

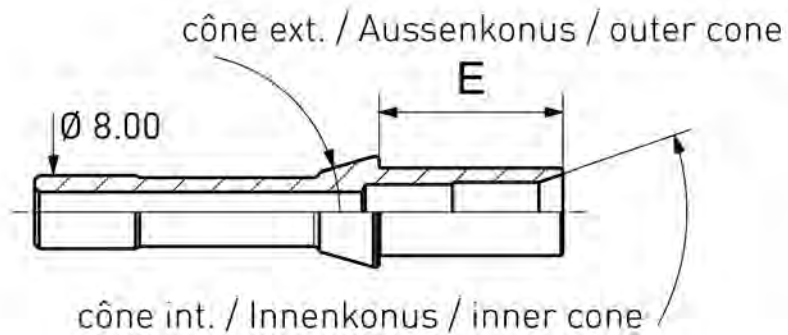
6 Werkzeughalter

- 6.3 Werkzeughalter
- 6.11 Zylindrische Fräsdorne
- 6.13 ESX Fräsdorne
- 6.15 ER Fräsdorne



Werkzeughalter

Verlängerung Reduktionszangenaufnahme F8 auf B6

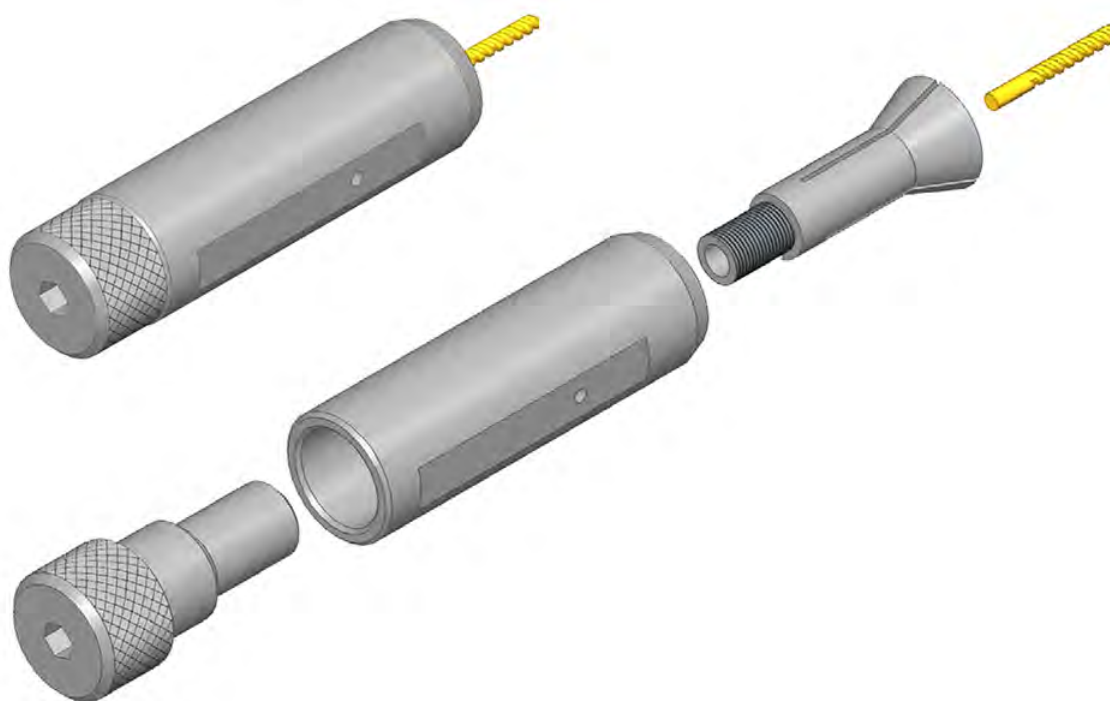


Artikel Nr	E	Innenkonus	Aussenkonus
F8B6-10	10.00	20°	16°
F8B6-12	12.00	20°	16°
F8B6-15	15.00	20°	16°
F8B6-18	18.00	20°	16°
F8B6-20	20.00	20°	16°
F8B6-22	22.00	20°	16°
F8B6-25	25.00	20°	16°
F8B6-30	30.00	20°	16°
F8B6-35	35.00	20°	16°
F8B6-40	40.00	20°	16°
F8B6-42	42.00	20°	16°

Werkzeughalter

B8 Zylindrische Zangenhalter

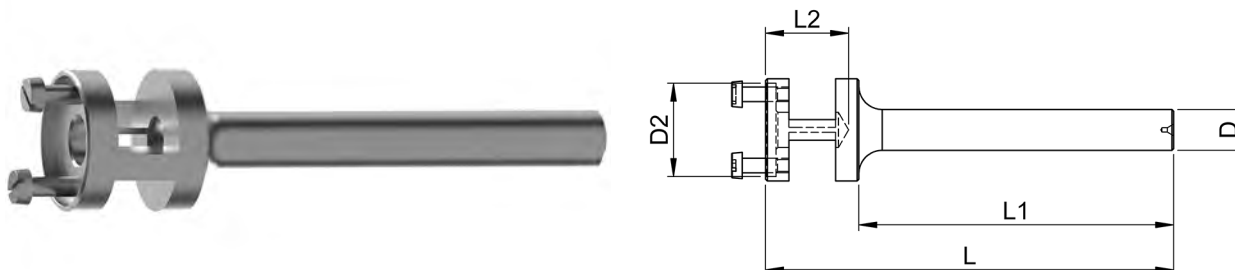
Höhere Präzision als standard ER Zangen



Artikel Nr.	Schaft Ø	Länge	Maschinentyp
B8 Zange			
B8 12 60	12.00	60.00	Tornos SwissNano / Citizen R07
B8 12 100	12.00	100.00	Tornos SwissNano
B8 5/8" 60	15.875 (5/8")	60.00	Citizen R04 / Citizen R07
B8 16 60	16.00	60.00	Tornos Micro 7 / Tornos Micro 8 / Tsugami P01
B8 16 100	16.00	100.00	Star SR-10J / Tornos Micro 7 / Tornos SwissNano
B8 3/4" 100	19.05 (3/4")	100.00	Citizen C16 / Citizen M16
B8 20 100	20.00	100.00	Tornos Delta 12/20 / Tornos Gamma 20
B8 22 100	22.00	100.00	Star SB-16 / Star SR-20
B8 25 100	25.00	100.00	Tornos Deco 13

Werkzeughalter

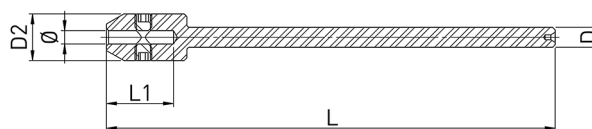
Schneideisenhalter Schraubenbefestigung



Artikel Nr	D	D2	L	L1	L2
Kurze					
PFC120370	3.00	12.00	70.00	54.50	15.50
PFC120470	4.00	12.00	70.00	54.50	15.50
PFC120570	5.00	12.00	70.00	54.50	15.50
PFC160370	3.00	16.00	70.00	53.50	16.50
PFC160470	4.00	16.00	70.00	53.50	16.50
PFC160570	5.00	16.00	70.00	53.50	16.50
PFC200378	3.00	20.00	78.00	51.00	27.00
PFC200478	4.00	20.00	78.00	51.00	27.00
PFC200678	6.00	20.00	78.00	51.00	27.00
PFC200778	7.00	20.00	78.00	51.00	27.00
PFC200878	8.00	20.00	78.00	51.00	27.00
Lange					
PFL120388	3.00	12.00	88.00	54.00	34.00
PFL120488	4.00	12.00	88.00	54.00	34.00
PFL120588	5.00	12.00	88.00	54.00	34.00
PFL160388	3.00	16.00	88.00	54.00	34.00
PFL160488	4.00	16.00	88.00	54.00	34.00
PFL160588	5.00	16.00	88.00	54.00	34.00
PFL200392	3.00	20.00	92.00	54.00	38.00
PFL200492	4.00	20.00	92.00	54.00	38.00
PFL200692	6.00	20.00	92.00	54.00	38.00
PFL200792	7.00	20.00	92.00	54.00	38.00
PFL200892	8.00	20.00	92.00	54.00	38.00

Werkzeughalter

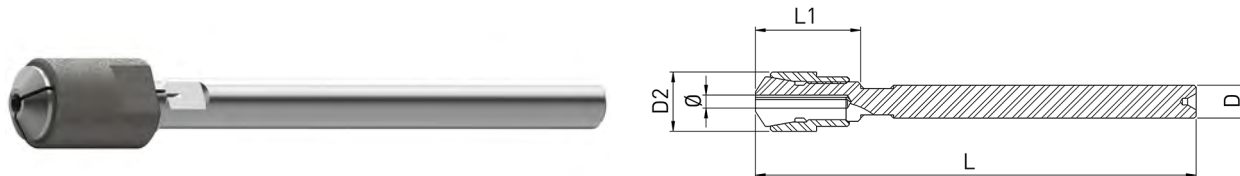
Bohrerhalter



Artikel Nr	D	D2	L	L1	Ø
Kopf Ø 7.00					
PTSC307-Ø	3.00	7.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50
PTSC407-Ø	4.00	7.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50
PTSC507-Ø	5.00	7.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00
PTSL307-Ø	3.00	7.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50
PTSL407-Ø	4.00	7.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50
PTSL507-Ø	5.00	7.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00
Kopf Ø 10.00					
PTSC310-Ø	3.00	10.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50
PTSC410-Ø	4.00	10.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50
PTSC510-Ø	5.00	10.00	67.00	12.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00
PTSL310-Ø	3.00	10.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50
PTSL410-Ø	4.00	10.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50
PTSL510-Ø	5.00	10.00	75.00	20.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00

Werkzeughalter

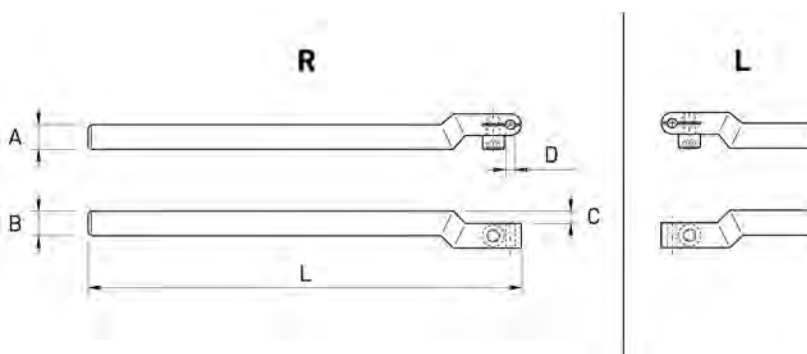
Gewindebohrerhalter



Artikel Nr	D	D2	L	L1	Ø
PTP310-Ø	3.00	10.00	67.00	15.00	1.00 - 1.50 - 2.00 - 2.50
PTP510-Ø	5.00	10.00	67.00	15.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00
PTP510-90-Ø	5.00	10.00	90.00	15.00	1.00 - 1.50 - 2.00 - 2.50 - 3.00

Werkzeughalter

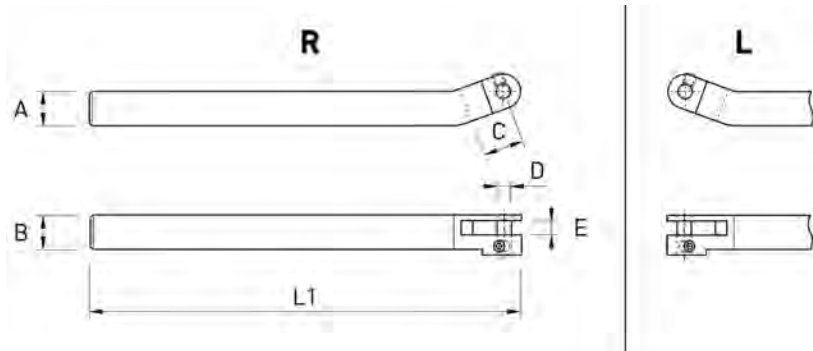
Zentrierbohrer-Halter Typ J



Art. Nr. L	Art. Nr. R	A x B	L	D	C
6 x 6					
4001-J-615	4002-J-615	6 x 6	132.00	1.50	3.00
4001-J-620	4002-J-620	6 x 6	132.00	2.00	3.00
4001-J-630	4002-J-630	6 x 6	132.00	3.00	3.00
7 x 7					
4001-J-715	4002-J-715	7 x 7	140.00	1.50	3.00
4001-J-720	4002-J-720	7 x 7	140.00	2.00	3.00
4001-J-730	4002-J-730	7 x 7	140.00	3.00	3.00
8 x 8					
4001-J-815	4002-J-815	8 x 8	140.00	1.50	4.00
4001-J-820	4002-J-820	8 x 8	140.00	2.00	4.00
4001-J-830	4002-J-830	8 x 8	140.00	3.00	4.00

Werkzeughalter

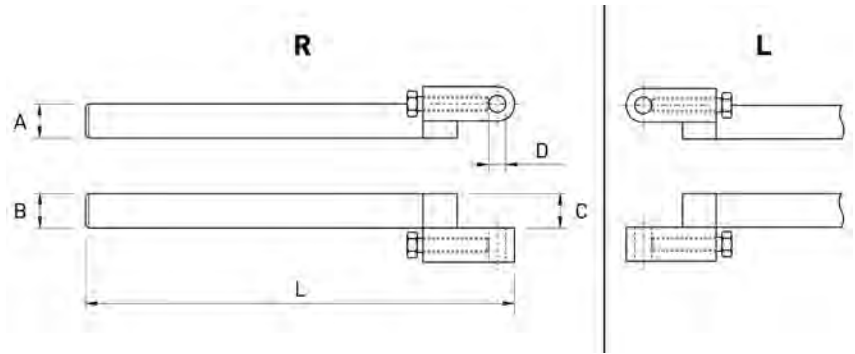
Rändelrollenhalter



Art. Nr. L	Art. Nr. R	A x B	L1	E	D	C
6 x 6						
4021-623	4022-623	6 x 6	132.00	2.00	3.00	10.00
4021-633	4022-633	6 x 6	132.00	3.00	3.00	10.00
7 x 7						
4021-723	4022-723	7 x 7	140.00	2.00	3.00	10.00
4021-733	4022-733	7 x 7	140.00	3.00	3.00	10.00
4021-743	4022-743	7 x 7	140.00	4.00	3.00	10.00
4021-724	4022-724	7 x 7	140.00	2.00	4.00	10.00
4021-734	4022-734	7 x 7	140.00	3.00	4.00	10.00
4021-744	4022-744	7 x 7	140.00	4.00	4.00	10.00
8 x 8						
4021-823	4022-823	8 x 8	140.00	2.00	3.00	10.00
4021-833	4022-833	8 x 8	140.00	3.00	3.00	10.00
4021-843	4022-843	8 x 8	140.00	4.00	3.00	10.00
4021-824	4022-824	8 x 8	140.00	2.00	4.00	10.00
4021-834	4022-834	8 x 8	140.00	3.00	4.00	10.00
4021-844	4022-844	8 x 8	140.00	4.00	4.00	10.00
10 x 10						
4021-1033	4022-1033	10 x 10	150.00	3.00	3.00	10.00
4021-1043	4022-1043	10 x 10	150.00	4.00	3.00	10.00
4021-1034	4022-1034	10 x 10	150.00	3.00	4.00	10.00
4021-1044	4022-1044	10 x 10	150.00	4.00	4.00	10.00
4021-1054	-	10 x 10	150.00	5.00	4.00	10.00
12 x 12						
4021-1244	4022-1244	12 x 12	150.00	4.00	4.00	12.00
4021-1254	4022-1254	12 x 12	150.00	5.00	4.00	12.00
4021-1245	4022-1245	12 x 12	150.00	4.00	5.00	12.00
4021-1255	4022-1255	12 x 12	150.00	5.00	5.00	12.00
16 x 16						
4021-1644	4022-1644	16 x 16	150.00	4.00	4.00	12.00
-	4022-1645	16 x 16	150.00	4.00	5.00	12.00
-	4022-1655	16 x 16	150.00	5.00	5.00	12.00
-	4022-1664	16 x 16	150.00	6.00	4.00	12.00
-	4022-1666	16 x 16	150.00	6.00	6.00	12.00
-	4022-1686	16 x 16	150.00	8.00	6.00	12.00

Werkzeughalter

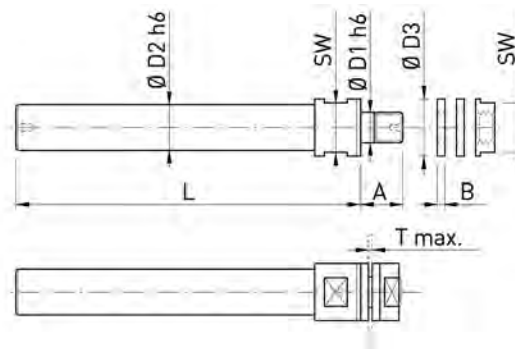
Zentrierbohrer-Halter Typ K



Art. Nr. L	Art. Nr. R	A x B	L	D	C
7 x 7					
4011-K-720	-	7 x 7	146.00	2.00	7.00
4011-K-730	4012-K-730	7 x 7	146.00	3.00	7.00
4011-K-740	4012-K-740	7 x 7	146.00	4.00	7.00
8 x 8					
4011-K-820	-	8 x 8	146.00	2.00	8.00
4011-K-830	4012-K-830	8 x 8	146.00	3.00	8.00
4011-K-840	4012-K-840	8 x 8	146.00	4.00	8.00
4011-K-850	4012-K-850	8 x 8	146.00	5.00	8.00
4011-K-860	4012-K-860	8 x 8	146.00	6.00	8.00
-	4012-K-1030	8 x 8	150.00	3.00	10.00
10 x 10					
4011-K-1040	4012-K-1040	10 x 10	150.00	4.00	10.00
4011-K-1050	4012-K-1050	10 x 10	150.00	5.00	10.00
4011-K-1060	4012-K-1060	10 x 10	150.00	6.00	10.00
4011-K-1070	4012-K-1070	10 x 10	150.00	7.00	10.00
12 x 12					
-	4012-K-1230	12 x 12	150.00	3.00	12.00
4011-K-1240	4012-K-1240	12 x 12	150.00	4.00	12.00
4011-K-1250	4012-K-1250	12 x 12	150.00	5.00	12.00
4011-K-1260	4012-K-1260	12 x 12	150.00	6.00	12.00
4011-K-1280	4012-K-1280	12 x 12	150.00	8.00	12.00
14 x 14					
4011-K-1440	4012-K-1440	14 x 14	150.00	4.00	14.00
4011-K-1460	4012-K-1460	14 x 14	150.00	6.00	14.00
4011-K-1480	4012-K-1480	14 x 14	150.00	8.00	14.00

Zylindrische Fräsdorne

Fräsdorne mit Spannung von vorne



Drehrichtung rechts (Rechtsgewinde)

Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

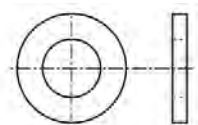
Artikel Nr.	D1	D2	D3	L	A	B	SW	T max.
Typ 8152								
8152-3-5	3.00	5.00	5.00	60.00	7.00	1.00	4.00	3.00
8152-5-6	5.00	6.00	7.50	70.00	7.00	1.00	6.00	3.00
Typ 8102								
8102-5-6	5.00	6.00	10.00	70.00	9.00	2.00	8.00	6.00
8102-5-10	5.00	10.00	10.00	80.00	9.00	2.00	8.00	6.00
8102-6-10	6.00	10.00	12.00	80.00	9.50	2.00	10.00	6.00
8102-8-10	8.00	10.00	15.00	80.00	10.00	2.00	13.00	6.00
8102-8-12	8.00	12.00	15.00	90.00	10.00	2.00	13.00	6.00
8102-10-6	10.00	6.00	18.00	80.00	10.50	2.00	15.00	6.00
8102-10-10	10.00	10.00	18.00	80.00	10.50	2.00	15.00	6.00
8102-10-16	10.00	16.00	18.00	100.00	10.50	2.00	15.00	6.00
8102-13-16	13.00	16.00	22.00	110.00	11.00	2.00	19.00	6.00
8102-16-20	16.00	20.00	26.00	120.00	12.00	2.00	22.00	6.00
8102-22-16	22.00	16.00	32.00	132.00	13.00	2.00	27.00	6.00
Typ 8112								
8112-16-10	16.00	10.00	22.00	80.00	8.00	2.00	19.00	3.00

Werkzeughalter

Ersatzteile für Fräsdorne

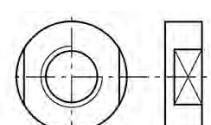
Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

* Durchmesser D1 angeben



Artikel Nr.

- 1820-D1*-A
- 2810-D1*-A
- 2811-D1*-A
- 2815-D1*-A
- 2820-D1*-A

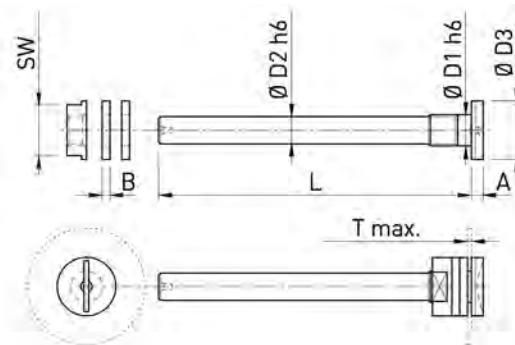


Artikel Nr.

- 1820-D1*-B
- 2810-D1*-B
- 2811-D1*-B
- 2815-D1*-B
- 2820-D1*-B

Zylindrische Fräsdorne

Fräsdorne mit Spannung von hinten



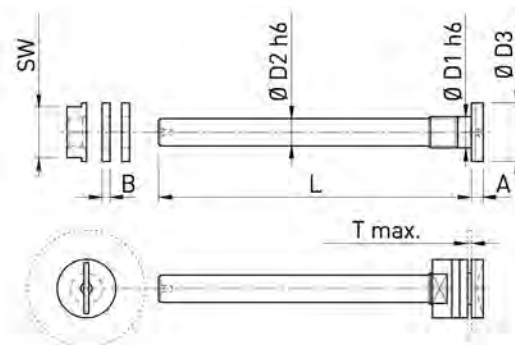
Drehrichtung rechts (Linksgewinde)

Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

Artikel Nr.	D1	D2	D3	L	A	B	SW	T max.
Typ 8202								
8202-5-4	5.00	4.00	10.00	50.00	3.00	2.00	8.00	6.00
8202-6-5	6.00	5.00	12.00	60.00	3.00	2.00	10.00	6.00
8202-8-6	8.00	6.00	15.00	70.00	3.00	2.00	13.00	6.00
8202-8-7	8.00	7.00	15.00	80.00	3.00	2.00	13.00	6.00
8202-10-6	10.00	6.00	18.00	70.00	3.50	2.00	15.00	6.00
8202-10-8	10.00	8.00	18.00	90.00	3.50	2.00	15.00	6.00
8202-13-10	13.00	10.00	22.00	110.00	3.50	2.00	19.00	6.00
8202-16-12	16.00	12.00	26.00	120.00	3.50	2.00	22.00	6.00

Werkzeughalter

Fräsdorne mit Spannung von hinten - Drehrichtung links



Drehrichtung links (Rechtsgewinde)

Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

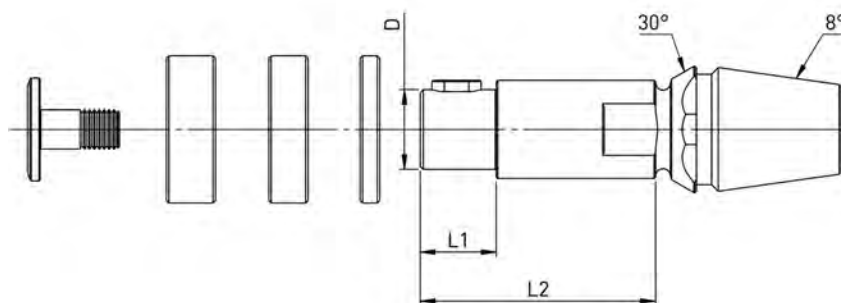
Artikel Nr.	D1	D2	D3	L	A	B	SW	T max.
Typ 8201								
8201-5-4	5.00	4.00	10.00	50.00	3.00	2.00	8.00	6.00
8201-6-5	6.00	5.00	12.00	60.00	3.00	2.00	10.00	6.00
8201-8-6	8.00	6.00	15.00	70.00	3.00	2.00	13.00	6.00
8201-10-6	10.00	6.00	18.00	70.00	3.50	2.00	15.00	6.00

ESX Fräsdorne

ESX Fräsdorne



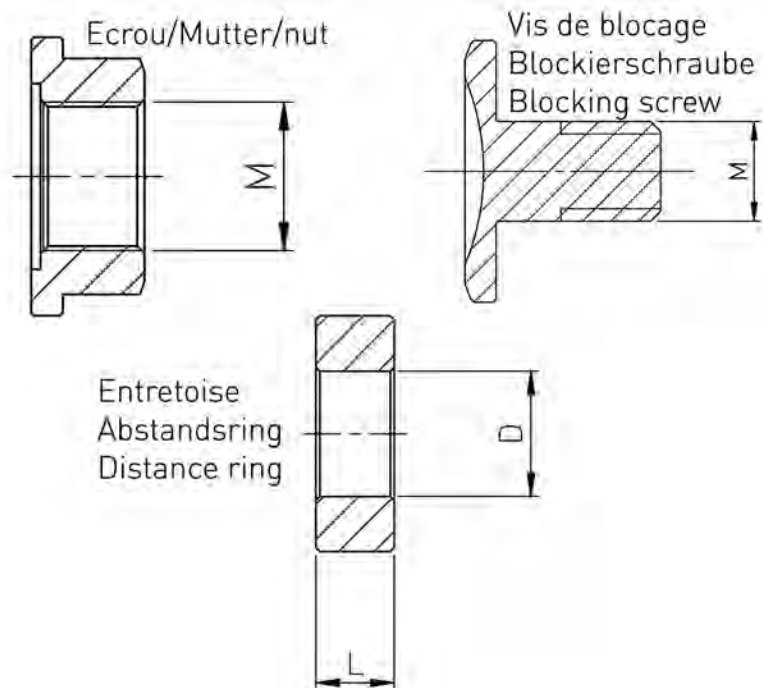
- Jeder Fräsdorn wird mit 3 Abstandsringen, 1 Schraube und 1 Mutter geliefert
- * = mit Keilnut



Artikel Nr.	D	L1	L2	Befestigung
Typ ESX 12 - Kurz				
2405	5.00	10.00	20.00	Schraube
2406	6.00	10.00	20.00	Schraube
2408	8.00	10.00	20.00	Schraube
Typ ESX 12 - Lang				
2505	5.00	22.00	27.00	Schraube
2506	6.00	22.00	27.00	Schraube
2508	8.00	22.00	27.00	Schraube
Typ ESX 20 - Kurz				
2208	8.00	15.50	43.00	Schraube
2210	10.00	15.50	43.00	Schraube
2213	13.00	15.50	43.00	Schraube
Typ ESX 20 - Lang				
2308*	8.00	25.00	43.00	Mutter
2310*	10.00	25.00	43.00	Mutter
2313*	13.00	25.00	43.00	Mutter
Typ ESX 25 - Kurz				
2008	8.00	15.50	49.00	Schraube
2010	10.00	15.50	49.00	Schraube
2013	13.00	15.50	49.00	Schraube
2016	16.00	15.50	49.00	Schraube
Typ ESX 25 - Lang				
2108*	8.00	25.00	49.00	Mutter
2110*	10.00	25.00	49.00	Mutter
2113*	13.00	25.00	49.00	Mutter
2116*	16.00	25.00	49.00	Mutter

ESX Fräsdorne

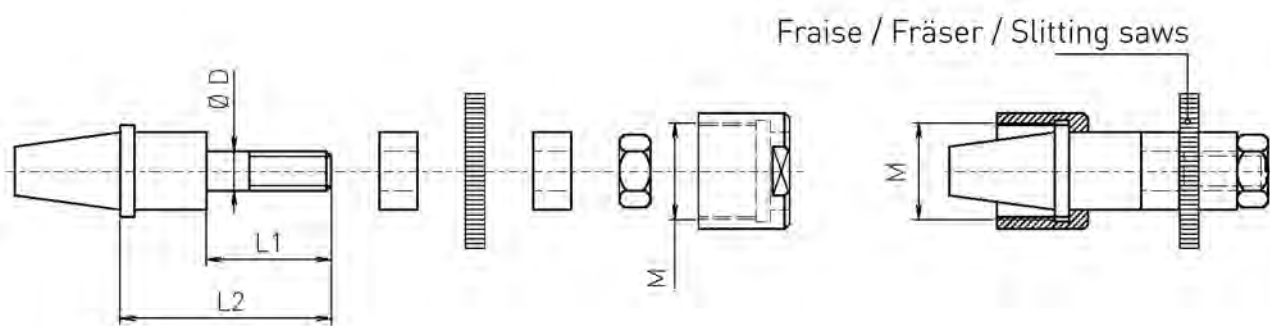
Ersatzteile für ESX Fräsdorne



Artikel Nr.	D	L	M
6-kt. Mutter			
2605			M5.00
2606			M6.00
2608			M8.00
2610			M10.00 x 1.00
2613			M13.00 x 1.00
2616			M16.00 x 1.00
Blockierschraube			
2705			M5.00
2708			M8.00
Abstandsring			
2805	5.00	4.00 / 6.00 / 8.00	
2806	6.00	4.00 / 6.00 / 8.00	
2808	8.00	4.00 / 6.00 / 8.00	
2810	10.00	4.00 / 8.00 / 10.00	
2813	13.00	4.00 / 8.00 / 10.00	
2816	16.00	4.00 / 8.00 / 10.00	
Abstandsring mit Keilnut			
2908	8.00	4.00 / 6.00 / 8.00	
2910	10.00	4.00 / 8.00 / 10.00	
2913	13.00	4.00 / 8.00 / 10.00	
2916	16.00	4.00 / 8.00 / 10.00	

ER Fräsdorne

ER Fräsdorne



Fräsdorne mit ER Schaft

Mögliche Grösse :

- ER 11
- ER 16
- ER 8

Inkl. Überwurfmutter

* auch für ESX12-Futter lieferbar

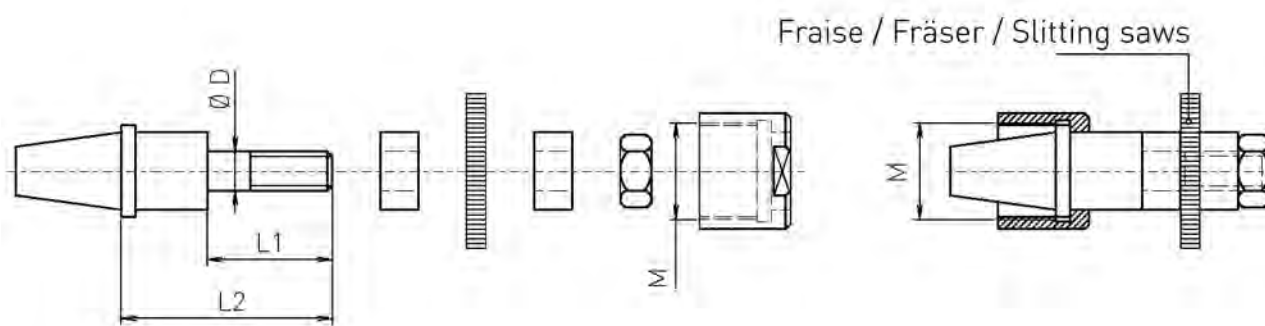
L2 ohne Fräseranzugsschraube

Artikel Nr.	D	L1	L2	M	Mutter	Schlüssel
Typ ER8						
TA-ER08M-05	5.00	25.00	29.00	M10 x 0.75	ECR/ER08M	N-5
TA-ER08M-06	6.00	25.00	29.00	M10 x 0.75	ECR/ER08M	N-6
TA-ER08M-08	8.00	25.00	29.00	M10 x 0.75	ECR/ER08M	GS14
Typ ER11						
TA-ER11M-05K	5.00	18.00	23.00	M13 x 0.75	ECR/ER11M	N-6
TA-ER11M-05	5.00	25.00	31.00	M13 x 0.75	ECR/ER11M	N-5
TA-ER11M-05L	5.00	25.00	40.00	M13 x 0.75	ECR/ER11M	N-5
TA-ER11M-06	6.00	18.00	23.00	M13 x 0.75	ECR/ER11M	N-6
TA-ER11M-06K	6.00	17.00	23.00	M13 x 0.75	ECR/ER11M	N-6
TA-ER11M-06S	6.00	21.00	26.00	M13 x 0.75	ECR/ER11M	N-6
TA-ER11M-08K	8.00	21.00	26.00	M13 x 0.75	ECR/ER11M	GS14
TA-ER11M-08	8.00	25.00	30.00	M13 x 0.75	ECR/ER11M	GS14
TA-ER11M-08L	8.00	35.00	40.00	M13 x 0.75	ECR/ER11M	GS14
TA-ER11M-10K	10.00	21.00	26.00	M13 x 0.75	ECR/ER11M	GS14
TA-ER11M-10	10.00	25.00	30.00	M13 x 0.75	ECR/ER11M	GS14
TA-ER11M-13K	13.00	24.00	32.00	M13 x 0.75	ECR/ER11M	SLF13
TA-ER11M-13	13.00	28.00	33.00	M13 x 0.75	ECR/ER11M	SLF13
TA-ER11M-13L	13.00	39.00	44.00	M13 x 0.75	ECR/ER11M	SLF13
Typ ER11*						
TA-ER11-05K	5.00	18.00	23.00	M14 x 0.75	ECR/ER11	N-5
TA-ER11-05	5.00	25.00	31.00	M14 x 0.75	ECR/ER11	N-5
TA-ER11-05L	5.00	25.00	40.00	M14 x 0.75	ECR/ER11	N-5
TA-ER11-06	6.00	18.00	23.00	M14 x 0.75	ECR/ER11	N-6
TA-ER11-08K	8.00	21.00	26.00	M14 x 0.75	ECR/ER11	GS14
TA-ER11-08	8.00	25.00	30.00	M14 x 0.75	ECR/ER11	GS14
TA-ER11-08L	8.00	35.00	40.00	M14 x 0.75	ECR/ER11	GS14
TA-ER11-10K	10.00	21.00	26.00	M14 x 0.75	ECR/ER11	GS14
TA-ER11-10	10.00	25.00	30.00	M14 x 0.75	ECR/ER11	GS14
TA-ER11-13K#	13.00	24.00	32.00	M14 x 0.75	ECR/ER11	SLF13
TA-ER11-13#	13.00	28.00	33.00	M14 x 0.75	ECR/ER11	SLF13
TA-ER11-13L#	13.00	39.00	44.00	M14 x 0.75	ECR/ER11	SLF13

ER Fräsdorne

ER Fräsdorne

Folge ...



Fräsdorne mit ER Schaft

Mögliche Grösse :

- ER 11
- ER 16
- ER 8

Inkl. Überwurfmutter

* auch für ESX12-Futter lieferbar

L2 ohne Fräseranzugsschraube

Artikel Nr.	D	L1	L2	M	Mutter	Schlüssel
Typ ER16						
TA-ER16M-05K	5.00	13.00	33.00	M19 x 1.00	ECR/ER16M	N-5
TA-ER16M-05	5.00	15.00	42.00	M19 x 1.00	ECR/ER16M	N-5
TA-ER16M-06	6.00	13.00	36.00	M19 x 1.00	ECR/ER16M	N-6
TA-ER16M-08	8.00	26.00	42.00	M19 x 1.00	ECR/ER16M	GS14
TA-ER16M-08L	8.00	35.00	50.00	M19 x 1.00	ECR/ER16M	GS14
TA-ER16M-10	10.00	26.00	44.00	M19 x 1.00	ECR/ER16M	GS14
TA-ER16M-13#	13.00	26.00	42.00	M19 x 1.00	ECR/ER16M	SLF13
TA-ER16M-13L#	13.00	35.00	50.00	M19 x 1.00	ECR/ER16M	SLF13
TA-ER16-05K	5.00	13.00	33.00	M22 x 1.50	ECR/ER16	N-5
TA-ER16-05	5.00	15.00	42.00	M22 x 1.50	ECR/ER16	N-5
TA-ER16-05L	5.00	26.00	41.00	M22 x 1.50	ECR/ER16	
TA-ER16-06	6.00	13.00	36.00	M22 x 1.50	ECR/ER16	N-6
TA-ER16-06L	6.00	26.00	44.00	M22 x 1.50	ECR/ER16	
TA-ER16-08	8.00	26.00	42.00	M22 x 1.50	ECR/ER16	GS14
TA-ER16-08L	8.00	35.00	50.00	M22 x 1.50	ECR/ER16	GS14
TA-ER16-10	10.00	26.00	44.00	M22 x 1.50	ECR/ER16	GS14
TA-ER16-10L	10.00	35.00	50.00	M22 x 1.50	ECR/ER16	GS14
TA-ER16-13	13.00	26.00	42.00	M22 x 1.50	ECR/ER16	SLF13
TA-ER16-13L#	13.00	35.00	50.00	M22 x 1.50	ECR/ER16	SLF13