

Pinces EX, ESX, ET1 pour serrage de queues d'outils EX, ESX, ET1 Spannzangen zum Spannen von Werkzeugschäften Collets EX, ESX, ET1 to hold tool shanks

EX
DIN 6499-A



Concentricité ultraprécise
Höchste Rundlaufgenauigkeit
Highest concentricity

ESX
DIN 6499-B



Concentricité standard
Standard Rundlaufgenauigkeit
Standard concentricity

ET-1-



Pince de taraudage
(système breveté PCM)
Gewindebohrzangen
(PCM-patent. System)
Tapping collets (PCM-patent)

Les pinces de ce groupe bénéficient d'un système d'extraction qui décolle la pince de son logement lors du desserrage de l'écrou.

Type EX (qualité UP)

La capacité de serrage est limitée au diamètre nominal (tolérance h 12).

Type ESX

Gr. 9 : capacité de serrage : 0,5 mm en dessous du diamètre nominal pour tous les alésages.

Gr. 12 à 60 : 1 mm en dessous du diamètre nominal (respectivement 0,5 mm pour les alésages <= 3 mm).

Type ET-1-

Pinces de taraudage avec compensation axiale incorporée - système breveté - adaptées aux dimensions normalisées.

Alle Typen "ESX", "EX" und "ET1-" mit Ausziehsystem: Dank einer Nute am grossen Durchmesser der Spannzangen wird diese beim Lösen der Mutter automatisch herausgezogen.

Typ EX (nur in UP-Qualität)

Spannt nur den Nenn-Durchmesser (mit Toleranz h 12).

Typ ESX

Gr. 9 : Spannbereich : 0,5 mm für alle Bohrungen.

Gr. 12 bis 60 : 0,5 mm für Bohrungen bis 3 mm, 1 mm für Bohrungen von 4 mm und darüber.

Typ ET-1-

Gewindebohrzangen mit eingebautem Achsialausgleich. Patentierte Lösung an genormte Abmessungen angepasst.

This category of collets offers an extraction system, which releases the collet from its seat when unscrewing the collet nut.

EX type (UP)

To hold nominal bore diameters only (h 12 tolerance).

ESX type

Size 9 : gripping collapsability 0,5 mm below the nominal diameter for all bores.

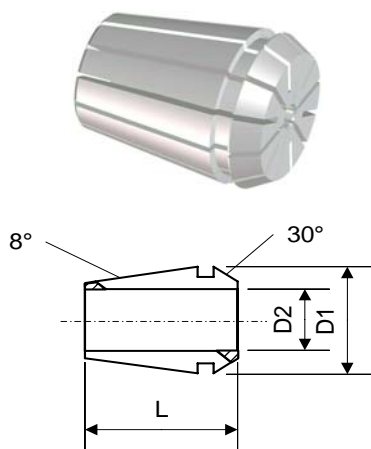
Size 12-60 : gripping collaps-ability 1 mm below the nominal diameter for 4 mm bores up, and 0,5 mm for bores below 4 mm.

ET-1- type

Tapping collets with axial compensation incorporated - patented, to suit standard sizes.

Pinces - Spannzangen - Collets ESX; EX

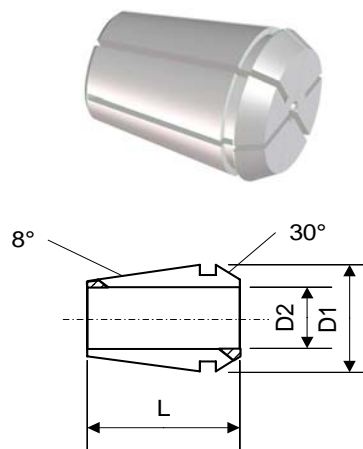
ESX (DIN 6499 B)



qualité standard
Qualität Standard
quality standard

avec plage de serrage (S) vers le bas
mit Spannbereich (S) nach unten
with collapsability (S) inwards

EX (DIN 6499 A)



qualité UP
Qualität UP
quality UP

serre le diamètre nominal
spannt den Nenndurchmesser
clamps the nominal diameter

Gr.	Art.	L	D1	D2	S	Gr.	Art.	L	D1	D2
ESX 9	75-09300	14.5	9	1-5	0.5	EX 9	75-09200	14.5	9	0.5-5
ESX 12	75-12300	19.5	12	1-3 4-7	0.5 1	EX 12	75-12200	17.5	11.75	0.5-7
ESX 16	75-16300	27.5	17	1-1.5 2-10	0.5 1	EX 16	75-16200	27.5	16.7	0.5-10
DIN 6499 B						DIN 6499 A				
ESX 20	75-20300	31.5	21	1-1.5 2-13	0.5 1	EX 20	75-20200	31.5	20.7	1-13
DIN 6499 B						DIN 6499 A				
ESX 25	75-25300	34	26	1-1.5 2-16	0.5 1	EX 25	75-25200	34	25.7	1-16
DIN 6499 B						DIN 6499 A				
ESX 32	75-32300	40	33	2.5-20	1	EX 32	75-32200	40	32.7	2-20
DIN 6499 B						DIN 6499 A				
ESX 40	75-40300	46	41	3-26	1	EX 40	75-40200	46	40.7	3-26
DIN 6499 B						DIN 6499 A				
ESX 50	75-50300 1)	55	51	6-34	1					

1) Jusqu'à épuisement du stock
Solange Vorrat
Whilst stocks last

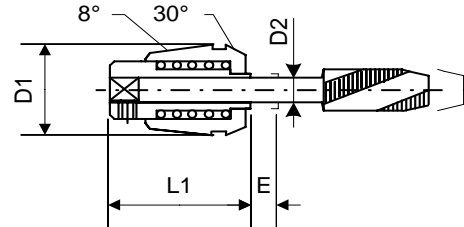
Pinces de taraudage PCM - PCM Gewindebohrzangen - PCM tapping collets

ET-1-



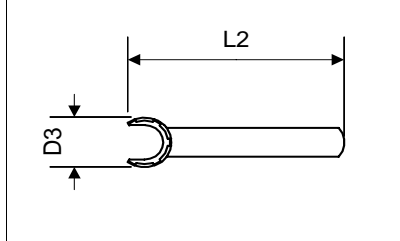
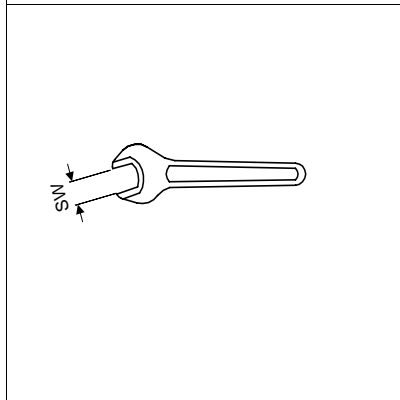
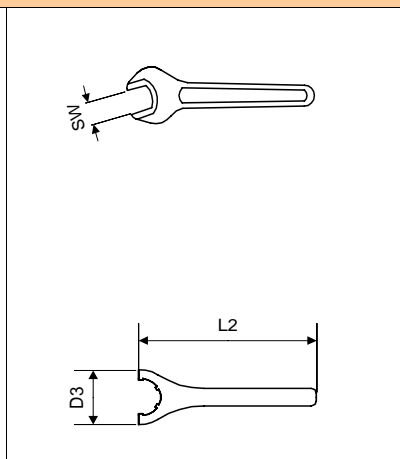
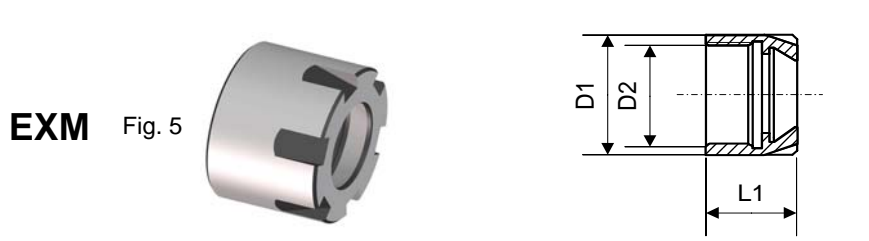
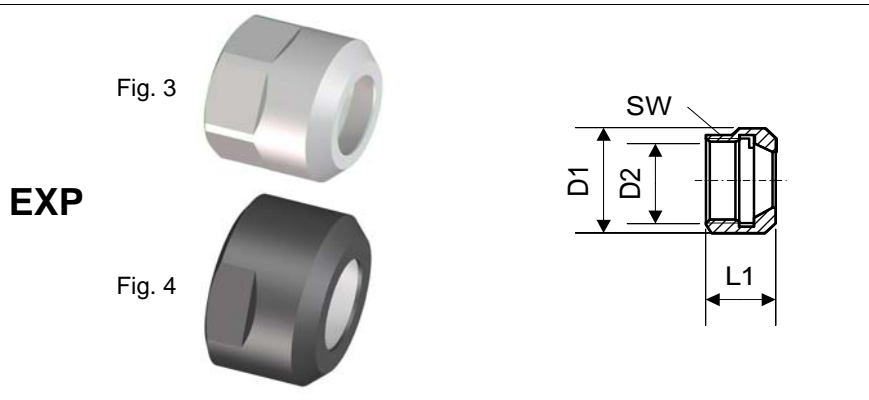
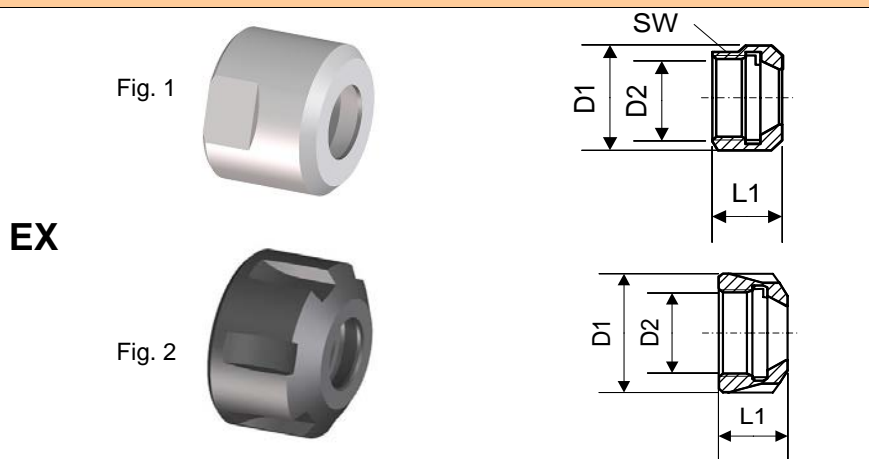
pince de taraudage avec une course d'extension
 Gewindebohrzange mit Auszugsweg
 tapping collet with extension stroke

avance de taraudage : 95 à 99 % du pas
 Vorschub beim Gewindebohren : 95 bis 99 %
 tapping feed : 95 to 99 %



	ET-1-12...	ET-1-16...	ET-1-20...	ET-1-25...	ET-1-32...	ET-1-40...	
L1	21.5	27	31	34	43	54	
D1	12	17	21	26	33	41	
E	5.5	7	7	8	10	13	
D2	ET-1-12...	ET-1-16...	ET-1-20...	ET-1-25...	ET-1-32...	ET-1-40...	ISO DIN Japan
1	ET-1-12100AL	ET-1-16100AL					-
1.4	ET-1-12140	ET-1-16140					D
1.5	ET-1-12150AL	ET-1-16150AL					-
1.6	ET-1-12160	ET-1-16160					D
1.8	ET-1-12180	ET-1-16180					D
2	ET-1-12200	ET-1-16200					(I)
2.2	ET-1-12221	ET-1-16221	ET-1-20221				D
2.24	ET-1-12224	-	-				I
2.5	ET-1-12250	ET-1-16250	ET-1-20250	ET-1-25250			I/D
2.8	ET-1-12280	ET-1-16280	ET-1-20280	ET-1-25280			I/D
3	ET-1-12300	ET-1-16300	ET-1-20300	ET-1-25300			J
3.15	ET-1-12315	ET-1-16315	ET-1-20315	ET-1-25315			I
3.5	ET-1-12350	ET-1-16350	ET-1-20350	ET-1-25350			D
3.55	ET-1-12355	ET-1-16355	ET-1-20355	ET-1-25355			I
4		ET-1-16400	ET-1-20400	ET-1-25400			I/D/J
4.5		ET-1-16450	ET-1-20450	ET-1-25450	ET-1-32450		I/D
5		ET-1-16500	ET-1-20500	ET-1-25500	ET-1-32500		I/J
5.5		ET-1-16550	ET-1-20550	ET-1-25550	ET-1-32550		(D)/J
5.6		ET-1-16560	ET-1-20560	ET-1-25560	ET-1-32560		I
6		ET-1-16600	ET-1-20600	ET-1-25600	ET-1-32600	ET-1-40600	D/J
6.2		ET-1-16620	ET-1-20620	ET-1-25620	ET-1-32620	-	J
6.3		ET-1-16630	ET-1-20630	ET-1-25630	ET-1-32630	ET-1-40630	I
7			ET-1-20700	ET-1-25700	ET-1-32700	ET-1-40700	D/J
7.1				ET-1-25710	ET-1-32710	ET-1-40710	I
8				ET-1-25800	ET-1-32800	ET-1-40800	I/D/(J)
8.5				ET-1-25850	ET-1-32850	ET-1-40850	J
9				ET-1-25900	ET-1-32900	ET-1-40900	I/D
10				ET-1-25100	ET-1-32100	ET-1-40100	I/D
10.5					ET-1-32105	-	J
11					ET-1-32110	ET-1-40110	D
11.2					ET-1-32112	ET-1-40112	I
12					ET-1-32120	ET-1-40120	D
12.5					ET-1-32125	ET-1-40125	I/J
14						ET-1-40140	I/D/J
15						ET-1-40150	J
16						ET-1-40160	I/D

Ecrous - Muttern - Nuts EX

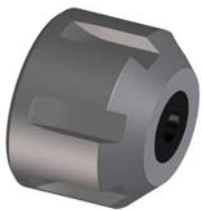
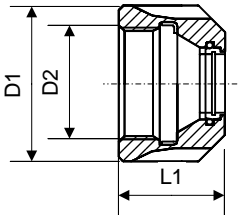
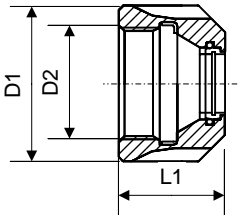
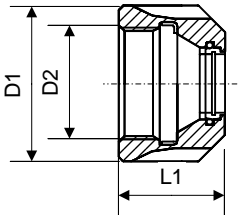
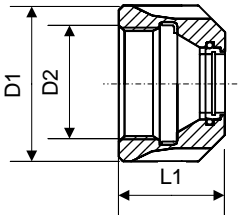
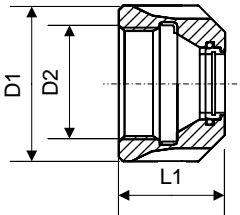

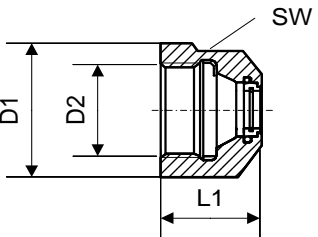
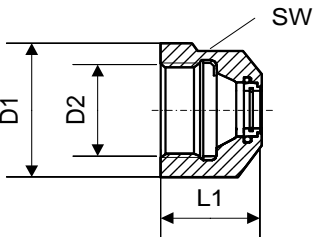
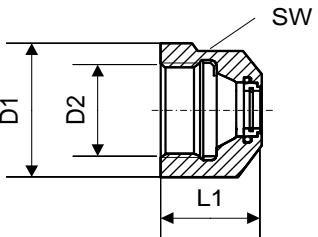
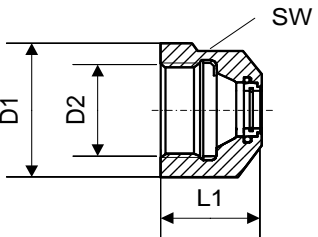
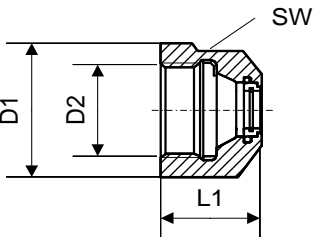

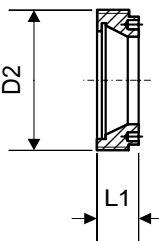
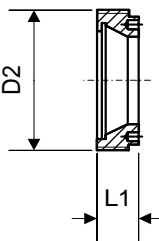
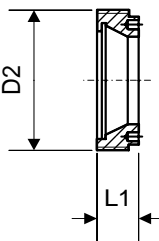
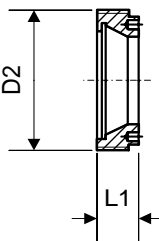
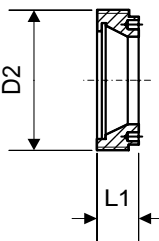


Gr.	Ecrou - Mutter - Nut					
	Art.	D1	D2	L1	SW	Fig.
EX 9	61-09730	15	M11x0.75	11.5	13	1
EX 12	61-12730	19	M14x0.75	14	17	1
EX 16	61-16730	32	M22x1.5	18	-	2
EX 20	61-20730	35	M25x1.5	19.5	-	2
EX 25	61-25730	42	M32x1.5	20.5	-	2
EX 32	61-32730	50	M40x1.5	23	-	2
EX 40	61-40730	63	M50x1.5	26	-	2
EX 50	61-50730	73	M60x1.5	29	-	2
EXP 9	61-09710	13.5	M10x0.75	11.5	12	3
EXP 12	61-12710	16.7	M13x0.75	14	15	3
EXP 16	61-16710	25	M20x1	18	22	4
EXP 20	61-20710	30.5	M24x1	18.5	27	4
EXM 11	61-11772	16	M13x0.75	12.1	-	5
EXM 16	61-16772	22	M19x1	18	-	5
EXM 20	61-20772	28	M24x1	19.5	-	5
EXM 25	61-25772	35	M30x1	20.5	-	5

Clé - Schlüssel - Spanner		
Art.	D3	L2
-	-	-
-	-	-
61-16800	55	163
61-20800	60	183
61-25800	70	203
61-32800	80	253
61-40800	95	283
61-50800	100	303
1)		
-	-	-
-	-	-
-	-	-
61-11812	16.8	90
61-16812	22.5	110
61-20812	29	120
61-25812	36	130

1) Jusqu'à épuisement du stock - Solange Vorrat - Whilst stocks last

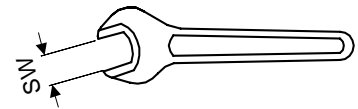
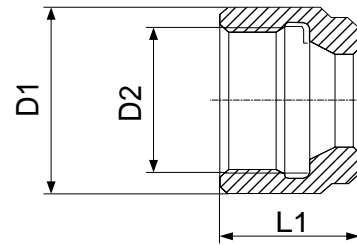
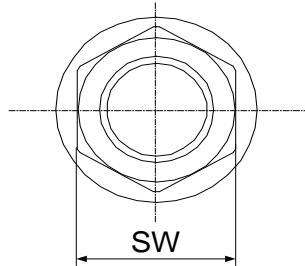
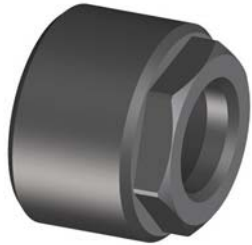
Ecrous - Muttern - Nuts EX

Ecrous - Muttern - Nuts EX									
EXA									
EXPA									
EXF									
Gr.	Ecrou Mutter Nut					Bague étanche Dichtscheibe Sealed disc	Clé Schlüssel Spanner		
	Art.	D1	D2	L1	SW		Art.	D3	L2
EXA 12	61-12790	19	M14x0.75	19.5	17	61-12791	-	-	
EXA 16	61-16790	32	M22x1.5	22.5	-	61-16791	61-16800	55 163	
EXA 20	61-20790	35	M25x1.5	24	-	61-20791	61-20800	60 183	
EXA 25	61-25790	42	M32x1.5	25	-	61-25791	61-25800	70 203	
EXA 32	61-32790	50	M40x1.5	27.5	-	61-32791	61-32800	80 253	
EXA 40	61-40790	63	M50x1.5	30.5	-	61-40791	61-40800	95 283	
EXPA 16	61-16795	25	M20x1	23.3	22	61-16791	-	-	
EXPA 20	61-20795	30.5	M24x1	24	27	61-20791	-	-	
EXF 16	61-16777	-	M24x1	8.1	-	-	61-16813	25 118	
EXF 20	61-20777	-	M28x1.5	10.9	-	-	61-20813	28 123	
EXF 25	61-25777	-	M32x1.5	12.5	-	-	61-25813	30.5 139	
EXF 32	61-32777	-	M40x1.5	14	-	-	61-32813	42 182	

Ecrous équilibrés - Ausgewuchtete Muttern - Balanced nuts EXE

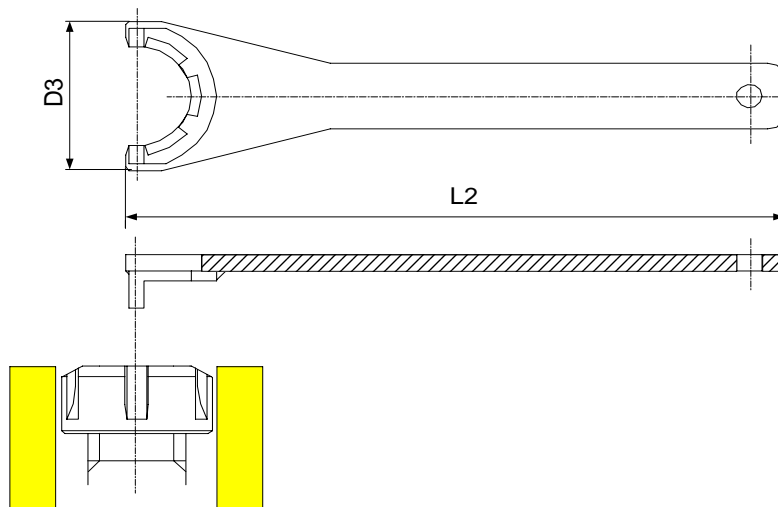
Ecrous équilibrés - Ausgewuchtete Muttern - Balanced nuts EXE								
EXE	Fig. 1							
	Fig. 2							
EXPE	Fig. 3							
	Fig. 4							
Gr.	Ecrou - Mutter - Nut					Clé - Schlüssel - Spanner		
	Art.	D1	D2	L1	SW	Art.	D3	L2
EXE 9 Fig. 1	61-09720	15	M11x0.75	11.5	13	-	-	-
EXE 12 Fig. 1	61-12720	19	M14x0.75	14	17	-	-	-
EXE 16 Fig. 2	61-16720	32	M22x1.5	18	-	61-16800	55	163
EXE 20 Fig. 2	61-20720	35	M25x1.5	19.5	-	61-20800	60	183
EXE 25 Fig. 2	61-25720	42	M32x1.5	20.5	-	61-25800	70	203
EXE 32 Fig. 2	61-32720	50	M40x1.5	23	-	61-32800	80	253
EXE 40 Fig. 2	61-40720	63	M50x1.5	26	-	61-40800	95	283
EXPE 9 Fig. 3	61-09721	13.5	M10x0.75	11.5	12	-	-	-
EXPE 12 Fig. 3	61-12721	16.7	M13x0.75	14	15	-	-	-
EXPE 16 Fig. 4	61-16721	25	M20x1	18	22	-	-	-
EXPE 20 Fig. 4	61-20721	30.5	M24x1	18.5	27	-	-	-

Ecrou - Mutter - Nut EX



Gr.	Ecrou Mutter Nut					Bague étanche Dichtscheibe Sealed disc Art.	Clé Schlüssel Spanner		
	Art.	D1	D2	L1	SW		Art.	D3	L2
EX 16	61-16769	28	M22x1.25	19.5	22	-	-	-	

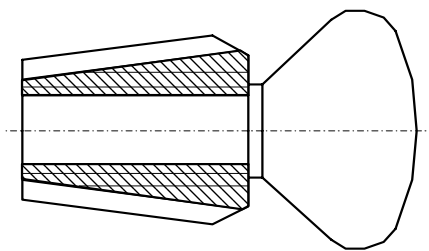
Clé - Schlüssel - Spanner



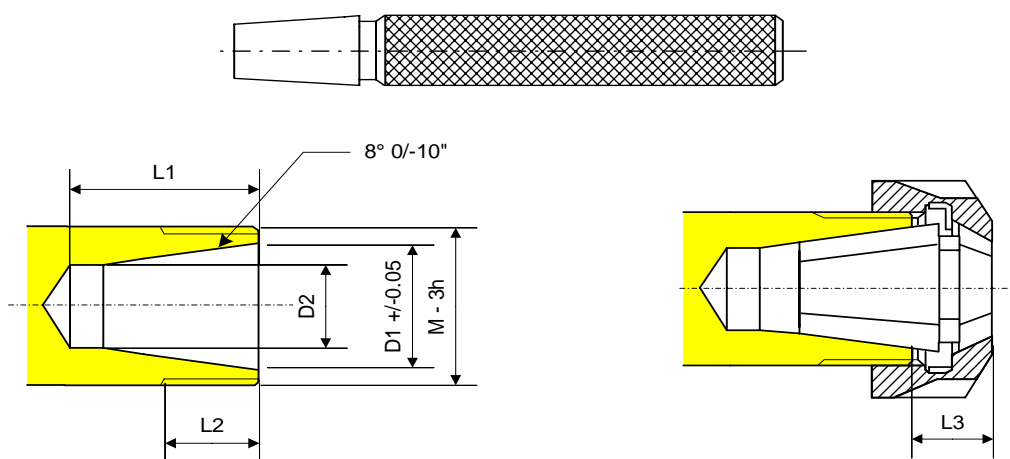
Gr.	Clé - Schlüssel - Spanner		
	Art.	D3	L2
EX 20	61-20802	45	183

Poignée de nettoyage - Reinigungsborn - Cleaning handle

Gr.	Art.
E 9	61-09950
E 12	61-12950
E 16	61-16950
E 20	61-20950
E 25	61-25950
E 32	61-32950
E 40	61-40950



Jauge de rectification - Schleiflehre - Grinding gage



Gr.	Art.	M	D1	D2	L1	L2	L3 - ESX	L3 - EX
E 9	61-09920	M10x0.75	8.5	5.6	13	9	5.7	5.7
		M11x0.75	8.5	5.6	13	9	5.7	5.7
E 12	61-12920	M13x0.75	11	7.3	18	11	9	5.5
		M14x0.75	11	7.3	18	10	9	5.5
E 16	61-16920	M20x1	16	10.5	23	13	10.6	6.4
		M22x1.5	16	10.5	23	13	10.6	6.4
E 20	61-20920	M24x1	20	13.5	28	13	11.5	7.2
		M25x1.5	20	13.5	28	13	11.5	7.2
E 25	61-25920	M32x1.5	25	18	31	14	12	7.5
E 32	61-32920	M40x1.5	32	23.5	34	16	13	8.3
E 40	61-40920	M50x1.5	40	30.5	39	17	15	10.5
E 50	61-50920 1)	M60x1.5	50	38.5	46	20	14.2	

1) Jusqu'à épuisement du stock
Solange Vorrat
Whilst stocks last