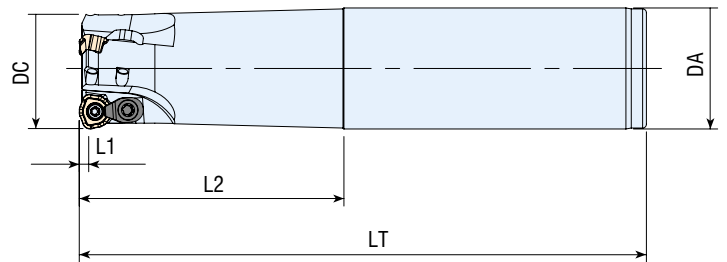
**Portaherramientas de fresado - Placa YOHW0602..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-YO0602-D10-C09-L120-2	10	2	9	120	15	0.3	YOHW0602..	TDA-002	LLT-6
NPDF-YO0602-D10-C10-L080-2	10	2	10	80	20	0.3			
NPDF-YO0602-D10-C10-L120-2	10	2	10	120	60	0.3			
NPDF-YO0602-D10-C10-L120-2R	10	2	10	120	60	0.3			
NPDF-YO0602-D10-C10-L120-2R	10	2	10	120	60	0.3			
NPDF-YO0602-D12-C11-L120-2	12	2	11	120	15	0.3			
NPDF-YO0602-D12-C11-L120-2R	12	2	11	120	15	0.3			
NPDF-YO0602-D12-C11-L120-2R	12	2	11	120	15	0.3			
NPDF-YO0602-D12-C11-L120-3	12	3	11	120	15	0.3			
NPDF-YO0602-D12-C12-L080-2	12	2	12	80	20	0.3			
NPDF-YO0602-D12-C12-L080-3	12	3	12	80	20	0.3			
NPDF-YO0602-D12-C12-L120-2	12	2	12	120	60	0.3			
NPDF-YO0602-D12-C12-L120-2R	12	2	12	120	60	0.3			
NPDF-YO0602-D12-C12-L120-3	12	3	12	120	60	0.3			
NPDF-YO0602-D12-C12-L120-3R	12	3	12	120	60	0.3			

• Compatible con: DJT • Placas NO Disponibles

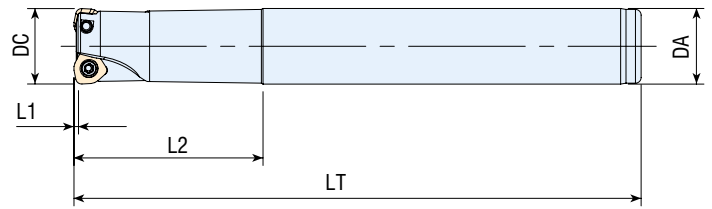
**Portaherramientas de fresado - Placa WDMT..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	BRIDA	TORNILLO BRIDA	LLAVE
NPDF-WD0603-D16-C16-L150-2	16	2	16	150	70	2	WDMT0603..	TDA-014	-	-	LLT-8
NPDF-WD0603-D20-C20-L150-3	20	3	20	150	70	2					
NPDF-WD0804-D25-C25-L150-2	25	2	25	150	70	1.5	WDMT0804..	TDA-032	BDA-26	TDA-032	LLT-10
NPDF-WD0804-D32-C32-L150-3	32	3	32	150	70	1.5					
NPDF-WD1205-D32-C32-L150-2	32	2	32	150	70	3	WDMT1205..	TDA-058	BDA-18	TDA-066	LLT-15

• Compatible con: SMTM • Placas NO Disponibles

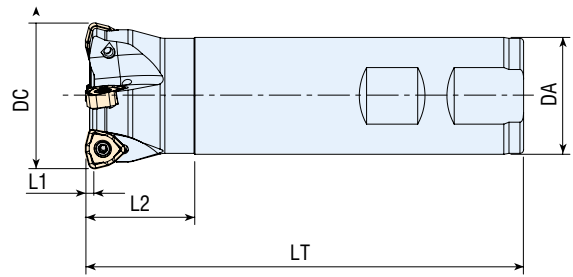
**Portaherramientas de fresado - Placa WD.W0503.. / WD.W06T3..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	BRIDA	TORNILLO BRIDA	LLAVE
NPDF-WD0503D-D20-C20-L150-2	20	2	20	150	50	1.25	WD.W0503..	TDA-031	-	-	LLT-10
NPDF-WD0503D-D21-C20-L150-2	21	2	20	150	30	1.25					
NPDF-WD06T3D-D26-C25-L200-2	26	2	25	200	30	1.5	WD.W06T3..	TDA-045	BDA-26	TDA-049	LLT-15
NPDF-WD06T3D-D33-C32-L200-3	33	3	32	200	32	1.5					

• Compatible con: DJT • Placas NO Disponibles

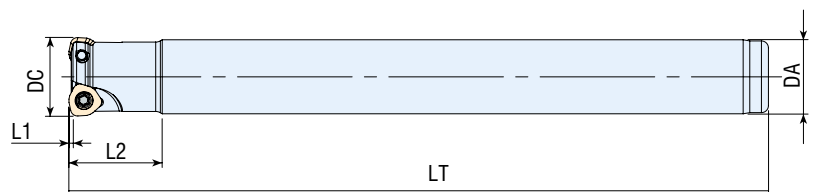
**Portaherramientas de fresado - Placa WNMX..**



REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-WN0603-D16-C16-L110-2R	16	2	16	110	30	1	WNMX0603..	TDA-014	LLT-8
NPDF-WN0603-D16-C16-L150-2R	16	2	16	150	70	1			
NPDF-WN0603-D17-C16-L150-2R	17	2	16	150	20	1			
NPDF-WN0603-D20-C20-L150-2R	20	2	20	150	70	1			
NPDF-WN0603-D20-C20-L200-2R	20	2	20	200	100	1			
NPDF-WN0603-D21-C20-L150-2R	21	2	20	150	20	1			
NPDF-WN09T3-D25-C25-L200-2	25	2	25	200	120	1.5	WNMX09T3	TDA-032	LLT-10
NPDF-WN09T3-D30-W25-L120-3R	30	3	25	120	30	1.5			
NPDF-WN09T3-D32-W32-L120-3R	32	3	32	120	30	1.5			
NPDF-WN09T3-D32-W32-L200-3R	32	3	32	200	100	1.5			
NPDF-WN09T3-D35-W32-L200-4R	35	4	32	200	50	1.5			
NPDF-WN09T3-D40-W32-L120-4R	40	4	32	120	30	1.5			
NPDF-WN09T3-D40-C32-L200-4	40	4	32	200	30	1.5			
NPDF-WN1305-D32-C32-L150-2R	32	2	32	150	70	2	WNMX1305..	TDA-066	LLT-15
NPDF-WN1305-D32-C32-L200-2R	32	2	32	200	120	2			
NPDF-WN1305-D40-C32-L200-3R	40	3	32	200	30	2			

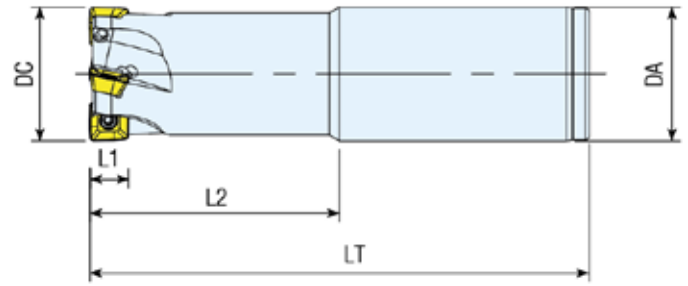
• Compatible con: KRLY • Placas NO Disponibles

**Portaherramientas de fresado - Placa WOMW04T2..**



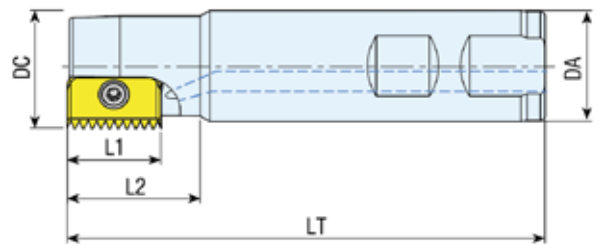
REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDF-WO04T2D-D16-C16-L150-2	16	2	16	150	20	0.8	WOMW04T2..	TDA-014	LLT-8
NPDF-WO04T2D-D17-C16-L150-2	17	2	16	150	20	0.8			

• Compatible con: DJT • Placas NO Disponibles

**Portaherramientas de fresado - Placa SPNW1004..**


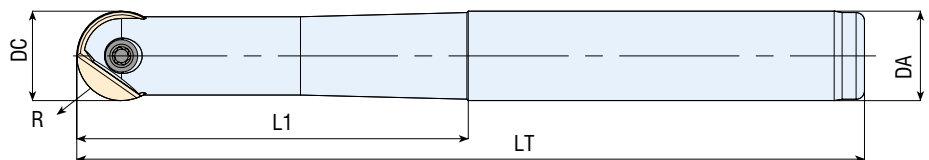
REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDA-SPMX0735-D16-C16-L160-2R	16	2	16	160	30	1.2	SPMX073505	TDA-028	LLT2-08
NPDA-SPMX0735-D17-C16-L160-2R	17	2	16	160	30	1.2			
NPDA-SPMX0735-D20-C20-L160-3R	20	2	20	160	30	1.2			
NPDA-SPMX0735-D21-C20-L160-3R	21	2	20	160	30	1.2			

• Compatible con: MTSBH • Placas NO Disponibles

**Portaherramientas de fresado - Placa Roscado C14/C21/C30**


REFERENCIA	DC	Z	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDFR-C14-D14-W20-L100-1R	14	1	20	100	25	14	C14	TDA-014	LLT2-08
NPDFR-C21-D18-W20-L100-1R	18	1	20	100	30	21	C21	TDA-064	LLT-15
NPDFR-C21-D21-W25-L125-1R	21	1	25	125	40	21		TDA-066	
NPDFR-C21-D25-W20-L125-1R	25	1	20	125	30	21			
NPDFR-C21-D28-W25-L90-1R	28	1	25	90	30	21			
NPDFR-C21-D38-W32-L90-3R	38	3	32	90	30	21			
NPDFR-C21-D38-W32-L120-3R	38	3	32	120	30	21			
NPDFR-C21-D43-W32-L90-3R	43	3	32	90	30	21			
NPDFR-C30-D29-W25-L150-1R	29	1	25	150	50	30	C30	TDA-082	LLT-20

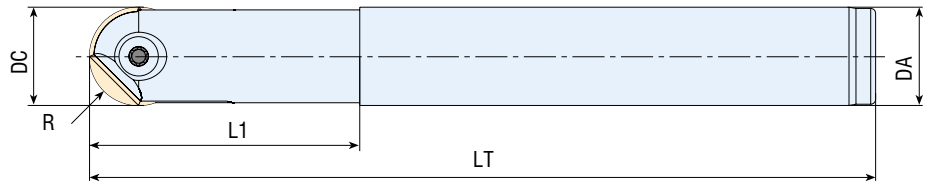
• Compatible con: CPT - NIXA • Placas Disponibles: Ver Sección Placas

**Portaherramientas de Copiado - Placa BNM..**


REFERENCIA	DC	R	DA	LT	L2	INSERTO	TORNILLO	LLAVE
NPDC-BNM12-D12-C12-L130	12	6	12	130	32	BNM120-S	TPA-008	LLT-10
NPDC-BNM16-D16-C16-L175	16	8	16	175	70	BNM160-S	TPA-009	LLT-15
NPDC-BNM16-D16-C16-L200	16	8	16	200	100			
NPDC-BNM20-D20-C20-L160	20	10	20	160	70	BNM200-S	TPA-005	LLT-20
NPDC-BNM20-D20-C20-L200	20	10	20	200	100			
NPDC-BNM20-D20-C20-L250	20	10	20	250	150			
NPDC-BNM25-D25-C25-L160	25	12.5	25	160	70	BNM250-S	TPA-006	LLT-20
NPDC-BNM25-D25-C25-L200	25	12.5	25	200	100			
NPDC-BNM25-D25-C25-L250	25	12.5	25	250	150			

• Compatible con: DJT • Placas NO Disponibles

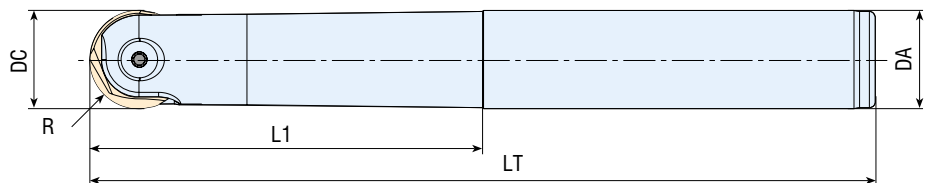
**Portaherramientas de Copiado - Placa ROHX..**



REFERENCIA	DC	R	DA	LT	L2	INSERTO	TORNILLO	LLAVE
NPDC-RO12-D12-C12-L120	12	6	12	120	35	ROHX 1203	TPA-002	LLT-15
NPDC-RO12-D12-C16-L160	12	6	16	160	50			
NPDC-RO16-D16-C16-L160	16	8	16	160	45	ROHX 1604	TPA-004	LLT-20
NPDC-RO16-D16-C16-L200	16	8	16	200	45			
NPDC-RO16-D16-C20-L200	16	8	20	200	65			
NPDC-RO20-D20-C20-L160	20	10	20	160	55	ROHX 2005	TPA-005	LLT-20
NPDC-RO20-D20-C20-L200	20	10	20	200	55			
NPDC-RO20-D20-C25-L220	20	10	25	220	80			

- Compatible con: ZCC - NIXA
- Algunos Modelos de Placas Disponibles: Ver Sección Placas

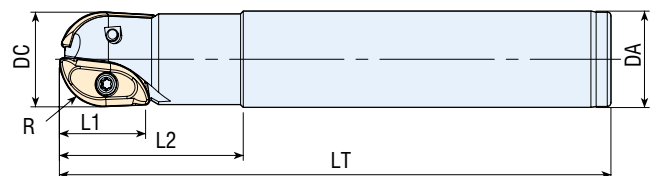
**Portaherramientas de Copiado - Placa P3...**



REFERENCIA	DC	R	DA	LT	L2	INSERTO	TORNILLO	LLAVE
NPDC-P3208-D08-C10-L110	8	4	10	110	25	P3208	TPA-001	LLT-8
NPDC-P3210-D10-C10-L130	10	5	10	130	30	P3210	TPA-002	LLT-15
NPDC-P3210-D10-C12-L130	10	5	12	130	30	P3210	TPA-002	LLT-15
NPDC-P3212-D12-C12-L130	12	6	12	130	32	P3212	TPA-003	LLT-20
NPDC-P3216-D16-C16-L175	16	8	16	175	75	P3216	TPA-004	LLT-20
NPDC-P3220-D20-C20-L200	20	10	20	200	100	P3220	TPA-005	LLT-20
NPDC-P3225-D25-C25-L200	25	12.5	25	200	100	P3225	TPA-006	LLT-20
NPDC-P3232-D32-C32-L200	32	16	32	200	100	P3232	TPA-007	LLA-4

- Compatible con: WLTR - NIXA
- Algunos Modelos de Placas Disponibles: Ver Sección Placas

**Portaherramientas de Copiado - Placa XPHT...**

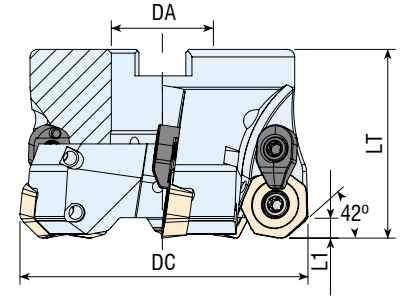


REFERENCIA	DC	R	DA	LT	L2	L1	INSERTO	TORNILLO	LLAVE
NPDC-XP16-D16-C16-L150	16	8	16	150	40	16	XPHT 16R0803	TDA-014	LLT-8
NPDC-XP20-D20-C20-L150	20	10	20	150	50	20	XPHT 20R10R3	TDA-043	LLT-10
NPDC-XP25-D25-C25-L150	25	12.5	25	150	50	25	XPHT 25R1204	TDA-064	LLT-15

- Compatible con: ZCC - NIXA
- Placas Disponibles: Ver Sección Placas



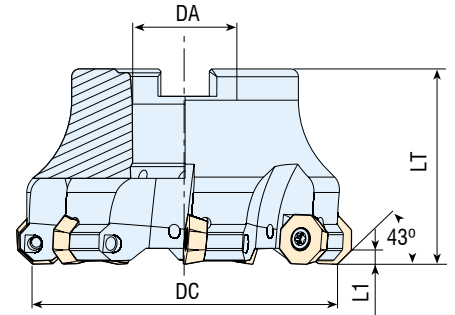
**Plato de Fresado 42° - XDMW0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF42C-XD0806-D063-E27-4R	63	4	27	50	12	XDMW0806..	TDA-079	BDA-30	TDA-079	LLT-20
NPDF42C-XD0806-D080-E27-5R	80	5	27	50	12					
NPDF42C-XD0806-D100-E32-6R	100	6	32	63	12					
NPDF42C-XD0806-D125-E40-7	125	7	40	63	12					
NPDF42C-XD0806-D160-E40-8	160	8	40	63	12					
NPDF42C-XD0806-D200-E60-9	200	9	60	63	12					

• Compatible con: DJT • Placas NO Disponibles

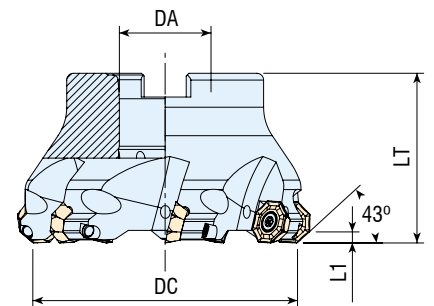
**Plato de Fresado 43° - OD..0504..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF43-OD0504-D040-E16-4R	40	4	16	40	3.5	OD..0504..	TDA-049	-	-	LLT-15
NPDF43-OD0504-D050-E22-5R	50	5	22	40	3.5					
NPDF43-OD0504-D063-E22-6R	63	6	22	40	3.5					
NPDF43-OD0504-D080-E27-7R	80	7	27	50	3.5					
NPDF43-OD0504-D100-E32-8R	100	8	32	50	3.5					

• Compatible con: WLTR • Placas NO Disponibles

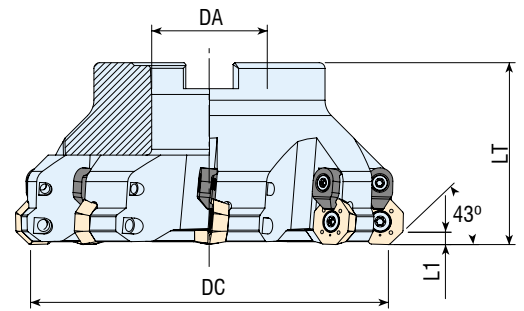
**Plato de Fresado 43° - OF..05T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF43-OF05T3-D050-E22-5R	50	5	22	40	3	OF..05T3..	TDA-064	-	-	LLT-15
NPDF43-OF05T3-D063-E22-6R	63	6	22	40	3		TDA-066	-	-	LLT-15
NPDF43-OF05T3-D080-E27-7R	80	7	27	50	3					
NPDF43-OF05T3-D125-E40-9	125	9	40	63	3					

• Compatible con: PLACAS ISO • Placas NO Disponibles

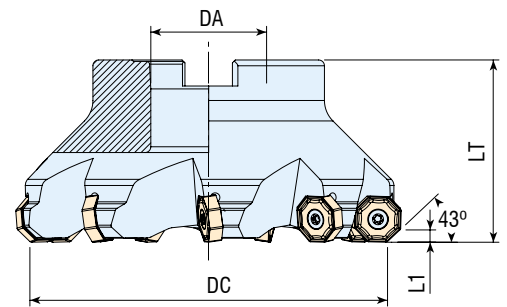
**Plato de Fresado 43° - OD..0605..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF43C-OD0605-D080-E27-6R	80	6	27	50	4	OD..0605..	TDA-081	BDA-18	TDA-066	LLT-20
NPDF43C-OD0605-D100-E32-7R	100	7	32	50	4					
NPDF43C-OD0605-D125-E40-8	125	8	40	63	4					

• Compatible con: WLTR - LMN • Placas NO Disponibles

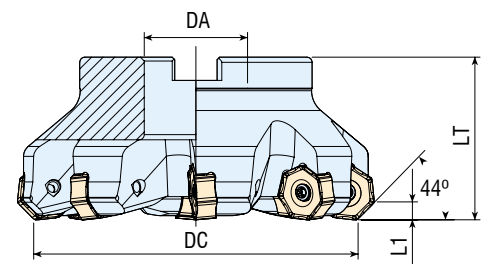
**Plato de Fresado 43° - ON..0604..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF43-ON0604-D050-E22-5R	50	5	22	40	4	ON..0604..	TDA-066	-	-	LLT-15
NPDF43-ON0604-D063-E22-6R	63	6	22	40	4					
NPDF43-ON0604-D080-E27-7R	80	7	27	50	4					
NPDF43-ON0604-D100-E32-8R	100	8	32	50	4					
NPDF43-ON0604-D125-E40-9	125	9	40	63	4					

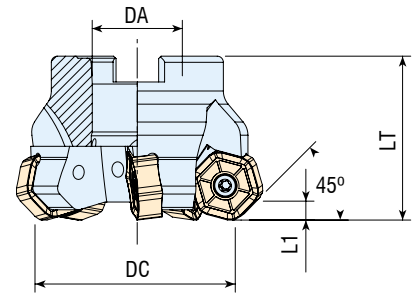
• Compatible con: ZCC • Placas NO Disponibles

**Plato de Fresado 44° - ONHX 0606....**



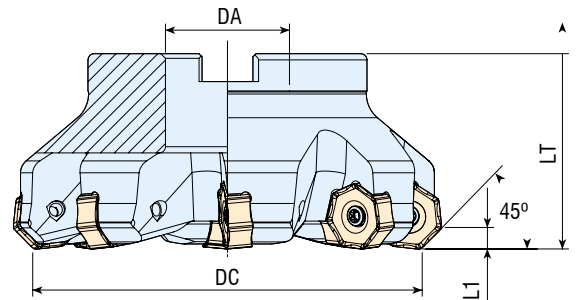
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF44-ON0606-D063-E22-6R	63	6	22	40	3.8	ONHX 0606..	TDA-079	-	-	LLT-15
NPDF44-ON0606-D080-E27-8R	80	8	27	50	3.8					
NPDF44-ON0606-D100-E32-10R	100	10	32	50	3.8					

• Compatible con: PLBT • Placas NO Disponibles

**Plato de Fresado 45° - HN..0905..**


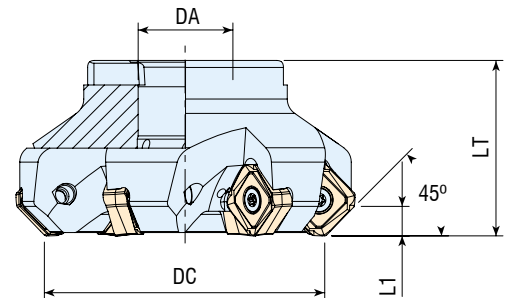
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-HN0905-D050-E22-5R	50	5	22	40	4.5	HN..0905..	TDA-066	LLT-15
NPDF45-HN0905-D063-E22-6R	63	6	22	40	4.5			
NPDF45-HN0905-D080-E27-7R	80	7	27	50	4.5			
NPDF45-HN0905-D125-E40-10	125	10	40	63	4.5			
NPDF45-HN0905-D160-E40-12	160	12	40	63	4.5			
NPDF45-HN0905-D200-E60-16	200	16	60	63	4.5			

• Compatible con: WDA • Placas NO Disponibles

**Plato de Fresado 45° - NNMU2007..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF45-NN2007-D063-E22-5R	63	5	22	50	6	NNMU2007..	TDA-082	-	-	LLT-20
NPDF45-NN2007-D080-E27-6R	80	6	27	50	6					
NPDF45-NN2007-D100-E32-7R	100	7	32	50	6	NNMU2007..	TDA-082	-	-	LLT-20
NPDF45-NN2007-D125-E40-8	125	8	40	63	6					
NPDF45-NN2007-D160-E40-10	160	10	50	63	6					

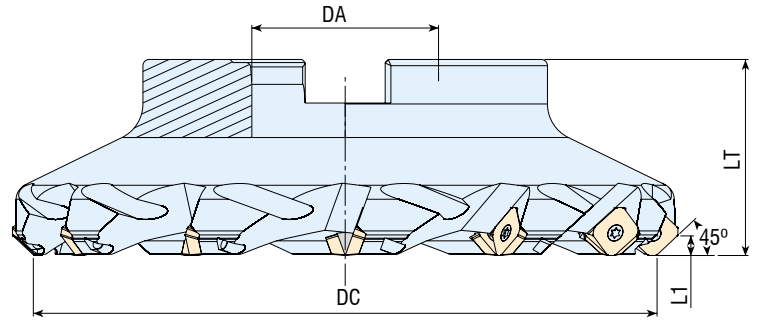
• Compatible con: MTSBH • Placas NO Disponibles

**Plato de Fresado 45° - SAKU1706**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-SA1706-D080-E27-6R	80	6	27	50	8.4	SAKU1706..	TDA-082	LLT-20
NPDF45-SA1706-D100-E32-7R	100	7	32	50	8.4			
NPDF45-SA1706-D125-E40-9	125	9	40	63	8.4			

• Compatible con: CRTZT • Placas NO Disponibles

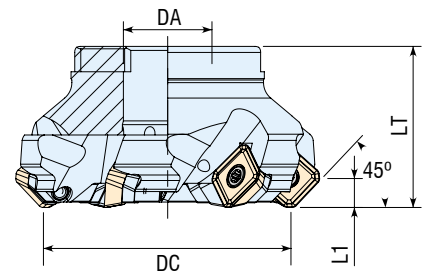
**Plato de Fresado 45° - SE..12T3.. / R245-12R3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF45-SE12-D050-E22-4R	50	4	22	40	6	SE..12T3..	TDA-049	-	-	LLT-15
NPDF45-SE12-D063-E22-5R	63	5	22	40	6	R245-12T3..				
NPDF45-SE12-D080-E27-6R	80	6	27	50	6					
NPDF45-SE12-D100-E32-7R	100	7	32	50	6					
NPDF45-SE12-D125-E40-8	125	8	40	63	6					
NPDF45-SE12-D160-E40-10	160	10	40	63	6					
NPDF45-SE12-D200-E60-12	200	12	60	63	6					

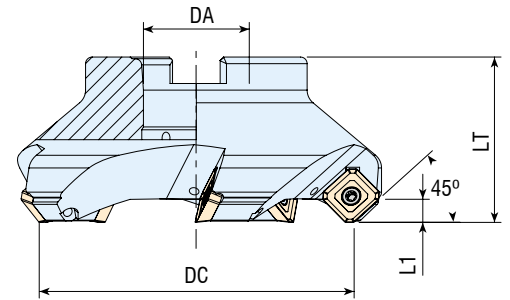
- Compatible con: ZCC - SNDVK - NIXA
- Placas Disponibles: Ver Sección Placas

**Plato de Fresado 45° - SEMT13T3..**



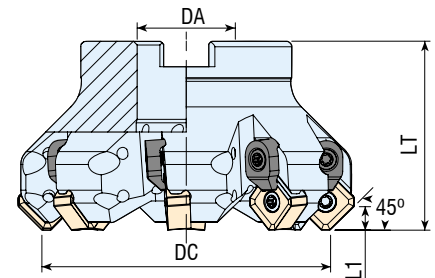
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Placa Base	Tornillo base	Tornillo placa	Llave
NPDF45-SE13-D050-E22-4R	50	4	22	40	6	SEMT13T3..	-	-	TDA-049	LLT-15
NPDF45-SE13-D063-E22-5R	63	5	22	40	6		-	-		
NPDF45-SE13-D080-E27-6R	80	6	27	50	6		-	-		
NPDF45B-SE13-D050-E22-5R	50	5	22	40	6	SEMT13T3	PB-025	TPB-015	TDA-050	LLT-15
NPDF45B-SE13-D063-E22-6R	63	6	22	40	6					
NPDF45B-SE13-D080-E27-8R	80	8	27	50	6					
NPDF45B-SE13-D100-E32-10R	100	10	32	50	6					
NPDF45B-SE13-D125-E40-12	125	12	40	63	6					

- Compatible con: SMTM - DJT
- Placas NO Disponibles

**Plato de Fresado 45° - SE..14M4**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-SE14M4-D063-E22-4R	63	4	22	40	7	SE..14M4..	TDA-049	LLT-15
NPDF45-SE14M4-D080-E27-5R	80	5	27	50	7			
NPDF45-SE14M4-D100-E32-5R	100	5	32	50	7			
NPDF45-SE14M4-D125-E40-6	125	6	40	63	7			
NPDF45-SE14M4-D160-E40-7	160	7	40	63	7			

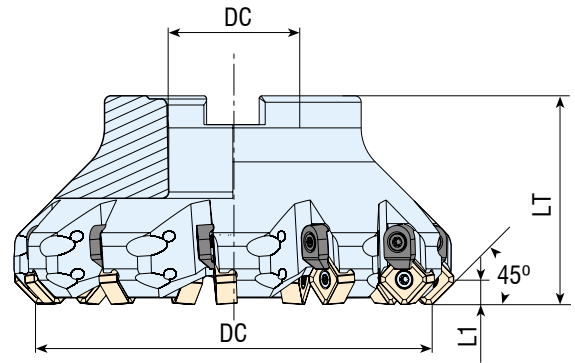
- Compatible con: KRLY
- Placas NO Disponibles

**Plato de Fresado 45° - SN..12**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF45C-SN12-D050-E22-4R	50	4	22	42	6	SN..12..	TDA-055	BDA-18	TDA-066	LLT-15
NPDF45C-SN12-D050-E22-5R	50	5	22	42	6					
NPDF45C-SN12-D063-E22-6R	63	6	22	42	6					
NPDF45C-SN12-D063-E22-7R	63	7	22	42	6					
NPDF45C-SN12-D080-E27-7R	80	7	27	52	6					
NPDF45C-SN12-D080-E27-8R	80	8	27	52	6					
NPDF45C-SN12-D100-E32-8R	100	8	32	52	6					
NPDF45C-SN12-D100-E32-10R	100	10	32	52	6					
NPDF45C-SN12-D125-E40-11	125	11	40	65	6					
NPDF45C-SN12-D160-E40-12	160	12	40	65	6					
NPDF45C-SN12-D200-E60-14	200	14	60	65	6					

- Compatible con: WLTR - LMN - ACHTK - OKE - NIXA
- Placas Disponibles: Ver Sección Placas

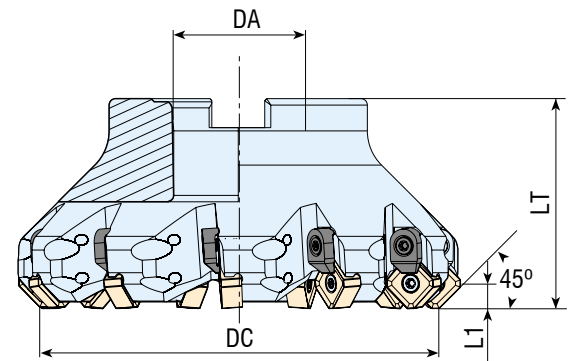
**Plato de Fresado 45° - SN..1206**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF45C-SN1206-D050-E22-4R	50	4	22	42	6	SN..1206..	TDA-066	BDA-18	TDA-066	LLT-15
NPDF45C-SN1206-D050-E22-5R	50	5	22	42	6					
NPDF45C-SN1206-D063-E22-6R	63	6	22	42	6					
NPDF45C-SN1206-D063-E22-7R	63	7	22	42	6					
NPDF45C-SN1206-D080-E27-7R	80	7	27	52	6					
NPDF45C-SN1206-D080-E27-8R	80	8	27	52	6					
NPDF45C-SN1206-D100-E32-8R	100	8	32	52	6					
NPDF45C-SN1206-D100-E32-10R	100	10	32	52	6					
NPDF45C-SN1206-D125-E40-11	125	11	40	65	6					
NPDF45C-SN1206-D160-E40-12	160	12	40	65	6					
NPDF45C-SN1206-D200-E60-14	200	14	60	65	6					

- Compatible con: KRLY - PLBT - BHLR - NIXA
- Placas Disponibles: Ver Sección Placas

**Plato de Fresado 45° - SNEG1205..**

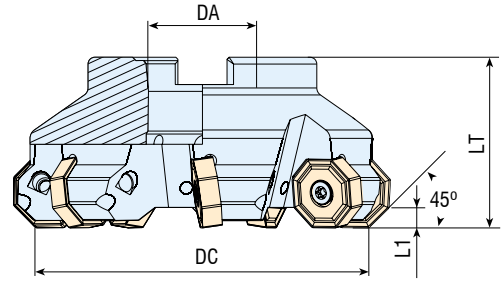


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF45C-SN12Z-D050-E22-5R	50	5	22	42	6	SNEG1205..	TDA-066	BDA-18	TDA-066	LLT-15
NPDF45C-SN12Z-D063-E22-6R	63	6	22	42	6					
NPDF45C-SN12Z-D080-E27-7R	80	7	27	52	6					
NPDF45C-SN12Z-D100-E32-9R	100	9	32	52	6					
NPDF45C-SN12Z-D125-E40-11	125	11	40	65	6					
NPDF45C-SN12Z-D160-E40-12	160	12	60	65	6					
NPDF45C-SN12Z-D200-E60-14	200	14	60	65	6					

- Compatible con: ZCC
- Placas NO Disponibles



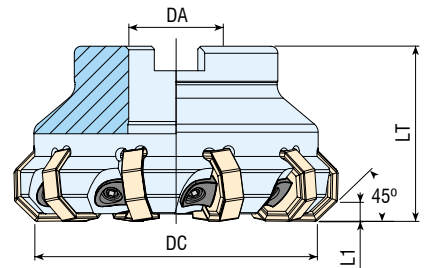
**Plato de Fresado 45° - ON..0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-ON0806-D050-E22-4R	63	6	22	40	5.5	ON..0806..	TDA-082	LLT-20
NPDF45-ON0806-D063-E22-5R	63	5	22	40	5.5			
NPDF45-ON0806-D063-E22-6R	63	6	22	40	5.5			
NPDF45-ON0806-D080-E27-6R	80	6	27	50	5.5			
NPDF45-ON0806-D080-E27-8R	80	8	27	50	5.5			
NPDF45-ON0806-D100-E32-7R	100	7	32	50	5.5			
NPDF45-ON0806-D100-E32-10R	100	10	32	50	5.5			
NPDF45-ON0806-D125-E40-8	125	8	40	63	5.5			
NPDF45-ON0806-D125-E40-12	125	12	40	63	5.5			
NPDF45-ON0806-D160-E40-10	160	10	40	63	5.5			
NPDF45-ON0806-D160-E40-14	160	14	40	63	5.5			
NPDF45-ON0806-D200-E60-12	200	12	60	63	5.5			
NPDF45-ON0806-D250-E60-14	250	14	60	63	5.5			
NPDF45-ON0806-D315-E60-16	315	16	60	63	5.5			

• Compatible con: PLACAS ISO - NIXA • Placas Disponibles: Ver Sección Placas

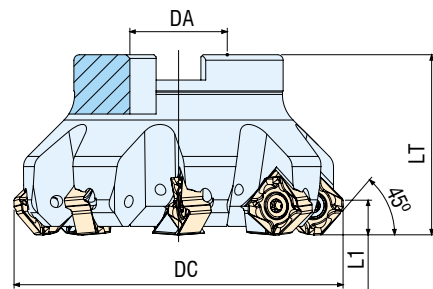
**Plato de Fresado 45° Con Brida - ON..0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida	Tornillo	Llave
NPDF45B-ON0806-D063-E22-8	63	8	22	50	5.5	ON..0806..	BDA-031	TPA-016	LLA-3
NPDF45B-ON0806-D080-E27-10	80	10	27	50	5.5				
NPDF45B-ON0806-D100-E32-14	100	14	32	50	5.5				
NPDF45B-ON0806-D125-E40-18	125	18	40	63	5.5				
NPDF45B-ON0806-D160-E40-22	160	22	40	63	5.5				

• Compatible con: PLACAS ISO - NIXA • Placas Disponibles: Ver Sección Placas

**Plato de Fresado 45° - SNGX1306..**

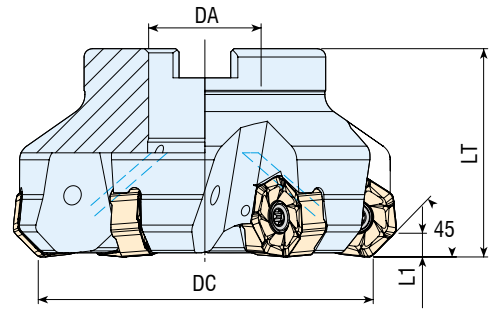


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-SNGX1306-D050-A22-5R	50	5	22	40	7	SNGX1306..	TDA-056	LLT-15
NPDF45-SNGX1306-D063-A22-6R	63	6	22	40	7			
NPDF45-SNGX1306-D080-A27-7R	80	7	27	50	7			
NPDF45-SNGX1306-D100-A32-8R	100	8	32	50	7			

• Compatible con: TGTC • Placas NO Disponibles



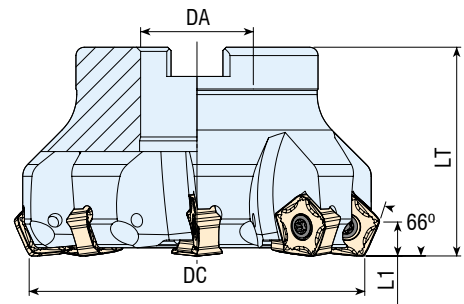
**Plato de Fresado 45° - XNMU0906..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF45-XN0906-D063-E22-6R	63	6	22	50	5	XNMU0906..	TDA-083	LLT-20
NPDF45-XN0906-D080-E27-6R	80	6	27	50	5			
NPDF45-XN0906-D100-E32-7R	100	7	32	55	5			
NPDF45-XN0906-D125-E40-8	125	8	40	63	5			

- Compatible con: TGTC
- Placas NO Disponibles

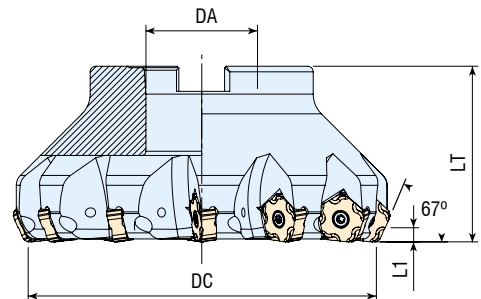
**Plato de Fresado 66° - PNMU0905..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF66-PN0905-D050-E22-5	50	5	22	40	8	PNMU0905..	TDA-066	LLT-15
NPDF66-PN0905-D063-E22-6	63	6	22	40	8			
NPDF66-PN0905-D080-E27-8	80	8	27	50	8			
NPDF66-PN0905-D100-E32-10	100	10	32	50	8			
NPDF66-PN0905-D125-E40-12	125	12	40	63	8			

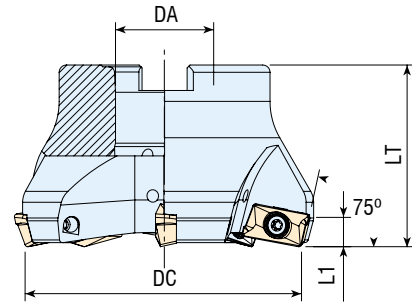
- Compatible con: KYCR
- Placas NO Disponibles

**Plato de Fresado 67° - PNEG1105..**



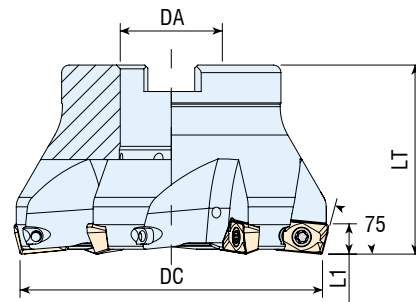
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF67-PN1105-D050-E22-5	50	5	22	50	5	PNEG1105..	TDA-066	LLT-15
NPDF67-PN1105-D063-E22-6	63	6	22	50	5			
NPDF67-PN1105-D080-E27-8	80	8	27	50	5			
NPDF67-PN1105-D100-E32-10	100	10	32	50	5			
NPDF67-PN1105-D125-E40-12	125	12	40	63	5			
NPDF67-PN1105-D160-E40-14	160	14	40	63	5			

- Compatible con: ZCC - NIXA
- Placas Disponibles: Ver Sección Placas

**Plato de Fresado 75° - AP..1604..**


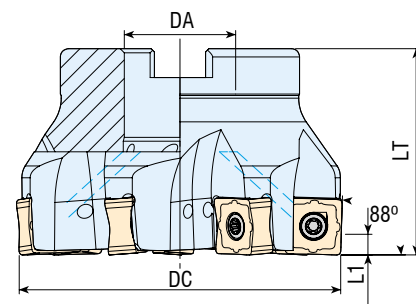
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF75-AP16-D063-E22-4R	63	4	22	40	6	AP..1604..	TDA-066	LLT-15
NPDF75-AP16-D080-E27-5R	80	5	27	50	6			
NPDF75-AP16-D100-E32-6R	100	6	32	50	6			
NPDF75-AP16-D125-E40-7	125	7	40	63	6			

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

**Plato de Fresado 75° - XOMX1204..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF75-XO12-D050-E22-4R	50	4	22	40	-	XOMX1204..	TDA-044	LLT-10
NPDF75-XO12-D063-E22-5R	63	5	27	40	-			
NPDF75-XO12-D080-E27-6R	80	6	27	50	-			

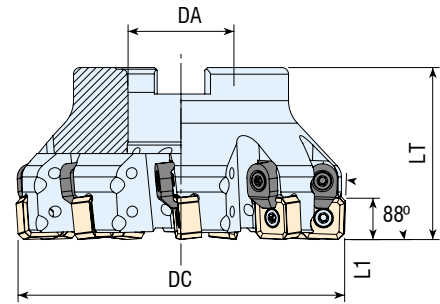
• Compatible con: SC • Placas NO Disponibles

**Plato de Fresado 88° - SNMU1305..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF88-SN1305-D050-E22-4	50	4	22	40	5	SNMU1305..	TDA-066	LLT-15
NPDF88-SN1305-D050-E22-5	50	5	22	40	5			
NPDF88-SN1305-D063-E22-5	63	5	22	40	5			
NPDF88-SN1305-D063-E22-7	63	7	22	40	5			
NPDF88-SN1305-D080-E27-6	80	6	27	50	5			
NPDF88-SN1305-D080-E27-9	80	9	27	50	5			
NPDF88-SN1305-D100-E32-7	100	7	32	50	5			
NPDF88-SN1305-D100-E32-11	100	11	32	50	5			
NPDF88-SN1305-D125-E40-13	125	13	40	63	5			

• Compatible con: KYCR • Placas NO Disponibles

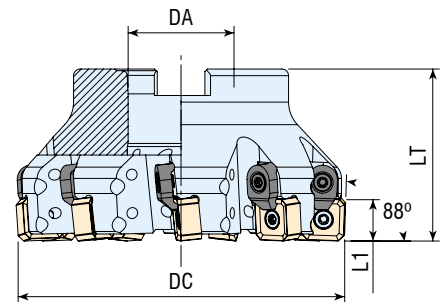
**Plato de Fresado 88° - SN..1206..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF88C-SN1206-D040-E16-4R	40	4	16	40	11.5	SN..1206..	TDA-071	BDA-18	TDA-066	LLT-15
NPDF88C-SN1206-D050-E22-5R	50	5	22	40	11.5				TDA-071	LLT-15
NPDF88C-SN1206-D063-E22-6R	63	6	22	40	11.5					
NPDF88C-SN1206-D080-E27-7R	80	7	27	50	11.5					
NPDF88C-SN1206-D100-E32-9R	100	9	32	52	11.5					
NPDF88C-SN1206-D125-E40-10	125	10	40	63	11.5		TDA-055	BDA-18	TDA-071	LLT-15

• Compatible con: KRLY • Placas NO Disponibles

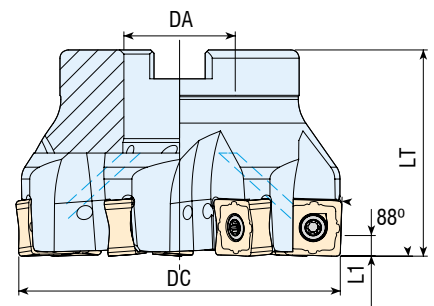
**Plato de Fresado 88° - SN..12..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF88C-SN12-D050-E22-5R	50	5	22	40	11.5	SN..12..	TDA-055	BDA-18	TDA-066	LLT-15
NPDF88C-SN12-D063-E22-6R	63	6	22	40	11.5					
NPDF88C-SN12-D080-E27-7R	80	7	27	50	11.5					
NPDF88C-SN12-D100-E32-9R	100	9	32	52	11.5					

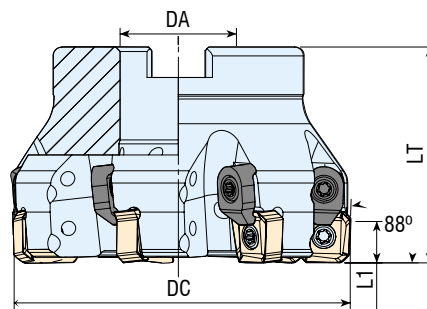
• Compatible con: PLACAS ISO - NIXA • Placas Disponibles: Ver Sección Placas

**Plato de Fresado 88° - SNGX1306..**



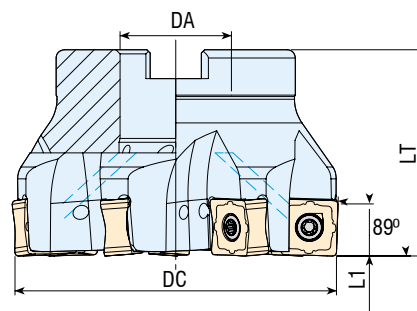
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF88-SN1306-D050-E22-5R	50	5	22	40	5	SNGX1306..	TDA-056	LLT-15
NPDF88-SN1306-D063-E22-6R	63	6	22	40	5			
NPDF88-SN1306-D080-E27-7R	80	7	27	50	5			

• Compatible con: TGTC • Placas NO Disponibles

**Plato de Fresado 88° - SNEG1205..**


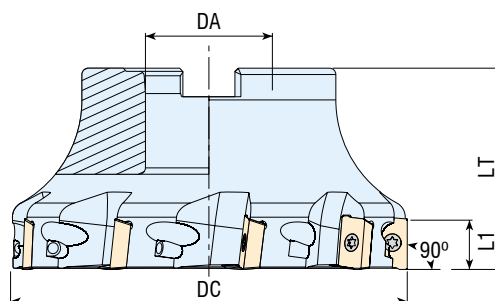
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDF88C-SN12Z-D063-E22-6R	63	6	22	40	11.5	SNEG1205..	TDA-066	BDA-18	TDA-066	LLT-15
NPDF88C-SN12Z-D080-E27-7R	80	7	27	50	11.5					

• Compatible con: ZCC • Placas NO Disponibles

**Plato de Fresado 89° - SNMU1305 / OXMT0507**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF89-SN1305I-D040-E16-4R	40	4	16	40	10	SNMU1305..	TDA-055	LLT-15
NPDF89-SN1305I-D050-E22-5R	50	5	22	40	10	SNMG1305..		
NPDF89-SN1305I-D063-E22-6R	63	6	22	40	10	OXMT0507..		
NPDF89-SN1305I-D063-E22-7R	63	7	22	40	10			
NPDF89-SN1305I-D080-E27-8R	80	8	27	50	10			
NPDF89-SN1305I-D100-E32-10R	100	10	32	50	10			

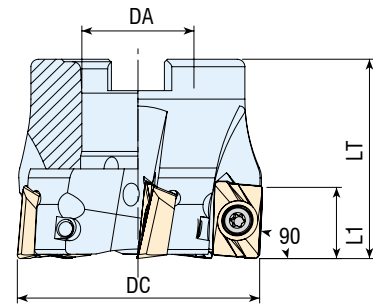
• Compatible con: ISCR • Placas NO Disponibles

**Plato de Fresado 90° - AD..1505.**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AD1505-D040-E16-4R	40	4	16	40	14.3	AD..1505..	TDA-066	LLT-15
NPDF90-AD1505-D050-E22-5R	50	5	22	40	14.3			
NPDF90-AD1505-D063-E22-6R	63	6	22	40	14.3			
NPDF90-AD1505-D080-E27-7R	80	7	27	50	14.3			
NPDF90-AD1505-D100-E32-8R	100	8	32	50	14.3			
NPDF90-AD1505-D125-E40-9	125	9	40	63	14.3			

• Compatible con: ISCR • Placas NO Disponibles

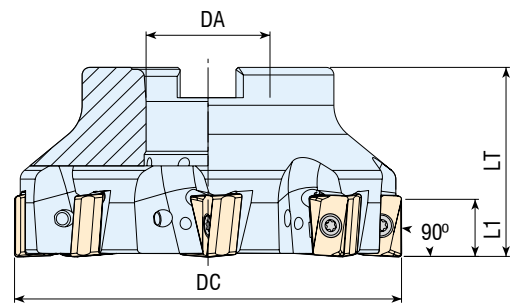
**Plato de Fresado 90° - ADKT150508**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AD1505D-D050-E22-5R	50	5	22	40	14.3	ADKT150508	TDA-066	LLT-15
NPDF90-AD1505D-D063-E27-6R	63	6	27	50	14.3			
NPDF90-AD1505D-D080-E27-8R	80	8	27	50	14.3			
NPDF90-AD1505D-D100-E32-8R	100	8	32	50	14.3			
NPDF90-AD1505D-D125-E40-9	125	9	40	63	14.3			

• Compatible con: DJT • Placas NO Disponibles

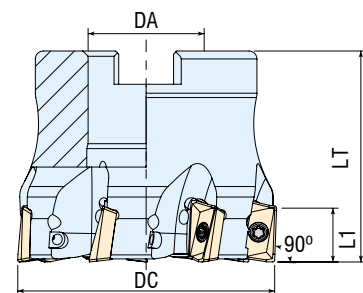
**Plato de Fresado 90° - ANGX1105.. / ANGX1506..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AN11-D040-E16-4R	40	4	16	40	11	ANGX1105..	TDA-032	LLT-10
NPDF90-AN1506-D050-E22-4R	50	4	22	40	14.5	ANGX1506..	TDA-067	LLT-15
NPDF90-AN1506-D063-E22-5R	63	5	22	40	14.5			
NPDF90-AN1506-D080-E27-6R	80	6	27	50	14.5			
NPDF90-AN1506-D100-E32-8R	100	8	32	50	14.5			
NPDF90-AN1506-D125-E40-9	125	9	40	63	14.5			
NPDF90-AN1506-D160-E40-10	160	10	40	63	14.5			

• Compatible con: ZCC • Placas NO Disponibles

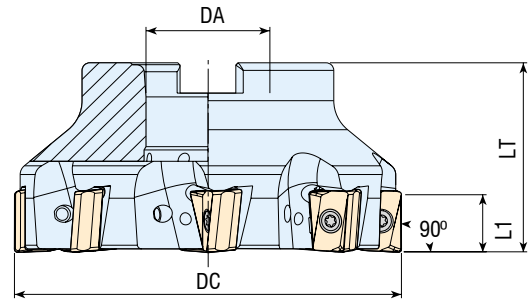
**Plato de Fresado 90° - ADMT10T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AD10T3-D040-E16-6R	40	6	16	40	10	ADMT10T3..	TDA-014	LLT-8
NPDF90-AD10T3-D050-E22-7R	50	7	22	40	10			

• Compatible con: WLTR • Placas NO Disponibles

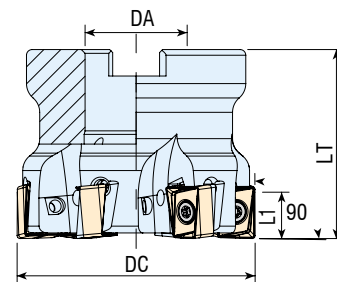
**Plato de Fresado 90° - AN.X1607..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AN1607-D050-E22-4R	50	4	22	40	15	AN.X1607..	TDA-066	LLT-15
NPDF90-AN1607-D063-E22-6R	63	6	22	40	15			
NPDF90-AN1607-D080-E27-7R	80	7	27	50	15			
NPDF90-AN1607-D100-E32-8R	100	8	32	50	15			
NPDF90-AN1607-D125-E40-10	125	10	40	63	15			

• Compatible con: TGTC • Placas NO Disponibles

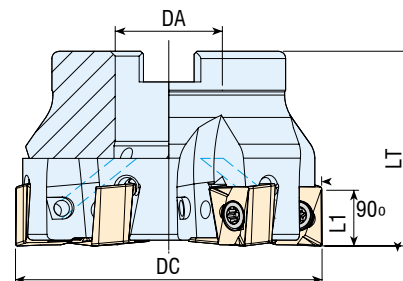
**Plato de Fresado 90° - ANKX1205..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AN12-D040-E16-4R	40	4	16	40	12	ANKX1205..	TDA-067	LLT-15
NPDF90-AN12-D050-E22-5R	50	5	22	40	12			
NPDF90-AN12-D063-E27-6R	63	6	27	50	12			

• Compatible con: ISCR • Placas NO Disponibles

**Plato de Fresado 90° - ANKX1207 / ANKX1607**

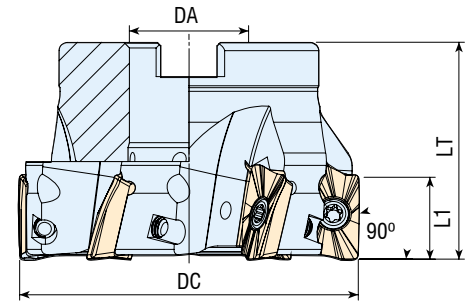


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AN1207-D040-E16-4R	40	4	16	40	10	ANKX1207..	TDA-066	LLT-15
NPDF90-AN1207-D050-E22-5R	50	5	22	40	10			
NPDF90-AN1207-D063-E22-6R	63	6	22	40	10			
NPDF90-AN1607X-D050-E22-4R	50	4	22	40	15	ANKX1607..	TDA-066	LLT-15
NPDF90-AN1607X-D063-E22-6R	63	6	22	40	15			
NPDF90-AN1607X-D080-E27-7R	80	7	27	50	15			

• Compatible con: XTC - GSC • Placas NO Disponibles



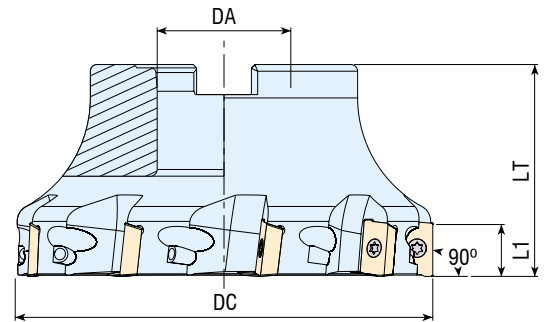
**Plato de Fresado 90° - AO..1236 / AO..1848**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AO1236-D050-E22-5R	50	5	22	40	10	AO..1236..	TDA-014	LLT-8
NPDF90-AO1848-D050-E22-5R	50	5	22	40	15	AO..1848..	TDA-066	LLT-15
NPDF90-AO1848-D063-E22-6R	63	6	22	40	15			

• Compatible con: MTSBH • Placas NO Disponibles

**Plato de Fresado 90° - AP..1003 / AP..1604..**

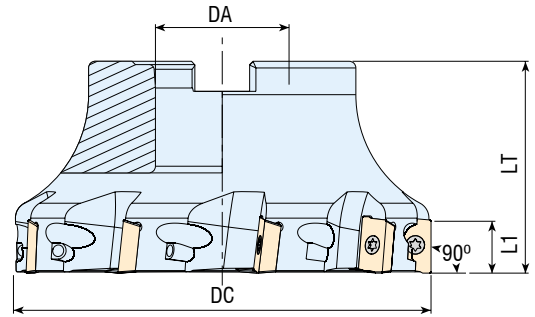


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AP10-D040-E16-5R	40	5	16	40	10	AP..1003..	TDA-014	LLT-8
NPDF90-AP10-D050-E22-6R	50	6	22	40	10			
NPDF90-AP10-D063-E22-7R	63	7	22	40	10			
NPDF90-AP10-D080-E27-8R	80	8	27	50	10			
NPDF90-AP10-D100-E32-9R	100	9	32	50	10			
NPDF90-AP16-D040-E16-4R	40	4	16	40	16	AP..1604..	TDA-066	LLT-15
NPDF90-AP16-D050-E22-5R	50	5	22	40	16			
NPDF90-AP16-D052-E22-5R	52	5	22	40	16			
NPDF90-AP16-D063-E22-6R	63	6	22	40	16			
NPDF90-AP16-D080-E27-7R	80	7	27	50	16			
NPDF90-AP16-D100-E32-8R	100	8	32	50	16			
NPDF90-AP16-D125-E40-9	125	9	40	63	16			
NPDF90-AP16-D160-E40-10	160	10	40	63	16			
NPDF90-AP16-D200-E60-12	200	12	60	63	16			

• Compatible con: PLACAS ISO - NIXA  
• Placas Disponibles: Ver Sección Placas



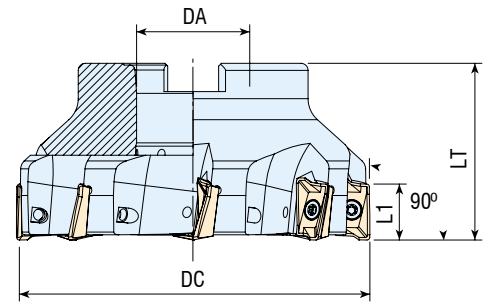
**Plato de Fresado 90° - AP..1705..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AP1705-D050-E22-5R	50	5	22	40	16	AP..1705..	TDA-066	LLT-15
NPDF90-AP1705-D063-E22-6R	63	6	22	40	16			
NPDF90-AP1705-D080-E27-7R	80	7	27	50	16			
NPDF90-AP1705-D100-E32-8R	100	8	32	50	16			

• Compatible con: TGTC - NIXA • Placas Disponibles: Ver Sección Placas

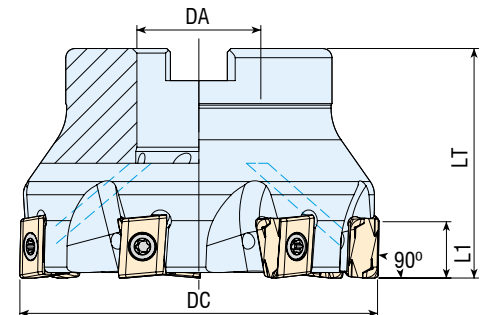
**Plato de Fresado 90° - AX.T1235.. / AX.T1705..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-AX1235-D040-E16-6R	40	6	16	40	10	AX.T1235..	TDA-028	LLT-8
NPDF90-AX1235-D050-E22-7R	50	7	22	40	10			
NPDF90-AX1235-D063-E22-8R	63	8	22	40	10			
NPDF90-AX1235-D080-E27-10R	80	10	27	50	10			
NPDF90-AX1705-D040-E16-4R	40	4	16	40	14	AX.T1705..	TDA-066	LLT-15
NPDF90-AX1705-D050-E22-5R	50	5	22	40	14			
NPDF90-AX1705-D063-E22-6R	63	6	22	40	14			
NPDF90-AX1705-D080-E27-7R	80	7	27	50	14			
NPDF90-AX1705-D100-E32-8R	100	8	32	50	14			

• Compatible con: SMTM - NIXA • Placas Disponibles: Ver Sección Placas

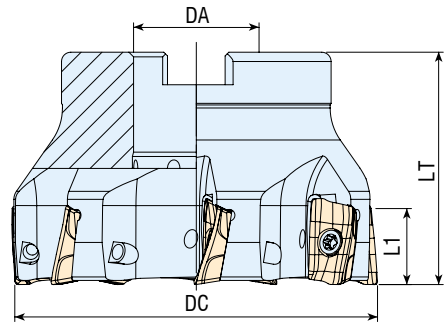
**Plato de Fresado 90° - LNMT1506..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN1506X-D063-E22-6	63	6	22	40	7	LNMT1506..	TDA-062	LLT-15
NPDF90-LN1506X-D080-E27-7	80	7	27	50	7			
NPDF90-LN1506X-D100-E32-8	100	8	32	50	7			

• Compatible con: XTC - GSC • Placas NO Disponibles

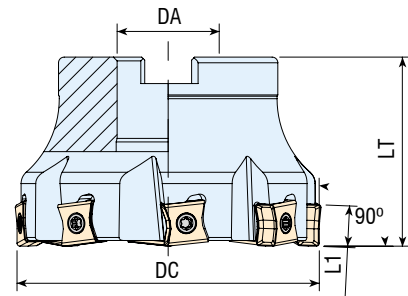
**Plato de Fresado 90° - BDMT11T3.. / BDMT1704..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-BD11T3-D040-E16-4R	40	4	16	40	10	BDMT11T3..	TDA-028	LLT-8
NPDF90-BD11T3-D040-E16-5R	40	5	16	40	10			
NPDF90-BD11T3-D050-E22-5R	50	5	22	40	10			
NPDF90-BD11T3-D063-E22-6R	63	6	22	40	10			
NPDF90-BD1704-D050-E22-4R	50	4	22	40	15.7	BDMT1704..	TDA-066	LLT-15
NPDF90-BD1704-D050-E22-5R	50	5	22	40	15.7			
NPDF90-BD1704-D063-E22-6R	63	6	22	40	15.7			
NPDF90-BD1704-D080-E27-6R	80	6	27	50	15.7			
NPDF90-BD1704-D080-E27-7R	80	7	27	50	15.7			
NPDF90-BD1704-D100-E32-7R	100	7	32	50	15.7			

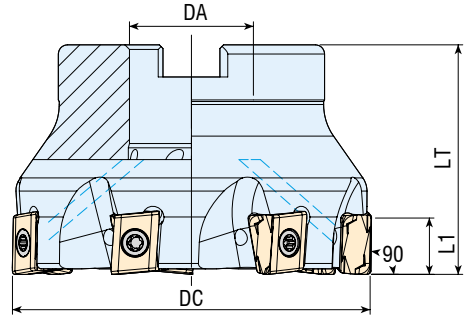
• Compatible con: KYCR • Placas NO Disponibles

**Plato de Fresado 90° - LN..**



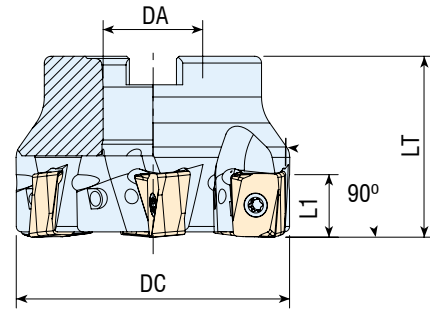
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN1106-D050-E22-5	50	5	22	40	10	LNMT1106..	TDA-049	LLT-15
NPDF90-LN1106-D063-E22-6	63	6	22	40	10			
NPDF90-LN1106-D080-E27-8	80	8	27	50	10			
NPDF90-LN1106-D100-E32-9	100	9	32	50	10			
NPDF90-LN1106-D125-E40-10	125	10	40	63	10			
NPDF90-LN1306-D040-E16-4R	40	4	16	40	12.5	T490-LNMT1306	TDA-066	LLT-15
NPDF90-LN1306-D050-E22-5R	50	5	22	40	12.5			
NPDF90-LN1306-D063-E22-6R	63	6	22	40	12.5			
NPDF90-LN1306-D080-E27-7R	80	7	27	50	12.5			
NPDF90-LN1306-D100-E32-8R	100	8	32	50	12.5			
NPDF90-LN1506-D040-E16-4	40	4	16	40	14			
NPDF90-LN1506-D050-E22-5	50	5	22	40	14			
NPDF90-LN1506-D063-E22-6	63	6	22	40	14			
NPDF90-LN1506-D080-E27-7	80	7	27	50	14			
NPDF90-LN1607-D050-E22-3R	50	3	22	40	16	T490-LNHT1607	TDA-087	LLT-20
NPDF90-LN1607-D063-E22-4R	63	4	22	40	16			
NPDF90-LN1607-D080-E27-5R	80	5	27	50	16			
NPDF90-LN1607-D100-E32-6R	100	6	32	50	16			

• Compatible con: ISCR • Placas NO Disponibles

**Plato de Fresado 90° - LNHU1306..**


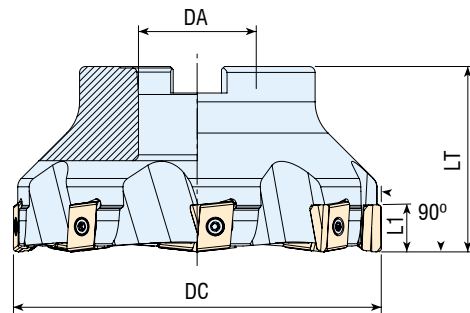
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN1306W-D040-E16-4R	40	4	16	40	12	LNHU1306..	TDA-068	LLT-15
NPDF90-LN1306W-D050-E22-5R	50	5	22	40	12			
NPDF90-LN1306W-D063-E22-6R	63	6	22	40	12			
NPDF90-LN1306W-D080-E27-7R	80	7	27	50	12			
NPDF90-LN1306W-D100-E32-8R	100	8	32	50	12			

• Compatible con: WLTR • Placas NO Disponibles

**Plato de Fresado 90° - LNGX1307..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN1307-D050-E22-4R	50	4	22	40	13	LNGX1307..	TDA-057	LLT-15
NPDF90-LN1307-D063-E22-6R	63	6	22	40	13			
NPDF90-LN1307-D080-E27-7R	80	7	27	50	13			
NPDF90-LN1307-D100-E32-8R	100	8	32	50	13			

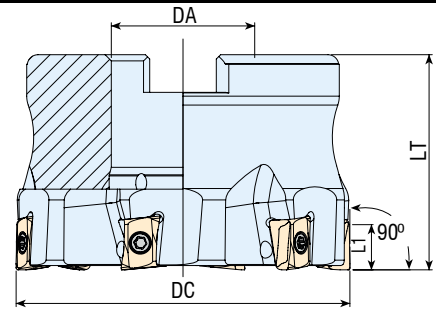
• Compatible con: WLTR • Placas NO Disponibles

**Plato de Fresado 90° - LNKT1506..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN15Z-D050-E22-4	50	4	22	40	15	LNKT1506..	TDA-066	LLT-15
NPDF90-LN15Z-D063-E22-5	63	5	22	40	15			
NPDF90-LN15Z-D080-E27-6	80	6	27	50	15			
NPDF90-LN15Z-D100-E32-7	100	7	32	50	15			
NPDF90-LN15Z-D125-E40-8	125	8	40	63	15			

• Compatible con: ZCC • Placas NO Disponibles

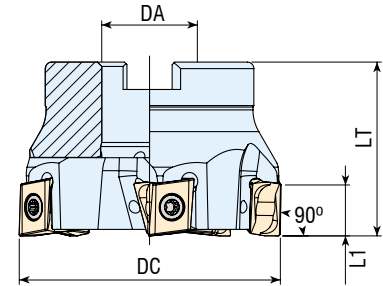
**Plato de Fresado 90° - LOEX0804..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LO08-D040-E16-6R	40	6	16	40	2	LOEX0804..	TDA-015	LLT-8
NPDF90-LO08-D050-E22-7R	50	7	22	40	2			
NPDF90-LO08-D063-E27-6R	63	6	27	40	2			

• Compatible con: SC • Placas NO Disponibles

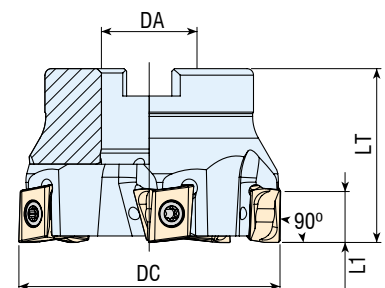
**Plato de Fresado 90° - LOGU0904..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LO0904-D040-E16-6R	40	6	16	40	8	LOGU0904..	TDA-125	LLT2-07
NPDF90-LO0904-D050-E22-5R	50	5	22	40	8			
NPDF90-LO0904-D050-E22-7R	50	7	22	40	8			
NPDF90-LO0904-D063-E22-6R	63	6	22	40	8			

• Compatible con: MTSBH • Placas NO Disponibles

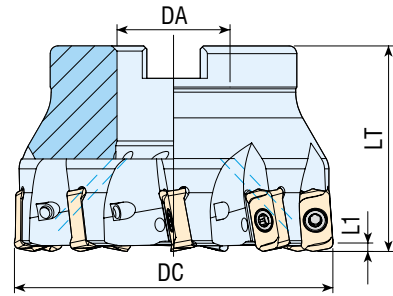
**Plato de Fresado 90° - LOGU1207..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LO1207-D040-E16-4R	40	4	16	40	11	LOGU1207..	TDA-062	LLT-15
NPDF90-LO1207-D050-E22-5R	50	5	22	40	11			
NPDF90-LO1207-D063-E22-5R	63	5	22	40	11			
NPDF90-LO1207-D063-E22-6R	63	6	22	40	11			
NPDF90-LO1207-D080-E27-7R	80	7	27	50	11			
NPDF90-LO1207-D100-E32-7R	100	7	32	50	11			

• Compatible con: MTSBH • Placas NO Disponibles

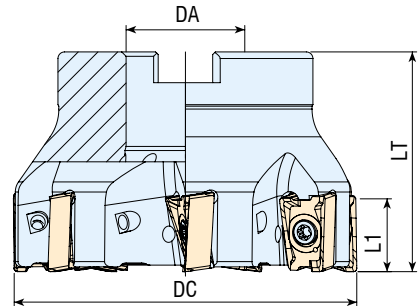
**Plato de Fresado 90° - LOMU..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LOMU1004-D040-E16-5R	40	5	16	40	10	LOMU1004..	TDA-024	LLT2-08
NPDF90-LOMU1004-D050-E22-5R	50	5	22	40	10			
NPDF90-LOMU1004-D063-E22-6R	63	6	22	40	10			
NPDF90-LOMU1505-D050-E22-4R	50	4	22	40	15	LOMU1505..	TDA-062	LLT-15
NPDF90-LOMU1505-D063-E22-5R	63	5	22	40	15			

• Compatible con: KYCR • Placas NO Disponibles

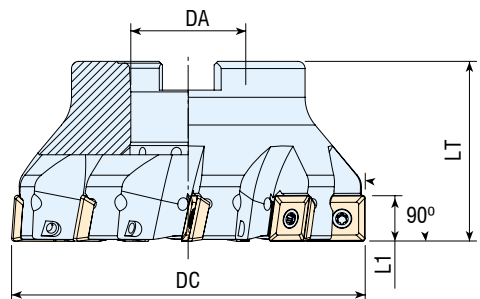
**Plato de Fresado 90° - LNGU15T6..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-LN15T6-D050-E22-5R	50	5	22	40	15.5	LNGU15T6..	TDA-067	LLT-15
NPDF90-LN15T6-D063-E22-6R	63	6	22	40	15.5			
NPDF90-LN15T6-D080-E27-7R	80	7	27	50	15.5			

• Compatible con: KNMTL • Placas NO Disponibles

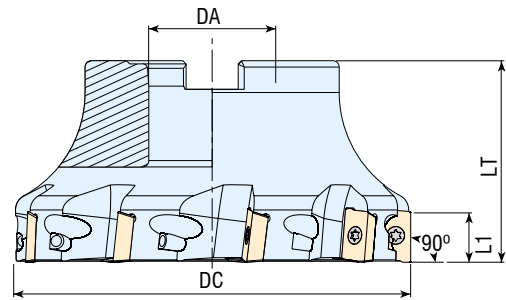
**Plato de Fresado 90° - R290-12T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-R290.12-D050-E22-4R	50	4	22	40	10.7	R290-12T3..	TDA-049	LLT-15
NPDF90-R290.12-D063-E22-5R	63	5	22	40	10.7			
NPDF90-R290.12-D080-E27-7R	80	7	27	50	10.7			
NPDF90-R290.12-D100-E32-9R	100	9	32	50	10.7			
NPDF90-R290.12-D125-E40-11	125	11	40	6	10.7			

• Compatible con: SNDVK • Placas NO Disponibles

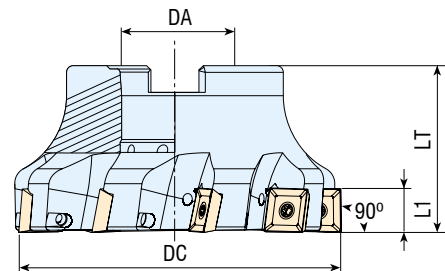
**Plato de Fresado 90° - R390...**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-R390.11-D040-E16-5R	40	5	16	40	10	R390-11T3..	TDA-014	LLT-8
NPDF90-R390.11-D050-E22-6R	50	6	22	40	10			
NPDF90-R390.11-D063-E22-7R	63	7	22	40	10			
NPDF90-R390.11-D080-E27-9R	80	9	27	50	10			
NPDF90-R390.17-D040-E16-4R	40	4	16	40	15.4	R390-1704..	TDA-049	LLT-15
NPDF90-R390.17-D050-E22-5R	50	5	22	40	15.4			
NPDF90-R390.17-D063-E22-6R	63	6	22	40	15.4			
NPDF90-R390.17-D080-E27-7R	80	7	27	50	15.4			
NPDF90-R390.17-D100-E32-8R	100	8	32	50	15.4			
NPDF90-R390.17-D125-E40-9	125	9	40	63	15.4			
NPDF90-R390.18-D050-E22-4R	50	4	22	40	15.4	R390-1806..	TDA-066	LLT-15
NPDF90-R390.18-D063-E22-5R	63	5	22	40	15.4			
NPDF90-R390.18-D080-E27-6R	80	6	27	50	15.4			
NPDF90-R390.18-D100-E32-7R	100	7	32	50	15.4			
NPDF90-R390.18-D125-E40-8	125	8	40	63	15.4			

• Compatible con: SNDVK - NIXA • Placas Disponibles: Ver Sección Placas

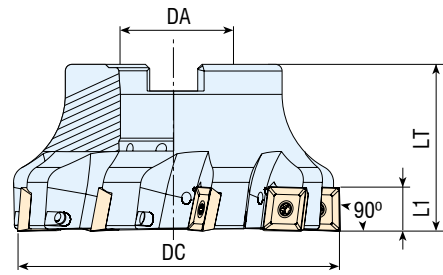
**Plato de Fresado 90° - 490R-1404..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-490R14-D050-E22-4R	50	4	22	40	10	490R-1404..	TDA-047	LLT-15
NPDF90-490R14-D063-E22-5R	63	5	22	40	10			
NPDF90-490R14-D080-E27-7R	80	7	27	50	10			
NPDF90-490R14-D100-E32-7R	100	7	32	50	10			
NPDF90-490R14-D125-E40-8	125	8	40	63	10			
NPDF90-490R14-D125-E40-12	125	12	40	63	10			
NPDF90-490R14-D160-E40-12	160	12	40	63	10			
NPDF90-490R14-D200-E60-16	200	16	60	63	10			

• Compatible con: SNDVK - NIXA • Placas Disponibles: Ver Sección Placas

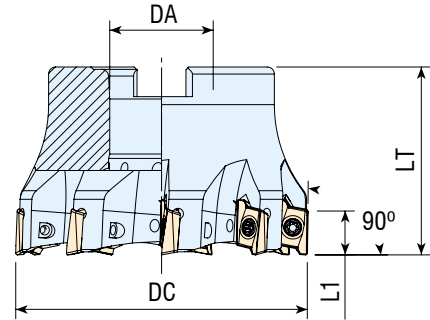
**Plato de Fresado 90° - 490R-08T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-490R08-D063-E22-6R	63	6	22	40	5.5	490R-08T3..	TDA-014	LLT-8

• Compatible con: SNDVK • Placas NO Disponibles

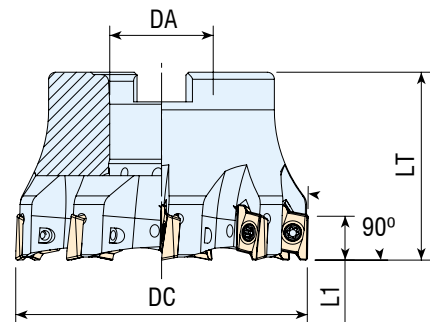
**Plato de Fresado 90° - RT1003..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-RT10-D040-E16-6R	40	6	16	40	10	RT1003..	TDA-014	LLT-8
NPDF90-RT10-D050-E22-7R	50	7	22	40	10			
NPDF90-RT10-D063-E22-9R	63	9	22	40	10			

• Compatible con: SFTY - NIXA • Placas Disponibles: Ver Sección Placas

**Plato de Fresado 90° - RT1606..**

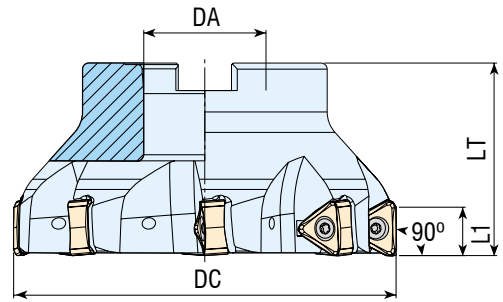


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-RT16-D040-E16-4R	40	4	16	40	16	RT1606..	TDA-066	LLT-15
NPDF90-RT16-D063-E22-6R	63	6	22	40	16			
NPDF90-RT16-D080-E27-7R	80	7	27	50	16			
NPDF90-RT16-D125-E40-9	125	9	40	63	16			

• Compatible con: SFTY - NIXA • Placas Disponibles: Ver Sección Placas



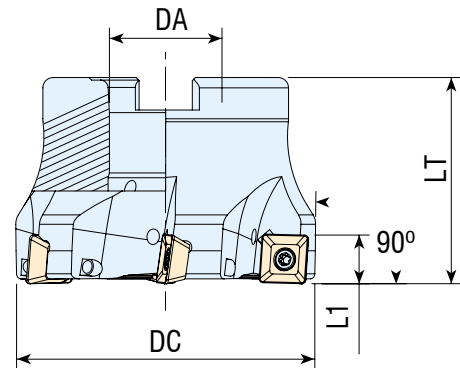
**Plato de Fresado 90° - TNGX..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-TNG10-D040-E16-4R	40	4	16	40	5	TNGX1004..	TDA-014	LLT2-08
NPDF90-TNG10-D040-E16-6R	40	6	16	40	5			
NPDF90-TNG10-D050-E22-5R	50	5	22	40	5			
NPDF90-TNG10-D050-E22-7R	50	7	22	40	5			
NPDF90-TNG10-D063-E22-6R	63	6	22	40	5			
NPDF90-TNG10-D063-E22-9R	63	9	22	40	5			
NPDF90-TNG10-D080-E27-10R	80	10	27	50	5			
NPDF90-TNG16-D040-E16-3R	40	3	16	40	10	TNGX1606..	TDA-062	LLT-15
NPDF90-TNG16-D040-E16-4R	40	4	16	40	10			
NPDF90-TNG16-D050-E22-4R	50	4	22	40	10			
NPDF90-TNG16-D050-E22-5R	50	5	22	40	10			
NPDF90-TNG16-D063-E22-4R	63	4	22	40	10			
NPDF90-TNG16-D063-E22-6R	63	6	22	40	10			
NPDF90-TNG16-D080-E27-5R	80	5	27	50	10			
NPDF90-TNG16-D080-E27-7R	80	7	27	50	10			
NPDF90-TNG16-D100-E32-6R	100	6	32	50	10			
NPDF90-TNG16-D100-E32-8R	100	8	32	50	10			
NPDF90-TNG16-D115-E32-6R	115	6	32	50	10			
NPDF90-TNG16-D125-E40-7R	125	7	40	63	10			
NPDF90-TNG16-D125-E40-9R	125	9	40	63	10			
NPDF90-TNG16-D140-E40-8R	140	8	40	63	10			
NPDF90-TNG16-D160-E40-10R	160	10	40	63	10			
NPDF90-TNG16-D175-E40-10R	175	10	40	63	10			

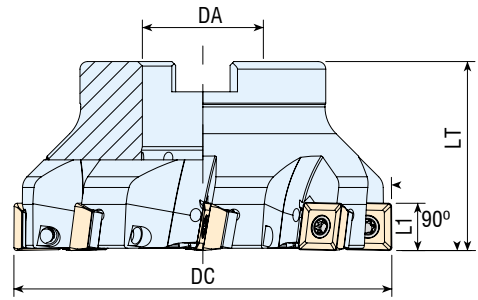
• Compatible con: PRMT • Placas NO Disponibles

**Plato de Fresado 90° - SEET09T3..**



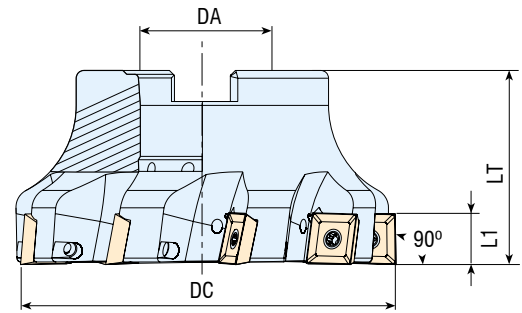
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-SE09-D040-E16-4R	40	4	16	40	6.7	SEET09T3..	TDA-027	LLT-8
NPDF90-SE09-D050-E22-5R	50	5	22	40	6.7			
NPDF90-SE09-D063-E22-6R	63	6	22	40	6.7			

• Compatible con: ZCC • Placas NO Disponibles

**Plato de Fresado 90° - SDMT1204..**


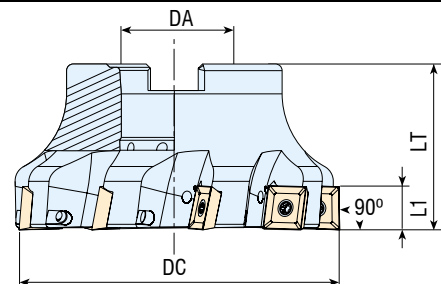
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Placa base	Tornillo base	Tornillo placa	Llave
NPDF90S-SD1204-D050-E22-4R	50	4	22	40	11	SDMT1204..	PB-024	TPB-013	TDA-050	LLT-15
NPDF90S-SD1204-D063-E22-5R	63	5	22	40	11			TPB-011	TDA-051	LLT-15
NPDF90S-SD1204-D080-E27-6R	80	6	27	50	11					
NPDF90S-SD1204-D100-E32-8R	100	8	32	50	11					
NPDF90S-SD1204-D125-E40-10	125	10	40	63	11					
NPDF90S-SD1204-D160-E40-12	160	12	40	63	11					

• Compatible con: DJT • Placas NO Disponibles

**Plato de Fresado 90° - SD..09M4.. / SD..1305..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-SD09M4-D040-E16-4R	40	4	16	40	9	SD..09M4..	TDA-049	LLT-15
NPDF90-SD09M4-D050-E22-5R	50	5	22	40	9			
NPDF90-SD09M4-D063-E22-6R	63	6	22	40	9			
NPDF90-SD09M4-D080-E27-7R	80	7	27	50	9			
NPDF90-SD1305-D050-E22-4R	50	4	22	40	13	SD..1305..	TDA-081	LLT-20
NPDF90-SD1305-D063-E22-5R	63	5	22	40	13			
NPDF90-SD1305-D080-E27-6R	80	6	27	50	13			
NPDF90-SD1305-D100-E32-7R	100	7	32	50	13			
NPDF90-SD1305-D125-E40-8	125	8	40	63	13			
NPDF90-SD1305-D160-E40-10	160	10	40	63	13			

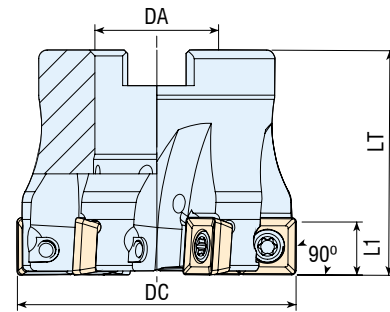
• Compatible con: KRLY • Placas NO Disponibles

**Plato de Fresado 90° - SEET1203..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-SE12-D050-E22-4R	50	4	22	40	12	SEET1203..	TDA-049	LLT-15
NPDF90-SE12-D063-E22-5R	63	5	22	40	12			
NPDF90-SE12-D080-E27-7R	80	7	27	50	12			
NPDF90-SE12-D100-E32-9R	100	9	32	50	12			
NPDF90-SE12-D125-E40-11	125	11	40	63	12			

• Compatible con: ZCC - OKE - NIXA • Placas Disponibles: Ver Sección Placas

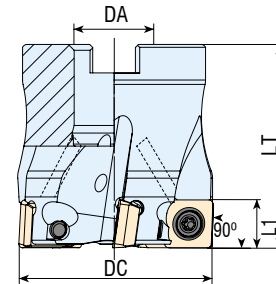
**Plato de Fresado 90° - SPMT1004.. / XPMT1004.. / QPMR1004.. / QPMT1004..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-SP1004-D040-E16-4R	40	4	16	40	9.4	SPMT1004..	TDA-065	LLT-15
NPDF90-SP1004-D050-E22-4R	50	4	22	40	9.4	XPMT1004..		
NPDF90-SP1004-D050-E22-6R	50	6	22	40	9.4	QPMR1004..		
NPDF90-SP1004-D063-E22-5R	63	5	22	40	9.4	QPMT1004..		
NPDF90-SP1004-D080-E27-7R	80	7	27	50	9.4			
NPDF90-SP1004-D100-E32-8R	100	8	32	50	9.4			

• Compatible con: ISCR • Placas NO Disponibles

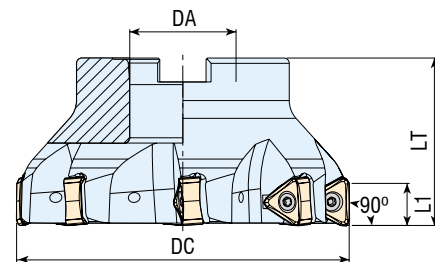
**Plato de Fresado 90° - SPMT09T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-SP09T3-D040-E16-5R	40	5	16	40	8.6	SPMT09T3..	TDA-044	LLT-10
NPDF90-SP09T3-D050-E22-6R	50	6	22	40	8.6			
NPDF90-SP09T3-D063-E22-7R	63	7	22	40	8.6			
NPDF90-SP09T3-D080-E27-8R	80	8	27	50	8.6			

• Compatible con: SNDVK • Placas NO Disponibles

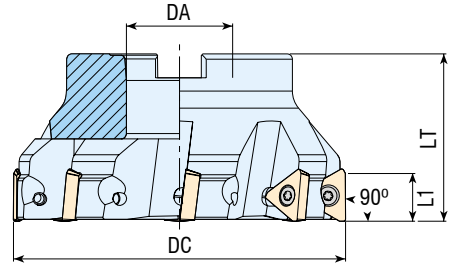
**Plato de Fresado 90° - TN.X2207..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-TN2207-D063-E22-4R	63	4	22	40	15	TN.X2207..	TDA-075	LLT-20
NPDF90-TN2207-D080-E27-5R	80	5	27	50	15			
NPDF90-TN2207-D100-E32-6	100	6	32	50	15			
NPDF90-TN2207-D125-E40-8	125	8	40	63	15			

• Compatible con: TGTC • Placas NO Disponibles

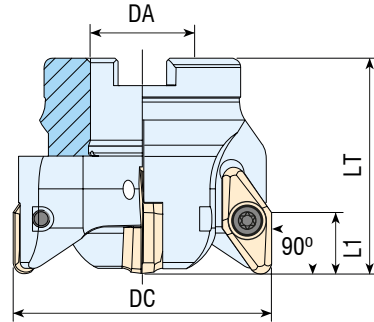
**Plato de Fresado 90° - TPKT2205..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-TP2205-D063-E22-4	63	4	22	40	18	TPKT2205..	TDA-075	LLT-20
NPDF90-TP2205-D080-E27-6	80	6	27	50	18			
NPDF90-TP2205-D100-E32-7	100	7	32	50	18			
NPDF90-TP2205-D125-E40-8	125	8	40	63	18			
NPDF90-TP2205-D160-E40-9	160	9	40	63	18			
NPDF90-TP2205-D200-E60-12	200	12	60	63	18			

• Compatible con: TGTC • Placas NO Disponibles

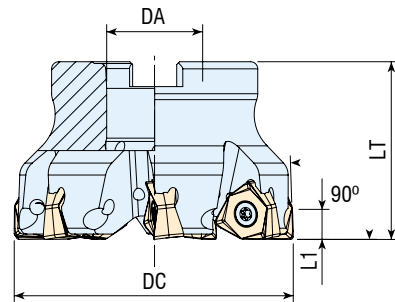
**Plato de Fresado 90° - VCKT2205..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-VC2205-D050-E22-3R	50	3	22	55	15	VCKT2205..	TDA-077	LLT-15
NPDF90-VC2205-D063-E22-4R	63	4	22	55	15			
NPDF90-VC2205-D066-E27-4R	66	4	27	55	15			
NPDF90-VC2205-D080-E27-5R	80	5	27	60	15			

• Compatible con: PLACAS ISO • Placas NO Disponibles

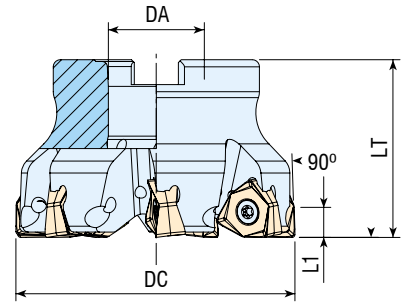
**Plato de Fresado 90° - WNGU0403..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-WNG04-D040-E16-6R	40	6	16	40	4	WNGU0403..	TDA-014	LLT-8
NPDF90-WNG04-D050-E22-5R	50	5	22	40	4			
NPDF90-WNG04-D050-E22-7R	50	7	22	40	4			
NPDF90-WNG04-D063-E22-6R	63	6	22	40	4			

• Compatible con: XTC - GSC • Placas NO Disponibles

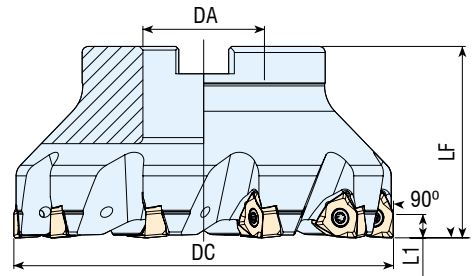
**Plato de Fresado 90° - WNGU0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-WNG08-D050-E22-5R	50	5	22	40	7.5	WNGU0806..	TDA-066	LLT-15
NPDF90-WNG08-D063-E22-6R	63	6	22	40	7.5			
NPDF90-WNG08-D080-E27-7R	80	7	27	50	7.5			
NPDF90-WNG08-D100-E32-7R	100	10	32	50	7.5			

• Compatible con: XTC - GSC • Placas NO Disponibles

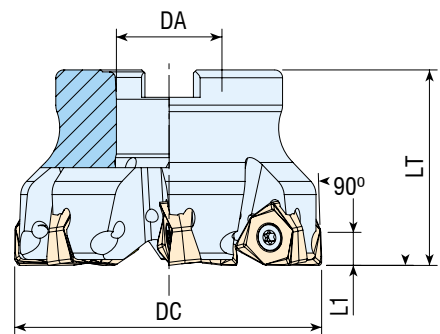
**Plato de Fresado 90° - WNHU0604.. / WNHU0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-WN0604Z-D040-E16-4R	40	4	16	40	5.7	WNHU0604..	TDA-027	LLT2-08
NPDF90-WN0604Z-D050-E22-5R	50	5	22	40	5.7			
NPDF90-WN0604Z-D063-E22-6R	63	6	22	40	5.7			
NPDF90-WN0604Z-D080-E27-7R	80	7	27	50	5.7			
NPDF90-WN0604Z-D100-E32-9R	100	9	32	50	5.7			
NPDF90-WN0806Z-D050-E22-4R	50	4	22	40	7.7	WNHU0806..	TDA-066	LLT-15
NPDF90-WN0806Z-D063-E22-5R	63	5	22	40	7.7			
NPDF90-WN0806Z-D080-E27-6R	80	6	27	50	7.7			
NPDF90-WN0806Z-D100-E32-8R	100	8	32	50	7.7			
NPDF90-WN0806Z-D125-E40-10	125	10	40	63	7.7			
NPDF90-WN0806Z-D160-E40-12	160	12	40	63	7.7			

• Compatible con: ZCC • Placas NO Disponibles

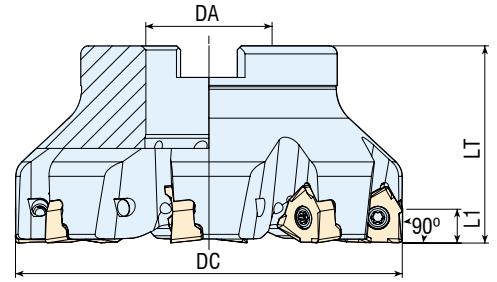
**Plato de Fresado 90° - WNMX080608**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-WN0806-D050-E16-4R	50	4	16	40	8	WNMX080608	TDA-084	LLT-15
NPDF90-WN0806-D063-E22-5R	63	5	22	40	8			
NPDF90-WN0806-D080-E27-7R	80	7	27	50	8			

• Compatible con: KYCR - JD • Placas NO Disponibles

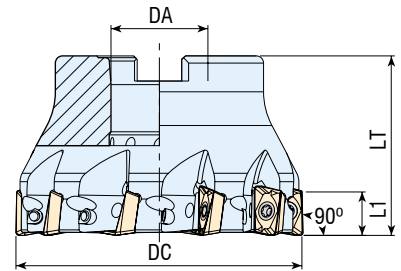
**Plato de Fresado 90° - XNEX0403.. / XNEX0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-XN0403-D040-E16-5R	40	5	16	40	4	XNEX0403..	TDA-014	LLT-8
NPDF90-XN0806-D050-E22-4R	50	4	22	40	7.5	XNEX0806..	TDA-066	LLT-15
NPDF90-XN0806-D063-E22-5R	63	5	22	40	7.5			
NPDF90-XN0806-D080-E27-7R	80	7	27	50	7.5			
NPDF90-XN0806-D100-E32-8R	100	8	32	50	7.5			

• Compatible con: SC - NIXA • Placas Disponibles: Ver Sección Placas

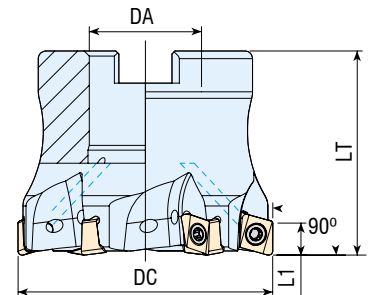
**Plato de Fresado 90° - XO..1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-XO12-D040-E16-5R	40	5	16	40	11	XO..1204..	TDA-044	LLT-10
NPDF90-XO12-D050-E22-7R	50	7	22	40	11			
NPDF90-XO12-D063-E22-8R	63	8	22	40	11			
NPDF90-XO12-D080-E27-10R	80	10	27	50	11			
NPDF90-XO12-D100-E32-12R	100	12	32	50	11			

• Compatible con: SC • Placas NO Disponibles

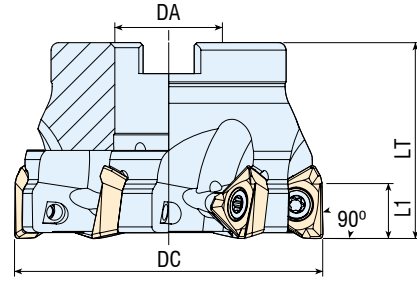
**Plato de Fresado 90° - 4NKT0603..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-4N06-D040-E16-5R	40	5	16	40	6	4NKT0603..	TDA-024	LLT-8
NPDF90-4N06-D050-E22-6R	50	6	22	40	6			

• Compatible con: TGTC • Placas NO Disponibles

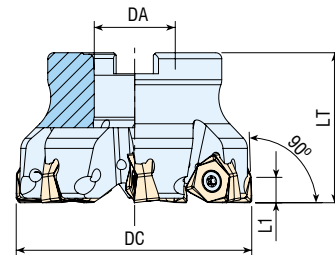
**Plato de Fresado 90° - 3PKT..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-3P1004-D040-E16-5R	40	5	16	40	7	3PKT1004..	TDA-012	LLT-8
NPDF90-3P1004-D050-E22-6R	50	6	22	40	7			
NPDF90-3P1505-D050-E22-4R	50	4	22	40	11	3PKT1505..	TDA-056	LLT-15
NPDF90-3P1505-D050-E22-5R	50	5	22	40	11			
NPDF90-3P1505-D063-E22-4R	63	4	22	40	11			
NPDF90-3P1505-D063-E22-6R	63	6	22	40	11			
NPDF90-3P1505-D080-E27-7R	80	7	27	50	11			
NPDF90-3P1505-D100-E32-8R	100	8	32	50	11			
NPDF90-3P1505-D125-E40-10	125	10	40	63	11			
NPDF90-3P1906-D080-E27-7R	80	7	27	50	15	3PKT1906..	TDA-075	LLT-20
NPDF90-3P1906-D100-E32-8R	100	8	32	50	15			
NPDF90-3P1906-D125-E40-10	125	10	40	63	15			

- Compatible con: TGTC - NIXA
- Algunos Modelos de Placas Disponibles: Ver Sección Placas

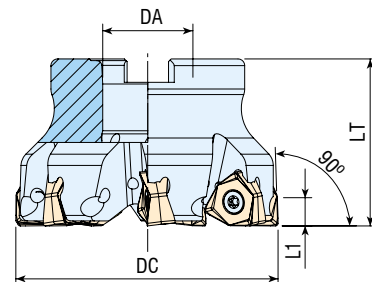
**Plato de Fresado 90° - 6NGU0905..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-6N09-D050-E22-5R	50	5	22	40	9	6NGU0905..	TDA-056	LLT-15
NPDF90-6N09-D063-E22-6R	63	6	22	40	9			
NPDF90-6N09-D080-E27-7R	80	7	27	50	9			
NPDF90-6N09-D100-E32-8R	100	8	32	50	9			

- Compatible con: MTSBH
- Placas NO Disponibles

**Plato de Fresado 90° - 6NMU1409..**

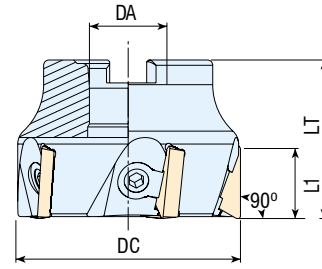


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDF90-6N14-D050-E22-4R	50	4	22	50	8.2	6NMU1409..	TDA-126	LLT-20
NPDF90-6N14-D063-E22-5R	63	5	22	40	8.2			
NPDF90-6N14-D080-E27-7R	80	7	27	50	8.2			
NPDF90-6N14-D100-E32-7R	100	7	32	50	8.2			
NPDF90-6N14-D125-B40-8	125	8	40	63	8.2			

- Compatible con: MTSBH
- Placas NO Disponibles



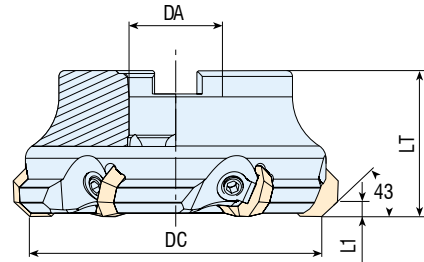
## Plato de Fresado 90° - TP..1603../ TP..2204..



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF90C-TP16-D050-E22-4	50	4	22	40	12	TP..1603..	BDA-23	TPA-014	LLA-4
NPDF90C-TP16-D063-E22-6	63	6	22	45	12			TPA-010	LLA-4
NPDF90C-TP16-D080-E27-7	80	7	27	50	12		BDA-24	TPA-011	LLA-4
NPDF90C-TP16-D100-E32-8	100	8	32	50	12				
NPDF90C-TP16-D125-E40-8	125	8	40	63	12				
NPDF90C-TP22-D063-E22-5	63	5	22	45	18	TP..2204..	BDA-24	TPA-011	LLA-4
NPDF90C-TP22-D080-E27-6	80	6	27	50	18				
NPDF90C-TP22-D100-E32-7	100	7	32	50	18				
NPDF90C-TP22-D125-E40-8	125	8	40	63	18				
NPDF90C-TP22-D160-E40-9	160	9	40	63	18				
NPDF90C-TP22-D200-E60-12	200	12	60	63	18				
NPDF90C-TP22-D250-E60-15	250	15	60	63	18				
NPDF90C-TP22-D315-E60-Z18	315	18	60	63	18				

• Compatible con: PLACAS ISO • Placas NO Disponibles

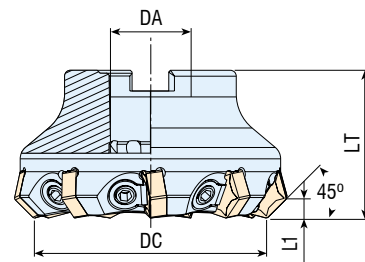
## Plato de Fresado 43° - OF..0704..



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF43C-OF07-D063-E22-4	63	4	22	45	5	OF..0704..	BDA-24	TPA-012	LLA-4
NPDF43C-OF07-D080-E27-5	80	5	27	50	5				
NPDF43C-OF07-D100-E32-6	100	6	32	50	5				
NPDF43C-OF07-D125-E40-8	125	8	40	63	5				
NPDF43C-OF07-D160-E40-9	160	9	40	63	5				

• Compatible con: PLACAS ISO • Placas NO Disponibles

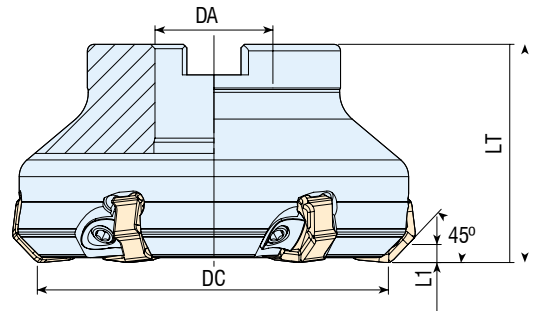
## Plato de Fresado 45° - HN..0905..



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF45C-HN0905-D063-E22-7	63	7	22	40	4.5	HN..0905..	BDA-24	TPA-012	LLA-4
NPDF45C-HN0905-D080-E27-9	80	9	27	50	4.5				
NPDF45C-HN0905-D100-E32-11	100	11	32	50	4.5				
NPDF45C-HN0905-D125-E40-13	125	13	40	63	4.5				
NPDF45C-HN0905-D160-E40-15	160	15	40	63	4.5				

• Compatible con: WDA - KNMTL • Placas NO Disponibles

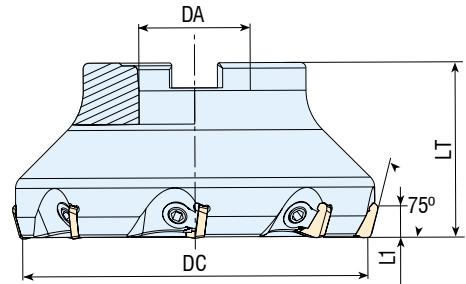
**Plato de Fresado 45° - XNMU0806..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF45C-XN0806-D063-E22-5	63	5	22	50	4.5	XNMU0806..	BDA-31	TPA-016	LLA-3
NPDF45C-XN0806-D080-E27-6	80	6	27	50	4.5				
NPDF45C-XN0806-D100-E32-8	100	8	32	50	4.5				
NPDF45C-XN0806-D125-E40-8	125	8	40	63	4.5				
NPDF45C-XN0806-D160-E40-10	160	10	40	63	4.5				
NPDF45C-XN0806-D200-E60-12	200	12	60	63	4.5				

• Compatible con: DJT • Placas NO Disponibles

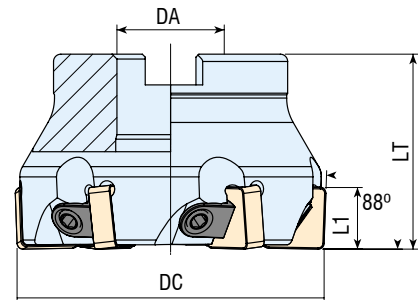
**Plato de Fresado 75° - SPKN1203..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF75C-SP12-D050-E22-4	50	4	22	42	8	SPKN1203..	BDA-23	TPA-014	LLA-4
NPDF75C-SP12-D063-E22-5	63	5	22	40	8			TPA-010	LLA-4
NPDF75C-SP12-D080-E27-6	80	6	27	50	8				
NPDF75C-SP12-D100-E32-7	100	7	32	50	8				
NPDF75C-SP12-D125-E40-8	125	8	40	63	8				
NPDF75C-SP12-D160-E40-9	160	9	40	63	8				
NPDF75C-SP12-D200-E60-12	200	12	60	63	8				

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

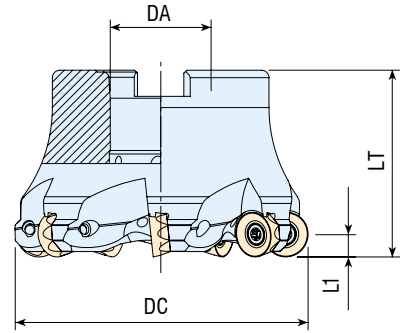
**Plato de Fresado 88° - SN..1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Brida Placa	Tornillo Brida	Llave
NPDF88C-SN1204-D050-E22-5	50	5	22	40	11	SN..1204..	BDA-28	TPA-015	LLA-3
NPDF88C-SN1204-D063-E22-6	63	6	22	40	11				
NPDF88C-SN1204-D080-E27-7	80	7	27	50	11				
NPDF88C-SN1204-D100-E32-8	100	8	32	50	11				
NPDF88C-SN1204-D125-E40-11	125	11	40	63	11				

• Compatible con: UNIN - NT - KYCR • Placas NO Disponibles

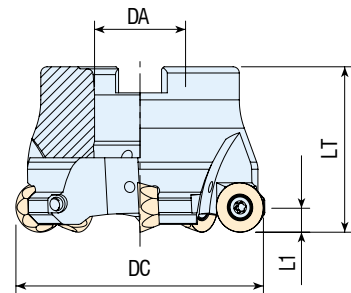
**Plato de Fresado - RC..1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-RC1204-D040-E16-4R	40	4	16	40	6	RC..1204..	TDA-049	LLT-15
NPDFR-RC1204-D050-E22-5R	50	5	22	50	6			
NPDFR-RC1204-D052-E22-5R	52	5	22	50	6			
NPDFR-RC1204-D063-E22-6R	63	6	22	50	6			
NPDFR-RC1204-D063-E27-6R	80	6	27	50	6			
NPDFR-RC1204-D080-E27-7R	80	7	27	50	6			

• Compatible con: SNDVK • Placas NO Disponibles

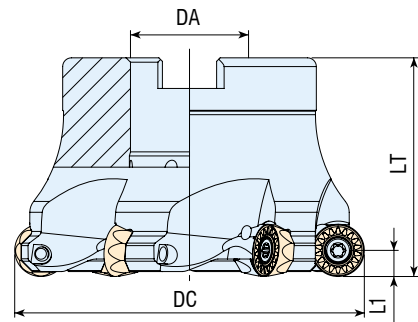
**Plato de Fresado - QP..10T3.. / QP..1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-QP10T3-D040-E16-4R	40	4	16	40	5	QP..10T3..	TDA-049	LLT-15
NPDFR-QP10T3-D050-E22-5R	50	5	22	40	5			
NPDFR-QP10T3-D063-E22-6R	63	6	22	40	5			
NPDFR-QP1204-D050-E22-4R	50	4	22	40	6	QP..1204..	TDA-066	LLT-15
NPDFR-QP1204-D063-E22-5R	63	5	22	40	6			

• Compatible con: SMTM • Placas NO Disponibles

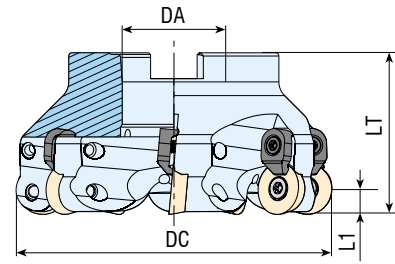
**Plato de Fresado - RPMT1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-RP1204M-D042-E16-4R	42	4	16	40	6	RPMT1204..	TDA-066	LLT-15
NPDFR-RP1204M-D050-E22-4R	50	4	22	50	6			
NPDFR-RP1204M-D052-E22-5R	52	5	22	50	6			
NPDFR-RP1204M-D063-E22-5R	63	6	22	50	6			
NPDFR-RP1204M-D080-E27-6R	80	7	27	50	6			

• Compatible con: MTSBH • Placas NO Disponibles

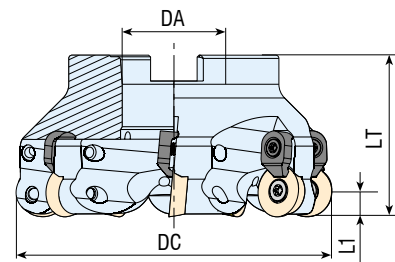
**Plato de Fresado - ROMX2006..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida	Tornillo Brida	Llave
NPDFR-RO20-D063-E22-5R	63	5	22	50	10	ROMX2006	TDA-088	BDA-18	TDA-066	LLT-15
NPDFR-RO20-D080-E27-6R	80	6	27	50	10					

• Compatible con: WLTR • Placas NO Disponibles

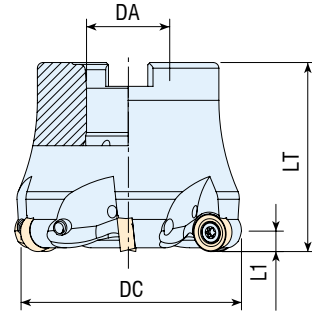
**Plato de Fresado - RD..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDFRC-RD0702-D050-E22-6R	50	6	22	40	3.5	RD..0702..	TDA-014	-	-	LLT-8
NPDFRC-RD0803-D050-E22-5R	50	5	22	40	4	RD..0803..	TDA-027	-	-	LLT-8
NPDFRC-RD1003-D040-E16-4R	40	4	16	40	5	RD..1003..	TDA-049	BDA-26	TDA-049	LLT-15
NPDFRC-RD1003-D050-E22-5R	50	5	22	50	5					
NPDFRC-RD1003-D052-E22-5	52	5	22	50	5					
NPDFRC-RD1003-D063-E22-6R	63	6	22	50	5					
NPDFRC-RD1003-D080-E27-7R	80	7	27	50	5					
NPDFRC-RD1003-D100-E32-8R	100	8	32	50	5					
NPDFRC-RD10T3-D050-E22-5R	50	5	22	50	5	RD..10T3..	TDA-049	BDA-26	TDA-049	LLT-15
NPDFRC-RD10T3-D063-E22-6R	63	6	22	50	5					
NPDFRC-RD12T3-D040-E16-4R	40	4	16	40	6	RD..12T3..	TDA-049	BDA-26	TDA-049	LLT-15
NPDFRC-RD12T3-D050-E22-5R	50	5	22	50	6					
NPDFRC-RD12T3-D052-E22-5R	52	5	22	50	6					
NPDFRC-RD12T3-D063-E22-6R	63	6	22	50	6					
NPDFRC-RD12T3-D080-E27-7R	80	7	27	50	6					
NPDFRC-RD12T3-D100-E32-8R	100	8	32	50	6					
NPDFRC-RD12T3-D125-E40-9	125	9	40	63	6					
NPDFRC-RD1204-D040-E16-4R	40	4	16	40	6	RD..1204..	TDA-049	BDA-26	TDA-049	LLT-15
NPDFRC-RD1204-D050-E22-5R	50	5	22	50	6					
NPDFRC-RD1204-D052-E22-5R	52	5	22	50	6					
NPDFRC-RD1204-D063-E22-6R	63	6	22	50	6					
NPDFRC-RD1204-D080-E27-7R	80	7	27	50	6					
NPDFRC-RD1204-D100-E32-7R	100	7	32	50	6					
NPDFRC-RD1204-D100-E32-8R	100	8	32	50	6					
NPDFRC-RD1604-D050-E22-4R	50	4	22	50	8	RD..1604..	TDA-077	BDA-18	TDA-066	LLT-15
NPDFRC-RD1604-D052-E22-4R	52	4	22	50	8					
NPDFRC-RD1604-D063-E22-5R	63	5	22	50	8					
NPDFRC-RD1604-D066-E22-5R	66	5	22	50	8					
NPDFRC-RD1604-D066-E27-5R	66	5	27	50	8					
NPDFRC-RD1604-D080-E27-6R	80	6	27	50	8					
NPDFRC-RD1604-D100-E32-7R	100	7	32	50	8					
NPDFRC-RD1604-D125-E40-7	125	7	40	63	8					
NPDFRC-RD1604-D160-E40-8	160	8	40	63	8					

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

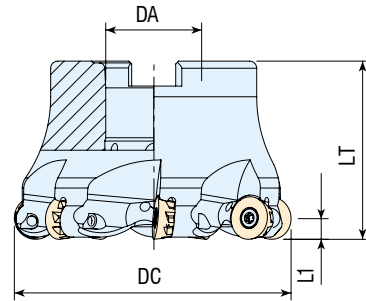
**Plato de Fresado - RC..10T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-RC10T3-D040-E16-4R	40	4	16	40	5	RC..10T3..	TDA-066	LLT-15
NPDFR-RC10T3-D050-E22-5R	50	5	22	50	5			
NPDFR-RC10T3-D063-E22-6R	63	6	22	50	5			

• Compatible con: ZCC • Placas NO Disponibles

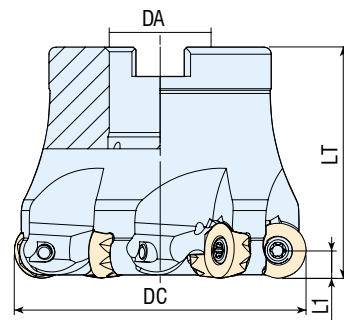
**Plato de Fresado - RPNX10T3.. / RPNX1204..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-RP10T3-D063-E22-6R	63	6	22	40	5	RPNX10T3..	TDA-032	LLT-10
NPDFR-RP10T3-D080-E27-7R	80	7	27	50	5			
NPDFR-RP1204-D040-E16-4R	40	4	16	40	6	RPNX1204..	TDA-049	LLT-15
NPDFR-RP1204-D080-E27-7R	80	7	27	50	6			

• Compatible con: CRTZT • Placas NO Disponibles

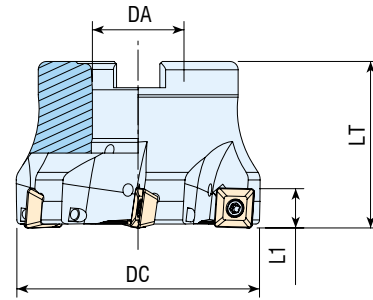
**Plato de Fresado - RYMX1004.. / RYMX1205..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFR-RY10-D040-E16-4R	40	4	16	40	5	RYMX1004..	TDA-049	LLT-15
NPDFR-RY10-D040-E16-5R	40	5	16	40	5			
NPDFR-RY10-D050-E22-5R	50	5	22	50	5			
NPDFR-RY10-D063-E22-6R	63	6	22	50	5			
NPDFR-RY12-D040-E16-4R	40	4	16	40	6	RYMX1205..	TDA-066	LLT-15
NPDFR-RY12-D050-E22-5R	50	5	22	50	6			
NPDFR-RY12-D052-E22-5R	52	5	22	50	6			
NPDFR-RY12-D063-E22-6R	63	6	22	50	6			
NPDFR-RY12-D080-E27-6R	80	6	27	50	6			
NPDFR-RY12-D100-E32-7R	100	7	32	50	6			

• Compatible con: TGTC • Placas NO Disponibles

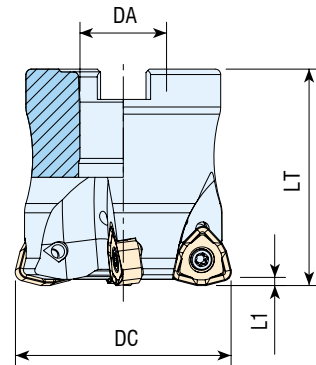
**Plato de Fresado - SPMX0945..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDFAA-SPMX0945-D050-E22-6R	50	6	22	40	1.4	SPMX0945..	TDA-063	LLT-15
NPDFAA-SPMX0945-D052-E22-6R	52	6	22	40	1.4			

- Compatible con: MTSBH
- Placas NO Disponibles

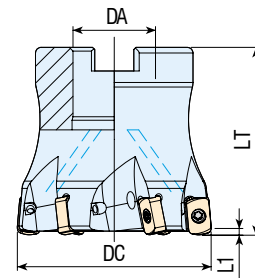
**Plato de Fresado - JOMU0905..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAA-JOMU09-D050-E22-4R	50	4	22	50	1.2	JOMU0905..	TDA-127	LLT2-10
NPDAA-JOMU09-D063-E22-5R	63	5	22	50	1.2			

- Compatible con: MTSBH
- Placas NO Disponibles

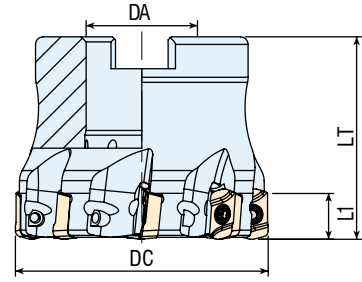
**Plato de Fresado - ENMU1004..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAA-EN1004-D050-E22-5R	50	5	22	50	1	ENMU1004..	TDA-014	LLT-8
NPDAA-EN1004-D050-E22-6R	50	6	22	50	1			
NPDAA-EN1004-D052-E22-6R	52	6	22	50	1			
NPDAA-EN1004-D063-E22-6R	63	6	22	50	1			

- Compatible con: DJT
- Placas NO Disponibles

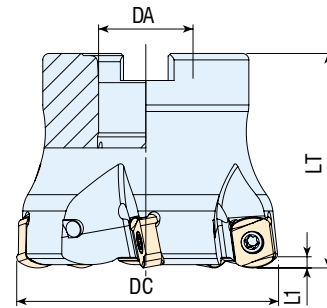
**Plato de Fresado - EP1003.. / ZPMT1003.. / YPHW1003..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-EP1003-D050-E22-8R	50	8	22	40	1	-	TDA-014	LLT-8
NPDA-EP1003-D063-E22-8R	63	8	22	40	1			

• Compatible con: DJT • Placas NO Disponibles

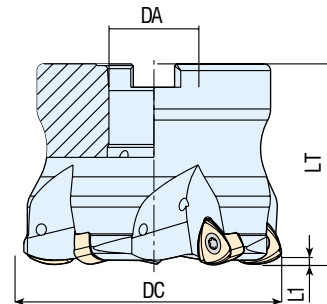
**Plato de Fresado - BLP0603 / BLP0904..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-BL0603-D040-E16-6R	40	6	16	40	1	BLMP0603..	TDA-014	LLT-8
NPDA-BL0603-D050-E22-7R	50	7	22	40	1			
NPDA-BL0904-D040-E16-5R	40	5	16	40	2	BLMP0904..	TDA-044	LLT-10
NPDA-BL0904-D050-E22-6R	50	6	22	50	2			
NPDA-BL0904-D063-E22-5R	63	5	22	50	2			
NPDA-BL0904-D063-E22-7R	63	7	22	63	2			

• Compatible con: TGTC - NIXA • Placas Disponibles: Ver Sección Placas

**Plato de Fresado - BLMP1205..**

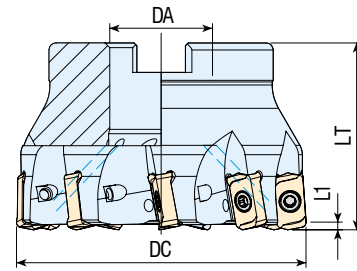


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-BL1205-D050-E22-3R	50	3	22	40	2	BLMP1205..	TDA-066	LLT-15
NPDA-BL1205-D063-E22-4R	63	4	22	40	2			
NPDA-BL1205-D080-E27-5R	80	5	27	50	2			

• Compatible con: TGTC • Placas NO Disponibles



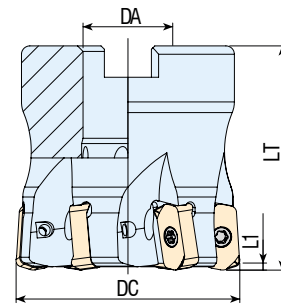
**Plato de Fresado - LOGU0303..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-LO03-D040-E16-6R	40	6	16	40	1	LOGU0303	TDA-024	LLT-8
NPDA-LO03-D050-E22-7R	50	7	22	40	1			
NPDA-LO03-D063-E22-9R	63	9	22	40	1			

• Compatible con: KYCR • Placas NO Disponibles

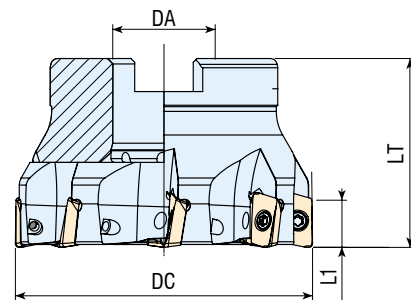
**Plato de Fresado - LNMU0303..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-LN0303-D040-E16-6R	40	6	16	40	12	LNMU0303..	TDA-014	LLT-8
NPDA-LN0303-D050-E22-7R	50	7	22	50	12			
NPDA-LN0303-D063-E22-9R	63	9	22	50	12			

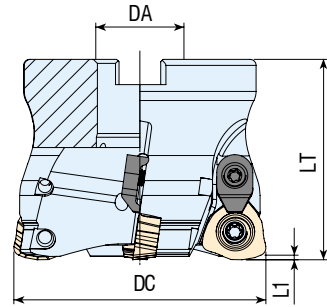
• Compatible con: TNGYL • Placas NO Disponibles

**Plato de Fresado - JDMT1003..**



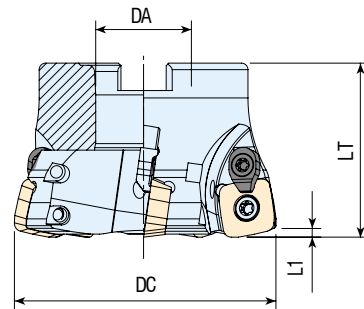
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDA-JD1003-D040-E16-6R	40	6	16	40	9	JDMT1003..	TDA-014	LLT-8
NPDA-JD1003-D063-E22-8R	63	8	22	40	9			

• Compatible con: HTCH • Placas NO Disponibles

**Plato de Fresado - JDMW1204.. / JDMW1405..**


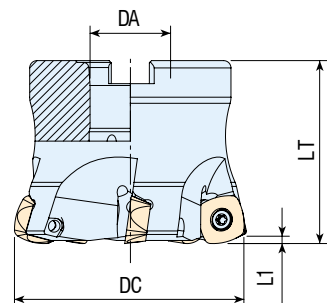
REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDAAC-JD1204-D052-E22-3R	52	3	22	50	1.5	JDMW1204..	TDA-071	BDA-18	TDA-066	LLT-15
NPDAAC-JD1204-D052-E22-4R	52	4	22	50	1.5					
NPDAAC-JD1204-D063-E22-5R	63	5	22	50	1.5					
NPDAAC-JD1204-D080-E27-6R	80	6	27	50	1.5					
NPDAAC-JD1204-D100-E32-7R	100	7	32	50	1.5					
NPDAAC-JD1405-D052-E22-3R	52	3	22	40	2	JDMW1405..	TDA-081	BDA-18	TDA-066	LLT-20
NPDAAC-JD1405-D063-E22-4R	63	4	22	40	2					

• Compatible con: MTSBCH • Placas NO Disponibles

**Plato de Fresado - SD..1204**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDAA-SD1204-D050-E22-4R	50	4	22	40	1.8	SD..1204..	TDA-066	BDA-26	TDA-049	LLT-15
NPDAA-SD1204-D063-E22-5R	63	5	22	40	1.8					
NPDAA-SD1204-D080-E27-6R	80	6	27	50	1.8					
NPDAA-SD1204-D100-E32-8R	100	8	32	50	1.8					

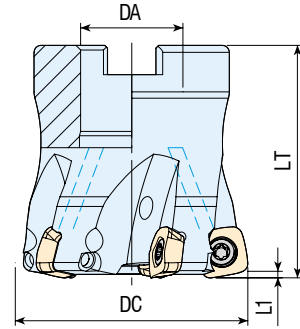
• Compatible con: ZCC - OKE • Placas Disponibles: Ver Sección Placas

**Plato de Fresado - SD..1205..**


REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAA-SD1205-D052-E22-4R	52	4	22	50	2	SD..1205..	TDA-066	LLT-15
NPDAA-SD1205-D052-E22-5R	52	5	22	50	2			
NPDAA-SD1205-D063-E22-5R	63	5	22	50	2			
NPDAA-SD1205-D066-E22-5R	66	5	22	50	2			
NPDAA-SD1205-D066-E22-6R	66	6	22	50	2			
NPDAA-SD1205-D080-E27-6R	80	6	27	70	2			

• Compatible con: HTCH • Placas NO Disponibles

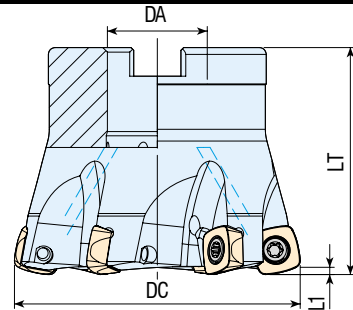
**Plato de Fresado - SOMET1004..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAASO1004D050E225R	50	5	22	50	1.5	SOMET1004..	TDA-066	LLT-15
NPDAASO1004D063E226R	63	6	22	50	1.5			
NPDAASO1004D080E277R	80	7	27	63	1.5			

• Compatible con: HTCH • Placas NO Disponibles

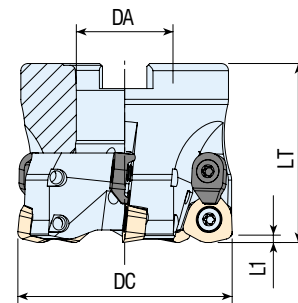
**Plato de Fresado - SPNW1004..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAASPNW1004D050E225R	50	5	22	50	1.5	SPNW1004..	TDA-045	LLT-15
NPDAASPNW1004D052E225R	52	5	22	50	1.5			
NPDAASPNW1004D063E226R	63	6	22	50	1.5			

• Compatible con: DJT • Placas NO Disponibles

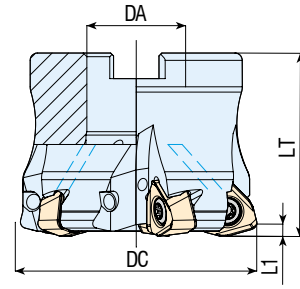
**Plato de Fresado - WD.W06T3.. / WD.W0805.. / WD.W10X6..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDAACWD06T3DD042E164R	42	4	16	45	1.5	WD.W06T3..	TDA-045	BDA-26	TDA-049	LLT-15
NPDAACWD06T3DD050E225R	50	5	22	50	1.5					
NPDAACWD06T3DD052E225R	52	5	22	50	1.5					
NPDAACWD0805DD052E224R	52	4	22	50	2	WD.W0805..	TDA-079	BDA-27	TDA-079	LLT-20
NPDAACWD0805DD063E225R	63	5	22	50	2					
NPDAACWD0805DD063E275R	63	5	27	50	2					
NPDAACWD0805DD066E275R	66	5	27	50	2					
NPDAACWD0805DD080E275	80	5	27	50	2					
NPDAACWD0805DD100E326	100	6	32	50	2					
NPDAACWD10X6DD125E406	125	6	40	63	2.5	WD.W10X6..	TDA-079	BDA-27	TDA-079	LLT-20
NPDAACWD10X6DD160E407	160	7	40	63	2.5					

• Compatible con: DJT • Placas NO Disponibles

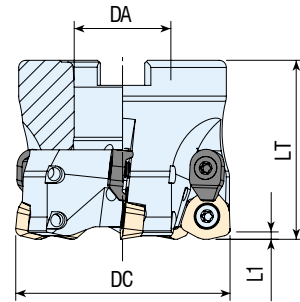
**Plato de Fresado - WNMX09T3..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAА-WN09T3-D040-E16-4R	40	4	16	40	1.5	WNMX09T3..	TDA-032	LLT-10
NPDAА-WN09T3-D050-E22-5R	50	5	22	40	1.5			
NPDAА-WN09T3-D063-E22-6R	63	6	22	40	1.5			

• Compatible con: KRLY • Placas NO Disponibles

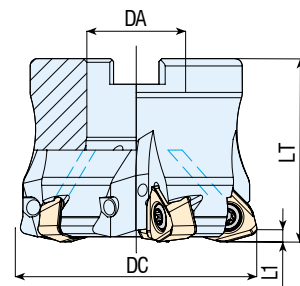
**Plato de Fresado - WDMT0804.. / WDMT1205..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Brida Placa	Tornillo Brida	Llave
NPDAAC-WD0804-D040-E16-4R	40	4	16	40	1.5	WDMT0804..	TDA-032	BDA-26	TDA-032	LLT-10
NPDAAC-WD0804-D050-E22-4R	50	4	22	50	1.5					
NPDAAC-WD1205-D050-E22-4R	50	4	22	50	3	WDMT1205..	TDA-058	BDA-18	TDA-066	LLT-15
NPDAAC-WD1205-D052-E22-4R	52	5	22	50	3					
NPDAAC-WD1205-D063-E22-5R	63	6	22	50	3					
NPDAAC-WD1205-D080-E27-6R	80	5	27	63	3					

• Compatible con: SMTM • Placas NO Disponibles

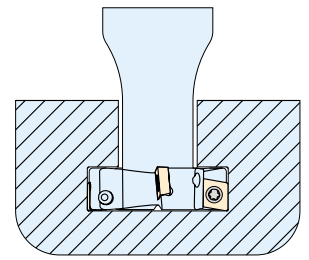
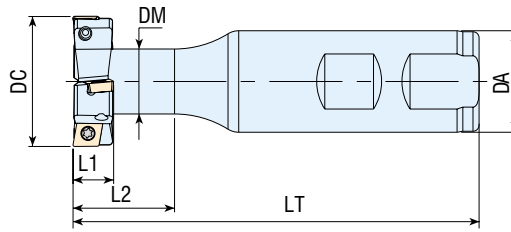
**Plato de Fresado - WNMU0907..**



REFERENCIA	DC	Z	DA	LT	L1	INSERTO	Tornillo Placa	Llave
NPDAА-WN0907-D050-E22-4R	50	4	22	50	3	WNMU0907..	TDA-082	LLT-20
NPDAА-WN0907-D052-E22-4R	52	4	22	50	3			
NPDAА-WN0907-D063-E22-5R	63	5	22	50	3			
NPDAА-WN0907-D066-E27-5R	66	5	27	50	3			
NPDAА-WN0907-D080-E27-6R	80	6	27	50	3			
NPDAА-WN0907-D100-E32-7R	100	7	32	50	3			

• Compatible con: DJT • Placas NO Disponibles

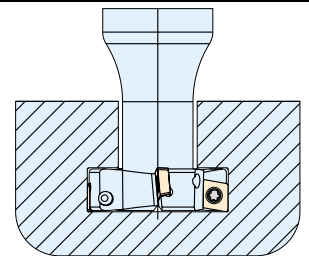
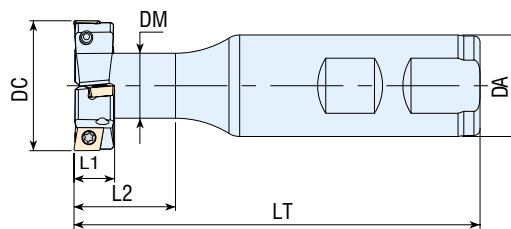
**Plato de Fresado 90° - CC..**



REFERENCIA	Z1	Z2	DC	L1	DA	LT	DM	L2	INSERTO	Tornillo Placa	Llave
NDF90-CC06-D17X8-W16-L85-2	2	1	17	8	16	85	10	16	CC..0602..	TDA-014	LLT-8
NDF90-CC06-D22X8-W20-L83-4	4	2	22	8	20	83	9	38			
NDF90-CC06-D32X8-W25-L100-4	4	2	32	8	25	100	16	23			
NDF90-CC06-D28X8-W20-L66-4	4	2	28	8	20	66	14	15.5			
NDF90-CC06-D45.5X8-W25-L100-6	6	3	45.5	8	25	100	12	30			
NDF90-CC06-D63X8-W32-L125-8	8	4	63	8	32	125	31.5	30			
NDF90-CC06-D18X9-W16-L90-2	2	1	18	9	16	90	10	16			
NDF90-CC06-D20X9-W16-L85-4	4	2	20	9	16	85	10	16			
NDF90-CC06-D23X10-W20-L90-4	4	2	23	10	20	90	12	25			
NDF90-CC06-D32X10-W25-L100-4	4	2	32	10	25	100	16	25			
NDF90-CC06-D45X10-W32-L120-6	6	3	45	10	32	120	20	25			
NDF90-CC06-D25X11-W25-L100-4	4	2	25	11	25	100	13	20			
NDF90-CC09-D30X12-W25-L100-4	4	2	30	12	25	100	16	25	CC..09T3..	TDA-047	LLT-15
NDF90-CC09-D32X12-W25-L100-2	2	1	32	12	25	100	16	25			
NDF90-CC09-D32X12-W25-L100-4	4	2	32	12	25	100	16	25			
NDF90-CC09-D32X14-W25-L100-4	4	2	32	14	25	100	16	25			
NDF90-CC09-D37X16-W32-L120-4	4	2	37	16	32	120	17	30			
NDF90-CC09-D40X17-W32-L120-4R	4	2	40	17	32	120	19	30			
NDF90-CC09-D42X17-W32-L120-4	4	2	42	17	32	120	19	30			
NDF90-CC12-D47X20-W32-L120-4	4	2	47	20	32	120	25	45	CC..1204..	TDA-081	LLT-20
NDF90-CC12-D52X21-W32-L120-4	4	2	52	21	32	120	25	45			
NDF90-CC12-D50X22-W32-L120-4	4	2	50	22	32	120	25	45			
NDF90-CC12-D55X22-W32-L120-4	4	2	55	22	32	120	2	45			

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

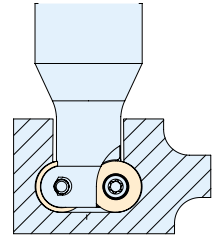
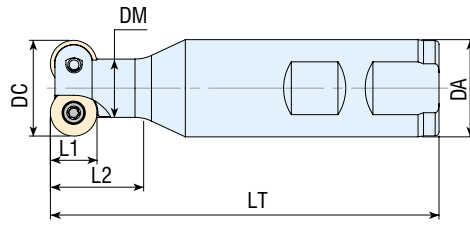
**Plato de Fresado 90° - SPGT**



REFERENCIA	Z1	Z2	DC	L1	DA	LT	DM	L2	INSERTO	Tornillo Placa	Llave
NDF90-SPGT0502-D63X6-W32-L125-10	10	5	63	6	32	125	31	30	SPGT050204	TDA-006	LLT-6
NDF90-SPGT0904-D32X14-W32-L120-4R	4	2	32	14	32	120	17.5	30	SPGT090408	TDA-047	LLT-15
NDF90-SPGT0904-D37X16-W32-L120-4R	4	2	37	16	32	120	21	40			
NDF90-SPGT0904-D42X17-W32-L120-4R	4	2	42	17	32	120	21	40			
NDF90-SPGT1104-D47X20-W32-L120-4R	4	2	47	20	32	120	24	45	SPGT110408	TDA-066	LLT-15

• Compatible con: ZCC - OKE • Placas Disponibles: Ver Sección Placas

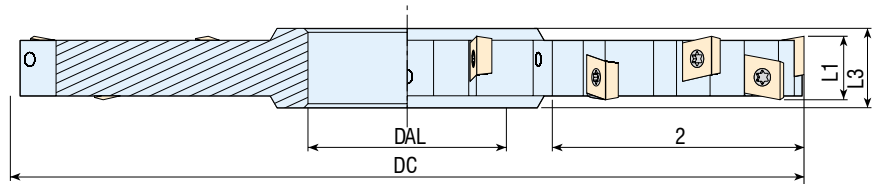
**Plato de Fresado - RD..**



REFERENCIA	Z	DC	L1	DA	LT	DM	L2	INSERTO	Tornillo Placa	Llave
NDFR-RD0702-D17-W16-L90-2	2	17	7	16	90	10	12	RD..0702	TDA-014	LLT-8
NDFR-RD0702-D25-W16-L90-3	3	25	7	16	90	15	12			
NDFR-RD0702-D35-W25-L100-5	5	35	7	25	100	20	20			
NDFR-RD1003-D21-W25-L100-2	2	21	10	25	100	12	20	RD..1003	TDA-047	LLT-15
NDFR-RD1003-D80-W32-L165-6R	6	80	10	32	165	30	31.5			
NDFR-RD12T3-D25-W25-L100-2	2	25	12	25	100	15	24	RD..12T3	TDA-047	LLT-15
NDFR-RD12T3-D80-W32-L165-6R	6	80	12	32	165	30	31.5			
NDFR-RD1604-D34-W32-L110-2	2	34	16	32	110	20	30	RD..1604	TDA-077	LLT-15

• Compatible con: ZCC - OKE • Placas Disponibles: Ver Sección Placas

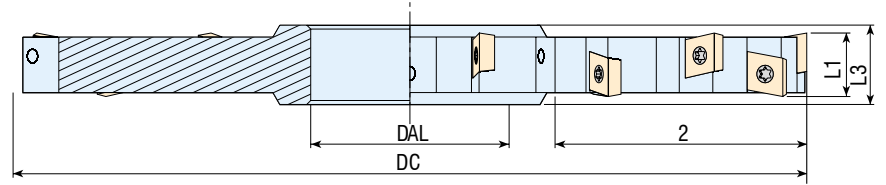
**Disco de Fresado 90° - SPGT**



REFERENCIA	Z	Z2	DC	L1	L2	DA	L3	INSERTO	Tornillo Placa	Llave
NDDF-SPGT05-D80x6-D27-10	10	5	80	6	17	27	10	SPGT050204	TDA-006	LLT-6
NDDF-SPGT05-D100x6-D32-12	12	6	100	6	25	32	10			
NDDF-SPGT05-D125x6-D40-14	14	7	125	6	35	40	10			
NDDF-SPGT05-D160x6-D40-Z18	18	9	160	6	52	40	10			
NDDF-SPGT06-D80x7-D27-10	10	5	80	7	17	27	11	SPGT060204	TDA-008	80-T07
NDDF-SPGT06-D100x7-D32-12	12	6	100	7	25	32	11			
NDDF-SPGT06-D125x7-D40-14	14	7	125	7	35	40	11			
NDDF-SPGT06-D160x7-D40-16	16	8	160	7	52	40	11			
NDDF-SPGT06-D200x7-D40-18	18	9	200	7	70	40	11			
NDDF-SPGT07-D100x10-D27-10	10	5	100	10	26.5	27	14	SPGT07T308	TDA-014	LLT-8
NDDF-SPGT07-D100x10-D32-12	12	6	100	10	25	32	11			

• Compatible con: ZCC - OKE • Placas Disponibles: Ver Sección Placas

**Disco de Fresado 90° - CC..**

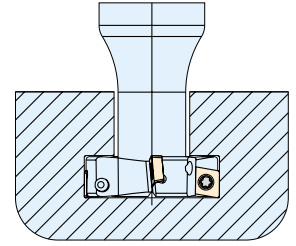
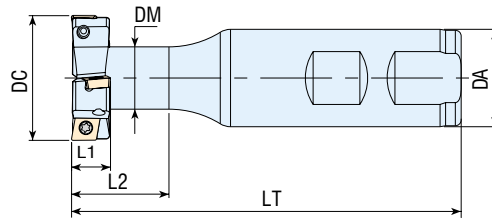


REFERENCIA	Z	Z2	DC	L1	L2	DA	L3	INSERTO	Tornillo Placa	Llave
NDDF-CC06-D80x8-D27-10	10	5	80	8	17	27	12	CC..0602	TDA-014	LLT-8
NDDF-CC06-D100x8-D32-12	12	6	100	8	25	32	12			
NDDF-CC06-D125x8-D40-14	14	7	125	8	35	40	12			
NDDF-CC06-D160x8-D40-16	16	8	160	8	52	40	12			
NDDF-CC06-D200x8-D40-Z18	18	9	200	8	70	40	12			
NDDF-CC06-D80x10-D27-10	10	5	80	10	17	27	14			
NDDF-CC06-D100x10-D32-12	12	6	100	10	25	32	14			
NDDF-CC06-D125x10-D40-14	14	7	125	10	35	40	14			
NDDF-CC06-D160x10-D40-16	16	8	160	10	52	40	14			
NDDF-CC06-D200x10-D40-18	18	9	200	10	70	40	14			
NDDF-CC09-D80x12-D27-8	8	4	80	12	17	27	16	CC..09T3	TDA-049	LLT-15
NDDF-CC09-D100x12-D32-10	10	5	100	12	25	32	16			
NDDF-CC09-D125x12-D40-12	12	6	125	12	35	40	16			
NDDF-CC09-D160x12-D40-14	14	7	160	12	52	40	16			
NDDF-CC09-D200x12-D40-16	16	8	200	12	70	40	16			
NDDF-CC09-D80x14-D27-8	8	4	80	14	17	27	18			
NDDF-CC09-D100x14-D32-10	10	5	100	14	25	32	18			
NDDF-CC09-D125x14-D40-12	12	6	125	14	35	40	18			
NDDF-CC09-D160x14-D40-14	14	7	160	14	52	40	18			
NDDF-CC09-D200x14-D40-16	16	8	200	14	70	40	18			
NDDF-CC12-D80x16-D27-6	6	3	80	16	17	27	20	CC.1204	TDA-081	LLT-20
NDDF-CC12-D100x16-D32-8	8	4	100	16	25	32	20			
NDDF-CC12-D125x16-D40-10	10	5	125	16	35	40	20			
NDDF-CC12-D160x16-D40-12	12	6	160	16	52	40	20			
NDDF-CC12-D200x16-D40-14	14	7	200	16	70	40	20			
NDDF-CC12-D80x18-D27-6	6	3	80	18	17	27	22			
NDDF-CC12-D100x18-D32-8	8	4	100	18	25	32	22			
NDDF-CC12-D125x18-D40-10	10	5	125	18	35	40	22			
NDDF-CC12-D160x18-D40-12	12	6	160	18	52	40	22			
NDDF-CC12-D200x18-D40-14	14	7	200	18	70	40	22			
NDDF-CC12-D250x18-D40-16	16	8	250	18	90	40	22			
NDDF-CC12-D80x20-D27-6	6	3	80	20	17	27	24			
NDDF-CC12-D100x20-D32-8	8	4	100	20	25	32	24			
NDDF-CC12-D125x20-D40-10	10	5	125	20	35	40	24			
NDDF-CC12-D160x20-D40-12	12	6	160	20	52	40	24			
NDDF-CC12-D200x20-D40-14	14	7	200	20	70	40	24			
NDDF-CC12-D250x20-D40-16	16	8	250	20	90	40	24			

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas



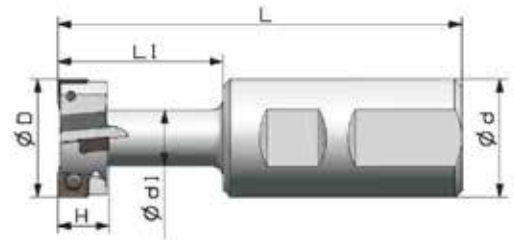
**Plato de Fresado 90° - SPMG**



REFERENCIA	Z1	Z2	DC	L1	DA	LT	DM	L2	INSERTO	Tornillo Placa	Llave
NDF90-SP05-D22.5X5-W25-L100-4	4	2	22.5	5	25	100	12	25	SPMG050204	TDA-006	LLT-6
NDF90-SP05-D25X5-W25-L100-4	4	2	25	5	25	100	9	25			
NDF90-SP05-D30X5-W25-L100-4	4	2	30	5	25	100	10	25			
NDF90-SP06-D80X7-W32-L120-10	10	5	80	7	32	120	32	30	SPMG060204	TDA-008	LLT-7

• Compatible con: TGTC - NIXA • Placas Disponibles: Ver Sección Placas

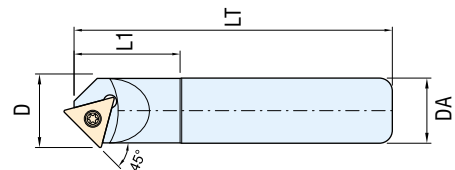
**Porta de Fresado 90° - MPHT...**



REFERENCIA	ØD	Ød	Ød1	L	L1	H	INSERTO	Tornillo Placa	Llave
NDF90-MPHT06-D21	21	25	10	100	32	9	MPHT060304	TDA-135	LLT-8
NDF90-MPHT06-D25	25	25	12	100	35	11			
NDF90-MPHT08-D32	32	32	15	110	45	14	MPHT080305	TDA-136	LLT-10
NDF90-MPHT12-D40	40	32	19	125	55	18	MPHT120408	TDA-137	LLT-20
NDF90-MPHT12-D50	50	40	25	140	65	22			

• Compatible con: ZCC • Placas NO Disponibles

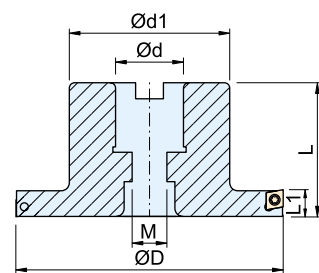
**Porta de Fresado 45 - Chaflán TC..16T3..**



REFERENCIA	D	DA	LT	°	L1	Z	INSERTO	Tornillo Placa	Llave
NPDF45-TC-D20-130-1	21.5	20	130	45°	35	1	TC..16T3	TDA-142	LLT-15

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

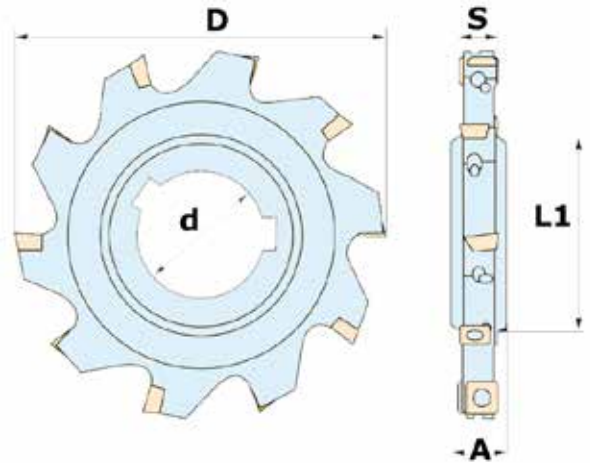
**Disco con Eje para Fresado Ranura - CCMT..**



REFERENCIA	D	d	d1	L	L1	M	Z	INSERTO	Tornillo Placa	Llave
NPDFD-CC08-D80-40-6	80	22	48	40	12	11	61	CCMT0803..	TDA-148	LLT-9

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

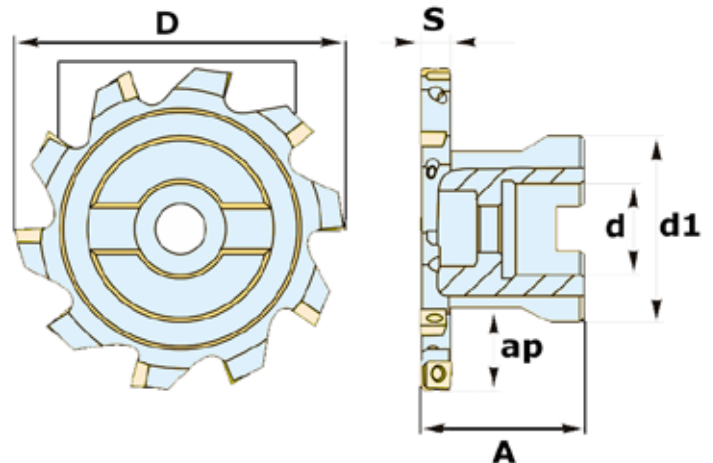
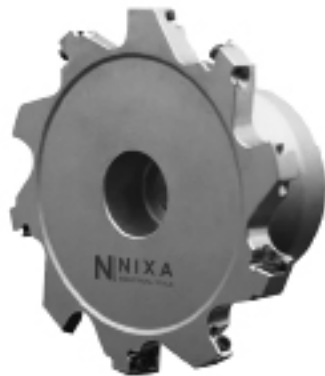
**Disco de Fresado 90° - MPHT...**



REFERENCIA	D	L1	d	S	A	INSERTO	Tornillo Placa	Llave
NDFF-MPHT06-D80-E27-S8-10	80	41	27	8	12	MPHT060304	TDA-135	LLT-8
NDFF-MPHT06-D100-E32-S8-14	100	47	32	8	12			
NDFF-MPHT06-D100-E32-S10-14	100	47	32	10	14			
NDFF-MPHT06-D125-E40-S10-16	125	55	40	10	14			
NDFF-MPHT08-D125-E40-S12-12	125	55	40	12	16	MPHT080305	TDA-136	LLT-10
NDFF-MPHT08-D160-E40-S12-14	160	62	40	12	16			
NDFF-MPHT12-D160-E40-S16-12	160	62	40	16	20	MPHT120408	TDA-137	LLT-20
NDFF-MPHT12-D160-E40-S18-12	160	62	40	18	24			
NDFF-MPHT12-D160-E40-S20-12	160	62	40	20	26			
NDFF-MPHT12-D200-E50-S16-14	200	72	50	16	20			
NDFF-MPHT12-D200-E50-S18-14	200	72	50	18	24			
NDFF-MPHT12-D200-E50-S20-14	200	72	50	20	26			

• Compatible con: ZCC • Placas NO Disponibles

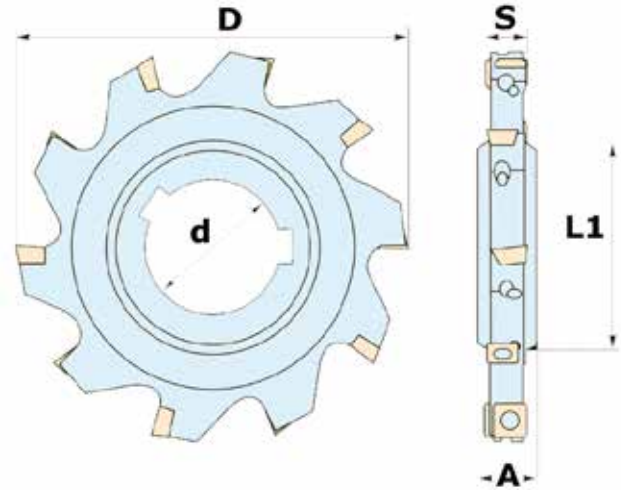
**Disco de Fresado 90° Con Eje - MPHT...**



REFERENCIA	D	d1	d	A	S	ap	INSERTO	Tornillo Placa	Llave
NPDFE-MPHT06-D080-E22-S8-10	80	45	22	40	8	21	MPHT060304	TDA-135	LLT-8
NPDFE-MPHT06-D100-E27-S8-14	100	55	27	40	8	24			
NPDFE-MPHT06-D100-E27-S10-14	100	55	27	40	10	24			
NPDFE-MPHT06-D125-E32-S10-16	125	65	32	45	10	33			
NPDFE-MPHT08-D125-E32-S12-12	125	65	32	45	12	33	MPHT080305	TDA-136	LLT-10
NPDFE-MPHT08-D160-E40-S12-14	160	80	40	45	12	45			
NPDFE-MPHT08-D200-E40-S12-18	200	92	40	50	12	53			
NPDFE-MPHT12-D125-E32-S16-10	125	65	32	50	16	30	MPHT120408	TDA-137	LLT-20
NPDFE-MPHT12-D160-E40-S16-12	160	80	40	60	16	45			
NPDFE-MPHT12-D160-E40-S18-12	160	80	40	60	18	45			
NPDFE-MPHT12-D200-E40-S16-14	200	92	40	50	16	53			
NPDFE-MPHT12-D200-E40-S18-14	200	92	40	50	18	53			
NPDFE-MPHT12-D200-E40-S20-14	200	92	40	50	20	53			

• Compatible con: ZCC • Placas NO Disponibles

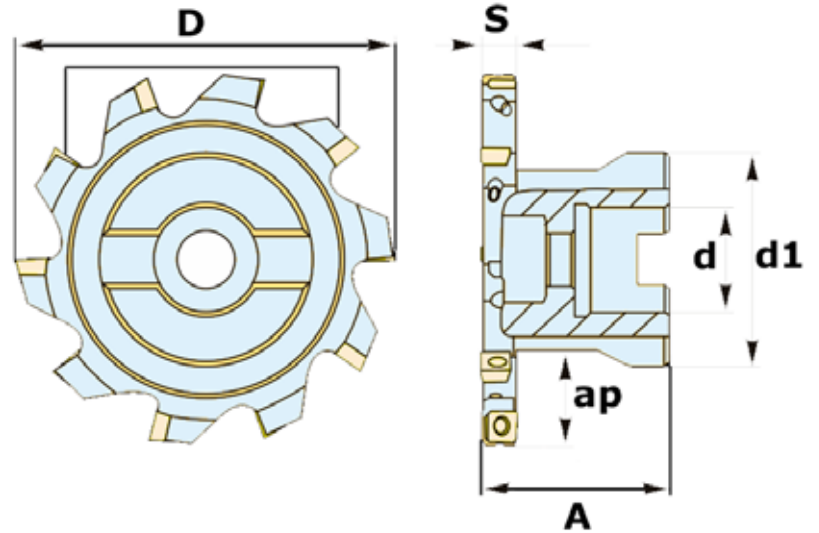
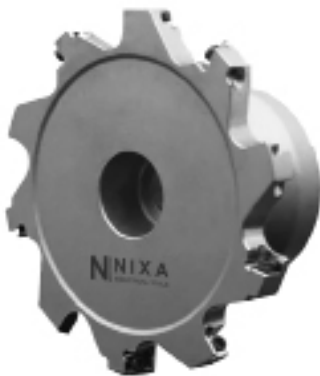
**Disco de Fresado 90° - X3...**



REFERENCIA	D	L1	d	S	A	INSERTO	Tornillo Placa	Llave
NPDDF-X308-D125-E40-S12-12	125	55	40	12	16	X3-084508H	TDA-138	LLT-10
NPDDF-X308-D160-E40-S12-14	160	62	40	12	16			
NPDDF-X3115-D160-E40-S16-14	160	62	40	16	20	X3-115008H	TDA-139	LLT-15
NPDDF-X3115-D160-E40-S18-14	160	62	40	18	24			
NPDDF-X3115-D160-E50-S16-16	200	72	50	16	20			
NPDDF-X3115-D160-E50-S16-18	200	72	50	18	24			
NPDDF-X3145-D200-E50-S20-16	200	72	50	20	26	X3-145008H	TDA-139	LLT-15
NPDDF-X3145-D200-E50-S24-16	200	72	50	24	28			
NPDDF-X3145-D250-E50-S20-18	250	72	50	20	26			
NPDDF-X3145-D250-E50-S24-18	250	72	50	24	28			

• Compatible con: SNDVK • Placas NO Disponibles

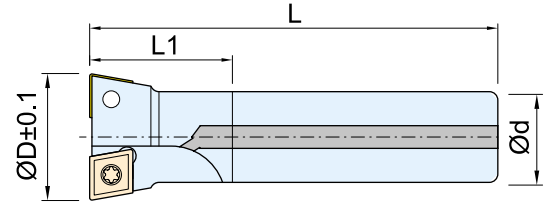
**Disco de Fresado 90° Con Eje - X3...**



REFERENCIA	D	d1	d	A	S	INSERTO	Tornillo Placa	Llave
NPDDFE-X308-D125-S12-12	125	65	32	45	12	X3-084508H	TDA-138	LLT-10
NPDDFE-X308-D160-S12-14	160	80	40	45	12			
NPDDFE-X3115-D160-S16-14	160	80	40	50	16	X3-115008H	TDA-139	LLT-15
NPDDFE-X3115-D160-S18-14	160	80	40	50	18			
NPDDFE-X3115-D200-S16-16	200	92	40	50	16			
NPDDFE-X3115-D200-S18-16	200	92	40	50	18			
NPDDFE-X3145-D200-S20-16	200	92	40	50	20	X3-145008H	TDA-139	LLT-15
NPDDFE-X3145-D200-S24-16	200	92	40	50	24			
NPDDFE-X3145-D250-S20-18	250	135	60	63	20			
NPDDFE-X3145-D250-S24-18	250	135	60	63	24			

• Compatible con: SNDVK • Placas NO Disponibles

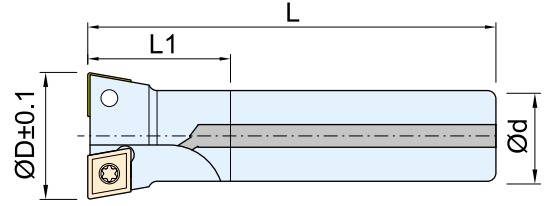
**Portaherramientas Agujeros - Modelo Básico - Rango 8-24 mm**



REFERENCIA	Diámetro	d	D (Re=0.4)	L1	L	Z	INSERTO	Tornillo Placa
NPDE-D8-S16-120	8	16	7,8	12	120	1	CC..060204	TDA-140
NPDE-D9-S16-120	9	16	8,8	14	120	1		
NPDE-D10-S16-120	10	16	9,8	25	120	1		
NPDE-D10-S16-160	10	16	9,8	25	160	1		
NPDE-D10-S16-200	10	16	9,8	25	200	1		
NPDE-D11-S16-120	11	16	10,8	25	120	1		
NPDE-D11-S16-160	11	16	10,8	25	160	1		
NPDE-D11-S16-200	11	16	10,8	25	200	1		
NPDE-D12-S16-120	12	16	11,8	30	120	1		
NPDE-D12-S16-160	12	16	11,8	30	160	1		
NPDE-D12-S16-200	12	16	11,8	30	200	1		
NPDE-D13-S16-120	13	16	12,8	30	120	1		
NPDE-D13-S16-160	13	16	12,8	30	160	1		
NPDE-D13-S16-200	13	16	12,8	30	200	1		
NPDE-D14-S16-120	14	16	13,8	30	120	1		
NPDE-D14-S16-160	14	16	13,8	30	160	1		
NPDE-D14-S16-200	14	16	13,8	30	200	1		
NPDE-D15-S16-120	15	16	14,8	30	120	1		
NPDE-D15-S16-160	15	16	14,8	30	160	1		
NPDE-D15-S16-200	15	16	14,8	30	200	1		
NPDE-D16-S16-120	16	16	15,8	30	120	2		
NPDE-D16-S16-160	16	16	15,8	30	160	2		
NPDE-D16-S16-200	16	16	15,8	30	200	2		
NPDE-D17-S16-120	17	16	16,8	30	120	2		
NPDE-D17-S16-160	17	16	16,8	30	160	2		
NPDE-D17-S16-200	17	16	16,8	30	200	2		
NPDE-D18-S16-120	18	16	17,8	30	120	2		
NPDE-D18-S16-160	18	16	17,8	30	160	2		
NPDE-D18-S16-200	18	16	17,8	30	200	2		
NPDE-D18-S16-250	18	16	17,8	30	250	2		
NPDE-D19-S16-120	19	16	18,8	30	120	2		
NPDE-D19-S16-160	19	16	18,8	30	160	2		
NPDE-D19-S16-200	19	16	18,8	30	200	2		
NPDE-D19-S16-250	19	16	18,8	30	250	2		
NPDE-D20-S16-120	20	16	19,8	30	120	2		
NPDE-D20-S16-160	20	16	19,8	30	160	2		
NPDE-D20-S16-200	20	16	19,8	30	200	2		
NPDE-D20-S16-250	20	16	19,8	30	250	2		
NPDE-D21-S16-120	21	16	20,8	30	120	2		
NPDE-D21-S16-160	21	16	20,8	30	160	2		
NPDE-D21-S16-200	21	16	20,8	30	200	2		
NPDE-D21-S16-250	21	16	20,8	30	250	2		
NPDE-D22-S16-120	22	16	21,8	30	120	2		
NPDE-D22-S16-160	22	16	21,8	30	160	2		
NPDE-D22-S16-200	22	16	21,8	30	200	2		
NPDE-D22-S16-250	22	16	21,8	30	250	2		
NPDE-D23-S20-130	23	20	22,8	30	130	2		
NPDE-D23-S20-160	23	20	22,8	30	160	2		
NPDE-D23-S20-200	23	20	22,8	30	200	2		
NPDE-D23-S20-250	23	20	22,8	30	250	2		
NPDE-D24-S20-130	24	20	23,8	30	130	2		
NPDE-D24-S20-160	24	20	23,8	30	160	2		
NPDE-D24-S20-200	24	20	23,8	30	200	2		
NPDE-D24-S20-250	24	20	23,8	30	250	2		

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

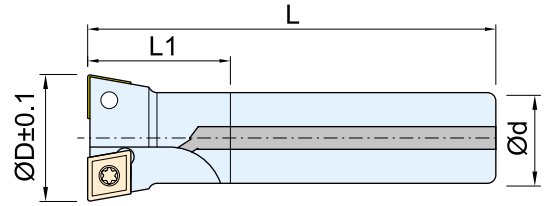
Portaherramientas Agujeros - Modelo Básico - Rango 25-37 mm



REFERENCIA	Diámetro	d	D (Re=0.4)	L1	L	Z	INSERTO	Tornillo Placa
NPDE-D25-S20-130	25	20	24,8	30	130	2	CC..060204	TDA-140
NPDE-D25-S20-160	25	20	24,8	30	160	2		
NPDE-D25-S20-200	25	20	24,8	30	200	2		
NPDE-D25-S20-250	25	20	24,8	30	250	2		
NPDE-D26-S20-130	26	20	25,8	30	130	2	CC..09T304	TDA-142
NPDE-D26-S20-160	26	20	25,8	30	160	2		
NPDE-D26-S20-200	26	20	25,8	30	200	2		
NPDE-D26-S20-250	26	20	25,8	30	250	2		
NPDE-D27-S20-130	27	20	26,8	30	130	2		
NPDE-D27-S20-160	27	20	26,8	30	160	2		
NPDE-D27-S20-200	27	20	26,8	30	200	2		
NPDE-D27-S20-250	27	20	26,8	30	250	2		
NPDE-D28-S20-130	28	20	27,8	30	130	2		
NPDE-D28-S20-160	28	20	27,8	30	160	2		
NPDE-D28-S20-200	28	20	27,8	30	200	2		
NPDE-D28-S20-250	28	20	27,8	30	250	2		
NPDE-D29-S20-130	29	20	28,8	30	130	2		
NPDE-D29-S25-160	29	25	28,8	30	160	2		
NPDE-D29-S20-160	29	20	28,8	30	160	2		
NPDE-D29-S25-200	29	25	28,8	30	200	2		
NPDE-D29-S20-200	29	20	28,8	30	200	2		
NPDE-D29-S25-250	29	25	28,8	30	250	2		
NPDE-D30-S25-160	30	25	29,8	40	160	2		
NPDE-D30-S25-200	30	25	29,8	40	200	2		
NPDE-D30-S25-250	30	25	29,8	40	250	2		
NPDE-D30-S25-300	30	25	29,8	40	300	2		
NPDE-D31-S25-160	31	25	30,8	40	160	2		
NPDE-D31-S25-200	31	25	30,8	40	200	2		
NPDE-D31-S25-250	31	25	30,8	40	250	2		
NPDE-D31-S25-300	31	25	30,8	40	300	2		
NPDE-D32-S25-160	32	25	31,8	40	160	2		
NPDE-D32-S25-200	32	25	31,8	40	200	2		
NPDE-D32-S25-250	32	25	31,8	40	250	2		
NPDE-D32-S25-300	32	25	31,8	40	300	2		
NPDE-D33-S25-160	33	25	32,8	40	160	2		
NPDE-D33-S25-200	33	25	32,8	40	200	2		
NPDE-D33-S25-250	33	25	32,8	40	250	2		
NPDE-D33-S25-300	33	25	32,8	40	300	2		
NPDE-D34-S25-160	34	25	33,8	40	160	2		
NPDE-D34-S25-200	34	25	33,8	40	200	2		
NPDE-D34-S25-250	34	25	33,8	40	250	2		
NPDE-D34-S25-300	34	25	33,8	40	300	2		
NPDE-D35-S25-160	35	25	34,8	40	160	2		
NPDE-D35-S25-200	35	25	34,8	40	200	2		
NPDE-D35-S25-250	35	25	34,8	40	250	2		
NPDE-D35-S25-300	35	25	34,8	40	300	2		
NPDE-D36-S25-160	36	25	35,8	40	160	2		
NPDE-D36-S25-200	36	25	35,8	40	200	2		
NPDE-D36-S25-250	36	25	35,8	40	250	2		
NPDE-D36-S25-300	36	25	35,8	40	300	2		
NPDE-D37-S25-160	37	25	36,8	40	160	2		
NPDE-D37-S25-200	37	25	36,8	40	200	2		
NPDE-D37-S25-250	37	25	36,8	40	250	2		
NPDE-D37-S25-300	37	25	36,8	40	300	2		

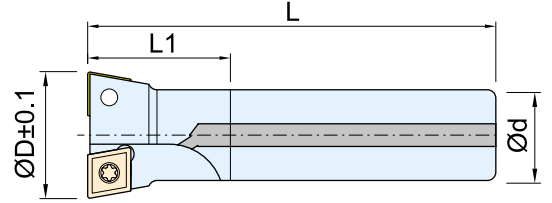
• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

**Portaherramientas Agujeros - Modelo Básico - Rango 35-45 mm**



REFERENCIA	Diámetro	d	D (Re=0.4)	L1	L	Z	INSERTO	Tornillo Placa
NPDE-D38-S25-160	38	25	37,8	40	160	2	CC..09T304	TDA-142
NPDE-D38-S25-200	38	25	37,8	40	200	2		
NPDE-D38-S25-250	38	25	37,8	40	250	2		
NPDE-D38-S25-300	38	25	37,8	40	300	2		
NPDE-D39-S25-160	39	25	38,8	40	160	2		
NPDE-D39-S25-200	39	25	38,8	40	200	2		
NPDE-D39-S25-250	39	25	38,8	40	250	2		
NPDE-D39-S25-300	39	25	38,8	40	300	2		
NPDE-D40-S25-160	40	25	39,8	40	160	2		
NPDE-D40-S25-200	40	25	39,8	40	200	2		
NPDE-D40-S25-250	40	25	39,8	40	250	2		
NPDE-D40-S25-300	40	25	39,8	40	300	2		
NPDE-D35-S32-160	35	32	34,8	50	160	2	CC..09T304	TDA-142
NPDE-D35-S32-200	35	32	34,8	50	200	2		
NPDE-D35-S32-250	35	32	34,8	50	250	2		
NPDE-D35-S32-300	35	32	34,8	50	300	2		
NPDE-D36-S32-160	36	32	35,8	60	160	2		
NPDE-D36-S32-200	36	32	35,8	60	200	2		
NPDE-D36-S32-250	36	32	35,8	60	250	2		
NPDE-D36-S32-300	36	32	35,8	60	300	2		
NPDE-D37-S32-160	37	32	36,8	60	160	2		
NPDE-D37-S32-200	37	32	36,8	60	200	2		
NPDE-D37-S32-250	37	32	36,8	60	250	2		
NPDE-D37-S32-300	37	32	36,8	60	300	2		
NPDE-D38-S32-160	38	32	37,8	40	160	2		
NPDE-D38-S32-200	38	32	37,8	40	200	2		
NPDE-D38-S32-250	38	32	37,8	40	250	2		
NPDE-D38-S32-300	38	32	37,8	40	300	2		
NPDE-D39-S32-160	39	32	38,8	40	160	2		
NPDE-D39-S32-200	39	32	38,8	40	200	2		
NPDE-D39-S32-250	39	32	38,8	40	250	2		
NPDE-D39-S32-300	39	32	38,8	40	300	2		
NPDE-D40-S32-160	40	32	39,8	45	160	2		
NPDE-D40-S32-200	40	32	39,8	45	200	2		
NPDE-D40-S32-250	40	32	39,8	45	250	2		
NPDE-D40-S32-300	40	32	39,8	45	300	2		
NPDE-D41-S32-200	41	32	40,8	45	200	2		
NPDE-D41-S32-250	41	32	40,8	45	250	2		
NPDE-D41-S32-300	41	32	40,8	45	300	2		
NPDE-D42-S32-200	42	32	41,8	45	200	2		
NPDE-D42-S32-250	42	32	41,8	45	250	2		
NPDE-D42-S32-300	42	32	41,8	45	300	2		
NPDE-D43-S32-200	43	32	42,8	45	200	2		
NPDE-D43-S32-250	43	32	42,8	45	250	2		
NPDE-D43-S32-300	43	32	42,8	45	300	2		
NPDE-D44-S32-200	44	32	43,8	45	200	2		
NPDE-D44-S32-250	44	32	43,8	45	250	2		
NPDE-D44-S32-300	44	32	43,8	45	300	2		
NPDE-D45-S32-200	36	25	35,8	40	300	2		
NPDE-D45-S32-250	37	25	36,8	40	160	2		
NPDE-D45-S32-300	37	25	36,8	40	200	2		

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

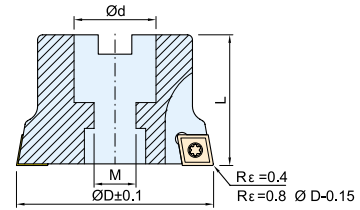
**Portaherramientas Agujeros - Modelo Básico - Rango 50-70 mm**


REFERENCIA	Diámetro	d	D (Re=0.4)	L1	L	Z	INSERTO	Tornillo Placa
NPDE-D45-S32-200	45	32	44,8	45	200	2	CC..09T304	TDA-142
NPDE-D45-S32-250	45	32	44,8	45	250	2		
NPDE-D45-S32-300	45	32	44,8	45	300	2		
NPDE-D46-S32-200	46	32	45,8	45	200	2		
NPDE-D46-S32-250	46	32	45,8	45	250	2		
NPDE-D46-S32-300	46	32	45,8	45	300	2		
NPDE-D47-S32-200	47	32	46,8	45	200	2		
NPDE-D47-S32-250	47	32	46,8	45	250	2		
NPDE-D47-S32-300	47	32	46,8	45	300	2		
NPDE-D48-S32-200	48	32	47,8	45	200	2		
NPDE-D48-S32-250	48	32	47,8	45	250	2		
NPDE-D48-S32-300	48	32	47,8	45	300	2		
NPDE-D49-S32-200	49	32	48,9	45	200	2		
NPDE-D49-S32-250	49	32	48,9	45	250	2		
NPDE-D49-S32-300	49	32	48,9	45	300	2		
NPDE-D50-S32-200	50	32	49,8	45	200	2		
NPDE-D50-S32-250	50	32	49,8	45	250	2		
NPDE-D50-S32-300	50	32	49,8	45	300	2		
NPDE-D51-S32-200	51	32	50,8	45	200	2		
NPDE-D51-S32-250	51	32	50,8	45	250	2		
NPDE-D51-S32-300	51	32	50,8	45	300	2		
NPDE-D52-S32-200	52	32	51,8	45	200	2		
NPDE-D52-S32-250	52	32	51,8	45	250	2		
NPDE-D52-S32-300	52	32	51,8	45	300	2		
NPDE-D53-S32-200	53	32	52,8	45	200	2		
NPDE-D53-S32-250	53	32	52,8	45	250	2		
NPDE-D53-S32-300	53	32	52,8	45	300	2		
NPDE-D54-S32-200	54	32	53,8	45	200	2		
NPDE-D54-S32-250	54	32	53,8	45	250	2		
NPDE-D54-S32-300	54	32	53,8	45	300	2		
NPDE-D55-S32-200	55	32	54,8	45	200	2		
NPDE-D55-S32-250	55	32	54,8	45	250	2		
NPDE-D55-S32-300	55	32	54,8	45	300	2		
NPDE-D56-S32-200	56	32	55,8	45	200	2		
NPDE-D56-S32-250	56	32	55,8	45	250	2		
NPDE-D56-S32-300	56	32	55,8	45	300	2		
NPDE-D57-S32-200	57	32	56,8	45	200	2		
NPDE-D57-S32-250	57	32	56,8	45	250	2		
NPDE-D57-S32-300	57	32	56,8	45	300	2		

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas



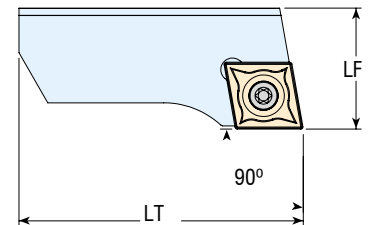
**Portaherramientas Agujeros - Modelo Básico Para Eje Rango 50-80 mm**



REFERENCIA	Diámetro	Eje	D (Re=0.4)	L	M	Z	INSERTO	Tornillo Placa
NPDE-D50-E22-L50	50	32	49,9	50	11	2	CC..09T304	TDA-142
NPDE-D51-E22-L50	51	32	50,8	50	11	2		
NPDE-D52-E22-L50	52	32	51,8	50	11	2		
NPDE-D53-E22-L50	53	32	52,8	50	11	2		
NPDE-D54-E22-L50	54	32	53,8	50	11	2		
NPDE-D55-E22-L50	55	32	54,8	50	11	2		
NPDE-D56-E22-L50	56	32	55,8	50	11	2		
NPDE-D57-E22-L50	57	32	56,8	50	11	2		
NPDE-D58-E22-L50	58	32	57,8	50	11	2		
NPDE-D59-E22-L50	59	32	58,8	50	11	2		
NPDE-D60-E22-L50	60	32	59,8	50	11	2		
NPDE-D61-E22-L50	61	32	60,8	50	11	2		
NPDE-D62-E22-L50	62	32	61,8	50	11	2		
NPDE-D63-E22-L50	63	32	62,8	50	11	2		
NPDE-D64-E22-L50	64	32	63,8	50	11	2		
NPDE-D65-E22-L50	65	32	64,8	50	11	2		
NPDE-D66-E22-L50	66	32	65,8	50	11	2		
NPDE-D67-E22-L50	67	32	66,8	50	11	2		
NPDE-D68-E22-L50	68	32	67,8	50	11	2		
NPDE-D69-E22-L50	69	32	68,8	50	11	2		
NPDE-D70-E22-L50	70	32	69,8	50	11	2		

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

**Cartuchos para Porta de Mandrinar**

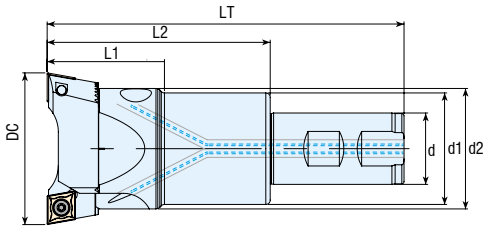


REFERENCIA	Para Inserto	Rango	LT	LF	Tornillo Placa	LLAVE
CDM1-18-22-CC06	CC.T 0602..	18-22	15	9	TDA-018	LLT2-08
CDM1-22-28-CC06		22-28	19	10		
CDM1-28-38-CC06		28-38	23	13		
CDM1-36-50-CC06		36-50	32	16		
CDM1-36-50-CC09	CC.T 09T3..	36-50	32	16	TDA-046	LLT-15
CDM1-50-68-CC09		50-68	40	20		
CDM1-50-68-CC12		50-68	40	20		
CDM1-68-90-CC12		68-90	54	23		
CDM1-90-120-CC12	CC.T 1204..	90-120	70	28	TDA-081	LLT-20
CDM1-120-160-CC12		120-160	95	32		
CDM1-160-200-CC12		160-200	120	32		
CDM2-28-38-CC06	CC.T 0602..	28-38	23	12.8	TDA-018	LLT2-08
CDM2-36-50-CC06		36-50	32	15.8		
CDM2-36-50-CC09	CC.T 09T3..	36-50	32	15.8	TDA-046	LLT-15
CDM2-50-68-CC09		50-68	40	19.7		
CDM2-50-68-CC12	CC.T 1204..	50-68	40	19.7	TDA-081	LLT-20
CDM2-68-90-CC12		68-90	54	22.7		
CDM2-90-120-CC12		90-120	70	27.7		
CDM2-120-160-CC12		120-160	95	31.7		
CDM2-160-200-CC12		160-200	120	31.7		

• Compatible con: PLACAS ISO • Placas Disponibles: Ver Sección Placas

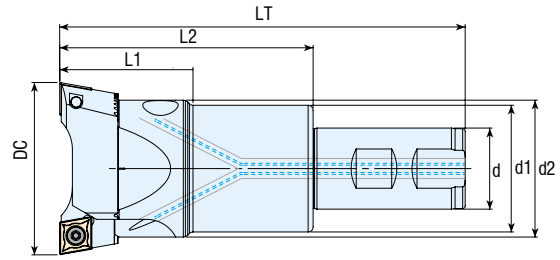
## Porta de Mandrinado para Placa ISO - CC..

Conjunto de Portaherramientas + Cartuchos para mandrinar incluidos.



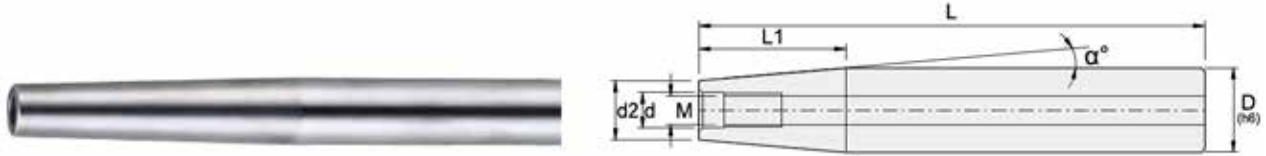
REFERENCIA	Rango	d	d1	d2	LT	L2	L1	Para Cartucho	Cuerpo
NPDM-D18X22-W16-L150-CC06	18-22	16	-	-	90	42	-	CDM1-18-22-CC06	CDM-D16X102-W16-L150
NPDM-D18X22-W16-L200-CC06	18-22	16	-	-	150	102	-		CDM-D16X152-W16-L200
NPDM-D18X22-W16-L90-CC06	18-22	16	-	-	200	152	-		CDM-D16X42-W16-L90
NPDM-D22X28-W20-L100-CC06	22-28	20	-	-	100	50	-	CDM1-22-28-CC06	CDM-D20X50-W20-L100
NPDM-D22X28-W20-L150-CC06	22-28	20	-	-	150	100	-		CDM-D20X100-W20-L150
NPDM-D22X28-W20-L200-CC06	22-28	20	-	-	200	150	-		CDM-D20X150-W20-L200
NPDM-D28X38-W20-L110-CC06	28-38	20	25	-	110	60	-	CDM1-28-38-CC06 CDM2-28-38-CC06	CDM-D25X60-W20-L110
NPDM-D28X38-W20-L160-CC06	28-38	20	25	-	160	110	-		CDM-D25X110-W20-L160
NPDM-D28X38-W20-L230-CC06	28-38	20	25	-	230	180	-		CDM-D25X180-W20-L230
NPDM-D36X50-W25-L120-CC06	36-50	25	32	-	120	64	-	CDM1-36-50-CC06 CDM2-36-50-CC06	CDM-D32X64-W25-L120
NPDM-D36X50-W25-L120-CC09	36-50	25	32	-	170	114	-	CDM1-36-50-CC09 CDM2-36-50-CC09	CDM-D32X64-W25-L120
NPDM-D36X50-W25-L170-CC06	36-50	25	32	-	250	194	-	CDM1-36-50-CC06 CDM2-36-50-CC06	CDM-D32X114-W25-L170
NPDM-D36X50-W25-L170-CC09	36-50	25	32	-	120	61	-	CDM1-36-50-CC09 CDM2-36-50-CC09	CDM-D32X114-W25-L170
NPDM-D36X50-W25-L250-CC06	36-50	25	32	-	170	114	-	CDM1-36-50-CC06 CDM2-36-50-CC06	CDM-D32X194-W25-250
NPDM-D36X50-W25-L250-CC09	36-50	25	32	-	250	194	-	CDM1-36-50-CC09 CDM2-36-50-CC09	CDM-D32X194-W25-250
NPDM-D50X68-W32-L140-CC09	50-68	32	40	-	140	80	-	CDM1-50-68-CC09 CDM2-50-68-CC09	CDM-D40X80-W32-L140
NPDM-D50X68-W32-L140-CC12	50-68	32	40	-	200	140	-	CDM1-50-68-CC12 CDM2-50-68-CC12	CDM-D40X80-W32-L140
NPDM-D50X68-W32-L200-CC09	50-68	32	40	-	280	220	-	CDM1-50-68-CC09 CDM2-50-68-CC09	CDM-D40X140-W32-L200
NPDM-D50X68-W32-L200-CC12	50-68	32	40	-	140	80	-	CDM1-50-68-CC12 CDM2-50-68-CC12	CDM-D40X140-W32-L200
NPDM-D50X68-W32-L280-CC09	50-68	32	40	-	200	140	-	CDM1-50-68-CC09 CDM2-50-68-CC09	CDM-D40X220-W32-L280
NPDM-D50X68-W32-L280-CC12	50-68	32	40	-	280	220	-	CDM1-50-68-CC12 CDM2-50-68-CC12	CDM-D40X220-W32-L280
NPDM-D68X90-W32-L160-CC12	68-90	32	50	54	160	100	50	CDM1-68-90-CC12 CDM2-68-90-CC12	CDM-D50X100-W32-L160
NPDM-D68X90-W32-L210-CC12	68-90	32	50	54	210	150	50		CDM-D50X150-W32-L210
NPDM-D68X90-W32-L280-CC12	68-90	32	50	54	280	220	50		CDM-D50X220-W32-L280
NPDM-D90X120-W32-L140-CC12	90-120	32	63	72	140	80	63	CDM1-90-120-CC12 CDM2-90-120-CC12	CDM-D63X80-W32-L140
NPDM-D90X120-W40-L200-CC12	90-120	40	63	72	200	130	63		CDM-D63X130-W40-L200
NPDM-D90X120-W40-L300-CC12	90-120	40	63	72	300	230	63		CDM-D63X230-W40-L300
NPDM-D120X160-W40-L210-CC12	120-160	40	80	95	210	140	75	CDM1-120-160-CC12 CDM2-120-160-CC12	CDM-D80X140-W40-L210
NPDM-D120X160-W40-L300-CC12	120-160	40	80	95	300	230	75		CDM-D80X230-W40-L300
NPDM-D160X200-W40-L210-B-CC12	160-200	40	80	95	210	140	75	CDM2-160-800-CC12	CDM-D80X140-W40-L210
NPDM-D160X200-W40-L300-B-CC12	160-200	40	80	95	300	230	75		CDM-D80X230-W40-L300

**Porta de Mandrinado (Solo el Cuerpo) Para Cartuchos CDM1 y CDM2**



REFERENCIA	Rango	d	d1	d2	LT	L2	L1	Tornillo Montaje	Llave Montaje	Brida	Tornillo Ajuste	Llave Ajuste
CDM-D16X102-W16-L150	18-22	16	-	-	90	42	-	TEA-017	LLA-2.5		TEA-004	LLA-1.5
CDM-D16X152-W16-L200	18-22	16	-	-	150	102	-					
CDM-D16X42-W16-L90	18-22	16	-	-	200	152	-					
CDM-D20X50-W20-L100	22-28	20	-	-	100	50	-	TEA-020	LLA-3		TEA-005	LLA-1.5
CDM-D20X100-W20-L150	22-28	20	-	-	150	100	-					
CDM-D20X150-W20-L200	22-28	20	-	-	200	150	-					
CDM-D25X60-W20-L110	28-38	20	25	-	110	60	-	TEA-018	LLA-3		TEA-006	LLA-1.5
CDM-D25X110-W20-L160	28-38	20	25	-	160	110	-					
CDM-D25X180-W20-L230	28-38	20	25	-	230	180	-					
CDM-D32X64-W25-L120	36-50	25	32	-	120	64	-	TEA-023	LLA-4		TEA-009	LLA-2
CDM-D32X114-W25-L170	36-50	25	32	-	250	194	-					
CDM-D32X194-W25-L250	36-50	25	32	-	170	114	-					
CDM-D40X80-W32-L140	50-68	32	40	-	140	80	-	TEA-027	LLA-5		2725-M5X16	LLA-2.5
CDM-D40X140-W32-L200	50-68	25	32	-	250	194	-					
CDM-D40X220-W32-L280	50-68	32	40	-	280	220	-					
CDM-D50X100-W32-L160	68-90	32	50	54	160	100	50	TEA-032	LLA-6		TEA-012	LLA-2.5
CDM-D50X150-W32-L210	68-90	32	50	54	210	150	50					
CDM-D50X220-W32-L280	68-90	32	50	54	280	220	50					
CDM-D63X80-W32-L140	90-120	32	63	72	140	80	63	TEA-037	LLA-8		TEA-014	LLA-3
CDM-D63X130-W40-L200	90-120	40	63	72	200	130	63					
CDM-D63X230-W40-L300	90-120	40	63	72	300	230	63					
CDM-D80X140-W40-L210	120-160	40	80	95	210	140	75	2510-M12X40	LLA-10		TEA-014	LLA-4
CDM-D80X230-W40-L300	120-160	40	80	95	300	230	75					
CDM-D80X140-W40-L210	160-200	40	80	95	210	140	75					
CDM-D80X230-W40-L300	160-200	40	80	95	300	230	75					

## Alargadores Metal Duro - Cónico



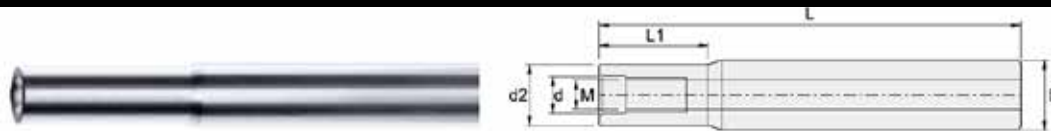
Referencia	d2	d	a°	L1	L	D	M
SMD06.05	9.8	5.5	1°	60	150	12	M5
SDM06.06	9.8	5.5	1°	60	150	12	M6
SDM06.061	11.8	6.5	1.5°	70	150	16	M6
SDM06.08	15.5	8.5	1.5°	90	200	20	M8
SDM06.10	19.8	10.5	1.5°	90	200	25	M10
SDM06.12	24.5	12.5	2°	90	200	32	M12

## Alargadores Metal Duro - Recto



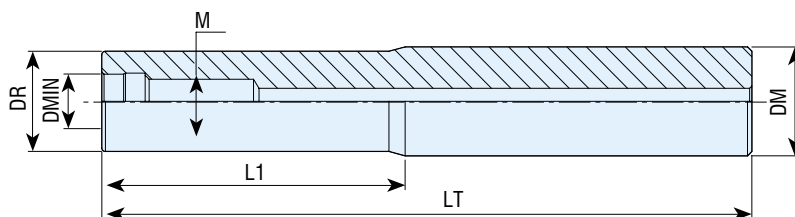
Referencia	d2	d	L	D	M
SDM07.04	8	4.5	100	8	M4
SDM07.041	8	4.5	120	8	M4
SDM07.05	10	5.5	75	10	M5
SDM07.051	10	5.5	100	10	M5
SDM07.052	10	5.5	150	10	M5
SDM07.06	10	5.5	100	10	M6
SDM07.061	10	5.5	150	10	M6
SDM07.062	11	6.5	100	11	M6
SDM07.063	11	6.5	150	11	M6
SDM07.064	12	6.5	75	12	M6
SDM07.065	12	6.5	100	12	M6
SDM07.066	12	6.5	150	12	M6
SDM07.067	12	6.5	200	12	M6
SDM07.08	15	8.5	100	15	M8
SDM07.081	15	8.5	150	15	M8
SDM07.082	15	8.5	200	15	M8
SDM07.083	16	8.5	100	16	M8
SDM07.084	16	8.5	150	16	M8
SDM07.085	16	8.5	200	16	M8
SDM07.086	16	8.5	250	16	M8
SDM07.10	20	10.5	100	20	M10
SDM07.101	20	10.5	150	20	M10
SDM07.102	20	10.5	200	20	M10
SDM07.103	20	10.5	250	20	M10
SDM07.104	20	10.5	300	20	M10
SDM07.12	25	12.5	100	25	M12
SDM07.121	25	12.5	150	25	M12
SDM07.122	25	12.5	200	25	M12
SDM07.123	25	12.5	250	25	M12
SDM07.124	25	12.5	300	25	M12
SDM07.16	32	17.0	200	32	M16
SDM07.161	32	17.0	300	32	M16
SDM07.162	32	17.0	350	32	M16
SDM07.163	32	17.0	400	32	M16

**Alargadores Metal Duro - Cuello Rebajado**



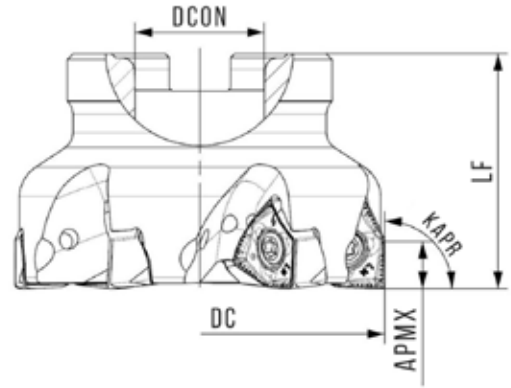
Referencia	d2	d	L1	L	D	M
SDM08.06	11.5	6.5	24	100	12	M6
SDM08.061	11.5	6.5	40	100	12	M6
SDM08.062	11.5	6.5	60	100	12	M6
SDM08.063	11.5	6.5	24	150	12	M6
SDM08.064	11.5	6.5	100	150	12	M6
SDM08.08	13	8.5	32	150	16	M8
SDM08.081	15	8.5	30	150	16	M8
SDM08.082	15	8.5	100	150	16	M8
SDM08.083	15	8.5	40	200	16	M8
SDM08.084	15	8.5	120	200	16	M8
SDM08.10	17	10.5	40	150	20	M10
SDM08.101	19	10.5	40	150	20	M10
SDM08.102	19	10.5	100	150	20	M10
SDM08.103	19	10.5	40	200	20	M10
SDM08.104	19	10.5	120	200	20	M10
SDM08.12	24	12.5	48	150	25	M12
SDM08.121	24	12.5	100	150	25	M12
SDM08.122	24	12.5	48	200	25	M12
SDM08.123	24	12.5	100	200	25	M12

**Alargadores Acero Rápido Tratado - Rebajado**



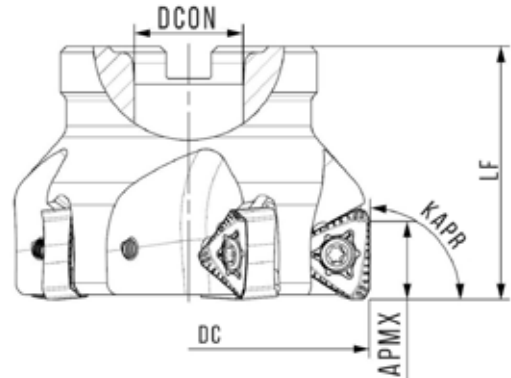
Referencia	DM	M	DMIN	DR	LT	L1
SDM10.05	16	M-5	5.5	10	150	7
SDM10.06	12	M-6	6.5	11	120	10
SDM10.08	16	M-8	8.5	13	100	40
SDM10.081	16	M-8	8.5	15	130	70
SDM10.082	16	M-8	8.5	13	200	10
SDM10.10	20	M-10	10.5	18	130	70
SDM10.101	20	M-10	10.5	18	160	80
SDM10.102	20	M-10	10.5	18	250	15
SDM10.12	25	M-12	12.5	23	150	70
SDM10.121	25	M-12	12.5	23	200	100
SDM10.122	25	M-12	12.5	23	250	150
SDM10.123	25	M-12	12.5	23	300	15
SDM10.16	32	M-16	17	30	150	70
SDM10.161	32	M-16	17	30	200	100
SDM10.162	32	M-16	17	30	250	150
SDM10.163	32	M-16	17	30	300	200
SDM10.164	32	M-16	17	29	350	18

**Plato de Fresado 90° - WNGX0806**



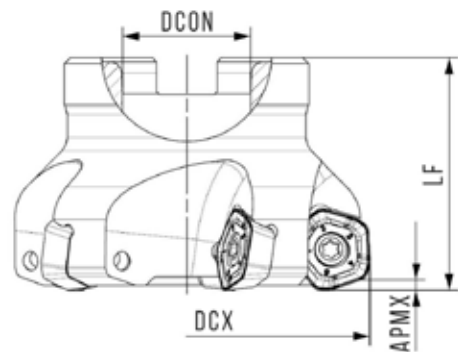
REFERENCIA	øDC	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF90-WNX08-D050-E22-5R	50	5	22	40	7.5	WNGX0806	TDA-108	LLT-15
NPDF90-WNX08-D063-E22-6R	63	5	22	40	7.5			
NPDF90-WNX08-D080-E27-7R	80	7	27	50	7.5			
NPDF90-WNX08-D100-E32-8	100	8	32	50	7.5			
NPDF90-WNX08-D125-E32-10	125	10	40	63	7.5			

**Plato Fresado 90° - TNGX1306**



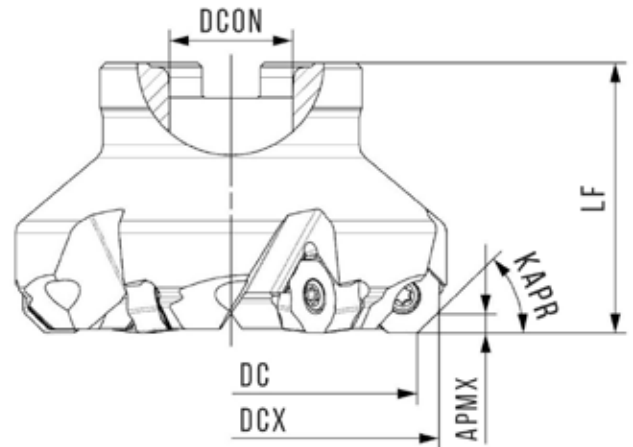
REFERENCIA	øDC	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF90-TN13-D050-E22-5R	50	5	22	40	13	TNGX1306	TDA-109	LLT-15
NPDF90-TN13-D063-E22-6R	63	5	22	40	13			
NPDF90-TN13-D080-E27-7R	80	7	27	50	13			
NPDF90-TN13-D100-E32-8	100	8	32	50	13			
NPDF90-TN13-D125-E32-10	125	10	40	63	13			

**Plato de Fresado 19° - PDMT1305**



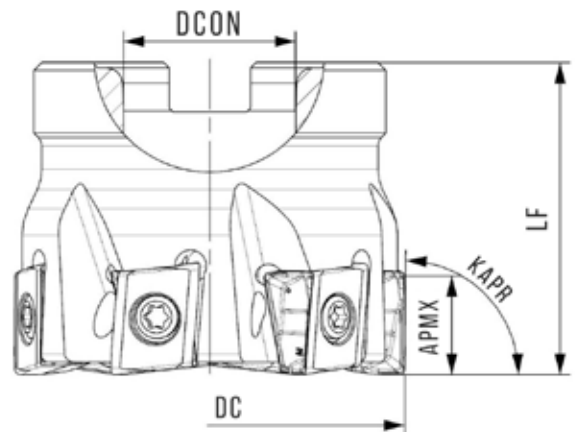
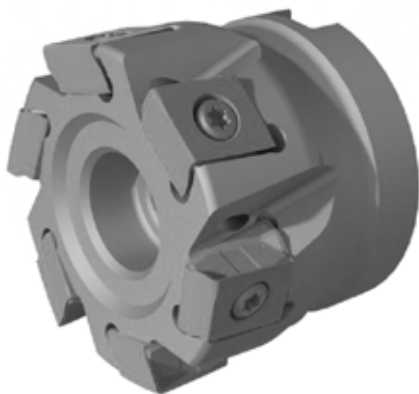
REFERENCIA	øDC	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF19-PD13-D050-E22-5R	50	5	22	40	7.5	PDMT1305	TDA-112	LLT-15
NPDF19-PD13-D063-E22-6R	63	5	22	40	7.5			
NPDF19-PD13-D080-E27-7R	80	7	27	50	7.5			
NPDF19-PD13-D100-E32-8	100	8	32	50	7.5			
NPDF19-PD13-D125-E32-10	125	10	40	63	7.5			

**Plato Fresado 44° - ONMU0504 / ONMU0906**



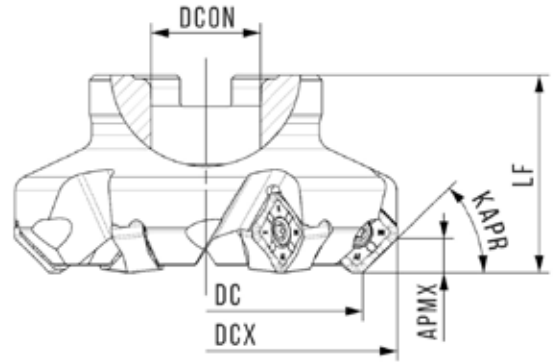
REFERENCIA	øDC	øDCX	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF44-ON0504-D050-5R	50	64.6	5	22	48.4	3.5	ONMU0504	TDA-110	LLT-15
NPDF44-ON0504-D063-6R	63	77.6	6	22	48.4	3.5			
NPDF44-ON0504-D080-7R	80	94.6	7	27	48.4	3.5			
NPDF44-ON0504-D100-8	100	114.6	8	32	48.4	3.5			
NPDF44-ON0504-D125-10	125	139.6	10	40	61.4	3.5			
NPDF44-ON0906-D050-5R	50	76.2	5	22	50	5.5	ONMU0906	TDA-111	LLT-20
NPDF44-ON0906-D063-6R	63	93.2	6	22	50	5.5			
NPDF44-ON0906-D080-7R	80	113.2	7	27	50	5.5			
NPDF44-ON0906-D100-8	100	138.2	8	32	63	5.5			
NPDF44-ON0906-D125-10	125	173.2	10	40	63	5.5			

**Plato de Fresado 90° - LNGX1306**

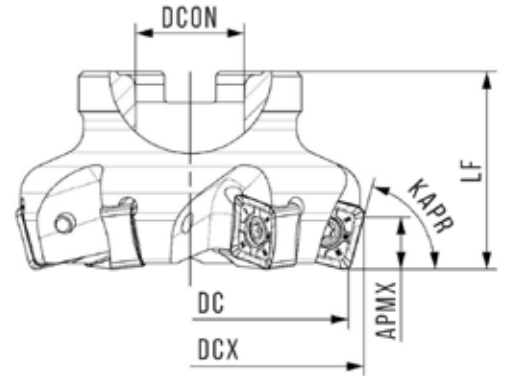


REFERENCIA	øDC	øDCX	Z	øDcon	LF	apmx	INSERTO	Tornillo Placa	Llave
NPDF90-LN13-E22-D50-5R	50	-	5	22	40	8	LNGX1306	TDA-149	80-T15
NPDF90-LN13-E22-D50-6R	50	-	6	22	40	8			
NPDF90-LN13-E22-D63-6R	63	-	6	22	40	8			
NPDF90-LN13-E22-D63-8R	63	-	8	22	40	8			
NPDF90-LN13-E27-D80-7R	80	-	8	27	50	8			
NPDF90-LN13-E27-D80-10R	80	-	10	27	50	8			

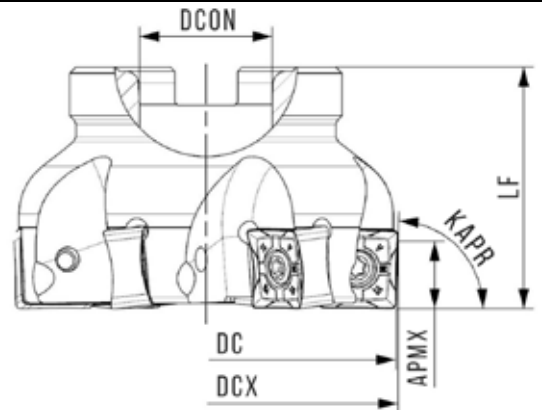


**Plato de Fresado 45° - SNMX1306**


REFERENCIA	øDC	øDCX	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF45-SNMX13-D050-E22-5R	50	64.6	5	22	40	6.5	SNMX1306	TDA-115	LLT-15
NPDF45-SNMX13-D063-E22-6R	63	77.6	5	22	40	6.5			
NPDF45-SNMX13-D080-E27-7R	80	94.6	7	27	50	6.5			
NPDF45-SNMX13-D100-E32-8	100	114.6	8	32	50	6.5			
NPDF45-SNMX13-D125-E32-10	125	139.6	10	40	63	6.5			

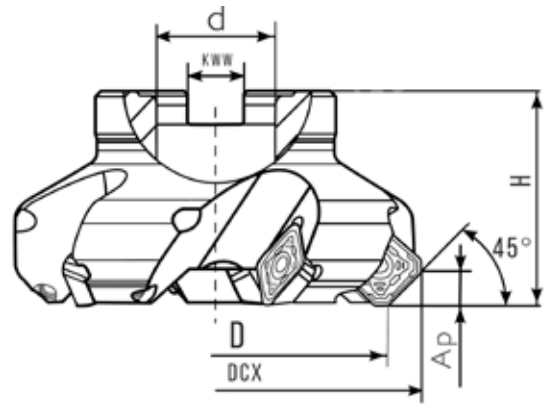
**Plato de Fresado 75° - SNMX1306**


REFERENCIA	øDC	øDCX	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF75-SNMX13-D050-E22-5R	50	56.2	5	22	40	10.3	SNMX1306	TDA-115	LLT-15
NPDF75-SNMX13-D063-E22-6R	63	69.2	5	22	40	10.3			
NPDF75-SNMX13-D080-E27-7R	80	86.2	7	27	50	10.3			
NPDF75-SNMX13-D100-E32-8	100	106.2	8	32	50	10.3			
NPDF75-SNMX13-D125-E32-10	125	131.2	10	40	63	10.3			

**Plato de Fresado 88° - SNMX1306**


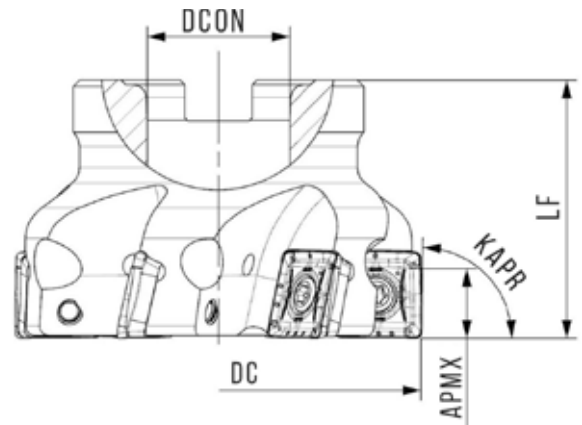
REFERENCIA	øDC	øDCX	Z	øDcon	LT	apmx	INSERTO	Tornillo Placa	Llave
NPDF88-SNMX13-D050-E22-5R	50	50.6	5	22	40	10.9	SNMX1306	TDA-115	LLT-15
NPDF88-SNMX13-D063-E22-6R	63	63.6	5	22	40	10.9			
NPDF88-SNMX13-D080-E27-7R	80	80.6	7	27	50	10.9			
NPDF88-SNMX13-D100-E32-8	100	100.6	8	32	50	10.9			
NPDF88-SNMX13-D125-E32-10	125	125.6	10	40	63	10.9			

**Plato de Fresado 45° - SEET13T3**



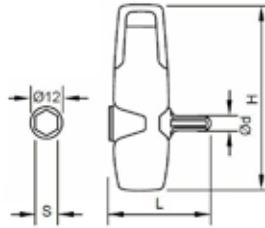
REFERENCIA	øDC	øDCX	Z	øDcon	LF	apmx	INSERTO	Tornillo Placa	Llave
NPDF45-SEET12T3-D50-E22-3	50	64.6	3	22	40	5.9	SEET12T3	TDA-049	LLT-15
NPDF45-SEET12T3-D50-E22-4	50	64.6	4	22	40	5.9			
NPDF45-SEET12T3-D63-E22-4	63	76.7	4	22	40	5.9			
NPDF45-SEET12T3-D63-E22-5	63	76.7	5	22	40	5.9			
NPDF45-SEET12T3-D80-E27-4	80	93.7	4	27	50	5.9			
NPDF45-SEET12T3-D80-E27-6	80	93.7	6	27	50	5.9			
NPDF45-SEET12T3-D100-E32-5	100	113.7	5	32	50	5.9			
NPDF45-SEET12T3-D100-E32-7	100	113.7	7	32	50	5.9			
NPDF45-SEET12T3-D125-E40-6	125	138.7	6	40	63	5.9			
NPDF45-SEET12T3-D125-E40-8	125	138.7	8	40	63	5.9			

**Plato de Fresado 90° - SDKT13T3**

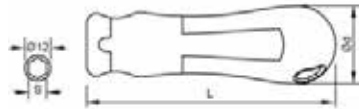


REFERENCIA	øDC	øDCX	Z	øDcon	LF	apmx	INSERTO	Tornillo Placa	Llave
NPDF90-SD13-E22-50-4R	50	-	4	22	40	10.7	SDKT13T3	TDA-149	80-T15
NPDF90-SD13-E22-50-5R	50	-	5	22	40	10.7			
NPDF90-SD13-E27-63-6R	63	-	6	27	40	10.7			
NPDF90-SD13-E27-80-7R	80	-	7	27	50	10.7			
NPDF90-SD13-E32-100-8R	100	-	8	32	50	10.7			
NPDF90-SD13-E40-125-12	125	-	10	40	63	10.7			
NPDF90-SD13-E40-160-12	160	-	12	40	63	10.7			
NPDF90-SD13-E60-200-16	200	-	16	60	63	10.7			

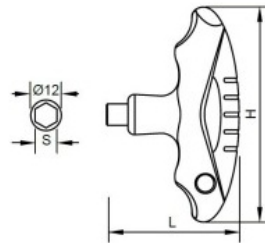
### Mangos Sloky



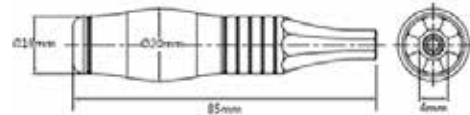
Referencia	Par Apriete Recomendado	Color Mango	S	L	H	Ød
0-TPK-H01	0.6-5.7 Nm	Rojo	6.35 (1/4")	37.5	70.7	5
0-TPK-H01B	0.6-5.7 Nm	Azul	6.35 (1/4")	37.5	70.7	5



Referencia	Par Apriete Recomendado	Color Mango	S	L	H	Ød
0-TPK-H02	0.1-2.0 Nm	Rojo	6.35 (1/4")	104	-	32.50
0-TPK-H02B	0.1-2.0 Nm	Azul	6.35 (1/4")	104	-	32.50

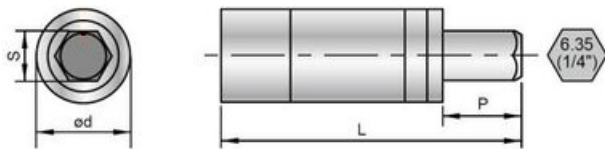


Referencia	Par Apriete Recomendado	Color Mango	S	L	H	Ød
0-TPK-H03	3.0-10.0 Nm	Rojo	6.35 (1/4")	65	100	-
0-TPK-H03B	3.0-10.0 Nm	Azul	6.35 (1/4")	65	100	-



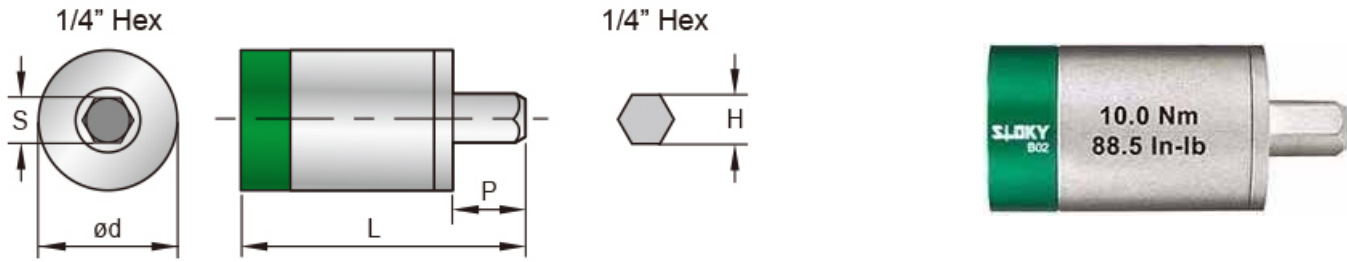
Referencia	Par Apriete Recomendado	Color Mango	S	L	H	Ød
0-TPK-H05	10-70 cNm - (0.1-0.7 Nm)	Naranja	4	85	-	20

### Adaptadores Par de Apriete

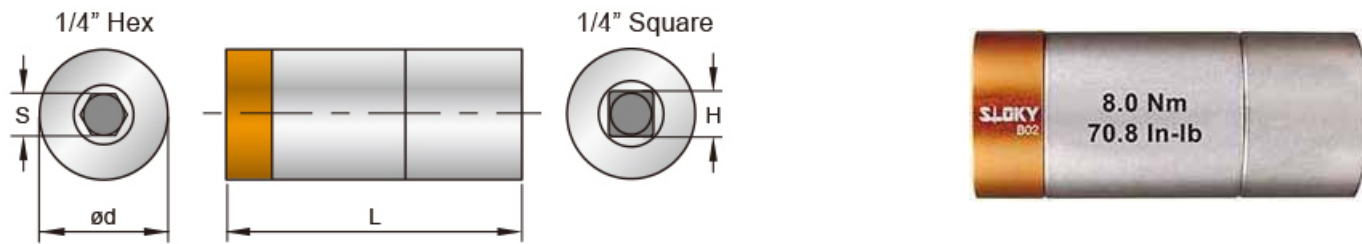


Referencia	Color Punta	Nm	KgfcM	In-lb	S	Ød	L	P
0-TPK-A06-0.6	Rojo	0.6	6.10	5.30	1/4" Hex (6.35 mm)	12	38.3	10
0-TPK-A07-0.9	Marrón	0.9	9.20	8.00				
0-TPK-A08-1.2	Verde	1.2	12.0	10.60				
0-TPK-A08-2.0	Verde	2.0	20.4	17.70				
0-TPK-A09-1.4	Naranja	1.4	14.0	12.40				
0-TPK-A09-2.0	Naranja	2.0	20.4	17.70				
0-TPK-A10-2.0	Morado	2.0	20.4	17.70				
0-TPK-A15-3.0	Azul	3.0	30.6	26.60				
0-TPK-A20-5.0	Gris	5.0	51.0	44.30				
0-TPK-A20-5.5	Gris	5.5	56.1	48.70				
0-TPK-A25-5.5	Gris	5.5	56.1	48.70				

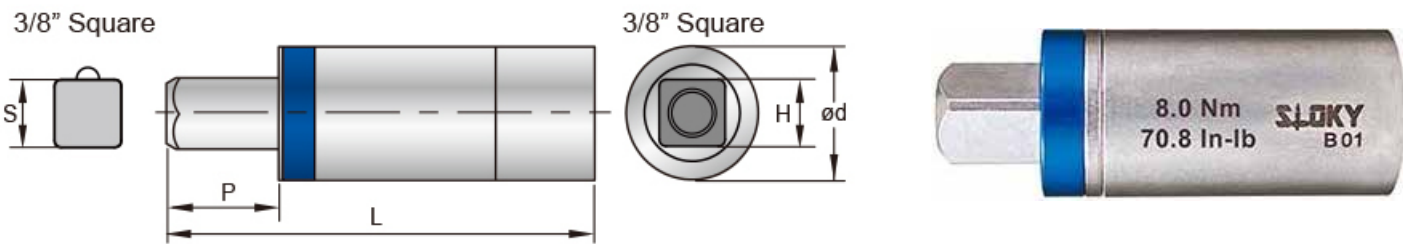
**Adaptadores - Gran Par de Apriete**



Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	P
0-TPK-ETA-6.0	Verde	6.0	66.10	53.10	1/4" Hex (6.35 mm)	20	43.50	10
0-TPK-ETA-8.0	Verde	8.0	81.50	70.80				
0-TPK-ETA-10.0	Verde	10.0	101.90	88.50				

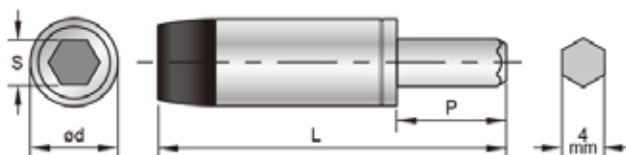


Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	H
0-TPK-ETB-8.0	Naranja	8.0	81.50	70.80	1/4" Hex (6.35 mm)	20	44.50	1/4" Cuadrado
0-TPK-ETB-10.0	Naranja	10.0	101.90	88.50				
0-TPK-ETB-12.0	Naranja	12.0	122.30	106.20				



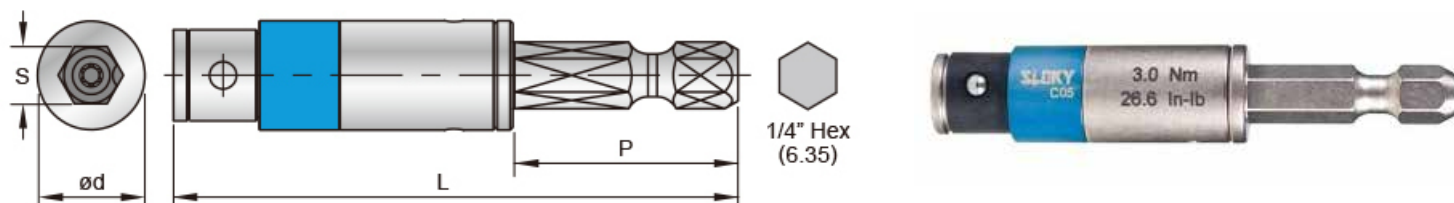
Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	P	H
0-TPK-ETC-8.0	Azul	8.0	81.50	70.80	3/8" Cuadrado DIN 3122/3123	20	53.0	12	3/8" Cuadrado DIN 3120
0-TPK-ETC-10.0	Azul	10.0	101.90	88.50					
0-TPK-ETC-12.0	Azul	12.0	122.30	106.20					

**Adaptadores - Mini Par de Apriete**



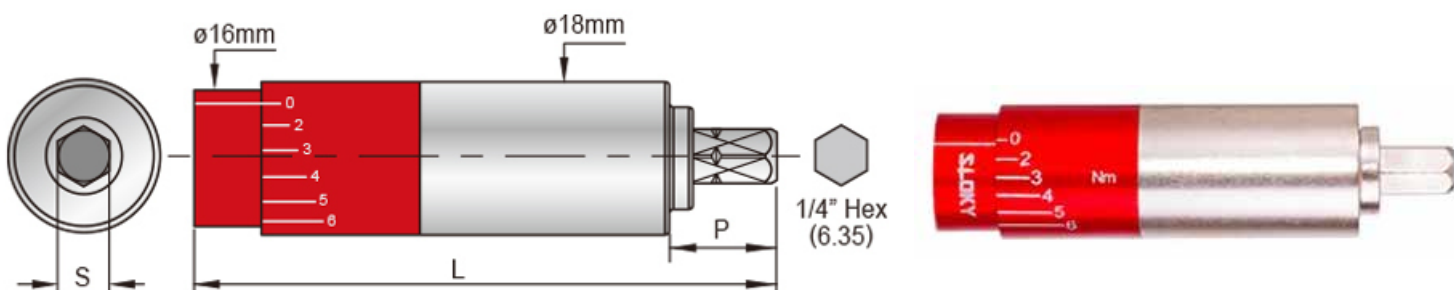
Referencia	Color Punta	cNm	KgfcM	In-lb	S	ød	L	P
0-TPK-MTA-0.1	Negro	10	1.0	0.9	4mm Hex	8	32	10
0-TPK-MTA-0.2	Negro	20	2.0	1.8				
0-TPK-MTA-0.3	Negro	30	3.1	2.7				
0-TPK-MTA-0.4	Negro	40	4.1	3.5				
0-TPK-MTA-0.5	Negro	50	5.1	4.4				
0-TPK-MTA-0.6	Negro	60	6.2	5.3				
0-TPK-MTA-0.7	Negro	70	7.1	6.2				

### Adaptadores Cambio Rápido E6.3



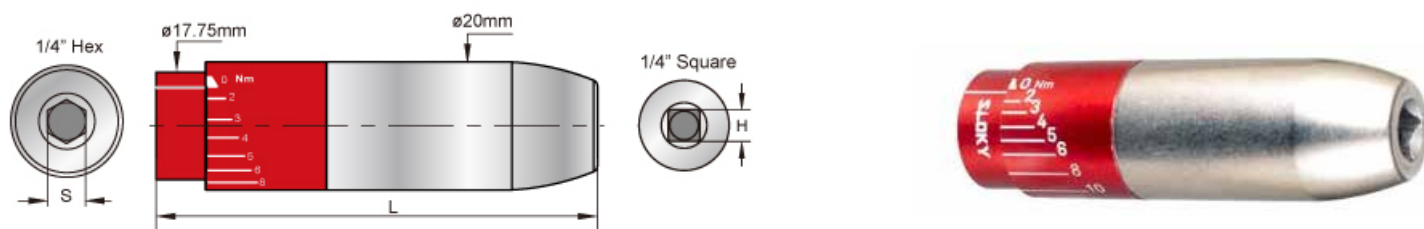
Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	P
0-TPK-PTEQ-6.3-2.0	Azul	2.0	20.40	17.70	1/4" Hexagono DIN 3126	12	62.70	25
0-TPK-PTEQ-6.3-3.0	Azul	3.0	30.60	26.60				
0-TPK-PTEQ-6.3-4.5	Azul	4.0	45.90	39.80				
0-TPK-PTEQ-6.3-5.0	Azul	5.0	51.10	44.30				

### Adaptadores Multi-Rango 5/1



Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	P	H
0-TPK-5IN1-6.0	Roja	2.0	20.40	17.70	1/4" Hexagono DIN 3126	18	68.80	10	1/4" Cuadrado DIN 3126
	Roja	3.0	30.60	26.60					
	Roja	4.0	45.90	39.80					
	Roja	5.0	51.10	44.30					
	Roja	6.0	61.10	53.10					

### Adaptadores Multi-Rango 7/1



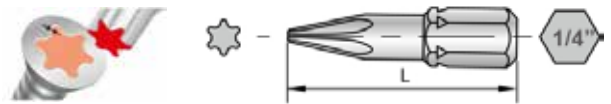
Referencia	Color Punta	Nm	KgfcM	In-lb	S	ød	L	P	H
0-TPK-ETB-7IN1-10.0	Roja	2.0	20.40	17.70	1/4" Hexagono DIN 3126	20	69	-	1/4" Cuadrado DIN 3120
	Roja	3.0	30.60	26.60					
	Roja	4.0	45.90	39.80					
	Roja	5.0	51.10	44.30					
	Roja	6.0	61.10	53.10					
	Roja	8.0	81.50	70.80					
	Roja	10.0	101.90	88.50					



### Puntas 25mm - TORX

- Según DIN3126 - C6.3 (1/4")
- Longitud: 25mm
- Acero Alta Aleación, Resistencia HRC 58-60

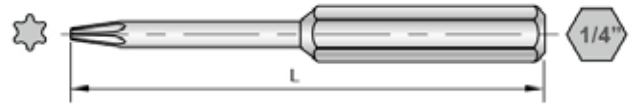
Referencia	Color Punta	Punta	L
0-TPK-B01-TX06-25	Rojo	TX6	25
0-TPK-B01-TX07-25	Marrón	TX7	
0-TPK-B01-TX08-25	Verde	TX8	
0-TPK-B01-TX09-25	Naranja	TX9	
0-TPK-B01-TX10-25	Morado	TX10	
0-TPK-B01-TX15-25	Azul	TX15	
0-TPK-B01-TX20-25	Gris	TX20	



### Puntas 50mm - TORX

- Según DIN3126 - C6.3 (1/4")
- Longitud: 50mm
- Acero Alta Aleación, Resistencia HRC 58-60

Referencia	Color Punta	Punta	L
0-TPK-B01-TX06-50	Rojo	TX6	50
0-TPK-B01-TX07-50	Marrón	TX7	
0-TPK-B01-TX08-50	Verde	TX8	
0-TPK-B01-TX09-50	Naranja	TX9	
0-TPK-B01-TX10-50	Morado	TX10	
0-TPK-B01-TX15-50	Azul	TX15	
0-TPK-B01-TX20-50	Gris	TX20	
0-TPK-B01-TX25-50	Gris	TX25	



### Puntas 75mm - TORX

- Según DIN3126 - C6.3 (1/4")
- Longitud: 75mm
- Acero Alta Aleación, Resistencia HRC 58-60

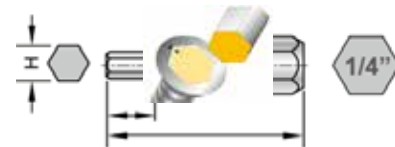
Referencia	Color Punta	Punta	L
0-TPK-B01-TX08-75	Verde	TX8	75
0-TPK-B01-TX09-75	Naranja	TX9	
0-TPK-B01-TX10-75	Morado	TX10	
0-TPK-B01-TX15-75	Azul	TX15	
0-TPK-B01-TX20-75	Gris	TX20	
0-TPK-B01-TX25-75	Gris	TX25	



### Puntas 25mm - Hexagonales

- Según DIN3126 - C6.3 (1/4")
- Longitud: 25mm
- Acero Alta Aleación, Resistencia HRC 58-60

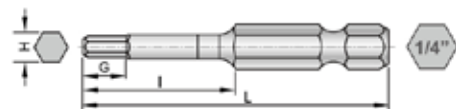
Referencia	Color Punta	Punta - H	G	L
0-TPK-B03-H015-25	Rojo	Hex 1.5	2.3	25
0-TPK-B03-H020-25	Verde	Hex 2.0	3.0	
0-TPK-B03-H025-25	Morado	Hex 2.5	3.8	
0-TPK-B03-H030-25	Azul	Hex 3.0	4.5	
0-TPK-B03-H040-25	Gris	Hex 4.0	6.0	
0-TPK-B03-H050-25	Gris	Hex 5.0	7.5	



### Puntas 50mm - Hexagonales

- Según DIN3126 - C6.3 (1/4")
- Longitud: 50mm
- Acero Alta Aleación, Resistencia HRC 58-60

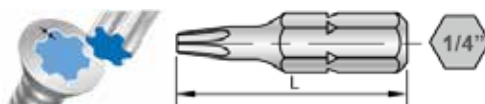
Referencia	Color Punta	Punta - H	G	L
0-TPK-B03-H015-50	Rojo	Hex 1.5	2.3	50
0-TPK-B03-H020-50	Verde	Hex 2.0	3.0	
0-TPK-B03-H025-50	Morado	Hex 2.5	3.8	
0-TPK-B03-H030-50	Azul	Hex 3.0	4.5	
0-TPK-B03-H040-50	Gris	Hex 4.0	6.0	
0-TPK-B03-H050-50	Gris	Hex 5.0	7.5	



### Puntas 25mm - TORX PLUS

- Según DIN3126 - C6.3 (1/4")
- Longitud: 25mm
- Acero Alta Aleación, Resistencia HRC 58-60

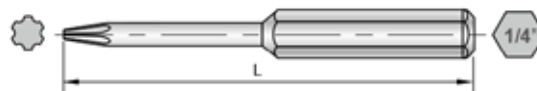
Referencia	Color Punta	Punta	L
0-TPK-B02-6IP-25	Rojo	6IP	25
0-TPK-B02-7IP-25	Marrón	7IP	
0-TPK-B02-8IP-25	Verde	8IP	
0-TPK-B02-9IP-25	Naranja	9IP	
0-TPK-B02-10IP-25	Morado	10IP	
0-TPK-B02-15IP-25	Azul	15IP	
0-TPK-B02-20IP-25	Gris	20IP	



### Puntas 50mm - TORX PLUS

- Según DIN3126 - C6.3 (1/4")
- Longitud: 25mm
- Acero Alta Aleación, Resistencia HRC 58-60

Referencia	Color Punta	Punta	L
0-TPK-B02-6IP-50	Rojo	6IP	50
0-TPK-B02-7IP-50	Marrón	7IP	
0-TPK-B02-8IP-50	Verde	8IP	
0-TPK-B02-9IP-50	Naranja	9IP	
0-TPK-B02-10IP-50	Morado	10IP	
0-TPK-B02-15IP-50	Azul	15IP	
0-TPK-B02-20IP-50	Gris	20IP	
0-TPK-B02-25IP-50	Gris	25IP	



### Puntas 75mm - TORX PLUS

- Según DIN3126 - C6.3 (1/4")
- Longitud: 25mm
- Acero Alta Aleación, Resistencia HRC 58-60

Referencia	Color Punta	Punta	L
0-TPK-B02-8IP-75	Verde	8IP	75
0-TPK-B02-9IP-75	Naranja	9IP	
0-TPK-B02-10IP-75	Morado	10IP	
0-TPK-B02-15IP-75	Azul	15IP	
0-TPK-B02-20IP-75	Gris	20IP	
0-TPK-B02-25IP-75	Gris	25IP	



### SET PRO Station - 22 Puntas + 3 Mangos

- Soporte Aluminio Identificativo por modelos
- Longitud Puntas: 50mm
- 3 Mangos y 6 Adaptadores

Referencia	Composición	Puntas	L
0-TPK26-PR-22K	3 - Mangos 8 - Adaptadores	8 - Puntas TX 8 - Puntas IP 6 - Puntas Hex	50 mm

### SET PRO Station - Soporte

- Base Soporte Pro-Station

Referencia
0-TPK26-PR





### Set TOGO - Torx

- Kit para pares de apriete 0.6 a 3.0Nm
- Longitud Puntas: 25mm y 50 mm (1 de cada medida)

Referencia	Mango	Medida	Nm	Puntas
0-TPK01-TGTX-12K	TPK-H02	TX6	0.6	25 y 50mm
		TX7	0.9	
		TX8	1.2	
	TPK-H01	TX9	1.4	
		TX10	2.0	
		TX15	3.0	

### Set TOGO - Torx Plus

- Kit para pares de apriete 0.6 a 3.0Nm
- Longitud Puntas: 25mm y 50 mm (1 de cada medida)

Referencia	Mango	Medida	Nm	Puntas
0-TPK02-TGIP-12K	TPK-H02-B	6IP	0.6	25 y 50mm
		7IP	0.9	
		8IP	1.2	
	TPK-H01-B	9IP	1.4	
		10IP	2.0	
		15IP	3.0	

### Set TOGO - Hexagonal

- Kit para pares de apriete 0.6 a 3.0Nm
- Longitud Puntas: 25mm y 50 mm (1 de cada medida)

Referencia	Mango	Medida	Nm	Puntas
0-TPK03-TGTH-12K	TPK-H02	Hex 1.5	0.6	25 y 50mm
		Hex 2.0	1.2	
		Hex 2.5	2.0	
	TPK-H01	Hex 3.0	3.0	
		Hex 4.0	5.0	
		Hex 5.0	5.5	

### Smart Kit - Torx

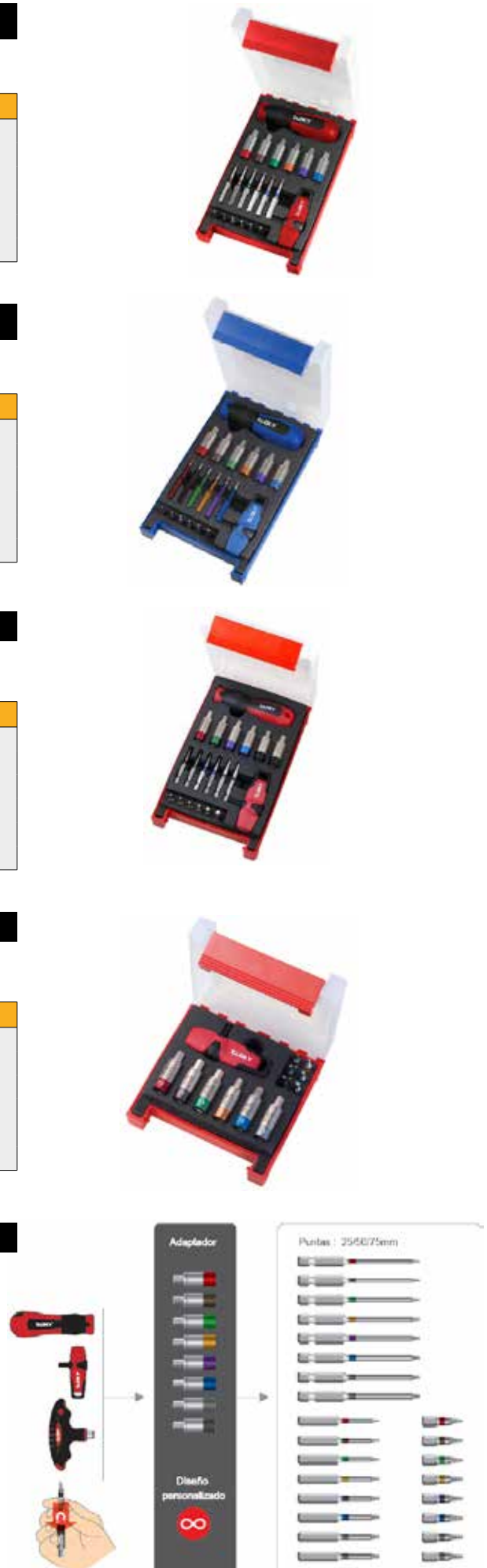
- Kit para pares de apriete 0.6 a 5.5Nm (6 Adaptadores)
- Longitud Punta: 25mm (6 Puntas, 1 de cada medida)

Referencia	Mango	Medida	Nm	Punta
0-TPK01-99-06K	TPK-H01	TX6	0.6	25 mm
		TX7	0.9	
		TX8	1.2	
		TX9	2.0	
		TX15	3.0	
		TX20	5.5	

### Funcionamiento del Sistema SLOKY

Cuando decimos, he apretado el tornillo al máximo, probablemente no lo hayamos apretado correctamente y estemos dañando el tornillo y el equipo. El Sistema Sloky hace que sabiendo el apriete de cada tornillo se ajuste al par exacto de manera que ni el tornillo, herramienta ni destornillador sufre.

- 1 - Elige Mango (Hay 3 disponibles)
- 2 - Elige El Adaptador (Dependiendo del par de apriete)
- 3 - Elige La Punta (Torx, Torx Plus o Hexagonal)

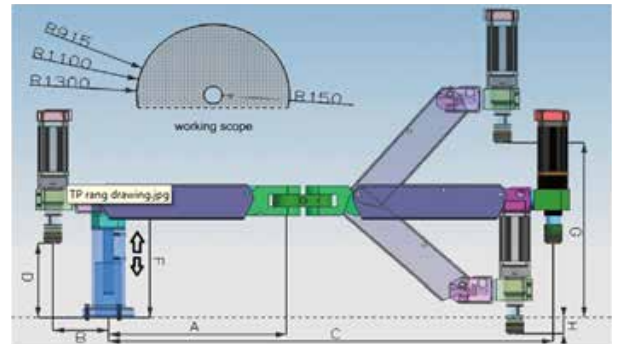


### Roscadora Eléctrica Taipu: R31091512 (TP915-12P)

- Portaherramientas de cambio rápido  $\Phi 19$  mm (Serie 1). Incluye 6 cabezillas de roscado con la máquina
- Cambio rápido de 3 a 5 segundos para reducir el tiempo de trabajo y aumentar la productividad
- Base ajustable en altura de 40-60 mm que genera más radio de trabajo.
- Mediante el pie y con tres tornillos M8 se puede fijar la máquina a una mesa o banco de trabajo.



Características:	
Capacidad Roscado	M2-M12
Rango de Radio	915mm
Tamaño de cabeza roscado	Serie 1 - $\phi 19$ mm
Potencia Motor (W)	1200W
Max rpm roscado	600 rpm
Max fuerza roscado	30N.m
Orientación	Vertical
Peso Neto	21/28 Kg

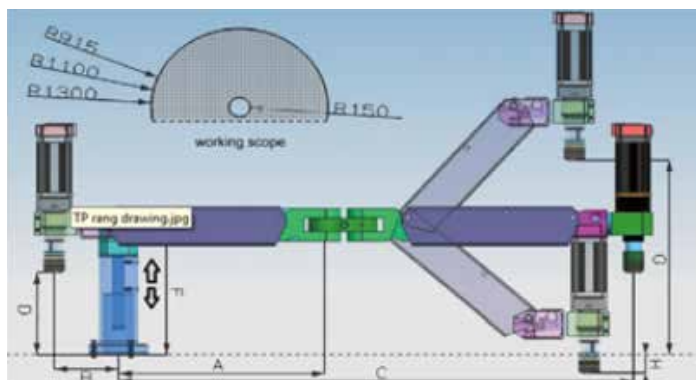


A	B	C	D	F	G	H
400	150	915	200	180	430-530	50

### Roscadora Eléctrica Taipu: R32110024 (TP1100-24AU) - Roscado Vertical y Horizontal

- Portaherramientas de cambio rápido  $\Phi 31$  mm (Serie 2). Incluye 6 cabezillas de roscado con la máquina.
- Cambio rápido de 3 a 5 segundos para reducir el tiempo de trabajo y aumentar la productividad
- Base ajustable en altura de 40-60 mm que genera más radio de trabajo.
- Mediante el pie y con tres tornillos M8 se puede fijar la máquina a una mesa o banco de trabajo.

Características:	
Capacidad Roscado	M3-M24
Rango de Radio	1100mm
Tamaño de cabeza roscado	Serie 2 - $\phi 31$ mm
Potencia Motor (W)	1200W
Max rpm roscado	150 rpm
Max fuerza roscado	250N.m
Orientación	Vertical y Horizontal
Peso Neto	34/45 Kg

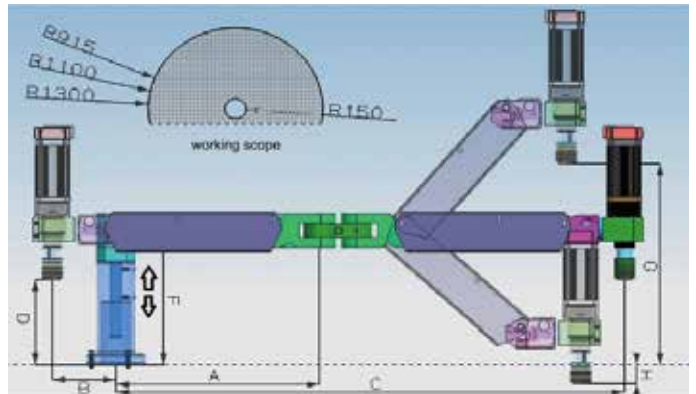


A	B	C	D	F	G	H
480	150	1100	230	300	450-50	100

**Roscadora Eléctrica Taipu: R32110030 (TP1100-30AU) - Roscado Vertical y Horizontal**



<b>Características:</b>	
Capacidad Roscado	M3-M30
Rango de Radio	1100mm
Tamaño de cabeza roscado	Serie 2 - $\phi$ 31mm
Potencia Motor (W)	1200W
Max rpm roscado	150 rpm
Max fuerza roscado	270N.m
Orientación	Vertical y Horizontal
Peso Neto	35/46 Kg

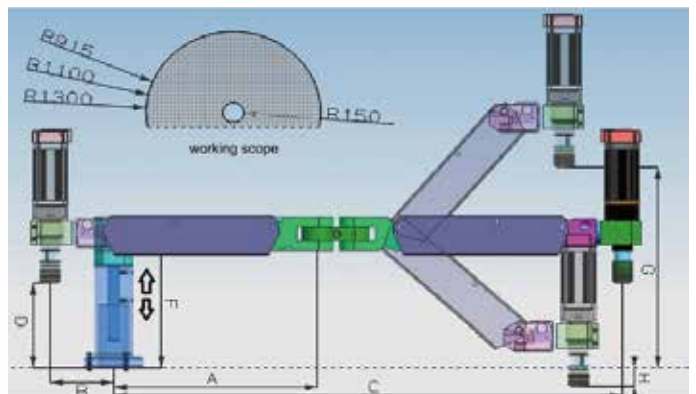


A	B	C	D	F	G	H
480	150	1100	230	300	450-50	100

**Roscadora Eléctrica Taipu: R32130042 (TP1300-42AD) - Roscado Vertical y Horizontal**



<b>Características:</b>	
Capacidad Roscado	M8-M42
Rango de Radio	1300mm
Tamaño de cabeza roscado	Serie 3 - $\phi$ 45mm
Potencia Motor (W)	1050W
Max rpm roscado	30/100 rpm
Max fuerza roscado	600N.m
Orientación	Vertical y Horizontal
Peso Neto	110/120 Kg

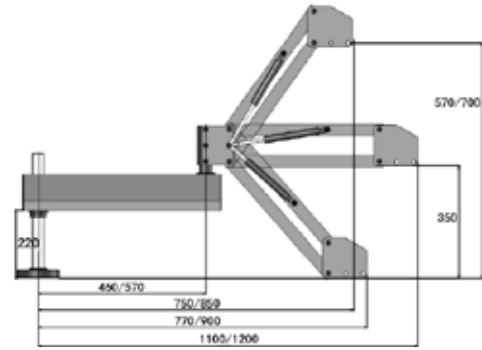


A	B	C	D	F	G	H
480	150	1300	150	400	350-750	50

### Roscadora Eléctrica Taipu: Z33110008 (Z1100-M8) - Roscado Vertical y Horizontal



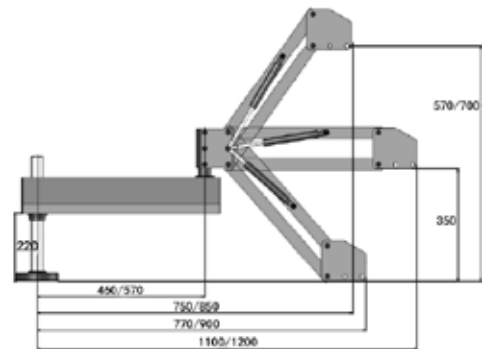
Características:	
Capacidad Roscado	M3-M8
Rango de Radio	1100mm
Tamaño de cabeza roscado	Serie 1 - $\phi$ 19mm
Potencia Motor (W)	800W
Max rpm roscado	1600 rpm
Max fuerza roscado	13N.m
Orientación	Vertical y Horizontal
Peso Neto	20/30 Kg



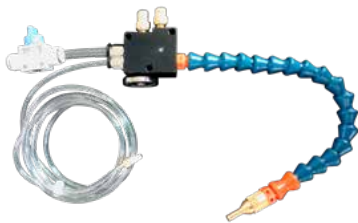
### Roscadora Eléctrica Taipu: Z33110016 (Z1100-M16) - Roscado Vertical y Horizontal



Características:	
Capacidad Roscado	M3-M16
Rango de Radio	1100mm
Tamaño de cabeza roscado	Serie 1 - $\phi$ 19mm
Potencia Motor (W)	800W
Max rpm roscado	450 rpm
Max fuerza roscado	57N.m
Orientación	Vertical y Horizontal
Peso Neto	23/32 Kg



### Lubricación por pulverización externa magnética



Referencia: **DCP003**

### Mesa de trabajo rígida para roscadora



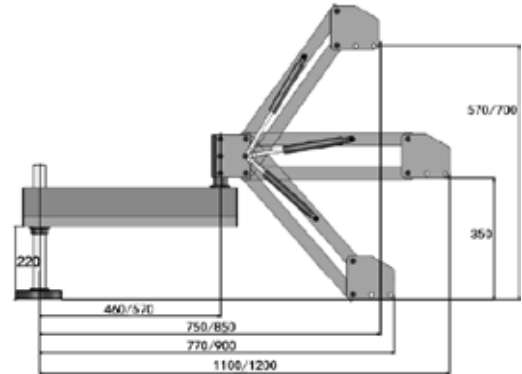
Referencia:	<b>DCP001-500</b>
Dimensiones	900x600x700mm
Carga	500 Kgs
Peso	95/105 Kg



## Roscadora Eléctrica Taipu: Z33150030 (Z1500-M30) - Roscado Vertical y Horizontal



Características:	
Capacidad Roscado	M3-M30
Rango de Radio	1200mm
Tamaño de cabeza roscado	Serie 2 - $\varnothing$ 31mm
Potencia Motor (W)	2000W
Max rpm roscado	250 rpm
Max fuerza roscado	240N.m
Orientación	Vertical y Horizontal
Peso Neto	38/48Kg



## Bloque de amarre magnético



Referencia:	DCP009-300
Dimensiones	160x122x65mm
Carga	300 Kgs
Peso	9/10 Kg
Para modelos	Hasta M-16

Referencia:	DCP009-600
Dimensiones	240x165x73mm
Carga	600 Kgs
Peso	18/20 Kg
Para modelos	Hasta M-30

## Posicionador de Ángulo para roscadora



Referencia:	Características
DCP006-19	Posicionador Serie 1 ( $\varnothing$ 19mm)
DCP006-31	Posicionador Serie 2 ( $\varnothing$ 31mm)

## Portaherramientas para roscado exterior con terraja



Referencia:	Características
DCP007-19	Posicionador Serie 1 ( $\varnothing$ 19mm)
DCP007-31	Posicionador Serie 2 ( $\varnothing$ 31mm)
DCP007-48	Posicionador Serie 3 ( $\varnothing$ 48mm)
DCP007-60	Posicionador Serie 4 ( $\varnothing$ 60mm)

## Portaherramientas/Portabrocas para taladrado/avellanado



Referencia:	Características
DCP008-19	Para modelo Serie 1 ( $\varnothing$ 19mm)
DCP008-31	Para modelo Serie 2 ( $\varnothing$ 31mm)

**Modelos ZA 27x27D - Altura 390mm**

Color RAL7035 (Cuerpo) y RAL5012 (Cajones)

- Dimensiones externas: 600x578
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZA39-2	2 Cajones	1x100   1x200
ZA39-3	3 Cajones	3x100
ZA39-4	3 Cajones	1x75   1x100   1x125
ZA39-5	3 Cajones	2x75   1x150


**Modelos ZA 27x27D - Altura 840mm**

Color RAL7035 (Cuerpo) y RAL5012 (Cajones)

- Dimensiones externas: 600x578
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZA84-1	1 Cajones 1 Puerta 750mm con dos baldas	1x75   1x125
ZA84-2	2 Cajones 1 Puerta 550mm con una balda	1x75   1x125 1x250   1x300
ZA84-3	3 Cajones	1x150   2x300
ZA84-4	4 Cajones	1x75   1x125 1x250   1x300
ZA84-5	7 Cajones	2x75   2x100 2x125   1x150
ZA84-6	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZA84-7	6 Cajones	2x75   1x100 2x150   1x200
ZA84-8	8 Cajones	4x75   2x100 2x125


**Modelos ZA 27x27D - Altura 990mm**

Color RAL7035 (Cuerpo) y RAL5012 (Cajones)

- Dimensiones externas: 600x578
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZA99-1	1 Cajón 1 Puerta	1 Cajón 100mm 1 Puerta 800mm con 2 baldas
ZA99-2	3 Cajones 1 Puerta	1x75   1x125   1x150 Puerta 550mm con 1 balda
ZA99-3	5 Cajones	1x150   2x300
ZA99-4	6 Cajones	1x75   1x125 1x250   1x300
ZA99-5	8 Cajones	2x75   2x100 2x125   1x150
ZA99-6	7 Cajones	1x75   2x100 1x125   2x150   1x200



**Modelos ZA 27x27D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600x578
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZA120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZA120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con una balda
ZA120-3	5 Cajones	1x100   1x125 3x300
ZA120-4	9 Cajones	3x75   2x100 2x150   2x200
ZA120-5	10 Cajones	3x75   4x100 2x150   1x200
ZA120-6	6 Cajones	2x100   1x125 1x200   2x300



**Carros ZA 27x27D**

Código	Composición
ZAMP-1	578x600x785mm 2 Baldas 2 Ruedas + 2 Ruedas con freno
ZAM39-1	78x600x785mm 3 Cajones de 100 2 Ruedas + 2 Ruedas con freno
ZAM59-1	78x600x785mm 1 cajon 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZAM59-2	78x600x785mm 2 cajones de 75   1 cajón de 100   1 cajón de 250 2 Ruedas + 2 Ruedas con freno





**Modelos ZB 36x36D - Altura 390mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZB39-1	1 Cajón	1x300
ZB39-2	2 Cajones	1x100   1x200
ZB39-3	3 Cajones	3x100
ZB39-4	3 Cajones	1x75   1x100   1x125



ZB39-2



ZB39-3



ZB39-4



ZB39-5

**Modelos ZB 36x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZB84-1	1 Puerta	1 Puerta 750mm con dos baldas
ZB84-2	2 Cajones 1 Puerta	1x75   1x125 1 Puerta 550mm con una balda
ZB84-3	3 Cajones	1x150   2x300
ZB84-4	4 Cajones	1x75   1x125 1x250   1x300
ZB84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZB84-6	6 Cajones	2x75   1x100 2x150   1x200



ZB84-1



ZB84-2



ZB84-3



ZB84-4



ZB84-5



ZB84-6

**Modelos ZB 36x36D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZB99-1	1 Cajón 1 Puerta	1 Cajón 100mm 1 Puerta 800mm con 2 baldas
ZB99-2	3 Cajones 1 Puerta	1x75   1x125   1x150 Puerta 550mm con 1 balda
ZB99-3	5 Cajones	3x100   2x300
ZB99-4	6 Cajones	1x75   1x100 2x150   1x300
ZB99-5	4 Cajones	1x100   1x200 2x300
ZB99-6	7 Cajones	1x75   2x100 1x125   2x150   1x200



ZB99-1



ZB99-2



ZB99-3



ZB99-4



ZB99-5



ZB99-6

**Modelos ZB 36x36D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZB120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZB120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con una balda
ZB120-3	5 Cajones	1x100   1x125 3x300
ZB120-4	9 Cajones	3x75   2x100 2x150   2x200
ZB120-5	6 Cajones	2x100   1x125 1x200   2x300



**Carros ZB36x36D**

Código	Composición
ZBMP-1	731x753x810mm 2 Baldas 2 Ruedas + 2 Ruedas con freno
ZBM39-1	731x753x810mm 3 Cajones de 100 2 Ruedas + 2 Ruedas con freno
ZBM59-1	731x753x810mm 1 cajon 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZBM84-1	731x753x1060mm 1 cajón de 75   1 cajón de 100   1 cajón de 125 1 cajón de 200 y 1 cajón de 250 2 Ruedas + 2 Ruedas con freno



**Modelos ZC 54x27D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X1037
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZC84-2	2 Cajones 1 Puerta	1 x75   1 x100 1 Puerta 550mm con 1 balda
ZC84-3	3 Cajones	1x150   2x300
ZC84-4	4 Cajones	1x75   1x125 1x250   1x300
ZC84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZC84-6	6 Cajones	2x75   1x100 2x150   1x200
ZC84-7	7 Cajones	2x75   2x100 2x125   1x150
ZC84-8	8 Cajones	4x75   2x100 2x125



**Modelos ZC 54x27D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X1037
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZC99-1	1 Cajón 1 Puerta	1x100 1 Puerta 550mm con 2 balda
ZC99-2	3 Cajones 1 Puerta	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZC99-3	5 Cajones	3x100   2x300
ZC99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZC99-5	4 Cajones	1x100   1x200 2x300



**Modelos ZC 54x27D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X1037
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZC120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZC120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con una balda
ZC120-3	5 Cajones	1x100   1x125 3x300
ZC120-4	9 Cajones	3x75   2x100 2x150   2x200
ZC120-5	7 Cajones	1x75   2x100 3x200   1x250



**Carros ZC 54x27D**

Código	Composición
ZCM59-1	1037x600x855mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZCM69-1	1037x600x955mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZCM84-1	1037x600x1105mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



**Modelos ZC 54x27D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZD84-1	1 Puerta	Puerta 750 con 2 baldas
ZD84-2	2 Cajones 1 Puerta	1 x75   1 x100 1 Puerta 550mm con 1 balda
ZD84-3	3 Cajones	1x150   2x300
ZD84-4	4 Cajones	1x75   1x125 1x250   1x300
ZD84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZD84-6	6 Cajones	2x75   1x100 2x150   1x200
ZD84-7	7 Cajones	2x75   2x100 2x125   1x150
ZD84-8	8 Cajones	4x75   2x100 2x125
ZD84-9	9 Cajones	6x75   3x100



ZD84-1



ZD84-2



ZD84-3



ZD84-4



ZD84-5



ZD84-6



ZD84-7



ZD84-8



ZD84-9

**Modelos ZD 36x27D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZD99-1	1 Cajón 1 Puerta	1x100 1 Puerta 800mm con 2 baldas
ZD99-2	3 Cajones 1 Puerta	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZD99-3	5 Cajones	3x100   2x300
ZD99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZD99-5	4 Cajones	1x100   1x200 2x300
ZD99-6	7 Cajones	1x75   2x100 1x125   2x150   1x200



ZD99-1



ZD99-2



ZD99-3



ZD99-4



ZD99-5



ZD99-6



**Modelos ZD 36x27D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600X731
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZD120-1	4 Cajones 1 Puerta	3x75   1x100 1 Puerta 800mm con 2 baldas
ZD120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con una balda
ZD120-3	5 Cajones	1x100   1x125 3x300
ZD120-4	9 Cajones	3x75   2x100 2x150   2x200
ZD120-5	6 Cajones	2x100   1x125 1x200   2x300



ZD120-1



ZD120-2



ZD120-3



ZD120-4



ZD120-5

**Carros ZD 36x27D**

Código	Composición
ZDM59-1	731x600x910mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZDM59-2	731x600x910mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 200 2 Ruedas + 2 Ruedas con freno
ZDM69-1	731x600x910mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno
ZDM84-1	731x600x1060mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



ZDM59-1



ZDM59-2



ZDM69-1



ZDM84-1

**Modelos ZE 27x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 578x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZE84-1	1 Puerta	Puerta 750 con 2 baldas
ZE84-2	2 Cajones 1 Puerta	1 x75   1 x125 1 Puerta 550mm con 1 balda
ZE84-3	3 Cajones	1x150   2x300



ZE84-1



ZE84-2



ZE84-3

**Modelos ZE 27x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 578x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZE84-4	4 Cajones	1x75   1x125 1x250   1x300
ZE84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZE84-6	6 Cajones	2x75   1x100 2x150   1x200
ZE84-7	7 Cajones	2x75   2x100 2x125   1x150
ZE84-8	8 Cajones	4x75   2x100 2x125
ZE84-9	9 Cajones	6x75   3x100



ZE84-4



ZE84-5



ZE84-6



ZE84-7



ZE84-8



ZE84-9

**Modelos ZE 27x36D- Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 578x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZE99-1	1 Cajón 1 Puerta	1x100 1 Puerta 800mm con 2 balda
ZE99-2	3 Cajones 1 Puerta	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZD99-3	5 Cajones	3x100   2x300
ZE99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZE99-5	4 Cajones	1x100   1x200 2x300
ZE99-6	7 Cajones	1x75   2x100 1x125   2x150   1x200



ZE99-1



ZE99-2



ZE99-3



ZE99-4



ZE99-5



ZE99-6

**Modelos ZE 27x36D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 578x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZE120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZE120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con una balda
ZE120-3	5 Cajones	1x100   1x125 3x300
ZE120-4	9 Cajones	3x75   2x100 2x150   2x200
ZE120-5	6 Cajones	2x100   1X125 1x200   2x300



ZE120-1



ZE120-2



ZE120-3



ZE120-4



ZE120-5

**Carros ZE 27x36D**

Código	Composición
ZEM59-1	578x753x810mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZEM59-2	578x753x810mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 200 2 Ruedas + 2 Ruedas con freno
ZEM69-1	578x753x810mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZEM84-1	578x753x1060mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



ZEM59-1



ZEM59-2



ZEM69-1



ZEM84-1



**Modelos ZG 54x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 1037x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZG84-1	3 Cajones	1x150   2x300
ZG84-2	4 Cajones	1x75   1x125 1x250   1x300
ZG84-3	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZG84-4	6 Cajones	1x75   2x100 1x125   1x200
ZG84-5	7 Cajones	2x75   2x100 2x125   1x150
ZG84-6	8 Cajones	4x75   2x100 1x125
ZG84-7	9 Cajones	6x75   3x100
ZG84-8	1 Puerta 2 Cajones	1x75   1x25 1 Puerta 550mm con 1 balda



ZG84-1



ZG84-2



ZG84-3



ZG84-4



ZG84-5



ZG84-6



ZG84-7



ZG84-8

**Modelos ZG 54x36D- Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 1037x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZG99-1	4 Cajones	1x100   1x200 2x300
ZG99-2	5 Cajones	3x100   2x300
ZD99-3	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZG99-4	7 Cajones	1x75   2x100 1x125   2x150   1x200
ZG99-5	8 Cajones	2x75   4x100 1x150   1x200
ZG99-6	1 Cajón 1 Puerta	1x100 1 Puerta 800mm con 2 balda
ZG99-7	3 Cajones 1 Puerta	1x75   1x125   1x150 1 Puerta 55mm con 1 balda



ZG99-1



ZG99-2



ZG99-3



ZG99-4



ZG99-5



ZG99-6



ZG99-7

**Modelos ZG 54x36D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 1037x753
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZG120-1	5 Cajones	1x100   1x125 3x300
ZG120-2	6 Cajones	2x100   1x125 1x200   2x300
ZG120-3	8 Cajones	2x75   2x100   1x125 1x150   1x200   1x300
ZG120-4	9 Cajones	3x75   2x100 2x150   2x200
ZG120-5	6 Cajones	2x100   1x125 1x200   2x300
ZG150-6	4 Cajones 1 Puerta	3x75   1x100 1 Puerta 800mm con 2 baldas



ZG120-1



ZG120-2



ZG120-3



ZG120-4



ZG120-5



ZG120-6

**Carros ZG54x36D**

Código	Composición
ZGM59-1	1037x753x855mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZEGM69-1	1037x753x855mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZGM84-1	1037x753x1105mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



ZGM59-1



ZEGM69-1



ZGM84-1

**Modelos ZH 19x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZH84-1	1 Puerta	1 Puerta 750mm 2 Baldas
ZH84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZH84-3	3 Cajones	1x150   2x300
ZH84-4	4 Cajones	1x75   1x125 1x250   1x300
ZH84-5	5 Cajones	1x100   1x100 1x125   1x200   1x250
ZH84-6	6 Cajones	2x75   1x100 2x150   1x200
ZH84-7	7 Cajones	2x75   2x100 2x125   1x150
ZH84-8	8 Cajones	4x75   2x100 2x125
ZH84-9	9 Cajones	6x75   3x100



ZH84-1



ZH84-2



ZH84-3



ZH84-4



ZH84-5



ZH84-6



ZH84-7



ZH84-8



ZH84-9

**Modelos ZH 19x36D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZH99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZH99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZH99-3	5 Cajones	3x100   2x300
ZH99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZH99-5	4 Cajones	1x100   1x200 2x300
ZH99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



ZH99-1



ZH99-2



ZH99-3



ZH99-4



ZH99-5



ZH99-6

**Modelos ZH 19x36D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZH120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZH120-2	5 Cajones 1 Puerta	1X75   1X100 2X125   1x150 1 Puerta 550mm con 1 balda
ZH120-3	5 Cajones	1x100   1x125 3x300
ZH120-4	9 Cajones	3x75   2x100 2x150   2x200
ZH120-5	6 Cajones	2x100   1X125 1x200   2x300



ZH120-1

ZH120-2

ZH120-3



ZH120-4

ZH120-5

**Carros ZH 19x36D**

Código	Composición
ZHM59-1	442X753X810mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZHM59-2	442X753X810mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 200 2 Ruedas + 2 Ruedas con freno
ZHM69-1	442X753X910mm 1 cajón 75   1 cajón 100   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZHM84-1	442X753X1060mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



ZHM59-1



ZHM59-2



ZHM69-1



ZHM84-1



**Modelos ZK 45x36D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZK84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZK84-3	3 Cajones	1x150   2x300
ZK84-4	4 Cajones	1x75   1x125 1x250   1x300
ZK84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZK84-6	6 Cajones	2x75   1x100 2x150   1x200



ZK84-2



ZK84-3



ZK84-4



ZK84-5



ZK84-6

**Modelos ZK 45x36D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZK99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZK99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZK99-3	5 Cajones	3x100   2x300
ZK99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZK99-5	4 Cajones	1x100   1x200 2x300
ZK99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



ZK99-1



ZK99-2



ZK99-3



ZK99-4



ZK99-5



ZK99-6

**Modelos ZK 45x36D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 753x884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZK120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZK120-2	5 Cajones 1 Puerta	1X75   1X100 2X125   1x150 1 Puerta 550mm con 1 balda
ZK120-3	5 Cajones	1x100   1x125 3x300
ZK120-4	9 Cajones	3x75   2x100 2x150   2x200
ZK120-5	6 Cajones	2x100   1X125 1x200   2x300



ZK120-1



ZK120-2



ZK120-3



ZK120-4



ZK120-5

**Carros ZK 45x36D**

Código	Composición
ZKM39-1	884x753x855mm 3 cajones 300   1 Balda 2 Ruedas + 2 Ruedas con freno
ZKM59-2	884x753x855mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZHM84-1	884x753x1105mm 1 cajón 75   1 cajón 100   1 cajón 125 1 cajón 200   1 cajón 250 2 Ruedas + 2 Ruedas con freno



ZKM59-2



ZKM84-1



ZKM39-1



**Modelos ZL 19x27D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZL84-1	1 Puerta	1 Puerta 750mm con 2 baldas
ZL84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZL84-3	3 Cajones	1x150   2x300
ZL84-4	4 Cajones	1x75   1x125 1x250   1x300
ZL84-5	7 Cajones	2x75   1x100 2x125   1x150
ZL84-6	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZL84-7	6 Cajones	2x75   1x100 2x150   1x200
ZL84-8	8 Cajones	4x75   2x100 2x125



ZL84-1



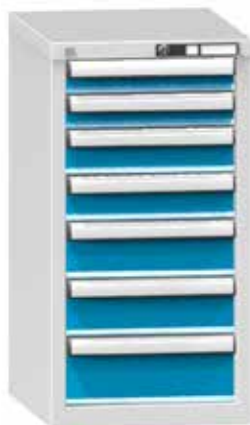
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ZL84-3



ZL84-4



ZL84-5



ZL84-6



ZL84-7



ZL84-8

**Modelos ZL 19x27D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZL99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZL99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZL99-3	5 Cajones	3x100   2x300
ZL99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZL99-5	8 Cajones	3x75   2x100 1x125   1x150   1x200
ZL99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



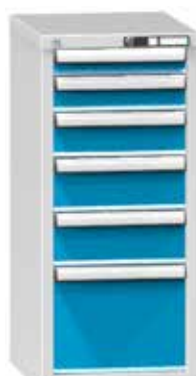
ZL99-1



ZL99-2



ZL99-3



ZL99-4



ZL99-5

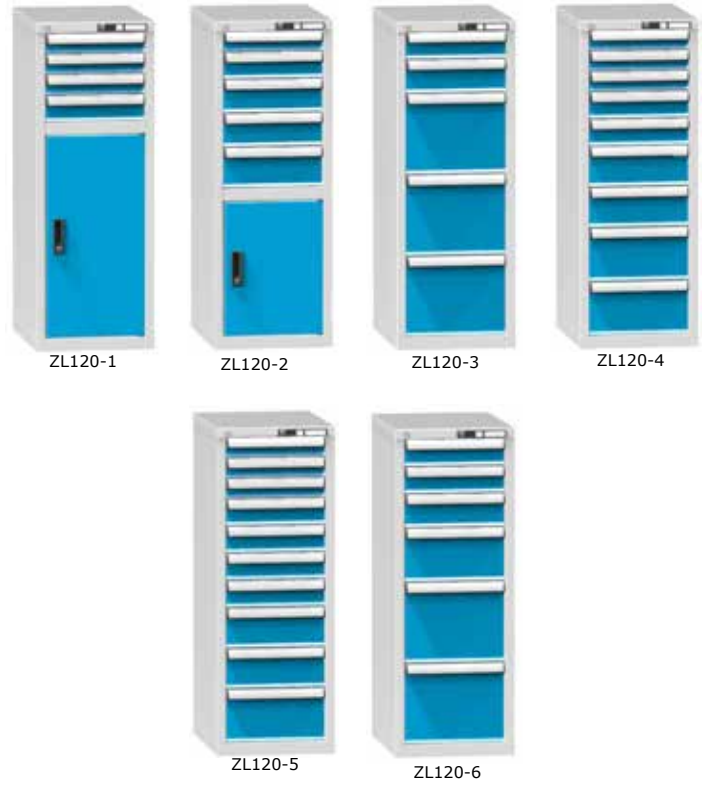


ZL99-6

**Modelos ZL 19x27D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 600x442mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZL120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZL120-2	5 Cajones 1 Puerta	1X75   1X100 2X125   1x150 1 Puerta 550mm con 1 balda
ZL120-3	5 Cajones	1x100   1x125 3x300
ZL120-4	9 Cajones	3x75   2x100 2x150   2x200
ZL120-5	10 Cajones	3X75   4X100 2X150   1X200
ZL120-6	6 Cajones	2x100   1X125 1x200   2x300



**Carros ZL 19x27D**

Código	Composición
ZLMP-1	442x600x785mm 2 Baldas 2 Ruedas + 2 Ruedas con freno
ZLM39-1	442x600x785mm 3 cajones 100   1 balda 2 Ruedas + 2 Ruedas con freno
ZLM59-1	442x600x785mm 1 cajón 75   1 cajón 125   1 cajón 300 2 Ruedas + 2 Ruedas con freno
ZLM59-2	442x600x785mm 2 cajones 75   1 cajón 100   1 cajón 250 2 Ruedas + 2 Ruedas con freno



**Modelos ZN 27x19D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x578mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZN84-1	1 Puerta	1 Puerta 750mm con 2 baldas
ZN84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZN84-3	3 Cajones	1x150   2x300
ZN84-4	4 Cajones	1x75   1x125 1x250   1x300
ZN84-5	7 Cajones	2x75   2x100 2x125   1x150
ZN84-6	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZN84-7	6 Cajones	2x75   1x100 2x150   1x200
ZN84-8	8 Cajones	4x75   2x100 2x125



ZN84-1



ZN84-2



ZN84-3



ZN84-4



ZN84-5



ZN84-6



ZN84-7



ZN84-8

**Modelos ZN 27x19D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x578mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZN99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZN99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZN99-3	5 Cajones	3x100   2x300
ZN99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZN99-5	8 Cajones	3x75   2x100 1x125   1x150   1x200
ZN99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



ZN99-1



ZN99-2



ZN99-3



ZN99-4



ZN99-5



ZN99-6

**Modelos ZN 27x19D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x578mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZN120-1	4 Cajones 1 Puerta	3x75   1x100 1 Puerta 800mm con 2 baldas
ZN120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con 1 balda
ZN120-3	5 Cajones	1x100   1x125 3x300
ZN120-4	9 Cajones	3x75   2x100 2x150   2x200
ZN120-5	10 Cajones	3x75   4x100 2x150   1x200
ZN120-6	6 Cajones	2x100   1x125 1x200   2x300



ZN120-1



ZN120-2



ZN120-3



ZN120-4



ZN120-5



ZN120-6



**Modelos ZP 36x19D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x731mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZP84-1	1 Puerta	1 Puerta 750mm con 2 baldas
ZP84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZP84-3	3 Cajones	1x150   2x300
ZP84-4	4 Cajones	1x75   1x125 1x250   1x300
ZP84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZP84-6	5 Cajones	2x75   1x100 2x150   1x200
ZP84-7	7 Cajones	2x75   2x100 2x125   1x150
ZP84-8	8 Cajones	4x75   2x100 2x125
ZP84-9	9 Cajones	6x75   3x100



ZP84-1



ZP84-2



ZP84-3



ZP84-4



ZP84-5



ZP84-7



ZP84-7



ZP84-8



ZP84-9

**Modelos ZP 36x19D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x731mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZP99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZP99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZP99-3	5 Cajones	3x100   2x300
ZP99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZP99-5	4 Cajones	1x100   1x200 2x300
ZP99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



ZP99-1



ZP99-2



ZP99-3



ZP99-4



ZP99-5



ZP99-6

**Modelos ZP 36x19D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x731mm
- Opcionales adicionales de personalización disponibles

Código	Composición	ANtura Cajones ANtura Puertas
ZP120-1	4 Cajones 1 Puerta	3x75   1x100 1 Puerta 800mm con 2 baldas
ZP120-2	5 Cajones 1 Puerta	1x75   1x100 2x125   1x150 1 Puerta 550mm con 1 balda
ZP120-3	5 Cajones	1x100   1x125 3x300
ZP120-4	9 Cajones	3x75   2x100 2x150   2x200
ZP120-5	6 Cajones	2x100   1x125 1x100   2x300
ZP120-6	7 Cajones	1x75   2x100 2x150   1x250   1x300



ZP120-1



ZP120-2



ZP120-3



ZP120-4



ZP120-5



ZP120-6

**Modelos ZR 45x19D - Altura 840mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464x884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZR84-2	1 Puerta 2 Cajones	1x75   1x125 1 Puerta 550mm con 1 balda
ZR84-3	3 Cajones	1x150   2x300
ZR84-4	4 Cajones	1x75   1x125 1x250   1x300
ZR84-5	5 Cajones	1x75   1x100 1x125   1x200   1x250
ZR84-6	5 Cajones	2x75   1x100 2x150   1x200
ZR84-7	7 Cajones	2x75   2x100 2x125   1x150
ZR84-8	8 Cajones	4x75   2x100 2x125
ZR84-9	9 Cajones	6x75   3x100



ZR84-2



ZR84-3



ZR84-4



ZR84-5



ZR84-6



ZR84-7



ZR84-8



ZR84-9



**Modelos ZR 45x19D - Altura 990mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464X884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones
ZR99-1	1 Puerta 1 Cajón	1x100 1 Puerta 800mm con 2 baldas
ZR99-2	1 Puerta 3 Cajones	1x75   1x125   1x150 1 Puerta 550mm con 1 balda
ZR99-3	5 Cajones	3x100   2x300
ZR99-4	6 Cajones	1x75   1x100 1x125   2x150   1x300
ZR99-5	4 Cajones	1x100   1x200 2x300
ZR99-6	7 Cajones	1x75   2x100   1x125 2x150   1x200



ZR99-1



ZR99-2



ZR99-3



ZR99-4



ZR99-5



ZR99-6

**Modelos ZR 45x19D - Altura 1215mm**

- Color RAL7035 (Cuerpo) y RAL5012 (Cajones)
- Dimensiones externas: 464X884mm
- Opcionales adicionales de personalización disponibles

Código	Composición	Altura Cajones Altura Puertas
ZR120-1	4 Cajones 1 Puerta	3X75   1X100 1 Puerta 800mm con 2 baldas
ZR120-2	5 Cajones 1 Puerta	1X75   1X100 2X125   1x150 1 Puerta 550mm con 1 balda
ZR120-3	5 Cajones	1x100   1x125 3x300
ZR120-4	9 Cajones	3x75   2x100 2x150   2x200
ZR120-5	6 Cajones	2x100   1x125 1x100   2x300
ZR120-6	7 Cajones	1x75   2x100 2x150   1x250   1x300



ZR120-1



ZR120-2



ZR120-3



ZR120-4



ZR120-5



ZR120-6

**Mesa de Trabajo - 2 Patas**

- Color RAL7035 (Patas) y Encimera Madera

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
AB4715	AB4815	1 tabla - 1500 x 40mm
AB4720	AB4820	1 tabla - 2000 x 40mm
AB4725	AB4825	1 tabla - 2500 x 40mm
AB5715	AB5815	1 tabla - 1500 x 50mm
AB5720	AB5820	1 tabla - 2000 x 50mm
AB5725	AB5825	1 tabla - 2500 x 50mm



**Mesa de Trabajo - 2 Patas + 1 Cajón**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajones) y Encimera Madera
- Cajonera: 1 Cajón 100 mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición
PB4715	PB4815	1 tabla - 1500 x 40mm 2 patas - altura 880mm
PB4720	PB4820	1 tabla - 2000 x 40mm 2 patas - altura 880mm
PB4725	PB4825	1 tabla - 2500 x 40mm 2 patas - altura 880mm
PB5715	PB5815	1 tabla - 1500 x 50mm 2 patas - altura 890mm
PB5720	PB5820	1 tabla - 2000 x 50mm 2 patas - altura 890mm
PB5725	PB5825	1 tabla - 2500 x 50mm 2 patas - altura 890mm



**Mesa de Trabajo - 2 Patas + 2 Cajones**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajones) y Encimera Madera
- 2 Cajones: 1x100 mm, 1x200mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición
BB4715	BB4815	1 tabla - 1500 x 40mm 2 patas - altura 880mm
BB4720	BB4820	1 tabla - 2000 x 40mm 2 patas - altura 880mm
BB4725	BB4825	1 tabla - 2500 x 40mm 2 patas - altura 880mm
BB5715	BB5815	1 tabla - 1500 x 50mm 2 patas - altura 890mm
BB5720	BB5820	1 tabla - 2000 x 50mm 2 patas - altura 890mm
BB5725	BB5825	1 tabla - 2500 x 50mm 2 patas - altura 890mm



**Mesa de Trabajo - 1 Pata + Armario**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Puerta) y Encimera Madera
- 1 Armario Puerta con 2 Baldas - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición
CB4715	CB4815	1 tabla - 1500 x 40mm 1 pata + Armario - altura 880mm
CB4720	CB4820	1 tabla - 2000 x 40mm 1 pata + Armario - altura 880mm
CB4725	CB4825	1 tabla - 2500 x 40mm 1 pata + Armario - altura 880mm
CB5715	CB5815	1 tabla - 1500 x 50mm 1 pata + Armario - altura 890mm
CB5720	CB5820	1 tabla - 2000 x 50mm 1 pata + Armario - altura 890mm
CB5725	CB5825	1 tabla - 2500 x 50mm 1 pata + Armario - altura 890mm



**Mesa de Trabajo - 1 Pata + Armario y Cajones**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Puerta y cajones) y Encimera Madera
- 1 Armario Puerta con 1 Balda - 1 Cajon de 75 y 125mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
DB4715	DB4815	1 tabla - 1500 x 40mm 1 pata + Armario y Cajones
DB4720	DB4820	1 tabla - 2000 x 40mm 1 pata + Armario y Cajones
DB4725	DB4825	1 tabla - 2500 x 40mm 1 pata + Armario y Cajones
DB5715	DB5815	1 tabla - 1500 x 50mm 1 pata + Armario y Cajones
DB5720	DB5820	1 tabla - 2000 x 50mm 1 pata + Armario y Cajones
DB5725	DB5825	1 tabla - 2500 x 50mm 1 pata + Armario y Cajones



**Mesa de Trabajo - 1 Pata + Cajonera**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajones) y Encimera Madera
- 1 Cajon de 150 y 2 cajones de 300mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
EB4715	EB4815	1 tabla - 1500 x 40mm 1 pata + Cajonera
EB4720	EB4820	1 tabla - 2000 x 40mm 1 pata + Cajonera
EB4725	EB4825	1 tabla - 2500 x 40mm 1 pata + Cajonera
EB5715	EB5815	1 tabla - 1500 x 50mm 1 pata + Cajonera
EB5720	EB5820	1 tabla - 2000 x 50mm 1 pata + Cajonera
EB5725	EB5825	1 tabla - 2500 x 50mm 1 pata + Cajonera



**Mesa de Trabajo - 1 Pata + Cajonera**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajones) y Encimera Madera
- 1 Cajon de 75,125,250,300mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
FB4715	FB4815	1 tabla - 1500 x 40mm 1 pata + Cajonera
FB4720	FB4820	1 tabla - 2000 x 40mm 1 pata + Cajonera
FB4725	FB4825	1 tabla - 2500 x 40mm 1 pata + Cajonera
FB5715	FB5815	1 tabla - 1500 x 50mm 1 pata + Cajonera
FB5720	FB5820	1 tabla - 2000 x 50mm 1 pata + Cajonera
FB5725	FB5825	1 tabla - 2500 x 50mm 1 pata + Cajonera



**Mesa de Trabajo - 1 Pata + Cajonera**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajones) y Encimera Madera
- 1 Cajon de 75,100,125,200,250mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
HB4715	HB4815	1 tabla - 1500 x 40mm 1 pata + Cajonera
HB4720	HB4820	1 tabla - 2000 x 40mm 1 pata + Cajonera
HB4725	HB4825	1 tabla - 2500 x 40mm 1 pata + Cajonera
HB5715	HB5815	1 tabla - 1500 x 50mm 1 pata + Cajonera
HB5720	HB5820	1 tabla - 2000 x 50mm 1 pata + Cajonera
HB5725	HB5825	1 tabla - 2500 x 50mm 1 pata + Cajonera



**Mesa de Trabajo - 1 Armario + Armario y Cajonera**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Puerta y cajones) y Encimera Madera
- 1 Armario con 2 baldas + 1 Armario con 1 balda y cajones 75 y 125mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
KB4715	KB4815	1 tabla - 1500 x 40mm 1 Armario + Armario y Cajones
KB4720	KB4820	1 tabla - 2000 x 40mm 1 Armario + Armario y Cajones
KB4725	KB4825	1 tabla - 2500 x 40mm 1 Armario + Armario y Cajones
KB5715	KB5815	1 tabla - 1500 x 50mm 1 Armario + Armario y Cajones
KB5720	KB5820	1 tabla - 2000 x 50mm 1 Armario + Armario y Cajones
KB5725	KB5825	1 tabla - 2500 x 50mm 1 Armario + Armario y Cajones



**Mesa de Trabajo - 1 Armario + Cajonera**

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Puerta y cajones) y Encimera Madera
- 1 Armario con 2 baldas + 1 Cajón de 150 y 2 de 300mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
LB4715	LB4815	1 tabla - 1500 x 40mm 1 Armario + Cajonera
LB4720	LB4820	1 tabla - 2000 x 40mm 1 Armario + Cajonera
LB4725	LB4825	1 tabla - 2500 x 40mm 1 Armario + Cajonera
LB5715	LB5815	1 tabla - 1500 x 50mm 1 Armario + Cajonera
LB5720	LB5820	1 tabla - 2000 x 50mm 1 Armario + Cajonera
LB5725	LB5825	1 tabla - 2500 x 50mm 1 Armario + Cajonera



### Mesa de Trabajo - 1 Armario + Cajonera

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Puerta y cajones) y Encimera Madera
- 1 Armario con 2 baldas + 1 Cajón de 75, 125, 250, 300mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
MB4715	MB4815	1 tabla - 1500 x 40mm 1 Armario + Cajonera
MB4720	MB4820	1 tabla - 2000 x 40mm 1 Armario + Cajonera
MB4725	MB4825	1 tabla - 2500 x 40mm 1 Armario + Cajonera
MB5715	MB5815	1 tabla - 1500 x 50mm 1 Armario + Cajonera
MB5720	MB5820	1 tabla - 2000 x 50mm 1 Armario + Cajonera
MB5725	MB5825	1 tabla - 2500 x 50mm 1 Armario + Cajonera



### Mesa de Trabajo - 2 Cajoneras

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajoneras) y Encimera Madera
- 1 Cajonera con cajones de 150 y 2 de 300mm + 1 Cajonera con cajones de 75, 125, 250 y 300mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
NB4715	NB4815	1 tabla - 1500 x 40mm 2 Cajoneras
NB4720	NB4820	1 tabla - 2000 x 40mm 2 Cajoneras
NB4725	NB4825	1 tabla - 2500 x 40mm 2 Cajoneras
NB5715	NB5815	1 tabla - 1500 x 50mm 2 Cajoneras
NB5720	NB5820	1 tabla - 2000 x 50mm 2 Cajoneras
NB5725	NB5825	1 tabla - 2500 x 50mm 2 Cajoneras



### Mesa de Trabajo - 2 Cajoneras

- Color RAL7035 (Patas + Cuerpo) RAL5012 (Cajoneras) y Encimera Madera
- 2 Cajoneras con 1 cajone de 75, 100, 125, 200, 250mm - Tipo 27x27D

Código Fondo 700mm	Código Fondo 800mm	Composición (Largo x Espesor)
OB4715	OB4815	1 tabla - 1500 x 40mm 2 Cajoneras
OB4720	OB4820	1 tabla - 2000 x 40mm 2 Cajoneras
OB4725	OB4825	1 tabla - 2500 x 40mm 2 Cajoneras
OB5715	OB5815	1 tabla - 1500 x 50mm 2 Cajoneras
OB5720	OB5820	1 tabla - 2000 x 50mm 2 Cajoneras
OB5725	OB5825	1 tabla - 2500 x 50mm 2 Cajoneras





**Carros de Trabajo**

- Color RAL7035 (Cuerpo) / RAL 5012 (Puertas y Cajones) y Encimera Madera
- 2 Ruedas fijas y 2 ruedas móviles
- Dimensiones: 1200 x 700 x 810mm

Código	Composición
PPS-1	1 Balda

Código	Composición
PPS-2	1 Balda + Armario con 1 balda

Código	Composición
PPS-3	1 Balda + 2 Cajones de 75, 1 de 100 y 1 de 250mm

Código	Composición
PPS-4	2 Armarios con 1 balda cada uno

Código	Composición
PPS-5	1 Armario con 1 balda + 1 cajon de 75,125,300mm

Código	Composición
PPS-6	2 Cajoneras cada uno con 2 cajones de 75, 100, 250mm



PPS-1



PPS-4



PPS-2



PPS-5



PPS-3



PPS-6

**Armarios de Taller / Almacén - Serie SK1**

- Color RAL7035 (Cuerpo) / RAL 5012 (Puertas y Cajones)
- Dimensiones: 1000 alto x 1044 largo x 625 mm fondo

Código	Composición
SK1-004	2 Baldas

Código	Composición
SK1-005	2 Baldas y 1 cajón de 100mm

Código	Composición
SK1-006	2 Baldas, 1 cajón de 100mm y trasera perforada



SK1-004



SK1-005



SK1-006

**Armarios de Taller / Almacén - Serie SK2**

- Color RAL7035 (Cuerpo) / RAL 5012 (Puertas)
- Dimensiones: 1000 alto x 1044 largo x 405 mm fondo

Código	Composición
SK2-002	2 Baldas

Código	Composición
SK2-004	1 Balda y trasera perforada



SK2-002



SK2-004



**Armarios de Taller / Almacén - Serie SK1**

- Color RAL7035 (Cuerpo) / RAL 5012 (Puertas y Cajones)
- Dimensiones: 1950 alto x 1044 largo x 625 mm fondo

Código	Composición
SK1-001	4 Baldas

Código	Composición
SK1-002	4 Baldas y 2 cajones de 100mm

Código	Composición
SK1-003	1 Balda, 2 Cajones de 100mm y panel perforado

Código	Composición
SK1-007P	Balda Adicional para Modelo SK1...



SK1-001



SK1-002



SK1-003

**Armarios de Taller / Almacén - Serie SK2**

- Color RAL7035 (Cuerpo) / RAL 5012 (Puertas)
- Dimensiones: 1950 alto x 1044 largo x 405 mm fondo

Código	Composición
SK2-001	3 Baldas

Código	Composición
SK2-003	2 Baldas y panel perforado

Código	Composición
SK2-004P	Balda Adicional para Modelo SK2...



SK2-001



SK2-003

### Set de herramientas inalámbricas

El kit de herramientas XT-Line

- Taladro, Taladro de impacto, Amoladora 115mm, Sierra orbital, Sierra de sable Sierra recta circular
- 2 Baterías 18V 2.0 Ah + 1 Batería 18V 4.0 Ah + Cargador
- 1 Bolsa de transporte



Contenido del Set	Descripción
XT102700	Taladro inalámbrico 18V
XT102710	Taladro impacto inalámbrico 18V
XT102730	Sierra de sable inalámbrica 18V
XT102740	Lijadora orbital inalámbrica 18V
XT102720	Amoladora inalámbrica 18V
XT102745	Sierra circular inalámbrica 18V
XT102782	2x Batería 18V - 2.0Ah
XT102784	1X Batería 18V - 4.0 Ah
XT102785	Cargador batería 18V
XT90060	Bolsa de transporte 670 x 300 x 310mm

Referencia	Descripción
XT102600	Set de herramientas inalámbricas - Set 10 pcs

### Set de herramientas inalámbricas

El kit de herramientas XT-Line

- Taladro Combinado SDSplus, Taladro de impacto, Caladora, Sierra Oscilante, Linterna
- 2 Baterías 18V 2.0 Ah + 1 Batería 18V 4.0 Ah
- 1 Bolsa de transporte



Contenido del Set:	Descripción
XT102745	Taladro Inalámbrico SDSplus 18V
XT102800	Taladro impacto inalámbrico 18V
XT102725	Lijadora orbital inalámbrica 18V
XT102735	Caladora inalámbrica 18V
XT102765	Linterna LED inalámbrica 18V
XT102795	Cargador con linterna Led
XT102784	Batería 1X 18V - 4Ah
XT102785	Cargador para batería 18V
XT90060	Bolsa de transporte 670 x 300 x 310mm

Referencia	Descripción
XT102610	Set herramientas inalámbricas - Set 10pcs

**Set de herramientas inalámbricas**



Contenido del Set:	Descripción
XT102700	Taladro de impacto 18V
XT102835	Amoladora angular 125mm - 18V
XT9004	Caja portaherramientas S - 443x310x128mm
XT102782	Batería 18V -2.0Ah Samsung
XT102784	Batería 18V -4.0Ah Samsung
XT102785	Cargador para baterías

Referencia	Descripción
XT102630	Set herramientas inalámbricas - Set 6pcs

**Taladro Batería 18V**



**Taladro XTline Inalámbrico 18V**

Taladro inalámbrico diseñado para taladrar o atornillar con dos velocidades y caja de cambios de engranajes metálicos. Mango ergonómico con forma, y portabrocas rápido Iluminación LED de la zona de trabajo.



**Parámetros Técnicos:**

- Potencia: 18V
- Velocidad: 0-500/0-2000rpm
- Portabrocas: 2-13mm
- Max. ø taladrado Acero: 13mm
- Max. ø taladrado Madera: 35mm
- Max. ø taladrado Hormigón: 13mm
- Peso: 1,2kg (Peso del producto sin batería)
- Máximo apriete: 65Nm
- Aprietes Par: 25+3 Taladrado
- Velocidad: Variable

Referencia	Descripción
XT102800	Caja de Cartón - Sin Baterías
XT102800-1B2B	Pack Estuche: Máquina + Batería/Cargador

La comodidad del manejo del taladro está garantizada gracias a su diseño ergonómico con asas de goma. Más eficiente y con freno del motor y a prueba de polvo. Caja de cambios con engranajes metálicos. Portabrocas sin llave, con el manejo manual para insertar/quitar brocas.

**Parámetros Técnicos:**

- Suministro de Potencia: 18V
- Velocidad: 0-400/0-1400 rpm
- Amarre Portabrocas: 2-13mm
- max. ø taladro: Metal 12mm
- max. ø taladro: Alu 15mm
- max. ø taladro: Madera 25mm
- Máximo Par: 35Nm
- Aprietes Par: 25+1 Taladrado
- Peso: 1.1kg (Peso del producto sin batería)



Referencia	Descripción
XT102700	Caja de Cartón Sin Batería
XT102700-1B2	Pack Estuche: Máquina + Batería/Cargador



### Llave de impacto Inalámbrico 18 V

Llave inalámbrica con torque ajustable de 3 etapas con un par máximo de 300 Nm. La ventaja es el diseño compacto con forma ergonómica, con mango de goma para un manejo perfecto. La comodidad del manejo del taladro está garantizada gracias a su diseño ergonómico con asas de goma. Más eficiente y con freno del motor y a prueba de polvo. Caja de cambios con engranajes metálicos.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V
- Velocidad: 0-1000/1800/2700rpm
- Golpes / min: 0-3780bpm
- Par Máximo: 120/180/300Nm
- Amarre: 1/2"
- Peso: 1.2kg (Peso del producto sin batería)



Referencia	Descripción
XT102830	Caja de Cartón - Sin Batería
XT102830-1B5B	Pack Estuche: Máquina + Batería/Cargador
XT102830-2B5B	Pack Estuche: Máquina + 2 Batería y 1 Cargador

### Taladro de Impacto de Batería 18V

El mecanismo de impacto permite trabajar con todo tipo de tornillos largos o cortos. Dispone de control electrónico de velocidad/motor.

Portabrocas magnético

Selección sentido giro, derecha izquierda

Control velocidad

Amarre ergonómico

Iluminación LED del área de trabajo

#### Parámetros Técnicos:

- Suministro de Potencia: 18V
- Velocidad: 0-2800ot/min
- Golpes / min: 0-3600bpm
- Par Máximo: 180Nm
- Amarre: 1/4"
- Peso: 1.2kg (Peso del producto sin batería)



Referencia	Descripción
XT102710	Caja de Cartón Sin Batería

### Maletín Con: Taladro + 2 Baterías



Indicador LED de batería

#### Parámetros Técnicos:

- Suministro de Potencia: 18V
- Velocidad: 0-400/0-1400 rpm
- Amarre Portabrocas: 2-13mm
- max. ø taladro: Metal 12mm
- max. ø taladro: Alu 15mm
- max. ø taladro: Madera 25mm
- Máximo Par: 35Nm
- Aprietes Par: 25+1 Taladrado
- Peso: 1.1kg (Peso del producto sin batería)
- Tipo Batería: Li-Ion
- Capacidad Batería: 2x2000MAH
- Tiempo de carga: 1h aprox

#### Accesorios Incluidos:

- Punta 50mm
- 1xPZ1; bit 25mm: head 5mm, 6mm; PPZ1, PH1, PH2, PZ1, PZ2
- Brocas: 1x2mm, 1x2.5mm, 1x3mm, 1x4mm, 1x5mm, 1x6mm
- Amarre Magnético: 55mm



Referencia	Descripción
XT102770E	Maletín con 2 baterías y Cargador

### Maletín Con: Taladro de Impacto + Baterías

La comodidad del manejo del taladro está garantizada gracias a su diseño ergonómico con asas de goma. Más eficiente y con freno del motor y a prueba de polvo. Caja de cambios con engranajes metálicos.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V
- Velocidad: 0-2800ot/min
- Golpes / min: 0-3600bpm
- Accesorios: Amarre 50mm PZ1
- Par Máximo: 180Nm
- Amarre: 1/4"
- Peso: 1.2kg (Peso del producto sin batería)
- Capacidad Batería: 1x2000MAH



Referencia	Descripción
XT102760E	Maletín con 1 Batería y Cargador

### Taladro de Impacto de Batería

Taladro inalámbrico para taladrar o atornillar con mecanismo de dos engranajes internos metálicos. Mango de goma ergonómico, sistema de cambio rápido y zona de luz para el área de trabajo.



**Parámetros Técnicos:**

- Potencia: 18V
- Velocidad:: 0-500/0-2000 rpm
- Portabrocas: 2-13mm
- Freno Eléctrico: Doble sentido
- Velocidad: Variable
- Max. Potencia: 65Nm
- Aprietes: 21+3 Taladrado
- Peso: 1.2kg (Peso del producto sin batería)
- Tipo Batería: Li-Ion
- Capacidad Batería: 2.0Ah
- Cargador: XT102785
- Motor: Alterno 48

Referencia	Descripción
XT102860E	Caja de Plástico con 2 Baterías y Cargador

### Martillo Combinado de Batería SDS-Plus

Martillo combinado de batería para perforación ligera en albañilería y hormigón así como yesos, azulejos, anclajes, etc... Cambio de velocidades y tipos para posicionar dependiendo la necesidad. Iluminación LED en el área del trabajo. El equipo está sin batería-cargador. Cargador y baterías individuales de 2.0Ah ó 4.0Ah se pueden comprar independientemente.



**Parámetros Técnicos:**

- Potencia: 18V
- Velocidad:: 0-1420 rpm
- Portabrocas: SDSplus
- Max. ø taladrado Acero: 13mm
- Max. ø taladrado Madera: 22mm
- Max. ø taladrado Hormigón: 28mm
- Funciones: 4
- Fuerza de Ataque: 2.2J
- Peso: 2,3kg (Peso del producto sin batería)
- Motor: Alterno 48
- Freno Eléctrico: Doble sentido
- Velocidad: Variable

Referencia	Descripción
XT102840	Caja de Cartón - Sin Baterías
XT102840-1B5B	Pack Estuche: Máquina + Batería/Cargador
XT102840-2B5B	Pack Estuche: Máquina + 2 Batería y 1 Cargador



### Taladro Inalámbrico XTline 18V - 4.0Ah

Taladro inalámbrico 18V sin escobillas  
Con dos baterías de 4.0Ah + caja incluido.



#### Parámetros Técnicos:

- Potencia: 18V
- Velocidad: 0-500/0-2000rpm
- Portabrocas: 2-13mm
- Max. ø taladrado Acero: 13mm
- Max. ø taladrado Madera: 35mm
- Max. ø taladrado Hormigón: 13mm
- Máximo apriete: 65Nm
- Aprietes Par: 21+3 Taladrado
- Velocidad: Variable
- Cargador: XT102790 (incluido)
- Batería: XT102790 (2und incluido)
- Peso: 1,1kg (Peso del producto sin batería)

Referencia	Descripción
XT102865E	Equipo Completo: Taladro + Caja + 2 baterías + cargador

### Amoladora Batería ø115 - 18V

Amoladora de batería ø115mm para todo tipo de cortes.  
Gracias a su mango permite tres posiciones para un mejor uso



#### Parámetros Técnicos:

- Suministro de Potencia: 18V; Velocidad: 10,000 rpm
- Disco ø115mm; Indicador LED de estado batería; Tuerca apriete M14
- Peso 1.6kg (Peso del producto sin batería)
- Accesorios: Llave y Mango

Referencia	Descripción
XT102720	Caja de Cartón - Sin Batería

### Amoladora Batería ø125



**Parámetros Técnicos:** Suministro de Potencia: 18V; Velocidad: 10,000 rpm  
- Disco ø125mm; Indicador LED de estado batería; Tuerca apriete M14  
- Peso 1.6kg (Peso del producto sin batería)  
- Accesorios: Llave y Mango

Referencia	Descripción
XT102835	Caja de Cartón - Sin Batería
XT102835-1B5B	Pack Estuche: Máquina + Batería/Cargador
XT102835-2B5B	Pack Estuche: Máquina + 2 Batería y 1 Cargador

### Compresor Batería - 18V

Compresor de Aire, diseñado para inflar pequeños equipos.  
Baterías opcionales de 2.0Ah o 4.0Ah

#### Botón de Arranque

Pantalla LCD con manómetro de bares ó PSI

Equipo con forma ergonómica para un uso más confortable



#### Parámetros Técnicos:

- Suministro de Potencia: 18V; Máxima presión: 7 bar
- Peso: 0.7kg (Peso del producto sin batería)

Referencia	Descripción
XT102775	Caja de Cartón - Sin Batería
XT102776	Accesorio: Cable Conexión





**Taladro - Destornillador - 2 Baterías**



Batería XT102698



Destornillador de batería dos velocidades y taladro para madera, metal y plásticos. Diseño compacto y ligero. El Destornillador tiene un sistema rápido de extraer el portabrocas y poder atornillar con amarre 1/4"

**Parámetros Técnicos:**

- Tensión Potencia: 10.8V, 2.0 Ah
- Velocidad sin carga: 0-350 / 0-1350 rpm, Batería 2x2000MAH, Samsung; Amarre 1 -10mm
- Tiempo de carga: 60min, Ajuste Apriete: 18 + 1
- Fuerza: 25Nm, Peso: 1kg, LED linterna, Indicador LED estado de batería- Peso: 0.9kg (Peso del producto sin batería)
- Max. ø taladrado metal: 6mm
- Max. ø taladrado madera: 10mm
- Max. ø taladrado aluminio: 20mm



Referencia	Descripción
XT102699	Equipo Completo Estuche Plástico

**Destornillador compacto de batería 3,6V**

Destornillador compacto de batería, para apretar y aflojar tornillos. Cuerpo giratorio 60° con controlador de par. Se incluye un práctico estuche de accesorios para su uso.



**Accesorios Incluidos:**

- 1x Extensión 60mm
- 3x Juego Torq: 6,8,10
- 4x Puntas: 1,2,3,4
- 4x Puntas: S0,S1,S2,S3
- 4x Puntas: PL: 4,6,8,10
- 5x Puntas: IP10,IP15,IP20,IP25,IP30
- 5x Puntas: F: 3,4,5,6,7
- 6x Puntas: TRX: T10,T15,T20,T25,T30,T40
- 7x Puntas: TRX with hole: T10,T15,T20,T25,T30,T35,T40
- 8x Puntas: PH0,PH1,PH2,PH3; PZ1,PZ2,PZ3
- 8x Puntas: HEX: 2,;2,5;3;4;5;5,5;6;8



**Parámetros Técnicos:**

- Tensión Potencia: 3.6V
- Velocidad:: 200/min
- Amarre: 1/4"
- Cargador: USB
- Max. fuerza: 4Nm
- Posiciones: 10+1 Taladrado
- Peso: 0.5kg (Peso del producto sin batería)
- Tipo Batería: Li-Ion
- Capacidad Batería: 1500MAH
- Tiempo de carga: 3-5h



Referencia	Descripción
XT102106	Caja de Plástico

### Lijadora de banda inalámbrica - 18 V

La lijadora de banda inalámbrica es adecuada para trabajar con madera y metal.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V, Velocidad: 120-380rpm
- Tamaño de banda de lija: 75x457mm
- Peso: 2.4kg (Peso del producto sin batería)



Referencia	Descripción
XT102755	Caja de Cartón - Sin Batería
XT102755-1B5B	Pack Estuche: Máquina + Batería/Cargador

### Cepilladora a batería - 18V

La cepilladora inalámbrica es especialmente adecuada para trabajar con madera. Motor poderoso que asegura un uso más prolongado por carga de batería.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V, Velocidad: 1400rpm
- Ancho máximo: 82mm | Profundidad máxima 1.5mm
- Máxima profundidad herramienta: 8mm
- Peso: 2.4kg (Peso del producto sin batería)



Referencia	Descripción
XT102750	Caja de Cartón - Sin Batería
XT102750-1B5B	Pack Estuche: Máquina + Batería/Cargador
XT102750-2B5B	Pack Estuche: Máquina + Batería/Cargador

### Herramienta Múltiple Batería - 18V

La amoladora oscilante corta paneles de yeso, madera, metal, plásticos, composites, etc. También lija esas superficies. Palanca de bloqueo con sistema rápido de sustitución de la herramienta y accesorios. La Luz LED incorporada facilita una visión óptima en el lugar de trabajo.

Luz LED Integrada para facilitar una visión óptima en el área de trabajo.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V, Velocidad: 5000-20000 rpm
- Indicador de Batería LED, Velocidad control: 6-Velocidades
- Ángulo de oscilación: 3º Grados, Sistema de amarre rápido
- Peso: 1.2kg (Peso del producto sin batería)



Referencia	Descripción
XT102725	Caja de Cartón - Sin Batería

### Lijadora Orbital Batería - 18V

Diseño ergonómico para un uso fácil en las superficies a trabajar. Soporte de goma para una fácil adaptación de los accesorios.



#### Parámetros Técnicos:

- Suministro de Potencia: 18V
- Velocidad: 2000-10000 rpm
- Control de Velocidad: 6 grados, diámetro 125mm
- Peso: 1.1kg (Peso del producto sin batería)



Referencia	Descripción
XT102740	Caja de Cartón - Sin Batería



### Sierra Circular Batería ø165 - 18V

Se puede ajustar a diferentes ángulos de corte.  
Se puede usar para diferente tipo de materiales.

Adaptador para aspirador

Freno eléctrico motorizado y mango de goma para un trabajo mas seguro

Línea Láser

Manejable y ligera

**Parámetros Técnicos:**

- Suministro de Potencia: 18 V
- Velocidad: 4200 rpm; Diámetro Disco: 165x20x1,6, 20 Dientes
- Corte: 51mm a 90 ° Inclinación: 35mm a 45 °
- Peso: 2.4kg (Peso del producto sin batería)



Referencia	Descripción
XT102745	Caja de Cartón - Sin Batería

### Sierra de Calar Batería - 18V

Para uso en corte directo en materiales como madera, Aluminio, madera, etc.. Diseño compacto con un giro pequeño y óptimo. Sistema de cambio de cuchilla facil y rápido.

Uso en diversos materiales madera, aluminio, acero, etc...

Ajuste de corte de hasta 4 grados

Sistema rápido de cambio

Sistema de extracción de viruta

Iluminación LED del área de trabajo

**Parámetros Técnicos:**

- Suministro de Potencia: 18 V
- Velocidad: 0-2700 min, Capacidad Corte: Madera 80mm, Aluminio 12mm, Acero 5mm
- Ángulo de Ajuste 0-45 °, Longitud de Hoja: 20mm, Ajuste de: 4 Grados
- Peso: 1.7kg (Peso del producto sin batería)



Referencia	Descripción
XT102735	Caja de Cartón - Sin Batería
XT102735-1B2B	Pack Estuche: Máquina + Batería/Cargador y set de cuchillas

### Sierra circular a batería ø165 - 18V

Para cortar materiales de madera, ajustable para diferentes ángulos de corte para un ajuste preciso de diferentes materiales de corte. La sierra está equipada con una guía láser para un corte preciso.



**Parámetros Técnicos:**

- Suministro de Potencia: 18 V
- Motor sin escobillas
- Velocidad: 4200 rpm; Diámetro Disco: 165x20x1,6, 20 Dientes
- Corte: a 90° - 51mm a 45° - 35mm
- Peso: 2.4kg (Peso del producto sin batería)



Referencia	Descripción
XT102845	Caja de Cartón - Sin Batería
XT102845-1B5B	Pack Estuche: Máquina + Batería/Cargador
XT102845-2B5B	Pack Estuche: Máquina + Batería/Cargador

### Sierra de Sable Batería - 18V



**Parámetros Técnicos:**

- Suministro de Potencia: 18V, Velocidad: 0-3000 min
- Potencia de Corte: Madera 115mm, Metal 10mm, Accesorios, 1x sierra madera, 1x sierra metal
- Sistema de Cambio rápido, Indicador LED de batería
- Peso: 1.7kg (Peso del producto sin batería)



Referencia	Descripción
XT102730	Caja de Cartón - Sin Batería
XT102730-1B2B	Pack Estuche: Máquina + Batería/Cargador

### Cargador con Luz LED Interna

El cargador es adecuado para cargar dispositivos electrónicos a través del USB. Además dispone de luz LED. El cargador es suministrado sin batería. Baterías individuales de 2.0Ah o 4.0 Ah. Se compran por separado.



- Suministro de Potencia 18V; Potencia de carga de salida: 5V
- Corriente de entrada: 1,5A, lámpara LED de 0,3W, intensidad lumínica 60 Lm,
- Peso: 0,12kg (Peso del producto sin batería)

Referencia	Descripción
XT102795	Caja de Cartón - Sin Batería

### Baterías de Recambio



Referencia	Descripción
XT102782E	18.0V, Tipo Li-Ion, 2.0Ah - EVE
XT102784E	18.0V, Tipo Li-Ion, 4.0Ah - EVE
XT102786E	18.0V, Tipo Li-Ion, 5.0Ah - EVE
XT102787E	18.0V, Tipo Li-Ion, 6.0Ah - EVE
XT102789	18.0V, Tipo Li-Ion, 8.0Ah - Samsung

### Linterna LED 3W 18V

Linterna equipada con 3 LED de 3W de alta calidad. Características del LED con amplio ángulo de luz de 90° y con 260 lúmenes. La lámpara no se suministra ni con batería ni cargador. Se puede comprar cargador 4.0Ah y baterías individuales por separado.



- Parámetros Técnicos**
- Suministro de Potencia 18V; consumo de energía: 3W
  - Luminosidad: 260 Lm
  - Peso: 0.25kg (Peso del producto sin batería)

Referencia	Descripción
XT102765	Caja de Cartón - Sin Batería

### Panel de luz LED 5000 lm - 18V

- Parámetros Técnicos**
- Suministro de Potencia 18V;
  - Potencia: 35W
  - Potencia entrada: 15-21V
  - Duración batería 1.5h (a máximo brillo)
  - Peso: 0.95kg (Peso del producto sin batería)



Referencia	Descripción
XT102768	Caja de Cartón - Sin Batería

### Cargador para Baterías



Referencia	Descripción
XT102785	18.0V, Tipo Li-Ion, 2.4Ah
XT102790	18.0V, Tipo Li-Ion, 3.5Ah
XT102792	2x 18.0V, Tipo Li-Ion, 3.5Ah



# POWER TOOLS SERIES



### Taladro de Impacto

Taladro de impacto universal. Cuerpo de metal para una alta resistencia. Buen control gracias al gran interruptor, dirección de rotación y velocidad.

#### Topo de Profundidad



#### ACCESORIOS:

- 1 par de brochas
- Topo de profundidad
- Empuñadura Auxiliar
- Llave Portabrocas



#### Parámetros Técnicos:

- Potencia 900W; Frecuencia: 230V/50Hz; Peso: 2,9kg
- Velocidad: 0~2800 rpm; Capacidad Taladro: 1,5-13mm
- max. ø taladro madera: 30mm
- max. ø taladro hormigón: 30mm
- max. ø taladro acero: 13mm



Referencia	Descripción
XT106130	Potencia 900W
XT106130-38	Recambios Escobillas

### Taladro de Impacto

Taladro de impacto universal. Cuerpo de metal para una alta resistencia. Buen control gracias al gran interruptor, dirección de rotación y velocidad.

- Cuerpo con Portabrocas 13mm
- Perforación con fuerza e impacto
- Velocidad continua de control según materiales
- Diseño compacto y poco peso
- Par de fuerza máximo



#### ACCESORIOS:

- 1 par de brochas
- Topo de profundidad
- Empuñadura Auxiliar
- Llave Portabrocas



#### Parámetros Técnicos:

- Potencia 850W; Frecuencia 230V/50Hz; Peso: 2,7kg
- Velocidad: 0~3000 rpm; Capacidad Taladro: 1,5-13mm
- max. ø taladro madera: 30mm
- max. ø taladro hormigón: 30mm
- max. ø taladro acero: 13mm



Referencia	Descripción
XT106120	Potencia 850W
XT106120-25	Recambio Escobillas



### Taladro de Impacto - 1050W



**Parámetros Técnicos:**

- Diámetro Max hormigón: 16mm
- Diámetro Max madera: 40mm
- Diámetro Max metal: 13mm
- Portabrocas: 1.5-13mm con llave
- Potencia: 1050W - Velocidad: 0-1200/3000 rpm
- Peso: 3.2 kg



Referencia	Descripción
XT106150	Potencia: 1050W
XT106150-60	Recambio Escobillas

### Martillo Combinado SDS PLUS 3J

Martillo combinado con dos tipo de amarre: Tipo SDS-PLUS y amarre cilíndrico para broca.



Peso 3,2 kg

**Parámetros Técnicos:**

- Diámetro Max hormigón: 28mm
- Diámetro Max madera: 30mm
- Diámetro Max metal: 13mm
- Portabrocas: SDS-Plus o Portabrocas hasta 13mm sin llave
- Potencia 850W; Frecuencia 230V/50Hz; Potencia Impacto 3J
- Velocidad:: 0~1300 rpm, Peso: 3,2kg



Referencia	Descripción
XT106010	Potencia 850W, 3J
XT106010-89	Recambio Escobillas
106010-11-16	Recambio Portabrocas 1-13
106010-1-13	Recambio Portabrocas SDS

### Martillo Combinado- SDS PLUS 3J



Peso 3,2 kg

**Parámetros Técnicos:**

- Diámetro Hormigón: 28mm
- Diámetro Madera: 30mm
- Diámetro Metal: 13mm
- Amarre: SDS-Plus
- Potencia 850W; Frecuencia: 230V/50Hz; Potencia Impacto: 3J
- Velocidad:: 0~1300 rpm, Peso: 3,2kg



Referencia	Descripción
XT106005	Potencia 850W, 3J



### Martillo Combinado SDS-Max

El Martillo combinado se utiliza para taladrar y picar con un corte en ángulo ajustable con una posición de bloqueo. Sistema antivibraciones para un cómodo trabajo. El equipo en caso de sobrecarga se auto-apaga automáticamente. Para uso en ladrillos, hormigón o piedra.

Anti-vibración para reducir lafatiga de trabajo



6 grados ajustables para el control de velocidad

#### Características

- El ángulo de corte es ajustable con 12 tipos de cinceles
- Mango Ergonómico
- Indicador de encendido y protección sobreesfuerzo
- Sistema Anti-vibración para facilitar el trabajo
- Velocidades ajustables 6 y control de impacto
- Protegido con embrague de seguridad

#### Parámetros Técnicos:

- Potencia 1100W; Frecuencia 230V/50Hz; Peso: 6,14kg
- Velocidad: 300~760 rpm; Martilleo: 1900-4860BPM
- Fuerza de Golpeo 1-7J, Amarre SDS MAX



Referencia	Descripción
XT106061	Potencia 1100W, 1-7J
XT106061-93	Recambio Escobillas



### Martillo Cortador SDS-Max

Utilizado principalmente para trabajos de demolición en hogares, pero también para uso en corto plazo profesional. La sujeción hexagonal permite un cambio cómodo de herramienta. El martillo está equipado con un bloqueo en 12 pasos para un posicionamiento óptimo del cincel. Uso: Para trabajar en materiales de construcción; Ladrillos, Homigón, Piedra, etc...



Anti-vibración para reducir lafatiga de trabajo

#### CARACTERÍSTICAS

- El ángulo de corte es ajustable a 12 tipos para el cincel.
- Amarre Ergonómica suave 360°
- Sistema anti-vibración: Reduce la carga de trabajo
- Indicador de Encendido y protección
- 6 Velocidades de control

#### Parámetros Técnicos:

- Potencia 1200W; frequency 230V/50Hz; Peso: 5,6kg
- Velocidad: 300~760 rpm; Martilleo 1900-4860BPM
- Fuerza de Ataque 14J, Amarre SDS MAX



Referencia	Descripción
XT106057	Potencia 1200W, 14J
XT106057-58	Recambio Escobillas



### Martillo Combinado - SDS PLUS 3.5J

Martillo combinado SDS PLUS para taladrar y cincelar mampostería y hormigón. Para cortar yeso, baldosas, taladrar anclajes y agujeros pasantes y perforación de núcleos. Función de taladrado, taladrado con martilleo y picar. Posibilidad de cambiar la cabeza para sujetar la broca SDS plus y para sujeción de vástago cilíndrico. El mango ergonómico permite trabajo más cómodo y conveniente



**Parámetros Técnicos:**

- Diámetro Max hormigón: 30mm
- Diámetro Max madera: 30mm
- Diámetro Max metal: 13mm
- Diámetro Max en pared: 80mm
- Portabrocas: SDS-Plus
- Potencia 1000W; Frecuencia 230V/50Hz; Potencia Impacto 3.5J
- Golpes-fuerza 2800-3400min; Velocidad: 650-1000 rpm, Peso: 4,63kg



Referencia	Descripción
XT106040	Potencia: 1000W - 3.5J
XT106040-81	Recambio Escobillas

### Martillo Combinado - SDS PLUS 6J



**Parámetros Técnicos:**

- Diámetro Max hormigón: 30mm
- Diámetro Max madera: 45mm
- Diámetro Max metal: 15mm
- Portabrocas: SDS-Plus
- Potencia 900W; Frecuencia 230V/50Hz; Potencia Impacto 6J
- Golpes-fuerza 0-4500min; Velocidad: 0-850rpm, Peso: 5,1kg



Referencia	Descripción
XT106050	Potencia: 900W - 6J
XT106050-61	Recambio Escobillas

### Amoladora ø115mm - 720W



**Parámetros Técnicos:**

- Diámetro Disco: ø115mm
- Con llave de apriete incorporada
- Potencia 720W - Diámetro amarre: ø22.2
- Tuerca de amarre: M14
- Velocidad: 11000 rpm, Peso: 1.9kg

Referencia	Descripción
XT105115	Potencia: 720W - ø115mm
XTAG125-38	Recambio Anillo Disco
XT AG115-F01	Recambio Manilla

### Amoladora ø125mm - 1400W



**Parámetros Técnicos:**

- Diámetro Disco: ø125mm
- Con llave de apriete incorporada
- Potencia 1400W - Diámetro amarre: ø22.2
- Velocidad de regulación: 1-6 - Tuerca amarre: M14
- Velocidad: 2800-10000 rpm, Peso: 3kg

Referencia	Descripción
XT105130	Potencia: 1400W - ø125mm
XT105130-40	Recambio Escobillas

### Amoladora ø125mm - 840W



**Parámetros Técnicos:**

- Diámetro Disco: ø125mm
- Con llave de apriete incorporada
- Potencia 840W - Diámetro amarre: ø22.2
- Tuerca de amarre: M14
- Velocidad: 10000 rpm, Peso: 2.0kg

Referencia	Descripción
XT105125	Potencia: 840W - ø125mm
XTAG125-36	Recambio Anillo Interior Soporte
XTAG125-38	Recambio Anillo Disco
XTAG125-42	Recambio Escobillas



### Amoladora ø150mm - 1200W



#### Parámetros Técnicos:

- Diámetro Disco: ø150mm
- Con llave de apriete incorporada
- Potencia 1200W - Diámetro amarre: ø22.2
- Tuerca de amarre: M14
- Velocidad: 9000 rpm, Peso: 3.5kg



Referencia	Descripción
XT105150	Potencia: 1200W - ø150mm
XTAG125-38	Recambio Anillo Disco
XTAG1503-46	Recambio Escobillas

### Amoladora ø230mm - 2600W



#### Parámetros Técnicos:

- Diámetro Disco: ø230mm
- Con llave de apriete incorporada
- Potencia 2600W - Diámetro amarre: ø22.2
- Tuerca de amarre: M14
- Velocidad: 6500 rpm, Peso: 6.0kg



Referencia	Descripción
XT105240	Potencia: 2600W - ø230mm
XTAG125-38	Recambio Anillo Disco
XTAG2305-39	Recambio Escobillas
XTAG2305-58	Recambio Manilla

### Pulidora Excéntrica



Pulidora excéntrica diseñada especialmente para pulir, preservar y tratar pinturas en carrocerías de vehículos sin el uso del agua y también para retocar pequeños defectos, rasguños, etc...  
Puede usarse con todo tipo de discos de pulido con o sin pasta de brillantado o pulido.



#### Parámetros Técnicos:

- Potencia 600W; 230V/50Hz
- Diámetro disco 150mm, Peso 2,2kg
- Velocidad:: modo 1-3: 1500-3700 rpm para pulido con cera  
modo 4-6: 4800-6800 rpm para pulido

El producto se suministra sin accesorios



Referencia	Descripción
XT105300	Potencia 600W
XT105300-4	Recambio Escobillas

### Pulidora de Tambor



Para la aplicación como el esmerilado, pulido, satinado, etc...  
Se puede usar con diferente tipo de materiales, como madera, acero, inoxidable, plásticos, etc.. usando el tambor mas adecuado.  
Uso óptimo gracias a su versatilidad y ergonomía de fácil uso.



#### Parámetros Técnicos:

- Potencia 1300W; 230V/50Hz
- Velocidad: 900-3200 rpm, Diámetro: 100x120mm, Peso: 2,8kg

El producto se suministra sin accesorios



Referencia	Descripción
XT105350	Potencia 1300W
XT105350-16	Recambio Escobillas
XT105350-46	Recambio Carcasa Protección

### Amoladora Orbital Delta - 200W

La amoladora vibratoria es una herramienta para moler materiales de madera, metal, sino también para rectificar acabados dañados. No se recomienda la lijadora para lijar paneles de yeso, eliminación de rayones microfinos después de lavar el vehículo, etc.)



**Parámetros Técnicos:**

- Superficie de lijado: 150x100mm
- Potencia 200W - Longitud cable: 2metros
- Velocidad: 12500 rpm, Peso: 1.2kg

El producto se suministra sin accesorios



Referencia	Descripción
XT106235	Potencia: 200W
XT106235-4	Recambio Escobillas

### Amoladora Orbital ø125 - 450W

Amoladora compacta excéntrica con diseño ergonómico. Agarre superior para mayor comodidad en cualquier posición de trabajo. Adecuado para moler y pulir varios material, pintura y barniz.



**Parámetros Técnicos:**

- Superficie de lijado: ø125mm
- Potencia 450W - Accesorio: Extractor de polvo
- Velocidad: 6000-13000 rpm, Peso: 1.75kg

El producto se suministra sin accesorios



Referencia	Descripción
XT106382	Potencia: 450W
XT106382-17	Recambio Escobillas

### Lijadora Orbital

Lijadora orbital con un diseño ergonómico y agarre superior para una mayor comodidad en su uso en todas las posiciones de trabajo. Adecuado para esmerilar, pulir, etc...



**TECNOLOGÍA**  
Cambio rápido del papel

**FUERZA**  
Extracción del polvo



**Parámetros Técnicos:**

- Potencia 380W; 230V/50Hz; Velocidad: 6 000 - 13 000 rpm
- Diámetro disco 125mm; Extracción del polvo
- Peso 2.2kg

El producto se suministra sin accesorios



Referencia	Descripción
XT106380	Potencia 380W

(\* ) Hasta fin de Stock

### Lijadora de Banda - 240W



- Facil cambio de papel de lijado
- Tecnología de base de soporte en aluminio resistente
- Salida de extracción de polvo



**Parámetros Técnicos:**

- Potencia 240W; 230V/50Hz; Velocidad: 6000-12000rpm
- Dimensiones de lija: 90mm x 182mm
- Peso 1,5kg

El producto se suministra sin accesorios



Referencia	Descripción
XT106245	Potencia 240W
XT106245-21	Recambio Escobillas

### Juego de Amoladora multifuncional con regulación de velocidad + 6 Accesorios



Referencia	Descripción
XT105135	Potencia: 1400W - Velocidad variable

### Accesorio para amoladora - Fresado



Referencia	Descripción
XT105315	Diámetro $\varnothing$ 125mm
XT105320	Máquina + Accesorio de fresado $\varnothing$ 125mm

### Accesorio para amoladora - Banda de lija



Referencia	Descripción
XT105319	Banda 533x30 mm
XT105342	Máquina + Accesorio banda de lija 533x30mm

### Accesorio para amoladora - Banda de lija



Referencia	Descripción
XT105305	Banda de 533x30mm
XT105337	Máquina + Accesorio de banda 533x30mm

### Accesorio para amoladora - Pulidora



Referencia	Descripción
XT105306	Diámetro $\varnothing$ 125mm
XT105345	Máquina + Accesorio pulidora $\varnothing$ 125mm

### Accesorio para amoladora - Tapa de extracción



Referencia	Descripción
XT105307	Diámetro $\varnothing$ 125mm
XT105140	Máquina + Accesorio extracción $\varnothing$ 125mm



**Accesorio para amoladora - Pulidora**



Referencia	Descripción
XT105307	Diámetro ø150mm
XT105325	Máquina + Accesorio pulidora ø150mm

**Lijadora de tubos 1300W**

La amoladora de cinta para tubos es una ayuda útil para pulir y esmerilar tubos, pulido rugoso y acabado satinado.



**Parámetros Técnicos:**

- Potencia 1300W; 230V/50Hz; Velocidad: 1100-3200 rpm
- Medidas banda 760x40mm - Peso 4.2kg
- Gran ángulo de la correa (270 °) para un trabajo eficiente

El producto se suministra sin accesorios



Referencia	Descripción
XT105340	Potencia 1300W
XT105340-49	Recambio Escobillas

**Maquina pulidora/rectificadora ø225m**

**Accesorios incluidos:**

- 1 par de carbono
- 2x papel de lija (tamaño 150, 180, 240)
- 2x conectores
- 1x llave hexagonal
- 1x manguera de extracción de polvo



**Parámetros Técnicos:**

- Potencia 710W; 230V/50Hz; Velocidad: 1100-2000 rpm
- Medidas banda 760x40mm Diámetro disco: ø225mm
- Accesorios opcionales: Aspiradora industrial XT102810

Referencia	Descripción
XT106322	Potencia 710W - ø225mm
XT106322-66	Recambio Escobillas

**Herramienta Multifunción**

Multi-herramienta para un uso general con diferentes tipos de herramientas. Dispone de diferentes accesorios para corte, lijado, pulido. El cabezal se puede ajustar en diferentes ángulos.

- Posibilidad de amarrar el equipo en otras superficies
- Equipamiento: 1xHoja sierra semicircular, 1xHoja sierra, 3x Papel lija (gr40,60,80)



**Parámetros Técnicos:**

- Potencia 400W; 230V/50Hz
- Velocidad: 15000-22000 rpm
- Peso 1,6kg



Referencia	Descripción
XT106200	Potencia: 400W
XT106200-38	Recambio Escobillas

### Lijadora de Banda



Abrazaderas (opcionales)



Cambio rápido de banda de lija

**Parámetros Técnicos:**

- Potencia 1010W; 230V/50Hz; Velocidad: 120-380 rpm
- Nivel de presión acústica (LpA): 90dB
- Nivel de potencia acústica (LwA): 101dB
- Vibraciones 5,07m/s<sup>2</sup>; Peso 3,6kg



Posicionamiento de banda de lija



Ajuste manual del mango amarre

Referencia	Descripción
XT106310	Potencia: 1010W, Banda Lija: 75x533mm
XT106310-76	Abrazaderas: 2pcs
XT106310-2	Recambio Correa
XT106310-30	Recambio Funda
XT106310-9	Recambio Escobillas
XT106310-REDUKCE	Recambio Adaptador Reductor

### Mini Multi-Herramienta

Multiherramienta para el rectificado, taladrado, pulido, etc...  
Se suministra en un estuche con 40 accesorios

**TECNOLOGÍA**

Mango ergonómico para su uso manualmente



**TECNOLOGÍA**

Control de velocidad

**Parámetros Técnicos:**

- Potencia 170W; 230V/50Hz
- Velocidad: 10000-35000 rpm
- 1,8-3,2mm; Peso 0,9kg



Referencia	Descripción
XT107060	Potencia: 170W + 40 Accesorios

### Caladora - 750W



**Parámetros Técnicos:**

- Potencia 750W; 230V/50Hz; Velocidad: 600-2900 rpm
- 6 Velocidades de velocidad
- Capacidad de Corte: madera - 132mm, en metal 10mm
- Ajuste de ángulo -45° - +45°; Peso 2.5kg



Referencia	Descripción
XT106368	Potencia: 750W

### Caladora - 600W

Sierra de calar para cortar madera, aglomerado y metal.  
Dispone de ajuste de velocidad, modo de corte y acción del péndulo.



**ACCESORIOS**

- 1 pieza extracción polvo
- 1 pieza adaptador
- 1 filtro de polvo
- 2 cuchillas corte
- 1 regla
- 1 manual

**MATERIAL**

Protección de superficie en plástico

**TECNOLOGÍA**

4 tipos de cambios oscilante

**TECNOLOGÍA**

Cambio de herramienta rápido



**Parámetros Técnicos:**

- Potencia 600W; 230V/50Hz; Velocidad: 16 000 rpm
- Cuchilla: 65mm; Capacidad de Corte: madera - 130mm, en metal 10mm
- Altura de oscilación 26mm; Amarre tipo T
- Ajuste de ángulo -45° - +45°; Peso 3.0kg



Referencia	Descripción
XT106360	Potencia: 600W
XTAT3602-13	Recambio Escobillas
XTAT3602-16-91	Recambio Placa Guia



### Caladora - 550W

Sierra de calar para cortar madera, aglomerado y metal. Dispone de ajuste de velocidad, modo de corte y acción del péndulo.

**ACCESORIOS**

- 1 pieza extracción polvo
- 1 pieza adaptador
- 1 filtro de polvo
- 2 cuchillas corte
- 1 regla



**MATERIAL**

Selección del corte en 3 niveles 0-3

**TECNOLOGÍA**

Velocidad control

**TECNOLOGÍA**

Botón de funcionamiento continuado



**Parámetros Técnicos:**

- Potencia 550W; 230V/50Hz
- Capacidad de corte: madera - 65mm, aluminio - 12mm, metal 6mm
- Velocidad: 800-2600 rpm
- Ajuste de ángulo -45° - +45°; Peso 2.1kg



Referencia	Descripción
XT106365	Potencia: 550W
XT106365-52	Recambio Escobillas

### Rectificadora de Banco

Pequeña amoladora-rectificadora de banco para pequeñas tareas de rectificadas, pulidos, etc.. en espacios cerrados o de difícil acceso. Uso para tipo de materiales adecuando los accesorios.



**SEGURIDAD**

Base con 4 orificios para su amarre en banco de trabajo

**Parámetros Técnicos:**

- Potencia 150W; 230V/50Hz
- Velocidad: 0-10000 rpm
- Diámetro disco: 75x20x10mm; Peso 2,7kg

Referencia	Descripción
XT107100	Potencia: 150W

(\*) Hasta fin de Stock

### Set Herramientas Para Dremel - 146pc



Referencia	Descripción
XT107146	Set 146 Piezas

### Planeadora-Canteadora

**TECNOLOGÍA**

13 posiciones de control de profundidad

**TECNOLOGÍA**

Extracción del polvo en dos sentidos



**TECNOLOGÍA**

Ajuste de la profundidad de corte de hasta 3 mm dependiendo la superficie. La máxima profundidad de corte es de 18 mm lo que hace que la máquina sea muy versatil para ranuras y bordes.

**ACCESORIOS**

- 1 Set guías paralelas
- 1 Soporte

**Parámetros Técnicos:**

- Potencia 750W; 230V/50Hz; Velocidad: 17 000 rpm
- Tamaño de cuchilla 82x3mm; mango ergonómico; superficie deslizante de aluminio
- Ancho 82mm; Ajustable en rango 0-3mm; profundidad ranura 0-18mm
- Orificios de extracción del polvo en ambos lados; Peso 3.0kg

Referencia	Descripción
XT106372	Potencia: 750W
XT106372-24	Recambio Escobillas

**POTENCIA**

Soporte práctico para un facil manejo y alta seguridad en su uso



### Recambios para máquina: XT106372



Referencia	Descripción
XT106373	Dimension: 82X3mm

### Esmeriladora

Potente motor con lámpara para una mejor visión del área de trabajo.

**TECNOLOGÍA**  
Lámpara ajustable

**POTENCIA**  
Discos finos o gruesos

**SEGURIDAD**  
Interruptor Protegido

Sistema anti-vibración

**Parámetros Técnicos:**

- Potencia 150W - 230V/50Hz
- Velocidad: 2850 rpm
- Peso 5.5kg
- Nivel de presión acústica: LpA v dB: 83.5 d
- Nivel de potencia acústica: LWA v dB: 96.5dB (A)
- Diámetro disco: 125x16x12,7mm



Referencia	Descripción
XT107125	∅125mm/150W + luz 40W

### Esmeriladora

**Parámetros Técnicos:**

- Potencia 300W - 230V/50Hz
- Velocidad: 2850 rpm
- Peso 8kg
- Nivel de presión acústica: LpA v dB: 96.5dB (A)
- Nivel de potencia acústica: LpA v dB: 83.5 dB (A)
- Diámetro disco: 150x20x12,7mm



Referencia	Descripción
XT107150	∅150mm/300W + luz 40W

### Esmeriladora

Esmeriladora de banco de baja velocidad para el afilado de tijeras, cuchillos, cinceles, etc.. Dos tipos de disco para uso independiente.



**Parámetros Técnicos:**

- Potencia 250W; 230V/50Hz; Velocidad: 2850 rpm
- Diámetro disco superior: 200x40x20mm
- Diámetro disco: 150x20x12.7mm
- Nivel presión acústica LWA v dB: 96.5dB(A)
- Nivel potencia acústica LpA v dB 83.5dB(A)
- Peso 8.5kg



Referencia	Descripción
XT107175	∅150/200mm; 250W

### Esmeriladora

Esmeriladora de gran potencia de dos discos para el desbarbado de todo tipo de metales. Resistente diseño con eliminación de vibraciones.



**Parámetros Técnicos:**

- Potencia 520W; 230V/50Hz; Velocidad: 2850 rpm
- Diámetro disco: 200x25x16mm
- Nivel presión acústica LWA v dB: 96.5dB(A)
- Nivel potencia acústica LpA v dB 83.5dB(A)
- Peso 18kg



Referencia	Descripción
XT107200	∅200mm; 520W



### Afiladora de Cadenas



**Parámetros Técnicos:**

- Potencia 85W - 230V/55Hz
- Tamaño disco: 108x3,2x22,2mm
- Velocidad: 4800 rpm
- Peso 2,8kg

Referencia	Descripción
XT108802	Potencia:185W
XT108812	Recambio disco: 108x32x22,2



### Afiladora Eléctrica de Discos

Utilizado para el rectificado de hojas de sierra o discos de sierra. El ángulo de rectificado es ajustable para garantizar la precisión.



**Parámetros Técnicos:**

- Potencia 110W; 230V/50Hz; Velocidad: 5300 rpm
- Nivel acústico LWA v dB: 96.5dB(A); nivel de presión sonora LpA v dB 83.5dB(A); Peso 8.5kg

Referencia	Descripción
XT108803	Potencia: 110W
XT108813	Disco 100x10mm

### Afiladora de Brocas

Diseñado para el afilado de brocas de forma rápida y precisa. Sistema de ajuste gracias a su portabrocas universal.



**Parámetros Técnicos:**

- Potencia 80W; 230V/50Hz; Velocidad: 4800 rpm
- Diámetro de brocas: 3-13mm
- Longitud de brocas: Hasta 60mm, Peso 2,9kg

Referencia	Descripción
XT108808	Potencia: 80W
XT108818	Disco de recambio

### Ingletadora - ø255mm

La sierra de inglete es adecuada para cortar madera, plástico y metales no ferrosos. El marcado láser de la línea de corte es práctico para un corte preciso. El diseño permite al usuario trabajar cerca de la pared. La construcción de la sierra es adecuada para trabajos móviles incluso en áreas pequeñas para un fácil manejo. Diseño muy compacto para un fácil almacenamiento y transporte. El potente motor de 2000 W con 4500 rpm garantiza un trabajo perfecto para cortar material. Mangos de soporte extra anchos para un cómodo control de la sierra



**ACCESORIOS**  
Botón de indicador láser en el mango de la sierra

**ACCESORIOS**  
Indicador láser

**ACCESORIOS**  
Sistema de desplazamiento rápido para un ajuste a medidas de las necesidades

**ACCESORIOS**  
Mesa rotativa de ángulo

#### Parámetros Técnicos:

- Potencia 2000W; 230V/50Hz; Velocidad: 4500 rpm
- Diámetro disco: 255mm, Diámetro amarre disco: 30mm
- Corte a: 0°x 0°, 0°x45°; 45°x 0°; 45°x 45°/ 305x90mm, 305x56mm; 305x80mm, 305x56mm
- Ángulo corte ajustable -45° a +45°; Peso: 15,5kg



Referencia	Descripción
XT106255	Diámetro: 255mm Potencia: 2000W
XT106255-7	Recambio Escobillas

### Ingletadora - ø210mm



**ACCESORIOS**  
Botón de indicador láser en el mango de la sierra

**ACCESORIOS**  
Indicador láser

**ACCESORIOS**  
Mesa rotativa de ángulo

#### Parámetros Técnicos:

- Potencia 1700W; 230V/50Hz; Velocidad: 4500 rpm
- Diámetro disco: 210mm, Diámetro amarre disco: 30mm
- Corte a: 0°x 0°, 0°x45°; 45°x 0°; 45°x 45°/ 300x60, 300x35; 210x60, 210x35mm
- Ángulo de corte ajustable -45° a +45°; Peso: 9,5kg



Referencia	Descripción
XT106210	Diámetro: 210mm Potencia: 1700W



**Inglotadora ø305mm**



**Parámetros Técnicos:**

- Potencia 2000W; 230V/50Hz; Velocidad: 4500 rpm
- Diámetro disco: 305mm, Diámetro amarre disco: 30mm
- Corte 0°x90° de 340x120mm; 0°x45° izquierda de 340x48mm
- +/-45°x90° de 235x102mm; +/-45°x45° izquierda de 235x48mm
- +/-45°x45° derecha de 235x40mm
- Ángulo corte ajustable -45° a +45°; Peso: 15,5kg



Referencia	Descripción
XT106305	Diámetro: 305mm Potencia: 2000W
XT106305-52	Recambio Escobillas

**Cizalla-Cortadora de chapa**

Las cizallas para chapa se utilizan para cortes y recortes rápidos y sin virutas hojas de acero macizas y perforadas y hojas de metales no ferrosos. Permiten un corte de chapa rápido y preciso hasta un espesor de 1,6 mm



**Parámetros Técnicos:**

- Potencia 600W; Frecuencia 230V/50Hz; Velocidad: 4500 rpm
- Espesor máximo de corte: 1.6mm
- Peso 2,5kg



Referencia	Descripción
XT106335	Potencia: 600W
XT106335-33	Recambio Escobillas

**Sierra Circular ø185**



**Parámetros Técnicos:**

- Potencia 1350W; Frecuencia 230V/50Hz; Velocidad: 5000 rpm
- Diámetro disco 185mm; diámetro amarre: 30mm
- Corte 90° 62mm, 45°46mm; ángulo de corte ajustable -45° - +45°
- Peso 4,5kg



Referencia	Descripción
XT106185	Potencia: 1350W

**Sierra Circular ø185**



**Parámetros Técnicos:**

- Potencia 1350W; Frecuencia 230V/50Hz; Velocidad: 5300 rpm
- Diámetro disco 185mm; diámetro amarre: 30mm
- Corte 90° 62mm, 45° 46mm; ángulo de corte ajustable -45° - +45°
- Peso 4,1kg



Referencia	Descripción
XT106187	Potencia: 1380W
XT106187-42	Recambio Escobillas

### Sierra Circular

Para cortes en madera y materiales similares. También puede usarse en otro tipo de materiales como plásticos y aluminio.

#### ACCESORIOS

- 1x Regla
- 1x Disco

#### PROTECCIÓN

Cubierta de plástico para máxima seguridad

#### MATERIAL

Cuerpo de aluminio para un corte estable.

#### Parámetros Técnicos:

- Potencia 1400W; Frecuencia 230V/50Hz; Velocidad: 5.000 rpm
- Diámetro disco 190mm; diámetro amarre 16mm
- Corte 90° 63mm, 45°44mm; ángulo de corte ajustable -45°/+45°;
- Peso 4,1kg



Referencia	Descripción
XT106190	Potencia: 1350W
XT 106190-16	Recambio Escobillas

### Fresadora Frontal

Cortadora frontal-fresadora para tamaños de 8-12mm. Cortador de arco, amarre ergonómico, llave inglesa y extensión-tope.

#### TECNOLOGÍA

Ajuste de profundidad para el fresado

#### SEGURIDAD

Base de aluminio estable

#### Parámetros Técnicos:

- Potencia 1200W; Frecuencia 230V/50Hz;
- Velocidad: 16000-30000 rpm
- Eje: 8,12mm; Peso 4,5kg



Referencia	Descripción
XT106395	Potencia: 1200W
XT106395-10	Recambio Escobillas

### Sierra Circular

Para cortes en madera y materiales similares. También puede usarse en otro tipo de materiales como plásticos y aluminio.

#### ACCESORIOS

- 1x Regla
- 1x Disco

#### AJUSTES

Ajuste para ángulos



#### Parámetros Técnicos:

- Potencia 1300W; Frecuencia 230V/50Hz; Velocidad: 4500 rpm
- Diámetro disco 160mm; diámetro amarre 20mm
- Corte 90° 55mm, 45°35mm; ángulo de corte ajustable -45° - +45°
- Peso 3,5kg



Referencia	Descripción
XT106160	Potencia: 1300W
XT106160-19	Recambio Escobillas

### Sierra de Sable

Hoja de sierra delgada para cortar madera, tuberías, perfiles, etc.. Reemplazo de hoja de forma rápida sin llave.



#### Parámetros Técnicos:

- Potencia 650W; Frecuencia 230V/50Hz; Velocidad: 500-3000 rpm
- Tamaño de cuchilla: 65mm
- Rendimiento en madera 115mm, en metal - 10mm
- Peso 2.7kg



Referencia	Descripción
XT106390	Potencia: 650W
XT106390-25	Recambio Escobillas

### Soldador Portatil

Soldador electrofusión para soldar todo tipo de tubos termoplásticos hasta  $\varnothing 63\text{mm}$ . Adaptadores incorporados con material de teflón anti-adherente. Regulación de temperatura de 0-300°C. Indicador de potencia y temperatura.

**Caja de Metalcon accesorios**

**ACCESORIOS**

Extensiones en  $\varnothing(32,40,50,63\text{mm})$



**Parámetros Técnicos:**

- Potencia 230V/50Hz; Potencia 800W; Tiempo de calentamiento <15min.
- Peso 3,4kg



Referencia	Descripción
XT101001	800W, $\varnothing$ 20-63mm

### Accesorios para Soldador (XT101001)



Referencia	Descripción
XT101020	20mm
XT101025	25mm
XT101032	32mm
XT101040	40mm
XT101050	50mm
XT101063	63mm

### Pistola de Calor

Pistola de calor para eliminar pinturas, barniz o dar formas con la contracción/dilatación de materiales. Pantalla LCD para mostrar la temperatura actual. Varias boquillas para un trabajo efectivo.



Boquillas diferentes tipos

**Calentador:**  
en espiral cerámico



**Parámetros Técnicos:**

- Potencia 230V/50Hz; Potencia 2000W; 50-650°C,
- 4 boquillas, 1 rascador
- Flujo aire 250-500l/min
- Peso: 0,95kg



Referencia	Descripción
XT106230	2000W, Caja de Cartón

### Soldador Portatil



**ACCESORIOS**

Extensiones en  $\varnothing(16,20,25,32\text{mm})$



**Parámetros Técnicos:**

- Potencia 800W; Potencia 230V/50Hz; Tiempo de calentamiento <15min.;
- Peso 2,8kg



Referencia	Descripción
XT103001	800W, $\varnothing$ 16-32mm

### Accesorios para Soldador (XT103001)



Referencia	Descripción
XT101020	20mm
XT101025	25mm
XT101032	32mm
XT101040	40mm

### Pistola de Calor



**Modelo XT106220:**  
3 Tipos de Temperatura

**Parámetros Técnicos:**

- Potencia 230V/50Hz; Potencia 2000W; 3 Temperaturas 50-450-600°C,
- 4 Boquillas, 1 rascador
- Flujo aire 250-500l/min
- Peso: 0,95kg



Referencia	Descripción
XT106220	2000W, Caja de Cartón



### Máquina de soldar Inverter 160A

Tecnología de ciclo de trabajo alto a 40°C, que se encarga del funcionamiento continuo a largo plazo e incluso a temperaturas ambiente elevadas. Equipado con grandes acoplamientos rápidos para cables de sujeción con terminales 35-50mm.



#### Parámetros Técnicos:

- Rango de soldadura: 20-160A
- Ciclo de trabajo 40° - 71A-100% / 92A-60% / 160A-20%
- Electrodo de 1.6 a 4 mm
- Potencia 5300W
- Protección IP21 - Peso: 4kg

Referencia	Descripción
XT103160	Potencia: 160A
XTJ421-20	Electrodo Rutile ø2 - 2.5Kg
XTJ421-25	Electrodo Rutile ø2.5 - 2.5Kg
XTJ421-32	Electrodo Rutile ø3.2 - 5Kg
XTJ506-20	Electrodo Básico ø2 - 2.5Kg
XTJ506-25	Electrodo Básico ø2.5 - 2.5Kg
XTJ506-32	Electrodo Básico ø3.2 - 5Kg
XTM70070	Recambio de Amarre Electrodo 250mm - 300A

### Pistola de pegamento

Pistola de cola para pegar diversos materiales como textiles, madera, metal, corcho, plástico, cerámica ...



Referencia	Descripción
XT10905	Potencia: 100W - barra ø7.2mm

### Pistola de pegamento

#### TECNOLOGÍA

- Función anti-goteo
- Fusible de seguridad
- Cuerpo cerámico
- Boquilla intercambiable



Referencia	Descripción
XT10910	Potencia: 100W - barra ø11mm
XT10916	Potencia: 150W - barra ø11mm

### Pistola de pegamento



Referencia	Descripción
XT10906	40W, pegamento barra ø 11mm
XT10929	80W, pegamento barra ø 11mm

### Pistola de soldar

La pistola de soldadura está diseñada para soldar fácilmente, conexiones eléctricas soldadas, hacer modelos y pintar por anillo.



Referencia	Descripción
XT10930	Potencia: 150W
P19932	Hilo soldar ø1mm/200g

### Recambios de barras de pegamento transparente



Referencia	Descripción
XT10901	Longitud 100mm - ø7mm - Pack 12 und
XT10902	Longitud 300mm - ø7mm - Pack 20 und
XT10903	Longitud 300mm - ø11mm - Pack 10 und

### Recambios de barras de pegamento - negro



Referencia	Descripción
XT10805	Longitud 100mm - ø7.2 mm - Pack 12 und
XT10806	Longitud 100mm - ø11 mm - Pack 12 und

**Compresor 2HP 1.5Kw**



**Parámetros Técnicos:**

- Compresor aceite, potencia: 1,5kW; caudal de presión: 24litros
- Max. presión 8bar; 2850 rpm
- Potencia: 230V/ 50-60Hz
- Potencia: 187 l/min; fuerza salida: 125l/min
- Peso 23kg



Referencia	Descripción
XT2002	Pistón Simple 1,5kW

**Compresor OIL-FREE - 900 W, 6 L**



**Parámetros Técnicos:**

- Potencia: 900W; Capacidad: 6 litros
- Max. presión 8bar
- Potencia: 230V/ 50-60Hz
- Potencia orientable: 60 l/min;
- Peso: 13kg



Referencia	Descripción
XT2008	Potencia: 900W

**Compresor 3HP 2.2Kw**

Compresor XT-Line de doble pistón para la producción de aire comprimido con presión máxima de 8bar para operar con herramientas neumáticas y similares. Bomba lubricada con aceite para extender su vida útil.

**TECNOLOGÍA**

Doble Pistón

**CAPACIDAD**

Depósito de 50 litros con alta potencia de salida



**Parámetros Técnicos:**

- Compresor aceite, potencia: 2,2kW; caudal de presión: 50litros
- Máx. presión: 8bar; 2 manómetros, 2850 rpm
- Potencia: 230V/ 50-60Hz
- Potencia: 356l/min; fuerza salida: 250l/min
- Peso 39kg



Referencia	Descripción
XT2004	Doble Pistón 2,2kW

**Compresor Portatil 1,5HP 1,1KW**

Compartimento incorporado. Sin aceite y libre de mantenimientos.



**Parámetros Técnicos:**

- Compresor de aceite, potencia: 1.1kW
- Máx.. presión 8bar; 3550 rpm
- Potencia: 230V/ 50-60Hz
- Potencia orientable: 180 l/min;
- Peso 6.3kg



Referencia	Descripción
XT2011	Potencia: 1.1Kw

### Aspiradora Industrial para suelo seco/húmedo

Diseñado para el uso industrial básico como residuos medios o pequeñas zonas con líquidos. Mango flexible para acceso a zonas difíciles.

#### Accesorios incluidos:

- Tubo telescópico
- Tubo metálico largo
- Boquilla para suelo
- Bolsa de papel
- Adaptador
- Filtro Hepa

Enchufe: 230V



Capacidad 20L para un uso diario.

Aspiración en suelos secos o húmedos



Protección IPX4a



#### Parámetros Técnicos:

- Potencia 1400W; Potencia 230V/50Hz, Protección IPX4
- Contenedor plástico 20l, Potencia succión 58l/s
- Cable conexión eléctrica 3m, Peso: 4kg

Referencia	Descripción
XT102819	Potencia: 1400W

### Accesorios para Aspiradora Industrial



XT1028B03

XT1028B02

XT1028B12

XT1028B11

XT1028F13

XT1028P04

XT1028P07

XT1028F01

XT1028F04

XT1028B09

XT1028H01

Referencia	Descripción
XT1028B01	Boquilla para Suelo Madera/Parquet
XT1028B02	Boquilla de Suelo
XT1028B03	Ruedas 1pack/4pcs
XT1028B09	Tubo de ranura
XT1028B12	Enchufe adaptador
XT1028F01	Bolsa papel 1pack/5pcs
XT1028F04	Bolsa textil 1pack/1pc
XT1028F11	Filtro Hepa
XT1028F13	Filtro de espuma
XT1028H01	Manguera de plástico 3m
XT1028P04	Tubo metálico (Pack 2)
XT1028P07	Tubo telescópico metálico



### Accesorios para Aspiradora Industrial

La aspiradora industrial está equipada con dos funciones de aspiración: seco y húmedo. La aspiradora tiene una manguera de succión de 3 m y un tubo de acero de longitud ajustable. Es adecuado para eliminar virutas, serrín y polvo de yeso. Estable y manejable gracias a las ruedas delanteras y traseras.



**Parámetros Técnicos:**

- Potencia 1600W; Potencia 230V/50Hz,
- Contenedor plástico 30l
- Cable conexión eléctrica 4m
- Sistema de aspiración: Seco/Húmedo
- Potencia succión 78l/s
- Longitud de manguera: 3m
- Peso: 13.4kg

Referencia	Descripción
XT102810	Potencia: 1600W

### Accesorios de recambio

Referencia	Descripción
XT10281A0	Filtro Hepa
XT10281B1	Filtro de polvo
XT10281C2	Adaptador
XT10281B3	Cepillo brocha 32mm
XT10281D4	Tubo plástico
XT10281E5	Conector
XT10281F6	Tubo fino de aspiración
XT10281G7	Tubo telescópico metálico
XT10281H8	Bolsa textil
XT10281L9	Boquilla de Suelo



XT10281A0



XT10281B1



XT10281B3



XT10281C2



XT10281E5



XT10281F6



XT10281L9



XT10281G7



XT10281D4



XT10281H8

### Montacargas eléctrico

Polipasto eléctrico diseñado para elevación o descenso vertical de cargas fijas. Elevación de cargas mediante polea de hasta 250 kg, elevación recta de pesos de hasta 125 kg.



**Parámetros Técnicos:**

- Potencia: 540W
- Potencia 230V/50Hz
- Max capacidad 125/250kg
- Cable de acero de 3 mm
- Altura máxima 12/6 m
- Peso 10,7kg



Referencia	Descripción
XT108250	Potencia: 540W

### Montacargas eléctrico

Polipasto eléctrico diseñado para elevación o descenso vertical de cargas fijas. Levantamiento de cargas mediante polea hasta 600 kg, levantamiento recto de pesos hasta 300 kg.



**Parámetros Técnicos:**

- Potencia: 1200W
- Potencia 230V/50Hz
- Max capacidad 300/600kg
- Cable de acero de 4.5 mm
- Altura máxima 12/6 m
- Peso 17,5kg



Referencia	Descripción
XT108600	Potencia: 1200W

### Montacargas eléctrico



Referencia	Descripción
XT108100	Largo: 750mm



**Pulverizador a batería 18V**



El rociador inalámbrico es adecuado para tratar de difundir los líquidos en un espacio de trabajo amplio. Cómodo mediante a las dos correas para su enganche en la espalda.

**Parámetros Técnicos:**

- Voltaje: 18V
- Capacidad de agua: 1.3m/min
- Capacidad depósito: 10l
- Flujo de agua: 1.3l/min
- Longitud manfuera: 800mm
- Presión máxima: 3bar
- Peso: 2.75kg (Sin batería ni deposito lleno)

Referencia	Descripción
XT102940	Caja de cartón - Sin batería



**Hidrolimpiadora a presión**

La limpiadora de alta presión está diseñada para limpiar superficies de diversos materiales (madera, piedra, plástico, hierro, etc.). La principal ventaja de la limpieza es el lavado de medios de transporte (coche, moto, moto, maquinaria, suelos industriales, etc.) Manejo muy fácil gracias a las ruedas. Todos los accesorios se pueden guardar en los compartimentos de limpieza



**Parámetros Técnicos:**

- Potencia: 1800W - 230V/50Hz
- Incluye: Manguera - Lanza - Pistola
- Flujo de agua: 6l/min
- Dimensiones: 410x320x575mm
- Presión de trabajo: 105bar - Presión máxima: 165bar
- Peso 10,6kg

Referencia	Descripción
XT121701	Potencia: 1800W
XT121701-38	Recambio: Varilla Extension Ajustable
XT121701-39	Recambio: Pistola
XT121701-42	Recambio: Deposito Jabón para pistola
XT121701-43	Recambio: Conexión Entrada Agua
XT121701-44	Recambio: Manguera
XT121701-46	Recambio: Bloquilla
XT121701-47	Recambio: Boquilla 6en1



the best of HONITON  
**HONIDRIVER**

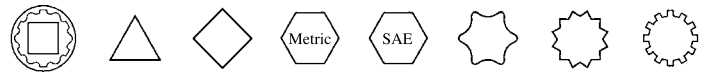
Un ejemplo de multifuncionalidad de las llaves con un producto patentado, HONIDRIVER. Honidriver supera al tipo estandar de las llaves. Cada borde de llave tiene una geometría especial para adaptarse a cada necesidad. Con HONIDRIVER puede utilizar las llaves incluso con cabezas de tornillo dañadas.

Aplicable a los tipos de Amarre:

Métrica, Sae, 3PT, 4PT, 6PT, Torx, Spline, Sistema Cuadrado



Puede usarse para seis tipos de aprietes diferentes



MEDIDA	METRIC	SAE	STAR	SIZE	METRIC	SAE	STAR
3.2	3.2	1/8"	E4	16	16	5/8"	E20
4	4	5/32"	E5	17	17	21/32"	
4.5	4.5			18	18	11/16"	E22
5	5	3/16"	E6	19	19	3/4"	E24
5.5	5.5	7/32"	E7	20	20	25/32"	
6	6		E8	21	21	13/16"	E26
1/4"		1/4"	E8	22	22	7/8"	E28
7	7	9/32"		23	23	29/32"	E28
8	8	5/16"	E10	24	24	15/16"	E30
9	9	11/32"	E11	25	25	31/32"	E32
10	10	3/8"	E12	26	26	1"	E32
11	11	7/16"	E14	27	27	1-1/16"	E34
12	12	15/32"		28	28	1-3/32"	E36
13	13	1/2"	E16	29	29	1-1/8"	E36
14	14	9/16"	E18	30	30	1-3/16"	E38
15	15	19/32"		32	32	1-1/4"	E40

### SET 1/4" - 20 pcs



Pcs	Descripción
14x	1/4" Cabeza vaso: 3.2 4 4.5 5 5.5 6 7 8 9 10 11 12 13 14 mm
1x	1/4" Llave de carraca
2x	1/4" Extensión 50,150mm
1x	1/4" Destornillador cuadradillo
1x	1/4" Articulación
1x	1/4" Mango amarre en T

Referencia	Descripción
H1120	40CRV, Caja de plástico

### SET 1/2" - 27 pcs



Pcs	Descripción
18x	1/2" Cabeza vaso : 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca
2x	1/2" Extensión 125, 250 mm
2x	1/2" Adaptador 16, 21 mm
1x	1/2" Articulación
1x	1/2" Mango amarre en T

Referencia	Descripción
H4027	40CRV, Caja de plástico

**SET 1/4"- 3/8"- 1/2" - 99 pcs**

HONIDRIVER



Pcs	Descripción
13x	1/4" Cabeza vaso : 3.2 4 4.5 5 5.5 7 8 9 10 11 12 13 mm
11x	3/8" Cabeza vaso : 9 10 11 12 13 14 15 16 17 18 19 mm
14x	1/2" Cabeza vaso : 14 15 16 17 18 19 20 21 22 23 24 27 30 32mm
1x	1/4" Mango de destornillador
2x	1/4" Extensión 50 150 mm
2x	3/8" Extensión 75 150 mm
2x	1/2" Extensión 125 150 mm
2x	3/8"Adaptador 14 18 mm
2x	1/2"Adaptador 15 21 mm
3x	Adaptador 3/8"- 1/4" 3/8"- 1/2" 1/2"- 3/8"
3x	Articulación 1/4" 3/8" 1/2"
21x	1/4" Contactos punta:
	PH 1 2 3 PZ 1 2 3
	PL 4 5.5 7 HEX 3 4 5 6 7 8
	TRX 10 15 20 25 30 40
3x	Llave allen : 1.5 2 2.5
17x	5/16" Punta :
	PH 3 4 PZ 3 4 PL 8 10 12
	HEX 3 4 5 6 7 8 TRX 40 45 50 55

Referencia	Descripción
H4399	40CRV, Caja de plástico

**SET 1/4"- 3/8"- 1/2" - 111 pcs**

HONIDRIVER



Pcs	Descripción
13x	1/4" Cabeza vaso : 3.2 4 4.5 5 5.5 7 8 9 10 11 12 13 mm
11x	3/8" Cabeza vaso : 9 10 11 12 13 14 15 16 17 18 19 mm
14x	1/2" Cabeza vaso : 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
3x	Llave de carraca 1/4" 3/8" 1/2"
1x	1/4" Mango de destornillador
2x	1/4" Extensión 50 150 mm
2x	3/8" Extensión 75 150 mm
2x	1/2" Extensión 125 150 mm
2x	3/8"Adaptador 14 18 mm
2x	1/2"Adaptador 15 21 mm
3x	Adaptador 3/8"- 1/4" 3/8"- 1/2" 1/2"- 3/8"
3x	Articulación 1/4" 3/8" 1/2"
21x	1/4" Contactos punta:
	PH 1 2 3 PZ 1 2 3
	PL 4 5.5 7 HEX 3 4 5 6 7 8
	TRX 10 15 20 25 30 40
3x	Llave allen : 1.5 2 2.5
17x	5/16" Punta :
	PH 3 4 PZ 3 4 PL 8 10 12
	HEX 3 4 5 6 7 8 TRX 40 45 50 55
12x	Llave combinada: 8 9 10 11 12 13 14 15 16 17 18 19mm

Referencia	Descripción
H4321	40CRV, Caja de plástico

**SET 1/4" - 68 pcs**

HONIDRIVER



Referencia	Descripción
H4368	40CRV, Caja de plástico

Pcs	Descripción
13x	1/4" Cabeza vaso : 3.2 4 4.5 5 5.5 7 8 9 10 11 12 13 mm
14x	1/2" Cabeza vaso : 10 11 12 13 14 15 16 17 19 21 22 24 27 30 32 mm
3x	Llave de carraca 1/4" 1/2"
1x	1/4" Mango de destornillador
2x	1/4" Extensión 50 150 mm
2x	1/2" Extensión 125 150 mm
1x	1/2" T-M head
2x	1/2"Adaptador 15 21 mm
2x	Articulación 1/4" 1/2"
21x	1/4" Contactos punta :
	PH 1 2 3 PZ 1 2 3
	PL 4 5.5 7 HEX 3 4 5 6
	TRX 10 15 20 25 30 40
3x	Llave allen : 1.5 2 2.5
8x	llave combinada: 10 11 12 13 14 15 17 19 mm

### SET 1/4" - 11pcs en soporte de plástico



Referencia	Descripción
H2200	Vaso 1/4": 4 4.5 5 5.5 6 7 8 9 10 11 13mm

### SET 3/8" - 10 pcs en soporte de plástico



Referencia	Descripción
H2300	Vaso 3/8": 9 10 11 12 13 14 15 16 17 19mm

### SET 1/2" - 10 pcs en soporte de plástico



Referencia	Descripción
H2400	Vaso 1/2": 10 11 12 13 14 15 17 19 22 24mm

### SET 1/4" - 43 pcs



Pcs	Descripción
12x	1/4" Cabeza vaso: 4 4.5 5 5.5 6 7 8 9 10 11 12 13 mm
1x	1/4" Llave de carraca
2x	1/4" Extensión 50 100 mm
1x	1/4" Mango con cuadradillo
1x	1/4" Adaptador 1/4"- 3/8", Amarre T
1x	1/4" Articulación universal
3x	Llave allen : 1.5 2 2.5 mm
1x	1/4" Extensión flexible 150 mm
21x	1/4" Vaso con Punta : HEX 3 4 5 6 7 8 PL 4 5.5 7 PH 1 2 3 PZ 1 2 3

Referencia	Descripción
H1143	40CRV, Caja metálica

### SET 1/2" - 25 pcs



Pcs	Descripción
18x	1/2" Cabeza vaso: 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca
1x	1/2" Mango amarre en T
2x	1/2" Extensión 125 250 mm
2x	1/2" Adaptador 16 21 mm
1x	1/2" Articulación universal

Referencia	Descripción
H4054	40CRV, Caja metálica

### SET 1/4" - 33 pcs



Pcs	Descripción
12x	1/4" Cabeza vaso: 4 4.5 5 5.5 6 7 8 9 10 11 12 13 mm
1x	1/4" Llave de carraca
2x	1/4" Extensión 50 100 mm
1x	1/4" Mango con cuadradillo
1x	1/4" Adaptador 1/4"- 3/8", Amarre T
1x	1/4" Articulación universal
1x	1/4" Mango con cuadradillo
3x	Llave allen : 1.5 2 2.5 mm
12x	1/4" Vaso con Punta : PH 1 2   PL 3 4 5 6 7   HEX 3 4 5 6 8

Referencia	Descripción
H1133	40CRV, Caja metálica



Pcs	Descripción
18x	3/8" Cabeza vaso : 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 mm
9x	3/8" Cabeza vaso larga: 8 10 11 12 13 14 15 17 19 mm
7x	3/8" Cabeza vaso E: E6 E8 E10 E11 E12 E14 E16
1x	3/8" Llave de carraca
1x	3/8" Articulación universal
12x	3/8" Vaso con Puntas : PH 2 3 PH 2 3   PZ 2 3   PL 5,5 8   HEX 4 5 6 7 8   TRX T20 T25 T27 T30 T40 T45

Referencia	Descripción
H13058	40CRV, Caja metálica

### SET 3/8" - 22 pcs



Pcs	Descripción
15x	3/8" Cabeza vaso: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 22 mm
1x	3/8" Llave de carraca
2x	3/8" Extensión 75,150mm
1x	3/8" Mango amarre en T
1x	3/8" Articulación
2x	3/8" Adaptador Vaso 16,21mm

Referencia	Descripción
H1322	40CRV, Caja metálica



**SET 1/2" - 28 pcs**



Pcs	Descripción
20x	1/2" Cabeza vaso: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca
2x	1/2" Extensión 125 250 mm
2x	1/2" Adaptador 16 21 mm
1x	1/2" Mango amarre en T
1x	1/2" Articulación universal
1x	1/2" Llave de carter

Referencia	Descripción
H4028	40CRV, Caja metálica

**SET 1/4" - 1/2" - 59 pcs**



Pcs	Descripción
12x	1/4" Cabeza vaso: 4 4.5 5 5.5 6 7 8 9 10 11 12 13 mm
1x	1/4" Mango con cuadradillo
1x	1/4" Mango amarre en T
14x	1/2" Vaso : 10 11 12 13 14 15 17 19 21 22 24 27 30 32 mm
1x	1/4" Llave de carraca
1x	1/4" Extensión 100 mm
1x	1/4" Articulación universal
1x	1/2" Llave de carraca
2x	1/2" Extensión 125 250 mm
2x	1/2" Adaptador 16 21 mm
1x	1/2" Reductor 1/2"- 3/8", T-M Cabeza
1x	1/2" Articulación universal
3x	Llave allen : 1.5 2 2.5 mm
18x	1/4" Vaso con Punta :
	PH 1 2 3 PZ 1 2
	PL 4 5 5.5 7 HEX 4 5 6 8
	TRX 10 15 20 25 27 30

Referencia	Descripción
H4059	40CRV, Caja metálica

**SET 1/2" - 17 pcs**



Pcs	Descripción
11x	1/2" Cabeza vaso: 10 11 12 13 14 15 17 19 21 22 24 mm
1x	1/2" Llave de carraca
2x	1/2" Extensión 125 250 mm
1x	1/2" Reductor a 3/8"- 1/2", T-M Vaso
1x	1/2" Articulación universal
1x	1/2" Adaptador 21 mm

Referencia	Descripción
H4017	40CRV, Caja de plástico

**SET 1/2" - 25 pcs**



Pcs	Descripción
18x	1/2" Cabeza vaso: 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca
1x	1/2" Adaptador 21 mm
1x	1/2" Mango amarre en T
1x	1/2" Articulación universal
1x	1/2" Mango giratorio

Referencia	Descripción
H4052	40CRV, Caja metálica

**SET 1/2" - 13 pcs**



Pcs	Descripción
11x	1/2" Cabeza vaso: 8 10 11 12 13 14 15 17 19 21 22 mm
1x	1/2" Llave de carraca
1x	1/2" Extensión 125 mm

Referencia	Descripción
H4030	40CRV, Caja metálica

**SET 1/4" - 46 pcs**



Pcs	Descripción
13x	1/4" Cabeza vaso: 4 4.5 5 5.5 6 7 8 9 10 11 12 13 14 mm
1x	1/4" Llave de carraca
1x	1/4" Mango con cuadradillo
1x	1/4" Articulación universal
1x	1/4" Mango amarre en T
2x	1/4" Extensión : 50 100 mm
1x	1/4" Extensión flexible 150 mm
4x	Llave allen: 1.25 1.5 2 2.5 mm
1x	Adaptador
21x	1/4" Vaso con Punta :
	PH 1 2 3 PL 5.5 6.5 8
	HEX 3 4 5 6 7 8 10 PZ 1 2 3
	TRX 10 15 20 25 27 30 40 45 50 55

Referencia	Descripción
H1160	40CRV, Caja de plástico

### SET 1/2" - 25 pcs



Pcs	Descripción
18x	1/2" Vaso : 8 9 10 11 12 13 14 15 16 17 18 19 21 22 24 27 30 32 mm
1x	1/2" Llave de carraca
1x	1/2" T-Extensión
1x	1/2" Articulación universal
2x	1/2" Extensión 125 250 mm
2x	1/2" Adaptador 16 21 mm



Referencia	Descripción
H4025	40CRV, Caja de plástico

### SET 1/4" - 3/8" - 1/2" - 99 pcs



Pcs	Descripción
13x	1/4" Vaso : 3.2 4 4.5 5 5.5 7 8 9 10 11 12 13 mm
11x	3/8" Vaso : 9 10 11 12 13 14 15 16 17 18 19 mm
14x	1/2" Vaso : 14 15 16 17 18 19 20 21 22 23 24 27 30 32mm
3x	Llave de carraca 1/4" 3/8" 1/2"
1x	1/4" Mango con cuadradillo
2x	1/4" Extensión 50 150 mm
2x	3/8" Extensión 75 150 mm
2x	1/2" Extensión 125 150 mm
2x	3/8" Adaptador 14 18 mm
2x	1/2" Adaptador 15 21 mm
3x	Adaptador 3/8"- 1/4" 3/8"- 1/2" 1/2"- 3/8"
3x	Articulación 1/4" 3/8" 1/2"
21x	1/4" Vaso con Punta:
	PH 1 2 3 PZ 1 2 3
	PL 4 5.5 7 HEX 3 4 5 6 7 8
	TRX 10 15 20 25 30 40
3x	Llave allen : 1.5 2 2.5
17x	5/16" Punta:
	PH 3 4 PZ 3 4 PL 8 10 12
	HEX 3 4 5 6 7 8 TRX 40 45 50 55

Referencia	Descripción
H4099	Tipo estandar (Vasos de 6) 40CRV, Caja de plástico

### SET 1/4" - 1/2" - 56 pcs



Pcs	Descripción
13x	1/2" Vaso : 10 11 12 13 14 15 17 19 22 24 27 30 32 mm
1x	1/2" Llave de carraca
2x	1/2" Adaptador 16 21 mm
1x	1/2" Adaptador 3/8"- 1/2", -bar Vaso
1x	1/2" Articulación universal
11x	1/4" Vaso : 4 4.4 5 5.5 6 7 8 9 10 11 13 mm
17x	1/4" Vaso Punta:
	PZ 1 2 PL 4 5.5 7   TRX 10 15 20 25 30 HEX 3 4 5 6
1x	1/4" Llave de carraca
1x	1/4" Mango con cuadradillo
1x	1/4" Mango amarre en T
1x	1/4" Articulación universal
1x	1/4" Extensión 100 mm
3x	Llave allen : 1.5 2 2.5 mm

Referencia	Descripción
H4060	40CRV, Caja de plástico

### SET 1/4" - 3/8" - 1/2" 111 pcs



Pcs	Descripción
13x	1/4" Vaso : 3.2 4 4.5 5 5.5 7 8 9 10 11 12 13 mm
11x	3/8" Vaso : 9 10 11 12 13 14 15 16 17 18 19 mm
14x	1/2" Vaso : 14 15 16 17 18 19 20 21 22 23 24 27 30 32mm
3x	Llave de carraca 1/4" 3/8" 1/2"
1x	1/4" Mango con cuadradillo
2x	1/4" Extensión 50 150 mm
2x	3/8" Extensión 75 150 mm
2x	1/2" Extensión 125 150 mm
2x	3/8" Adaptador 14 18 mm
2x	1/2" Adaptador 15 21 mm
3x	Adaptador 3/8"- 1/4" 3/8"- 1/2" 1/2"- 3/8"
3x	Articulación 1/4" 3/8" 1/2"
21x	1/4" Vaso con Punta:
	PH 1 2 3 PZ 1 2 3   PL 4 5.5 7 HEX 3 4 5 6 7 8   TRX 10 15 20 25 30 40
3x	Llave allen : 1.5 2 2.5
17x	5/16" Punta:
	PH 3 4 PZ 3 4 PL 8 10 12   HEX 3 4 5 6 7 8 TRX 40 45 50 55
12x	Llave combinada: 8 9 10 11 12 13 14 15 16 17 18 19mm

Referencia	Descripción
H4421	Tipo estandar (Vasos de 6) 40CRV, Caja de plástico

**INFORMACIÓN TÉCNICA**

Honiton, el conjunto de cabezales de enchufe más vendido, que no debería falta en cualquier taller. Su composición completa con equipos de 1/4" y accesorios de 1/2" lo convierten en un equipo altamente completo para un uso indispensable. Todas las piezas están hechas de acero resistente 40CrV han sido certificadas por una ingeniería técnica.

**EQUIPAMIENTO**

Diferentes tipos de vasos bien ordenados para un facil uso

**EQUIPAMIENTO**

Adaptador rápido de puntas PH - PL - HEX y TRX

**TECNOLOGÍA**

La Llave de carraca con palanca para cambio de dirección y botón de cambio rápido de heramienta

**MATERIAL**

Los Vasos de medida 1/4" y 1/2" más usados fabricados acero cromo-vanadio.

**EQUIPAMIENTO**

Vasos de bujía de 16 y 21mm

**SET 1/4" - 1/2" - 94 pcs**



**SET 1/4" - 1/2" - 94 pcs**



Pcs	Descripción
18x	1/2" Vaso : 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
4x	1/2" Vaso 77.7 mm : 14 15 17 19 mm
13x	1/4" Vaso : 4 4.5 5 5.5 6 7 8 9 10 11 12 13 14 mm
8x	1/4" Vaso 50 mm : 6 7 8 9 10 11 12 13 mm
17x	1/4" Vaso Punta: PH 1 2 PZ 1 2   PL 4 5 5 7 HEX 3 4 5 6   TRX 8 10 15 20 25 30
15x	Punta 8x30mm: PH 3 4 PZ 3 4 PL 8 10 12   HEX 8 10 12 14 TRX 40 45 50 55
1x	1/2" Mango amarre en T
1x	1/2" Articulación universal
2x	1/2" Extensión 125 250 mm
2x	1/2" Adaptador 16 21 mm
1x	1/2" Llave de carraca
1x	1/2" reductor 3/8" - 1/2"
1x	1/4" Mango amarre en T
1x	1/4" Mango con cuadradillo
1x	1/4" Llave de carraca
1x	1/4" Articulación universal
2x	1/4" Extensión 50 100 mm
1x	1/2"- 5/16" Adaptador
1x	1/4" Extensión flexible 150 mm
3x	Llave allen : 1.5 2 2.5 mm

Pcs	Descripción
17x	1/2" Vaso : 10 11 12 13 14 15 16 17 18 19 20 21 22 24 27 30 32 mm
13x	1/4" Vaso 25.5mm : 4 4.5 5 5.5 6 7 8 9 10 11 12 13 14 mm
5x	1/2" Vaso 77.0mm : 14 15 17 19 22 mm
8x	1/4" Vaso 50.0mm : 6 7 8 9 10 11 12 13 mm
18x	1/4" Vaso Punta: PH 1 2 PZ 1 2   PL 4 5 5 7 HEX 3 4 5 6   TRX 8 10 15 20 25 30
16x	Punta 8x30mm: PH 3 4 PZ 3 4 PL 8 10 12   HEX 7 8 10 12 14   TRX 40 45 50 55
1x	1/4" Mango amarre en T
1x	1/2" Adaptador 3/8" - 1/2", Mango amarre en T Vaso
1x	1/2" Articulación universal
1x	1/4" Articulación universal
2x	1/2" Adaptador 16 21 mm
1x	1/4" Mango con cuadradillo
2x	1/2" Extensión 125 250 mm
2x	1/4" Extensión 50 100 mm
3x	Llave allen : 1.5 2 2.5 mm
1x	1/2" Llave de carraca
1x	1/4" Llave de carraca
1x	1/2" - 5/16" Adaptador
1x	1/4 Extensión flexible 150mm

Referencia	Descripción
H4056	40CRV, Caja de plástico

Referencia	Descripción
H4040	40CRV, Caja de plástico



### SET 1/2" - 64 pcs



Pcs	Descripción
20x	1/2" Vaso: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
8x	1/2" Vaso largo: 10 11 12 13 14 15 17 19 mm
7x	1/2" Vaso: E10 E11 E12 E14 E15 E17 E19
4x	1/2" Vaso de Impacto: 17 19 21 24 mm
2x	1/2" Adaptador: 16 21 mm
2x	1/2" Extensión: 125 250 mm
1x	1/2" Articulación
1x	1/2" Mango amarre en T
1x	1/2" Punta Adaptador
15x	Puntas 8mm:
	PH 3,4; PZ 3,4; PL 8,10,12   HEX 8,10,12,14; TRX 40,45,50,55

Referencia	Descripción
H4064	40CRV, Caja de plástico

### SET 3/4" - 21 pcs



Pcs	Descripción
16x	3/4" Vaso: 19 21 22 23 24 26 27 29 30 32 35 36 38 41 46 50 mm
1x	3/4" Vaso
1x	3/4" Mango amarre en T
3x	3/4" Extensión 100 200 400 mm

Referencia	Descripción
H6021	40CRV, Caja de plástico

### SET 3/4" - 14 pcs



Pcs	Descripción
10x	3/4" Vaso : 22 24 27 30 32 36 38 41 46 50 mm
1x	3/4" Llave de carraca
1x	3/4" Mango amarre en T
2x	3/4" Extensión 100 200 mm

Referencia	Descripción
H6014	40CRV, Caja de plástico





**INFORMACIÓN TÉCNICA**

**TECNOLOGÍA**

Llave ajustable en longitud



**SET 1/4" - 3/8" - 1/2" 155 pcs**

El Set más completo con amarre 1/4", 3/8" y 1/2"  
Con todas las herramientas disponibles para el profesional



Pcs	Descripción
13x	1/4" Vaso: 4-4.5-5-5.5-6-7-8-9-10-11-12-13-14mm
7x	1/4" Vaso: 4-5-6-7-8-9-10mm
5x	1/4" E Vaso: E4-E5-E6-E7-E8
30x	1/4" Vaso Punta (+) 0-1-2-3 (*) 0-1-2-3 (T) T8-T9-T10-T15-T20-T25-T27-T30-T40 (-) 3-4-4.5-5-5.5-6-6.5-7 (H) 3-4-5-6-7
10x	3/8" Vaso: 10-11-12-13-14-15-16-17-18-19mm
6x	3/8" Vaso: 10-11-12-13-14-15mm
5x	3/8" E Vaso: E10-E12-E14-E16-E18
10x	3/8" Vaso Punta: (T) T45-T47-T50-T55-T60 (H) 6-7-8-9-10
17x	1/2" Vaso: 10-11-12-13-14-15-16-17-18-19-20-21-22-24-27-30-32mm
5x	1/2" Vaso: 14-15-17-19-22mm
3x	1/2" E Vaso: E20-E22-E24
21x	Punta 10x30mm: (T) TH20-TH25-TH30-TH40-TH45-TH50-TH55 (H) 4-5-6-7-8-10-12 (+) 2-3 (M) M5-M6-M8-M10-M12
15x	5/16" Punta: PH 3 4 PI 8 10 12   HEX 3 4 5 6 7 8   TRX 40 45 50 55
5x	Llave allen: 1.25-1.5-2.0-2.5-3.0mm
3x	Llave de carraca telescópica: 1/4" 3/8" 1/2"
3x	Articulación: 1/4" 3/8" 1/2"
1x	Punta destornillador 1/4"
6x	Extensión 1/4" (50,100mm) 3/8" (75,150mm) 1/2" (125,250mm)
2x	Adaptador: 3/8" 10mm hexagonal, 1/2" 10mm hexagonal
3x	Adaptador: 1/2" -16 21 mm; 3/8 - 16mm

Referencia	Descripción
H4455	40 CRV, Caja de plástico

**SET 3/4" - 14 pcs**



Pcs	Descripción
10x	3/4" Vaso : 22 24 27 30 32 36 38 41 46 50 mm
1x	3/4" Llave de carraca
1x	3/4" Mango amarre en T
2x	3/4" Extensión 100 200 mm

Referencia	Descripción
H6014M	40 CRV, Caja metálica

**SET 3/4" - 21 pcs**



Pcs	Descripción
16x	3/4" Vaso : 19 21 22 23 24 26 27 29 30 32 35 36 38 41 46 50 mm
1x	3/4" Llave de carraca
1x	3/4" Mango amarre en T
3x	3/4" Extensión 100 200 400 mm

Referencia	Descripción
H6021M	40 CRV, Caja metálica

### SET 1" - 14 pcs



Pcs	Descripción
10x	1" Vaso: 36 41 46 50 55 60 65 70 75 80 mm
1x	1" Llave de carraca
1x	1" Mango amarre en T
2x	1" Extensión 200 400 mm

Referencia	Descripción
H8014	40CRV, Caja metálica

### Set Herramientas 1/4" - 1/2" - 73 pcs



Pcs	Descripción
1x	Alicate 160mm
6x	Destornillador PL,PH
9x	Vaso 1/4" 5-13mm
10x	Vaso 1/2" 10-24mm
8x	Llave combinada 10-19mm
1x	Llave de carraca 1/2"
2x	Adaptador Vaso 16,21mm
1x	Extensión 1/2"
1x	Articulación 1/2"
1x	Punta Adaptador
22x	Puntas PH,PZ,PL, TRX,HEX
1x	Martillo 300g
1x	Llave para tubo fontanería 250mm

Referencia	Descripción
H4073	40CRV, Caja de plástico

### SET 1/4" - 27 pcs



Pcs	Descripción
12x	1/4" Vaso : 4 4.5 5 5.5 6 7 8 9 10 11 12 13 mm
14x	1/4" Vaso Punta: PH 1 2 PL 4 5.5 7 HEX 3 4 5 6 TRX 10 15 20 25 30
1x	1/4" Llave de carraca

Referencia	Descripción
H1127	40CRV, Soporte de plástico



### SET 1/4" - 3/8" - 112 pcs



Pcs	Descripción
1x	Alicate de contactos + Conexiones
1x	Alicate 160mm
5x	Destornillador PL,PH
9x	Vaso 1/4" 4-13mm
11x	Vaso 3/8" 10-22mm
6x	Llave combinada 8-15mm
1x	Llave inglesa 150mm
1x	Llave de carraca 3/8"
2x	Adaptador Vaso 16 21mm
1x	Extensión 3/8"
1x	Punta Adaptador
22x	Puntas PH,PZ,PL, TRX,HEX

Referencia	Descripción
H1320	40CRV, Caja de plástico

### SET 1/2" - 19 pcsVV



Pcs	Descripción
18x	1/2" Vaso : 8 9 10 11 12 13 14 15 16 17 19 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca

Referencia	Descripción
H4019	40CRV, Soporte de plástico



**SET 1/4" - 11 pcs**



Pcs	Descripción
11x	1/4" Vaso : 4 4.5 5 5.5 6 7 8 9 10 11 13 mm

Referencia	Descripción
H1111	CRV, Soporte de plástico

**SET 1/2" - 6 pcs**



Pcs	Descripción
6x	1/2" Vaso : 10 12 13 14 17 19 mm

Referencia	Descripción
H4006	CRV, Soporte de plástico

**SET TRX 3/8" - 8 pcs**



Pcs	Descripción
8x	1/2" Vaso TRX-E : 8 10 11 12 14 16 mm

Referencia	Descripción
H3008	CRV, Soporte de plástico

**Set Barras Extensión 1/2" - 3 pcs**



Pcs	Descripción
3x	1/2" Extensión 75 150 200 mm

Referencia	Descripción
H4003	CRV, Soporte de plástico

**Set Barras Extensión 1/4" 3/8" 1/2"- 9 pcs**



Pcs	Descripción
3x	1/2" Extensión 50 125 250 mm
3x	3/8" Extensión 75 150 225 mm
3x	1/4" Extensión 50 100 225 mm

Referencia	Descripción
H4329	CRV, Soporte de plástico

**SET 1/2" - 10 pcs**



Pcs	Descripción
10x	1/2" Vaso : 10 11 12 13 14 15 17 19 22 24 mm

Referencia	Descripción
H4010	CRV, Soporte de plástico



**SET TRX 1/2" - 9 pcs**



Pcs	Descripción
9x	1/2" Vaso TRX-E : 10 11 12 14 16 18 20 22 24 mm

Referencia	Descripción
H4009	CRV, Soporte de plástico

**Set Barras Extensión 1/4" - 3/8" - 1/2"- 9 pcs**



Pcs	Descripción
3x	1/2" Extensión 50 125 250 mm
3x	3/8" Extensión 75 150 225 mm
3x	1/4" Extensión 50 100 225 mm

Referencia	Descripción
H4329	CRV, Soporte de plástico

### SET HEX 1/2" - 9 pcs



Pcs	Descripción
9x	1/2" Vaso HEX : 4 5 6 7 8 10 12 14 17 mm

Referencia	Descripción
H4008	CRV, Caja metálica

### SET TRX 1/4" - 3/8" - 1/2" - 11 pcs



Pcs	Descripción
3x	1/2" Vaso TRX-E : 14 18 20
5x	3/8" Vaso TRX-E : 7 8 10 11 12
3x	1/4" Vaso TRX-E : 4 5 6

Referencia	Descripción
H4311	CRV, Caja metálica

### SET TRX 1/2" - 9 pcs



Pcs	Descripción
9x	1/2" Vaso TRX : 20 25 27 30 40 45 50 55 60

Referencia	Descripción
H4007	CRV, Caja metálica

### SET Extensión TORX 1/2" - 40 pcs



Pcs	Descripción
5x	1/4" Vaso TRX-E : 4 5 6 7 8
6x	3/8" Vaso TRX-E : 10 12 14 16 18 20
4x	1/4" Punta TRX 30mm : 9 10 15 20
6x	10mm Punta TRX 30mm : 25 27 30 40 45 50
1x	14mm Punta TRX 120mm : 55
2x	14mm Punta TRX 75mm : 60 70
3x	Adaptador : 1/2"- 14mm 3/8"- 10mm 1/4"- 6mm
13x	keys TRX : 9 10 15 20 25 27 30 40 45 50 55 60 70

Referencia	Descripción
H4340	CRV, Caja metálica

### SET TRX 1/2" - 20 pcs



Pcs	Descripción
10x	1/2" Vaso TRX 55mm: 15 20 25 27 30 40 45 50 55 60
10x	1/2" Vaso TRX 140mm: 15 20 25 27 30 40 45 50 55 60

Referencia	Descripción
H4020	CRV, Caja metálica

### SET TRX 1/4" - 3/8" - 1/2" - 12 pcs



Pcs	Descripción
3x	1/4" Vaso TRX : 8 10 15
4x	3/8" Vaso TRX : 20 25 27 30
5x	1/2" Vaso TRX : 40 45 50 55 60

Referencia	Descripción
H4312	CRV, Caja metálica

### SET HEX 1/2" - 16 pcs



Pcs	Descripción
10x	1/2" Vaso hex 55mm : 5 6 7 8 9 10 12 14 17 19 mm
6x	1/2" Vaso hex 140mm : 5 6 7 8 10 12 mm

Referencia	Descripción
H0016	CRV, Caja metálica

### SET 1/2" XZN M6-M18 - 7 pcs



Pcs	Descripción
7x	M6;M8;M10;M12;M14;M16;M18

Referencia	Descripción
H4005	CRV, Caja metálica

**Set Extensión XZN - 12 pcs**



Pcs	Descripción
5x	Punta 10mm XZN-M 30mm : 5 6 8 10 12
5x	Punta 10mm XZN-M 75mm : 5 6 8 10 12
1x	1/2" Punta Adaptador 10mm

Referencia	Descripción
H4011	CRV, Caja de plástico

**Set Extensión TRX - 15 pcs**



Pcs	Descripción
7x	Punta 10mm TRX 30mm : 20 25 30 40 45 50 55
7x	Punta 10mm TRX 75mm : 20 25 30 40 45 50 55
1x	1/2" Punta Adaptador 10mm

Referencia	Descripción
H4015	CRV, Caja de plástico

**Impacto vaso 1/2"**



Referencia	Descripción
H1815	15 mm
H1817	17 mm
H1818IM	18 mm
H1819	19 mm
H1821	21 mm
H1822	22 mm
H1824	24 mm



**Set Extensión Hex 15 pcs**



Pcs	Descripción
7x	Punta 10mm HEX 30mm : 4 5 6 7 8 10 12
7x	Punta 10mm HEX 75mm : 4 5 6 7 8 10 12
1x	1/2" Punta Adaptador 10mm

Referencia	Descripción
H4014	CRV, Caja de plástico

**Set Puntas TRX y Hex 1/4 y 1/2 - 39 pcs**



Pcs	Descripción
5x	1/4" HEX Vaso: 2.5 3 4 5 6 mm
4x	1/4" TRX-E Vaso: 4 5 6 8
8x	1/4" TRX Punta Vaso: 8 10 15 20 25 27 30 40
4x	1/2" TRX-E Vaso: 10 12 14 18
4x	1/2" TRX Punta Vaso: 45 50 55 60
5x	1/2" hex Punta Vaso: 7 8 10 12 14 mm
5x	1/2" hex Punta Larga: 6 7 8 10 12 mm
4x	Llave allen : 1.25 1.5 2 3 mm

Referencia	Descripción
H0204	CRV, Caja de plástico

**Set V de vaso 1/2"**



Referencia	Descripción
H1803	CrMoV, set 17 19 21 mm
H1804	CrMoV, set 17 19 21 22 mm



### SET Vasos de Impacto 3/4" - 8 pcs



Pcs	Descripción
10x	3/4" Vaso : 19 22 24 27 30 32 36 41 mm

Referencia	Descripción
H6008L	CrMoV, Caja de plástico

### Set Adaptador - 6 pcs



Pcs	Descripción
3x	Adaptador : 1/4"- 3/8", 3/8"- 1/2", 1/2"- 3/4"
3x	Adaptador : 3/8"- 1/4", 1/2"- 3/8", 3/4"- 1/2"

Referencia	Descripción
H5-6432AD	CRV, Caja de plástico

### SET Vasos de Impacto 1/2" - 6 pcs



Pcs	Descripción
3x	1/2" Vaso : 30 32 36 mm
3x	1/2" hex Vaso: 14 17 19 mm

Referencia	Descripción
H6006L	CRV, Caja de plástico

### SET Vasos de Impacto 1/2" - 9 pcs



Pcs	Descripción
9x	1/2" Vaso HEX: 5 6 7 8 10 12 14 17 19 x 78mm

Referencia	Descripción
H5-IBS40009H	CrMoV, Caja de plástico

### SET Vasos de Impacto 1/2" - 10 pcs



Pcs	Descripción
10x	1/2" Vaso : 11 12 13 14 16 17 19 21 22 24 mm

Referencia	Descripción
H5-40010L	CrMoV, Caja de plástico

### Set Adaptador - 6 pcs



Pcs	Descripción
3x	Adaptador : 1/4"- 3/8", 3/8"- 1/2", 1/2"- 3/4"
3x	Adaptador : 3/8"- 1/4", 1/2"- 3/8", 3/4"- 1/2"

Referencia	Descripción
H5-6432IAD	CrMoV, Caja de plástico

### SET Vasos de Impacto 1/2" - 5 pcs



Pcs	Descripción
5x	1/2" Vaso XZN: M05 M06 M08 M10 M12 x 78mm

Referencia	Descripción
H5-IBS40005M	CrMoV, Caja de plástico

### SET Vasos de Impacto 1/2" - 9 pcs



Pcs	Descripción
9x	1/2" Vaso : T25 T27 T30 T40 T45 T50 T55 T60 T70 x 78mm

Referencia	Descripción
H5-IBS40009T	CrMoV, Caja de plástico

**Carro Portaherramientas + Herramientas - 231 pcs**

**HONITON**  
PROFESSIONAL TOOLS

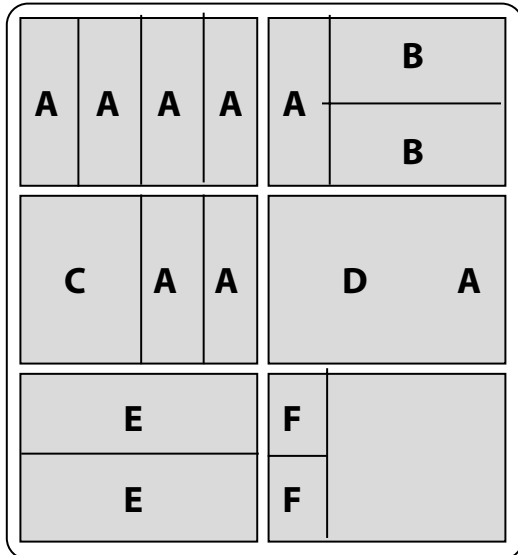


**INFORMACIÓN TÉCNICA**

2 Cajones: 573x406x154mm  
5 Cajones: 573x406x75mm  
Total Medida: 680x458x860mm

Referencia	Descripción
HA250	Carro con herramientas Dimensiones: 680x458x860mm

Código	Pcs	Módulo	Tipo
HA001	1x	Set 1/2" 27 pcs	B (42x19x4cm)
HA003	1x	Set 1/4" 53 pcs	A (39x13x4cm)
HA021-1	1x	Set llaves media luna 5 pcs	B (42x19x4cm)
HA015	1x	Set combinación llaves 16 pcs	A (39x13x4cm)
HA020	1x	Set combinación llaves 4 pcs	A (39x13x4cm)
HA041	1x	Set Impacto 1/2" 20 pcs	A (39x13x4cm)
HA068	1x	Llaves anillo 8 pcs	A (39x13x4cm)
HA071	1x	Set llaves 6 pcs	A (39x13x4cm)
HA076	1x	Set alicates de seguridad 4pcs	A (39x13x4cm)
HA077	1x	Set Juego 3/8" y 1/2" 5 pcs	A (39x13x4cm)
HA078	1x	Set Llave allen en T 8 pcs	C (39x26x4cm)
HA079	1x	Set destornillador Torx 9 pcs	C (39x26x4cm)
HA085	1x	Set 10mm Trx Hexagonal 3/8"1/2" 40	A (39x13x4cm)
HA030-001	1x	Set alicates 3 pcs	A (39x13x4cm)
HA040-001	1x	Set alicates 4 pcs	A (39x13x4cm)
HA090-001	1x	Set de 9 pcs	A (39x13x4cm)
HA100-001	1x	Set de destornilladores 10 pcs	A (39x13x4cm)





### Carro Portaherramientas + Herramientas - 215 pcs



#### INFORMACIÓN TÉCNICA

Carro portaherramientas metálico con 7 cajones de dos alturas diferentes.

Carro con agarrador y cuatro ruedas, dos de ellas con freno y giratorias.

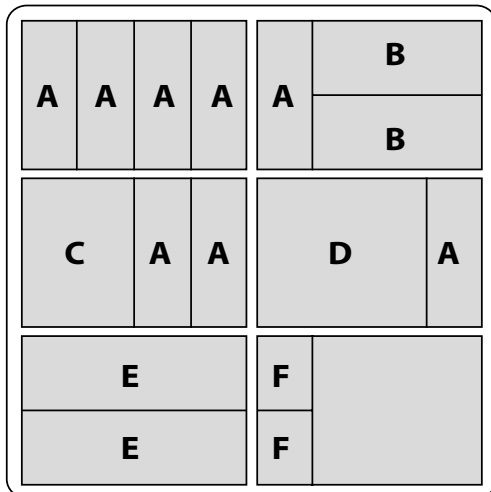
#### INFORMACIÓN TÉCNICA

2 Cajones: 573x406x154mm

5 Cajones: 573x406x75mm

Total Medida: 680x458x860mm

Referencia	Descripción	Peso
HA230	V40CR	68kg



Código	Pcs	Módulo	Tipo
HA001	1x	Set 1/2" 27 pcs	B (42x19x4cm)
HA003	1x	Set 1/4" 53 pcs	A (39x13x4cm)
HA021-1	1x	Set llaves media luna 5 pcs	B (42x19x4cm)
HA015	1x	Set combinación llaves 16 pcs	A (39x13x4cm)
HA020	1x	Set combinación llaves 4 pcs	A (39x13x4cm)
HA068	1x	Llaves anillo 8 pcs	A (39x13x4cm)
HA071	1x	Set llaves 6 pcs	A (39x13x4cm)
HA077	1x	Set Juego 3/8" y 1/2" 5 pcs	A (39x13x4cm)
HA080	1x	Set puntas Torx 1/2" 20 pcs	A (39x13x4cm)
HA081	1x	Set Puntas Hex 1/2" 16 pcs	A (39x13x4cm)
HA082	1x	Set Puntas Trx 1/2" 12 pcs	A (39x13x4cm)
HA030-001	1x	Set alicates 3 pcs	A (39x13x4cm)
HA040-001	1x	Set alicates 4 pcs	A (39x13x4cm)
HA090-001	1x	Set de 9 pcs	A (39x13x4cm)
HA078	1x	Set llaves Hexagonales en T 8pcs	C (39x26x4cm)
HA079	1x	Juego destornilladores Torx 9pcs	C (39x26x4cm)
HA100-001	1x	Juego de destornilladores 10pcs	A (39x13x4cm)





**SET 1/2" - 27 pcs**



Pcs	Descripción
20x	1/2" Vaso: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27 30 32 mm
1x	1/2" Llave de carraca
3x	1/2" Extensión 72 125 250 mm
1x	1/2" Articulación
1x	1/2" Mango giratorio 375 mm
1x	1/2" Mango amarre en T

Referencia	Descripción
HA001	40CRV, Base de plástico

**Set Llave combinada - 11 pcs**



Pcs	Descripción
11x	llaves: 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32 mm

Referencia	Descripción
HA011	40CRV, Base de plástico

**Set Llave combinada - 16 pcs**



Pcs	Descripción
16x	llave: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 22 24 mm

Referencia	Descripción
HA015	40CRV, Base de plástico

**Set Llaves combinadas en Curva - 5 pcs**



Pcs	Descripción
5x	llave: 10x12 11x13 14x16 17x19 20x22 mmB

Referencia	Descripción
HA021-1	40CRV, Base de plástico

**Set Llaves combinadas en Curva - 5 pcs**



Pcs	Descripción
5x	llave: 10x12 11x13 14x16 17x19 20x22 mmB

Referencia	Descripción
HA051	40CRV, Base de plástico

**SET 1/4" - 53 pcs**



Pcs	Descripción
13x	1/4" Vaso: 4 4.5 5 5.5 6 7 8 9 10 11 12 13 14 mm Largo: 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm
1x	1/4" Llave de carraca
2x	1/4" Extensión 50 150 mm
1x	1/4" Articulación
1x	1/4" Mango giratorio
1x	1/4" Mango amarre en T
20x	1/4" Punta 25mm: PL 4 5 5 7 PH 1 2 3 HEX 3 4 5 6 PZ 1 2 3
1x	Punta Adaptador: TRX T8 T10 T15 T25 T27 T30 T40

Referencia	Descripción
HA003	40CRV, Base de plástico

**SET 3/8" - 53 pcs**



Pcs	Descripción
19x	3/8" Vaso: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 mm
8x	3/8" E-Vaso: E7 E8 E10 E11 E12 E14 E18 E20
1x	3/8" Llave de carraca
2x	3/8" Extensión 75 100 mm
1x	3/8" Articulación
1x	3/8" Mango giratorio
1x	3/8" Mango amarre en T
21x	3/8" Punta 25mm: PL 4 5 5 7 PH 1 2 3 HEX 4 5 6 8 PZ 1 2 TRX 10 15 20 25 27 30 40 45 50 TRX T10 T15 T20 T25 T27 T30 T40 T40 T50

Referencia	Descripción
HA004	40CRV, Base de plástico

**Set llave combinada - 4 pcs**



Pcs	Descripción
4x	llave: 27 28 30 32 mm

Referencia	Descripción
HA020	40CRV, Base de plástico

**Set llave combinada de carraca - 12 pcs**



Pcs	Descripción
12x	llave: 8 9 10 11 12 13 14 15 16 17 18 19 mm

Referencia	Descripción
HA025-21	40CRV, Base de plástico

### Set Alicates - 3 pcs

A



Pcs	Descripción
3x	1x alicates autoajustables 250 mm; 1x alicates 250 mm 1x llave ajustable 250 mm

Referencia	Descripción
HA030-001	40CRV, Base de plástico

### Set Alicates - 3 pcs

A



Pcs	Descripción
17x	Cabezales 1/2": 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 27, 30, 32 mm;
1x	1 extensión industrial de 1/2" de 125 mm
2x	Juntas tóricas y pasador L20, L25

Referencia	Descripción
HA041	40CRV, Base de plástico

### Set llaves abiertas dobles - 11pcs

A



Pcs	Descripción
11x	Llaves Abiertas: 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 30x32 mm

Referencia	Descripción
HA066	40CRV, Base de plástico

### Set llaves acodadas - 6 pcs

A



Pcs	Descripción
6x	Llaves acodadas: 21x23, 24x27, 25x28, 30x32 mm

Referencia	Descripción
HA069	40CRV, Base de plástico

### Set llaves acodadas - 6 pcs

A



Pcs	Descripción
4x	1x exterior recto; 1x interior recto; 1x exterior curvado; 1x interior curvado

Referencia	Descripción
HA076	40CRV, Base de plástico

### Set Alicates - 4 pcs

A



Pcs	Descripción
4x	1x alicates combinados 180 mm; 1x alicates de corte lateral 180 mm; 1x alicates extendidos 180 mm; 1x alicates curvos 180 mm

Referencia	Descripción
HA040-001	40CRV, Base de plástico

### Set Alicates - 4 pcs

A



Pcs	Descripción
6x	Llaves dobles articuladas: 8x9, 10x11, 12x13, 14x15, 16x17, 18x19

Referencia	Descripción
HA060	40CRV, Base de plástico

### Set Llaves estrella dobles - 8 pcs

A



Pcs	Descripción
8x	Llaves estrella: 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22 mm

Referencia	Descripción
HA068	40CRV, Base de plástico

### Set Llaves para tuercas ciegas - 6 pcs

A



Pcs	Descripción
6x	Llaves estrella: 8x9, 10x11, 12x13, 14x17, 19x22, 24x27 mm

Referencia	Descripción
HA071	40CRV, Base de plástico

### Set Adaptador 3/8 y 1/2" - 5pcs

A



Pcs	Descripción
5x	2x Adaptador de 1/2": 16, 21 mm 2x Adaptador de 3/8": 14, 18 mm 1x adaptador 1/2" - 3/8"

Referencia	Descripción
HA077	40CRV, Base de plástico

**Set Llave Hexagonal en T - 8 pcs**

C



Pcs	Descripción
8x	Hex: 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Referencia	Descripción
HA078	40CRV, Base de plástico

**Set Puntas TORX 1/2" - 20 pcs**

A



Pcs	Descripción
10x	55mm: T15 T20 T25 T27 T30 T40 T45 T50 T55 T60
10x	140mm: T15 T20 T25 T27 T30 T40 T45 T50 T55 T60

Referencia	Descripción
HA080	40CRV, Base de plástico

**Set Puntas XZN 1/2" - 12 pcs**

A



Pcs	Descripción
6x	55mm: M6 M8 M10 M12 M14 M16
6x	100mm: M6 M8 M10 M12 M14 M16

Referencia	Descripción
HA082	40CRV, Base de plástico

**Set Puntas en T - 8 pcs**

E



Pcs	Descripción
6x	Vaso Punta 390mm: 8 10 12 13 17 19 mm
2x	Amarre para T

Referencia	Descripción
HA083	40CRV, Base de plástico

**Set de 9 Herramientas**

A



Pcs	Descripción
2x	Martillo de peña 300g; Martillo Nylon ø32mm
3x	Cinceles planos: 15mm, 6mm en punta
4x	Puntero 3,4,5 mm; y en punta 6mm

Referencia	Descripción
HA090-001	40CRV, Base de plástico

**Set Llave Torx en T - 9 pcs**

C



Pcs	Descripción
9x	torx: T10 T15 T20 T25 T27 T30 T40 T45 T50

Referencia	Descripción
HA079	40CRV, Base de plástico

**Set Puntas Hexagonales 1/2" - 16 pcs**

A



Pcs	Descripción
10x	55mm: 5 6 7 8 9 10 12 14 17 19 mm
6x	140mm: 5 6 7 8 10 12mm

Referencia	Descripción
HA081	40CRV, Base de plástico

**Set Puntas Hexagonales 3/8" y 1/2" - 40 pcs**

A



Pcs	Descripción
19x	10mm Punta,30mm L: (HX) 4;5;6;7;8;10;12 (TX) T20;T25;T30;T40;T50;T55 (M) M5;M6;M7;M10;M12
19x	10mm Punta,75mm L: (HX) 4;5;6;7;8;10;12 (TX) T20;T25;T30;T40;T50;T55 (M) M5;M6;M7;M10;M12
2x	Adaptador 1/2" 10mm; Adaptador 3/8" 10mm

Referencia	Descripción
HA085	40CRV, Base de plástico

**SET de 3/4" - 11 pcs**

E



Pcs	Descripción
8x	3/4" Vaso: 32 33 34 36 41 46 50 55 mm
1x	3/4" Llave de carraca
2x	3/4" Extensión 125 250 mm

Referencia	Descripción
HA002	40CRV, Base de plástico

**Set de Destornilladores - 10 pcs**

A



Pcs	Descripción
3x	Plano: PL5.5x125mm, PL6.5x150mm, PL8.0x175mm
2x	Cruz: PH1x80mm, PH2x100mm
3x	Plano: PL3.0x75mm, PL3.5x100mm, PL4.0x100mm
2x	Mini: PL5.5x25mm, PH2x25mmC

Referencia	Descripción
HA100-001	40CRV, Base de plástico



### Caja Metálica + Herramientas - 68 pcs



Pcs	Descripción
1x	Set 3 Alicates
1x	Set Llaves combinadas 15 pcs
1x	Set destornilladores 11 pcs
1x	Set Puntas 1/2" 24 pcs
1x	Set Herramientas 15 pcs

Referencia	Descripción
HA106	40CRV, Base de plástico

### Set de Herramientas - 15 pcs



Pcs	Descripción
3x	Tenaza grip 250mm; Tenaza de ajuste rápido 250mm; Llave inglesa 250mm
4x	Martillo 300g, Martillo Nylon ø32mm, 1 metro de 3 metros, cutter de 18mm
8x	Botador 3,4,5mm, 2x Punteros, Marador15mm, Puntero 5 ;6mm

Referencia	Descripción
HA150	40CRV, Base de plástico

### Set de Alicates - 3 pcs



Pcs	Descripción
3x	Set de alicates corte, punta larga y estándar

Referencia	Descripción
HA030	40CRV, Base de plástico

### SET 1/2" - 24 pcs



Pcs	Descripción
18x	1/2" Vaso: 10 11 12 13 14 15 16 17 18 19 21 22 23 24 27 28 30 32 mm
3x	1/2" Extensión: 75 125 250 mm
1x	1/2" Mango amarre en T
1x	1/2" Reductor
1x	Llave de carraca handle

Referencia	Descripción
HA140	40CRV, Base de plástico

### Set Llaves Combinadas - 15 pcs



Pcs	Descripción
15x	Llave: 8 10 11 12 13 14 15 16 17 18 19 21 22 23 24 mm

Referencia	Descripción
HA101	40CRV, Base de plástico

### Set Destornilladores - 11 pcs



Pcs	Descripción
4x	Plano: PL5.5x125mm, PL6.5x150mm, PL3.0x75mm, PL4.0x100mm
3x	Cruz: PH0x60mm PH1x80 PH2x100mm
4x	Mini: PL5.5x25mm, PL6.5x25mm, PH1x25mm, PL2x25mm

Referencia	Descripción
HA110	40CRV, Base de plástico

### Caja de plástico Vacía Tipo A



Referencia	Descripción
HA600	Dimensiones: 39x13x4cm

**SET Extensión TRX, XZN, HEX - 40 pcs**



Pcs	Descripción
7x	30mm Punta HEX : 4 5 6 7 8 10 12
7x	30mm Punta TRX : T20 T25 T30 T40 T45 T50 T55
5x	30mm Punta HXZN : M5 M6 M7 M10 M12
7x	75mm Punta HEX : 4 5 6 7 8 10 12
7x	75mm Punta TRX : T20 T25 T30 T40 T45 T50 T55
5x	75mm Punta HXZN : M5 M6 M7 M10 M12
2x	Extensión 10mm: 1/2" 3/8"

Referencia	Descripción	Peso
H4350	CRV,Caja metálica	1,8kg

**Carro Portaherramientas Vacío - HA102**



Capacidad: 40kg  
 Total Capacidad: 250kg  
 Total Peso: 78kg  
 Extracción Cajón: 40cm  
 2 Cajones Altos  
 569x397x154mm  
 5 Cajones Bajos  
 569x397x75mm  
 Total Medida:  
 716x495x1009mm

Referencia	Descripción	Peso
HA102	716 x 495 x 1009mm	76kg

**Carro Portaherramientas Vacío - HA104**



Capacidad: 64kg  
 Total Capacidad: 450kg  
 Total Peso: 63kg  
 Extracción Cajón: 40cm  
 2 Cajones Altos  
 569x397x157mm  
 5 Cajones Bajos  
 569x397x75mm  
 Total Medida:  
 677x459x1000mm

Referencia	Descripción	Peso
HA104	677 x 459 x 1000mm	63kg

**Caja Herramientas Vacía - HA202**



Capacidad: 40kg  
 Total Capacidad: 160kg  
 Total Peso: 42kg  
 Extracción Cajón: 40cm  
 4 Cajones  
 569x397x75mm  
 Total Medida:  
 716x495x437mm

Referencia	Descripción	Peso
HA202	716 x 495 x 437mm	41,6kg

**Caja Herramientas Vacía - HA105**



5 Compartimentos  
 Total Medida:  
 465x215x235mm

Referencia	Descripción	Peso
HA105	465 x 215 x 235mm	6kg

**Carro Portaherramientas Vacío - PA4007**

Alta Calidad, resistente para el día a día en la industria

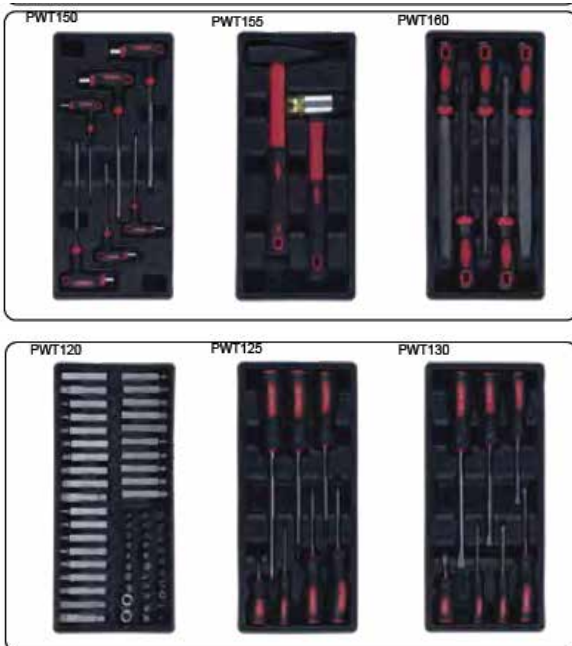


Capacidad: 20kg  
 Total Capacidad: 140kg  
 Total Peso: 57kg  
 2 Cajones Altos  
 573x406x154mm  
 5 Cajones Bajos  
 573x406x75mm  
 Total Medida:  
 680x458x860mm

Referencia	Descripción	Peso
PA4007	680 x 458 x 860mm	59kg



### Carro Portaherramientas con 229 pcs



Código	Descripción
PWT105	Juego de cabezas de 1/4": trinquete, cardán, manilla giratoria 110 mm, extensión 50,110 mm, cabezas: 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
PWT110	Juego de cabezas 3/8": trinquete, cardán, manilla giratoria 160 mm, extensión 75,150 mm, llaves para bujías 16,21 mm, cabezas: 6,7,8,9,10,11,12,13,14,15, 16,17,18,19,20,21,22 mm, cabeza torx: E10, E11, E12, E14, E16, E18, E20 "
PWT115	Juego de cabezales de 1/2": trinquete, cardán, manilla giratoria 250 mm, extensión 125,250 mm, cabezal: 8,9,10,11,12,13,15,17,19,20, 21,22,24,27, 30,32 milímetros
PWT120	Conjunto: 5,6,8,10,12; hex: 4,5,6,7,8,10; torx: T20, T25, T30, T40, T45, T50, T55, T60; seguridad Torx: T20, T25, T30, T40, T45, T50, T55, T60; Bits de 1/4": ranura 5,6,8,10,12; imbus: 4,5,6,7,8,10; torx: T20, T25, T30, T40, T45, T50, T55, T60; seguridad Torx: T20, T25, T30, T40, T45, T50, T55, T60
PWT125	Destornilladores: PH1X100 PH2X100 PH0X75 PH3X150 PH2X38 PH4X200
PWT130	Destornilladores planos: SL6x38 - SL8x200 - SL6x150 - SL5x100 - SL4x100 - SL3x75
PWT135	Alicates: recto interior, exterior; curvo interno y externo
PWT140	Alicates : división lateral de 180 mm, combinada de 200 mm, curvada de 200 mm
PWT145	Alicate , alicate de sujeción automática
PWT150	Llaves en T Llave Allen: 2x100; 2,5x100; 3x100; 4x150; 5x150; 6x150 mm
PWT155	Martillo cerrajero 300g y mazo de nailon
PWT160	Limas: superficies, redondeos, redondeos, triangulares, cuadrados
PWT165	Llaves de anillo: 6x7; 8x9; 10x11; 12x13; 14x15; 16x17; 18x19; 20x22 mm
PWT170	Llaves: 6-8-9-10-11-12-13-14-15-16-17-19-20-21 mm
PWT175	Cabeza extendida de 1/4": 5; 6; 7; 8; 9; 10; 11; 12; 13 mm; Juego de llaves Allen: 1,5; 2; 2,5; 3; 4; 5; 6; 8; 10 mm; Bits de 1/4": PH; PH2; PH3; PZ1; PZ2; PZ3, plano: 4; 5,5; 7 mm; Llave Allen: 3,4,5,6,7,8 mm; TORX T8, T10, T15, T20, T25, T27, T30, T40

Referencia	Descripción
PWT200B	690x465x970mm - Carro Vacío
PWT220B	690x465x970mm - Carro + Herramientas



**Maletín Herramientas Mantenimiento - 188pcs**



Referencia	Descripción
PWT188	188pcs, Maletín-Herramientas con Ruedas



### INFORMACIÓN TÉCNICA

Mango no deslizable.  
Resistente a aceites y disolventes

Superficie Tratada Resistente

# HONITON

## PROFESSIONAL TOOLS

Llave de carraca con 36 dientes. Mango antideslizante y ergonómico.  
El acabado cromado es altamente resistente a la corrosión  
Reemplazo rápido y fácil con el sistema de la cabeza de carraca.

El pasador de bloqueo para reemplazo con una sola mano.

Trinquete de cuerpo sólido para una mayor carga de trabajo.

Especialmente acero tratado para su uso profesional.



### Llave de carraca 36 dientes 40CRV, DIN 3122



Referencia	Descripción
H9723	1/4" L 148mm
H9733	3/8" L 200mm
H9743	1/2" L 250mm

### Llave de carraca 36 dientes 40CRV, DIN 3122



Referencia	Descripción
H8336	1/4" L 148mm
H8337	3/8" L 200mm
H8347	1/2" L 250mm

### Llave de carraca 40 dientes 40CRV, DIN 3122



Referencia	Descripción
H8712	1/4" L 140mm
H8731	3/8" L 200mm
H8713	1/2" L 250mm

### Llave de carraca 36 dientes 40CRV, DIN 3122



Referencia	Descripción
H8436	1/4" L 145mm
H8437	3/8" L 200mm
H8501	1/2" L 255mm

**Llave de Carraca Telescópica 72 Dientes DIN 3122**



Referencia	Descripción
H8623	1/4" L 145-200mm
H8633	3/8" L 220-320mm
H8643	1/2" L 300-445mm

**Llave de Carraca 2 en 1 DIN 3122**



Referencia	Descripción
H8207	1/4" L 115mm
H8306	3/8" L 168mm
H8411	1/2" L 168mm

**Llave de Carraca 1/2" - 72 Dientes 40CRV DIN 3122**



Referencia	Descripción
H8342	1/2" L 250mm

**Llave de Carraca Desmontable - 1/2" DIN 3122**



Referencia	Descripción
H8843	1/2" L 272mm
H8838	Cuadradillo 1/2"

**Llave de carraca 1/2" - 36 dientes 40CRV**



Referencia	Descripción
H8443	1/2" L 410mm

**Llave de Carraca 72 Dientes DIN 3122**



Referencia	Descripción
H83252	1/4" L 145mm
H83352	3/8" L 200mm
H83452	1/2" L 250mm

**Llave de Carraca 3/4" - 24 Dientes 40CRV DIN3122**



Referencia	Descripción
H8561	3/4" L 510mm

**SET Extensión TRX, XZN, HEX - 40 pcs**



Pcs	Descripción
7x	30mm Punta HEX : 4 5 6 7 8 10 12
7x	30mm Punta TRX : T20 T25 T30 T40 T45 T50 T55
5x	30mm Punta HXZN : M5 M6 M7 M10 M12
7x	75mm Punta HEX : 4 5 6 7 8 10 12
7x	75mm Punta TRX : T20 T25 T30 T40 T45 T50 T55
5x	75mm Punta HXZN : M5 M6 M7 M10 M12
2x	Extensión 10mm: 1/2" 3/8"

Referencia	Descripción
H4350	CRV, Caja metálica

**Llave de Carraca 1" - 40 CRV DIN3122**



Referencia	Descripción
H8581	1" L 670mm



### Llave Dinamométrica Profesional - DIN3120



Referencia	Descripción
H402-25	1/4" 5-25Nm, calibrada
H402-50	3/8" 10-50Nm, calibrada
H402-100	1/2" 10-100Nm, calibrada
H402-210	1/2" 20-210Nm, calibrada



### Llave Dinamométrica Profesional - DIN3120



Referencia	Descripción
H404-025	1/4" 5-25Nm, calibrada
H404-110	3/8" 20-110Nm, calibrada
H404-210	1/2" 42-210Nm, calibrada
H404-350	1/2" 70-350Nm, calibrada
H404-450	3/4" 65-450Nm, calibrada
H404-750	3/4" 140-700Nm, calibrada
H404-980	3/4" 140-980Nm, calibrada

### Adaptador Digital Dinamométrico 1/2" + Adaptador de 1/4" a 3/8"

Adaptador digital Dinamométrico, con indicador de fuerza y LED.



- Lectura 0,1Nm;
- Precisión +/- 2%;
- Units: Nm, Kg-cm, ft-lb, in-lb
- 2 Modos: Dirección Derechas, operación de apriete, indicador digital del valor
- Indicador luminoso y LED, pantalla giratoria, auto-apagado sin uso al de 3 minutos de inactividad.

Referencia	Descripción
H403	20-200Nm + Adaptador 1/4", 3/8"

### Juego Multiplicador de Par

Set de multiplicador profesional para aumentar el par de apriete, usado sobre todo para grandes cargas en vehículos como autobuses y camiones.



Cuadrado Superior

Palanca para Giro

1" Vaso 32 y 33 mm

Extensión

Referencia	Descripción
XT10068	1" 4800Nm + Vaso 32,33mm

# HONITON

## PROFESSIONAL TOOLS

### Mango Giratorio 40CRV - DIN 3122



Referencia	Descripción
H4600	1/2" L 600mm
H6750	3/4" L 750mm
H8100	1" L 1000mm

### Mango Giratorio 40CRV - DIN 3122



Referencia	Descripción
H4375	1/2" L 325mm
H6510	3/4" L 510mm

### Mango en L 40CRV - DIN3123



Referencia	Descripción
H4300	1/2" L 300mm
H6450	3/4" L 450mm

### Maneta 40CRV - DIN3122



Referencia	Descripción
H401	1/2" L 400mm

### Mango en T con Muelle 40CRV - DIN3129



Referencia	Descripción
H4252	1/2" L 250mm

### Mango Amarre en T 40CRV - DIN3129



Referencia	Descripción
H2115	1/4" L 115mm
H3165	3/8" L 165mm
H4251	1/2" L 250mm
H6460	3/4" L 460mm
H8550	1" L 550mm

### Adaptador 40CRV - DIN3122



Referencia	Descripción
H4604	1/2" Para H4600
H6756	3/4" Para H6750
H8108	1" Para H8100

### Barra de Extensión 40CRV - DIN3123



Referencia	Descripción
H2250	1/4" L 50mm
H2075	1/4" L 75mm
H2100	1/4" L 100mm
H2150	1/4" L 150mm
H2125	1/4" L 225mm
H3075	3/8" L 75mm
H3125	3/8" L 125mm
H3150	3/8" L 150mm
H3250	3/8" L 225mm
H4050	1/2" L 50mm
H4075	1/2" L 75mm
H4125	1/2" L 125mm
H4200	1/2" L 200mm
H4250	1/2" L 250mm
H6100	3/4" L 100mm
H6200	3/4" L 200mm
H6400	3/4" L 400mm
H8200	1" L 200mm
H8400	1" L 400mm

### Barra de Torsión 1/2" 40CRV - DIN3123

Se detiene al valor máximo permitido en la medida.



Referencia	Descripción
HTEX4065	90Nm L 200mm
HTEX4075	100Nm L 200mm
HTEX4080	110Nm L 200mm
HTEX4120	120Nm L 200mm
HTEX4135	135Nm L 200mm

### Barra Extensión Giratorio 1/2" 40CRV - DIN3123



Referencia	Descripción
H0075	1/2" L 75mm
H0150	1/2" L 125mm
H0200	1/2" L 200mm

### Barra Extensión Magnética 40CRV - DIN3123



Referencia	Descripción
H5250	1/2" L 250mm

### Destornillador Cuadrado 40CRV - DIN 3126



Referencia	Descripción
H150	1/4" L 150mm
H151	1/4" L 150mm



### Barra Extensión Giratorio 1/4" 40CRV - DIN3123



Referencia	Descripción
H01075	1/2" L 75mm
H01150	1/2" L 125mm
H01225	1/2" L 200mm

### Barra Extensión Giratorio 3/8" 40CRV - DIN3123



Referencia	Descripción
H03075	3/8" L 75mm
H03150	3/8" L 125mm
H03200	3/8" L 200mm
H03250	3/8" L 250mm

### Extensión 40CRV - DIN3123



Referencia	Descripción
H4300	1/2" L 300mm
H6450	3/4" L 450mm

### Extensión 40CRV - DIN3123



Referencia	Descripción
H2050	1/4" L 145mm
H4150	1/2" L 200mm



**Adaptador 40CRV  
DIN3123**



Referencia	Descripción
H230	1/4"- 3/8" L 26mm
H320	3/8"- 1/4" L 28mm
H340	1/2"- 3/8" L 36mm
H430	3/8"- 1/2" L 36mm
H460	1/2"- 3/4" L 48mm
H640	3/4"- 1/2" L 56mm
H680	3/4" - 1" L 56mm
H860	1" - 3/4" L 56mm

**Vaso para Puntas 1/4"**



Referencia	Descripción
H206	1/4" - 1/4" L25mm
H306	3/8" - 1/4" L27mm

**Adaptador - DIN3129**



Referencia	Descripción
H041	1/4" L 29mm
H042	3/8" L 40mm
H043	1/2" L 44mm
H088	1" L 85mm

**Vaso Bujía 40CRV Honidriver - DIN3124**



Referencia	Descripción
H4114	14mm 3/8" L 65mm
H411409	14mm 3/8" L 90mm
H411425	14mm 3/8" L 250mm
H411430	14mm 3/8" L 300mm
H4116	16mm 3/8" L 65mm
H4118	18mm 3/8" L 65mm
H4121	21mm 1/2" L 67mm

**Vaso de Impacto CrMoV - DIN3129**



Referencia	Descripción
H2460	1/2"- 3/4" L 48mm
H2640	3/4"- 1/2" L 58mm
H2680	3/4"- 1" L 63mm
H2860	1"- 3/4" L 75mm



**Adaptador 40CRV - DIN3126**



Referencia	Descripción
H406	1/4" para 1/4" Puntas L 25mm
H307	3/8" para Punta 1/4" L 25mm
H407	3/8" para 5/16" Puntas L 29mm
H408	1/2" para 5/16" Puntas L 38mm
H409	1/2" para 14mm Puntas L 38mm
H410	1/2" para 10mm Puntas L 38mm
H405	3/8" para Punta 10mm L 38mm

**Articulación 40CRV - DIN3123**



Referencia	Descripción
H040	1/4" L 40mm
H050	3/8" L 55mm
H070	1/2" L 78mm
H061	3/4" L 100mm

**Vaso Bujía 40CRV - DIN3124**



Referencia	Descripción
H4016	1/2" 16mm L 65mm
H4021	1/2" 21mm L 65mm

**Vaso Bihexagonal 1/4" 40CRV - DIN3124**

Referencia	Descripción
H2232	3,2mm L 25mm
H2240	4mm L 25mm
H2245	4,5mm L 25mm
H2250H	5mm L 25mm
H2255	5,5mm L 25mm
H2206	6mm L 25mm
H2207	7mm L 25mm
H2208	8mm L 25mm
H2209	9mm L 25mm
H2210	10mm L 25mm
H2211	11mm L 25mm
H2212	12mm L 25mm
H2213	13mm L 25mm
H2214	14mm L 25mm


**Vaso Hexagonal TRX-E 1/4" 40CRV - DIN3124**

Referencia	Descripción
HS1204	E4
HS1205	E5
HS1206	E6
HS1207	E7
HS1208	E8
HS1210	E10
HS1211	E11
HS1204L	E4 - Largo
HS1205L	E5 - Largo
HS1206L	E6 - Largo
HS1207L	E7 - Largo
HS1208L	E8 - Largo
HS1210L	E10 - Largo


**Vaso Bihexagonal 1/2" 40CRV - DIN3124**

Referencia	Descripción
H2408	8mm L 38mm
H2409	9mm L 38mm
H2410	10mm L 38mm
H2411	11mm L 38mm
H2412	12mm L 38mm
H2413	13mm L 38mm
H2414	14mm L 38mm
H2415	15mm L 38mm
H2416	16mm L 38mm
H2417	17mm L 38mm
H2418	18mm L 38mm
H2419	19mm L 38mm
H2420	20mm L 38mm
H2421	21mm L 38mm
H2422	22mm L 38mm
H2423	23mm L 38mm
H2424	24mm L 38mm
H2427	27mm L 38mm
H2428	28mm L 38mm
H2429	29mm L 38mm
H2430	30mm L 38mm
H2432	32mm L 38mm


**Vaso Hexagonal TRX-E 3/8" - DIN 3124**

Referencia	Descripción
HS1306	E6
HS1307	E7
HS1308	E8
HS1310	E10
HS1311	E11
HS1312	E12
HS1314	E14
HS1316	E16
HS1318	E18


**Vaso Bihexagonal 3/8" 40CRV - DIN3124**

Referencia	Descripción
H2308	8mm L 28mm
H2309	9mm L 28mm
H2310	10mm L 28mm
H2311	11mm L 28mm
H2312	12mm L 28mm
H2313	13mm L 28mm
H2314	14mm L 28mm
H2315	15mm L 28mm
H2316	16mm L 28mm
H2317	17mm L 28mm
H2318	18mm L 28mm
H2319	19mm L 28mm


**Vaso Hexagonal TRX-E 1/2" 40CRV - DIN3124**

Referencia	Descripción
H1910	E10 L 38mm
H1911	E11 L 38mm
H1912	E12 L 38mm
H1914	E14 L 38mm
H1916	E16 L 38mm
H1918	E18 L 38mm
H1920	E20 L 38mm
H1922	E22 L 38mm
H1924	E24 L 38mm



**Vaso Cabeza 1/4" 40CRV - DIN3124**



Referencia	Descripción
H1204	4mm L 25mm
H1245	4,5mm L 25mm
H1205	5mm L 25mm
H1255	5,5mm L 25mm
H1206	6mm L 25mm
H1207	7mm L 25mm
H1208	8mm L 25mm
H1209	9mm L 25mm
H1210	10mm L 25mm
H1211	11mm L 25mm
H1212	12mm L 25mm
H1213	13mm L 25mm
H1214	14mm L 25mm

**Vaso Cabeza 1/2" 40CRV - DIN3124**



Referencia	Descripción
H1408	8mm L 38mm
H1409	9mm L 38mm
H1410	10mm L 38mm
H1411	11mm L 38mm
H1412	12mm L 38mm
H1413	13mm L 38mm
H1414	14mm L 38mm
H1415	15mm L 38mm
H1416	16mm L 38mm
H1417	17mm L 38mm
H1418	18mm L 38mm
H1419	19mm L 38mm
H1420	20mm L 38mm
H1421	21mm L 38mm
H1422	22mm L 38mm
H1423	23mm L 38mm
H1424	24mm L 40mm
H1425	25mm L 40mm
H1426	26mm L 40mm
H1427	27mm L 42mm
H1428	28mm L 42mm
H1429	29mm L 42mm
H1430	30mm L 45mm
H1432	32mm L 45mm
H1434	34mm L 45mm
H1436	36mm L 46mm

**Vaso Cabeza 3/8" 40CRV - DIN3124**



Referencia	Descripción
H1310MB	10mm
H1311MB	11mm
H1312MB	12mm
H1313MB	13mm
H1314MB	14mm
H1315MB	15mm
H1316MB	16mm
H1317MB	17mm
H1318MB	18mm
H1319MB	19mm
H1310MBL	10mm Largo
H1311MBL	11mm Largo
H1312MBL	12mm Largo
H1313MBL	13mm Largo
H1314MBL	14mm Largo
H1315MBL	15mm Largo
H1316MBL	16mm Largo
H1317MBL	17mm Largo
H1318MBL	18mm Largo
H1319MBL	19mm Largo

**Vaso Cabeza Bihexagonal 1/2" 40CRV - DIN3124**



Referencia	Descripción
H1708-P	8mm L 38mm
H1709-P	9mm L 38mm
H1710-P	10mm L 38mm
H1711	11mm L 38mm
H1712-P	12mm L 38mm
H1713	13mm L 38mm
H1714-P	14mm L 38mm
H1715	15mm L 38mm
H1716	16mm L 38mm
H1717-P	17mm L 38mm
H1718	18mm L 38mm
H1719	19mm L 38mm
H1720	20mm L 38mm
H1721	21mm L 38mm
H1722	22mm L 38mm
H1723	23mm L 38mm
H1724	24mm L 40mm
H1725	25mm L 42mm
H1726	26mm L 42mm
H1727	27mm L 42mm
H1728	28mm L 42mm
H1729	29mm L 42mm
H1730	30mm L 45mm
H1732	32mm L 45mm
H1734	34mm L 45mm
H1736	36mm L 45mm

**Vaso Hexagonal 3/4" 40CRV - DIN3124**

Referencia	Descripción
H1617	17mm L 50mm
H1619	19mm L 50mm
H1621	21mm L 50mm
H1622	22mm L 50mm
H1623	23mm L 50mm
H1624	24mm L 51mm
H1626	26mm L 52mm
H1627	27mm L 52mm
H1629	29mm L 52mm
H1630	30mm L 54mm
H1632	32mm L 56mm
H1633	33mm L 56mm
H1634	34mm L 56mm
H1636	36mm L 58mm
H1638	38mm L 60mm
H1641	41mm L 64mm
H1646	46mm L 68mm
H1648	48mm L 68mm
H1651	50mm L 72mm
H1654	54mm L 74mm
H1655H	55mm L 74mm
H1656	56mm L 76mm
H1661	60mm L 78mm
H1665	65mm L 82mm


**Vaso Bihexagonal 3/4" 40CRV - DIN3124**

Referencia	Descripción
H1617MC	17mm L 50mm
H1619MC	19mm L 50mm
H1621MC	21mm L 50mm
H1622MC	22mm L 50mm
H1623MC	23mm L 50mm
H1624MC	24mm L 51mm
H1626MC	26mm L 52mm
H1627MC	27mm L 52mm
H1630MC	30mm L 54mm
H1632MC	32mm L 56mm
H1634MC	34mm L 56mm
H1636MC	36mm L 58mm
H1638MC	38mm L 60mm
H1641MC	41mm L 64mm
H1646MC	46mm L 68mm
H1651MC	50mm L 72mm
H1654MC	54mm L 74mm
H1655MC	55mm L 74mm
H1661MC	60mm L 74mm


**Vaso Hexagonal 1" 40CRV - DIN3124**

Referencia	Descripción
H1836	36mm L 65mm
H1841	41mm L 70mm
H1846	46mm L 75mm
H1850	50mm L 75mm
H1855	55mm L 80mm
H1860	60mm L 84mm
H1865	65mm L 84mm
H1870	70mm L 93mm
H1875	75mm L 97mm
H1880	80mm L 103mm


**Vaso Bihexagonal 1/2" Largo 40CRV - DIN3124**

Referencia	Descripción
H1508	8mm L 77mm
H1509	9mm L 77mm
H1510	10mm L 77mm
H1511	11mm L 77mm
H1512	12mm L 77mm
H1513	13mm L 77mm
H1514	14mm L 77mm
H1515	15mm L 77mm
H1516	16mm L 77mm
H1517	17mm L 77mm
H1518	18mm L 77mm
H1519	19mm L 77mm
H1520	20mm L 77mm
H1521	21mm L 77mm
H1522	22mm L 77mm
H1523	23mm L 77mm
H1524	24mm L 77mm
H1527	27mm L 77mm
H1530	30mm L 77mm
H1532	32mm L 77mm


**Vaso Hexagonal 1/4" Largo 40CRV - DIN3124**

Referencia	Descripción
H1304	4mm L 50mm
H1305	5mm L 50mm
H1306	6mm L 50mm
H1307	7mm L 50mm
H1308	8mm L 50mm
H1309	9mm L 50mm
H1310	10mm L 50mm
H1311	11mm L 50mm
H1312	12mm L 50mm
H1313	13mm L 50mm
H1314	14mm L 50mm


**Llave de Impacto 1/2" CrMoV - DIN3129**

Para tornillos de seguridad



Referencia	Descripción
H6317	1/2", D 19mm L 20mm
H6318	1/2", D 24mm L 25mm
H6321	3/4", D 36mm L 35mm
H6326	1", D 45mm L 45mm



**Vaso Impacto 1/2" CrMoV - DIN3129**

Referencia	Descripción
H0408	8mm L 38mm
H0409	9mm L 38mm
H0410	10mm L 38mm
H0411	11mm L 38mm
H0412	12mm L 38mm
H0413	13mm L 38mm
H0414	14mm L 38mm
H0415	15mm L 38mm
H0416	16mm L 38mm
H0417	17mm L 38mm
H0418	18mm L 38mm
H0419	19mm L 38mm
H0420	20mm L 38mm
H0421	21mm L 38mm
H0422	22mm L 38mm
H0423	23mm L 38mm
H0424	24mm L 38mm
H0427	27mm L 38mm
H0430	30mm L 38mm
H0432	32mm L 38mm



**Vaso Impacto 1/4" CrMoV - DIN3129**

Referencia	Descripción
H6017	17mm L 50mm
H6019	19mm L 50mm
H6020	21mm L 50mm
H6022	22mm L 50mm
H6023	23mm L 50mm
H6024	24mm L 50mm
H6025	25mm L 50mm
H6026	26mm L 50mm
H6027	27mm L 50mm
H6028	28mm L 50mm
H6029	29mm L 53mm
H6030	30mm L 53mm
H6032	32mm L 53mm
H6033	33mm L 55mm
H6034	34mm L 55mm
H6035	35mm L 55mm
H6036	36mm L 55mm
H6038	38mm L 57mm
H6041	41mm L 57mm
H6046	46mm L 62mm
H6050	50mm L 62mm



**Vaso Impacto 1" CrMoV - DIN3129**

Referencia	Descripción
H8022	22mm L 57mm
H8024	24mm L 57mm
H8026	26mm L 57mm
H8027	27mm L 57mm
H8030	30mm L 62mm
H8032	32mm L 62mm
H8033	33mm L 62mm
H8036	36mm L 62mm
H8041	41mm L 66mm
H8046	46mm L 70mm
H8050	50mm L 70mm
H8055	55mm L 82mm
H8060	60mm L 85mm
H8065	65mm L 85mm
H8070	70mm L 90mm
H8075	75mm L 90mm
H8080	80mm L 95mm



**Anillos de Impacto de Seguridad y Pasadores de Seguridad**

Referencia	Descripción
H0405	1/2", D 19mm L 20mm
H0406	1/2", D 24mm L 25mm
H6105	3/4", D 36mm L 35mm
H8105	1", D 45mm L 45mm



**Vaso Impacto Largo 1/2" CrMoV - DIN3129**



Referencia	Descripción
H0508	8mm L 78mm
H0509	9mm L 78mm
H0510	10mm L 78mm
H0511	11mm L 78mm
H0512	12mm L 78mm
H0513	13mm L 78mm
H0514	14mm L 78mm
H0515	15mm L 78mm
H0516	16mm L 78mm
H0517	17mm L 78mm
H0518	18mm L 78mm
H0519	19mm L 78mm
H0520	20mm L 78mm
H0521	21mm L 78mm
H0522	22mm L 78mm
H0523	23mm L 78mm
H0524	24mm L 78mm
H0527	27mm L 78mm
H0530	30mm L 78mm
H0532	32mm L 78mm

**Articulación Vaso Impacto CrMoV - DIN3129**



Referencia	Descripción
H071	1/2" L 64mm
H062	3/4" L 97mm

### Vaso Impacto Largo 3/4" CrMoV - DIN3129

Referencia	Descripción
H6119	19mm L 90mm
H6121	21mm L 90mm
H6122	22mm L 90mm
H6124	24mm L 90mm
H6126	26mm L 90mm
H6127	27mm L 90mm
H6130	30mm L 90mm
H6132	32mm L 90mm
H6133	33mm L 90mm
H6134	34mm L 90mm
H6136	36mm L 90mm
H6138	38mm L 90mm
H6141	41mm L 90mm
H6146	46mm L 90mm
H6150	50mm L 90mm



### Vaso Impacto Largo 1" CrMoV - DIN3129



Referencia	Descripción
H8122	22mm L 108mm
H8124	24mm L 108mm
H8127	27mm L 108mm
H8130	30mm L 108mm
H8132	32mm L 108mm
H8133	33mm L 108mm
H8134	34mm L 108mm
H8136	36mm L 108mm
H8138	38mm L 108mm
H8141	41mm L 108mm
H8146	46mm L 108mm
H8150	50mm L 108mm
H8155	55mm L 108mm
H8160	60mm L 108mm
H8165	65mm L 108mm
H8170	70mm L 108mm

### Vaso Impacto HEX 1/2" CrMoV - DIN3129



Referencia	Descripción
H78HX05	5mm L 78mm
H78HX06	6mm L 78mm
H78HX07	7mm L 78mm
H78HX08	8mm L 78mm
H78HX10	10mm L 78mm
H78HX12	12mm L 78mm
H78HX14	14mm L 78mm
H78HX17	17mm L 78mm
H78HX19	19mm L 78mm

### Vaso Impacto Extensión 3/4" CrMoV - DIN3129



Referencia	Descripción
H4075A	L 75mm
H4125A	L 125mm
H4250A	L 250mm

### Vaso Impacto Extensión 3/4" CrMoV - DIN3129



Referencia	Descripción
H6100A	L 100mm
H6175A	L 175mm
H6250A	L 250mm
H6325A	L 325mm

### Vaso Impacto Extensión 1" CrMoV - DIN3129



Referencia	Descripción
H8175	L 175mm
H8250	L 250mm
H8325	L 325mm

### Vaso Impacto TRX 1/2" CrMoV - DIN3129



Referencia	Descripción
H78T25	T25 L 78mm
H78T27	T27 L 78mm
H78T30	T30 L 78mm
H78T40	T40 L 78mm
H78T45	T45 L 78mm
H78T50	T50 L 78mm
H78T55	T55 L 78mm
H78T60	T60 L 78mm
H78T70	T70 L 78mm



**Vaso Impacto XZN 1/2" CrMoV - DIN3129**



Referencia	Descripción
H78M05	M05 L 78mm
H78M06	M06 L 78mm
H78M08	M08 L 78mm
H78M10	M10 L 78mm
H78M12	M12 L 78mm
H78M14	M14 L 78mm
H78M16	M16 L 78mm

**Vaso Punta HEX 1/4" 40CRV DIN3124**



Referencia	Descripción
HEX2-3	3mm L 32mm
HEX2-4	4mm L 32mm
HEX2-5	5mm L 32mm
HEX2-6	6mm L 32mm
HEX2-7	7mm L 32mm
HEX2-8	8mm L 32mm

**Vaso Punta PL 1/4" 40CRV - DIN3124**



Referencia	Descripción
HPL2-3	PL3mm L 32mm
HPL2-4	PL4mm L 32mm
HPL2-45	PL4.5mm L 32mm
HPL2-55	PL5.5mm L 32mm
HPL2-6	PL6mm L 32mm
HPL2-65	PL6.5mm L 32mm
HPL2-7	PL7mm L 32mm

**Vaso Punta PH 3/8" 40CRV - DIN3124**



Referencia	Descripción
HPH3-1	PH1mm L 48mm
HPH3-2	PH2mm L 48mm
HPH3-3	PH3mm L 48mm

**Vaso Punta PZ 3/8" 40 CRV - DIN 3127**



Referencia	Descripción
HPZ3-1	PL4mm L 48mm
HPZ3-2	PL5,5mm L 48mm
HPZ3-3	PL7mm L 48mm

**Vaso Punta TRX 1/4" 40CRV - DIN3124**

ReferenciaV	Descripción
HTRX2-08	T8 L 32mm
HTRX2-09	T9 L 32mm
HTRX2-10	T10 L 32mm
HTRX2-15	T15 L 32mm
HTRX2-20	T20 L 32mm
HTRX2-25	T25 L 32mm
HTRX2-27	T27 L 32mm
HTRX2-30	T30 L 32mm
HTRX2-40	T40 L 32mm



**Vaso Punta PH 1/4" PH 40CRV - DIN3124**

Referencia	Descripción
HPH2-1	PH1 L 32mm
HPH2-2	PH2 L 32mm
HPH2-3	PH3 L 32mm



**Vaso Punta PZ 1/4" 40CRV - DIN3124**

Referencia	Descripción
H2-0	PZ0 L 32mm
H2-1	PZ1 L 32mm
H2-2	PZ2 L 32mm
H2-3	PZ3 L 32mm



**Vaso Punta PL 3/8" 40CRV - DIN3124**

Referencia	Descripción
HPL3-4	PL4mm L 48mm
HPL3-5	PL5.5mm L 48mm
HPL3-6	PL6mm L 48mm
HPL3-7	PL7mm L 48mm
HPL3-8	PL8mm L 48mm



**Vaso Punta HEX 3/8" 40CRV - DIN3124**



Referencia	Descripción
HEX3-03	3mm L 48mm
HEX3-04	4mm L 48mm
HEX3-05	5mm L 48mm
HEX3-06	6mm L 48mm
HEX3-07	7mm L 48mm
HEX3-08	8mm L 48mm
HEX3-09	9mm L 48mm
HEX3-10	10mm L 48mm

### Vaso Punta TRX 3/8" 40CRV - DIN3124

Referencia	Descripción
HTRX3-10	T10 L 48mm
HTRX3-15	T15 L 48mm
HTRX3-20	T20 L 48mm
HTRX3-25	T25 L 48mm
HTRX3-27	T27 L 48mm
HTRX3-30	T30 L 48mm
HTRX3-40	T40 L 48mm
HTRX3-45	T45 L 48mm
HTRX3-50	T50 L 48mm
HTRX3-55	T55 L 48mm
HTRX3-60	T60 L 48mm



### Vaso Punta HEX 1/2" 40CRV - DIN3124

Referencia	Descripción
H1704	4mm L 55mm
H1705	5mm L 55mm
H1706	6mm L 55mm
H1707	7mm L 55mm
H1708	8mm L 55mm
H1709	9mm L 55mm
H1710	10mm L 55mm
H1712	12mm L 55mm
H1714	14mm L 55mm
H1717	17mm L 55mm



### Vaso Punta TRX 1/2" 40CRV - DIN3124

Referencia	Descripción
H1610	T10 L 55mm
H1615	T15 L 55mm
H1620	T20 L 55mm
H1625	T25 L 55mm
H1628	T27 L 55mm
H1631	T30 L 55mm
H1635	T35 L 55mm
H1640	T40 L 55mm
H1645	T45 L 55mm
H1650	T50 L 55mm
H1655	T55 L 55mm
H1660	T60 L 55mm
H1670	T70 L 55mm



### Vaso Punta XZN 1/2" 40CRV - DIN3124



Referencia	Descripción
H1806	M6 L 55mm
H1808	M8 L 55mm
H1810	M10 L 55mm
H1812	M12 L 55mm
H1814	M14 L 55mm
H1816	M16 L 55mm
H1818	M18 L 55mm

### Vaso Punta TRX 1/2" 40CRV - DIN3124

Referencia	Descripción
H1620TH	TRX 20 L 55mm
H1625TH	TRX 25 L 55mm
H1628TH	TRX 27 L 55mm
H1631TH	TRX 30 L 55mm
H1635TH	TRX 35 L 55mm
H1640TH	TRX 40 L 55mm
H1645TH	TRX 45 L 55mm
H1650TH	TRX 50 L 55mm
H1655TH	TRX 55 L 55mm
H1660TH	TRX 60 L 55mm
H1670TH	TRX 70 L 55mm



### Vaso Punta Larga HEX 1/2" 40CRV - DIN7472



Referencia	Descripción
HB4HX05LL	HX5 L 140mm
HB4HX06LL	HX6 L 140mm
HB4HX07LL	HX7 L 140mm
HB4HX08LL	HX8 L 140mm
HB4HX10LL	HX10 L 140mm
HB4HX12LL	HX12 L 140mm

### Vaso Punta Larga XZN 1/2" 40CRV - DIN7472



Referencia	Descripción
HB4M06L	M6 L 100mm
HB4M08L	M8 L 100mm
HB4M10L	M10 L 100mm
HB4M12L	M12 L 100mm
HB4M14L	M14 L 100mm
HB4M16L	M16 L 100mm
HB4M18L	M18 L 100mm

### Vaso Punta Larga TRX 1/2" 40CRV - DIN2DIN7472



Referencia	Descripción
HB4T10LL	T10 L 140mm
HB4T15LL	T15 L 140mm
HB4T20LL	T20 L 140mm
HB4T25LL	T25 L 140mm
HB4T27LL	T27 L 140mm
HB4T30LL	T30 L 140mm
HB4T40LL	T40 L 140mm
HB4T45LL	T45 L 140mm
HB4T50LL	T50 L 140mm

**Punta Plana 5/16" 30mm - DIN3126**

Referencia	Descripción
HPL8-45	PL 4,5 L 30mm
HPL8-55	PL 5,5 L 30mm
HPL8-07	PL 7,0 L 30mm
HPL8-08	PL 8,0 L 30mm
HPL8-10	PL 10,0 L 30mm
HPL8-12	PL 12,0 L 30mm



**Punta PZ 5/16" 30mm - DIN3126**

Referencia	Descripción
HPZ8-3	PZ3 L 30mm
HPZ8-4	PZ4 L 30mm



**Punta 10mm HEX - DIN3126**

ReV	Descripción
HEX10-4	Hex 4 L 30mm
HEX11-4	Hex 4 L 75mm
HEX10-5	Hex 5 L 30mm
HEX11-5	Hex 5 L 75mm
HEX10-6	Hex 6 L 30mm
HEX11-6	Hex 6 L 75mm
HEX10-7	Hex 7 L 30mm
HEX17-7	Hex 7 L 75mm
HEX10-8	Hex 8 L 30mm
HEX11-8	Hex 8 L 75mm
HEX10-10	Hex 10 L 30mm
HEX11-10	Hex 10 L 75mm
HEX10-12	Hex 12 L 30mm
HEX11-12	Hex 12 L 75mm



**Punta 10mm XZN - DIN3126**



Referencia	Descripción
HXZN10-5	XZN M5 L 30mm
HXZN10-6	XZN M6 L 30mm
HXZN10-8	XZN M8 L 30mm
HXZN10-10	XZN M10 L 30mm
HXZN10-12	XZN M12 L 30mm
HXZN10-14	XZN M14 L 30mm
HXZN10-16	XZN M16 L 30mm
HXZN10-18 (19mm)	XZN M18 L 30mm
HXZN11-5	XZN M5 L 75mm
HXZN11-6	XZN M6 L 75mm
HXZN11-8	XZN M8 L 75mm
HXZN11-10	XZN M10 L 75mm
HXZN11-12	XZN M12 L 75mm
HXZN11-14	XZN M14 L 75mm
HXZN11-16	XZN M16 L 75mm
HXZN11-18 (19mm)	XZN M18 L 75mm

**Punta 10mm TRX - DIN3126**

Referencia	Descripción
HTRX10-10	TRX 10 L 30mm
HTRX10-15	TRX 15 L 30mm
HTRX10-20	TRX 20 L 30mm
HTRX10-27	TRX 27 L 30mm
HTRX10-30	TRX 30 L 30mm
HTRX10-40	TRX 40 L 30mm
HTRX10-45	TRX 45 L 30mm
HTRX10-50	TRX 50 L 30mm
HTRX10-55	TRX 55 L 30mm
HTRX11-10	TRX 10 L 75mm
HTRX11-15	TRX 15 L 75mm
HTRX11-20	TRX 20 L 75mm
HTRX11-27	TRX 27 L 75mm
HTRX11-30	TRX 30 L 75mm
HTRX11-40	TRX 40 L 75mm
HTRX11-45	TRX 45 L 75mm
HTRX11-50	TRX 50 L 75mm
HTRX11-55	TRX 55 L 75mm



**Punta TRX 5/16" - DIN3126**

Referencia	Descripción
H8-20	T20 L 30mm
H8-25	T25 L 30mm
H8-27	T27 L 30mm
H8-30	T30 L 30mm
H8-40	T40 L 30mm
H8-50	T50 L 30mm
H8-55	T55 L 30mm
H9-20	T20 L 75mm
H9-25	T25 L 75mm
H9-27	T27 L 75mm
H9-30	T30 L 75mm
H8-40	T40 L 75mm
H9-50	T50 L 75mm
H9-55	T55 L 75mm



**Punta Cruz 5/16" 30mm - DIN3126**

Referencia	Descripción
HPH8-2	PH2 L 30mm
HPH8-3	PH3 L 30mm
HPH8-4	PH4 L 30mm



**Punta HEX 5/16" 30mm - DIN3126**

Referencia	Descripción
HEX8-3	3mm L 30mm
HEX8-4	4mm L 30mm
HEX8-5	5mm L 30mm
HEX8-6	6mm L 30mm
HEX8-7	7mm L 30mm
HEX8-8	8mm L 30mm
HEX8-10	10mm L 30mm
HEX8-12	12mm L 30mm
HEX8-14	14mm L 30mm



### the best of HONITON HONIDRIVER

La Llave HONIDRIVER es un ejemplo de multifuncionalidad de llave, patentada por HONITON. Honidriver supera a las llaves habituales, ya que cada borde tiene un papel clave para el correcto uso en las diferentes geometrías. Con las llaves Honidriver se puede usar incluso sobre los tornillos Aplicable a los tornillos/tuercas tipo: Métrica, Sae, 3PT, 4PT, 6PT, Torx, Ranura y Cuadradacon la cabeza dañada.

Tabla de Referencias

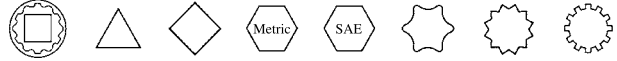
Medida	METRIC	SAE	STAR	Medida	METRIC	SAE	STAR
3.2	3.2	1/8"	E4	16	16	5/8"	E20
4	4	5/32"	E5	17	17	21/32"	
4.5	4.5			18	18	11/16"	E22
5	5	3/16"	E6	19	19	3/4"	E24
5.5	5.5	7/32"	E7	20	20	25/32"	
6	6			21	21	13/16"	E26
1/4"		1/4"	E8	22	22	7/8"	E28
7	7	9/32"		23	23	29/32"	E28
8	8	5/16"	E10	24	24	15/16"	E30
9	9	11/32"	E11	25	25	31/32"	E32
10	10	3/8"	E12	26	26	1"	E32
11	11	7/16"	E14	27	27	1-1/16"	E34
12	12	15/32"		28	28	1-3/32"	E36
13	13	1/2"	E16	29	29	1-1/8"	E36
14	14	9/16"	E18	30	30	1-3/16"	E38
15	15	19/32"		32	32	1-1/4"	E40



### Llave combinada 15° - 40CRV - DIN 3113



Se puede usar con seis tipos diferentes de llaves y formas



Referencia	w
H2006	6mm E8 L 105mm
H2007	7mm 9/32"- E8 L 115mm
H2008	8mm 5/16"- E10 L 125mm
H2009	9mm 11/32"- E11 L 135mm
H2010	10mm 3/8"- E12 L 145mm
H2011	11mm 7/16"- E14 L 155mm
H2012	12mm 15/32"- E14 L 165mm
H2013	13mm 1/2"- E16 L 175mm
H2014	14mm 9/16"- E18 L 185mm
H2015	15mm 19/32"- E18 L 195mm
H2016	16mm 5/8"- E20 L 205mm
H2017	17mm 21/32"- E20 L 215mm
H2018	18mm 11/16"- E22 L 225mm
H2019	19mm 3/4"- E24 L 235mm
H2021	21mm 13/16"- E26 L 255mm
H2022	22mm 7/8"- E28 L 265mm
H2023	23mm 29/32" E28 L 275mm
H2024	24mm 15/16"- E30 L 285mm
H2025	25mm 31/32" E32 L 295mm
H2026	26mm 1" E32 L 305mm
H2027	27mm 1-1/16"- E34 L 315mm
H2028	28mm 1-3/32" E36 L 325mm
H2029	29mm 1-1/8" E36 L 335mm
H2030	30mm 1-3/16"- E38 L 345mm
H2032	32mm 1-1/4"-E40 L 365mm

### Llave Combinada Ángulo 15° 31CrV3 - DIN 3113



Referencia	Descripción
P16406	6x6mm L100mm
P16407	7x7mm L105mm
P16408	8x8mm L120mm
P16409	9x9mm L 130mm
P16410	10x10mm L 130mm
P16411	11x11mm L 140mm
P16412	12x12mm L 150mm
P16413	13x13mm L 170mm
P16414	14x14mm L 180mm
P16415	15x15mm L 190mm
P16416	16x16mm L 200mm
P16417	17x17mm L 210mm
P16418	18x18mm L 220mm
P16419	19x19mm L 230mm
P16420	20x20mm L 240mm
P16421	21x21mm L 250mm
P16422	22x22mm L 260mm
P16423	23x23mm L 270mm
P16424	24x24mm L 280mm
P16426	26x26mm L 310mm
P16427	27x27mm L 310mm
P16428	28x28mm L 310mm
P16430	30x30mm L 320mm
P16432	32x32mm L 350mm
P16434	34x34mm L 380mm
P16436	36x36mm L 395mm
P16438	38x38mm L 395mm
P16441	41x41mm L 445mm
P16442	42x42mm L 445mm
P16446	46x46mm L 500mm
P16448	48x48mm L 540mm
P16450	50x50mm L 540mm



### Llave Combinada Ángulo 15° 40CRV - DIN 3113



Referencia	Descripción	Referencia	Descripción
HG21506	6x6mm L 105mm	HG21519	19x19mm L 235mm
HG21507	7x7mm L 115mm	HG21520	20x20mm L 245mm
HG21508	8x8mm L 125mm	HG21521	21x21mm L 255mm
HG21509	9x9mm L 135mm	HG21522	22x22mm L 265mm
HG21510	10x10mm L 145mm	HG21523	23x23mm L 275mm
HG21511	11x11mm L 155mm	HG21524	24x24mm L 285mm
HG21512	12x12mm L 165mm	HG21525	25x25mm L 295mm
HG21513	13x13mm L 175mm	HG21526	26x26mm L 305mm
HG21514	14x14mm L 185mm	HG21527	27x27mm L 315mm
HG21515	15x15mm L 195mm	HG21528	28x28mm L 325mm
HG21516	16x16mm L 205mm	HG21529	29x29mm L 335mm
HG21517	17x17mm L 215mm	HG21530	30x30mm L 345mm
HG21518	18x18mm L 225mm	HG21532	32x32mm L 365mm



**Llave Combinada Ángulo 15° 31CrV3 - DIN 3113**



Referencia	Descripción
GK10307	7x7mm L120mm
GK10308	8x8mm L120mm
GK10309	9x9mm L 130mm
GK10310	10x10mm L 130mm
GK10311	11x11mm L 140mm
GK10312	12x12mm L 150mm
GK10313	13x13mm L 170mm
GK10314	14x14mm L 180mm
GK10315	15x15mm L 190mm
GK10316	16x16mm L 200mm
GK10317	17x17mm L 210mm
GK10318	18x18mm L 220mm
GK10319	19x19mm L 230mm
GK10320	20x20mm L 240mm
GK10321	21x21mm L 250mm
GK10322	22x22mm L 260mm
GK10324	24x24mm L 280mm
GK10327	27x27mm L 310mm
GK10330	30x30mm L 320mm
GK10332	32x32mm L 350mm

**Llave de estrella impacto - DIN7444**



Referencia	Descripción
PC7301	17mm L 160mm
PC7302	19mm L 160mm
PC7369	19mm L 160mm
PC7370	22mm L 160mm
PC7371	24mm L 160mm
PC7372	26mm L 180mm
PC7373	27mm L 180mm
PC7374	30mm L 190mm
PC7375	32mm L 190mm
PC7376	34mm L 195mm
PC7377	36mm L 195mm
PC7378	38mm L 200mm
PC7379	41mm L 200mm
PC7380	46mm L 235mm
PC7381	50mm L 245mm
PC7382	55mm L 265mm
PC7383	60mm L 265mm
PC7384	65mm L 317mm
PC7385	70mm L 317mm
PC7386	75mm L 317mm
PC7387	80mm L 340 mm
PC7388	85mm L 340 mm
PC7389	90mm L 340 mm
PC7390	95mm L 340 mm
PC7391	100mm L 340 mm
PC7392	105mm L 340 mm

**Llave Doble Abierta CrV3 - DIN 895**



Referencia	Descripción
P10407	6x7mm L 95mm
P10408	8x9mm L 105mm
P10410	8x10mm L 115mm
P10411	10x11mm L 120mm
P10412	10x13mm L 120mm
P10413	12x13mm L 140mm
P10414	14x17mm L 150mm
P10415	13x15mm L 150mm
P10416	14x15mm L 150mm
P1041617	16x17mm L 150mm
P10417	13x17mm L 160mm
P10418	16x18mm L 160mm
P10419	17x19mm L 170mm
P10420	18x19mm L 170mm
P10421	21x23mm L 215mm
P10422	19x22mm L 190mm
P10423	20x22mm L 190mm
P10424	22x24mm L 215mm
P10427	24x27mm L 264mm
P10432	30x32mm L 270mm
P10441	36x41mm L 345mm
P10450	46x50mm L 420mm

**Llave Doble Abierta CrV3 - DIN 3110**



Referencia	Descripción
HDEW0607E	6x7mm L 123mm
HDEW0809E	8x9mm L 140mm
HDEW1011E	10x11mm L 156mm
HDEW1213E	12x13mm L 156mm
HDEW1415E	14x15mm L 190mm
HDEW1617E	16x17mm L 204mm
HDEW1819E	18x19mm L 221mm
HDEW2022E	20x22mm L 237mm
HDEW2123E	21x23mm L 247mm
HDEW2427E	24x27mm L 263mm
HDEW3032E	30x32mm L 298mm

### Llave Combinada con Carraca 40CRV - ISO 691



Referencia	Descripción
H3108	8mm 5/16"- E10 L 139mm
H3109	9mm 11/32"- E11 L 149mm
H3110	10mm 3/8"- E12 L 159mm
H3111	11mm 7/16"- E14 L 164mm
H3112	12mm 15/32"- E14 L 170mm
H3113	13mm 1/2"- E16 L 178mm
H3114	14mm 9/16"- E18 L 190mm
H3115	15mm 19/32"- E18 L 198mm
H3116	16mm 5/8"- E20 L 208mm
H3117	17mm 21/32"- E20 L 225mm
H3118	18mm 11/16" - E22 L 235mm
H3119	19mm 3/4" - E24 L 247mm
H3121	21mm 13/16" E26 L290mm
H3122	22mm 7/8" E28 L290mm
H3124	24mm 15/16" E30 L321mm
H3127	27mm 1 1/16" E34 L360mm
H3130	30mm 1 3/16" E38 L388mm
H3132	32mm 1 3/4" E40 L413mm

### Llave Combinada Mini de Carraca 40CRV - ISO 691



Referencia	Descripción
H0008E	8mm, 5/16", E10, L 90mm
H0009E	9mm, 11/32", E11, L 92mm
H0010E	10mm, 3/8", E12, L 94mm
H0011E	11mm, 7/16", E14, L 101mm
H0012E	12mm, 15/32", L 105mm
H0013E	13mm, 1/2", E16, L 107mm
H0014E	14mm, 9/16", E 18, L 114mm
H0015E	15mm, 19/32", L 118mm
H0016E	16mm, 5/8", E20, L 121mm
H0017E	17mm, 21/32", L 124mm
H0018E	18mm, 11/16", E22, L 130mm
H0019E	19mm, 3/4", E24, L 138mm

### Llave Combinada de Carraca CRV 72 dientes691



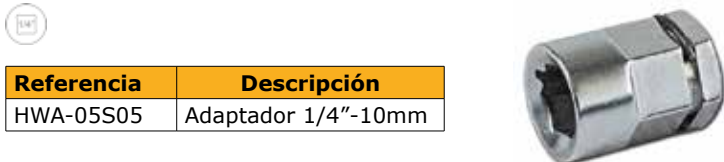
Referencia	Descripción
KL344008	8x8mm L 140mm
KL344009	9x9mm L 155mm
KL344010	10x10mm L 160mm
KL344011	11x11mm L 170mm
KL344012	12x12mm L 180mm
KL344013	13x13mm L 190mm
KL344014	14x14mm L 198mm
KL344015	15x15mm L 210mm
KL344016	16x16mm L 220mm
KL344017	17x17mm L 230mm
KL344018	18x18mm L 240mm
KL344019	19x19mm L 250mm
KL344022	22x22mm L 280mm

### Llave Combinada de Carraca Articulada CRV 72 dientes



Referencia	Descripción
KL345008	8x8mm L 140mm
KL345010	10x10mm L 160mm
KL345013	13x13mm L 190mm
KL345014	14x14mm L 198mm
KL345015	15x15mm L 210mm
KL345017	17x17mm L 230mm
KL345019	19x19mm L 250mm

### Punta Adaptador 1/4" para Llave de Carraca 10mm




Referencia	Descripción
HWA-05S05	Adaptador 1/4"-10mm

### Vaso Adaptador para Llave de Carraca



Referencia	Descripción
HWA-12005	1/4", para llave 10mm
HWA-13005	3/8", para llave 13mm
HWA-14005	1/2", para llave 19mm

### Llaves Combinadas de Carraca Set 7 pcs 40 CRV



Pcs	Descripción
14x	10mm, 3/8", E12; 11mm, 7/16", E14; 12mm, 15/32", E14; 13mm, 1/2", E16; 14mm, 9/16", E18; 17mm, 21/32", E20; 19mm, 3/4", E24

Referencia	Descripción
H3071	7 pcs, Soporte de plástico



**Set Llaves - 40 CRV DIN 3113**



Pcs	Descripción
14x	Llaves: 6mm, E8; 7mm, 9/32"; 8mm, 5/16", E10; 9mm, 11/32", E11; 10mm, 3/8", E12; 11mm, 7/16", E14; 12mm, 15/32", E14; 13mm, 1/2", E16; 14mm, 9/16", E18; 15mm, 19/32", E18; 16mm, 5/8", E20; 17mm, 21/32", E20; 18mm, 11/16", E22; 19mm, 3/4", E24

Referencia	Descripción
H0114	14 pcs, Caja de plástico

**Set Llave de carraca CRV**



Pcs	Descripción
7x	Llaves: 8 10 12 13 14 17 19 mm

Referencia	Descripción
KL344700	7 pcs, Soporte de plástico

**Set Llaves Carraca Combinada CRV**



Pcs	Descripción
7x	Llaves: 8 10 12 13 14 17 19 mm

Referencia	Descripción
KL345700	7 pcs, Soporte de plástico

**Set Llave de carraca Set 72 dientes**



Pcs	Descripción
5x	Llaves: 8;10;13;17;19

Referencia	Descripción
KL344500	5 pcs, Soporte de plástico

**Set Llave de carraca articulada Set 72 dientes**



Pcs	Descripción
5x	Llaves: 8;10;13;17;19

Referencia	Descripción
KL345500	5 pcs, Soporte de plástico

**Set Llave de carraca - Set 72 dientes**



Pcs	Descripción
6x	Llaves : 8x9;10x11;12x13;14x15;16x18;17x19

Referencia	Descripción
KL346600	7 pcs, Soporte de plástico



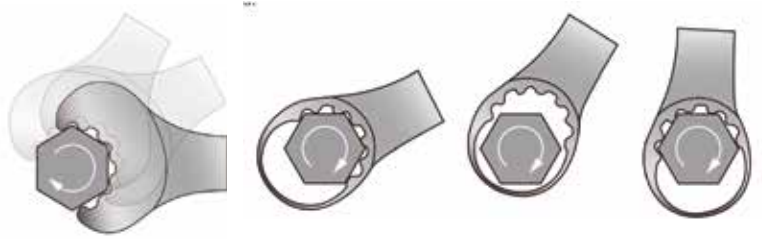
# HONITON

## PROFESSIONAL TOOLS

Las Llaves Dive-On Ratchet son las llaves combinadas de nueva generación. Acero al cromo vanadio según normativa DIN de Alta Calidad. En el extremo cerrado de la llave, su forma especial hace que apretar/aflojar sea mucho mas facil, no teniendo tanto movimiento, facilitando el uso y agilizándolo. Así mismo este tipo de llave se asemeja a las llaves de carraca. El extremo abierto de la llave hace que sea necesario mucho menos espacio para amarrar la tuerca y apretar/aflojar la pieza. Se gana en tiempo y facilidad a la hora de trabajar de forma continua. La llave fija abierta especial ocupa menos espacio.



4 puntos de ajuste para un rendimiento máximo



El espacio libre para girar la llave sin sacarla de la tuerca Hace que apretar/aflojar las piezas sea mas rápido y sencillo. gracias al espacio libre y sus 4 puntos de ajuste máximo.

### Llave Accionamiento 40CRV DIN3113



Referencia	Descripción
HDCW1508E	8mm L 123mm
HDCW1509E	9mm L 132mm
HDCW1510E	10mm L 143mm
HDCW1511E	11mm L 152mm
HDCW1512E	12mm L 162mm
HDCW1513E	13mm L 171mm
HDCW1514E	14mm L 181mm
HDCW1515E	15mm L 191mm
HDCW1516E	16mm L 200mm
HDCW1517E	17mm L 210mm
HDCW1518E	18mm L 219mm
HDCW1519E	19mm L 230mm

### Set Llave Accionamiento 40CRV



Pcs	Descripción
12x	Llave combinada: 8 9 10 11 12 13 14 15 16 17 18 19 mm
Referencia	Descripción
HDCW1512SE	12 pcs, Soporte de plástico

### Llave Estrella Acodada 40CRV - DIN 838



Referencia	Descripción
HDW750607E	6x7mm L 168mm
HDW750809E	8x9mm L 183mm
HDW751011E	10x11mm L 198mm
HDW751213E	12x13mm L 217mm
HDW751415E	14x15mm L 239mm
HDW751617E	16x17mm L 260mm
HDW751819E	18x19mm L 292mm
HDW752022E	20x22mm L 318mm
HDW752123E	21x23mm L 330mm
HDW752427E	24x27mm L 355mm
HDW753032E	30x32mm L 365mm

### Llave Estrella Acodada 31CrV3 - DIN 838



Referencia	Descripción
P10906	6x7mm L 170mm
P10909	8x9mm L 180mm
P10911	10x11mm L 195mm
P10913	12x13mm L 210mm
P10915	14x15mm L 225mm
P10917	16x17mm L 245mm
P10919	18x19mm L 266mm
P10920	20x22mm L 285mm
P10923	21x23mm L 305mm
P10927	24x27mm L 325mm
P10928	25x28mm L 345mm
P10932	30x32mm L 370mm



**Set Llaves Combinadas 7 pcs - 40CRV DIN3113**



Pcs	Descripción
7x	Comb. llave: 10 11 12 13 14 17 19 mm

Referencia	Descripción
HG11507	7pcs, Soporte de plástico

**Set Llaves Combinadas 7 pcs - 40CRV DIN3113**



Pcs	Descripción
14x	Comb. Llaves : 10mm, 3/8", E12; 11mm, 7/16", E14; 12mm, 15/32", E14; 13mm, 1/2", E16; 14mm, 9/16", E18; 17mm, 21/32", E20; 19mm, 3/4", E24

Referencia	Descripción
HCW11507	7pcs, Bolsa Textil

**Set Llaves Combinadas 12 pcs - 40CRV DIN3113**



Pcs	Descripción
7x	Comb. Llaves : 8 9 10 11 12 13 14 15 16 17 19 22 mm

Referencia	Descripción
HG11512	12pcs, Bolsa Textil

**Set Llaves Combinadas 12 pcs - 40CRV DIN3113**



Pcs	Descripción
14x	Comb. Llaves : 8mm, 5/16", E10; 9mm, 11/32", E11; 10mm, 3/8", E12; 11mm, 7/16", E14; 12mm, 15/32", E14; 13mm, 1/2", E16; 14mm, 9/16", E18; 15mm, 19/32", E18; 16mm, 5/8", E20; 17mm, 21/32", E20; 19mm, 3/4", E24; 22mm, 7/8", E28

Referencia	Descripción
HCW11512	12pcs, Bolsa Textil

**Set Llaves Combinadas 17 pcs - 40CRV DIN3113**



Pcs	Descripción
17x	Comb. Llaves : 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 mm

Referencia	Descripción
HG11517	17pcs, Bolsa Textil

**Set Llaves Combinadas 17 pcs - 40CRV DIN3113**



Pcs	Descripción
14x	Comb. Llaves : 6mm, E8; 7mm, 9/32"; 8mm, 5/16", E10; 9mm, 11/32", E11; 10mm, 3/8", E12; 11mm, 7/16", E14; 12mm, 15/32", E14; 13mm, 1/2", E16; 14mm, 9/16", E18; 15mm, 19/32", E18; 16mm, 5/8", E20; 17mm, 21/32", E20; 18mm, 11/16", E22; 19mm, 3/4", E24; 20mm, 25/32"; 21mm, 13/16", E26; 22mm, 7/8", E28

Referencia	Descripción
HCW11517	17pcs, Bolsa Textil

### Llave de Doble Boca para Racores 40CRV DIN 3118



Referencia	Descripción
HFNW0809E	8x9mm L 132mm
HFNW1011E	10x11mm L 151mm
HFNW1213E	12x13mm L 166mm
HFNW1417E	14x17mm L 191mm
HFNW1922E	19x22mm L 235mm

### Llave de Vaso Articulada Doble 40CRV - DIN3119



Referencia	Descripción
HF0607E	6x7mm L 185mm
HF0809E	8x9mm L 188mm
HF1011E	10x11mm L 203mm
HF1213E	12x13mm L 220mm
HF1415E	14x15mm L 242mm
HF1617E	16x17mm L 257mm
HF1819E	18x19mm L 270mm
HF2022E	20x22mm L 300mm
HF2123E	21x23mm L 307mm

### Llave Combinada Hexagonal TRX 40CRV-DIN837



Referencia	Descripción
HW0607EL	E6xE7mm L 200mm
HW0810EL	E8xE10mm L 240mm
HW1112EL	E11xE12mm L 280mm
HW1416EL	E14xE16mm L 320mm
HW1820EL	E18xE20mm L 360mm
HW2224EL	E22xE24mm L 400mm

### Llave Combinada 40CRV - DIN837



Referencia	Descripción
HFDW0809	8x9mm
HFDW1011	10x11mm
HFDW1213	12x13mm
HFDW1415	14x15mm
HFDW1617	16x17mm
HFDW1819	18x19mm
HFDW2022	20x22mm
HFDW2123	21x23mm
HFDW2427	24x27mm
HFDW2528	25x28mm
HFDW3032	30x32mm

### Llave de Doble Boca para Racores 40CRV DIN 3118



Referencia	Descripción
HMW1012E	10x12mm L 143mm
HMW1113E	11x13mm L 143mm
HMW1416E	14x16mm L 188mm
HMW1719E	17x19mm L 220mm
HMW2022E	20x22mm L 258mm

### Llave de Vaso Articulada en T 40CRV - DIN3112



Referencia	Descripción
HS1006A	6mm L 390mm
HS1007A	7mm L 390mm
HS1008A	8mm L 390mm
HS1009A	9mm L 390mm
HS1010A	10mm L 390mm
HS1011A	11mm L 390mm
HS1012A	12mm L 500mm
HS1013A	13mm L 500mm
HS1014A	14mm L 500mm
HS1015A	15mm L 500mm
HS1016A	16mm L 500mm
HS1017A	17mm L 500mm
HS1018A	18mm L 500mm
HS1019A	19mm L 500mm

### Mango en T Ejecución Larga 40CRV - DIN3112



Referencia	Descripción
HSTB201	1/4" 200x250mm
HSTB301	3/8" 200x300mm
HSTB401	1/2" 200x300mm

### Mango en T imantado - DIN 3124



Referencia	Descripción
H016	3/8", 16mm
H021	3/8", 21mm
H022	3/8", 16 21 mm



**Set Llaves Combinadas 22 pcs - 40CRV DIN3113**



Pcs	Descripción
22x	Comb. Llaves: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 26 27 30 32 mm

Referencia	Descripción
HG11522	22pcs, Bolsa Textil

**Set Llaves Combinadas 22 pcs - 40CRV DIN3113**



Pcs	Descripción
22x	Comb. Llaves : 6mm,E8; 7mm,9/32"; 8mm,5/16",E10; 9mm,11/32",E11; 10mm,3/8",E12; 11mm,7/16",E14; 12mm,15/32",E14; 13mm,1/2",E16; 14mm,9/16",E18; 15mm,19/32",E18; 16mm,5/8",E20; 17mm,21/32",E20; 18mm,11/16",E22; 19mm,3/4",E24; 20mm,25/32"; 21mm,13/16",E26; 22mm,7/8",E28; 24mm,15/16",E30; 26mm,1",E32; 27mm,1-1/16",E34; 30mm,1-3/16",E38; 32mm,1-1/4",E40

Referencia	Descripción
HCW11522	22pcs, Bolsa Textil

**Set Llaves Acodadas 8 pcs - 40CRV DIN3113**



Pcs	Descripción
8x	Llaves : 6mm, E8 x 7mm, 9/32"; 8mm, 5/16", E10 x 9mm, 11/32", E11; 10mm, 3/8", E12 x 11mm, 7/16", E14; 12mm, 15/32" x 13mm, 1/2", E16; 14mm, 9/16", E18 x 15mm, 19/32"; 16mm, 5/8", E20 x 17mm, 21/32"; 18mm, 11/16", E22 x 19mm, 3/4", E24; 20mm, 25/32" x 22mm, 7/8", E28

Referencia	Descripción
HDWP7508	8pcs Bolsa Textil

**Set Llaves Acodadas 12 pcs - 40CRV DIN3113**



Pcs	Descripción
12x	Llaves : 6mm, E8 x 7mm, 9/32"; 8mm, 5/16", E10 x 9mm, 11/32", E11; 8mm, 5/16", E10 x 10mm, 3/8", E12; 10mm, 3/8", E12 x 11mm, 7/16", E14; 12mm, 15/32" x 13mm, 1/2", E16; 14mm, 9/16", E18 x 15mm, 19/32"; 16mm, 5/8", E20 x 17mm, 21/32"; 18mm, 11/16", E22 x 19mm, 3/4", E24; 20mm, 25/32" x 22mm, 7/8", E28; 21mm, 13/16", E26 x 23mm, 29/32", E28; 24mm, 15/16", E30 x 27mm, 1-1/16", E34; 30mm, 1-3/16", E38 x 32mm, 1-1/4", E40

Referencia	Descripción
HDWP7512	12pcs, Bolsa Textil



### Set Llaves Combinadas 15° - 24pcsg - 31CrV3 - DIN3113



Quality that makes it be easy



Pcs	Descripción
24x	Comb. Llaves : 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27

Referencia	Descripción
GK10345	24pcs, Bolsa Textil

### Set Llaves Combinadas 15° - 31CrV3 - DIN3113



Quality that makes it be easy



Pcs	Descripción
6x	6pcs, Soporte Plástico - 6 8 10 13 15 17 mm
8x	8pcs, Soporte Plástico - 6 8 10 13 15 17 19 22 mm

Referencia	Descripción
P16141	6pcs, Soporte Plástico
P16142	8pcs, Soporte Plástico

### Set Llaves Combinadas 12 pcs - 31CrV3 DIN3113



Quality that makes it be easy



Pcs	Descripción
12x	Comb. Llaves : 6 8 10 13 15 17 19 22 24 27 30 32 mm

Referencia	Descripción
P16144-P	12pcs, Bolsa Textil

### Set Llaves Combinadas - 31CrV3 - DIN3113



Quality that makes it be easy



Pcs	Descripción
6x	6pcs, Bolsa Textil - 6 8 10 13 15 17 mm
8x	8pcs, Bolsa Textil - 6 8 10 13 15 17 19 22 mm

Referencia	Descripción
P16141-P	6pcs, Bolsa Textil
P16142-P	8pcs, Bolsa Textil

### Set Llaves Combinadas 15° 12 pcs - 31CrV-DIN3113



Quality that makes it be easy



### Set Llaves Combinadas 15° 12 pcs - 31CrV3-DIN3113



Quality that makes it be easy



Pcs	Descripción
12x	Comb. Llaves: 6 7 8 9 10 11 12 13 14 17 19 22 mm

Referencia	Descripción
P16143-P	12pcs, Bolsa Textil
P16143	12pcs, Soporte Plástico



**Set Llaves Combinadas 15° 6 pcs - 31CrV3 DIN3113**



Pcs	Descripción
6x	Llave combinada: 8 10 12 13 14 17mm

Referencia	Descripción
GK10341TP	6 pcs, Soporte de plástico

**Set Llaves Combinadas 15° - 8 pcs - 31CrV3 DIN3113**



Pcs	Descripción
8x	Llave combinada: 6 8 10 13 15 17 19 22mm

Referencia	Descripción
GK10342TP	8 pcs, Soporte de plástico

**Set Llaves Combinadas 15° - 12 pcs - 31CrV3 - DIN3113**



Pcs	Descripción
12x	Llave combinada: 6 7 8 9 10 11 12 13 14 17 19 22mm

Referencia	Descripción
GK10343TP	12 pcs, Soporte de plástico

**Set Llaves Combinadas 15° - 6 pcs - 31CrV3 DIN3113**



Pcs	Descripción
6x	Llave combinada: 8 10 12 13 14 17mm

Referencia	Descripción
GK10341	6 pcs, Soporte de plástico

**Set Llaves Combinadas 15° - 8 pcs - 31CrV3 DIN3113**



Pcs	Descripción
8x	Llave combinada: 6 8 10 13 15 17 19 22mm

Referencia	Descripción
GK10342	8 pcs, Bolsa Textil

**Set Llaves Combinadas 15° - 12 pcs - 31CrV3 - DIN3113**



Pcs	Descripción
12x	Llave combinada: 6 7 8 9 10 11 12 13 14 17 19 22mm

Referencia	Descripción
GK10343	12 pcs, Bolsa Textil

### Set Llaves Combinadas 24 pcs - 31CrV3 DIN3113



Pcs	Descripción
24x	Comb. Llaves : 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27 28 30 32 mm

Referencia	Descripción
P16145-P	24pcs, Bolsa Textil

### Set Llaves Dobles Abiertas - 31CrV3 - DIN3110



Pcs	Descripción
6x	Llave combinada: 6x7 8x9 10x11 12x13 14x15 16x17 mm
8x	Llave combinada: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22

Referencia	Descripción
P16020	6 pcs, Soporte de plástico
P16031	8 pcs, Soporte de plástico

### Set Llaves Dobles Abiertas 12 pcs 31CrV3 DIN3110



Pcs	Descripción
12x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 21x23 24x27 25x28 30x32 mm

Referencia	Descripción
P16033	12pcs, Soporte de plástico

### Set Llaves Dobles Abiertas - 31CrV3 - DIN3110



Pcs	Descripción
6x	Llave combinada: 6x7 8x9 10x11 12x13 14x15 16x17 mm
8x	Llave combinada: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22

Referencia	Descripción
P16020-P	6 pcs, Bolsa Textil
P16031-P	8 pcs, Bolsa Textil

### Set Llaves Dobles Abiertas 12 pcs - 31CrV3 DIN3110



Pcs	Descripción
12x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 21x23 24x27 25x28 30x32 mm

Referencia	Descripción
P16033-P	12pcs, Bolsa Textil

### Set Llaves Dobles Abiertas 31CrV3 DIN3110



Pcs	Descripción
6x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 mm
8x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22

Referencia	Descripción
P16040	6 pcs, Soporte de plástico
P16041	8 pcs, Soporte de plástico



**Set Llaves Dobles Abiertas 12pcs - 31CrV3 DIN3110**



Pcs	Descripción
12x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 21x23 24x27 25x28 30x32 mm

Referencia	Descripción
P16043	12pcs, Soporte de plástico



**Set Llaves de Estrella Acodadas - 31CrV3 - DIN838**



Pcs	Descripción
6x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 mm
8x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22

Referencia	Descripción
P16805	6 pcs, Soporte de plástico
P16831	8 pcs, Soporte de plástico

**Set Llaves Dobles Abiertas - 31CrV3 - DIN3110**



Pcs	Descripción
6x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 mm
8x	Llave: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22

Referencia	Descripción
P16040-P	6 pcs, Bolsa Textil
P16041-P	8 pcs, Bolsa Textil

**Set Llaves de Estrella Acodadas 8pcs - 31CrV3 - wDIN838**



Pcs	Descripción
8x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 mm

Referencia	Descripción
P16831-P	12pcs, Bolsa Textil

**Set Llaves Dobles Abiertas 12 pcs - 31CrV3 IN3110**



Pcs	Descripción
12x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 21x23 24x27 25x28 30x32 mm

Referencia	Descripción
P16043	12pcs, Bolsa Textil



Pcs	Descripción
6x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 mm

Referencia	Descripción
P16805-P	6pcs, Bolsa Textil

### Set Llaves Acodadas 12pcs - 31CrV3 - DIN838



Pcs	Descripción
12x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 21x23 24x27 25x28 30x32 mm

Referencia	Descripción
P16833-P	12pcs, Bolsa Textil

### Set Completo de Llaves - 47pcs



Pcs	Descripción
24x	Llave Combinada: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27 28 30 32mm
5x	Llave tuercas planas: 10x11 12x13 14x15 16x17 18x19mm
6x	Llave media luna: 8x10 9x11 10x12 13x14 15x17 16x18
4x	Llave TRX 6x8 10x12 14x18 20x24mm
8x	Llaves Acodadas: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22mm

Referencia	Descripción
P16136	47pcs, Bolsa Textill

### Set Llaves Dobles OX - 10pcs - 31CrV3 - DIN895



Pcs	Descripción
10x	Llaves: 6x7 8x9 10x11 12x13 13x17 14x17 16x18 19x22 24x27 30x32 mm

Referencia	Descripción
P10460	10pcs, Bolsa Textil

### Set Llave de Doble Boca para Racores 6 pcs



Pcs	Descripción
6x	Llaves: 8x10 9x11 10x12 13x14 15x17 16x18

Referencia	Descripción
P16137	6pcs, Bolsa Textil

### Set Llave Combinada de Media Luna 5 pcs



Pcs	Descripción
5x	Llaves: 10x11 12x13 14x15 16x17 18x19

Referencia	Descripción
P16138	5pcs, Bolsa Textil

**Llave Tubular Hexagonal**



Referencia	Descripción
M17650	6-7mm
M17651	8-9mm
M17642	8-10mm
M17652	10-11mm
M17643	12-13mm
M17654	14-15mm
M17644	14-17mm
M17655	16-17mm
M17645	16-18mm
M17653	16-21mm
M17656	18-19mm
M17657	19-22mm
M17658	24-27mm

**Set Llave Tubular Hexagonal - 9 pcs**



Pcs	Descripción
8x	Llaves: 6x7 8x9 10x11 12x13 14x15 16x17 18x19 20x22 mm
1x	Varilla

Referencia	Descripción
P06620-P	9pcs, Cromado, Bolsa Textil

**Llave Inglesa Ajustable**



Referencia	Descripción
HPW001	0-33mm L250mm

**Llave en Cruz CrV DIN899**



Referencia	Descripción
P16668	3/4" 24+27+32mm

**Vaso Punta 1/2"**

Referencia	Descripción
HSSB4008	8mm
HSSB4010	10mm



**Palanca Elevador**



Referencia	Descripción
HTL10260	260mm

**Llave Z para Mango**



Referencia	Descripción
HZTS0810	8x10mm

**Llave de Filtro de Cinta**



Referencia	Descripción
XT15011	280mm, Desde 225mm

**Llave de Filtro de Cinta**



Referencia	Descripción
XT15009	230mm, Desde 125mm

**Llave de Filtro de Cadena**



Referencia	Descripción
XT15061	230mm, Desde 125mm

**Llave en L Telescópica**



Referencia	Descripción
P16670	17+19mm, telescópica



### Set Llaves Allen - 9 pcs



Pcs	Descripción
9x	Llaves: 1.5 2.0 2.5 3.0 4.0 5.0 6.0 8.0 10.0 mm

Referencia	Descripción
XT081	60CRV, Soporte de plástico

### Set Llaves Torx - 4pcs



Pcs	Descripción
4x	Llaves: E6x8 E10x12 E14x18 E20x24

Referencia	Descripción
P16139	4pcs, Bolsa Textil

### Set Llaves Torx - 9pcs



Pcs	Descripción
9x	Llaves: T10 T15 T20 T25 T27 T30 T40 T45 T50

Referencia	Descripción
XT082	60CRV, Soporte de plástico

### Set Llaves TORX 8 pcs - DIN 911



Referencia	Descripción
HW158-1908	Serie Larga - Soporte de plástico. T10,T15,T20,T25,T30,T40,T45,T50
HW158-2008	Serie Standar - Soporte de plástico T10,T15,T20,T25,T30,T40,T45,T50

### Set Llaves Torx - 8pcs



Pcs	Descripción
8x	Llaves: T10 T15 T20 T25 T27 T30 T40 T45

Referencia	Descripción
XT086	60CRV, Soporte de plástico

(\*) Hasta fin de existencias

### Set Llaves Allen 8 pcs - DIN 911



Referencia	Descripción
HW158-1508	Serie Larga Punta Bola - Soporte de plástico Medidas: 2.0,2.5,3.0,4.0,5.0,6.0,8.0,10.0mm
HW158-1518	Serie Punta Bola Pulgadas - Soporte de plástico Medidas: 5/64", 3/32", 1/8", 5/32", 3/16", 1/4", 5/16", 3/8"
HW158-1608	Serie Standar Punta Bola - Soporte de plástico Medidas: 2.0,2.5,3.0,4.0,5.0,6.0,8.0,10.0mm

### Llaves Allen - DIN911



Referencia	Descripción
H33020	2,0mm L 100mm
H33025	2,5mm L 112mm
H33030	3,0mm L 126mm
H33035	3,5mm L 126mm (Sin bola)
H33040	4,0mm L 140mm
H33050	5,0mm L 160mm
H33060	6,0mm L 180mm
H33080	8,0mm L 200mm
H33100	10,0mm L 224mm

### Llaves Torx - DIN911



Referencia	Descripción
H35010	T10 L 100mm
H35015	T15 L 112mm
H35020	T20 L 126mm
H35025	T25 L 140mm
H35030	T30 L 160mm
H35040	T40 L 180mm
H35045	T45 L 200mm
H35050	T50 L 224mm

### Llaves Allen - CrV



Llave Allen Standar - Fosfatada

Referencia	Descripción
P00212	12 mm
P00214	14 mm
P00217	17 mm
P00219	19 mm
P00222	22 mm
P00224	24 mm



### Kit Eliminación Tapicería

Set de 11 Herramientas para quitar la tapicerías de vehículos. El Kit está preparado para su uso individual con herramientas especiales y preparadas con un material especial.



La gran ventaja del kit es que no raya o daña la tapicería ni tampoco elementos pintados

Referencia	Descripción
XT50111	11 piezas

### Destornillador Plano Tipo S2 DIN5264

Material bi-componente con agarre antideslizante y ergonómico. Resistente a aceites, solventes, químicos para su uso diario. Materiales ecológicos y reciclable. Alto par de potencia y resistencia. Alta precisión en fabricación. Acorde a las normas internacionales. Aleación de acero de alta calidad, endurecido y templado a capacidad máxima. Acabados de alta precisión y calidad.



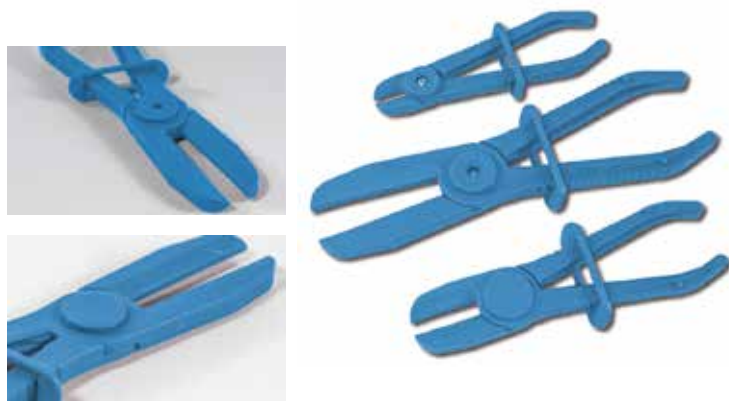
Referencia	Descripción
HW1711-3-07530	PL 3 0x75mm
HW1711-3-07540	PL 4 0x75mm
HW1711-3-10055	PL 5 5x100mm
HW1711-3-10065	PL 6 5x100mm
HW1711-3-15065	PL 6 5x150mm
HW1711-3-15080	PL 8 0x150mm

### Destornillador TRX S2 DIN5264



Referencia	Descripción
HW1714-06006	T 6 x 60mm
HW1714-06007	T 7 x 60mm
HW1714-06008	T 8 x 60mm
HW1714-06009	T 9 x 60mm
HW1714-08010	T 10 x 80mm
HW1714-08015	T 15 x 80mm
HW1714-10020	T 20 x 100mm
HW1714-10025	T 25 x 100mm
HW1714-11527	T 27 x 115mm
HW1714-11530	T 30 x 115mm
HW1714-13040	T 40 x 130mm
HW1714-13045	T 45 x 130mm

### Juego de abrazaderas - 3 Pcs



Abrazaderas para diámetros 19-32-57 mm  
Boqueo seguro mediante anillo de sujeción  
Las abrazaderas están diseñadas para no pellizcar ni deformar las mangueras. Las abrazaderas no son conductoras de electricidad.

Referencia	Descripción
XT50103	3 piezas

### Destornillador Cruz PZ S2 DIN5264



Referencia	Descripción
HW1712-3-0600	PH 0 0x60mm
HW1712-3-0801	PH 1 0x80mm
HW1712-3-1002	PH 2 0x100mm
HW1712-3-1502	PH 2 0x150mm
HW1712-3-1503	PH 3 0x150mm

### Destornillador Cruz PZ S2 DIN5264



Referencia	Descripción
HW1713-3-0600	PZ 0 0x60mm
HW1713-3-1001	PZ 1 0x80mm
HW1713-3-1002	PZ 2 0x100mm
HW1713-3-1502	PZ 2 0x150mm
HW1713-3-1503	PZ 3 0x150mm

### Destornillador PZ S2 DIN5264 - Amarre Hexagonal

Referencia	Descripción
HW1713-4-0801	PZ 1,0x80mm
HW1713-4-1002	PZ 2,0x100mm



### Destornillador en T-TRX S2 DIN5264



Referencia	Descripción
HW1515-5-10010	TH10
HW1515-5-10015	TH15
HW1515-5-10020	TH15
HW1515-5-15025	TH25
HW1515-5-15027	TH27
HW1515-5-15030	TH30
HW1515-5-20040	TH40
HW1515-5-20045	TH45
HW1515-5-20050	TH50

### Destornillador en T-HEX S2 DIN5264



Referencia	Descripción
HW1516-6-6100020	HEX 2,0x100mm
HW1516-6-6100025	HEX 2,5x100mm
HW1516-6-6100030	HEX 3,0x100mm
HW1516-6-6150040	HEX 4,0x150mm
HW1516-6-6150050	HEX 5,0x150mm
HW1516-6-6150060	HEX 6,0x150mm
HW1516-6-6150070	HEX 7,0x150mm
HW1516-6-6200080	HEX 8,0x200mm
HW1516-6-6200100	HEX 10,0x200mm

### Set Destornilladores en T - TRX



Referencia	Descripción
HW151-0506	T10,T15,T20,T25,T30,T40



### Set Destornilladores en T - HEX



Referencia	Descripción
HW151-0306	2,5;3,0;4,0;5,0;6,0;8,0

**Destornillador PH S2 DIN5264 - Cabeza Hexagonal**



Referencia	Descripción
HW1712-4-70801	PH 1 0x80mm
HW1712-4-71002	PH 2 0x100mm

**Destornillador Flexible para Puntas S2**



Referencia	Descripción
HW1717-2-2160516	5/16"x 160mm

**Set Destornilladores 8pcs - PL+PH+PZ S2 - DIN5264**

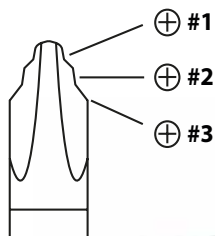


Pcs	Descripción
2x	PL5,5x25mm PL 6,5x25mm
2x	PH0,0x60mm PH1,0x25mm
4x	PZ0,0x60mm PZ1,0x80mm PZ2,0x100mm PZ1,0x25mm

Referencia	Descripción
W171-1208	8pcs, Caja de cartón

**Multi-Destornillador 3 en 1, PH1-2-3, S2**

Este destornillador universal reemplaza en solo un equipo tres destornilladores. Única punta escalonada en Puntas PH 1-2-3



Referencia	Descripción
HW112-9-1002	Ph1, Ph1, Ph3 - Longitud 210mm

**Destornillador para Puntas S2**



Referencia	Descripción
HW1717-3-610014	1/4"x100mm

**Destornillador Flexible para Puntas S2**



Referencia	Descripción
HW1717-2-2160416	1/4"x160mm

**Destornillador Flexible para Vasos 1/4"**



Referencia	Descripción
HW1719-2-160014	1/4"x160mm

**Set Destornilladores 6 pcs - PL+PH S2 DIN5264**



Pcs	Descripción
4x	PL3,0x75mm PL4,0x100mm PL5,5x125mm PL 6,5x150mm
2x	PH1,0x80mm PH2,0x100mm

Referencia	Descripción
HW171-0706	6pcs, Caja de cartón

**Multi-Destornillador 6 en 1**



Referencia	Descripción
HW96-8702	PL 4,5,6; PH 1,2,3



### Destornillador PL S2 - DIN5264 - Cabeza Hexagonal



Referencia	Descripción
HW1711-4-712555	PL 5 5x125mm
HW1711-4-715065	PL 6 5x150mm
HW1711-4-717580	PL 8 0x175mm

### Destornillador Mini PL S2 - DIN5264



Referencia	Descripción
HW951-7-02555	PL 5 5x25mm
HW951-7-02565	PL 6 5x25mm

### Destornillador Mini PH S2 - DIN5264



Referencia	Descripción
HW952-6-0251	PH 1 0x25mm
HW952-6-0252	PH 2 0x25mm

### Destornillador Mini PZ S2 - DIN5264



Referencia	Descripción
HW953-6-0251	PZ 1 0x25mm
HW953-6-0252	PZ 2 0x25mm

### Expositor Destornilladores S2 - DIN5264



Pcs	Descripción
25x	5xPL3,0x75mm 5xPL4,0x75mm 5xPL5,5x100mm 5xPL6,5x150mm 5xPL8,0x150mm
25x	5xPH0,0x60mm 5xPH1,0x80mm 5xPH2,0x100mm 5xPZ1,0x100mm 5xPZ2,0x100mm

Referencia	Descripción
HW171-D150	S2, 50pcs, Soporte de plástico

### Destornillador Serie Larga PL



Referencia	Descripción
HW1711-9-40040	PL4x400mm
HW1711-9-40055	PL5 5x400mm

### Destornillador Serie Larga PH



Referencia	Descripción
HW1712-8-4001	PH1x400mm
HW1712-8-4002	PH2x400mm

### Destornillador Vaso Hexagonal



Referencia	Descripción
HW1717-1-125060	6x125mm
HW1717-1-125070	7x125mm
HW1717-1-125080	8x125mm
HW1717-1-125100	10x125mm
HW1717-1-125120	12x125mm
HW1717-1-125130	13x125mm

### Mini Set Destornilladores S2



Referencia	Descripción
HW130-0708	5x PL 2 2.5 3 3.5 4
HW130-0908	8x TRX 5 6 7 8 9 10 15 20

**Destornillador Plano PL CrV**



Referencia	Descripción
XT071310	PL3x75mm
XT071311	PL3x100mm
XT071312	PL4x75mm
XT071313	PL4x100mm
XT071314	PL6x100mm
XT071315	PL6x150mm
XT071316	PL8x150mm

**Destornillador Estrella PH CrV**



Referencia	Descripción
XT071301	PH0x75mm
XT071302	PH0x100mm
XT071303	PH1x75mm
XT071304	PH1x100mm
XT071305	PH2x100mm
XT071306	PH2x150mm
XT071307	PH3x150mm

**Destornillador Estrella PZ CrV**



Referencia	Descripción
XT071401	PZ0x75mm
XT071402	PZ0x100mm
XT071403	PZ1x75mm
XT071404	PZ1x100mm
XT071405	PZ2x100mm
XT071406	PZ2x150mm
XT071407	PZ3x150mm

**Destornillador TRX CrV**

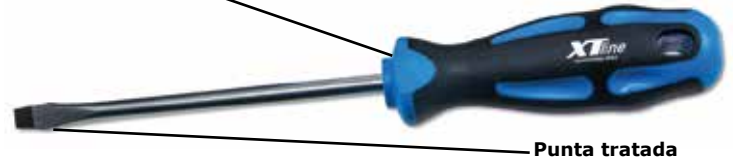


Referencia	Descripción
XT071210	T10x75mm
XT071215	T15x75mm
XT071220	T20x100mm
XT071225	T25x100mm
XT071230	T30x125mm
XT071240	T40x125mm
XT071245	T45x125mm



**LÍNEA DE DESTORNILLADORES**

Mango ergonómico



Alta precisión en fabricación.  
Acorde a las normas internacionales.  
Aleación de acero de alta calidad,  
endurecido y templado a capacidad.  
Máxima, con acabados de calidad.

**Destornillador Corto Plano PL CrV**



Referencia	Descripción
XT071317	PL 5x38mm
XT071318	PL 6x38mm

**Destornillador Corto Estrella PZ CrV**



Referencia	Descripción
XT071408	PZ 1x38mm
XT071409	PZ 2x38mm

**Destornillador Corto Estrella PH CrV**



Referencia	Descripción
XT071308	PH 1x38mm
XT071309	PH 2x38mm



### Set Destornilladores 7pcs - PL+PH CrV



Pcs	Descripción
3x	PH0 PH1 PH2
4x	PL 3 PL 5 PL 6 PL 8

Referencia	Descripción
XT073	7 pcs, Caja de Cartón

### Set Destornilladores 7 pcs - PL+PH CrV



Pcs	Descripción
3x	PH0 PH1 PH2
4x	PL 3 PL 5 PL 6 PL 8

Referencia	Descripción
XT075	7 pcs, Caja de Cartón

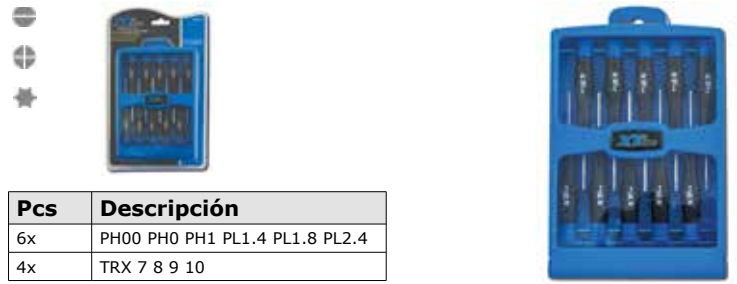
### Set Destornilladores 7 pcs - PL+PZ CrV



Pcs	Descripción
4x	PZ 0 PZ1 PZ2 PZ3
3x	PL 4 PL6 PL8

Referencia	Descripción
XT071507	7 pcs, Caja de Cartón

### Set Mini-Destornillador CrV - 10 pcs



Pcs	Descripción
6x	PH00 PH0 PH1 PL1.4 PL1.8 PL2.4
4x	TRX 7 8 9 10

Referencia	Descripción
XT07010	10 pcs, Caja de plástico

### Mini Multi-Destornillador CrV - 31 pcs



Pcs	Descripción
30x	4xPH 2xPZ 7xPL 8xHEX 9xTRX
1x	Mango Destornillador

Referencia	Descripción
XT07031	31pcs, Caja de plástico

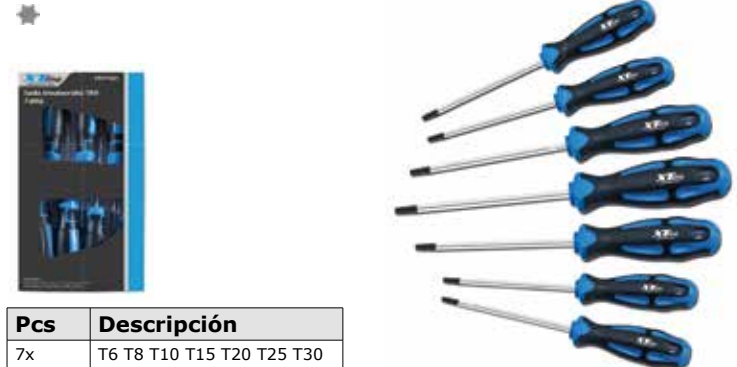
### Set Destornilladores 7 pcs - PL-PH CrV



Pcs	Descripción
3x	PH1 PH2 PH3
4x	PL3 PL5 PL6 PL8

Referencia	Descripción
XT071707	7 pcs, Caja de Cartón

### Set Destornilladores 7 pcs - TRX CrV



Pcs	Descripción
7x	T6 T8 T10 T15 T20 T25 T30

Referencia	Descripción
XT071607	7 pcs, Caja de Cartón

# HONITON PROFESSIONAL TOOLS

Los destornilladores de electricista se prueban individualmente en agua a 10.000V y sometidos a las siguientes 5 pruebas:

- Diseñado y probado de acuerdo a los estándares internacionales
- Mango bi-material ergonómico para un fácil uso.
- Aislamiento de cuchilla moldeado.
- Mango de acero aleado de alta calidad.
- Aislamiento de hasta 10.000 V AC



**Prueba de fuerza:** Los instrumentos se prueban para resistir carga de 20N y temperaturas de +70°C



**Prueba inflamable:** Las herramientas se prueban para determinar la resistencia a las llamas, lo que elimina el riesgo de fuego



**Test Eléctrico:** Los instrumentos se sumergen en agua durante 24 horas y luego es conectado a 10.000V después de 3 minutos de interrupción.



**Prueba de resistencia a las heladas:** Los instrumentos son probados a -40°C su impacto de resistencia. El aislamiento del material protege a en rango amplio de temperatura.



## Destornillador Plano PL - 1000V S2 EN 60900



Referencia	Descripción
HW1021-07525	PL 2 5x75mm
HW1021-10030	PL 3 0x100mm
HW1021-10040	PL 4 0x100mm
HW1021-12555	PL 5 5x125mm
HW1021-15065	PL 6 5x150mm

## Destornillador Phillips PH - 1000V S2 EN 60900



Referencia	Descripción
HW1022-0600	PH 0x60mm
HW1022-0801	PH 1x80mm
HW1022-1002	PH 2x100mm
HW1022-1503	PH 3x150mm

## Set Destornillador PL+PH - 1000V S2 EN 60900



Pcs	Descripción
4x	PL 2.5x75mm PL 3.5x100mm PL 4.0x100mm PL 5.5x125mm
2x	PH 1x80mm PH 2x100mm

Referencia	Descripción
HW102-306	6 pcs, Caja de Cartón

## Set Destornillador PL+PH - 1000V S2 EN 60900



Pcs	Descripción
3x	PL 2.5x75mm PL 3.5x100mm PL 5.5x125mm
2x	PH 1x80mm PH 2x100mm
2x	PZ 1x80mm PZ 2x100mm

Referencia	Descripción
HW102-007	7 pcs, Caja de Cartón

## Destornillador SL/PZ - 1000V S2 EN 60900



Referencia	Descripción
HW10213-0801	SL5.0 & PZ1x80mm
HW10213-1002	SL6.0 & PZ2x100mm

## Destornillador Pozidriv PZ - 1000V S2 EN 60900



Referencia	Descripción
HW1023-0801	PZ 1x80mm
HW1023-1002	PZ 2x100mm



### Punta Atornillador Plana PL - 1/4", RS S2



Referencia	Descripción
HW961-12-02542	PL 4.5x25mm (10pcs/pack)
HW961-12-02551	PL 5.5x25mm (10pcs/pack)
HW961-12-02561	PL 6.5x25mm (10pcs/pack)
HW961-12-02581	PL 8.0x25mm (10pcs/pack)

### Punta Atornillador Phillips PH - 1/4", RS S2 system



Referencia	Descripción
HW962-12-0251	PH 1x25mm (10pcs/pack)
HW962-12-0252	PH 2x25mm (10pcs/pack)
HW962-12-0253	PH 3x25mm (10pcs/pack)

### Punta Atornillador Pozidriv PZ - 1/4", RS S2



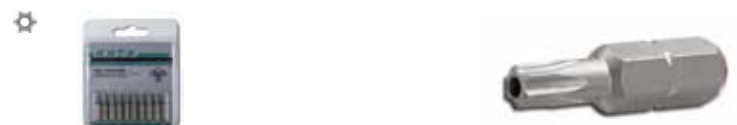
Referencia	Descripción
HW963-12-0251	PZ 1x25mm (10pcs/pack)
HW963-12-0252	PZ 2x25mm (10pcs/pack)
HW963-12-0253	PZ 3x25mm (10pcs/pack)

### Punta Atornillador Torx TRX - 1/4", RS S2



Referencia	Descripción
HW964-12-02510	T10x25mm (10pcs/pack)
HW964-12-02515	T15x25mm (10pcs/pack)
HW964-12-02520	T20x25mm (10pcs/pack)
HW964-12-02525	T25x25mm (10pcs/pack)
HW964-12-02527	T27x25mm (10pcs/pack)
HW964-12-02530	T30x25mm (10pcs/pack)
HW964-12-02540	T40x25mm (10pcs/pack)

### Punta Atornillador Torx TRX - 1/4", RS S2 system



Referencia	Descripción
HW965-11-02510	T10x25mm (10pcs/pack)
HW965-11-02515	T15x25mm (10pcs/pack)
HW965-11-02520	T20x25mm (10pcs/pack)
HW965-11-02525	T25x25mm (10pcs/pack)
HW965-11-02527	T27x25mm (10pcs/pack)
HW965-11-02530	T30x25mm (10pcs/pack)
HW965-11-02540	T40x25mm (10pcs/pack)

### Punta Atornillador Phillips Serie Larga PH - 1/4", RS S2



Referencia	Descripción
HW962-21-0501	PH 1x50mm (10pcs/pack)
HW962-21-0502	PH 2x50mm (10pcs/pack)
HW962-21-0503	PH 3x50mm (10pcs/pack)

### Punta Atornillador Pozidriv Serie Larga PZ - 1/4", RS S2



Referencia	Descripción
HW963-21-0501	PZ 1x50mm (10pcs/pack)
HW963-21-0502	PZ 2x50mm (10pcs/pack)
HW963-21-0503	PZ 3x50mm (10pcs/pack)

### Punta Atornillador Torx Serie Larga TRX - 1/4", RS S2



Referencia	Descripción
HW964-21-05010	T10x50mm (10pcs/pack)
HW964-21-05015	T15x50mm (10pcs/pack)
HW964-21-05020	T20x50mm (10pcs/pack)
HW964-21-05025	T25x50mm (10pcs/pack)
HW964-21-05027	T27x50mm (10pcs/pack)
HW964-21-05030	T30x50mm (10pcs/pack)
HW964-21-05040	T40x50mm (10pcs/pack)

### Punta 1/4" 3V S2



Referencia	Descripción
HW9603-11-02502	2x25mm, 1pack/2pcs
HW9603-11-02503	3x25mm, 1pack/2pcs
HW9603-11-02504	4x25mm, 1pack/2pcs

# HONITON

## PROFESSIONAL TOOLS

### PUNTAS DE ATORNILLADOR

Gran precisión en el ajuste con la cabeza del tornillo.  
 Reduce el deslizamiento del contacto punta-tornillo  
 Endurecido y tratado a su máxima capacidad con acero RSC.

**Punta Atornillador Phillips PH - 1/4", RS S2 Titan**



Referencia	Descripción
HW962-12-0251TH	PH 1x25mm (10pcs/pack)
HW962-12-0252TH	PH 2x25mm (10pcs/pack)
HW962-12-0253TH	PH 3x25mm (10pcs/pack)

**Punta Atornillador Pozidriv PZ - 1/4", RS S2 Titan**



Referencia	Descripción
HW963-12-0251TH	PZ 1x25mm (10pcs/pack)
HW963-12-0252TH	PZ 2x25mm (10pcs/pack)
HW963-12-0253TH	PZ 3x25mm (10pcs/pack)

**Punta Atornillador Torx TRX - 1/4", RS S2 Titan**



Referencia	Descripción
HW964-12-02510TH	T10x25mm (10pcs/pack)
HW964-12-02515TH	T15x25mm (10pcs/pack)
HW964-12-02520TH	T20x25mm (10pcs/pack)
HW964-12-02525TH	T25x25mm (10pcs/pack)
HW964-12-02527TH	T27x25mm (10pcs/pack)
HW964-12-02530TH	T30x25mm (10pcs/pack)
HW964-12-02540TH	T40x25mm (10pcs/pack)

**Set de Puntas - RS S2**



Pcs	Descripción
2x	SL 1.0x5.5 SL 1.2x6.5
4x	1xPH 1 2xPH 2 1xPH 3
4x	1xPZ 1 2xPZ 2 1xPZ 3
1x	Adaptador de amarre magnético

Referencia	Descripción
HW96-0411	11pcs, Caja de plástico

**Llave de carraca Amarre 1/4"**



Referencia	Descripción
HW967-24-2-1414	Llave de carraca Amarre 1/4"

**Set de Puntas - RS S2**



Pcs	Descripción
9x	TRX - T7 T8 T9 T10 T15 T20 T25 T30 T40
6x	HEX - 2.0 2.5 3.0 4.0 5.0 6.0mm
4x	Punta 0 1 2 3
4x	Allen Llaves 4 6 8 10
3x	Torx 6 8 10
3x	Tri 1 2 3 4
1x	Destornillador magnético
1x	Adaptador de puntas magnético

Referencia	Descripción
HW96-3232	32pcs, Caja de plástico

**Llave de Vaso y Puntas - Set 31 pcs**



Pcs	Descripción
3x	PL 4.5 PL5.5 PL6.5
3x	PH1 PH2 PH3
3x	PZ1 PZ2 PZ3
6x	Torx 10 15 20 25 30 40
3x	Hex 4 5 6
1x	Extensión magnética
1x	1/4" Llave de carraca
1x	1/4" Adaptador 25mm
9x	Vasos 1/4" 5 6 7 8 9 10 11 12 13mm

Referencia	Descripción
HW96-2731	31pcs, Caja de plástico

### Set de Puntas - 21 pcs



Pcs	Descripción
3x	PL 4.5 PL5.5 PL6.5
4x	PH1 2xPH2 PH3
4x	PZ1 2xPZ2 PZ3
6x	Torx 10 15 20 25 30 40
3x	Hex 4 5 6
1x	Amarre 1/4"

Referencia	Descripción
HW96-8021	21 pcs, Caja de plástico

### Set de Puntas - RS S2



Pcs	Descripción
3x	SL 0.6x4.5 SL 1.0x5.5 SL 1.2x6.5
9x	3xPH 1 3xPH 2 3xPH 3
9x	3xPZ 1 3xPZ 2 3xPZ 3
6x	TRX 10 15 20 25 30 40
3x	HEX 4 5 6
1x	Adaptador de puntas magnético

Referencia	Descripción
HW96-3232	32pcs, Caja de plástico

### Adaptador Rápido Magnético de puntas - 1/4" S2



Referencia	Descripción
HW967-21-2-06214	62 mm
HW967-21-3-07514	75 mm

### Adaptador Universal Magnético - 1/4" S2



Referencia	Descripción
HW967-21-41-06014	65 mm

### Adaptador - 1/4" S2



Referencia	Descripción
HW969-2-11-02514	1/4" 25mm
HW969-2-21-05014	1/4" 50mm

### Adaptador - 1/4" S2



Referencia	Descripción
HW969-2-75176	1/2" 75mm

### Adaptador para Vaso - 1/4"



Referencia	Descripción
HW960-65-06	6mm / 65mm
HW960-65-07	7mm / 65mm
HW960-65-08	8mm / 65mm
HW960-65-10	10mm / 65mm
HW960-65-12	12mm / 65mm
HW960-65-13	13mm / 65mm

### Set: Destornillador + Puntas + Vasos 1/4" CrV



Pcs	Descripción
2x	Mangos para adaptar puntas
1x	Adaptador magnético 62mm
1x	1/4" Extensión flexible
11x	Punta 25mm: PH1, 4xPH2, PH3, PZ1, 3xPZ2, PZ3
5x	Punta Hex 25mm: 3mm, 4mm, 5mm, 6mm, 8mm
5x	Punta Plana 25mm: PL4mm, PL4.5, PL5.5mm, PL6.5mm, PL8mm
7x	Punta TRX 25mm: T10, T15, T20, T25, T27, T30, T40
7x	Punta TRX 25mm con hole: T10, T15, T20, T25, T27, T30, T40
10x	1/4" Vaso: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13mm
1x	1/4" Vaso E-TRX: E4, E5, E6, E7, E8, E10

Referencia	Descripción
HW96-5856	56pcs, Caja de plástico



**Destornillador Impacto + Puntas**



Pcs	Descripción
1x	Amarre 1/2"
4x	Punta 5/16" 75mm PL6, PL8, PH2, PH3
6x	Punta 5/16" 30mm PH2, PH3, PH4, PL6, PL8, P10
1x	1/2" Punta Adaptador

Referencia	Descripción
H5-ID0120	12pcs, Caja de plástico

**Llave de carraca - Set 14pcs**



Pcs	Descripción
2x	PL5.5 PL6.5
2x	PZ1 PZ2
3x	TRX T15 T20 T25
3x	HEX 4 5 6
1x	Punta Amarre
1x	Llave de Carraca

Referencia	Descripción
HW96-4314	14pcs, Caja de plástico

**Destornillador de Impacto + Puntas S2**



Pcs	Descripción
1x	Destornillador 1/2" 135mm
4x	Punta 5/16" hex 8x36mm: 4mm, 5mm, 6mm, 8mm
4x	Punta 5/16" cross 8x36mm: PH1, PH2, PH3, PH4
4x	Punta 5/16" slotted 8x36mm: PL5mm, PL6mm, PL8mm, PL10mm
2x	Punta 5/16" 8x80mm: PL8mm, PH3
1x	1/2" Punta Adaptador 8mm

Referencia	Descripción
XT07116	17pcs, Caja metálica

**Puntas Set S2 - 7 pcs**



Pcs	Descripción
2x	PL5 PL6
2x	PH1 PH2
2x	PZ1 PZ2
1x	Punta Adaptador Magnético

Referencia	Descripción
XT07007	7pcs, Caja de plástico

**Puntas Set S2 - 21 pcs**



Pcs	Descripción
2x	PL4.5 PL5.5
4x	PH1 2xPH2 PH3
4x	PZ1 2xPZ2 PZ3
4x	HEX 3 4 5 6
6x	TRX T8 T10 T15 T20 T25 T30
1x	Adaptador

Referencia	Descripción
XT07021	21pcs, Caja de plástico

**Puntas Set S2 - 25 pcs**



Pcs	Descripción
2x	PL4 PL5
2x	PH1 PH2
2x	PZ1 PZ2
4x	HEX 3 4 5 6
6x	TRX T10 T15 T20 T25 T30 T40
6x	Vaso 1/4" 6 7 8 10 11 13mm
1x	Amarre 1/4"
1x	Carraca 1/4"
1x	Adaptador 1/4"

Referencia	Descripción
XT07025	25pcs, Caja de plástico

### Puntas Set S2 - 32 pcs



Pcs	Descripción
4x	PL3 PL4 PL5 PL6
4x	PH1 2xPH2 PH3
4x	PZ1 2xPZ2 PZ3
4x	HEX 3 4 5 6
7x	TRX T10 T15 T20 T25 T27 T30 T40
7x	TRX T10 T15 T20 T25 T27 T30 T40
1x	Adaptador Cuadradillo
1x	Punta Adaptador magnética

Referencia	Descripción
XT07033	32pcs, Caja de plástico



### Alicates HONITON

Mango con material bi-componente. Agarre antideslizante y manipulación cómoda y ergonómica. Resistente a aceites, solventes y químicos. Materiales ecológicos y reciclables. Alta generación de par y transmisión. Puntas Material Cromo Vanadio, Acero 40CRV.

### Alicates Profesionales - 40CrV - DIN5746



Referencia	Descripción
HW15601-321-160	160mm
HW15601-321-180	180mm
HW15601-321-200	200mm

### Alicates Profesionales Punta Plana-40CrV DIN5745



Referencia	Descripción
HW15602-121-160	160mm

### Alicates de Bocas Redondas - 40CrV - DIN5745



Referencia	Descripción
HW15602-133-160	160mm

### Destornillador T + Puntas + Vasos



Pcs	Descripción
1x	Destornillador en T Magnético
2x	PL5 PL6
3x	PH1 PH2 PH3
4x	PZ0 PZ1 PZ2 PZ3
2x	TRX 10 20
9x	Vaso 5 6 7 8 9 10 11 12 13

Referencia	Descripción
X7120	20pcs, Caja de plástico

### Alicates Profesionales Punta Larga - 40CrV DIN5745



Referencia	Descripción
HW15602-211-160	160mm
HW15602-311-200	200mm
HW15603-211-200	200mm - Curvo

### Alicate de Corte 40CrV - DIN5749



Referencia	Descripción
HW15604-12-160	160mm

### Alicate de Corte Diagonal - 40CrV - DIN5745



Referencia	Descripción
HW15604-12-180	180mm

**Tenacilla de Ajuste Múltiple - 40CrV**



Referencia	Descripción
HW15608-01-250	250mm

**Alicates Profesionales Pelacables - 40CrV DIN5743**



Referencia	Descripción
HW15606-180	180mm

**Alicate para Terminales - 40CrV**



HW1773-3-BN06WF      HW1773-3-BN03B      HW1773-3-BN03C

Referencia	Descripción
HW177-3-BN06WF	260mm
HW1773-3-BN03B	260mm
HW177-3-BN03C	260mm

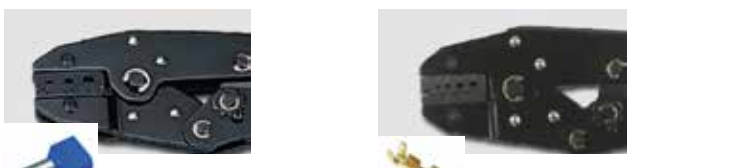
**Accesorios para Alicates de Terminales**



HW177-LY03B



HW177-LY03C



HW177-LY04WF



HW177-LY06WF

Referencia	Descripción
HW177-LY038	0 5-6 mm <sup>2</sup> AWG 20-10
HW177-LY03C	0 5-6 mm <sup>2</sup> AWG 20-10
HW177-LY04WF	0 5-4 mm <sup>2</sup> AWG 20-10
HW177-LY06WF	0 75-6mm <sup>2</sup> , AWG 18-10

**Tenaza de Ajuste Rápido**



Referencia	Descripción
HW15240-1039	250mm
HW15300-1239	300mm

**Tenaza de Ajuste Rápido - 40CrV**



Referencia	Descripción
HPL010	250mm

**Tenaza Grip Boca Curva - 40CrV**



Referencia	Descripción
HPL011	250mm

**Tijera de Corte Básico**



Referencia	Descripción
HW15600-1250	Corte Izquierdas

**Tijera de Corte Básico**



Referencia	Descripción
HW15600-1260	Corte Derechas

**Tijera de Corte Básico**



Referencia	Descripción
HW15600-1270	Corte Recto



### Mini Alicates de Corte Diagonal CrV



Referencia	Descripción
HW15280	130mm

### Mini Alicates de Corte Diagonal Punta Larga CrV



Referencia	Descripción
HW15282	140mm

### Mini Alicates de Corte Curvo CrV



Referencia	Descripción
HW15283	140mm

### Mini Alicates de Corte Punta Redonda CrV



Referencia	Descripción
HW15284	140mm

### Alicates Cir-Clips CrV



Referencia	Descripción
HW15618-01	180mm, Recto - Externo
HW15618-02	170mm, Curvo - Externo
HW15618-03	180mm, Recto - Interno
HW15618-04	170mm, Curvo - Interno



### KIT DE ELECTRICISTA - 21 Pcs

Kit de herramientas de electricista con bolsa textil ligera muy práctica. Apertura superior y con corpantimentos separados con malla para cada área y herramienta individualmente. DIMENSIONES: 210x270x250mm



Pcs	Descripción
4x	alicates - pelador cable 160mm, llave apriete 250, cortador cable 250mm, punta 200mm
3x	alicates - punta curva 200mm, cortador cable 145mm, combinados 180mm
1x	alicates - corte lateral 180mm
1x	Cinta Pvc 19x0,15mm
1x	cuchillo pelacables
1x	probador de Potencia 190mm
3x	destornilladores - PH0x60mm PH1x80mm PH2x100mm
4x	destornilladores - PL3,0x75mm PL4,0x100mm PL5,5x125mm PL6,5x150mm

Referencia	Descripción
VDE17321	21pcs, Bolsa Textil

**Alicates Electricidad CrV - 1000V DIN EN 60900**



Referencia	Descripción
VDE17350	160mm
VDE17351	180mm
VDE17352	200mm

**Alicates Electricidad Punta Larga CrV - 1000V DIN EN 60900**



Referencia	Descripción
VDE17331	180mm

**Tenaza de Ajuste Rápido Electricidad CrV - 1000V**



Referencia	Descripción
VDE17385	240mm



Los alicates están fabricados con acero al cromo vanadio de alta calidad lo que garantiza una durabilidad extrema. El mango ergonómico está diseñado para su comodidad con asas de goma TPR que minimizan su potencia. Los alicates están fabricados con materiales reciclables y libres de sustancias nocivas.

**Alicates Profesionales CrV**



Referencia	Descripción
XT54181	160mm
XT54182	180mm
XT54183	200mm

**Alicates Corte Electricidad CrV - 1000V DIN EN 60900**



Referencia	Descripción
VDE17340	160mm

**Alicates Pelacables Electricidad CrV - 1000V DIN EN 60900**



Referencia	Descripción
VDE17360	160mm

**Alicate Corte CrV**



Referencia	Descripción
VDE17390	240mm

**Alicates de Corte CrV**



Referencia	Descripción
XT54187	160mm

**Alicates de Corte CrV**



Referencia	Descripción
XT54188	180mm
XT54189	200mm

**Alicates Punta Larga CrV**



Referencia	Descripción
XT54184	160mm
XT54186	200mm



### Alicates Punta Larga Curva CrV



Referencia	Descripción
XT54194	160mm
XT54195	200mm

### Alicate Pelacables CrV



Referencia	Descripción
XT54193	180mm

### Alicates Punta Cónica CrV



Referencia	Descripción
XT54126	125mm

### Mini Alicates Corte Frontal CrV



Referencia	Descripción
XT54128	125mm

### Alicate Puntas Redondas CrV



Referencia	Descripción
XT54130	125mm

### Tenaza Profesional CrV



Referencia	Descripción
XT54402	180mm
XT54403	200mm

### Mini Alicates CrV



Referencia	Descripción
XT54125	125mm

### Alicate de Corte CrV



Referencia	Descripción
XT54127	125mm

### Alicates Punta Larga CrV



Referencia	Descripción
XT54129	125mm

### Alicate Plano Puntas Curvas CrV



Referencia	Descripción
XT54131	125mm

### Alicates Cir-Clips CrV



Referencia	Descripción
XT54143	180mm, Recto - Interno
XT54144	180mm, Curvo - Interno
XT54145	180mm, Recto - Externo
XT54146	180mm, Curvo - Externo

**Set Alicates CrV - 4 pcs**



Pcs	Descripción
1x	Alicate - Corte
1x	Alicate - Puntas Largas
1x	Alicate - Puntas Redondas
1x	Alicate - Puntas Curvas

Referencia	Descripción
X0140	125mm, 4pcs, Bolsa Textil

**Alicates Anillos Circlips CrV**



Referencia	Descripción
X0143	180mm, Recto - Interno
X0144	180mm, Curvo - Interno
X0145	180mm, Recto - Externo
X0146	180mm, Curvo - Externo

**Tenaza Grip CR-MO**



Referencia	Descripción
XT52057	250mm

**Tenaza de Ajuste Rápido**



Referencia	Descripción
XT52180	180mm
XT52250	250mm
XT52300	300mm
XT52400	400mm

**Tenazas CrV**

Referencia	Descripción
X1401	160mm
X1402	180mm
X1403	200mm



**Tenazas con Corte CrV**



Referencia	Descripción
P17119	230mm, PVC Mango

**Tenazas con Corte CrV**



Pcs	Descripción
2x	Alicate - Recto Interno y Curvo Interno
2x	Alicate - Recto Externo y Curvo Externo

Referencia	Descripción
X0150	180mm, 4pcs, Bolsa Textil

**Tenaza Grip Cuello Cisne CR-MO**



Referencia	Descripción
XT52065	280mm

**Tenaza de Ajuste Rápido CrV**



Referencia	Descripción
XT51250	250mm
XT51300	300mm

### Alicate CrV



Referencia	Descripción
X0181	160mm
X0182	180mm
X0183	200mm

### Alicate Corte CrV



Referencia	Descripción
X0190	180mm

### Alicate de Corte CrV



Referencia	Descripción
X0191	160mm

### Alicate Puntas Redondeadas CrV



Referencia	Descripción
X0192	180mm

### Alicate Pelacables CrV



Referencia	Descripción
X0193	180mm

### Alicates de Corte CrV



Referencia	Descripción
X0187	160mm
X0188	180mm
X0189	200mm

### Mini Alicates de Corte CrV



Referencia	Descripción
X0132	125mm

### Mini Alicates CrV



Referencia	Descripción
X0125	125mm

### Mini Alicates Corte CrV



Referencia	Descripción
X0128	125mm

### Mini Alicates Puntas Largas CrV



Referencia	Descripción
X0129	125mm

### Mini Alicates Forma Curva CrV



Referencia	Descripción
X0131	125mm

### Mini Alicates Punta Larga CrV



Referencia	Descripción
X0126	125mm

### Mini Alicates Corte Frontal CrV



Referencia	Descripción
X0128	125mm

### Mini Alicates Puntas Redondas CrV



Referencia	Descripción
X0130	125mm



### Alicates Corta Tubos

Tijeras para un corte más fácil y rápido de tuberías de plástico.  
 Filo de acero Sk5 para cortar tubos de plástico.  
 Aplicación para corte:  
 Tubos de plástico: PVC, PPR, PP, PE, PEX, PB  
 Cambio de la cuchilla en menos de 30 segundos  
 Cuchilla masqueada hasta la punta  
 para un acceso rápido al plástico.



Referencia	Descripción
XT50106	max.ø3-42mm
XT50107	Cuchillas de recambio

### Cortador de Tubos

Dos rodillos de guía templados



Retráctil para rebarbador de cuchillas



Referencia	Descripción
XT50104	3-30mm
XT50105	Cuchilla recambio

### Sacabocados Profesional



Referencia	Descripción
XT50200	Mango de Goma Ergonómico Medidas: ø 2.0 2.5 3.0 3.5 4.0 4.5 mm

### Tijera Cortadora Industrial



Referencia	Descripción
K17026	max.42mm
K17028	Cuchilla recambio para K17026

### Tijeras Técnicas de Corte



Referencia	Descripción
XT93120	200mm, Mango de goma ergonómico Uso: textil, cuero, papel, plástico, caucho...

### Grapadora Cuerpo Metálico - PRO

Grapadora profesional metálica XTline con 4 funciones de grapas clavos, etc... Cumple con la normativa TÜV que garantiza la fabricación y protocolos del mismo. Uso Versátil para todo tipo de oficios. Dispone de un depósito para un trabajo más rápido y ágil.



Referencia	Descripción
XT19179	Medida: 6-14mm

### Grapadora Metal

Anchos de grapa hasta 11,3mm y grosor de grapa hasta 0,7mm



Referencia	Descripción
P19170	Altura de Grapa: 4 - 6 - 8 mm

### Grapadora Metal

Anchos de grapa hasta 11,3mm y grosor de grapa hasta 0,7mm



Referencia	Descripción
P19175	Altura de Grapa: 4 - 6 - 8 - 10 - 12 - 14 mm

### Grapadora Cuerpo Metal/Plástico - Basic

Anchos de grapa hasta 11,3mm y grosor de grapa hasta 0,7mm



Referencia	Descripción
P19173	Altura de Grapa: 4 - 6 - 8 - 10 - 12 - 14 mm

### Martillo para Grapas

Para anchos de grapa de 10,6mm; y grosor de 1,2mm



Referencia	Descripción
P19178	Grapas de: 4, 6, 8, 10, mm

### Caja de Grapas 1000 Unidades MH

Para Uso con modelos: XT19179, P19178



Referencia	Descripción
P19191	8x10,2mm
P19192	10x10,2mm
P19193	12x10,2mm

### Caja de Grapas 1000 Unidades

Para Uso con modelos: P19170, P19173, P19175



Referencia	Descripción
P19165	6x11,3mm
P19166	8x11,3mm
P19167	10x11,3mm
P19168	12x11,3mm
P19169	14x11,3mm



**Martillo XTline**



Martillo con mango de fibra de vidrio que absorbe los golpes de impacto. El agarre suave proporciona un trabajo cómodo y fácil. La cabeza del martillo está pintada con un tratamiento que prolonga la vida útil del mismo.

Referencia	Descripción
XT030R	100g
XT031R	200g
XT032R	300g
XT0324R	400g
XT033R	500g
XT0336R	600g
XT034R	800g
XT035R	1000g
XT036R	1500g
XT037R	2000g

**Martillo Basic - Honiton**



**HONITON**  
PROFESSIONAL TOOLS

Referencia	Descripción
HPL002	300g

**Martillo Según DIN 1041**



Referencia	Descripción
XT33001	100g
XT33002	200g
XT33003	300g
XT33004	400g
XT33005	500g
XT33006	600g
XT33008	800g
XT33010	1000g
XT33015	1500g
XT33020	2000g

**Martillo Según DIN 7239**



Referencia	Descripción
XT051R	600g con soporte imán

**Martillo Con Ranura para Clavos**



Martillo fabricado en una sola pieza de acero resistente, según DIN 7239. Mango ergonómico para un menor despliegue de la fuerza de impacto. Cabeza del martillo tratada con soporte magnético para clavos.

Referencia	Descripción
P12205	600g, con soporte imán

**Martillo Con Ranura para Clavos**



Referencia	Descripción
XT33070	600g, con soporte imán

### Martillo - Piqueta según DIN 5108



Referencia	Descripción
P12215	600g

### Martillo - Piqueta según DIN 5108 Mango Fibra de Vidro



Referencia	Descripción
XT052R	600g

### Martillo Maquinista Mango Fibra de Vidro



Referencia	Descripción
XT050R	450g

### Recambios para Mazo HPA002



**HONITON**  
PROFESSIONAL TOOLS

Referencia	Descripción
HPA003	ø 32mm, nylon
HPA004	ø 32mm, PU

### Mazo de Goma Blanco - Basic

**STAVTOOL**



Referencia	Descripción
P12615B	ø 55mm
P12616B	ø 65mm
P12626B	ø 75mm

### Mazo de Goma Negro - Basic

**STAVTOOL**



Referencia	Descripción
P12615	ø 55mm
P12616	ø 65mm
P12626	ø 75mm

### Mazo de Goma



Referencia	Descripción
XT046R	ø 55mm
XT047R	ø 65mm
XT048R	ø 75mm

### Mazo de Goma

**HONITON**  
PROFESSIONAL TOOLS



Referencia	Descripción
HPA002	ø32mm

**Maza DIN 6475 - Mango Fibra de Vidrio**



Referencia	Descripción
XT056R	1000g
XT057R	1250g
XT058R	1500g
XT059R	2000g

**Maza DIN 1041 - Mango de Madera**



Referencia	Descripción
XT33043	3000g
XT33044	4000g
XT33045	5000g
XT33046	6000g

**Maza DIN 6475 - Mango Fibra de Vidrio**



Referencia	Descripción
XT33039	1000g
XT33040	1250g
XT33041	1500g
XT33042	2000g

**Hacha - Mango Fibra de Vidrio**



Hacha con mango de fibra para evitar lesiones y deslizamientos. Además absorbe los golpes con lo que el impacto es menor. Cabezal de una sola pieza de acero recubierto con pintura especial tratada para anti-corrosión. Alta calidad del material fabricado según norma DIN5131

Referencia	Descripción
XT040R	600g
XT041R	800g
XT042R	1000g
XT043R	1250g
XT044R	1500g

**Maza DIN 6475 - Mango Fibra de Vidrio**



Referencia	Descripción
XT060R	3000g
XT061R	4000g
XT062R	5000g
XT063R	6000g

**Hacha Mini según DIN 5131**



Referencia	Descripción
XT068R	500g, L 250mm

### Hacha - Martillo según DIN 5131



Referencia	Descripción
XT064R	2500g
XT054R	4000g

### Hacha con Cuña según DIN 5131



Referencia	Descripción
XT066R	1000g

### Hacha con Cuña según DIN 5131



Referencia	Descripción
XT067R	2200g

### Hacha con Mango de Madera DIN 5131



Referencia	Descripción
XT33026	600g
XT33028	800g
XT33030	1000g
XT33032	1250g
XT33035	1400g
XT33058	2000g

### Hacha - Martillo Empuñadura corta



El Equilibrio perfecto entre el mango y la cabeza hace que garantiza un óptimo centrado de la hacha y aumente la velocidad y ligereza a la hora de usarla día a día. También aumenta la fuerza.

Referencia	Descripción
XT00640	600g/360mm
XT00900	900g/450mm

### Punzón



Referencia	Descripción
HPP103	3x8x150mmv
HPP104	4x10x190mm
HPP105	5x10x200mm

### Punzón Redondeado



Referencia	Descripción
HPP106	6x10x185mm

### Punzón Cónico



Referencia	Descripción
HPT106	6x175mm
HPT108	8x185mm

### Punzón Plano



Referencia	Descripción
HPP115	15x12x180mm

### Punzón Cruzado



Referencia	Descripción
HCC-105	5x160mm



**Juegos de Botadores**



Referencia	Descripción
PA234102	6pcs, Caja de Metal - Medidas: 2,3,4,5,6,8

**Barra de uña**



Barra extractora de 600 y 700 mm de longitud de acero endurecido. Resistente a la abrasión y corrosión. Ideal para clavos, ganchos, etc... Con palanca de apriete y ergonomía cómoda.

Referencia	Descripción
P19811	600mm
P19812	750mm

**Barra de Uña Mini**



Referencia	Descripción
P19805	300mm

**Cíncel**



Referencia	Descripción
P19855	200x23x13mm
P19856	250x23x13mm
P19857	300x23x13mm

**Cutter 07G-L5**



Referencia	Descripción
P19150	18mm 07G-L5, +5 pcs cuchillas

**Cutter - Con Ruleta 50-L1**



Cutter de cuerpo de goma con refuerzo de metal para uso profesional. Dispone de una tuerca de bloqueo para fijar la cuchilla y así poder garantizar un trabajo seguro.

Referencia	Descripción
XT19148	18mm

**Cutter - Con Ruleta 49G-L1**



Referencia	Descripción
XT19149	18mm

**Cutter**



Referencia	Descripción
P19151	9mm 07G-S5 + 5pcs cuchillas
P19160	25mm 21G-H1 + 5pcs cuchillas

**Cutter**



Referencia	Descripción
PA222634	18mm

**Cutter SK4**



Referencia	Descripción
XT19144	18mm



### Cutter - Basic



Referencia	Descripción
P19107	18mm

### Cutter



Referencia	Descripción
P19144	18mm + 3 cuchillas

### Cuchillas de Recambio para Cutter



Referencia	Descripción
P19122	9mm(10pcs) SK4
P19124	18mm L100 (10pcs) SK4
P19145	18mm L100 (10pcs) SK2
P107028	25mm H126 10pcs SK4

### Sierra de Mano - 300mm



Referencia	Descripción
P11715	300mm, Mango PVC

### Rascador Vidrio

Rascador para uso en cerámicas, y otras superficies. Mango ergonómico de plástico duro y goma. Cambio rápido y fácil de la cuchilla



Referencia	Descripción
XT19142	Rascador
XT19143	Pack 5 cuchillas de recambio

### Cuchillas de Recambio para Cutter



Referencia	Descripción
P19146	18mm L100 (10ks) SK4

### Cuchillas de Recambio para Cutter



Referencia	Descripción
XT19147	18mm L-100A

### Sierra tipo serrucho

Sierra tipo serrucho. Mango Ergonómico para un fácil uso.



Referencia	Descripción
P11926	400mm
P11928	450mm
P11930	500mm

### Sierras de Recambio 300mm HSS-Co 24TPI



Referencia	Descripción
XT360000	300mm

### Lima Entrefina - Rectangular



Referencia	Descripción
XT180241	200mm
XT180341	250mm

### Lima Entrefina - Cuadrada



Referencia	Descripción
XT180242	200mm
XT180342	250mm

### Lima Entrefina - Triangular



Referencia	Descripción
XT180243	200mm
XT180343	250mm

### Lima Entrefina - Redonda



Referencia	Descripción
XT180244	200mm
XT180344	250mm

### Lima Entrefina - Media Caña



Referencia	Descripción
XT180245	200mm
XT180345	250mm

### Juego de Limas Entrefinas



Referencia	Descripción
XT180264	200mm - 3 und - Rectangular, Media caña, Redonda
XT180266	200mm - 5 und

### Juego de Limas Diamantadas



Referencia	Descripción
P18803	10 pcs, Superficie Diamantada

### Juego de Limas



Referencia	Descripción
P18801	140mm, 6pcs

### Lima de Madera - Rectangular



Referencia	Descripción
XT180246	200mm
XT180346	250mm

### Lima de Madera - Media Caña



Referencia	Descripción
XT180247	200mm
XT180347	250mm

### Lima de Madera - Redonda



Referencia	Descripción
XT180248	200mm
XT180348	250mm

### Juegos de Limas - Madera



Referencia	Descripción
XT180265	200mm - 3 und

### Pinzas de Plástico Gran Apriete y Ajustego. Fibra de Vidrio



Referencia	Descripción
XT140250	150mm
XT140300	300mm
XT140450	450mm
XT140600	600mm
XT140900	900mm

### Pinzas de Plástico Gran Apriete y Ajuste



Referencia	Descripción
XT140075	70mm
XT140100	100mm
XT140150	150mm
XT140228	228mm

### Pinza de Apriete



Referencia	Descripción
XT140230	160mm
XT140235	225mm

### Pinzas de Apriete Metálicas



Referencia	Descripción
P18254	100mm
P18256	150mm

### Sargentos



Referencia	Descripción
XT100050	100x50mm
XT150050	150x50mm
XT200050	200x50mm
XT250050	250x50mm
XT300050	300x50mm

### Sargentos



Referencia	Descripción
XT300120	300x120mm
XT500120	500x120mm
XT800120	800x120mm

### Sargento tipo G



Referencia	Descripción
XT141050	50mm
XT141075	75mm
XT141100	100mm



### Sargentos de rápido apriete

El sargento de liberación rápida está hecha de acero de alta calidad, la superficie de la abrazadera está galvanizada. La principal ventaja es una mayor reserva de energía, gracias al perfil de carril optimizado para una tensión uniforme, especialmente en el uso máximo del rango de sujeción.



Referencia	Descripción
XT150200	200X100mm
XT150250	250x100mm
XT150300	300x120mm
XT150400	400x120mm
XT150500	500x120mm
XT150600	600x120mm
XT150800	800x120mm
XT151000	1000X120mm

### Mordaza Apriete Ángulo

STAVTOOL



Referencia	Descripción
PA23335	65mm

### Tenaza de Ajuste Rápido CrV



Referencia	Descripción
XT50250	250mm, PVC Mango
XT50300	300mm, PVC Mango

### Tenaza de Ajuste Rápido



Referencia	Descripción
XT53250	250mm
XT50107	300mm

### Alicate Pelacables



(\*) Hasta Fin Stock

Referencia	Descripción
XT50165	165mm

### Alicate para Terminales



Referencia	Descripción
XT50215	215mm

### Alicate pelacables



Referencia	Descripción
P17513	Mango de goma ergonómico Medidas de corte: ø 0.6 1.2 1.7 2.2 mm

### Cizalla Cortadora CrV



Referencia	Descripción
XT50819	450 mm, max. ø Acero 6mm
XT50824	600mm, max ø Acero 8mm
XT50830	750mm, max. ø Acero 10mm
XT50836	900 mm, max. ø Acero 12mm

### Tenaza de Ajuste Rápido CrV



Referencia	Descripción
X0260	250mm, PVC Mango (*) Hasta Fin Stock
X0300	300mm, PVC Mango

### Extractor de 3 Patas



Referencia	Descripción
P19779	D 55mm, L 65mm
P19784	D 60mm, L 90mm
P19786	D 65mm, L 130mm
P19788	D 75mm, L 180mm

### Extractor de 3 Patas



Referencia	Descripción
XT15712	150mm (*) Hasta Fin Stock

### Extractor de 2 Patas



Referencia	Descripción
P19781	D 80mm, L 100mm
P19782	D 120mm, L 100mm
P19783	D 150mm, L 150mm

### Extractor de 2 Patas



Referencia	Descripción
P19760	D 75mm, L 65mm
P19761	D 75mm, L 90mm
P19762	D 85mm, L 130mm
P19763	D 85mm, L 180mm

### Extractor de 3 Patas



(\*) Hasta Fin Stock

Referencia	Descripción
XT15130	D 130mm, L 100 mm
XT15160	D 160mm, L150 mm
XT15200	D 200mm, L 150 mm



### Ángulos magnéticos

Los soportes magnéticos se utilizan para colocar y fijar objetos metálicos durante los procesos de soldadura. Libera ambas manos para poder enfocarse completamente en el proceso de la soldadura.

El imán se puede colocar a 45°-90°-135° y se pueden usar múltiples imanes para la construcción de la pieza a realizar. Los ángulos magnéticos atraen los materiales níquel, cobalto, hierro o aleaciones que contienen este tipo de composición. No pueden usarse con materiales como el aluminio o metales no magnéticos.

### Ángulo magnético triangular



Referencia	Descripción
XT58008	80x80mm
XT58009	90x90mm
XT58012	120x120mm

### Ángulo magnético con interruptor



Referencia	Descripción
XT58109	95x110x25mm
XT58113	130x152x28mm

### Ángulo magnético Hexagonal



Referencia	Descripción
XT58209	95x64mm
XT58210	110x90mm
XT58213	135x105mm

### Caja de Herramientas

Caja de herramientas profesional de Acero inoxidable-plástico. Fuerte y duradera con alta capacidad de carga de hasta 100Kg. Cierres metálicos con posibilidad de incorporar candado de seguridad.



Referencia	Descripción
XT90000	470x238x203mm
XT90001	582x298x255mm
XT90002V1	Set: XT90000 + XT90001

### Caja de herramientas metálica



Referencia	Descripción
PA78745	404x200x150mm - 5 bandejas vacías

### Caja de herramientas metálica



Referencia	Descripción
PA78735	495x290x200mm - 5 bandejas vacías

### Cinturón de cambio rápido



Referencia	Descripción
XT90040	Tamaño: 120x6cm

### Bolsa textil para herramientas



Referencia	Descripción
XT90055	405x230x290mm - Suministrado vacío

### Bolsa para herramientas



Referencia	Descripción
XT90065	460x350x200mm - Mochila para herramientas
XT90070	500x250x360mm - Maletín para herramientas



Referencia	Descripción
XT90055	405x230x290mm - Maleta para herramientas

### Bolsa para herramientas

- 490x230x280mm
- 31 Compartimentos
- Asa tipo bandolera
- Capacidad: 15kg
- Material: Nylon



Referencia	Descripción
XT90050	610x270x400mm - Suministrado sin herramientas

### Bolsa para herramientas



Referencia	Descripción
XT90020	240x90mm - Suministrado sin herramientas

### Bolsa para herramientas



Referencia	Descripción
XT90010	280x160mm Suministrado sin herramientas



**Bolsa para herramientas**



Referencia	Descripción
XT90030	300x250mm - Suministrado sin herramientas

**Bolsa para herramientas**

Bolsa de Herramientas, adecuado para el transporte y almacenamiento de todo tipo de herramientas. Materiales de calidad con bolsillos interiores y exterior acolchado. Mango telescópico y ruedas

- 670x300x310mm
- 13 compartimentos
- 2 ruedas de transporte
- Asa tipo bandolera
- Mango telescópico
- Material: Nylon



Referencia	Descripción
XT90060	670x300x310mm Suministrado sin herramientas

**Bolsa textil para herramientas**



Referencia	Descripción
XT90055	405x230x290mm

**Bolsa para herramientas**



Referencia	Descripción
XT90045	180x110x260mm - Suministrado sin herramientas

**Gorro de protección con Luz - 3.7V**

Referencia	Descripción
XT60081C	Gorro XTLINE con luz color Negro
XT60081M	Gorro XTLINE con luz color Azul
XT60081S	Gorro XTLINE con luz color Gris
XT60083C	Gorro con luz color Negro
XT60083F	Gorro con luz color Amarillo
XT60083R	Gorro con luz color Rojo/Rosa
XT60083S	Gorro con luz color Gris
XT60083Z	Gorro con luz color Verde Kaki



### Bridas de plástico blancas



Referencia	Descripción
XT901225	120x2.5mm, 50pcs/pack
XT902036	200x3.6mm, 50pcs/pack
XT902536	250x3.6mm, 50pcs/pack
XT902548	250x4.8mm, 50pcs/pack
XT903048	300x4.8mm, 50pcs/pack
XT904048	400x4.8mm, 50pcs/pack
XT905048	500x4.8mm, 50pcs/pack
XT904076	400x7.6mm, 50pcs/pack
XT905076	500x7.6mm, 50pcs/pack

### Bridas de plástico negras



Referencia	Descripción
XT921225	120x2.5mm, 50pcs/pack
XT922036	200x3.6mm, 50pcs/pack
XT922536	250x3.6mm, 50pcs/pack
XT922548	250x4.8mm, 50pcs/pack
XT923048	300x4.8mm, 50pcs/pack
XT924048	400x4.8mm, 50pcs/pack
XT925048	500x4.8mm, 50pcs/pack
XT924076	400x7.6mm, 50pcs/pack
XT925076	500x7.6mm, 50pcs/pack

### Luz de Trabajo COB LED 2W

- Luminancia of 160 lúmenes
- Batería de Litio 3,7V 1500MAh
- Cargador 230V+12V car charger
- Soporte Magnético y Gancho
- Cargador incluido
- Tiempo de carga 6-7 horas
- Duración 6 horas
- Dimensiones 33x5x5,5cm, Peso 265g
- Diseño Profesional



Referencia	Descripción
XT60071	En Blíster individual

### Luz de Trabajo 2W COB + 3xLED

- Luminancia de 250 lúmenes LED COBALT 3W
- Dimensiones 25x4x5cm, Peso 260g
- Luz Frontal LED DIOD 5 x 1W
- Cargador: 230V+12V para coche
- Soporte Magnético 3x, Gancho 2x
- Tiempo de carga 5-6 horas
- Batería Litio 3,7V 2400MAh
- Indicador de carga
- Duración 6 horas
- Giro de 180°



Referencia	Descripción
XT60037	En Blíster individual

### Luz de Trabajo LED - 1x1W

- Luminancia de 160 lúmenes
- Batería Litio 3,7V 1500MAh
- Cargador 230V+12V para coche
- Soporte Imán y Gancho
- Dimensiones 33x5x5,5cm, Peso 265g
- Indicador de carga
- Tiempo de carga 6-7 horas
- Duración 6 horas
- Perfil Muy fino.



Referencia	Descripción
XT60036	En Blíster individual

**Luz de Trabajo COB LED 2W + 1xLED 1W**

- Luminancia de 200 lúmenes
- Luz Frontal LED DIODY 1W
- Batería Litio 3,7V 2000MAH
- Cargador: 230V+12V para coche + USB
- Soporte Imán y Gancho
- Bloque Articulado para posicionar
- Indicador de carga
- Tiempo de carga 5-6 horas
- Duración 3 horas
- Dimensiones 23x4x5,5cm
- Peso: 210gr

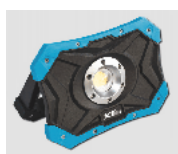


Referencia	Descripción
XT60064	En Blíster individual

**Luz de Trabajo Portable - 20W COB LED**

Alta potencia 20W COB LED es capaz de funcionar hasta 6 horas con 1500 lúmenes. El Puerto USB incorporado de 5V proporciona suficiente energía para cargar un teléfono móvil. El Robusto reflector de luz tiene protección IP44. El diseño moderno y sencillo garantiza una larga vida útil. Incorpora un soporte de imán para la sujeción en zonas férricas.

- Luminosidad 1500 lúmenes
- LED COBALT 20W
- Cargador Batería: 230/12V - Batería 3,7V 6600mAh Li-Ion
- Protection IP 44



Referencia	Descripción
XT60113	En Caja individual

**Luz de Trabajo COB LED 3W +1xLED 1W**

- Luminancia de 250 lúmenes LED COBALT 3W
- Luz Frontal LED DIODY 1W
- Batería Litio 3,7V 2400MAH
- Cargador: 230V+12V USB
- Alimentación via Micro USB
- Soporte Magnético 3x, Gancho 2x
- Giro de 180°
- Indicador de carga
- Tiempo de carga 5-6 horas
- Duración 6 horas
- Dimensiones 26x4x5,5cm, Peso 340g
- Cuerpo de Goma



Referencia	Descripción
XT60080	En Blíster individual





### Lampara de Trabajo COB LED + 1 x LED 1W



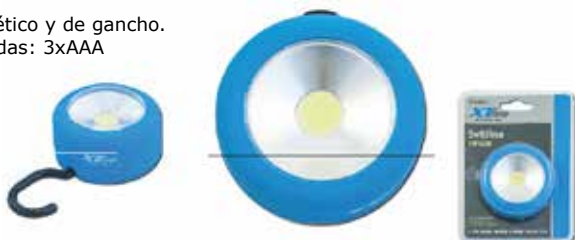
- Luminancia de 200 lúmenes LED COBALT 2W
- Luz Frontal LED DIODY 1W
- Batería: 3xAAA
- Soporte magnético y de gancho
- Equipo con articulación
- Duración 3 horas
- Dimensiones 23x4x5,5cm, Peso 210g



Referencia	Descripción
XT60063	En Blíster individual

### Lampara de Trabajo LED COB 1W + 3 LED

- Soporte magnético y de gancho.
- Baterías Incluidas: 3xAAA



Referencia	Descripción
XT60057	En Blíster individual

### Luz de Trabajo COB LED 1W

- Luminancia de 150 lúmenes
- Batería de Litio 3,7V 1000MAH
- Cargador: USB
- Soporte Magnético
- Cargador incluido
- Tiempo de carga 3 horas
- Duración 3 horas
- Dimensiones 16x2,5x3cm, Peso 60g
- Diseño Profesional



Referencia	Descripción
XT60069	En Blíster individual

### Lampara de Trabajo LED COBALT 2W

- Luminancia de 150 lúmenes
- Soporte magnético y de gancho
- Baterías: 3xAA
- Dimensiones 20x2x6cm, Peso 153g



Referencia	Descripción
XT60065	En Blíster individual

### Lampara de Trabajo Tubular



Referencia	Descripción
XT60043	230V/50Hz 48 SMD LED

### Lampara de Trabajo Tubular



Referencia	Descripción
XT60047	230V/50Hz 16 SMD LED

### Flexómetro con Tope Imantado

- Cinta de acero al carbono
- Gacho cromado y remaches ajustados
- Recubrimiento de Nylon
- Chasis exterior ABS
- Alta resistencia



Referencia	Descripción
P13083	3m/19mm 71G
P13085	5m/25mm 71G
P13088	8m/25mm 71G

### Cargador de Batería - 6V/12V 3.6Amp

- Corriente de Carga (6V) [A] 3,6A
- Corriente de Carga (12V) [A] 3,6A
- Capacidad Batería desde [Ah] 1,2Ah
- Capacidad Batería desde [Ah] 120Ah
- Estado de carga de batería mediante indicador LED: (25%, 50%, 75%, 100%)
- Peso 0,5 kg
- Protection IP20
- Dimensiones: 260 x 70 x 45mm



Referencia	Descripción
XT60136	6V/12V; 3,6Amp

### Flexómetro



Referencia	Descripción
P13012	2m x 16mm (*) Hasta fin stock
P13013	3m x 16mm
P13015	5m x 19mm
P13017	7,5m x 25mm (*) Hasta fin stock
P13019	10m x 25mm (*) Hasta fin stock

### Flexómetro con Tope Imantado



Referencia	Descripción
P13075	5m x 19mm
P13077	7,5m x 25mm

### Flexómetro con Tope Imantado - De Bolsillo



Referencia	Descripción
P13151	1m - Con Iman y colgante



### Flexómetro



**ASSIST®**  
Made by ASSIST

Referencia	Descripción
P13052	2m x 16mm
P13053	3m x 16mm
P13055	5m x 19mm
P13057	7,5m x 25mm
P13060	10m x 25mm

### Flexómetro



**ASSIST®**  
Made by ASSIST

Referencia	Descripción
P13102	2m x 16mm
P13103	3m x 16mm
P13105	5m x 19mm
P13107	7,5m x 25mm
P13110	10m x 25mm

### Flexómetro con Tope Imantado



**ASSIST®**  
Made by ASSIST

Referencia	Descripción
P13303	3m x 10mm
P13305	5m x 19mm
P13307	7,5m x 25mm
P13310	10m x 25mm

### Cinta Métrica de Fibra de Vidrio



Referencia	Descripción
P13063	30m x 13mm
P13065	50m x 13mm

### Flexómetro con Tope Imantado



**ASSIST®**  
Made by ASSIST

Referencia	Descripción
P13152	2m x 16mm
P13153	3m x 16mm
P13154	5m x 19mm
P13158	7,5m x 25mm
P13160	10m x 25mm

### Cintas de señalización



Referencia	Descripción
P108119	Cinta balizamiento Rojo/Blanco - 75mm x 25m
ZN38947	Cinta adhesiva de señalización Negro/Amarillo 50mmx20m
P108119	Cinta Adhesiva transparente

**Alicates para Remachar**

Para medidas: 2,4; 3,2; 4,0; 4,8mm



Referencia	Descripción
XT0902	190mm, Caja de Cartón

**Alicates para Remachar - PRO**



Referencia	Descripción
XT080	Para Remaches de Aluminio, Cobre, Inoxidable Medidas: ø2.4 3.2 4.0 4.8

**Alicates para Remachar GS/TUV**



Referencia	Descripción
P17516	Remaches de Aluminio - Cobre ø2.4 - 3.2 - 4.0 - 4.8

**Alicates para Remachar - Basic**



Referencia	Descripción
P17520	Remaches de Aluminio - Cobre ø2.4 3.2 4.0 4.8

**Alicates para Remachar**



Referencia	Descripción
P17521	Remaches - Aluminio, Cobre ø2.4 3.2 4.0 4.8

**Remaches de Aluminio - Bolsa 50pcs**



Referencia	Descripción
P17523	3,2x10,0mm
P17524	4,0x10,0mm
P17525	4,8x10,0mm
P17526	4,0x 6,4mm
P17527	4,0x12,7mm
P17528	3,2x12,7mm
P17529	4,8x12,7mm

### Tornillo de Banco



Referencia	Descripción
XT19100	100mm
XT19125	125mm
XT19150	150mm

### Tornillo de Banco - Amarre inferior



Referencia	Descripción
P19220	50mm
P19225	60mm

### Broca Construcción SDS Plus

Diseñada para perforar todo tipo de ladrillos, granitos, hormigón, etc... Hélice de corte rápido con una inclinación del 28%  
El Cabezal extra corto permite una extracción directa y rápida del material perforado evitando una obstrucción de la broca y su rotura.  
Ángulos de corte agresivos que permite un rápido y cómodo trabajo



Código	Descripción
XT70411	5x110mm
XT70416	5x160mm
XT70421	5x210mm
XT70511	5,5x110mm
XT70516	5,5x160mm
XT70521	5,5x210mm
XT70526	5,5x260mm
XT70610	6x110mm
XT70616	6x160mm
XT70621	6x210mm
XT70626	6x260mm
XT70631	6x310mm
XT70716	6,5x160mm
XT70721	6,5x210mm
XT70726	6,5x260mm
XT70731	6,5x310mm
XT70811	8x110mm
XT70816	8x160mm

Código	Descripción
XT70821	8x210mm
XT70826	8x260mm
XT70831	8x310mm
XT70845	8x460mm
XT71016	10x160mm
XT71021	10x210mm
XT71026	10x260mm
XT71031	10x310mm
XT71035	10x350mm
XT71045	10x450mm
XT71060	10x600mm
XT71100	10x1000mm
XT71216	12x160mm
XT71221	12x210mm
XT71226	12x260mm
XT71231	12x310mm
XT71235	12x350mm
XT71245	12x460mm

Código	Descripción
XT71260	12x600mm
XT71210	12x1000mm
XT71421	14x210mm
XT71426	14x260mm
XT71435	14x360mm
XT71445	14x450mm
XT71460	14x600mm
XT71491	14x1000mm
XT71621	16x210mm
XT71626	16x260mm
XT71635	16x350mm
XT71645	16x460mm
XT71660	16x600mm
XT71691	16x1000mm
XT71821	18x210mm
XT71826	18x260mm
XT71835	18x350mm
XT71845	18x460mm

Código	Descripción
XT71860	18x600mm
XT71891	18x1000mm
XT72045	20x460mm
XT72060	20x600mm
XT72091	20x1000mm
XT72245	22x450mm
XT72260	22x600mm
XT72100	22x1000mm
XT72445	24x450mm
XT72460	24x600mm
XT72491	24x1000mm
XT72645	26x450mm
XT72660	26x600mm
XT72691	26x1000mm
XT72860	28x600mm
XT72891	28x1000mm
XT73060	30x600mm
XT73100	30x1000mm



### Broca SDS MAX, 4 puntas

Diseñado para perforar ladrillos, bloques, mampostería, hormigón y granito. Helix aumentó en un 28% con una eliminación muy rápida de la pulpa perforada. Cabezal de perforación extra corto es una garantía de descarga directa del material perforado en la hélice y un riesgo reducido de obstrucción. Punta autocentrante para facilitar el inicio de la perforación. Ángulos de corte más agresivos para una perforación más rápida.



Código	Descripción
XT81234	12x340mm
XT81434	14x340mm
XT81534	15x340mm
XT81634	16x340mm
XT81834	18x340mm
XT82034	20x340mm
XT82234	22x340mm
XT82434	24x340mm
XT82534	25x340mm
XT82837	28x370mm
XT83037	30x370mm
XT83237	32x370mm
XT83537	35x370mm
XT83837	38x370mm
XT84037	40x370mm
XT81254	12x540mm
XT81454	14x540mm
XT81554	15x540mm
XT81654	16x540mm
XT81854	18x540mm
XT82054	20x540mm
XT82254	22x540mm
XT82454	24x540mm
XT82554	25x540mm
XT82857	28x570mm
XT83057	30x570mm
XT83237	32x570mm
XT83557	35x570mm
XT83857	38x570mm
XT84057	40x570mm
XT81891	18x1000mm
XT82091	20x1000mm
XT82291	22x1000mm
XT82591	25x1000mm
XT82891	28x1000mm
XT83091	30x1000mm
XT83291	32x1000mm
XT83591	35x1000mm
XT83891	38x1000mm
XT84091	40x1000mm

### Set de Brocas de Construcción 5 Pcs



Referencia	Descripción
XT70600	5x110,6x110,8x160,10x160,12x160mm

### Fresa de Diamante

Uso: baldosas, pavimentos; para amoladoras angulares



Código	Descripción
XT170006	ø 6mm, M14
XT170008	ø 8mm, M14
XT170010	ø 10mm, M14
XT170012	ø 12mm, M14
XT170016	ø 16mm, M14
XT170020	ø 20mm, M14
XT170025	ø 25mm, M14
XT170030	ø 30mm, M14
XT170035	ø 35mm, M14
XT170045	ø 45mm, M14
XT170050	ø 50mm, M14
XT170055	ø 55mm, M14
XT170068	ø 68mm M14
XT170073	ø 73mm M14
XT170082	ø 82mm M14
XT170083	ø 83mm M14

### Set de fresa de Diamante (8 piezas)

Uso: azulejos, baldosas; para amoladoras angulares  
Dimensiones: 6,8,10,20,30,35,50,68 mm



Referencia	Descripción
XT1700000	Set 8 piezas - 6-68 mm M14

### Cinzel SDS plus, SDS max

Diseñado para trabajar con mampostería, hormigón y otros materiales de construcción  
Para herramientas SDS + y SDS MAX de todo tipo, largo y ancho.  
Larga vida útil gracias al acero para herramientas.  
Diseñado para demolición, tallado, pinchazos, etc.



Código	Descripción
XT1725020	14x250x20mm SDSplus
XT1725040	14x250x40mm SDSplus
XT1740020	14x400x20mm SDSplus
XT1740040	14x400x40mm SDSplus

### Cinzel plano SDS max



Código	Descripción
XT1828025	18x280x25mm SDSmax
XT1828040	18x280x40mm SDSmax
XT1840025	18x400x25mm SDSmax
XT1840040	18x400x40mm SDSmax
XT1860025	18x600x25mm SDSmax
XT1860040	18x600x40mm SDSmax

### Cinzel puntiagudo SDS plus



Código	Descripción
XT1725000	14x250mm SDSplus
XT1740000	14x400mm SDSplus

### Cinzel puntiagudo SDS max



Código	Descripción
XT1828000	18x280mm SDSmax
XT1840000	18x400mm SDSmax
XT1860000	18x600mm SDSmax

### Soporte para Amoladora

Referencia	Descripción
XT105415	Para Modelos de: ø115/125/150mm



### Soporte para Amoladora

Referencia	Descripción
XT105430	Para Modelos de: ø180/230mm



### Soporte para Taladro

Referencia	Descripción
XT106135	Amarre ø43mm



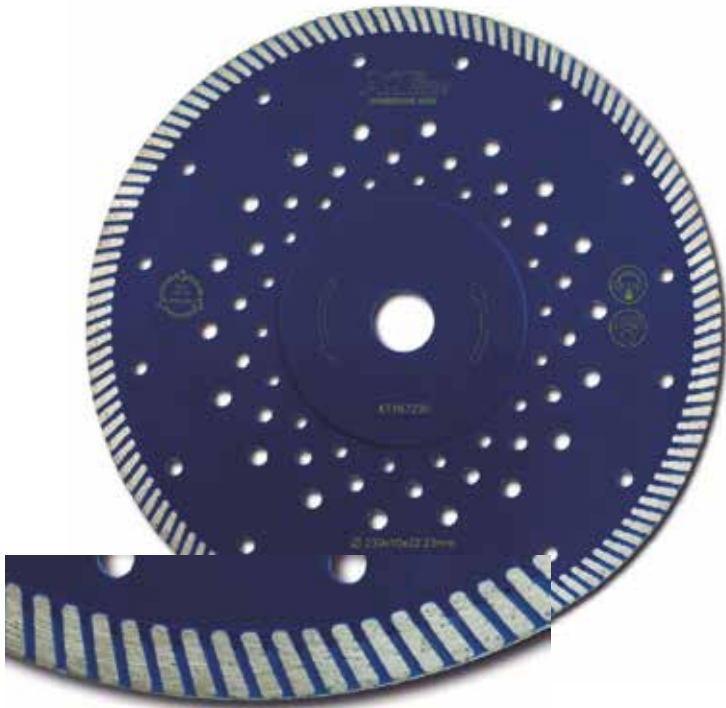
### Números y Letras de Marcado

Referencia	Descripción
P19764	Letras 4 mm
P19766	Letras 6 mm
P19768	Letras 8 mm
P19774	Números 4 mm
P19776	Números 6 mm
P19778	Números 8 mm



### Disco de Diamante TURBO LASER

Disco de diamante turbo para corte en seco y húmedo de hormigón, hormigón armado, piedra, ladrillo, cerámica, etc...  
La forma del disco y su fabricación permite un corte rápido y eficaz



Referencia	Descripción
XT167115	115x10x22,2
XT167125	125x10x22,2
XT167150	150x10x22,2
XT167230	230x10x22,2

### Disco de Diamante Segmentado TURBO LASER

Disco de diamante segmentado para corte en hormigón seco, húmedo o reforzado además de piedra, ladrillo, baldosas, azulejos, etc...  
Diseño de cuchilla que permiten cortes rápidos y alta vida a la herramienta



Referencia	Descripción
XT165115	115x2,2x22,2
XT165125	125x2,2x22,2
XT165150	150x2,3x22,2
XT165180	180x2,4x22,2
XT165230	230x2,8x22,2

### Disco de Diamante TURBO

Disco de diamanteturbo para corte en seco y húmedo de todo tipo de hormigón, piedra, ladrillo, tejas, etc...  
Corte Rápido y cuchilla especial para una larga vida útil.

#### TIPO

Segmento de 10mm con perfil único que permite aumentar la velocidad del corte y deja los perfiles limpios.

#### Uso:

Disco de corte diamantado para todo tipo de hormigones, piedra, ladrillo, granito, azulejos, mármol, pizarra, cuarzo, vidrio, porcelana, tejas, etc...

Referencia	Descripción
XT169115	115x1,4x10x22,2mm
XT169125	125x1,4x10x22,2mm
XT169150	150x1,6x10x22,2mm
XT169200	200x2,0x10x22,2mm
XT169230	230x2,0x10x22,2mm
XT169250	250x2m0x10x22,2mm





### Disco de Diamante

**Uso:**

- Corte de azulejos, baldosas, vidrio, cerámica, granito



Referencia	Descripción
HCO115	115x22,2
HCO125	125x22,2
HCO150	150x22,2
HCO180	180x22,2
HCO230	230x22,2

### Disco de Diamante

**Uso:**

- Corte de ladrillos, hormigón, bloques de construcción



Referencia	Descripción
HDS115	115x22,2
HDS125	125x22,2
HDS150	150x22,2
HDS180	180x22,2
HDS230	230x22,2

### Disco de Diamante

**Uso:**

- Corte de hormigón, ladrillos, tejas, bloques de construcción

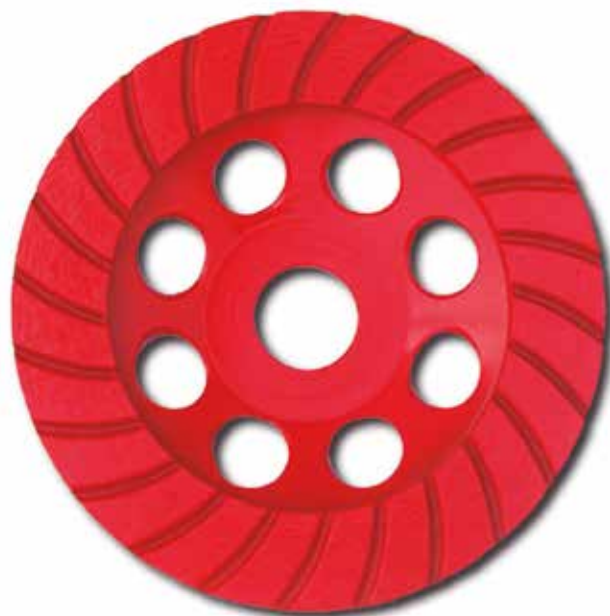


Referencia	Descripción
HTS115	115x22,2
HTS125	125x22,2
HTS150	150x22,2
HTS180	180x22,2
HTS230	230x22,2

### Disco de Diamante Abasivo

**Uso:**

- Corte de mármol, granito, ladrillo, piedra natural y artificial



Referencia	Descripción
HBL115	115x22,2
HBL125	125x22,2
HBL150	150x22,2

### Disco universal para madera y plástico

Uso:  
- para cortar madera y plástico



Referencia	Descripción
XT161115	115x22,2 mm, espesor de corte: 3 mm
XT161125	125x22,2 mm, espesor de corte: 3 mm

### Disco universal para madera, piedra, acero

Uso:  
Para cortar madera, piedra y acero



Referencia	Descripción
XT162115	115x22,2 mm, espesor de corte: 3 mm
XT162125	125x22,2 mm, espesor de corte: 3 mm

### Muela abrasiva de diamante de doble hilera

Uso:  
Rectificado de materiales duros (hormigón, ladrillo y mampostería, etc.)



Referencia	Descripción
HBD115	115x5x22,2 mm
HBD125	125x5x22,2 mm
HBD150	150x5x22,2 mm

### Muela abrasiva de diamante integrada

Uso:  
Rectificado de materiales duros (hormigón, ladrillo y mampostería, etc.)



Referencia	Descripción
HBS115	115x22,2 mm
HBS125	125x22,2 mm
HBS150	150x22,2 mm

### Disco universal para acero

Uso:  
Para cortar material de acero



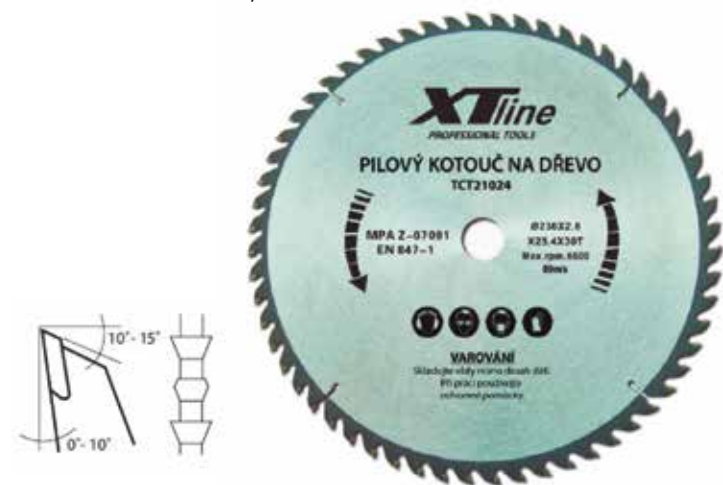
Referencia	Descripción
XT163115	115x22,2 mm, espesor de corte: 3 mm
XT163125	125x22,2 mm, espesor de corte: 3 mm



### Hoja de sierra circular con carburo - Diente recto

Hojas de sierra con hojas de carburo para cortar madera (tipo TZ especialmente diseñado para cortar aluminio y aglomerado laminado). Para el corte longitudinal y transversal de madera blanda y dura para todo tipo de sierras.

Una amplia selección de diámetros y material de diente a cortar cuanto más duro es el material, más dientes se necesitan.



Referencia	Descripción	Adaptador
TCT14040	140x20/40 dientes	16mm
TCT15040	150x20/40 dientes	16mm
TCT16060	160x20/60 dientes	16mm
TCT17060	170x30/60 dientes	25.4, 20, 16mm
TCT18060	180x30/60 dientes	25.4, 20, 16mm
TCT18560	185x30/60 dientes	25.4, 20, 16mm
TCT19060	190x30/60 dientes	25.4, 20, 16mm
TCT20060	200x30/60 dientes	25.4, 20, 16mm
TCT21060	210x30/60 dientes	25.4, 20, 16mm
TCT25080	250x30/80 dientes	25.4, 20, 16mm
TCT30100	300x30/100 dientes	25.4, 20, 16mm
TCT35100	350x30/100 dientes	25.4, 20, 16mm
TCT40100	400x30/100 dientes	25.4, 20, 16mm
TCT45100	450x30/100 dientes	25.4, 20, 16mm
TCT50100	500x30/100 dientes	25.4, 20, 16mm
TCT60120	600x30/120 dientes	

### Circular saw



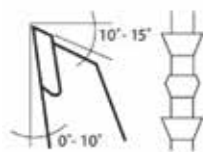
Referencia	Descripción
TC50060	500x2,8x30/56 dientes
TC60061	600x3,5x30/56 dientes

### Juego de anillos adaptadores

Referencia	Descripción
TCT0001	30-25.4 20 16 mm



### Hoja de sierra circular con carburo - Diente cruzado



Referencia	Descripción	Adaptador
TCT14016	140x20/16 dientes	16mm
TCT14024	140x20/24 dientes	16mm
TCT14030	140x20/30 dientes	16mm
TCT15018	150x20/18 dientes	16mm
TCT15024	150x20/24 dientes	16mm
TCT15030	150x20/30 dientes	16mm
TCT16018	160x20/18 dientes	16mm
TCT16024	160x20/24 dientes	16mm
TCT16030	160x20/30 dientes	16mm
TCT16048	160x20/48 dientes	16mm
TCT16520	165x20/20 dientes	16mm
TCT17024BD	170x20/24 dientes	16mm
TCT17040BD	170x20/40 dientes	16mm
TCT18024	180x30/24 dientes	25.4, 20, 16mm
TCT18040	180x30/40 dientes	25.4, 20, 16mm
TCT18524	185x30/24 dientes	25.4, 20, 16mm
TCT18540	185x30/40 dientes	25.4, 20, 16mm
TCT19024	190x30/24 dientes	25.4, 20, 16mm
TCT19040	190x30/40 dientes	25.4, 20, 16mm
TCT20024	200x30/24 dientes	25.4, 20, 16mm
TCT20040	200x30/40 dientes	25.4, 20, 16mm
TCT21024	210x30/24 dientes	25.4, 20, 16mm
TCT21040	210x30/40 dientes	25.4, 20, 16mm
TCT25020	250x30/20 dientes	25.4, 20, 16mm
TCT25040	250x30/40 dientes	25.4, 20, 16mm
TCT25060	250x30/60 dientes	25.4, 20, 16mm
TCT30024	300x30/24 dientes	25.4, 20, 16mm
TCT30040	300x30/40 dientes	25.4, 20, 16mm
TCT30060	300x30/60 dientes	25.4, 20, 16mm
TCT35028	350x30/28 dientes	25.4, 20, 16mm
TCT35040	350x30/40 dientes	25.4, 20, 16mm
TCT35060	350x30/60 dientes	25.4, 20, 16mm
TCT35080	350x30/80 dientes	25.4, 20, 16mm
TCT40032	400x30/32 dientes	25.4, 20, 16mm
TCT40040	400x30/40 dientes	25.4, 20, 16mm
TCT40060	400x30/60 dientes	25.4, 20, 16mm
TCT40080	400x30/80 dientes	25.4, 20, 16mm
TCT45060	450x30/60 dientes	25.4, 20, 16mm
TCT45080	450x30/80 dientes	25.4, 20, 16mm
TCT50040	500x30/40 dientes	25.4, 20, 16mm
TCT50060	500x30/60 dientes	25.4, 20, 16mm
TCT50080	500x30/80 dientes	25.4, 20, 16mm
TCT60056	600x30/56 dientes	25.4, 20, 16mm
TCT60060	600x30/60 dientes	25.4, 20, 16mm
TCT60080	600x30/80 dientes	25.4, 20, 16mm

**Set hojas de sierra**

Referencia	Descripción
T08SET	10 piezas

**Composición:**

Set de 10 de cuchillas para todo tipo de materiales. Amarre: T- xing

Incluye modelos	pcs	Longitud corte	Diente	Madera	Plástico	Acero
T144D	2x	75mm	4mm	5-50mm	-	-
T101D	2x	75mm	4mm	10-45mm	10-45mm	-
T101B	2x	75mm	2.5mm	3-30mm	>30mm	-
T101AO	1x	50mm	1.4mm	2-15mm	2-15mm	-
T218A	1x	50mm	1.2mm	-	-	-
T118A	1x	50mm	1.2mm	-	-	1-3mm
T127D	1x	75mm	3mm	-	-	1-3mm



**Hoja de Sierras de Calar - 1 Paquete/5pcs**

Referencia	Longitud corte	Diente	Madera	Plástico	Acero
T101AO	50mm	1.4mm	2-15mm	2-15mm	
T101B	75mm	2.5mm	3-30mm	<30mm	
T101BR	75mm	2.5mm	3-30mm	3-30mm	
T101D	75mm	4.0mm	10-45mm	10-45mm	
T111C	75mm	3.0mm	5-50mm	5-40mm	
T118A	50mm	1.2mm			1-3mm
T144D	75mm	4.0mm	5-50mm		
T318A	105mm	1.2mm			1-3mm



**Hoja de Sierras de calar - 1 Paquete/5pcs**

Referencia	Longitud corte	Diente	Madera	Plástico	Acero
U101B	75mm	2.5mm	3-30mm	<30mm	
U111C	75mm	3.0mm	5-50mm	5-40mm	
U118A	50mm	1.2mm			1-3mm



Referencia	USO
 <b>T118A</b>  A=1.2mm +21tpi B=50mm +2" C=76mm +3"  HSS Corte recto para materiales finos como chapas, metales no férricos y aluminio.	
 <b>T218A</b>  A=1.2mm +21tpi B=50mm +2" C=76mm +3"  HSS Corte con giro para materiales finos como chapas, and metales no férricos y aluminio.	
 <b>T318A</b>  A=1.2mm +21tpi B=110mm +4 1/2" C=132mm +5 1/2"  HSS Corte recto para materiales férricos, no férricos y aluminio.	
 <b>T144D</b>  A=4mm +6tpi B=75mm +3" C=100mm +4"  HCS Corte rápido para maderas gruesas/duras y paneles	
 <b>T101AO</b>  A=1.4mm +20tpi B=50mm +2" C=76mm +3"  HCS Corte con giro limpio y con precisión para maderas duras, tableros laminados, tableros de fibra y plásticos.	
 <b>T101B</b>  A=2.5mm +10tpi B=75mm +3" C=100mm +4"  HCS Corte recto limpio y preciso para maderas duras, tableros laminados, tableros de fibra y plásticos.	
 <b>T101BR</b>  A=2.5mm +10tpi B=75mm +3" C=100mm +4"  HCS Corte recto limpio y preciso para maderas duras, tableros laminados, tableros de fibra y plásticos.	
 <b>T101D</b>  A=4mm +6tpi B=75mm +3" C=100mm +4"  HCS Corte recto limpio y preciso para maderas duras, tableros laminados, tableros de fibra y plásticos.	
 <b>T111C</b>  A=3.0mm +8tpi B=75mm +3" C=100mm +4"  HCS Corte recto y rápido para maderas blandas y plásticos.	
 <b>U118A</b>  A=1.2mm +21tpi B=50mm +2" C=76mm +3"  HSS Corte recto de materiales finos como chapa, metales no férricos y aluminio.	
 <b>U101B</b>  A=2.5mm +10tpi B=75mm +3" C=100mm +4"  HCS Corte recto, limpio y preciso en madera dura, tableros laminados, tableros de fibra y plástico.	
 <b>U111C</b>  A=3mm +6tpi B=75mm +3" C=100mm +4"  HCS Corte recto rápido en madera dura, blanda y en plásticos.	

### Hojas de Sierra de Sable

Hojas de Sierra de sable bimetálicas con 8%CO especialmente adecuadas para cortar materiales duros. El Cuerpo de la cuchilla es flexible permitiendo un mejor uso. Los Cientes de acero HSS y el cuerpo de un acero especial permiten una larga vida a la herramienta. Compatible con: XTline, AEG, Bosch, Dewalt, Hitachi, Black&Decker, Makina, Metabo, Flex, Atlas/copco, Skil, Milwaukee

Incluye modelos	pcs	Longitud corte	Diente	Madera	Plástico	Acero
S922AF	1x	150mm	1mm			0,7-3mm
S611DF	1x	150mm	4,3mm	10-100mm	5-10mm	
S922HF	1x	150mm	2,5mm	5-100mm		3-12mm
S644D	2x	150mm	4,3mm	75mm	6-100mm	



Referencia	Descripción
XTS-STR1	5 piezas

### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Metal 1-8mm; Perfilera 5-100mm

Referencia	Longitud total	Dientes
XTS123XF	150mm	1,8-3mm; 8-14TPI



### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Maderas con clavos 5-10mm; chapa metálica, Perfilera 3-12mm

Referencia	Longitud total	Dientes
XTS922VF	150mm	2,5mm; 10TPI



### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Metal 31-2mm; tuberías/perfiles

Referencia	Longitud total	Dientes
XTS922AF	150mm	1mm; 24TPI



### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Metal 3-8mm

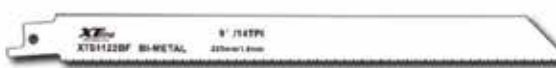
Referencia	Longitud total	Dientes
XTS522BF	100mm	1,8mm; 14TPI



### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Metal 3-8mm; Tuberías, Perfiles hasta 175mm

Referencia	Longitud total	Dientes
XTS1122BF	225mm	1,8mm; 14TPI



### Hojas de Sierra de Sable - 5pcs/Pack

Uso: Maderas con clavos 5-175mm; chapa metálica, Perfilera 3-12mm

Referencia	Longitud total	Dientes
XTS1122HF	225mm	2,5mm; 10TPI



### Hojas de espada HM Bi-metal 1pack / 1pc

Uso: Piedra y hormigón

Referencia	Longitud total	Dientes
XTS1243HM	305mm	1,5mm; 10TPI
XTS2243HM	455mm	1,5mm; 10TPI





**Accesorio Sierra Oscilante - Cuchilla HSS/MD**



Referencia	Descripción	Tipo
XTFM0001	∅ 80mm; paso 1mm	HSS
XTFM0024	Espesor: 5mm	MD

**Accesorio Sierra Oscilante - Soporte Papel**



Referencia	Descripción
XT106203	93x93x93 mm

**Papel Lijado - Pack 20pcs**



Referencia	Descripción
XTFM0023	80mm; segmento 1,2mm

**Papel Lijado - Pack 20pcs**

5x gr. 40 / 5x gr. 60 / 5x gr. 80 / 5x gr. 100



Referencia	Descripción
XT106205	93x93x93 mm

**Accesorio Sierra Oscilante**



Referencia	Descripción
XTFM0018	Ancho: 50mm



Referencia	Descripción
XTFM0002	65mm, Paso: 1,2mm



Referencia	Descripción
XTFM0003	33mm; Paso: 1,4mm



Referencia	Descripción
XTFM0013	65mm; Paso: 2,5mm



Referencia	Descripción
XTFM0014	34mm; Paso: 2,5mm

### Set de Accesorios para Máquina Oscilante

- 1 und - Hoja de Sierra HSS - 88mm
- 1 und - Cuchilla Bimetálica 20mm
- 1 und - Cuchilla Bimetálica 34mm
- 1 und - Espátula 30mm



Referencia	Descripción
XT106204	Set de 4 unidades

### Set de Accesorios para Máquina Oscilante



Referencia	Descripción
XT106208	Set de 8 unidades

### Discos de Corte



### Discos de Desbaste



Referencia	Descripción	Und/Pack	Uso
SARK11516	115x1,6x22,2 / A 46 TBF	10pcs	Acero
SARK11520	115x2,0x22,2 / A 30 TBF	5pcs	Acero
SARK11525	115x2,5x22,2 / A 30 TBF	5pcs	Acero
SARK12516	125x1,6x22,2 / A 46 RBF	10pcs	Acero
SARK12520	125x2,0x22,2 / A 30 TBF	5pcs	Acero
SARK12525	125x2,5x22,2 / A 30 TBF	5pcs	Acero
SARK15016	150x1,6x22,2 / A 46 TBF	10pcs	Acero
SARK15020	150x2,0x22,2 / A 30 TBF	10pcs	Acero
SARK15025	150x2,5x22,2 / A 30 TBF	10pcs	Acero
SARK18030	180x3,0x22,2 / A 30 TBF	5pcs	Acero
SARK23030	230x3,0x22,2 / A 30 TBF	5pcs	Acero
SARK30030	300x3,0x32,0 / A 46 RBF	5pcs	Acero
SARN11510	115x1,0x22 / A 60 TBF	10pcs	Inox
SARN11516	115x1,6x22 / A 46 TBF	10pcs	Inox
SARN12510	125x1,0x22 / A 60 TBF	10pcs	Inox
SARN12516	125x1,6x22 / A 46 TBF	10pcs	Inox
SARN15010	150x1,0x22 / A 60 TBF	10pcs	Inox
SARN15016	150x1,6x22 / A 46 TBF	10pcs	Inox
SARN18022	180x2,2x22 / A 30 TBF	10pcs	Inox
SARN23022	230x2,2x22 / A 30 TBF	10pcs	Inox

Referencia	Descripción	Und/Pack
SABK11560	115x6,0x22,2 / A 24 RBF	5pcs
SABK12560	125x6,0x22,2 / A 24 RBF	5pcs
SABK15060	150x6,0x22,2 / A 24 RBF	5pcs
SABK18060	180x6,0x22,2 / A 24 RBF	5pcs
SABK23060	230x6,0x22,2 / A 24 RBF	5pcs



**Disco de Láminas**

Discos abrasivo de crconio para pulir superficies, bordes, desbarbado de soldaduras etc.. Disco cóncavo para un mejor uso y que le permite acceder a lugares mas difíciles. Gran resistencia de adherencia de las láminas del disco con gran calidad en su fabricación y durabilidad del mismo. El diseño de este disco asegura una baja vibración en su uso.



Referencia	Descripción	Und/Pack
BZ115040	Zirconio ø115mm, gr.40	10pcs
BZ115060	Zirconio ø115mm, gr.60	10pcs
BZ115080	Zirconio ø115mm, gr.80	10pcs
BZ115100	Zirconio ø115mm, gr.100	5pcs
BZ115120	Zirconio ø115mm, gr.120	5pcs
BZ125040	Zirconio ø125mm, gr.40	5pcs
BZ125060	Zirconio ø125mm, gr.60	5pcs
BZ125080	Zirconio ø125mm, gr.80	5pcs
BZ125100	Zirconio ø125mm, gr.100	5pcs
BZ125120	Zirconio ø125mm, gr.120	5pcs
BZ150040	Zirconio ø150mm, gr.40	5pcs
BZ150060	Zirconio ø150mm, gr.60	5pcs
BZ150080	Zirconio ø150mm, gr.80	5pcs
BZ150100	Zirconio ø150mm, gr.100	5pcs
BZ150120	Zirconio ø150mm, gr.120	5pcs

**Disco de limpieza de nailon**

Referencia	Descripción
PC4653	Ø100X13mm - ø amarre 5.5 mm
PC4654	ø100x26mm - ø amarre 5.5 mm
PC4641	ø125mm

**Disco de Láminas**

STAVTOOL



Referencia	Descripción	Und/Pack
BS115040	ø115mm, gr.40	10pcs
BS115060	ø115mm, gr.60	10pcs
BS115080	ø115mm, gr.80	10pcs
BS115100	ø115mm, gr.100	25pcs
BS115120	ø115mm, gr.120	25pcs
BS125040	ø125mm, gr.40	25pcs
BS125060	ø125mm, gr.60	5pcs
BS125080	ø125mm, gr.80	5pcs
BS125100	ø125mm, gr.100	5pcs
BS125120	ø125mm, gr.120	5pcs
BS150040	ø150mm, gr.40	5pcs
BS150060	ø150mm, gr.60	5pcs
BS150080	ø150mm, gr.80	5pcs
BS150100	ø150mm, gr.100	5pcs
BS150120	ø150mm, gr.120	5pcs

**Disco de Goma para Amoladora Angular: Velcro + Bástago**

STAVTOOL



Referencia	Descripción
P10005	ø115 mm, M14
P10004	ø125 mm, M14
P10006	ø150 mm, M14

### Disco de Pulido

STAVTOOL



Referencia	Descripción
KL04015	Ø115mm
KL04016	Ø125mm
KL04017	Ø125mm - con cordón
KL04018	Ø150mm - con cordón

### Rodillo de Lijado para Máquina - XT105350



Referencia	Descripción
XT390120	120x100mm; Gr. 120
XT390180	120x100mm; Gr. 180
XT390240	120x100mm; Gr. 240
XT397120	120x50mm; Gr. 120
XT397180	120x50mm; Gr. 180
XT397200	120x50mm; Gr. 240

### Rodillo Lijado puntas acero para Máquina-T105350

Uso: apto para cepillado, eliminación de óxido y eliminación de pintura.



Referencia	Descripción
XT393003	120X100mm - 0.3mm
XT399003	120x50mm - 0.3mm

### Rodillo de Nylon para Máquina - XT105350



Referencia	Descripción
XT392080	120X100mm - Gr.80
XT398080	120x50mm - Gr.80

### Rodillo de Lijado para Máquina - XT105350



Referencia	Descripción
XT391060	120x100mm; Gr. 60
XT391080	120x100mm; Gr. 80
XT391120	120x100mm; Gr. 120
XT396060	120x50mm; Gr. 60
XT396080	120x50mm; Gr. 80
XT396120	120x50mm; Gr. 120

### Disco de Pulido para Máquina - XT105300



Referencia	Descripción
XT395030	Azul - Ø150 - Blando - Espesor 25mm
XT395040	Amarillo - Ø150 - Medio - Espesor 25mm
XT395050	Naranja - Ø150 - Duro - Espesor 25 mm



**Disco de Soporte para Máquina - XT105300**

Referencia	Descripción
XT395150	ø150mm

**Disco laminar abrasivo - vástago 3 / 6 mm**

Referencia	Dimensiones	Grano	Mango
K1230100300403	ø30x15	40	3
K1230100300603	ø30x15	60	3
K1230100300803	ø30x15	80	3
K1230100301203	ø30x15	120	3
K1230100300404	ø30x15	40	6
K1230100300606	ø30x15	60	6
K1230100300808	ø30x15	80	6
K1230100301202	ø30x15	120	6
K1230100400404	ø40x15	40	6
K1230100400606	ø40x15	60	6
K1230100400808	ø40x15	80	6
K1230100401202	ø40x15	120	6
K1230200400404	ø40x30	40	6
K1230200400606	ø40x30	60	6
K1230200400808	ø40x30	80	6
K1230200401202	ø40x30	120	6
K1230100500404	ø50x20	40	6
K1230100500606	ø50x20	60	6
K1230100500808	ø50x20	80	6
K1230100501202	ø50x20	120	6
K1230200500404	ø50x40	40	6
K1230200500606	ø50x40	60	6
K1230200500808	ø50x40	80	6
K1230200501202	ø50x40	120	6
K1230100600404	ø60x15	40	6
K1230100600606	ø60x15	60	6
K1230100600808	ø60x15	80	6
K1230100601202	ø60x15	120	6
K1230200600404	ø60x40	40	6
K1230200600606	ø60x40	60	6
K1230200600808	ø60x40	80	6
K1230200601202	ø60x40	120	6
K1230100800404	ø80x25	40	6
K1230100800606	ø80x25	60	6
K1230100800808	ø80x25	80	6
K1230100801202	ø80x25	120	6
K1230200800404	ø80x50	40	6
K1230200800606	ø80x50	60	6
K1230200800808	ø80x50	80	6
K1230200801202	ø80x50	120	6

**Disco de amoladora para lijado**

Referencia	Descripción
XT164121	ø125x3x22.2 - fino
XT164122	ø125x3x22.2 - medio
XT164123	ø125x3x22.2 - grueso

**Disco lijado de velcro con orificios - Pack 6 und**

Recambio de máquina XT106380

STAVTOOL



Referencia	Descripción
KL04040	ø125 - Zr. 40
KL04060	ø125 - Zr. 60
KL04080	ø125 - Zr. 80
KL04120	ø125 - Zr. 120

**Disco lijado de velcro - Pack 3und**

Recambio de máquina XT106310

STAVTOOL



Referencia	Descripción
KL04604	ø125 - Zr. 40
KL04606	ø125 - Zr. 60
KL04608	ø125 - Zr. 80
KL04612	ø125 - Zr. 120

### Papel de lija impermeable

Dimensiones: Lámina de 230x280mm



Referencia	Grano
KL25221-2808	60
KL25221-2809	80
KL25221-2812	120
KL25221-2818	180
KL25221-2824	240
KL25221-2832	320
KL25221-2840	400
KL25221-2860	600
KL25221-2880	800
KL25221-2890	1000
KL25221-2895	1500
KL25221-2897	2000

### Papel de lija 90x182mm - Pack 5 und

Recambio de máquina XT106240



### Papel de lija

Dimensiones: Lámina de 230x280mm



Referencia	Grano
KL26121-2806	40
KL26121-2808	60
KL26121-2809	80
KL26121-2812	120
KL26121-2818	180
KL26121-2824	240
KL26121-2832	320

Referencia	Descripción
KL04304	90x182mm - Gr. 40
KL04306	90x182mm - Gr. 60
KL04308	90x182mm - Gr. 80
KL04312	90x182mm - Gr. 120

### España abrasiva 90x70x20



Referencia	Grano
K22100	60
K22101	80
K22103	120
K22104	180
K22105	220

### Papel de lija 93x185mm - Pack 5 und



Referencia	Descripción
KL04404	93x185mm - Gr. 40
KL04406	93x185mm - Gr. 60
KL04408	93x185mm - Gr. 80
KL04410	93x185mm - Gr. 100
KL04412	93x185mm - Gr. 120

### Banda de Lija



Referencia	Descripción
KL04204	75x533mm - Gr40 - 3und/pack
KL04206	75x533mm - Gr60 - 3und/pack
KL04208	75x533mm - Gr80 - 3 und/pack
KL04210	75x533mm - Gr100 - 3 und/pack
KL04212	75x533mm - Gr120 - 3 und/pack
KL044704	40x760mm - Gr40 - 3 und/pack
KL044706	40x760mm - Gr60 - 3 und/pack
KL044708	40x760mm - Gr80 - 3 und/pack
KL044712	40x760mm - Gr120 - 3 und/pack
KL044945	13x457mm - Gr40-100 - 20und/pack
KL044953	30x533mm - Gr40-100 - 20 und/pack

### Banda de Lija 40 x 760mm - Pack 3 und



Referencia	Descripción
KL049708	40x760mm - Gr. 80
KL049712	40x760mm - Gr. 120
KL049718	93x185mm - Gr. 180
KL049724	93x185mm - Gr. 240

**Pulverizadores**



Referencia	Descripción
P108659	Pulverizador básico - 0.75L
JAD26000	Pulverizador alta calidad - 1L

**Pulverizador gran capacidad**



Referencia	Descripción
P108653	Capacidad 2 Litros
P108655	Capacidad 5 Litros
P108656	Capacidad 8 Litros
P108658	Capacidad 16 Litros

**Cepillo de puntas**



Referencia	Descripción
XT22001	ø100 - M14

**Cepillo de traza**



Referencia	Descripción
XT22002	ø75 - M14
XT22003	ø100 - M14

**Aceite de mantenimiento WD-40**

- Aceite universal WD-40
- Abrillanta
- Lubrica
- Protege
- Aloja
- Desplaza la humedad



Referencia	Descripción
WD750083	Bote spray de 400ml

**Cepillo redondo ondulado**



Referencia	Descripción
XT22008	ø125
XT22009	ø150
XT22010	ø175
XT22011	ø200

**Cepillo de traza corrugado inox**



Referencia	Descripción
XT22055	ø75 - M14
XT22056	ø100 - M14



### Cepillo de traza



Referencia	Descripción
XT22004	ø65 - M14
XT22005	ø80 - M14
XT22006	ø100 - M14

### Disco de cepillo



Referencia	Descripción
XT22012	ø100mm - M14
XT22013	ø115mm - M14
XT22014	ø125mm - M14
XT22015	ø150mm - M14
XT22016	ø178mm - M14

### Bástago de cepillo



Referencia	Descripción
XT22024	Ø75mm - Bástago 6 mm

### Cepillo de traza corrugado inox



Referencia	Descripción
XT22037	ø65 - M14
XT22038	ø80 - M14

### Cepillo de traza corrugado inox



Referencia	Descripción
XT22005-5	ø80 - M14 - 0.5mm
XT22005-8	ø80 - M14 - 0.8 mm
XT22006-8	ø100 - M14 - 0.8 mm

### Disco de trazo inox



Referencia	Descripción
XT22057	ø100 - M14

### Bástago de cepillo disco



Referencia	Descripción
XT22023	Ø75mm - Bástago 6 mm

**Bástago de cepillo fino**



Referencia	Descripción
XT22018	ø12mm - ø6mm bástago
XT22019	ø17mm - ø6mm bástago
XT22020	ø25mm - ø6mm bástago

**Bástago de cepillo fino inox**



Referencia	Descripción
XT22021	ø19mm - ø6mm bástago
XT22022	ø22mm - ø6mm bástago

**Disco de cepillo**



Referencia	Descripción
XT22025	ø75mm - ø6mm bástago

**Bástago de cepillo fino**



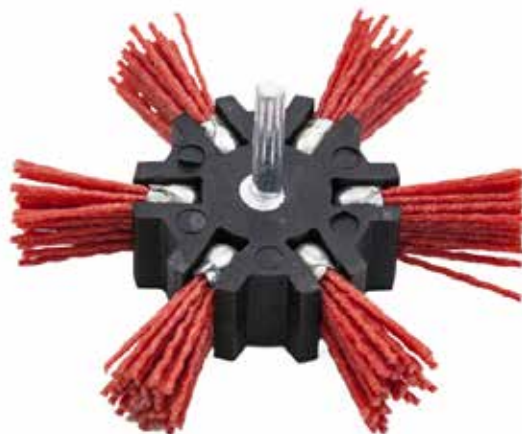
Referencia	Descripción
XT22026	ø12mm - ø6mm bástago
XT22027	ø17mm - ø6mm bástago
XT22028	ø75mm - ø6mm bástago
XT22029	ø100mm - ø6mm bástago

**Bástago de cepillo fino**



Referencia	Descripción
XT22030	ø65mm - ø6mm bástago
XT22031	ø75mm - ø6mm bástago

**Cepillo de bástago de pulido**



Referencia	Descripción
XT22032	ø100mm - ø6mm bástago

**Cepillo de alambre latón / acero / inox**



Referencia	Descripción
XT22034	270mm - latón



Referencia	Descripción
X22035	270mm - acero



Referencia	Descripción
XT22036	270mm - inox

**Disco de cepillo Inox**



Referencia	Descripción
XT22039	ø100mm - M14
XT22040	ø125mm - M14



### Kit Remachadora 190mm

Alicates de remachado con un diseño ergonómico y altamente resistente para trabajos pesados. Palanca de acero y mango ergonómico de cuerpo ligero y duradero con aleación de aluminio y mordazas Cr-Mo endurecidas. Con Adaptadores para remaches de M3, M4, M5 y llave de apriete.



Referencia	Descripción
XT0613	190mm - Caja de plástico con equipo y accesorios

### Kit Remachadora 260mm

Alicates de remachado con un diseño ergonómico y altamente resistente para trabajos pesados. Palanca de acero y mango ergonómico de cuerpo ligero y duradero con aleación de aluminio y mordazas Cr-Mo endurecidas. Con Adaptadores para remaches de M3, M4, M5, M6, M8, M10, M12 y llave de apriete.



Referencia	Descripción
XT0617	260mm - Caja de plástico con equipo y accesorios

### Recambios de adaptador remachadora

Referencia	Descripción
XT06103	M-3
XT06104	M-4
XT06105	M-5
XT06106	M-6
XT06108	M-8
XT06110	M-10
XT06112	M-12



### Remachadora 260mm

Para medidas de 2.4 - 3.2 - 4.0 - 4.8 mm



Referencia	Descripción
XT0801	260mm - Caja de cartón

### Pistola para cartucho



Referencia	Descripción
XT099	Para capacidad 300ml

### Pistola para cartucho



Referencia	Descripción
XT096	Para Capacidad 300ml

### Pistola para cartucho reforzado



Referencia	Descripción
XT094	Para capacidad 310ml
XT095	Para capacidad 600ml
XTZ950101	Boquilla de recambio

### Pistola para cartucho



Referencia	Descripción
XT098	Para Capacidad 410ml

**Pistola plus para espuma de polietileno**



Referencia	Descripción
XT093	Pistola para espuma polietileno

**Ventosa Doble / Triple**



Referencia	Descripción
XT140040	Doble - Carga 120kg
XT140041	Triple - Carga 180kg

**Escalera de tres tramos**

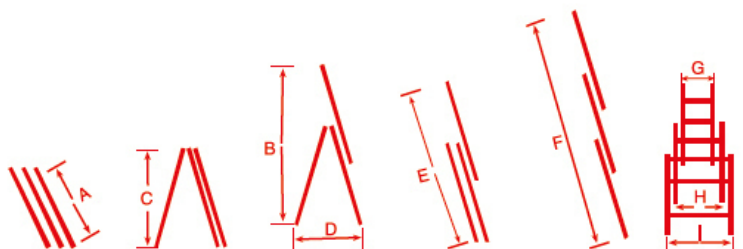
Una escalera de tres partes que se destaca por su versatilidad y manejo rápido y fácil. Puede ser utilizada como sistema deslizador, doble, triple o como escalera independiente. La escalera se puede colorar en diferentes tipos de terrenos y alturas. La escalera en tijera es la que ofrece mayor resistencia. Perfiles de aleación de calidad con sus compensaciones en la escalera para un bajo peso y tener rigidez en su uso. Espesor del material: 1.2 +/- 0.5mm

Referencia	Descripción
XT607EK	3x7 - 150kg
XT609EK	3x9 - 150 kg
XT611EK	3x11 - 150 kg
XT611EK-8Y	Recambio Goma inferior de protección para escalera

**Escalera de tres tramos**



XT611EK-8Y



Referencia	Peldaño	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G/H (mm)	Peso (kg)	Dimension ©
XT607	3x7	2045	2830	1965	1240	2950	4090	320/385/450	10,7	195x45x16
XT609	3x9	2605	3630	2495	1580	3830	5530	320/385/450	13,2	254x45x16
XT611	3x11	3165	4800	3025	1920	4940	6870	320/385/450	15,5	

### Careta de protección básica



Referencia	Descripción
PC0021	Careta de Protección Basica
PC0021R	Recambio frontal de careta

### Careta de soldadura - Basic

Según norma CE (EN169/379)

- Ventana de filtro: 96x39cm; tamaño del filtro: 110x90x9 mm;
- Protección UV / IR: DIN 16 en todo
- Energía: batería solar / batería de litio; activación: automática
- Temperatura de trabajo: -10° + 60 ° C;
- Peso 485 g
- Tiempo de atenuación: 1-30000s; aclarar: 0,1-1s; sensores de atenuación: 2



Referencia	Descripción
XT5894	Careta de soldadura auto gran pantalla
XT5894-500G	Recambio filtro de soldadura LCD para XT5894

### Soporte de cabeza para careta soldadura XT5890



Referencia	Descripción
XT5893-HG4	Soporte de cabeza de careta para soldadura

### Soporte de cabeza para careta soldadura XT5894



Referencia	Descripción
XT5894-HG3	Soporte de cabeza de careta para soldadura

### Careta de soldadura - Pantalla grande

Careta de soldadura con oscurecimiento automático de nueva generación. Se utilizan nuevos conocimientos altamente científicos y tecnológicos como LCD, optoelectrónicos, carga solar, microelectrónica, etc...

El casco protege eficazmente los ojos de la soldadura y permite al trabajador trabajar en su puesto de una forma cómoda, con amplia visión y precisión. El filtro óptico XYE-958E permite un color verdadero en todo momento.

Con su nuevo display de visualización XL permite una mejora del trabajo. El equipo está realizado según normativg CE EN169/379.

Protección completa de cabeza y cuello con un peso ligero.

Control del casco:

- Configuración del filtro y configuración de sensibilidad
- Configuración retardo e interruptor

La óptica permite colores reales en todo el espectro rojo, amarillo, verde, azul



#### Parámetros Técnicos:

- Tamaño ventana: 98x87cm; Tamaño filtro: 114x133x9mm;
- UV/IR Protección DIN16 en todo momento
- Fuente de alimentación: Célula solar/Batería Litio
- Encendido completamente automático
- Tiempo de atenuación: 1-30000s, Brillo ajustable 0.1-1s,
- Sensores de atenuación: 4
- Temperatura de trabajo -10° a +60°, Peso:525gr, Interruptor on/off

Referencia	Descripción
XT5890	Careta de soldadura auto gran pantalla
XT5890-958E	Recambio filtro de soldadura LCD para XT5890

### Careta de soldadura

La careta con superficie de carbono, evita que el polvo y los humos se adhieran al casco. Adecuado para trabajos de soldadura y desbarbado.



#### Parámetros Técnicos:

- Ventana de filtro: 100x60cm; tamaño del filtro: 110x90x9 mm;
- Protección UV / IR: DIN 16 en todo
- Batería solar / batería de litio; Completamente automática
- Tiempo de atenuación: 1-30000s; aclarar: 0,1-1s; Sensores atenuación: 4
- Temperatura de trabajo: -10° a +60°, Peso:515gr, Interruptor: on/off

Referencia	Descripción
XT5893	Careta de soldadura
XT5893-818E	Recambio filtro de soldadura LCD para XT5893



### Pistola de Pulverización PRO

Pistola de pulverización con recipiente superior con capacidad de 0.6 litros. Con una boquilla de pulverización ancha. Adecuado para lacas y pinturas.

Uso profesional. Cuerpo de pistola y boquillas de Acero Inoxidable. Opcionales: Boquillas de diferentes tamaños, etc...



**Detalles técnicos:**

- Flujo de aire requerido 10,2 m<sup>3</sup>/h
- Presión de boquilla 1,36atm
- Presión de trabajo: 2,0 BAR
- Ancho de pulverización 180-260mm
- Tamaño de boquilla ø1,5mm

Referencia	Descripción
XT4018	Depósito: 0.6l, Boquilla Dimensiones 1,5mm
XT4019	Recambio Boquilla 1,4 mm
XT4020	Recambio Boquilla 2,0 mm
XT4021	Depósito recambio

### Pistola Pulverizadora con Depósito Superior

Presión de trabajo: 2,0 - 3,0 BAR



Referencia	Descripción
P19641	Depósito: 0.6l, Boquilla Dimensiones 1,4mm
P19672	Recambio Depósito: 0,6l
P19658-S	Recambio: Boquilla 1.4mm y accesorios
P19644-S	Recambio: Boquilla 2.0mm y accesorios
P19643-S	Recambio: Boquilla 1.7mm y accesorios

### Pistola Pulverizadora Depósito Inferior Metálico

Presión de trabajo: 2,0 - 3,0 BAR



Referencia	Descripción
P19609	Depósito: 1.0l, Boquilla Dimensiones 1,5mm
P19660	Recambio: Boquilla y accesorios

### Pistola Pulverizadora con Depósito Inferior

Presión de trabajo: 2,0 - 3,0 BAR



Referencia	Descripción
XT10607	Capacidad Depósito: 1.0l

### Pistola Pulverizadora con Depósito Superior Mini

Presión de trabajo: 2,0 - 3,0 BAR



Referencia	Descripción
P19640	Depósito: 0.15l, Boquilla Dimensiones 0,8mm
P19657	Recambio: Boquilla y accesorios

### Pistola Pulverizadora con Depósito Superior



Referencia	Descripción
XT10608	Depósito: 0.6l, Boquilla Dimensiones 1,5mm

### Manguera profesional en espiral para aire



Detalles: Presión máxima 10 bar

Referencia	Descripción
P19594	8/12mm 5m PU
P19595	8/12mm 7,5m PU
P19596	8/12mm 10m PU
P19597	8/12mm 15m PU
P19598	8/12mm 20m PU
P19626H	5/8mm 10m PU
P19627H	5/8mm 15m PU
P19628H	5/8mm 20m PU

### Manguera para aire



Detalles: Presión máxima 16 bar

Referencia	Descripción
XT41950	9/15mm 50m
XT42050	6/12mm

### Manguera conexión de aire

Presión máxima 16bar. Material: PVC + PES fibra



Referencia	Descripción
XT41905	9/15mm 5m
XT41910	9/15mm 10m
XT41915	9/15mm 15m
XT41920	9/15mm 20m
XT42005	6/12mm 5m
XT42010	6/12mm 10m
XT42015	6/12mm 15m

### Mangera de Aire enrollada con soporte pared



### Llave de impacto 1/2"



#### Parámetros Técnicos:

- Max. 680Nm, Velocidad 7000/min
- Máx Medida M16, adaptador aire 1/4"; consumo de aire 380l/min
- Vibración en el cuadrado <0.4mm, presión del ai
- 8x Puntas de impacto: 10; 11; 13; 14; 17; 19; 22; 24mm
- 1x Extensión 1x Bote de aceite
- Peso 2.6kg

Referencia	Descripción
XT10026B	1/2", 680Nm, Caja de plástico

### Mangera de Aire enrollada con soporte pared

Longitud Cable: 20 metros  
 Diámetro Exterior: 12mm / Interior: 9.5mm  
 Presión: 8 bar - Máxima 16bar  
 Temperatura trabajo: -5°C/45°C  
 Adaptador rápido: 1/4"  
 Peso: 6.7 Kg

Referencia	Descripción
XT41900	Equipo completo

**Comprobador de inflado de neumáticos**



Máxima presión: 12 BAR

Referencia	Descripción
XT10615	Modelo TG-11
XTWJ002009	Recambio de manguera LG-04 k

**Comprobador de inflado de neumáticos**

Comprobador de neumáticos calibrada con control de presión. Mango con palanca de control en la parte trasera para el manejo con una sola mano. Recubierto de goma para evitar daños en el equipo.



Máxima presión: 12 BAR; desviación +/- 1psi

Referencia	Descripción
XT10087	Equipo calibrado
XTG19300	Recambio: Manguera de Conexión

**Comprobador de inflado de neumáticos**

Máxima presión: 12 BAR



Referencia	Descripción
XT10089	Modelo TG-89

**Comprobador de inflado de neumáticos**

**Set de 3 piezas**

- Comprobador de inflado de neumáticos
- Manguera de conexión 5m
- Pistola de aire



Referencia	Descripción
XT10063	Set de 3 piezas

**Comprobador de inflado de neumáticos**



**Set de 5 piezas**

- Comprobador de inflado de neumáticos
- Manguera de conexión 5m
- Pistola de aire
- Pistola con depósito superior
- Pistola con depósito inferior

Referencia	Descripción
XT10065	Set de 5 piezas

**Bote para Aceite**



Referencia	Descripción
P19621	Capacidad: 180ml



### Pistola de aire - Punta corta



Referencia	Descripción
XT10616	Modelo LA-01

### Pistola de aire - Punta media



Referencia	Descripción
XT10618	Modelo LA-02

### Pistola de aire - Punta larga



Referencia	Descripción
XT10617	Modelo LA-03
XT10617-1	Recambio Punta Larga

### Pistola de aire - Intercambiable



Referencia	Descripción
XT10675	Modelo LA-11

### Pistola de Aire Compromido SG-12, 4,7m



Referencia	Descripción
XT1012	Kit Completo de 4/6mm
XT1013	Kit Completo de 5/8mm
XT1014	Recambio: Conector T

### Comprobador de Inflado de Neumáticos



Máxima presión: 12 BAR

Referencia	Descripción
XT1008	Modelo TG-8
XT1009	Recambio de manguera LG-04 k

### Comprobador Digital de Inflado de Neumáticos



Referencia	Descripción
XT1010	Longitud 350mm
XT1011	Recambio: Manguera Adicional
XTWJ002009	Recambio: Manguera Original

# HONITON

## PROFESSIONAL TOOLS

### Llave de Impacto



#### TECNOLOGÍA

El par de apriete puede ser controlado por tres etapas:

- Nivel 1: 814 Nm
  - Nivel 2: 1085 Nm
  - Nivel 3: 1356 Nm
- Cuadrado de salida 1/2"  
Adaptador de aire 1/4"



v

- Par de apriete máximo 1356Nm, Velocidad sin carga 10000rpm
- Tornillo máximo de capacidad M16, Entrada de aire 1/4",
- Consumo de aire 153m/min
- Ajuste de par: 1-814Nm, 2-1085Nm, 3-1356Nm
- Presión de trabajo: 6,2bar
- Peso 2kg
- Garantía: 2 Años + 1 Adicional previo registro

Referencia	Descripción
HY1281T	1356Nm, Caja de Cartón

### Llave de Impacto



#### TECNOLOGÍA

El par de apriete puede ser controlado por tres etapas:

- Nivel 1: 814 Nm
  - Nivel 2: 1085 Nm
  - Nivel 3: 1630 Nm
- Cuadrado de salida 3/4"  
Adaptador de aire 1/4"

#### Parámetros Técnicos:

- Par de apriete máximo 1630Nm, Velocidad sin carga 5500rpm
- Tornillo máximo de capacidad M16, Entrada de aire 1/4",
- Consumo de aire 196m/min
- Ajuste de par: 1-814Nm, 2-1085Nm, 3-1630Nm
- Presión de trabajo: 6,23bar
- Peso 3,6kg
- Garantía: 2 Años + 1 Adicional previo registro

Referencia	Descripción
HY1982T	1630Nm, Caja de Cartón

### Llave de trinquete neumática HONITON



#### Parámetros Técnicos:

- Max. par: 120 Nm
- Velocidad: 160 rpm
- Presión de trabajo: 6,3 bar
- Consumo de aire: 104,8 l / min
- Suministro de aire: 1/4"
- Sujeción: 3/8" ó 1/2"
- Dimensiones: 254 x 50 x 50 mm
- Peso: 1,25 kg

Referencia	Descripción
HY1038A	Sujeción 3/8" - Caja de Cartón
HY1012A	Sujeción 1/2" - Caja de Cartón



### Llave de Impacto



#### Parámetros Técnicos:

- Par de apriete máximo 310Nm, Consumo de aire:360l/min
- Llave cabeza 1/2": 9,10,11,13,14,17,19,22,24,27mm
- Extensión 1/2" 125mm
- Llave Allen 4mm
- Adaptador
- Filtro de grasa
- Caja de plástico

Referencia	Descripción
XT1001	17 pcs, 310Nm



### Llave de Impacto



#### Parámetros Técnicos:

- Par de apriete máximo 310Nm, Consumo de aire:360l/min
- Llave cabeza 1/2": 9,10,11,13,14,17,19,22,24,27mm
- Llave bloqueo 1/2"
- Llave Allen 4mm
- Adaptador
- Filtro de grasa
- Caja de plástico

Referencia	Descripción
XT1005	17 pcs, 310Nm



**Conector de aire**

Máxima presión: 10 BAR



Referencia	Descripción
XT40214	1/4"
XT40238	3/8"
XT40212	1/2"

**Conector de aire**

Máxima presión: 10 BAR



Referencia	Descripción
XT40406	6,35mm
XT40407	6,9mm
XT40410	10mm

**Conector de aire**

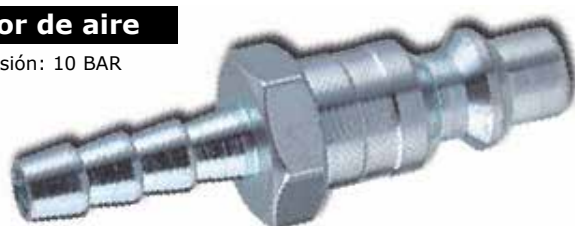
Máxima presión: 10 BAR



Referencia	Descripción
XT40314	1/4"
XT40338	3/8"
XT40312	1/2"

**Conector de aire**

Máxima presión: 10 BAR



Referencia	Descripción
XT40314	6,35mm
XT40338	7mm
XT40312	10mm

**Conector de aire**

Máxima presión: 10 BAR



Referencia	Descripción
XT40514	1/4" - Rosca hembra
XT40614	1/4" - Rosca macho

**Conector de aire**

Máxima presión: 10 BAR



Referencia	Descripción
XT40514	6,35mm
XT40614	10mm

**Recambios para conectores aire**



Referencia	Descripción
XT4011	8/12mm LF-11
XT4012	8/12mm LF-12
P19631	LF-11, 6x8mm
P19632	LF-12, 6x8mm

**Filtro de Aire con Regulador**



Referencia	Descripción
P19619	Modelo Tipo: LG-05

**Juego de juntas tóricas**



Referencia	Descripción
P19635	12 Modelos / 50 Pc

**Válvula Reductora**



Referencia	Descripción
P19655	Modelo Tipo: LG-04

### Pistola engrasadora XTline

Modelo LM-01 con 2 mangueras (1 flexible y 1 rígida)



Referencia	Descripción
P19646	Pistola de engrase

### Gato de botella

Gatos de Botella para la elevación de grandes cargas en el taller. Fácil manejo y ajuste de la altura de trabajo con la palanca. El diseño garantiza la máxima estabilidad y seguridad en el trabajo.



Referencia	Cap.	Min altura	Max altura	Carrera	Ajuste altura	Peso
P19622	2t	181mm	345mm	110mm	48mm	2kg
P19623	3t	194mm	363mm	115mm	60mm	2.8kg
P19625	5t	216mm	402mm	125mm	70mm	3.7kg
P19628	8t	230mm	447mm	145mm	80mm	4.8kg
P19630	10t	230mm	447mm	145mm	80mm	4.8kg

### Polipasto de Cadena

Parámetros Técnicos:

Cadena de control 5m, cadena de amarre 2m



Referencia	Descripción
P19790	Carga: 1t
P19791	Carga: 2t
P19792	Carga: 3t

### Gato de botella

Para grandes cargas de peso. Modelo 32t y 50t (Con varillas)



Referencia	Cap.	Min altura	Max altura	Carrera	Ajuste altura	Peso
PT91204	12t	242mm	472mm	150mm	60mm	11.5kg
PT91504	15t	230mm	465mm	155mm	80mm	8kg
PT92004	20t	230mm	460mm	150mm	80mm	8kg
PT93204	32t	242mm	472mm	150mm	60mm	11.5kg
PT95004	50t	230mm	465mm	155mm	80mm	8kg



**Elevador de tijera**



Referencia	Descripción
PT10102	Carga: 1t
PT10202	Carga: 2t

**Gato de Carretilla**



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PTA82001S	2t	85mm	330mm	548x230x160mm	10kg

**Gato de carretilla**



Referencia	Peso
XTPT83502-5	Recambio Goma: Para Modelo PT83508



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
P19600	2t	130mm	345mm	460x220x150mm	9.3kg
XTPT820033E-2	Recambio: Goma soporte				

**Gato de Carretilla**

Perfil Bajo: 98mm  
Doble Bomba



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT83508	3t	98mm	535mm	760x345x170mm	44kg

### Gato de Carretilla



Gato Hidráulico para cargas en taller de hasta 2t con un perfil muy bajo. Adecuado para el cambio de neumáticos y poco recorrido de altura. Fabricado en acero de alta calidad para soportar las cargas pesadas. Diseño compacto para su fácil manejo y almacenaje.

Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
P19601	1.5t	130mm	345mm	460x205x150mm	7.8kg
XTPT820033E-2	Recambio: Goma soporte				

### Gato de Carretilla



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT830025	3t	130mm	465mm	620x380x215mm	27.4kg

### Gato de carretilla



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT825010CS	2t	89mm	359mm	590x275x180mm	14.2kg
XTPT825010CE-2	Recambio: Goma soporte				

### Gato de Carretilla



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT8350	3t	145mm	500mm	685x346x180mm	39kg

### Gato de Carretilla



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT83006B	2.5t	150mm	530mm	680x290x185mm	18kg
XTPT83006FE-2	Recambio: Goma soporte				

### Gato de Carretilla



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT830018	2.5t	85mm	455mm	640x342x174mm	34.8kg
XTPT830018-2	Recambio: Goma soporte				



### Gato de carretilla PRO

Gato hidráulico de taller con capacidad de carga hasta 3 toneladas. El equipo con un perfil bajo es recomendable para el cambio de neumáticos en vehículos. El acero de alta resistencia está hecho para soportar cargas pesadas en el uso diario. Su diseño facilita el manejo y almacenaje.



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT830008	3t	100mm	585mm	846x398x168mm	51,5kg

### Soportes elevadores



Referencia	Capacidad	Min altura	Max altura	Peso
PT4204	2t	285mm	425mm	5.5kg
PT4302	3t	310mm	425mm	6.4kg
PT4602	6t	410mm	600mm	12.8kg
PT412002	12t	460mm	720mm	27.5kg

### Bomba hidráulica 10T



Referencia	Descripción
PO001	Capacidad: 10t

### Kit Hidráulico chapista 4T

Incluye:

- Extensión: 127;250;456;685 mm
- Extensión perforada/hueca
- Cuña, Soporte de goma
- Placa de soporte, Llave Hexagonal 4mm
- Punta: expulsora, con hendidura
- Soporte "V", Conector, Bomba
- Unidad hidráulica y manguera



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
PT70401	4t	120mm	330mm	580x360x175mm	17kg

### Kit Hidráulico chapista 10T

Tecnología con maleta de ruedas para su fácil traslado

Incluye:

- Extensión: 127;250;456;685 mm
- Extensión perforada/hueca
- Cuña, Soporte de goma
- Placa de soporte, Llave Hexagonal 4mm
- Punta: expulsora, con hendidura
- Soporte "V", Conector, Bomba
- Unidad hidráulica y manguera



Referencia	Cap.	Min altura	Max altura	Dimensiones	Peso
P19604P	10t	150m	460mm	815x430x165mm	31kg

### Grua plegable 2Tn

Grúa móvil de taller para un fácil trabajo. Capacidad de hasta 2t. Ideal para manejar motores de vehículos etc... El brazo articulado y el chasis sencillo hace que sea fácil de almacenar. El Brazo dispone de válvula de seguridad para evitar una sobrecarga.

#### Características:

- Capacidad 2000kg
- Rango Elevación 25-2000mm
- Longitud 1750mm
- Altura 1040mm
- Altura 1486mm
- Dimension: 1450x545x160mm
- Peso 90kg

Referencia	Descripción
PT32002X	Capacidad 2Tn

### Taburete



Referencia	Descripción
PTR6100	360x365x365mm, Capacidad 120kg

### Camilla plegable



Referencia	Descripción
PTR451	900X420X270mm, Capacidad 120kg

### Camilla plegable



Referencia	Descripción
PTRH6802-2	1010x475x130mm, Capacidad 120kg



### Taburete neumático

Taburete de taller móvil ajustable en altura hasta 120mm. Asiento giratorio con ruedas orientables para moverse sin levantarse. Espacio de almacenaje en la parte inferior del taburete para facilitar el trabajo



Referencia	Descripción
PTR6201C	380x380x440mm, Capacidad 120kg Capacidad elevación: 120mm

### Camilla plegable



Referencia	Descripción
PTR452	1000X420X270mm, Capacidad 120kg



### Amarre de trinquete - ERGO

Normativa: EN 12195-2:2000



Referencia	Descripción
XT51510	50x10000mm/5000kg

### Amarre de trinquete

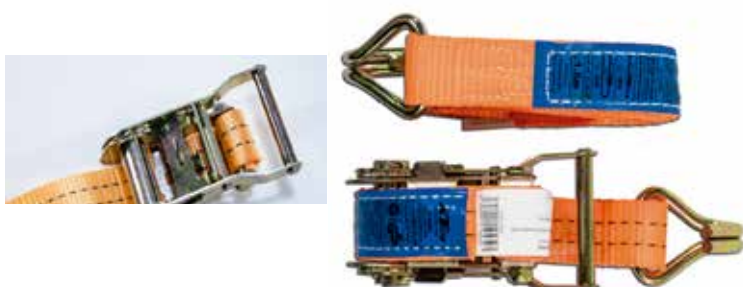
Normativa: EN 12195-2:2000



Referencia	Descripción
XT49272	800kg 25x2000mm
XT49274	800kg 25x4000mm
XT49276	800kg 25x6000mm
XT49278	800kg 25x8000mm

### Amarre de trinquete

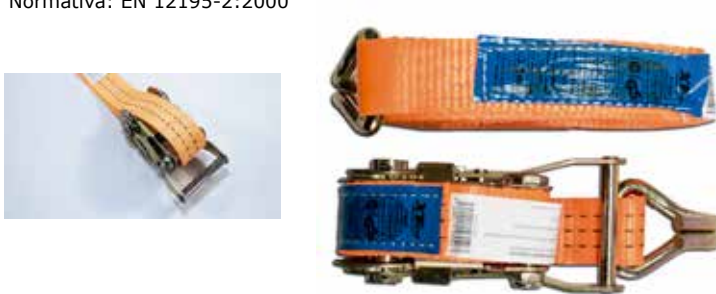
Normativa: EN 12195-2:2000



Referencia	Descripción
XT49352	2000kg 35x2000mm
XT49354	3000kg 35x4000mm
XT49355	3000kg 35x5000mm
XT49356	3000kg 35x6000mm
XT49358	3000kg 35x8000mm

### Amarre de trinquete

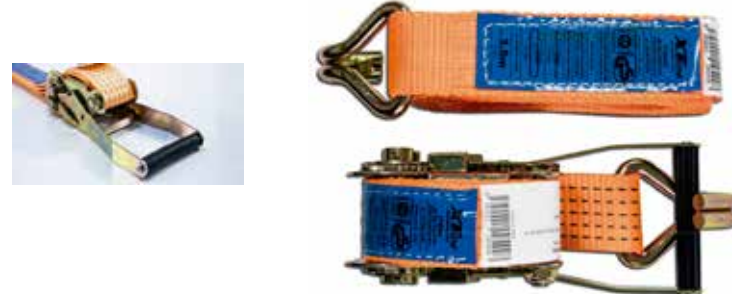
Normativa: EN 12195-2:2000



Referencia	Descripción
XT49454	5000kg 50x4000mm
XT49456	5000kg 50x6000mm
XT49458	5000kg 50x8000mm

### Amarre de trinquete

Normativa: EN 12195-2:2000



Referencia	Descripción
XT50504	5000kg 50x4000mm
XT50506	5000kg 50x6000mm
XT50506	5000kg 50x8000mm
XT50510	5000kg 50x10000mm
XT50512	5000kg 50x12000mm
XT50514	5000kg 50x14000mm
XT50516	5000kg 50x14000mm

### Escoba de Taller

Referencia	Descripción
XT385ESC	50x10000mm/5000kg



### Gel de Manos para Taller



Referencia	Descripción
B1046	500gr
B1046-5kg	5 kg

### Alargador de Cable



Referencia	Descripción
P19510	Alargador Cable 10 Metros - IP20 - Máx 2300W

Referencia	Descripción
P09225	Alargador Cable 25 metros - IP20 - Max 3680 W

### Proyector LED 2x 30W



Referencia	Descripción
ZS2221-2	Proyector LED 2x 30W - IP65 - Altura Máxima 1.8m

### Pilas para equipos



B7931



B79118



B7911



B7951



B7941



B79218



B7921



B7970



B7811



B7821



B7414



B7426



B7332

Referencia	Descripción
B7931	Pack 2 Pilas - Tipo C - LR14 - Alkalina
B79118	Pack 8 Pilas - Tipo AAA - Alkalina
B7911	Pack 4 Pilas - Tipo AAA - Alkalina
B7951	Pack 1 Pilas - Tipo 6LP3146 - Alkalina
B7941	Pack 2 Pilas - Tipo D - LR20 - Alkalina
B79218	Pack 8 Pilas - Tipo AA - Alkalina

Referencia	Descripción
B7921	Pack 4 Pilas - Tipo AAA - Alkalina
B7970	Pack 5 Pilas - Tipo LR44 - Alkalina
B7811	Pack 2 Pilas - Tipo AAA - Super Alkalina
B7821	Pack 2 Pilas - Tipo AA - Super Alkalina
B7414	Pack 2 Pilas - Tipo AAA - Recargables
B7426	Pack 2 Pilas - Tipo AA - Recargables
B7332	Pack 5 Pilas - Tipo CR2032



**Baldosa Técnica PROFÍ-NIXA - 40x40cm**

Transforme el espacio en cuestión de horas (no días) con el rápido sistema modular de baldosas perforadas PROFÍ-NIXA.

El suelo está diseñado para convertir su garaje en una sala de exposición de la que pueda estar orgulloso.

Este es el modelo de suelo más utilizado para la realización de un suelo de garaje o en zonas de montaje y mantenimiento.

En general, el suelo modular de plástico perforado es un revestimiento popular en los espacios de trabajo. Su precio de compra y su fácil y rápido montaje y desmontaje los convierten en el número uno en el campo de los revestimientos para suelos. Este modelo de suelo también es popular gracias a su efecto visual, especialmente en talleres de automóviles de diseño, como suelo para detalles de áreas de trabajo, exposición etc.. por sus múltiples combinaciones posibles de colores. Los suelos de diseño están de moda ahora y con nuestras baldosas acanaladas tendrás un suelo único.

El suelo es resistente a la luz solar y a las fluctuaciones de temperatura en el rango de -30°C a +70°C y es estable a los rayos UV, por lo que la luz solar no afectará el color de las baldosas y los colores siempre permanecerán como nuevos. Se puede utilizar tanto en interiores como en exteriores.

**Características básicas de la baldosa**

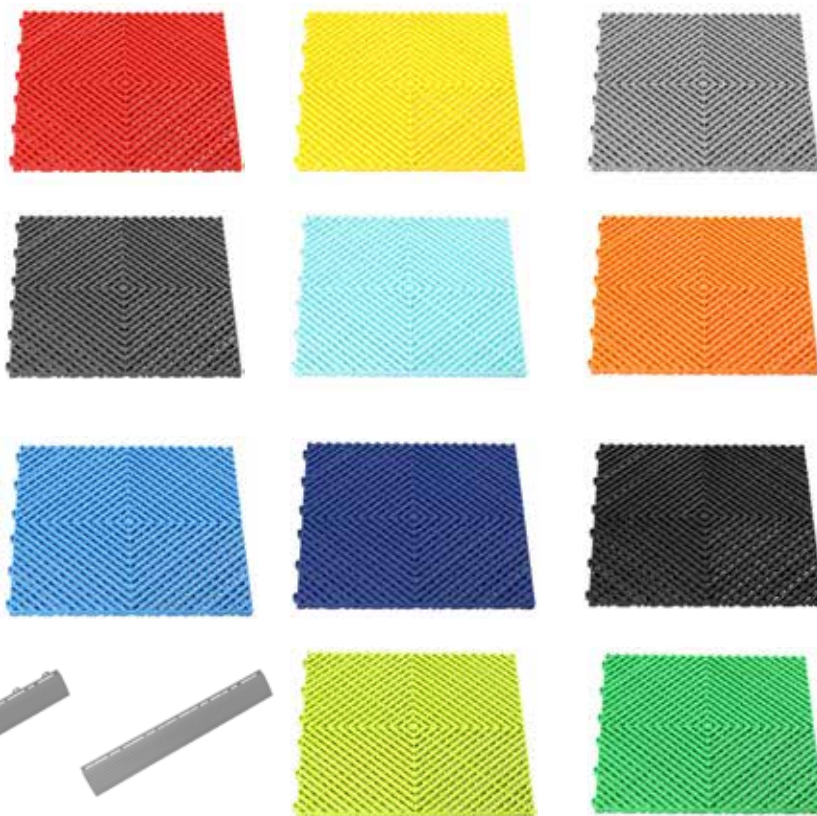
Las dimensiones de una loseta de plástico son 40 x 40 cm.

Grosor del azulejo 1,8 cm.

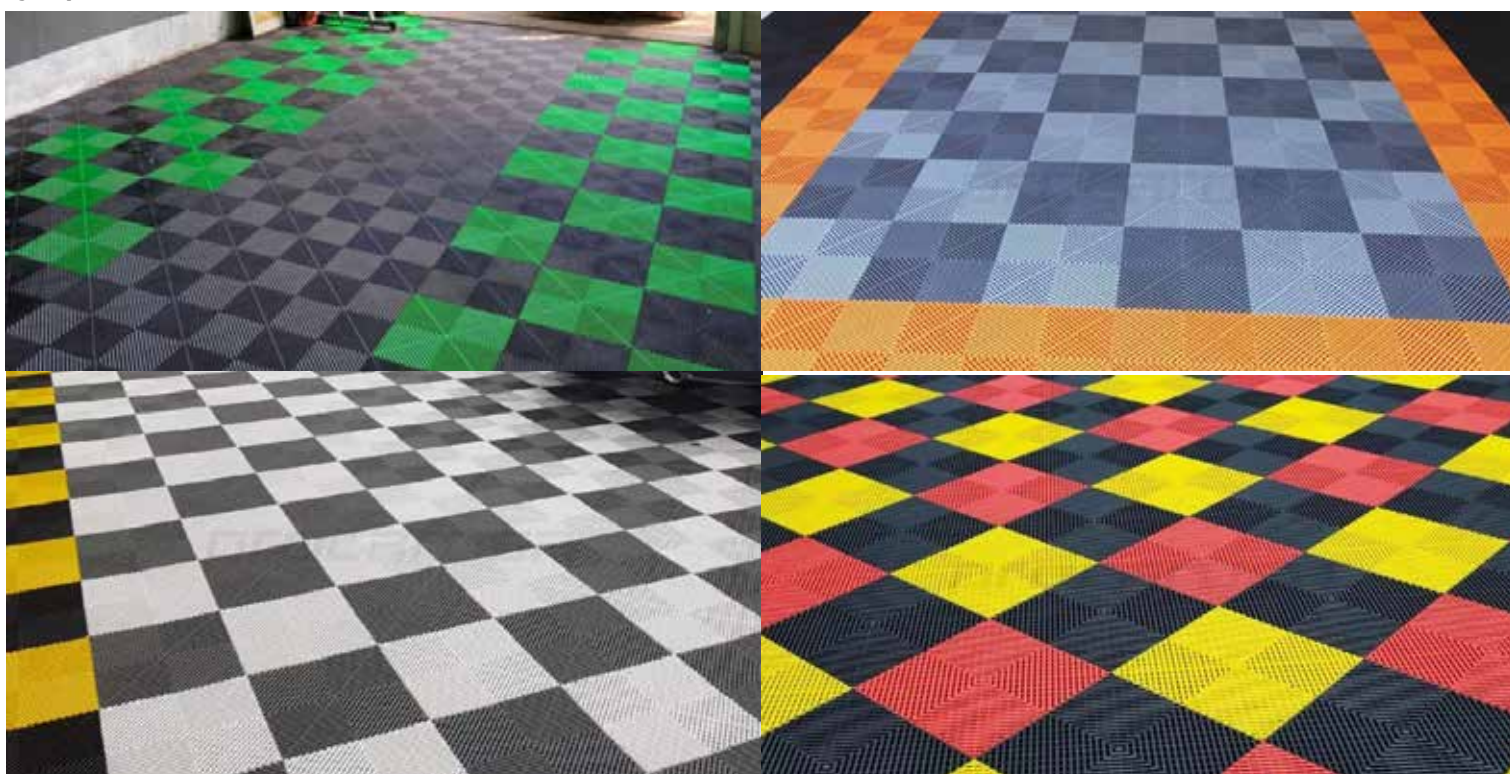
6,25 baldosas = 1 m<sup>2</sup>

Resiste una carga de 8 a 10 t

Referencia	Color
NPROFI-001	Rojo
NPROFI-002	Amarillo
NPROFI-003	Gris Claro
NPROFI-004	Gris Oscuro
NPROFI-005	Azul Claro
NPROFI-006	Naranja
NPROFI-007	Azul Medio
NPROFI-008	Azul Oscuro
NPROFI-009	Negro
NPROFI-010	Verde Olivo
NPROFI-011	Verde
NPROFI-100	Rebaje Negro Placa
NPROFI-101	Rebaje Negro Liso
NPROFI-110	Rebaje Gris Placa
NPROFI-111	Rebaje Gris Liso
NPROFI-200	Curva Gris
NPROFI-210	Curva Negra



**Ejemplos de Combinaciones**





### Chaqueta Laboral 4XSTRETCH

- Chaqueta laboral con puntos de reflectantes en las costuras
- Material A: 98% algodón, 2% elastano, Amalytton®, Tela 250 g/m2
- Material B: 88% nailon, 12% elastano, Tabiflex®.
- Material C: 65% poliéster, 35% algodón
- Resistente a la abrasión, máxima funcionalidad y tecnología flexible tejido especial allstretch, tejido de algodón transpirable.
- Tallas Disponibles: S a 4XL



Referencia	Colores
H6610	Rojo
H6080	Azul
H6620	Azul Oscuro
H6094	Gris
H6087	Gris Oscuro
H6600	Blanco

### Pantalón Laboral 4XSTRETCH

- Resistente a la abrasión, máxima funcionalidad y tecnología flexible tejido especial allstretch, tejido de algodón transpirable.
- Material A: 98% algodón, 2% elastano, Amalytton, tela 250 g/m2
- Material B: 88% nailon, 12% elastano, Tabiflex®.
- Material C: 100% poliéster - Oxford
- Material D: 65% poliéster, 35% algodón
- Tallas Disponibles: 46 a 64



Referencia	Colores
H6611	Rojo
H6081	Azul
H6623	Azul Oscuro
H6095	Gris
H6088	Gris Oscuro
H6601	Blanco

### Pantalón Laboral Corto 4XSTRETCH

- Resistente a la abrasión, máxima funcionalidad y tecnología flexible tejido especial allstretch, tejido de algodón transpirable.
- Material A: 98% algodón, 2% elastano, Amalytton, tela 250 g/m2
- Material B: 88% nailon, 12% elastano, Tabiflex®.
- Material C: 65% poliéster, 35% algodón
- Tallas Disponibles: 46 a 64



Referencia	Colores
H6613	Rojo
H6085	Azul
H6099	Gris
H6092	Gris Oscuro
H6603	Blanco

### Sudadera Elástica CityConic

- Sudadera elástica con cuello alto fabricada con el material técnico ARDON@TOPLYRON.
- La sudadera tiene un corte anatómico funcional SLIM FIT, dispone de un cómodo cierre de cremallera
- Tallas Disponibles: XS a 4XL (Depende Modelo)

Referencia	Colores
H6683	Rojo
H6682	Azul
H6684	Azul Oscuro
H6681	Gris Oscuro



### Chaqueta Elástica CityConic

- Chaqueta elástica con gorro(desmontable) y protección anti-lluvia. N. Corte anatómico funcional SLIM FIT, con cierre de cremallera
- Material: 93% poliéster-7% elastina, membrana 5000 waterproof
- Tallas Disponibles: S a 4XL

Referencia	Colores
H6694	Amarillo
H6693	Rojo
H6691	Azul
H6695	Azul Oscuro
H6690	Gris Oscuro
H6692	Blanco



### Chaqueta Laboral Neon

- Chaqueta laboral ergonómica con zonas reflectantes de alta visibilidad.
- Material A: 65% poliéster, 35% algodón, Tela 270 g/m<sup>2</sup>
- Material B: 65% poliéster, 35% elastano de visibilidad.
- Tallas Disponibles: Depende Modelo XXS a 7XL

Referencia	Colores
H6400	Amarillo/Negro (XXS a 7XL)
H6403	Rojo/Gris Oscuro (XS a 5XL)



### Pantalón Laboral Neon

- Pantalón laboral ergonómica con zonas reflectantes de alta visibilidad.
- Material A: 65% poliéster, 35% algodón, Tela 270 g/m<sup>2</sup>
- Material B: 65% poliéster, 35% elastano de visibilidad.
- Tallas Disponibles: Según Modelo
- Consultar modelos de largos especiales.

Referencia	Rango Longitud / Talla	Colores
H6432	170-175   S-3XL / 40-70	Amarillo/Negro
H6436	170-175   S-3XL / 40-70	Rojo/Gris Oscuro
H6401	176-182   46-66	Amarillo/Negro
H6404	176-182   46-66	Rojo/Gris Oscuro
H6520	Pantalón Corto - 46-66	Amarillo/Negro



### Chaqueta Cool Trend Reflectante

- Chaqueta laboral con reflectante de seguridad
- Material: 100% Algodon - Ca 260g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S a 5XL

Referencia	Colores
H8933	Verde/Negro
H8930	Azul/Azul
H8936	Negro/Gris



### Pantalón Cool Trend Reflectante

- Pantalón laboral con reflectante de seguridad
- Material: 100% Algodon - Ca 260g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: 46 a 66

Referencia	Colores
H8934	Verde/Negro
H8931	Azul/Azul
H8937	Negro/Gris





### Chaqueta Cool Trend

- Chaqueta laboral con multitud de opciones de color, siendo uno de los modelos más vendidos.
- Material: 100% Algodon - Ca 260g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S a 4XL
- Modelo H8100 (XXS a 7XL)

Referencia	Colores
H8106	Rojo/Negro
H8950	Azul Medio
H8100	Azul
H8220	Azul Oscuro/Claro
H8103	Verde
H8208	Gris/Naranja
H8204	Gris/Negro
H8957	Marrón
H8964	Negro
H8800	Blanco/Gris



### Pantalón Laboral Cool Trend

- Pantalón laboral con multitud de opciones de color, siendo uno de los modelos más vendidos.
- Material: 100% Algodon - Ca 260g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: Según Modelo
- Consultar modelos de largos especiales

Referencia	Rango Longitud / Talla	Colores
H8130	170-175   S a 3 XL	Rojo/Negro
H8952	170-175   S a 3 XL	Azul Medio
H8124	170-175   S a 3 XL	Azul
H8326	170-175   S a 3 XL	Azul Oscuro/Claro
H8127	170-175   S a 3 XL	Verde
H8309	170-175   S a 3 XL	Gris/Naranja
H8322	170-175   S a 3 XL	Gris/Negro
H8959	170-175   S a 3 XL	Marrón
H8966	170-175   S a 3 XL	Negro
H8817	170-175   S a 3 XL	Blanco/Gris
H8107	176-182   46 a 66	Rojo/Negro
H8951	176-182   46 a 66	Azul Medio
H8101	176-182   40 a 70	Azul
H8320	176-182   40 a 70	Azul Oscuro/Claro
H8104	176-182   46 a 66	Verde
H8308	176-182   46 a 66	Gris/Naranja
H8304	176-182   46 a 66	Gris/Negro
H8958	176-182   46 a 66	Marrón
H8965	176-182   46 a 66	Negro
H8801	176-182   46 a 66	Blanco/Gris



### Pantalón Laboral Corto Cool Trend

- Pantalón laboral con multitud de opciones de color, siendo uno de los modelos más vendidos.
- Material: 100% Algodon - Ca 260g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: 46 a 66

Referencia	Rango Longitud / Talla	Colores
H8182	170-175   S a 3 XL	Rojo/Negro
H8180	170-175   S a 3 XL	Azul Medio
H8604	170-175   S a 3 XL	Gris
H8620	170-175   S a 3 XL	Azul Oscuro/Claro
H8608	170-175   S a 3 XL	Gris/Naranja
H8181	170-175   S a 3 XL	Verde
H8807	170-175   S a 3 XL	Blanco



### Chaqueta Laboral Summer

- Chaqueta laboral ergonómica, confortable con una tela flexible.
- Material: 65% poliéster, 35% algosón, Tela 200 g/m<sup>2</sup>
- Puntos de referencia en frontal, mangas y espalda reflectivos.
- Tallas Disponibles: XS a 4XL (Excepto H6130 de S a 4XL)

Referencia	Colores
H6130	Azul Oscuro
H6104	Azul Claro
H6100	Gris Claro
H6121	Gris Oscuro
H5622	Blanco



### Pantalón Laboral Summer

- Pantalón laboral ergonómico, confortable con una tela flexible.
- Material: 65% poliéster, 35% algosón, Tela 200 g/m<sup>2</sup>
- Tallas Disponibles: Según Modelo
- Consultar modelos de largos especiales.

Referencia	Rango Longitud / Talla	Colores
H6132	170-175   S-3XL	Azul Oscuro
H6116	170-175   S-3XL	Azul Claro
H6108	170-175   S-3XL	Gris Claro
H6123	170-175   S-3XL	Gris Oscuro
H5624	170-175   S-3XL	Blanco
H6131	176-182   46-64	Azul Oscuro
H6105	176-182   46-64	Azul Claro
H6101	176-182   46-64	Gris Claro
H6122	176-182   42-64	Gris Oscuro
H5623	176-182   46-64	Blanco



### Pantalón Laboral Corto Summer

- Pantalón laboral de manga corta y ergonómico, confortable con una tela flexible.
- Material: 65% poliéster, 35% algosón, Tela 200 g/m<sup>2</sup>
- Tallas Disponibles: 46 a 64

Referencia	Colores
H6137	Azul Oscuro
H6107	Azul Claro
H6103	Gris Claro
H6128	Gris Oscuro
H5621	Blanco



### Cinturón ARDON SUMMER

- Hebilla de metal para un cierre cómodo extremo, material 100% poliéster
- Color: azul
- Medida: largo/ancho: 125 cm / 4 cm

Referencia	Colores
H6120	Azul



### Cinturón ARDON COOL TREND

- Cinturón textil con hebilla de plástico, material: 100% poliéster
- Color: Negro
- Medida: Longitud 140 cm

Referencia	Colores
H8140	Negro



### Rodilleras ARDON RICKIE

- Rodillera que proporciona la máxima protección para las rodillas
- Las rodilleras de gel son ligeras y resistentes a la abrasión.
- Ancho del fuelle = 8,5 cm

Referencia
J3802



### Chaqueta Alta Visibilidad SIGNAL +

- Chaqueta laboral con reflectante de seguridad
- Material: 65% Poliéster, 35% algodón, tela twill - Ca 290g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: XS a 5XL

Referencia	Colores
H5930	Amarillo/Negro
H5959	Naranja/Negro



### Pantalón Alta Visibilidad SIGNAL +

- Pantalón laboral ergonómico, confortable con una tela resistente al desgarro.
- Material: 65% poliéster, 35% algosón, Tela twill- Ca 290 g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: 44-66

Referencia	Colores
H5931	Amarillo/Negro
H5960	Naranja /Negro



### Pantalón Laboral Corto SIGNAL +

- Pantalón laboral de manga corta y ergonómico, confortable con una tela robusta resistente al desgarro.
- Material: 65% poliéster, 35% algosón, Tela Twill, Ca. 290 g/m2
- Según norma: EN ISO13688-2013
- Tallas Disponibles: 44 a 66

Referencia	Colores
H5937	Amarillo/Negro
H5966	Naranja/Negro



### Chaleco SIGNAL +

- Chaleco bicolor de alta visibilidad, con bandas reflectantes.
- Material: 100% Poliéster mesh - Ca. 120 g/m2, 100% Poliéster- Ca. 120 g/m2.
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S-3XL (Excepto H5928 de S-5XL)

Referencia	Colores
H5914	Amarillo/Negro
H5915	Naranja/Negro
H5928	Amarillo/Naranja



### Camiseta SIGNAL +

- Camiseta con mezcla de materiales de calidad con un alto porcentaje en algodón.
- Material: 55% algodón, 45% poliéster, 150 g/m2,
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S-4XL

Referencia	Colores
H5906	Amarillo
H5907	Naranja





### Polo SIGNAL +

- Polo de alta visibilidad de manga corta, con gran portecentaje de algodón
- Material: 45% Poliéster, 55% algodón, 150g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S a 4XL

Referencia	Colores
H5908	Amarillo



### Camiseta Larga SIGNAL +

- Camiseta de manga larga de alta visibilidad con gran portecentaje de algodón
- Material: 45% Poliéster, 55% algodón, 150g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S a 4XL

Referencia	Colores
H5926	Amarillo
H5927	Naranja



### Sudadera SIGNAL +

- Sudadera de alta visibilidad con ajuste ergonómico y ribetes reflectantes.
- Material: 65% Poliéster, 35% algodón, 300g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: Según Modelo

Referencia	Rango Longitud / Talla	Colores
H5956	XS-5XL	Amarillo/Negro
H5929	S-4XL	Amarillo/Naranja
H5967	S-5XL	Naranja/Negro



### Sudadera Polar SIGNAL +

- Sudadera de diseño de felpa de alta visibilidad, resistente a desgarros.
- Material: 100% poliéster rip-stop, 100% poliéster polar lana, 280 g/m<sup>2</sup>,
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S-4XL

Referencia	Colores
H5910	Amarillo
H5911	Naranja



### Chaleco ARDON ALEX

- Chaleco ligero de alta visibilidad, cómodo cierre de velcro, con elementos reflectantes
- Material: 100% poliéster 120 g/m<sup>2</sup>,
- Según norma: EN ISO13688-2013
- Tallas Disponibles: H2018(S-3XL), H2017 (S-4XL)

Referencia	Colores
H2018	Amarillo
H2017	Naranja



### Camiseta ARDON BOLT

- Chaleco ligero de alta visibilidad, material flexible y transpirable
- Material: 100% malla de poliéster amarillo: 125g/m<sup>2</sup>, Naranja 130 g/m<sup>2</sup>
- Según norma: EN ISO13688-2013
- Tallas Disponibles: S/M, L/XL, 2XL/3XL, 4XL/5XL

Referencia	Colores
H8918	Amarillo
H8919	Naranja



### Camiseta TRENDY

- Camiseta de manga corta, con material elastico, y con corte slim.
- Material: 95% algodón peinado, 5% de elastano,180g/m2
- Tallas Disponibles: Según Modelo

Referencia	Talla	Colores
H13183	S - 4XL	Rojo
H13188	S - 4XL	Azul
H13189	S - 4XL	Azul Royal
H13186	2XS - 7XL	Azul Oscuro Navy
H13182	S - 4XL	Verde
H13185	S - 4XL	Caqui
H13184	S - 4XL	Marrón
H13187	2XS - 7XL	Antracita
H13180	XS - 5XL	Negro
H13181	XS - 5XL	Blanco



### Camiseta Manga Corta LIMA

- Camiseta de manga corta, con material elastico y cuello redondo.
- Material: 100% algodón,160g/m2
- Tallas Disponibles: Según Modelo

Referencia	Tallas	Colores
H13006	XS-4XL	Amarillo
H13009	XS-4XL	Naranja
H13161	S-3XL	Rojo Brillante
H13002	XS-4XL	Rojo
H13163	XS-4XL	Rojo Oscuro
H13144	XS-4XL	Azul Claro
H13166	XS-4XL	Azul Opalo
H13149	XS-4XL	Azul
H13004	XXS-7XL	Azul Royal
H13003	XS-5XL	Azul oscuro Navy
H13146	XS-4XL	Verde Claro
H13005	XS-4XL	Verde
H13164	XS-4XL	Caqui
H13165	XS-4XL	Marrón
H13008	XS-4XL	Gris Melange
H13145	XS-4XL	Gris
H13162	XS-4XL	Antracita
H13007	XS-5XL	Negro
H13001	XS-5XL	Blanco



### Camiseta Manga Larga ARDON CUBA

- Camiseta de manga larga con cuello redondo
- Material:100% algodón, 160g/m2
- Tallas Disponibles: Según Modelo

Referencia	Talla	Colores
H13012	S - 4XL	Rojo
H13224	S - 4XL	Azul
H13225	S - 4XL	Azul Royal
H13013	XS - 5XL	Azul Oscuro Navy
H13018	S - 4XL	Gris
H13222	S - 4XL	Antracita
H13017	S - 4XL	Negro
H13011	S - 4XL	Blanco



## Sudadera ARDON DONA

- Sudadera de manga larga, mangas y dobladillo inferior rematados con punto de canalé
- Material: 65% algodón, 30% poliéster, 300g/m<sup>2</sup>
- Tallas Disponibles: S-3XL

Referencia	Talla	Colores
H13044	S - 3XL	Rojo
H13047	S - 3XL	Verde
H13046	S - 3XL	Azul Royal
H13045	S - 3XL	Azul
H13050	S - 3XL	Gris Claro
H13043	S - 3XL	Negro



## Sudadera JUMPER

- Sudadera de manga larga con corte slim fit, de material elastico.
- Material: 95% Poliéster, 5% Spandex- 270g/m<sup>2</sup>
- Tallas Disponibles: 46 a 66

Referencia	Rango Longitud / Talla	Colores
H9780	S-4XL	Rojo
H9779	S-4XL	Verde
H9778	S-4XL	Azul Royal
H9776	S-4XL	Azul Oscuro
H9777	S-4XL	Gris Oscuro
H9775	XS-4XL	Negro
H9781	S-4XL	Blanco



## Sudadera ARDON BREEFFIDRY MELANGE

- Sudadera adaptable al movimiento con un diseño Melange, excelente transpirabilidad
- El material ARDON BREEFFIDRY hace que retenga el calor a la vez que elimina la humedad
- Material: 100% poliéster, 300g/m<sup>2</sup>
- Tallas Disponibles: Según Modelo

Referencia	Talla	Colores
H9763	S - 4XL	Rojo
H9762	S - 4XL	Verde
H9764	S - 4XL	Azul
H9761	S - 4XL	Azul Oscuro
H9760	XS - 5XL	Gris Oscuro



## Sudadera ARDON M007

- Sudadera de hombre con cuello alto, un porcentaje elevado de algodón para un uso agradable
- Material: 50% algodón, 50% poliéster, CVC, 340g, lana
- Tallas Disponibles: Según Modelo

Referencia	Talla	Colores
H5947	S - 4XL	Rojo
H5943	S - 4XL	Verde
H5951	XS - 5XL	Azul Royal
H5941	S - 4XL	Azul Oscuro
H5944	S - 4XL	Marrón
H5946	XS - 4XL	Gris Oscuro
H5940	XS - 5XL	Negro
H5948	XS - 5XL	Blanco





### Sudadera CREATRON

- Sudadera de alta calidad con cremallera
- Material: 68% rayon, 27% nylon, 5% spandex, 280 g/m2,
- Según norma: EN ISO13688-2013
- Tallas Disponibles: XS-5XL

Referencia	Colores
H6670	Negro-Neon



### Sudadera ARDON M003

- Sudadera calida con capucha, con corte ergonómico, con cuello alto.
- Material: 65% algodón, 35% poliester 380 g lana
- Tallas Disponibles: H5949 (XS-5XL) , H5950 ((XS-4XL)

Referencia	Colores
H5949	Negro/Amarillo
H5950	Gris/Rojo



### Chaqueta ARDON NYPAXX

- Chaqueta para hombre acolchadas con 3 capas y mangas de punto ligero con un corte muy ergonómico y funcional
- Material: 88% nylon, 12% licra, material TABIFLEX
- Tallas Disponibles: S-4XL (Excepto H5993: XS-5XL)

Referencia	Colores
H5995	Rojo
H5996	Azul
H5994	Azul Oscuro
H5993	Negro
H5997	Blanco



### Chaqueta ARDON HYBRID

- Camiseta de manga larga con cuello redondo
- Material: 100% algodón, 160g/m2
- Tallas Disponibles: S-4XL (Excepto H5952 XS-5XL)

Referencia	Talla	Colores
H5958	S - 4XL	Rojo
H5954	S - 4XL	Azul
H5955	S - 4XL	Caqui
H5957	S - 4XL	Marrón
H5953	S - 4XL	Gris Oscuro
H5952	XS - 5XL	Negro



### Chaleco TONY

- Chaleco con material de Nylon
- Material: 35% algodón, 65% poliester
- Tallas Disponibles: H2006 (XS-5XL) , H2007 ((XS-4XL)

Referencia	Colores
H2006	Azul
H2007	Negro



### Gorra de Seguridad

- Gorra de seguridad según norma DIN EN812
- Material: ABS

Referencia	Colores
D1301	Azul
D1302	Verde
D1303	Negra



### Gorro SPARK

- Gorro de invierno con forro polar, con una raya reflectante para mejor visibilidad
- Material: 100% acrílica
- Talla: Única

Referencia	Colores
H6053	Amarillo
H6054	Naranja



### Gorro de Invierno ARDON BARRDY

- Elegante gorro de invierno con un borde doblado que se puede ajustar.
- Cálido y muy cómodo de llevar
- Material: 100% acrílica
- Talla: Única

Referencia	Colores
H6165	Azul
H6161	Gris
H6162	Gris Oscuro
H6160	Negro



### Plantilla ARDON INS COMFORT

- H14068 > Plantillas de gel con forma anatómica, Soporte en la zona del arco del pie

Referencia	Colores	Tallas
H14068	Crudo / Base Azul y Gris	36-48

### Plantilla ARDON DRUM

- Plantilla de calzado deportivo con forma anatómica
- Amortiguan la banda de rodadura
- Estandar EN 12568

Referencia	Colores	Tallas
H14067	Gris / Azul	38-42/43-47



H14068

H14067

### Calcetines ARDON SUMMER-R8ED-ESD

- H1495> Calcetines bajos que drenan el exceso de humedad de la piel
- H1496> Calcetines altos con hilo Thermolite que aísla del frío y elimina la humedad.
- H1499> Calcetines altos de trabajo con tratamiento antiestático según EN1149.

Referencia	Colores	Tallas
H1495	Azul / Negro	36-38, 39-41, 42-45, 46-48
H1496	Gris / Negro	39-41, 42-45, 46-48
H1499	Negro / Amarillo	39-41, 42-45, 46-48



H1495

H1496

H1499

### Calcetines ARDON ADN

- Calcetines bajos con la parte inferior del pie con refuerzo de fibra COOLMAX

Referencia	Colores	Tallas
H1479	Azul / Negro	36-38, 39-41, 42-45, 46-48
H1481	Naranja / Negro	36-38, 39-41, 42-45, 46-48
H1480	Amarillo / Negro	36-38, 39-41, 42-45, 46-48



H1479

H1481

H1480

### Calcetines ARDON LEE-GREY

- H1475> Calcetines altos cálidos de invierno hasta la espinilla
- H1476> Calcetines deportivos altos grises con zona funcional en la zona del empeine

Referencia	Colores	Tallas
H1475	Azul / Negro	36-38, 39-41, 42-45, 46-48
H1476	Gris / Negro	36-38, 39-41, 42-45, 46-48



H1475

H1476



### Calzado Laboral ARDON - XLIGHT YELLOW

- Zapatos de seguridad ultraligero con diseño deportivo
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 38-48

#### Referencia

G3396



### Calzado Laboral ARDON - XLIGHT BLUE

- Zapatos de seguridad ultraligero con diseño deportivo
- Protección O1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 36-48

#### Referencia

G3397



### Calzado Laboral ARDON - TIMON

- Zapatos bajos de seguridad con puntera de fibra de vidrio
- Protección SP1 ESD, por lo que protege contra descargas electrostáticas
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3386



### Calzado Laboral ARDON - FLYKER GRIS

- Zapatos de seguridad extra cómodo, con puntera ancha de composite
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-47 ( Excepto la talla 38)

#### Referencia

G3325



### Calzado Laboral ARDON - FLYKER AZUL

- Zapatos de seguridad extra cómodo, con puntera ancha de composite
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-47

#### Referencia

G3324



### Calzado Laboral ARDON - FLYTEX AZUL ESD

- Zapatos de seguridad con diseño deportivo, con refuerzo en la zona puntera
- La transpirabilidad de los zapatos está garantizada por el tejido MESH
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3354



### Calzado Laboral ARDON - FLYTEX AMARILLO ESD

- Zapatos de seguridad con diseño deportivo, con refuerzo en la zona puntera
- La transpirabilidad de los zapatos está garantizada por el tejido MESH
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3368



### Calzado Laboral ARDON - FLYTEX GRIS

- Zapatos de seguridad con diseño deportivo, con refuerzo en la zona puntera
- La transpirabilidad de los zapatos está garantizada por el tejido MESH
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3387



### Calzado Laboral ARDON - FLYTEX NEGRA

- Zapatos de seguridad con diseño deportivo, con refuerzo en la zona puntera
- La transpirabilidad de los zapatos está garantizada por el tejido MESH
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3353



### Calzado Laboral ARDON - FLYTEX AZUL/GRIS

- Zapatos de seguridad con diseño deportivo, con refuerzo en la zona puntera
- La transpirabilidad de los zapatos está garantizada por el tejido MESH
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3355



### Calzado Laboral ARDON - SOFTEX

- Zapatos de seguridad softshell con diseño deportivo.
- Zapatos equipados con una puntera de acero y una plantilla antipinchazos
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 38-50

#### Referencia

G3352



### Calzado Laboral ARDON - RASPER GRIS/AZUL

- Zapatos de seguridad con parte superior de tejido transpirable
- La suela es resistente al calor de contacto hasta 300 ° C
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3331



### Calzado Laboral ARDON - DIGGER NEGRA

- Zapatos de seguridad de diseño
- Parte superior de microfibras flexible, sin partes metálicas
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3239



### Calzado Laboral ARDON - DIGGER AZUL

- Zapatos de seguridad de diseño
- Parte superior de microfibras flexible, sin partes metálicas
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3161



### Calzado Laboral ARDON - TANGERLOW ESD

- Zapatos bajos de seguridad
- Con puntera de fibra de vidrio, sin partes metálicas
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 36-48

#### Referencia

G3218



### Calzado Laboral ARDON - VERNOR ESD

- Zapatos de seguridad fabricado en microfibra y tela lavable hasta 30°
- Es segura porque lleva una puntera de fibra de vidrio y una plantilla flexible
- Protección O1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 36-48

#### Referencia

G3215



### Calzado Laboral ARDON - SPARKLELOW

- Zapatos de seguridad con parte superior de piel de vacuno de alta calidad
- La comodidad se ve reforzada por la inserción de una plantilla anatómica.
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 37-48

#### Referencia

G3385



### Calzado Laboral ARDON - TURNER

- Zapatos de seguridad on diseño deportivo
- Franja reflectante en la sección del talón, un diseño elegante y moderno
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3282



### Calzado Laboral ARDON - TRIMMER

- Zapatos de seguridad de estilo moderno, suela de PU/Goma
- Punta compuesta y plantilla de Kevlar, sin partes metálicas
- Práctico apriete en un punto para ajustar el ancho
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3281



### Calzado Laboral ARDON - HOBARTLOW

- Zapatos con diseño deportivo, y con cierre en un punto para ajustar la anchura
- Refuerzo en puntera composite, talón y tobillo
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3217



### Calzado Laboral ARDON - ROVER LOW

- Zapatos de seguridad con punta extra ancha, con plantilla flexible Kevlar
- Suela de PU/goma, impermeable y resistente al calor de contacto hasta 300 °C
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3308





### Calzado Laboral ARDON - FOUNDRY

- Botines de fundición de seguridad íntegramente en piel, con punta de acero
- Suela PU2D, resistente a aceites, combustibles y calor de contacto hasta 110°C, antiestática.
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 39-48

#### Referencia

G3073



### Calzado Laboral ARDON - INTEGRAL

- Botines de seguridad con parte superior de cuero con protección de metatarso
- Protección por una puntera de acero y una plantilla de acero contra pinchazos.
- Protección O1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela EVA
- Tallas Disponibles: 39-48

#### Referencia

G1028



### Calzado Laboral ARDON - FIRLOW S1P

- Zapatos bajo con suela de poliuretano con puntera de seguridad de acero
- Plantilla resistente a pinchazos
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G1186



### Calzado Laboral ARDON - FIRLOW S3

- Zapatos bajo con suela de poliuretano de dos componentes
- Plantilla resistente a pinchazos
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-50

#### Referencia

G3273



### Bota Laboral ARDON - FIRSTY S1P

- Botines de seguridad con parte superior de tejido transpirable y piel de vacuno
- Suela ancha de PU/caucho y es resistente al calor de contacto hasta 300 ° C
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3331



### Bota Laboral ARDON - FIRSTY S3

- Botines de seguridad de diseño, con parte superior de microfibra flexible
- Sin partes metálicas
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 36-48

#### Referencia

G3239



### Calzado Laboral ARDON - FIRLOW TREK

- Zapatos de seguridad con diseño de trekking y parte superior de ante.
- Puntera de seguridad de acero y plantilla a prueba de pinchazos
- Suela de poliuretano
- Protección SP1 ESD
- 0% Metal - Ultra ligero y cómodo. Suela FOAM
- Tallas Disponibles: 35-48

#### Referencia

G3304



**Guantes de Trabajo - BUCK - XC7E**

- A9061 | A9117 > PES 13G+PU - Protección en la palma - Categoría 2
- A9888 > PES 13G + PU - Protección en la palma - Categoría 2

Referencia	Colores	Tallas
A9061	Negro	6 - 11
A9117	Gris	6 - 11
A9888	Blanco	6 - 11



A9061

A9117

A9888

**Guantes de Trabajo - NITRAX - NITRAX BASIC**

- A9057 > Nylon + Nitrilo Bayer - Protección en la palma - Categoría 2
- A9054 > PES13G + Nitrilo - Protección en la palma - Categoría 2

Referencia	Colores	Tallas
A9057	Gris/Azul	7 - 11
A9054	Gris/Blanco	8 - 10



A9057

A9054

**Guantes de Trabajo - RONY - SIDNEY**

- A4004 > Algodón + Nitrilo - Protección completa - Categoría 2
- A4003 > Algodón + Nitrilo - Protección completa - Categoría 2

Referencia	Características	Tallas
A4004	Muñeca ajustada	9 y 10
A4003	Muñeca amplia	10 y 11



A4004

A4003

**Guantes de Trabajo - BREMEN**

- A9082 > piel flor de vacuno + algodón - Reforzado

Referencia	Colores	Tallas
A9082	Blanco /Verde	9 - 10.5 - 12



A9082

A1018

**Guantes de Trabajo - TOP UP**

- A1018 > piel flor de vacuno + algodón - Reforzado

Referencia	Colores	Tallas
A1018	Blanco /Rojo	9 - 11 - 12 - 13

**Guantes de Trabajo - PETRAX**

- A8007 > Nylon15G + Espuma latex - Espesor 1.7mm - Protección Palma
- A8107 > Nylon13G + Latex + Espuma latex - Protección Doble en Palma

Referencia	Colores	Tallas
A8007	Según talla	6 - 12
A8107	Negro/Amarillo-Rojo	7 - 11



A8007

A8107



**Guantes de Trabajo - HOBBY**

- A1073 > Piel oveja + Algodón - Protección Palma y Velcro de ajuste

Referencia	Colores	Tallas
A1073	Según talla	6 - 12



A1073

A1073RX

**Guantes de Trabajo - HOBBY REFLEX**

- A1073 > Piel oveja + Algodón - Protección Palma y Velcro de ajuste

Referencia	Colores	Tallas
A1073RX	Amarillo - Reflectante	8 - 10

**Guantes de Trabajo - INDY - D-FNS**

- A1099 > Cuero con muñeca elástica - Categoría 2
- A1098 > Cuero y piel serrada en dorso - Categoría 2

Referencia	Colores	Tallas
A1099	Blanco	8 - 12
A1098	Blanco	7 - 12



A1099

A1098

**Guantes de Trabajo - ELTON**

- A1031 > Cuero con algodón y reforzado - Categoría 2

Referencia	Colores	Tallas
A1031	Blanco / Amarillo	10.5



**Guantes de Trabajo - LITE TOUCH**

- A8012 > Nylon 18G+PU - Ultrafinos (0.90mm) para máximo confort.

Referencia	Colores	Tallas
A8012	Negro/Azul	6 - 11



**Guantes de Trabajo - MAGNETIC THUNDER**

- A1074 > De piel con zonas de Nylon, Reflectantes y Dorso con zona magnética.

Referencia	Colores	Tallas
A1074	Naranja/Amarillo/Gris	9 - 10



### Gafa Seguridad ARDON V9 CLARO

- Gafas de seguridad extremadamente ligeras con un moderno diseño deportivo.
- Patillas de policarbonato en colores mate, lente ahumado con una superficie de espejo plateado
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4009



### Gafa Seguridad ARDON V1011E

- Gafas de seguridad clásicas , con forma ergonómica, sin partes metálicas
- Lentes de policarbonato para máx. protección, y gran campo de visión excepcionalmente amplio
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4012



### Gafa Seguridad ARDON V4000

- Gafas de seguridad tradicionales que proporcionan un alto nivel de protección
- Montura y patillas de policarbonato
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4013



### Gafa Seguridad ARDON V2

- Gafas de seguridad clásicas con un amplio campo de visión, con máxima protección
- Montura y patillas de nailón, longitud de las patillas es ajustable (4 posiciones)
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4020



### Gafa Seguridad ARDON M5

- Gafas de seguridad extremadamente ligeras de 22g de peso, y con un diseño sin montura
- Patillas de policarbonato, opción de lente clara con patillas claras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4044



### Gafa Seguridad ARDON P1

- Gafas Premium, tiene un acabado que proporciona antivaho y antirayaduras, con un diseño elegante y ligero
- El cuerpo y las lentes están hechas de policarbonato, lentes claras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

#### Referencia

E4258



### Gafa Seguridad ARDON P1 OSCURA

- Gafas Premium, tiene un acabado que proporciona antivaho y antirayaduras, con un diseño elegante y ligero
- El cuerpo y las lentes están hechas de policarbonato, lentes oscuras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 172 filtros de protección solar para uso industrial

#### Referencia

E4259



### Gafa Seguridad ARDON P1 AMARILLA

- Gafas Premium, tiene un acabado que proporciona antivaho y antirayaduras, con un diseño elegante y ligero
- El cuerpo y las lentes están hechas de policarbonato, lentes amarillas
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

Referencia
E4260



### Gafa Seguridad ARDON P2

- Gafas P2 protegen todo el área de los ojos y combinan diseño, flexibilidad y funcionalidad
- El lado exterior esta recubierto con goma colourojo de alta visibilidad, patillas cómodas y suaves
- Lentes Claras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

Referencia
E4261



### Gafa Seguridad ARDON P2 OSCURA

- Gafas P2 protegen todo el área de los ojos y combinan diseño, flexibilidad y funcionalidad
- El lado exterior esta recubierto con goma colourojo de alta visibilidad, patillas cómodas y suaves
- Lentes ahumadas
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 172 filtros de protección solar para uso industrial

Referencia
E4262



### Gafa Seguridad ARDON P3

- Gafas P3 con diseño deportivo, con plaquetas nasales suaves, ventiladas y antedreslizantes de gran comodidad.
- Tiene un acabado que proporciona antivaho y antirayaduras
- Lentes claras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

Referencia
E4263



### Gafa Seguridad ARDON P3 OSCURA

- Gafas P3 con diseño deportivo, con plaquetas nasales suaves, ventiladas y antedreslizantes de gran comodidad.
- Tiene un acabado que proporciona antivaho y antirayaduras
- Lentes ahumadas
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 172 filtros de protección solar para uso industrial

Referencia
E4264



### Gafa Seguridad ARDON P5

- Gafas P5 con diseño deportivo, con plaquetas nasales suaves, ventiladas y antedreslizantes de gran comodidad.
- Tiene un acabado que proporciona antivaho y antirayaduras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta

Referencia
E4287



### Gafa Seguridad ARDON P5 - OSCURA / AMARILLA

- Gafas P5 con diseño deportivo, con plaquetas nasales suaves.
- Tiene un acabado que proporciona antivaho y antirayaduras
- EN 166 mayor fuerza, máx. velocidad de 12m/s
- EN 170 filtros contra la radiación ultravioleta
- EN 172 filtros de protección solar para uso industrial. (Modelo E4288)

Referencia	Modelo
E4289	Oscura
E4288	Amarilla



