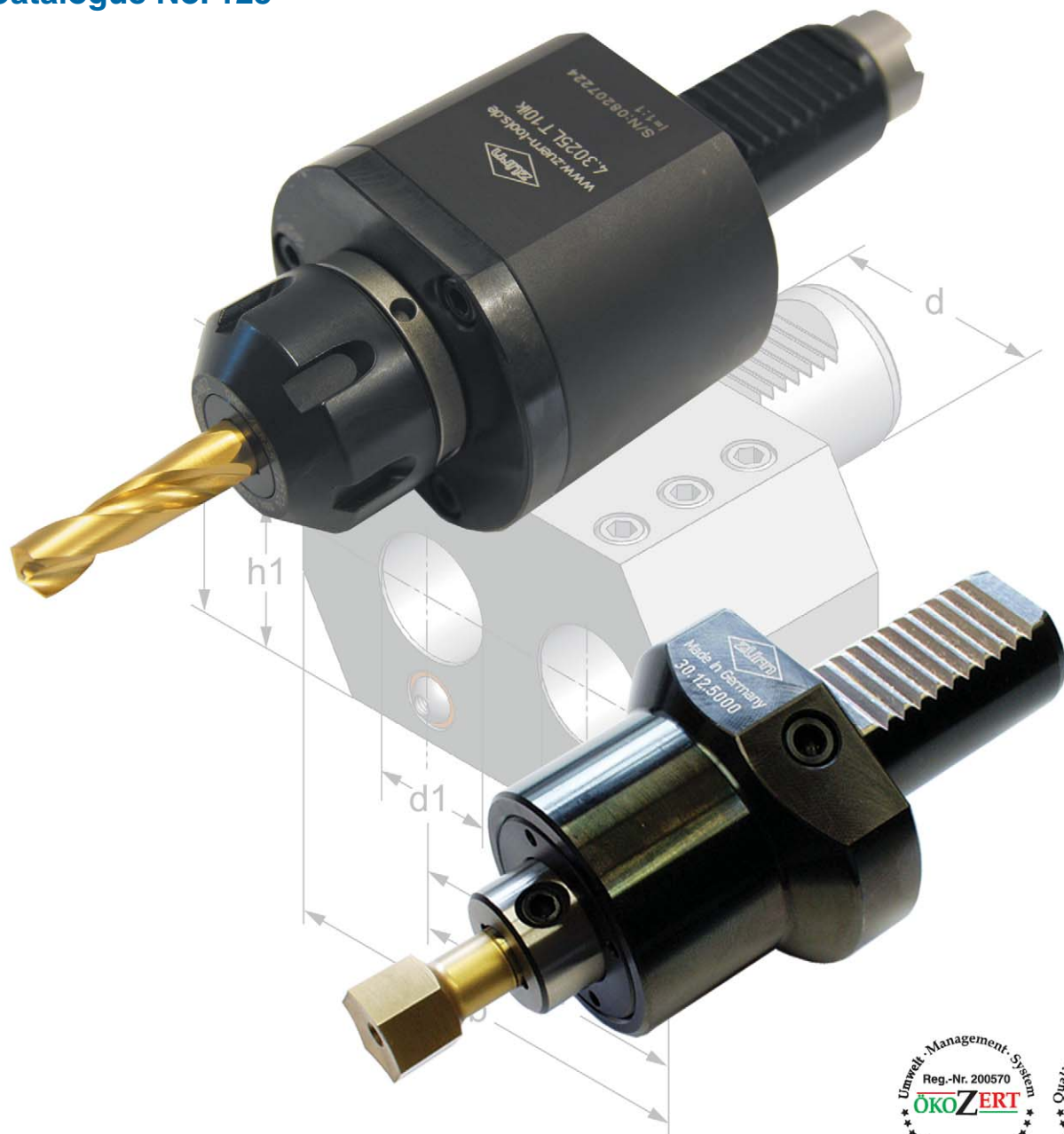


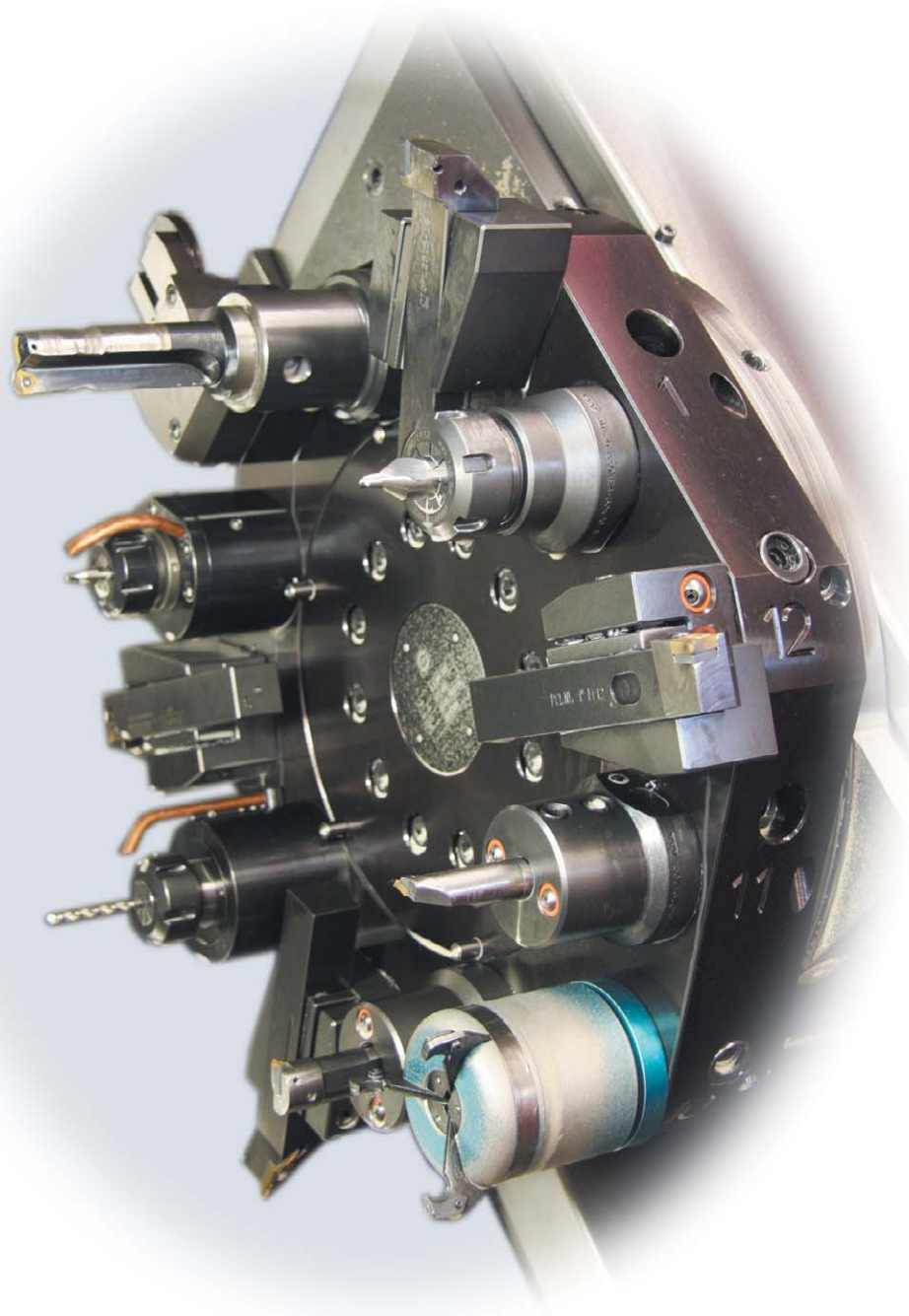
Werkzeughalter für CNC-Drehmaschinen DIN 69880 / DIN ISO 10889

Toolholders for CNC machines
DIN 69880 / DIN ISO 10889



Katalog Nr. 125 Catalogue No. 125





Allgemeine Verkaufsbedingungen finden Sie auf unserer Homepage:

www.zuern-tools.de
info@zuern-tools.de

Werkstoff: Legierter Einsatzstahl mit einer Zugfestigkeit im Kern von min. 800 N/mm²

Material: Case hardened steel, tensile strength in the core min. 800 N/mm²


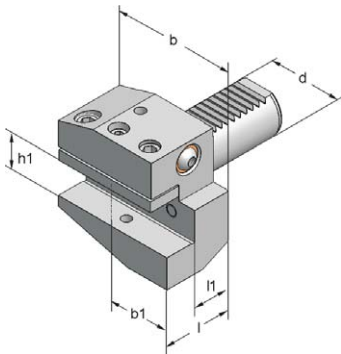

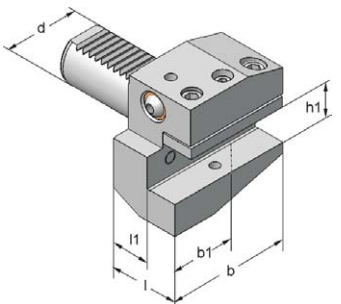

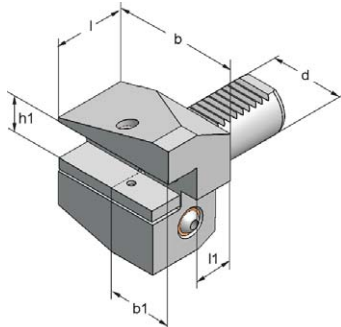

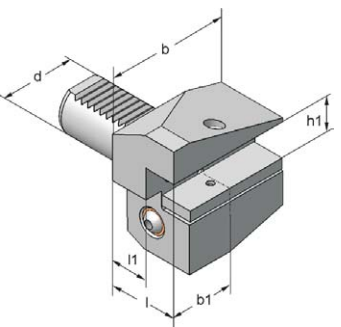
Ausführung: Einsatzgehärtet HRc 60 - 2 (HV 700 ± 50)
Härtetiefe 0,8 mm - 0,2
Brüniert und Präzisionsgeschliffen

Execution: Case hardened HRc 60 - 2 (HV 700 ± 50)
Depth of case 0,8 mm - 0,2
Brown-finish end precision ground

Technische Änderungen vorbehalten

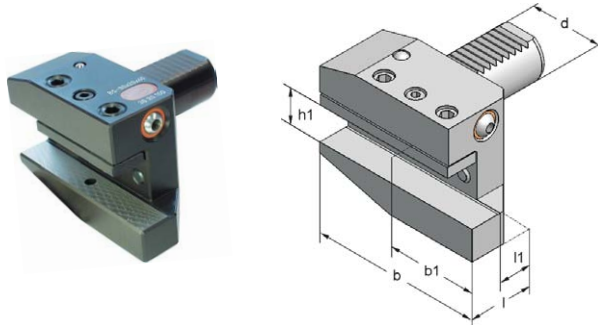
We reserve the right to make technical changes

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Radial-Werkzeughalter Form B1 kurz Radial toolholder form B1 short		Art.-Nr.	Typ	d	b	b1	h1	l	l1	
 	16.12.060	B1-16x12x24	16	42	23	12	24	13		
	20.16.060	B1-20x16x30	20	55	30	16	30	16		
	25.16.060	B1-25x16x30	25	55	30	16	30	16		
	30.20.060	B1-30x20x40	30	70	35	20	40	22		
	30.25.060	B1-30x25x44	30	70	35	25	44	22		
	40.25.060	B1-40x25x44	40	85	42,5	25	44	22		
	50.32.060	B1-50x32x55	50	100	50	32	55	30		
	60.32.060	B1-60x32x60	60	125	62,5	32	60	30		
	INCH									
	307206	B1-30x3/4"x40	30	70	35	3/4"	40	22		
343206	B1-30x1" x44	30	70	35	1"	44	22			
407206	B1-40x1" x44	40	85	42,5	1"	44	22			
507206	B1-50x1 1/4"x55	50	100	50	1 1/4"	55	30			
Radial-Werkzeughalter Form B2 kurz Radial toolholder form B2 short		Art.-Nr.	Typ	d	b	b1	h1	l	l1	
 	16.12.090	B2-16x12x24	16	42	23	12	24	13		
	20.16.090	B2-20x16x30	20	55	30	16	30	16		
	25.16.090	B2-25x16x30	25	55	30	16	30	16		
	30.20.090	B2-30x20x40	30	70	35	20	40	22		
	30.25.090	B2-30x25x44	30	70	35	25	44	22		
	40.25.090	B2-40x25x44	40	85	42,5	25	44	22		
	50.32.090	B2-50x32x55	50	100	50	32	55	30		
	60.32.090	B2-60x32x60	60	125	62,5	32	60	30		
	INCH									
	308206	B2-30x3/4"x40	30	70	35	3/4"	40	22		
344206	B2-30x1" x44	30	70	35	1"	44	22			
408206	B2-40x1" x44	40	85	42,5	1"	44	22			
508206	B2-50x1 1/4"x55	50	100	50	1 1/4"	55	30			
Radial-Werkzeughalter Form B3 kurz Radial toolholder form B3 short		Art.-Nr.	Typ	d	b	b1	h1	l	l1	
 	16.12.070	B3-16x12x24	16	42	23	12	24	13		
	20.16.070	B3-20x16x30	20	55	30	16	30	16		
	25.16.070	B3-25x16x30	25	55	30	16	30	16		
	30.20.070	B3-30x20x40	30	70	35	20	40	22		
	30.25.070	B3-30x25x44	30	70	35	25	44	22		
	40.25.070	B3-40x25x44	40	85	42,5	25	44	22		
	50.32.070	B3-50x32x55	50	100	50	32	55	30		
	60.32.070	B3-60x32x60	60	125	62,5	32	60	30		
	INCH									
	309206	B3-30x3/4"x40	30	70	35	3/4"	40	22		
345206	B3-30x1" x44	30	70	35	1"	44	22			
409206	B3-40x1" x44	40	85	42,5	1"	44	22			
509206	B3-50x1 1/4"x55	50	100	50	1 1/4"	55	30			
Radial-Werkzeughalter Form B4 kurz Radial toolholder form B4 short		Art.-Nr.	Typ	d	b	b1	h1	l	l1	
 	16.12.080	B4-16x12x24	16	42	23	12	24	13		
	20.16.080	B4-20x16x30	20	55	30	16	30	16		
	25.16.080	B4-25x16x30	25	55	30	16	30	16		
	30.20.080	B4-30x20x40	30	70	35	20	40	22		
	40.25.080	B4-40x25x44	40	85	42,5	25	44	22		
	50.32.080	B4-50x32x55	50	100	50	32	55	30		
	60.32.080	B4-60x32x60	60	125	62,5	32	60	30		
	INCH									
	310206	B4-30x3/4"x40	30	70	35	3/4"	40	22		
	410206	B4-40x1" x44	40	85	42,5	1"	44	22		
510206	B4-50x1 1/4"x55	50	100	50	1 1/4"	55	30			

Radial-Werkzeughalter Form B5 lang

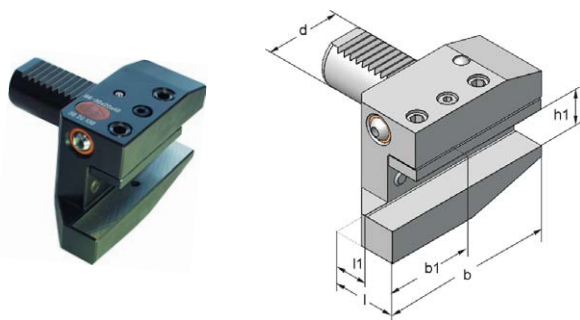
Radial toolholder form B5 long



Art.-Nr.	Typ	d	b	b1	h1	l	l1
16.12.100	B5-16x12x24	16	58	39	12	24	13
20.16.100	B5-20x16x30	20	75	50	16	30	16
30.20.100	B5-30x20x40	30	97	63	20	40	22
30.20.100-60	B5-30x20x60	30	97	63	20	60	42
30.25.100	B5-30x25x44	30	97	63	25	44	22
40.25.100	B5-40x25x44	40	108	66	25	44	22
50.32.100	B5-50x32x55	50	130	80	32	55	30
60.32.100	B5-60x32x60	60	145	82	32	60	30
INCH							
311206	B5-30x3/4"x40	30	100	65	3/4"	40	22
411206	B5-40x1" x44	40	108	66	1"	44	22
511206	B5-50x1 1/4"x55	50	130	80	1 1/4"	55	30

Radial-Werkzeughalter Form B6 lang

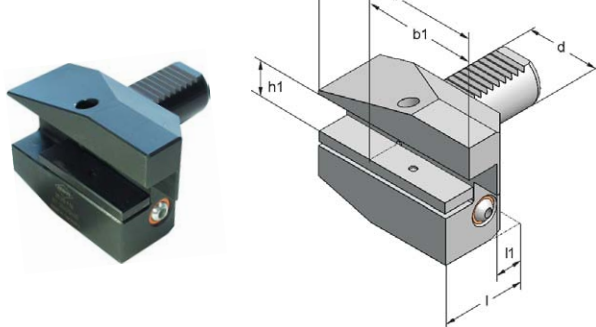
Radial toolholder form B6 long



Art.-Nr.	Typ	d	b	b1	h1	l	l1
16.12.130	B6-16x12x24	16	58	39	12	24	13
20.16.130	B6-20x16x30	20	75	50	16	30	16
30.20.130	B6-30x20x40	30	100	65	20	40	22
40.25.130	B6-40x25x44	40	108	66	25	44	22
50.32.130	B6-50x32x55	50	130	80	32	55	30
60.32.130	B6-60x32x60	60	145	82	32	60	30
INCH							
312206	B6-30x3/4"x40	30	100	65	3/4"	40	22
412206	B6-40x1" x44	40	108	66	1"	44	22
512206	B6-50x1 1/4"x55	50	130	80	1 1/4"	55	30

Radial-Werkzeughalter Form B7 lang

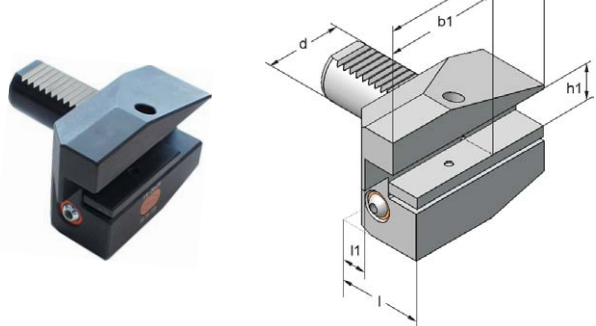
Radial toolholder form B7 long



Art.-Nr.	Typ	d	b	b1	h1	l	l1
16.12.110	B7-16x12x24	16	58	39	12	24	13
20.16.110	B7-20x16x30	20	75	50	16	30	16
30.20.110	B7-30x20x40	30	100	65	20	40	22
40.25.110	B7-40x25x44	40	108	66	25	44	22
50.32.110	B7-50x32x55	50	130	80	32	55	30
60.32.110	B7-60x32x60	60	145	82	32	60	30
INCH							
313206	B7-30x3/4"x40	30	100	65	3/4"	40	22
413206	B7-40x1" x44	40	108	66	1"	44	22
513206	B7-50x1 1/4"x55	50	130	80	1 1/4"	55	30

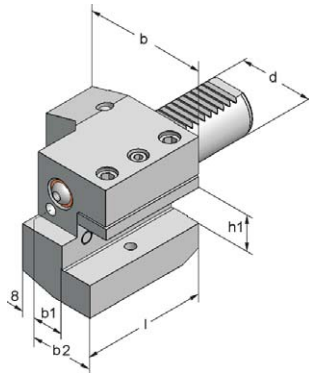
Radial-Werkzeughalter Form B8 lang

Radial toolholder form B8 long



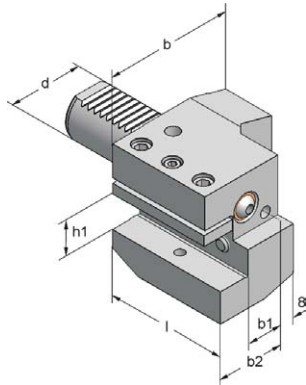
Art.-Nr.	Typ	d	b	b1	h1	l	l1
16.12.120	B8-16x12x24	16	58	39	12	24	13
20.16.120	B8-20x16x30	20	75	50	16	30	16
30.20.120	B8-30x20x40	30	100	65	20	40	22
40.25.120	B8-40x25x44	40	108	66	25	44	22
50.32.120	B8-50x32x55	50	130	80	32	55	30
60.32.120	B8-60x32x60	60	145	82	32	60	30
INCH							
314206	B8-30x3/4"x40	30	100	65	3/4"	40	22
414206	B8-40x1" x44	40	108	66	1"	44	22
514206	B8-50x1 1/4"x55	50	130	80	1 1/4"	55	30

Axial-Werkzeughalter Form C1
Axial toolholder form C1



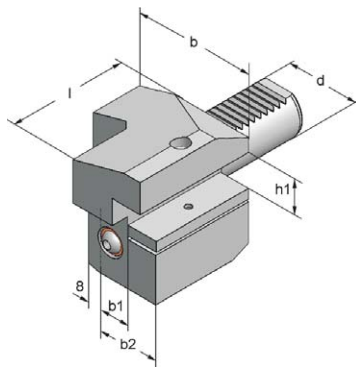
Art.-Nr.	Typ	d	b	b1	b2	h1	l
16.12.020	C1-16x12x 44	16	43	13,0	25	12	44
20.16.020	C1-20x16x 50	20	65	25,5	40	16	50
25.20.020	C1-25x20x 55	25	58	15,0	33	20	55
25.25.020	C1-25x25x 75	25	65	18,5	40	25	75
30.20.020	C1-30x20x 70	30	70	17,0	35	20	70
40.25.020	C1-40x25x 85	40	85	20,5	42,5	25	85
50.32.020	C1-50x32x100	50	100	25,5	50	32	100
60.32.020	C1-60x32x125	60	125	32,5	62,5	32	125
INCH							
303206	C1-30x3/4"x 70	30	70	17,0	35	3/4"	70
403206	C1-40x1" x 85	40	85	20,5	42,5	1"	85
503206	C1-50x1 1/4"x100	50	100	32,5	50	1 1/4"	100

Axial-Werkzeughalter Form C2
Axial toolholder form C2



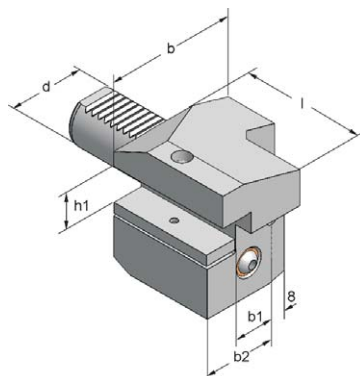
Art.-Nr.	Typ	d	b	b1	b2	h1	l
16.12.050	C2-16x12x 44	16	43	13,0	25	12	44
20.16.050	C2-20x16x 50	20	65	25,5	40	16	50
25.20.050	C2-25x20x 55	25	58	19,0	37	20	55
25.25.050	C2-25x25x 75	25	65	18,5	40	25	75
30.20.050	C2-30x20x 70	30	73	21,0	39	20	70
40.25.050	C2-40x25x 85	40	88	25,5	47,5	25	85
50.32.050	C2-50x32x100	50	105	30,0	55	32	100
60.32.050	C2-60x32x125	60	125	32,5	62,5	32	125
INCH							
304206	C2-30x3/4"x 70	30	73	21,0	39	3/4"	70
404206	C2-40x1" x 85	40	88	25,5	47,5	1"	85
504206	C2-50x1 1/4"x100	50	105	30,0	55	1 1/4"	100

Axial-Werkzeughalter Form C3
Axial toolholder form C3



Art.-Nr.	Typ	d	b	b1	b2	h1	l
16.12.030	C3-16x12x 44	16	43	13,0	25	12	44
20.16.030	C3-20x16x 50	20	65	25,5	40	16	50
25.20.030	C3-25x20x 55	25	58	15,0	33	20	55
25.25.030	C3-25x25x 75	25	65	18,5	40	25	75
30.20.030	C3-30x20x 70	30	70	17,0	35	20	70
40.25.030	C3-40x25x 85	40	85	20,5	42,5	25	85
50.32.030	C3-50x32x100	50	100	25,5	50	32	100
60.32.030	C3-60x32x125	60	125	32,5	62,5	32	125
INCH							
305206	C3-30x3/4"x 70	30	70	20,5	35	3/4"	70
405206	C3-40x1" x 85	40	85	25,5	42,5	1"	85
505206	C3-50x1 1/4"x100	50	100	32,5	50	1 1/4"	100

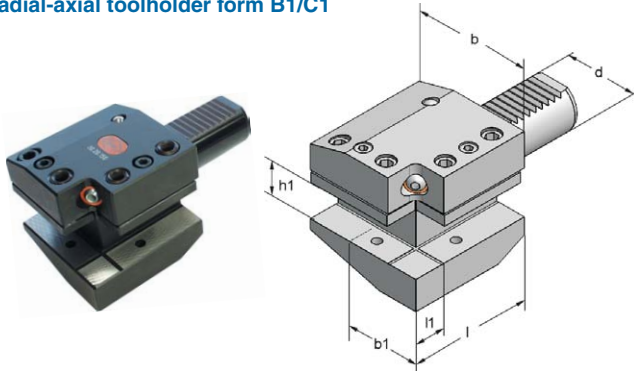
Axial-Werkzeughalter Form C4
Axial toolholder form C4



Art.-Nr.	Typ	d	b	b1	b2	h1	l
16.12.040	C4-16x12x 44	16	43	13,0	25	12	44
20.16.040	C4-20x16x 50	20	65	25,5	40	16	50
25.20.040	C4-25x20x 55	25	62	19,0	37	20	55
25.25.040	C4-25x25x 75	25	65	18,5	40	25	75
30.20.040	C4-30x20x 70	30	73	23,0	41	20	70
40.25.040	C4-40x25x 85	40	88	25,5	47,5	25	85
50.32.040	C4-50x32x100	50	105	30,0	55	32	100
60.32.040	C4-60x32x125	60	125	32,5	62,5	32	125
INCH							
306206	C4-30x3/4"x 70	30	73	23,0	41,0	3/4"	70
406206	C4-40x1" x 85	40	88	25,5	47,5	1"	85
506206	C4-50x1 1/4"x100	50	105	32,5	62,5	1 1/4"	100

Radial-Axial-Werkzeughalter Form B1/C1

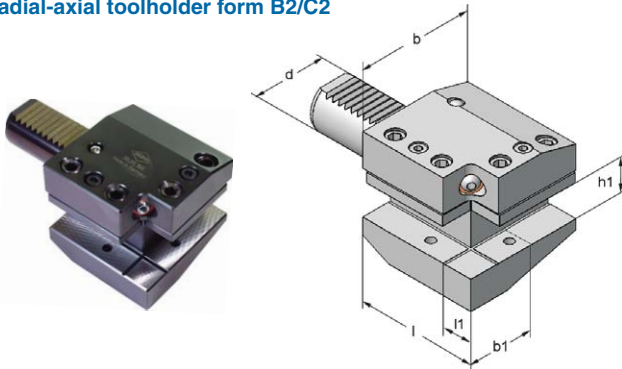
Radial-axial toolholder form B1/C1



Art.-Nr.	Typ	d	b	b1	h1	l	l1
20.16.150	B1/C1-20x16x 50	20	65	40,0	16	50	14
30.20.150	B1/C1-30x20x 70	30	70	35,0	20	70	18
40.25.150	B1/C1-40x25x100	40	85	42,5	25	100	25
50.32.150	B1/C1-50x32x120	50	100	50,0	32	120	25
60.32.150	B1/C1-60x32x135	60	125	62,5	32	135	30

Radial-Axial-Werkzeughalter Form B2/C2

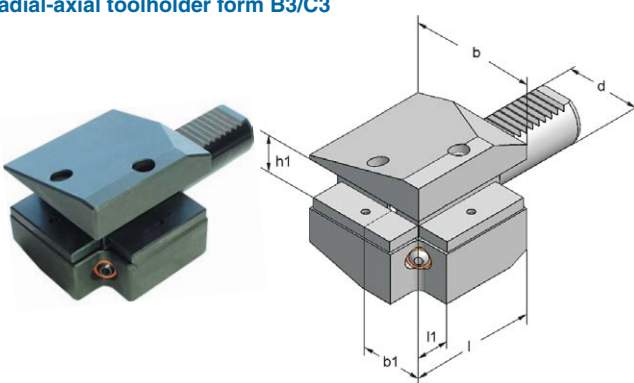
Radial-axial toolholder form B2/C2



Art.-Nr.	Typ	d	b	b1	h1	l	l1
20.16.160	B2/C2-20x16x 50	20	65	40,0	16	50	14
30.20.160	B2/C2-30x20x 70	30	74	39,0	20	70	18
40.25.160	B2/C2-40x25x100	40	90	47,5	25	100	25
50.32.160	B2/C2-50x32x120	50	105	55,0	32	120	25
60.32.160	B2/C2-60x32x135	60	125	62,5	32	135	30

Radial-Axial-Werkzeughalter Form B3/C3

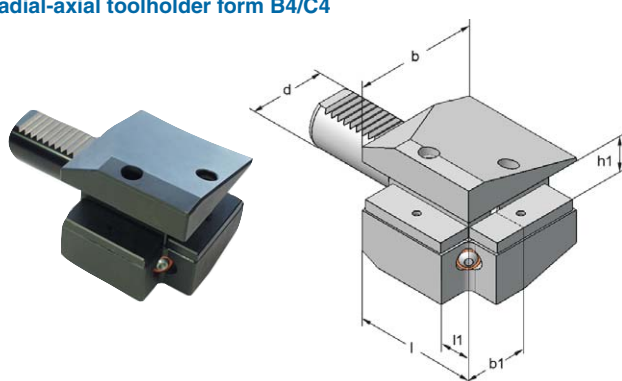
Radial-axial toolholder form B3/C3



Art.-Nr.	Typ	d	b	b1	h1	l	l1
30.20.170	B3/C3-30x20x 70	30	70	35,0	20	70	18
40.25.170	B3/C3-40x25x100	40	85	42,5	25	100	25
50.32.170	B3/C3-50x32x120	50	100	50,0	32	120	25
60.32.170	B3/C3-60x32x135	60	125	62,5	32	135	30

Radial-Axial-Werkzeughalter Form B4/C4

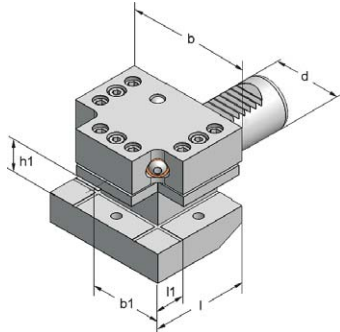
Radial-axial toolholder form B4/C4



Art.-Nr.	Typ	d	b	b1	h1	l	l1
30.20.180	B4/C4-30x20x 70	30	74	39,0	20	70	18
40.25.180	B4/C4-40x25x100	40	85	42,5	25	100	25
50.32.180	B4/C4-50x32x120	50	105	55,0	32	120	25
60.32.180	B4/C4-60x32x135	60	125	62,5	32	135	30

Mehrfachaufnahme Form D1/D2 (VDI 25,30,40)
Multiple toolholder form D1/D2 (VDI 25,30,40)

* Doppelverzahnung / * Double toothing



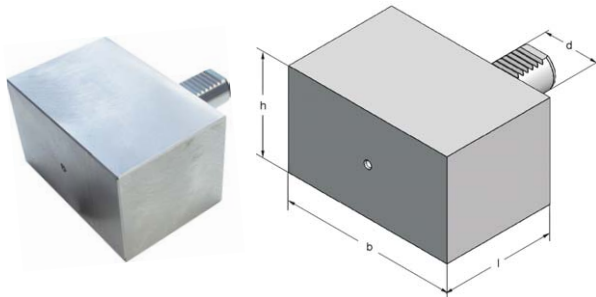
D1 ...151



D2 ...171

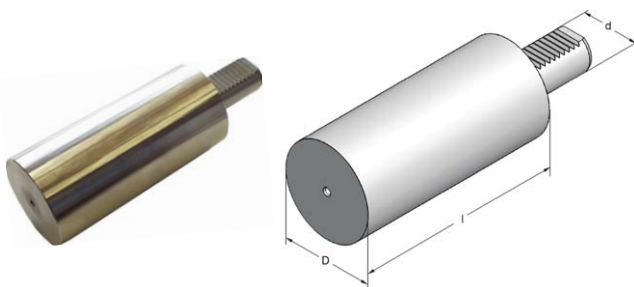
Art.-Nr.	Typ	d	b	b1	h1	l	l1
*25.16.151/171	D1/D2-25x16	25	66	33,0	16	48	14
*30.20.151/171	D1/D2-30x20	30	78	39,0	20	60	18
*40.25.151/171	D1/D2-40x25	40	95	47,5	25	72	22
50.32.151	D1-50x32x 85	50	105	52,5	32	85	25
60.32.151	D1-60x32x110	60	115	57,5	32	110	25
50.32.171	D2-50x32x 85	50	105	52,5	32	85	25
60.32.171	D2-60x32x110	60	115	57,5	32	110	25

Werkzeughalter-Rohling Form A1
Toolholder blank form A1



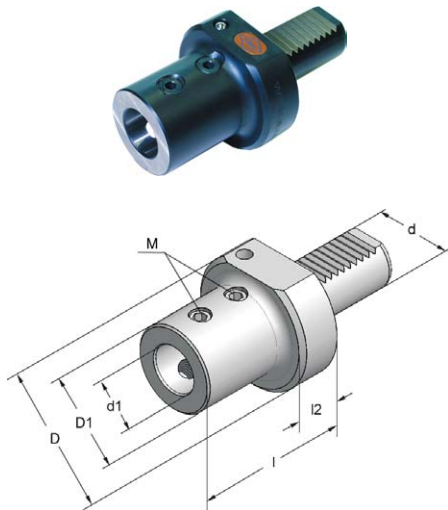
Art.-Nr.	Typ	d	b	h	l
20.050.001	A1-20x 60	20	68	60	60
25.075.001	A1-25x 75	25	100	60	75
30.085.001	A1-30x 85	30	130	76	85
40.100.001	A1-40x100	40	151	96	100
50.125.001	A1-50x125	50	160	120	125
60.160.001	A1-60x160	60	165	125	160

Werkzeughalter-Rohling Form A2
Toolholder blank form A2



Art.-Nr.	Typ	d	D	l
20.070.010	A2-20x 70	20	49	70
25.080.010	A2-25x 80	25	58	80
30.150.010	A2-30x150	30	68	150
40.180.010	A2-40x180	40	83	180
40.400.010	A2-40x400	40	83	400
50.210.010	A2-50x210	50	98	210
60.240.010	A2-60x240	60	123	240

Bohrerhalter für U-Bohrer Form E1 Holder for T-max U-drills form E1



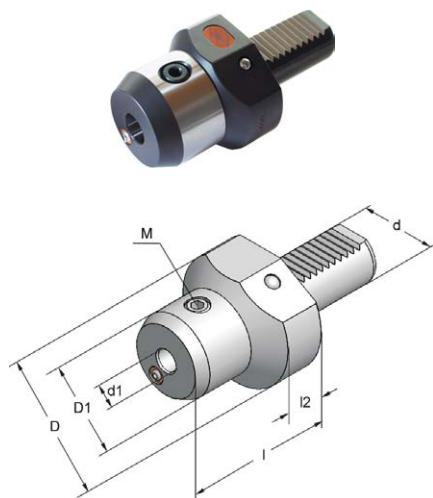
l1 Bohrungstiefe l1 drill depth

Art.-Nr.	Typ	d	d1	D	D1	l	l1	l2	Art.Nr. M
20.16.220	E1-20x16x 60	20	16	50	34	60	54	18	114100
20.20.220	E1-20x20x 60	20	20	50	40	60	54	18	114100
20.25.220	E1-20x25x 66	20	25	50	45	66	59	18	122100
25.16.220	E1-25x16x 60	25	16	58	34	60	54	18	114100
25.20.220	E1-25x20x 60	25	20	58	40	60	54	18	114100
25.25.220	E1-25x25x 66	25	25	58	45	66	59	18	122100
30.16.220	E1-30x16x 66	30	16	68	34	66	54	22	114100
30.20.220	E1-30x20x 66	30	20	68	40	66	54	22	114100
30.25.220	E1-30x25x 71	30	25	68	45	71	59	22	122100
30.32.220	E1-30x32x 75	30	32	68	52	75	63	22	122100
30.40.220	E1-30x40x 80	30	40	68	60	80	73	22	144100
40.16.220	E1-40x16x 66	40	16	83	34	66	54	22	114100
40.20.220	E1-40x20x 66	40	20	83	40	66	54	22	114100
40.25.220	E1-40x25x 71	40	25	83	45	71	59	22	122100
40.32.220	E1-40x32x 75	40	32	83	52	75	63	22	122100
40.40.220	E1-40x40x 85	40	40	83	60	85	73	22	144100
40.50.220	E1-40x50x 95	40	50	83	70	95	83	22	144100
50.20.220	E1-50x20x 66	50	20	98	40	66	54	30	114100
50.25.220	E1-50x25x 71	50	25	98	45	71	59	30	122100
50.32.220	E1-50x32x 75	50	32	98	52	75	63	30	122100
50.40.220	E1-50x40x 85	50	40	98	60	85	73	30	144100
50.50.220	E1-50x50x100	50	50	98	70	95	83	30	144100
60.20.220	E1-60x20x 66	60	20	123	40	66	54	30	114100
60.25.220	E1-60x25x 71	60	25	123	45	71	59	30	122100
60.32.220	E1-60x32x 75	60	32	123	52	75	63	30	122100
60.40.220	E1-60x40x 85	60	40	123	60	85	73	30	144100
60.50.220	E1-60x50x 95	60	50	123	70	95	83	30	144100

Bohrerhalter Whistle-Notch E1 Drill holder Whistle-Notch E1

Kühlmittelezufuhr intern + extern
Coolant supply internal + external

DIN 1835 Form E



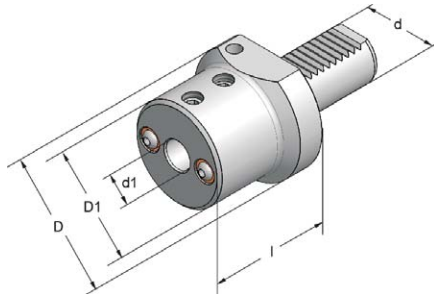
l1 Bohrungstiefe l1 drill depth

Art.-Nr.	Typ	d	d1	D	D1	l	l1	l2	Art.Nr. M
20.06.221	E1-20x06Ex60	20	6	50	35	60	36	18	147100
20.08.221	E1-20x08Ex60	20	8	50	35	60	36	18	148100
20.10.221	E1-20x10Ex60	20	10	50	35	60	40	18	149100
20.12.221	E1-20x12Ex60	20	12	50	44	60	45	18	150100
20.14.221	E1-20x14Ex60	20	14	50	44	60	45	18	150100
20.16.221	E1-20x16Ex60	20	16	50	50	60	48	-	151100
20.18.221	E1-20x18Ex60	20	18	50	50	60	48	-	151100
20.20.221	E1-20x20Ex60	20	20	50	50	60	50	-	152100
30.06.221	E1-30x06Ex67	30	6	68	35	67	36	22	147100
30.08.221	E1-30x08Ex67	30	8	68	35	67	36	22	148100
30.10.221	E1-30x10Ex67	30	10	68	35	67	40	22	149100
30.12.221	E1-30x12Ex67	30	12	68	44	67	45	22	150100
30.14.221	E1-30x14Ex67	30	14	68	44	67	45	22	150100
30.16.221	E1-30x16Ex67	30	16	68	52	67	48	22	151100
30.18.221	E1-30x18Ex67	30	18	68	52	67	48	22	151100
30.20.221	E1-30x20Ex67	30	20	68	52	67	50	22	152100
40.06.221	E1-40x06Ex67	40	6	83	35	67	36	22	147100
40.08.221	E1-40x08Ex67	40	8	83	35	67	36	22	148100
40.10.221	E1-40x10Ex67	40	10	83	35	67	40	22	149100
40.12.221	E1-40x12Ex67	40	12	83	44	67	45	22	150100
40.14.221	E1-40x14Ex67	40	14	83	44	67	45	22	150100
40.16.221	E1-40x16Ex67	40	16	83	52	67	48	22	151100
40.18.221	E1-40x18Ex67	40	18	83	52	67	48	22	151100
40.20.221	E1-40x20Ex67	40	20	83	52	67	50	22	152100

Bohrstangenhalter Form E2

Boring bar holder form E2

Kühlmittelzufuhr intern + extern
Coolant supply internal + external

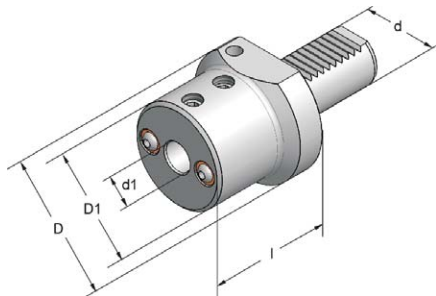


l1 Bohrungstiefe l1 drill depth

Art.-Nr.	Typ	d	d1	D	D1	l	l1
16.06.290	E2-16x06x44	16	6	40	40	44	39
16.08.290	E2-16x08x44	16	8	40	40	44	39
16.10.290	E2-16x10x44	16	10	40	40	44	39
16.12.290	E2-16x12x44	16	12	40	40	44	39
16.16.290	E2-16x16x44	16	16	40	40	44	39
20.06.290	E2-20x06x50	20	6	50	40	50	84
20.08.290	E2-20x08x50	20	8	50	40	50	84
20.10.290	E2-20x10x50	20	10	50	40	50	45
20.12.290	E2-20x12x50	20	12	50	40	50	45
20.16.290	E2-20x16x50	20	16	50	44	50	45
20.20.290	E2-20x20x50	20	20	50	49	50	45
20.25.290	E2-20x25x50	20	25	54	54	50	45
25.06.290	E2-25x06x50	25	6	58	40	50	84
25.08.290	E2-25x08x50	25	8	58	40	50	84
25.10.290	E2-25x10x50	25	10	58	40	50	84
25.12.290	E2-25x12x50	25	12	58	40	50	45
25.16.290	E2-25x16x50	25	16	58	40	50	45
25.20.290	E2-25x20x50	25	20	58	58	50	45
25.25.290	E2-25x25x50	25	25	58	58	50	45
30.06.290	E2-30x06x60	30	6	68	50	60	106
30.08.290	E2-30x08x60	30	8	68	50	60	106
30.10.290	E2-30x10x60	30	10	68	50	60	106
30.12.290	E2-30x12x60	30	12	68	50	60	106
30.16.290	E2-30x16x60	30	16	68	55	60	106
30.20.290	E2-30x20x60	30	20	68	55	60	55
30.25.290	E2-30x25x60	30	25	68	55	60	55
30.30.290	E2-30x30x60	30	30	68	68	60	57
30.32.290	E2-30x32x60	30	32	68	68	60	57
30.40.290	E2-30x40x60	30	40	74	74	75	66
40.08.290	E2-40x08x75	40	8	83	50	75	130
40.10.290	E2-40x10x75	40	10	83	50	75	130
40.12.290	E2-40x12x75	40	12	83	50	75	130
40.16.290	E2-40x16x75	40	16	83	55	75	130
40.20.290	E2-40x20x75	40	20	83	55	75	130
40.25.290	E2-40x25x75	40	25	83	60	75	66
40.30.290	E2-40x30x75	40	30	83	72	75	66
40.32.290	E2-40x32x75	40	32	83	72	75	66
40.40.290	E2-40x40x75	40	40	83	83	85	73
50.12.290	E2-50x12x90	50	12	98	56	90	156
50.16.290	E2-50x16x90	50	16	98	56	90	156
50.20.290	E2-50x20x90	50	20	98	56	90	156
50.25.290	E2-50x25x90	50	25	98	65	90	156
50.30.290	E2-50x30x90	50	30	98	68	90	110
50.32.290	E2-50x32x90	50	32	98	68	90	110
50.40.290	E2-50x40x90	50	40	98	80	90	81
50.50.290	E2-50x50x90	50	50	98	90	95	83

Bohrstangenhalter Form E2
Boring bar holder form E2

Kühlmittelzufuhr intern + extern
Coolant supply internal + external

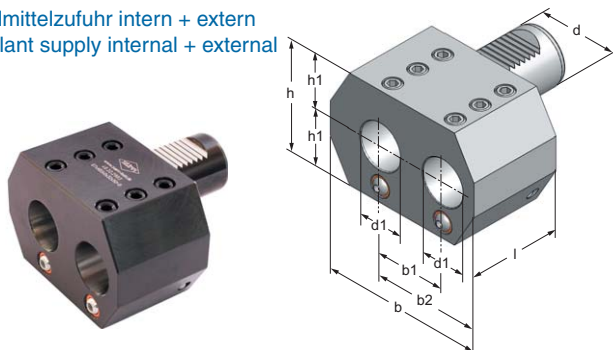


l1 Bohrungstiefe l1 drill depth

Art.-Nr.	Typ	d	d1	D	D1	l	l1
60.12.290	E2-60x12x90	60	12	123	52	90	174
60.16.290	E2-60x16x90	60	16	123	60	90	174
60.20.290	E2-60x20x90	60	20	123	60	90	174
60.25.290	E2-60x25x90	60	25	123	65	90	174
60.30.290	E2-60x30x90	60	30	123	70	90	172
60.32.290	E2-60x32x90	60	32	123	70	90	172
60.40.290	E2-60x40x90	60	40	123	80	90	110
60.50.290	E2-60x50x90	60	50	123	90	100	88
60.60.290	E2-60x60x90	60	60	123	100	100	88
INCH							
329206	E2-30x3/8"x60	30	3/8"	68	50	60	106
330206	E2-30x1/2"x60	30	1/2"	68	50	60	106
331206	E2-30x5/8"x60	30	5/8"	68	55	60	106
332206	E2-30x3/4"x60	30	3/4"	68	55	60	55
333206	E2-30x1" x60	30	1"	68	55	60	55
334206	E2-30x1 1/4"x65	30	1 1/4"	68	68	65	57
335206	E2-30x1 1/2"x75	30	1 1/2"	74	74	75	65
429206	E2-40x3/8"x75	40	3/8"	83	50	75	130
430206	E2-40x1/2"x75	40	1/2"	83	50	75	130
431206	E2-40x5/8"x75	40	5/8"	83	55	75	130
432206	E2-40x3/4"x75	40	3/4"	83	55	75	130
433206	E2-40x1" x75	40	1"	83	60	75	66
434206	E2-40x1 1/4"x75	40	1 1/4"	83	72	75	66
435206	E2-40x1 1/2"x85	40	1 1/2"	83	72	85	73
436206	E2-40x1 3/4"x85	40	1 3/4"	83	83	85	73
530206	E2-50x1/2"x90	50	1/2"	98	56	90	156
531206	E2-50x5/8"x90	50	5/8"	98	56	90	156
532206	E2-50x3/4"x90	50	3/4"	98	56	90	156
533206	E2-50x1" x90	50	1"	98	65	90	156
534206	E2-50x1 1/4"x90	50	1 1/4"	98	68	90	110
535206	E2-50x1 1/2"x90	50	1 1/2"	98	68	90	110
536206	E2-50x1 3/4"x90	50	1 3/4"	98	80	90	81
537206	E2-50x2" x95	50	2"	98	90	95	83

Bohrstangenhalter Form E7 / E8
Boring bar holder form E7 / E8

Kühlmittelzufuhr intern + extern
Coolant supply internal + external



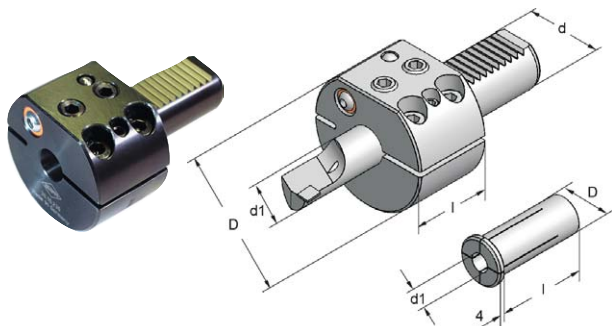
Art.-Nr.	Typ	d	d1	b	b1	b2	h	l
30.25.2903	E7+E8-30x25x56	30	25	95	45	65	64	56
40.32.2903	E7+E8-40x32x66	40	32	115	50	75	78	66
50.50.2903	E7+E8-50x50x90	50	50	154	70	105	98	90

VDI-Schaft mit Doppelverzahnung
VDI-Shank with double toothting

Bohrstangenhalter geschlitzt

Boring bar holder slotted

Kühlmittelzufuhr intern + extern
Coolant supply internal + external

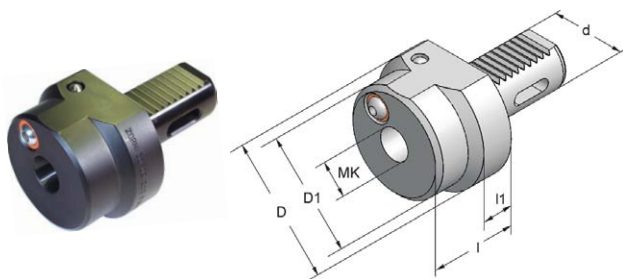


l1 Bohrungstiefe l1 drill depth

Art.-Nr.	Typ	d	d1	D	l	l1
30.16.230	E2-30x16x42	30	16	68	42	88
30.20.230	E2-30x20x42	30	20	68	42	88
40.16.230	E2-40x16x46	40	16	83	46	100
40.20.230	E2-40x20x46	40	20	83	46	100
40.25.230	E2-40x25x46	40	25	83	46	100
40.32.230	E2-40x32x90	40	32	83	90	83
50.20.230	E2-50x20x55	50	20	98	55	125
50.25.230	E2-50x25x55	50	25	98	55	125
50.32.230	E2-50x32x55	50	32	98	55	125
60.25.230	E2-60x25x60	60	25	123	60	145
60.32.230	E2-60x32x60	60	32	123	60	145
60.40.230	E2-60x40x60	60	40	123	60	145
203201	Reduzierung		8	20	51	
203202	Reduzierung		10	20	51	
203203	Reduzierung		12	20	51	
203205	Reduzierung		16	20	51	

Bohrerhalter für MK-Werkzeuge Form F1

Holder for M.T. Shanks form F1



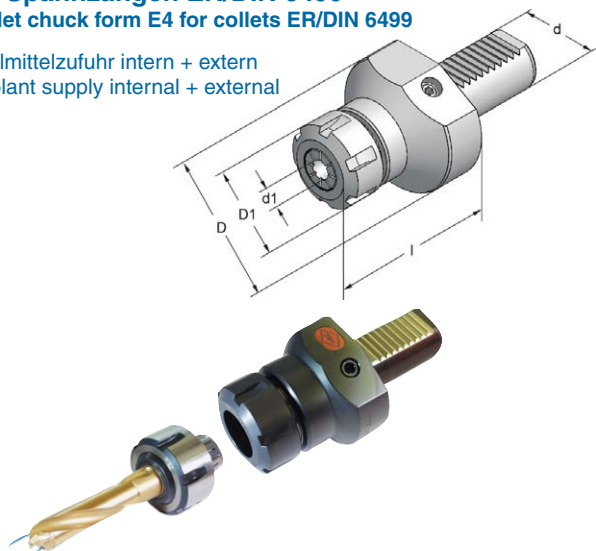
Art.-Nr.	Typ	d	MK	D	D1	l	l1
20.01.200	F1-20xMK1x22	20	1	50	-	22	-
30.01.200	F1-30xMK1x25	30	1	68	52	25	25
30.02.200	F1-30xMK2x42	30	2	68	58	42	25
30.03.200	F1-30xMK3x66	30	3	68	68	66	-
40.01.200	F1-40xMK1x25	40	1	83	-	25	-
40.02.200	F1-40xMK2x34	40	2	83	58	34	25
40.03.200	F1-40xMK3x58	40	3	83	64	58	25
40.04.200	F1-40xMK4x86	40	4	83	72	86	25
50.02.200	F1-50xMK2x25	50	2	98	-	25	-
50.03.200	F1-50xMK3x42	50	3	98	64	42	25
50.04.200	F1-50xMK4x71	50	4	98	72	71	25
60.02.200	F1-60xMK2x27	60	2	123	-	27	-
60.03.200	F1-60xMK3x27	60	3	123	-	27	-
60.04.200	F1-60xMK4x55	60	4	123	72	55	25
60.05.200	F1-60xMK5x94	60	5	123	90	94	30

Spannzangenhalter Form E4

für Spannzangen ER/DIN 6499

Collet chuck form E4 for collets ER/DIN 6499

Kühlmittelzufuhr intern + extern
Coolant supply internal + external

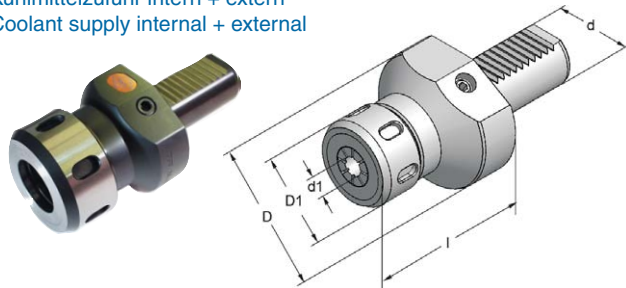


Spannmuttern GMGC und Dichtscheiben siehe Seite 35
Locknuts GMGC and sealing rings see page 35

Art.-Nr.	Typ	d	d1	D	D1	l	ER/ESX
16.10.330	E4-16x10x50	16	1-10	40	28	50	16
16.16.330	E4-16x16x50	16	1-16	40	42	50	25
20.10.330	E4-20x10x55	20	1-10	50	28	55	16
20.16.330	E4-20x16x55	20	1-16	50	42	55	25
20.20.330	E4-20x20x55	20	2-20	50	50	55	32
25.16.330	E4-25x16x55	25	1-16	58	42	55	25
25.20.330	E4-25x20x55	25	2-20	58	50	55	32
30.16.330	E4-30x16x75	30	1-16	68	42	75	25
30.16.331	E4-30x16x55	30	1-16	68	42	55	25
30.20.330	E4-30x20x75	30	2-20	68	50	75	32
30.20.331	E4-30x20x55	30	2-20	68	50	55	32
30.26.330	E4-30x26x75	30	3-30	68	63	75	40
40.16.330	E4-40x16x75	40	1-16	83	42	75	25
40.20.330	E4-40x20x75	40	2-20	83	50	75	32
40.26.330	E4-40x26x75	40	3-30	83	63	75	40
50.20.330	E4-50x20x90	50	2-20	98	50	90	32
50.26.330	E4-50x26x90	50	3-30	98	63	90	40
50.34.330	E4-50x34x90	50	6-34	98	78	90	50
60.26.330	E4-60x26x90	60	3-30	123	63	90	40
60.34.330	E4-60x34x99	60	6-34	123	78	99	50

Spannzangenhalter E3 für Spannzangen DIN 6388 Collet chuck E3 for collets DIN 6388

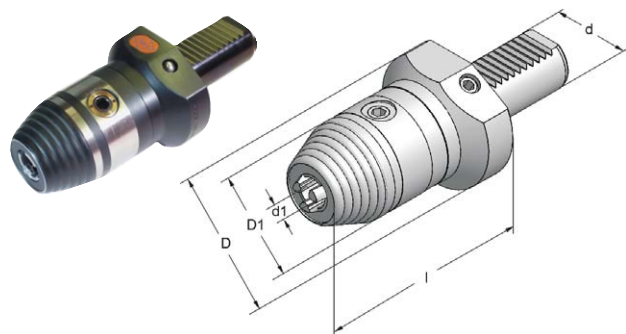
Kühlmitteleinzufuhr intern + extern
Coolant supply internal + external



Art.-Nr.	Typ	d	d1	D	D1	l
20.16.320	E3-20x16x55	20	2-16	50	40	55
30.25.320	E3-30x25x75	30	2-25	68	60	75
40.25.320	E3-40x25x75	40	2-25	83	60	75
40.32.320	E3-40x32x90	40	4-32	83	72	90
50.32.320	E3-50x32x90	50	4-32	98	72	90
60.32.320	E3-60x32x90	60	4-32	123	72	90

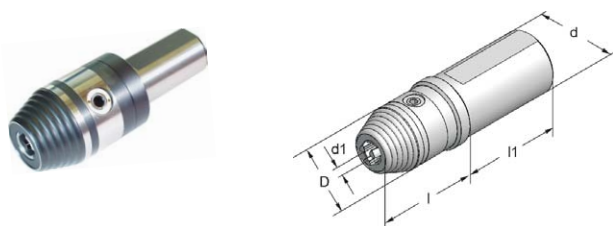
Spannmuttern GMGC und Dichtscheiben siehe Seite 35
Locknuts GMGC and sealing rings see page 35

Schnellspann-Bohrfutter für Links- und Rechtslauf Quick locking drill chuck for left and right rotation



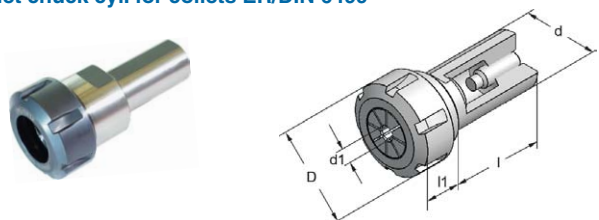
Art.-Nr.	Typ	d	d1	D	D1	l
16.06.08	16x1-8x68	16	1-8	44	36	68
20.06.08	20x1-8x68	20	1-8	50	36	68
25.06.08	25x1-8x68	25	1-8	58	36	68
30.06.13	30x1-13x96	30	1-13	68	50	96
40.06.13	40x1-13x96	40	1-13	83	50	96
40.06.16	40x3-16x96	40	3-16	83	57	96
50.06.16	50x3-16x96	50	3-16	98	57	96
60.06.16	60x3-16x96	60	3-16	123	57	96

Schnellspann-Bohrfutter mit Zylinderschaft Quick locking drill chuck cyl. shank



Art.-Nr.	Typ	d	d1	D1	l	l1
25.08.13	zyl.25x1-13x74	25	1-13	50	74	55
30.08.13	zyl.30x1-13x74	30	1-13	50	74	55
32.08.13	zyl.32x1-13x74	32	1-13	50	74	55
40.08.13	zyl.40x1-13x74	40	1-13	50	74	68
40.08.16	zyl.40x3-16x74	40	3-16	57	74	68
50.08.13	zyl.50x1-13x74	50	1-13	50	74	88
50.08.16	zyl.50x3-16x74	50	3-16	57	74	88

Spannzangenfutter zyl. für Spannzangen ER/DIN 6499 Collet chuck cyl. for collets ER/DIN 6499

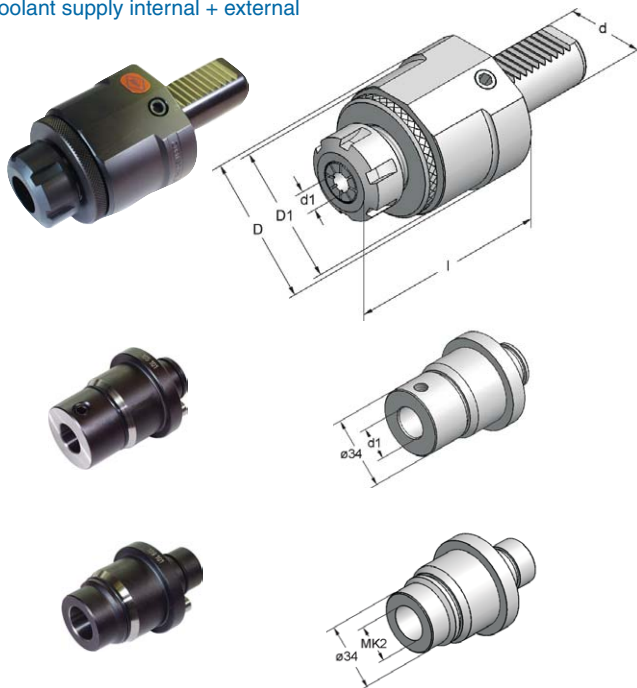


Art.-Nr.	Typ	d	d1	D	l	l1
100102	ø08x 56xER11M	8	1- 7	16	56	26
101102	ø12x 80xER16M	12	1-10	22	80	37
102102	ø16x150xER16M	16	1-10	22	150	30
103102	ø19,05x56xER25	19,05	2-16	42	56	46
104102	ø20 x50xER25	20	2-16	42	50	46
105102	ø20 x100xER25	20	2-16	42	100	46
106102	ø25 x 50xER25	25	2-16	42	50	40
107102	ø25 x150xER25	25	2-16	42	150	40
108102	ø25,4x 50xER25	25,40	2-16	42	50	40
109102	ø25,4x 50xER32	25,40	3-20	50	50	51
110102	ø31,75x50xER25	31,75	2-16	42	50	30
111102	ø31,75x50xER32	31,75	3-20	50	50	35
112102	ø32 x 56xER25	32	2-16	42	56	36
113102	ø32 x 56xER32	32	3-20	50	56	35
114102	ø32 x150xER25	32	2-16	50	150	30
115102	ø32 x150xER32	32	3-20	50	150	35
116102	ø32 x 56xER40	32	3-30	63	56	60
117102	ø40 x 66xER32	40	3-20	50	66	33
118102	ø40 x 66xER40	40	3-30	63	66	55

Pendelhalter, achsparallel ausgleichend einstellbar mit auswechselbaren Einsätzen

Floating holder, axially parallel compensating, adjustable with inserts

Kühlmittelzufuhr intern + extern
Coolant supply internal + external



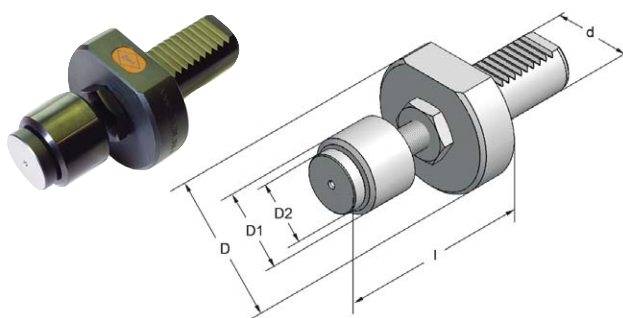
Art.-Nr.	Typ	d	D	D1	l
16.70.350	16xER16x67	16	50	50	67
20.70.350	20xER16x65	20	50	50	65
25.70.350	25xER16x65	25	58	58	65
30.70.350	ohne Einsatz	30	68	64	75
40.70.350	ohne Einsatz	40	83	64	75
50.70.350	ohne Einsatz	50	98	64	75

Abbildung zeigt: Ausführung montiert mit Einsatz 101101 ER25
Picture shows: this type is mounted with insert 101101 ER25
VDI16+20+25 incl. Einsatz ER16/426E
VDI16+20+25 incl. insert ER16/426E

Art.-Nr.	Typ	d1
101101	Einsatz ER25	1-16
102101	Einsatz DA180	2-20
103101	Einsatz B-12	12
104101	Einsatz B-15	15
105101	Einsatz B-16	16
106101	Einsatz B-1818	
107101	Einsatz B-20	20
108101	Einsatz B-25	25
109101	Einsatz MK2	MK2

Mitlaufender Anschlag längseinstellbar

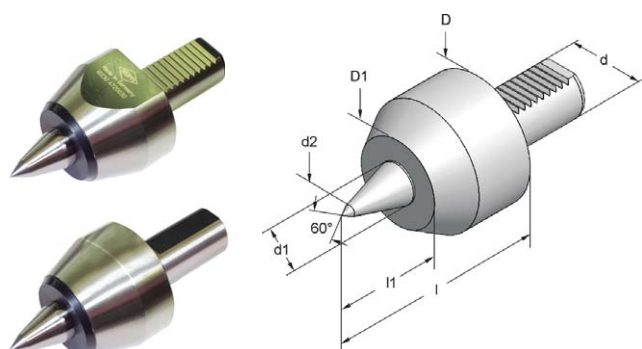
Rotary stop with interchangeable heads



Art.-Nr.	Typ	d	D	D1	D2	l
20.30.355	VDI 20	20	50	38	25	55
25.30.355	VDI 25	25	58	38	25	55
30.38.355	VDI 30	30	68	38	25	65-100
40.60.355	VDI 40	40	83	60	40	80-150
50.60.355	VDI 50	50	98	60	40	80-150

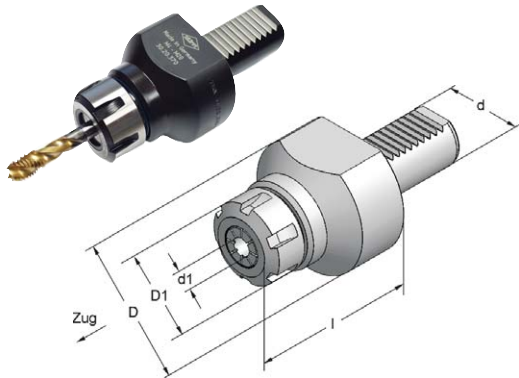
Mitlaufende Zentrierspitze gefedert

Driver centering point spring mounted



Art.-Nr.	Typ	d	d1	d2	D	D1	l	l1	
4720020	VDI20x60°x 73	20	18	6	50	41	73	42	
4720025	VDI25x60°x 73	25	18	8	58	41	73	42	
4720030	VDI30x60°x 88	30	22	11	68	47	88	51	
4720040	VDI40x60°x111	40	32	16	83	56	111	63	
25.10.6000	zyl.25x60°x	86	25	22	11	54	44	86	36

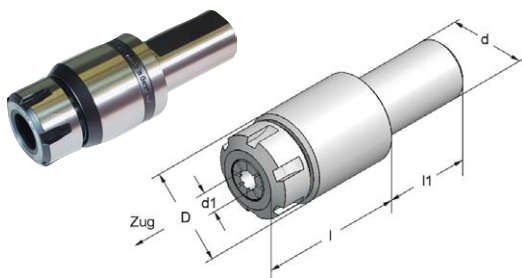
Gewindeschneidfutter mit elastischem Längenausgleich auf Zug mit innerer Kühlmittelzufuhr
Auto tapper with flexible position differential with internal coolant



Art.-Nr.	Typ	d	d1	l	Zug	D	D1
16.12.370	16xER16x60	16	1-10 / M3-M12	60	12	40	28
20.12.370	20xER16x60	20	1-10 / M3-M12	60	12	50	28
20.20.370	20xER25x85	20	2-16 / M4-M20	85	15	50	42
25.12.370	25xER16x60	25	1-10 / M3-M12	60	12	58	28
25.20.370	25xER25x79	25	2-16 / M4-M20	79	15	58	42
30.20.370	30xER25x75	30	2-16 / M4-M20	75	15	68	42
30.20.370*	30xER32x92	30	3-20 / M4-M24	92	15	68	50
40.20.370	40xER25x75	40	2-16 / M4-M20	75	15	83	42
40.20.370*	40xER32x92	40	3-20 / M4-M24	92	15	83	50
40.33.370	40xER40x98	40	4-30 / M8-M33	98	20	83	63
50.20.370	50xER25x75	50	2-16 / M4-M20	75	15	98	42
50.33.370	50xER40x98	50	4-30 / M8-M33	98	20	98	63
60.33.370	60xER40x75	60	4-30 / M8-M33	75	20	125	63

mit innerer Kühlmittelzufuhr
with internal coolant

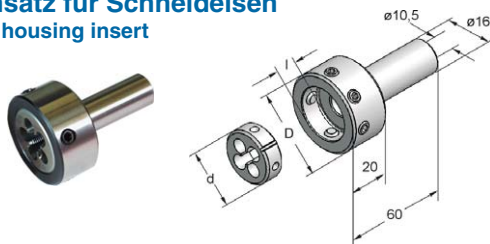
Gewindeschneidfutter mit zylindrischer Aufnahme
Auto tapper with cylindric shank



Art.-Nr.	Typ	d	d1	l	Zug	D	l1
16.12.372	16xER16x60	16	1-10 / M3-M12	60	12	32	40
20.12.372	20xER16x60	20	1-10 / M3-M12	60	12	32	48
20.20.372	20xER25x75	20	2-16 / M4-M20	75	15	45	48
25.20.372	25xER25x75	25	2-16 / M4-M20	75	15	45	48
30.20.372	30xER25x75	30	2-16 / M4-M20	75	15	45	55
32.20.372	32xER25x75	32	2-16 / M4-M20	75	15	49	58
40.20.372	40xER25x60	40	2-16 / M4-M20	60	15	49	68
25.20.375	25xER25x75	25	2-16 / M4-M20	75	15	53	54
32.20.375	32xER25x75	32	2-16 / M4-M20	75	15	53	54

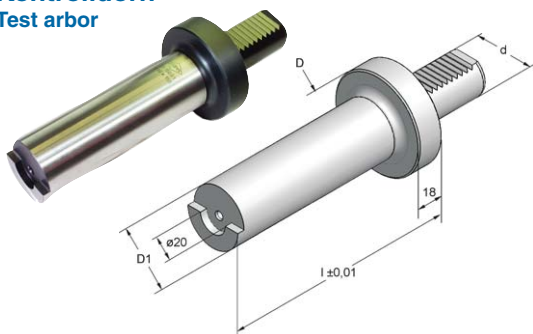
d1 1-10 Typ ER16 426E
d1 2-16 Typ ER25 430E
d1 3-20 Typ ER32 470E
d1 4-30 Typ ER40 472E
Typ .375 mit innerer Kühlmittelzufuhr
Typ .375 with internal coolant

Einsatz für Schneideisen
Die housing insert



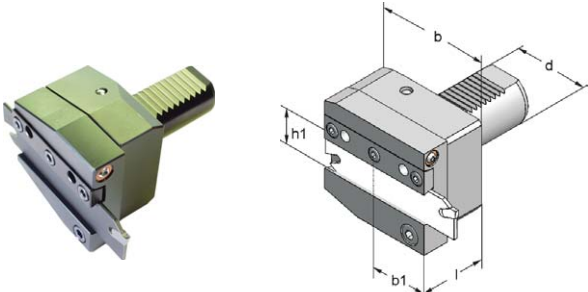
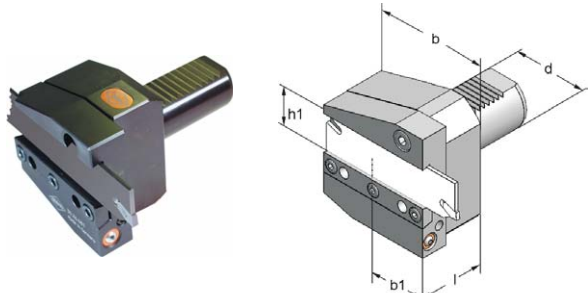
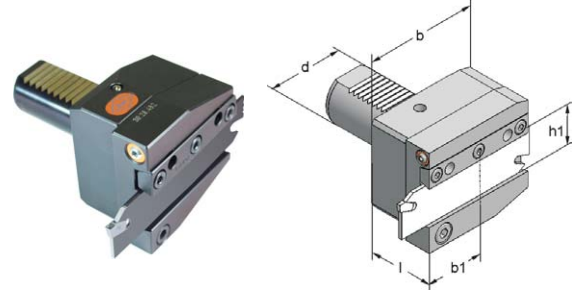
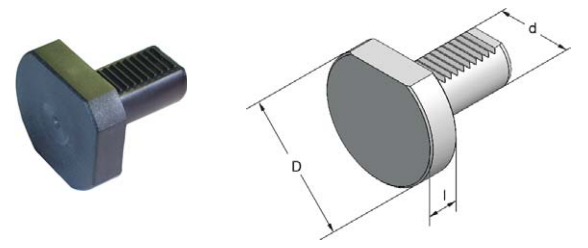
Art.-Nr.	Typ	d	D	l
153101	ø16x16	16	28	6,0
154101	ø16x20	20	32	7,5
155101	ø16x25	25	37	9,5
156101	ø16x30	30	42	11,0

Kontrolldorn
Test arbor

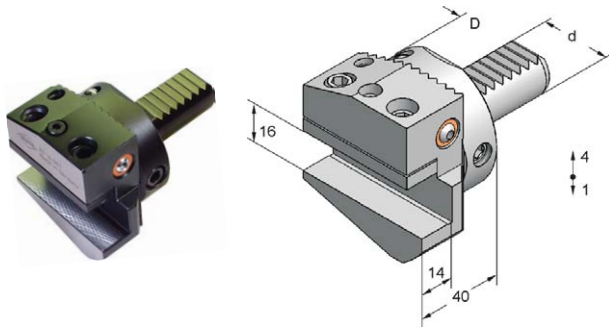


Art.-Nr.	Typ	d	D	D1	l
16.100.01	ø16x40x100	16	40	40	100
20.100.01	ø20x40x100	20	50	40	100
25.125.01	ø25x40x125	25	58	40	125
30.150.01	ø30x40x150	30	68	40	150
40.150.01	ø40x40x150	40	83	40	150
50.200.01	ø50x50x200	50	98	50	200
60.200.01	ø60x50x200	60	125	50	200

in Holzetui / in wooden case

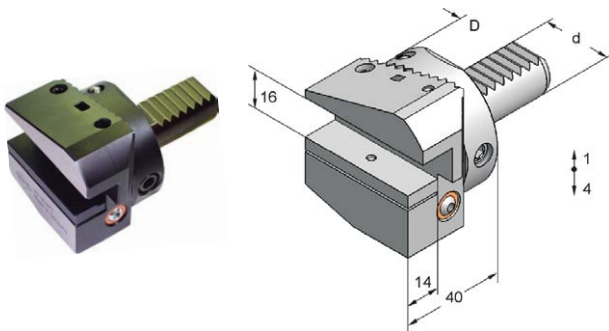
<p>Abstechmeisselhalter, höhenverstellbar ±0,5mm rechts Tool holder for cut off tools adjustable in height ±0,5mm right</p> 	Art.-Nr.	Typ	d	b	b1	l	h1	
	30.26.480	30x26x50-r	30	65	35	50	26	
	30.32.480	30x32x50-r	30	65	35	50	32	
	40.26.480	40x26x50-r	40	85	42,5	50	26	
	40.32.480	40x32x50-r	40	85	42,5	50	32	
	50.26.480	50x26x50-r	50	100	50	50	26	
	50.32.480	50x32x50-r	50	100	50	50	32	
	60.32.480	60x32x60-r	60	100	62,5	60	32	
<p>Abstechmeisselhalter, höhenverstellbar ±0,5mm Überkopf rechts Tool holder for cut off tools adjustable in height ±0,5mm overhead right</p> 	Art.-Nr.	Typ	d	b	b1	l	h1	
	30.26.481	30x26x50-rük	30	65	35	50	26	
	30.32.481	30x32x50-rük	30	65	35	50	32	
	40.32.481	40x32x50-rük	40	85	42,5	50	32	
	50.32.481	50x32x50-rük	50	100	50	50	32	
<p>Abstechmeisselhalter, höhenverstellbar ±0,5mm links Tool holder for cut off tools adjustable in height ±0,5mm left</p> 	Art.-Nr.	Typ	d	b	b1	l	h1	
	30.26.482	30x26x50-l	30	65	35	50	26	
	30.32.482	30x32x50-l	30	65	35	50	32	
	40.26.482	40x26x50-l	40	85	42,5	50	26	
	40.32.482	40x32x50-l	40	85	42,5	50	32	
<p>Schutzstopfen Form Z2 Blind tooling bore form Z2</p> 	Art.-Nr.	Typ	d	D	l			
	16.00.500	Z2-16	16	40	16			
	20.00.500	Z2-20	20	50	16			
	25.00.500	Z2-25	25	58	16			
	30.00.500	Z2-30	30	68	20			
	40.00.500	Z2-40	40	83	20			
	50.00.500	Z2-50	50	98	20			
	60.00.500	Z2-60	60	123	20			
	30.00.500-S	Z2-30 Stahl	30	68	20			
	40.00.500-S	Z2-40 Stahl	40	83	20			
	50.00.500-S	Z2-50 Stahl	50	98	20			
	60.00.500-S	Z2-60 Stahl	60	123	20			

Radial-Werkzeughalter Form B1 höhenverstellbar Radial toolholder Form B1 adjustable in height



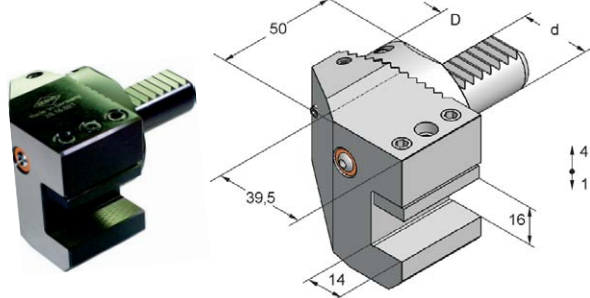
Art.-Nr.	Typ	d	D
20.16.061	B1-20x16x40	20	50
25.16.061	B1-25x16x40	25	58
30.16.061	B1-30x16x40	30	68

Radial-Werkzeughalter Form B3 höhenverstellbar Radial toolholder Form B3 adjustable in height



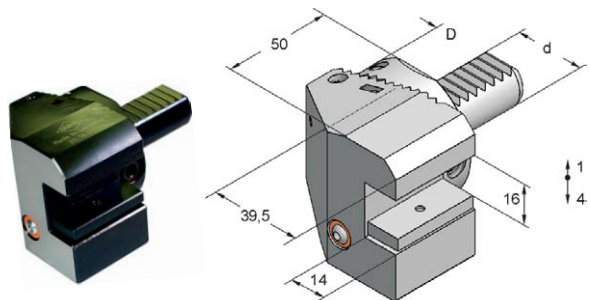
Art.-Nr.	Typ	d	D
20.16.071	B3-20x16x40	20	50
25.16.071	B3-25x16x40	25	58
30.16.071	B3-30x16x40	30	68

Axial-Werkzeughalter Form C1 höhenverstellbar Axial toolholder Form C1 adjustable in height



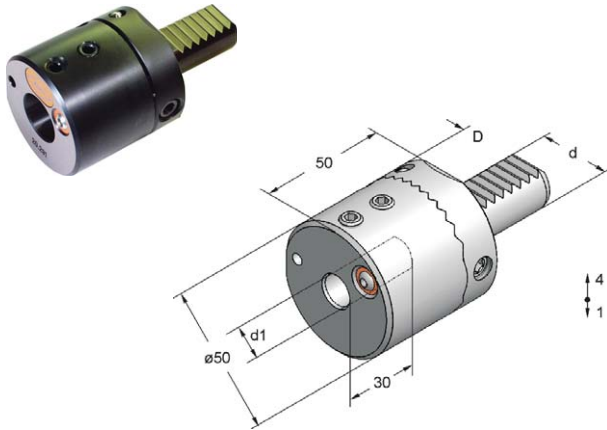
Art.-Nr.	Typ	d	D
20.16.021	C1-20x16x50	20	50
25.16.021	C1-25x16x50	25	58
30.16.021	C1-30x16x50	30	68

Axial-Werkzeughalter Form C3 höhenverstellbar Axial toolholder Form C3 adjustable in height



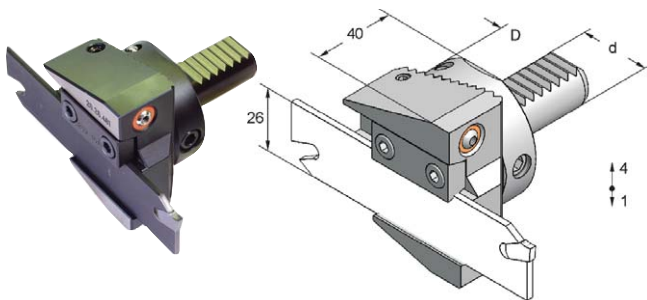
Art.-Nr.	Typ	d	D
20.16.031	C3-20x16x50	20	50
25.16.031	C3-25x16x50	25	58
30.16.031	C3-30x16x50	30	68

Bohrstangenhalter Form E2 höhenverstellbar Boring bar holder Form E2 adjustable in height



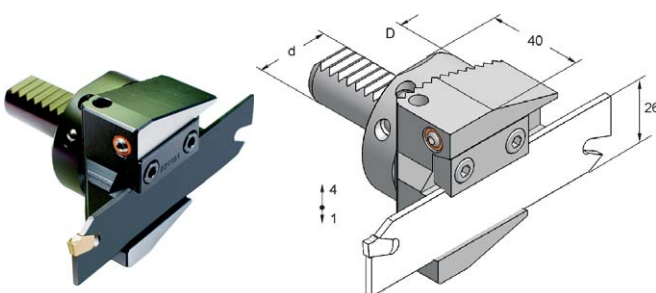
Art.-Nr.	Typ	d	d1	D
20.08.291	E2-20x08x50	20	8	50
20.10.291	E2-20x10x50	20	10	50
20.12.291	E2-20x12x50	20	12	50
20.16.291	E2-20x16x50	20	16	50
20.20.291	E2-20x20x50	20	20	50
25.08.291	E2-25x08x50	25	8	58
25.10.291	E2-25x10x50	25	10	58
25.12.291	E2-25x12x50	25	12	58
25.16.291	E2-25x16x50	25	16	58
25.20.291	E2-25x20x50	25	20	58
30.08.291	E2-30x08x50	30	8	68
30.10.291	E2-30x10x50	30	10	68
30.12.291	E2-30x12x50	30	12	68
30.16.291	E2-30x16x50	30	16	68
30.20.291	E2-30x20x50	30	20	68

Abstechmeisselhalter höhenverstellbar rechts Toolholder for cut off tools adjustable height right



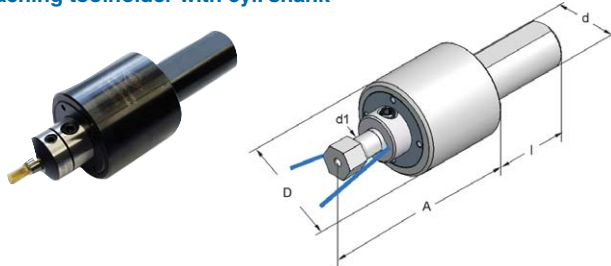
Art.-Nr.	Typ	d	D
20.26.481	20x26x40-r	20	50
25.26.481	25x26x40-r	25	58

Abstechmeisselhalter höhenverstellbar links Toolholder for cut off tools adjustable height left

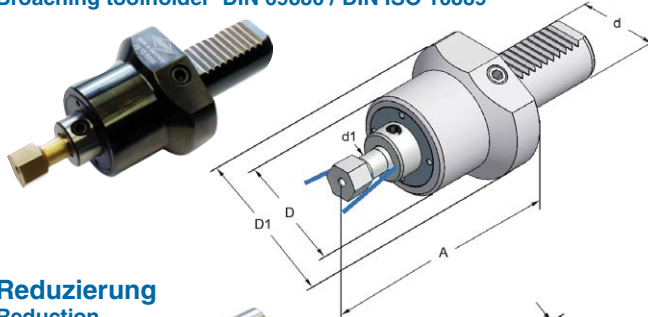


Art.-Nr.	Typ	d	D
20.26.482	20x26x40-l	20	50
25.26.482	25x26x40-l	25	58

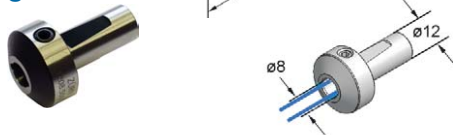
Räumwerkzeughalter mit Zylinderschaft Broaching toolholder with cyl. shank



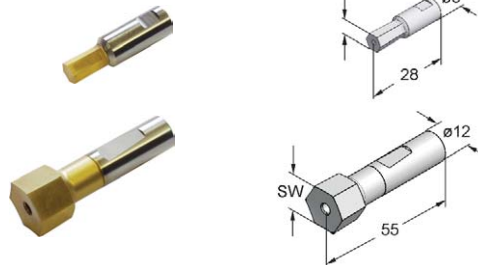
Räumwerkzeughalter DIN 69880 / DIN ISO 10889 Broaching toolholder DIN 69880 / DIN ISO 10889



Reduzierung Reduction



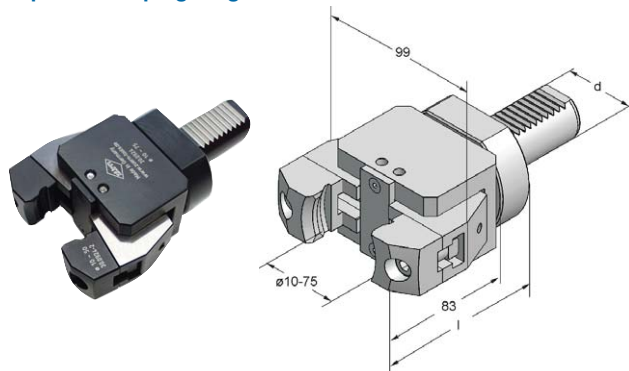
Räumstempel SW Hexagon-broaching cutter



Räumstempel TORX Broaching cutter TORX



Stangengreifer Spannbereich 10 - 75mm Bar puller clamping range 10 - 75mm



Art.-Nr.	Typ	d	d1	l	D	A
16.08.5010	zyl. 16	16	8	38	40	65
20.08.5010	zyl. 20	20	8	38	40	65
22.08.5010	zyl. 22	22	8	48	40	65
25.08.5010	zyl. 25	25	8	48	40	65
25.12.5010	zyl. 25	25	12	55	50	88

1905.08.5010	zyl. 3/4"	19,05	8	38	40	65
2540.12.5010	zyl. 1"	25,4	12	48	50	88
3175.12.5010	zyl. 1 1/4"	31,75	12	48	50	88

Art.-Nr.	Typ	d	d1	D	D1	A
16.08.5000	VDI 16	16	8	40	44	70
20.08.5000	VDI 20	20	8	40	50	70
25.08.5000	VDI 25	25	8	40	58	70
30.12.5000	VDI 30	30	12	50	68	96
40.12.5000	VDI 40	40	12	50	83	96

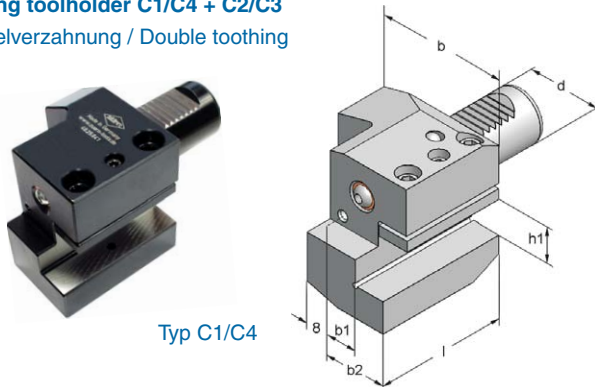
Art.-Nr.	Reduzierung
1208.5000	Reduzierung

Art.-Nr.	SW	d	Art.-Nr.	TORX	d
08.020	2	8	08.T05	5	8
08.025	2,5	8	08.T06	6	8
08.030	3	8	08.T07	7	8
08.040	4	8	08.T08	8	8
08.050	5	8	08.T09	9	8
08.060	6	8	08.T10	10	8
08.070	7	8	08.T15	15	8
08.080	8	8	08.T20	20	8
08.100	10	8	08.T25	25	8
12.060	6	12	08.T27	27	8
12.080	8	12	08.T30	30	8
12.100	10	12	08.T40	40	8
12.120	12	12	08.T45	45	8
12.140	14	12	12.T50	50	12
12.170	17	12			
12.190	19	12			

Sonderprofile auf Anfrage
Special executions on inquiry

Art.-Nr.	Art.-Nr. Schaft/Shank	d	l
30.0924			
30.0924-2	VDI 20	98	
30.0924-3	VDI 30	103	
30.0924-4	VDI 40	103	
30.0924-5	VDI 50	103	
30.0924-25	zyl.25	83	
30.0924-30	zyl.30	83	
30.0924-32	zyl.32	83	
30.0924-40	zyl.40	83	
30.0924-50	zyl.50	83	

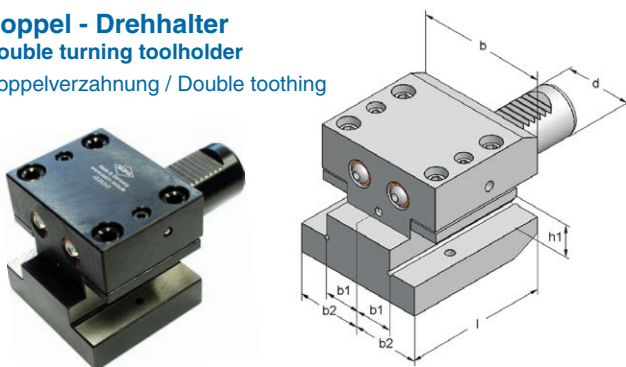
Drehhalter C1/C4 + C2/C3
Turning toolholder C1/C4 + C2/C3
 Doppelverzahnung / Double toothing



Typ C1/C4

Art.-Nr.	Typ	d	b	b1	b2	h1	l
25.20.041	VDI25 - C1/C4	25	62	19/23	37	20/16	55
25.20.031	VDI25 - C2/C3	25	62	19/23	37	20/16	55
30.20.041	VDI30 - C1/C4	30	78	26	44	20	90
30.20.031	VDI30 - C2/C3	30	78	26	44	20	90
40.25.041	VDI40 - C1/C4	40	90	25,5	47,5	25	85
40.25.031	VDI40 - C2/C3	40	90	25,5	47,5	25	85
INCH							
310208	VDI30 - C1/C4	30	79	23	45	1"	90

Doppel - Drehhalter
Double turning toolholder
 Doppelverzahnung / Double toothing



Art.-Nr.	Typ	d	b	b1	b2	h1	l
30.20.042	VDI30	30	88	26	44	20	90
40.25.042	VDI40	40	95	25,5	47,5	25	85
INCH							
311208	VDI30	30	90	23	45	1"	90
411208	VDI40	40	95	25,5	47,5	1"	85

Abstechhalter VDI 25 + VDI 30 + VDI 40
Infeed toolholder VDI 25 + VDI 30 + VDI 40
 Doppelverzahnung / Double toothing



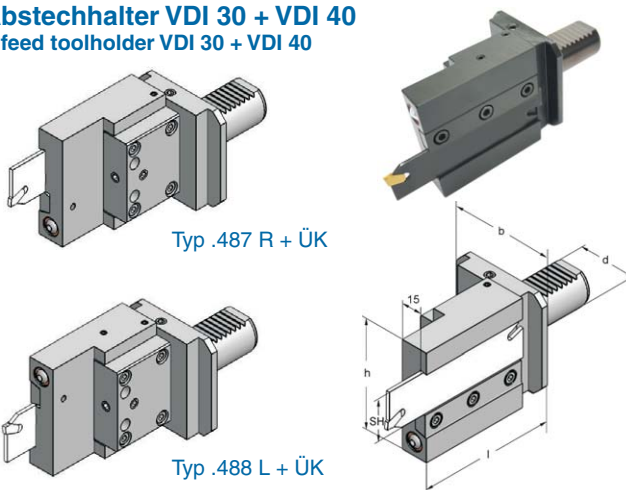
Typ .485

Typ .486

Typ .485

Art.-Nr.	Typ	d	SH	b	b1	h	l	l1
25.26.485	VDI25x26RL ÜK	25	26	43	29	40	85	112
25.32.485	VDI25x32RL ÜK	25	32	43	29	40	85	112
25.26.486	VDI25x26RL	25	26	43	29	40	85	112
25.32.486	VDI25x32RL	25	32	43	29	40	85	112
30.26.485	VDI30x26RL ÜK	30	26	60	35	50	85	112
30.32.485	VDI30x32RL ÜK	30	32	60	35	50	85	112
30.26.486	VDI30x26RL	30	26	60	35	50	85	112
30.32.486	VDI30x32RL	30	32	60	35	50	85	112
40.32.485	VDI40x32RL ÜK	40	32	60	35	50	88,5	115
40.32.486	VDI40x32RL	40	32	60	35	50	88,5	115

Abstechhalter VDI 30 + VDI 40
Infeed toolholder VDI 30 + VDI 40

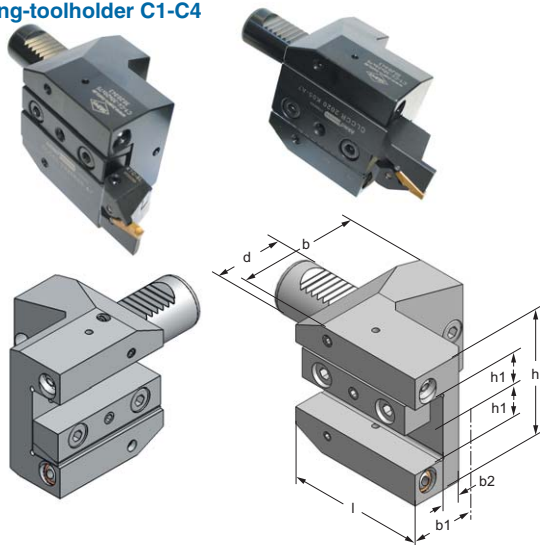


Typ .487 R + ÜK

Typ .488 L + ÜK

Art.-Nr.	Typ	d	SH	b	h	l
30.26.487	VDI30x26 R+ÜK	30	26	70	78	95
30.32.487	VDI30x32 R+ÜK	30	32	70	78	95
40.32.487	VDI40x32 R+ÜK	40	32	70	78	95
Höhenverstellbar ±0,5mm Adjustable in height ±0,5mm						
Art.-Nr.	Typ	d	SH	b	h	l
30.26.488	VDI30x26 L+ÜK	30	26	70	78	95
30.32.488	VDI30x32 L+ÜK	30	32	70	78	95
40.32.488	VDI40x32 L+ÜK	40	32	70	78	95
Höhenverstellbar ±0,5mm Adjustable in height ±0,5mm						

Multi-Drehhalter C1-C4
 Multi-turning-toolholder C1-C4

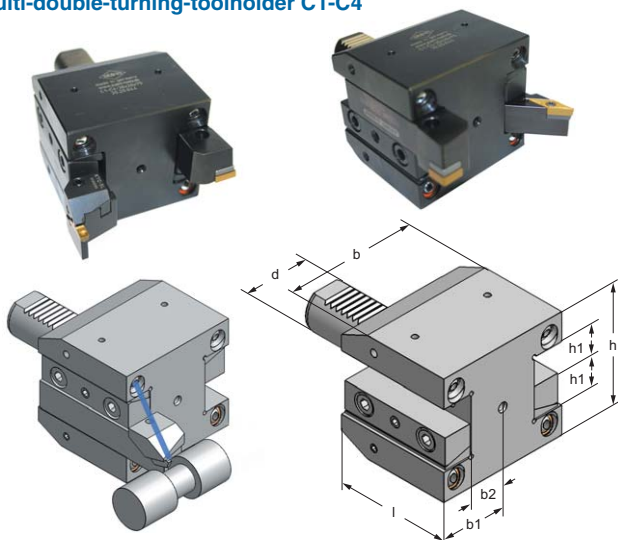


Art.-Nr.	d	b	b1	b2	h	h1	l
30.20.043	30	78	43	16	78	20	75
30.20.043E	30	89	54	16	78	20	85
... E für emco-Drehmaschinen							
40.25.043	40	94	52,5	20	94	25	90

VDI-Schaft mit Doppelverzahnung
 VDI-Shank with double toothing

Ein Drehhalter - vier Einsatzmöglichkeiten:
 links - rechts - vorkopf - überkopf
 One turning-toolholder - four possibilities:
 left - right - forehead - overhead

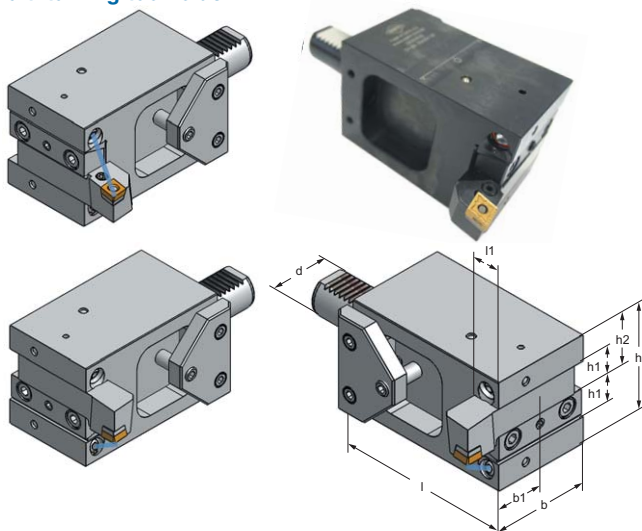
Multi-Doppel-Drehhalter C1-C4
 Multi-double-turning-toolholder C1-C4



Art.-Nr.	d	b	b1	b2	h	h1	l
30.20.044	30	86	43	23	78	20	75
40.25.044	40	130	65	40	96	25	90

Ein Drehhalter - vier Einsatzmöglichkeiten:
 links - rechts - vorkopf - überkopf
 One turning-toolholder - four possibilities:
 left - right - forehead - overhead

Multi-Drehhalter B1-B4
 Multi-turning-toolholder B1-B4



Art.-Nr.	d	b	b1	h	h1	h2	l	l1
30.20.063E	30	70	35	78	20	39	120	20
40.25.063E	40	96	48	94	25	47	125	25
... E für emco-Drehmaschinen								

NEWS

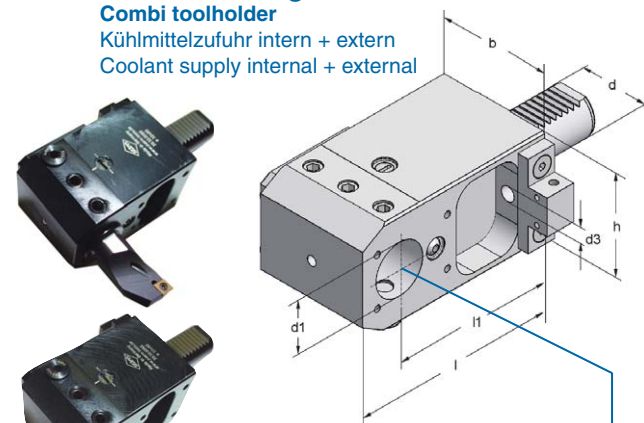
Ein Drehhalter - vier Einsatzmöglichkeiten:
 links - rechts - vorkopf - überkopf
 One turning-toolholder - four possibilities:
 left - right - forehead - overhead

VDI 25 Kombiwerkzeughalter

Combi toolholder

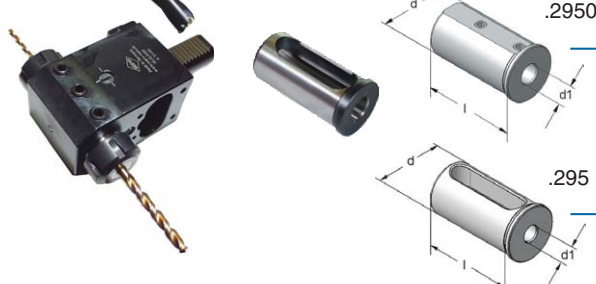
Kühlmittelzufuhr intern + extern

Coolant supply internal + external



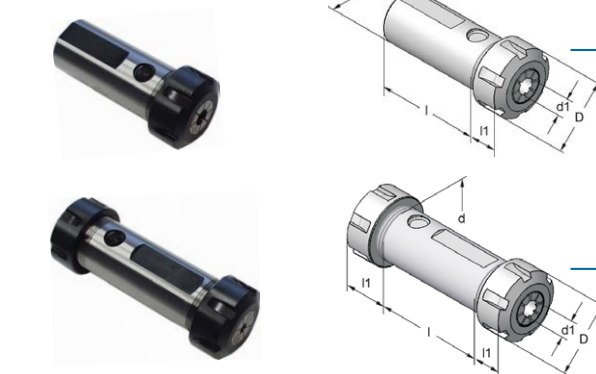
Reduzierbuchse

Reduction bushes



Spannzangenfutter DIN 6499

Collet chuck DIN 6499



Art.-Nr.	Typ	d	d1	b	h	l	l1	d3
25.25.0075	VDI25x25x75	25	25	60	54	98	75	7
25.32.0075	VDI25x32x75	25	32	60	54	98	75	7

Anschlagplatte links und rechts montierbar

Stop plate left and right mountable

Art.-Nr.	d	d1	l
25....2950	25	6,8	50
25....295	25	10,12,16,20	50
32....2950	32	6,8,10	60
32....295	32	12,16,20,25	60

Art.-Nr.	Typ	d	d1	D	l	l1
845101	ER 25	25	2-16	430E	42	58
846101	ER 25	32	2-16	430E	42	58

Art.-Nr.	Typ	d	d1	D	l	l1
822101	ER 25	32	2-16	430E	42	60

841101 Verschlussmutter ER25 / Sealing nut ER25

Drehhalter

Turning toolholder

C1-25x20x55

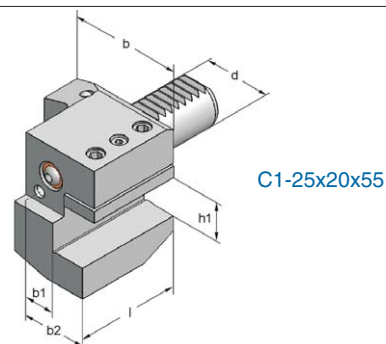
C2-25x20x55



C3-25x20x55

C4-25x20x55

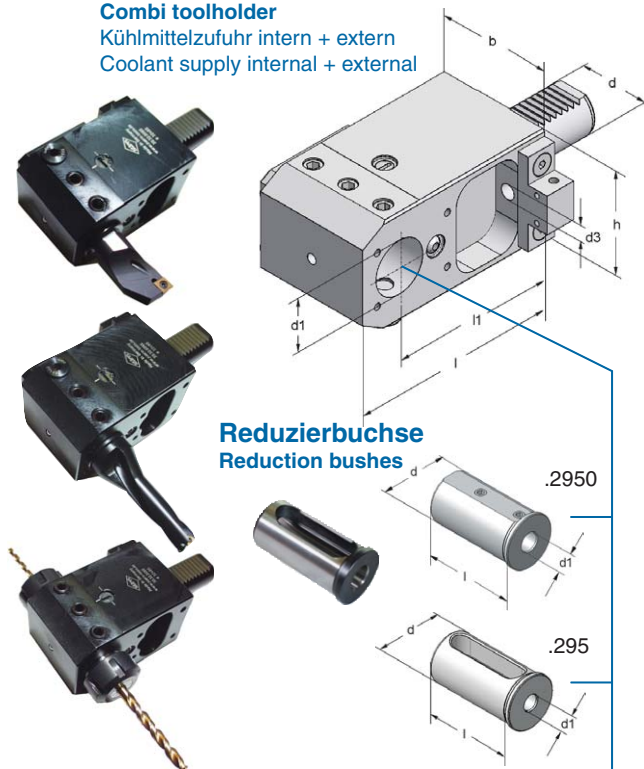
Art.-Nr.	Typ	d	b	b1	b2	h1	l
25.20.020	C1-25x20x55	25	58	15	33	20	55
25.20.050	C2-25x20x55	25	62	19	37	20	55
25.20.030	C3-25x20x55	25	58	15	33	20	55
25.20.040	C4-25x20x55	25	62	19	37	20	55



VDI 30 Kombiwerkzeughalter

Combi toolholder

Kühlmittelzufuhr intern + extern
 Coolant supply internal + external



Reduzierbuchse
 Reduction bushes

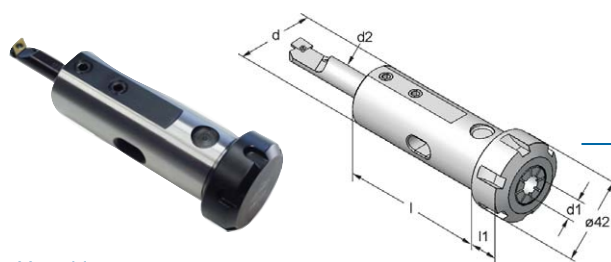
Spannzangenfutter DIN 6499

Collet chuck DIN 6499



Spannzangenfutter DIN 6499/430E mit Aufnahme für Spannung Whistle Notch oder Bohrstangen ø6-16mm

Collet chuck DIN 6499/430E with adaptor for clamping Whistle-Notch and boring bars ø6-16mm



Verschlussmutter 841101
 Sealing nut 841101

Art.-Nr.	Typ	d	d1	b	h	l	l1	d3
30.32.0085	VDI30x32x 85	30	32	70	64	110	85	9
30.32.0100	VDI30x32x100	30	32	70	64	125	100	9
INCH								
312208	VDI30x1¼"x 85	30	1¼"	70	64	110	85	9
313208	VDI30x1½"x100	30	1½"	70	64	125	100	9
HARDINGE								
30.32.0070	VDI30x32x70	30	32	70	64	101	70	
30.40.0070	VDI30x40x70	30	40	70	72	105	70	

Anschlagplatte links und rechts montierbar
 Stop plate left and right mountable

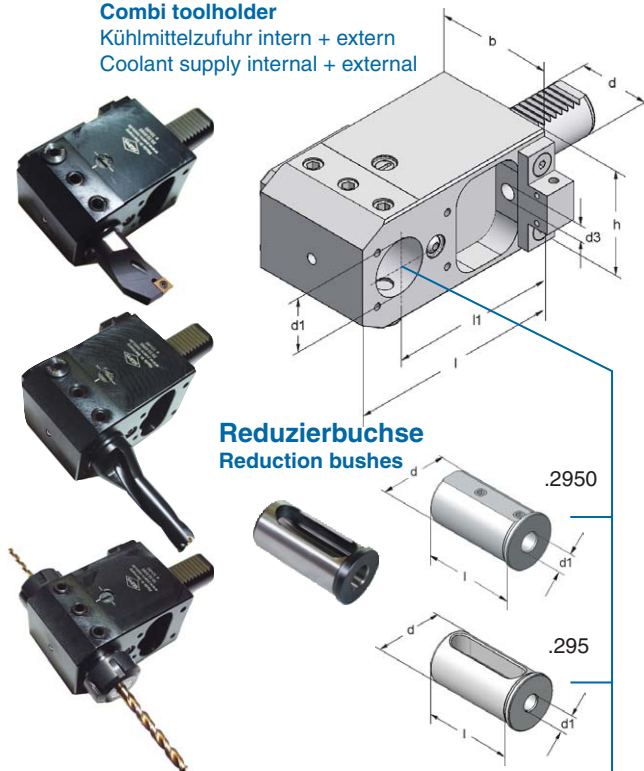
Art.-Nr.	d	d1	l
32....2950	32	6,8,10	60
32....295	32	12,16,20,25	60
INCH			
450101	1¼"	1/4"	59
451101	1¼"	3/8"	59
452101	1¼"	1/2"	59
453101	1¼"	5/8"	59
454101	1¼"	3/4"	59
455101	1¼"	1"	59

Art.-Nr.	Typ	d	d1	D	l	l1
820101	ER 25	32	2-16 430E	42	58	21-25
836101	ER 32	32	2-20 470E	50	58	31-35
INCH						
843101	ER 25	1¼"	2-16 430E	42	58	21-25

Art.-Nr.	Typ	d	d1	D	l	l1
821101	ER 25	32	2-16 430E	42	70	21-25
INCH						
825101	ER 25	1¼"	2-16 430E	42	70	21-25

Art.-Nr.	Typ	d	d1	d2	l	l1
830101	ER 25	32	2-16 430E	6	85	21-25
831101	ER 25	32	2-16 430E	8	85	21-25
832101	ER 25	32	2-16 430E	10	85	21-25
833101	ER 25	32	2-16 430E	12	85	21-25
834101	ER 25	32	2-16 430E	14	85	21-25
835101	ER 25	32	2-16 430E	16	85	21-25
INCH						
850101	ER 25	1¼"	2-16 430E	6	85	21-25
851101	ER 25	1¼"	2-16 430E	8	85	21-25
852101	ER 25	1¼"	2-16 430E	10	85	21-25
853101	ER 25	1¼"	2-16 430E	12	85	21-25
854101	ER 25	1¼"	2-16 430E	14	85	21-25
855101	ER 25	1¼"	2-16 430E	16	85	21-25
841101	Verschlussmutter ER25 / Sealing nut ER25					

VDI 40 Kombiwerkzeughalter
 Combi toolholder
 Kühlmittelzufuhr intern + extern
 Coolant supply internal + external

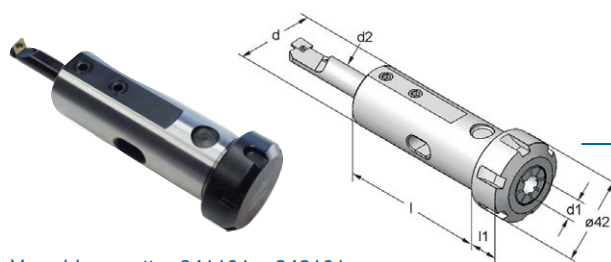


Reduzierbuchse
 Reduction bushes

Spannzangenfutter DIN 6499
 Collet chuck DIN 6499



Spannzangenfutter DIN 6499/430E
 mit Aufnahme für Spannung Whistle Notch
 oder Bohrstangen ø6-16mm
 Collet chuck DIN 6499/430E with adaptor for clamping
 Whistle-Notch and boring bars ø6-16mm



Verschlussmutter 841101 + 842101
 Sealing nut 841101 + 842101

Art.-Nr.	Typ	d	d1	b	h	l	l1	d3
40.25.0100	VDI40x25x100	40	25	85	76	122	100	11
40.32.0100	VDI40x32x100	40	32	85	76	125	100	11
40.40.0100	VDI40x40x100	40	40	85	76	129	100	11
40.25.0120	VDI40x25x120	40	25	85	76	142	120	11
40.32.0120	VDI40x32x120	40	32	85	76	145	120	11
40.40.0120	VDI40x40x120	40	40	85	76	149	120	11

INCH

412208	VDI40x1 1/4"x100	40	1 1/4"	85	76	125	100	11
413208	VDI40x1 1/2"x100	40	1 1/2"	85	76	129	100	11
414208	VDI40x1 1/4"x120	40	1 1/4"	85	76	145	120	11
415208	VDI40x1 1/2"x120	40	1 1/2"	85	76	149	120	11

Anschlagplatte links und rechts montierbar

Stop plate left and right mountable

Art.-Nr.	d	d1	l
32....2950	32	6,8,10	60
32....295	32	12,16,20,25	60
40....2950	40	6,8,10,12	72
40....295	40	16,20,25,32	72

INCH

450101	1 1/4"	1/4"	60
451101	1 1/4"	3/8"	60
452101	1 1/4"	1/2"	60
453101	1 1/4"	5/8"	60
454101	1 1/4"	3/4"	60
455101	1 1/4"	1"	60

Art.-Nr.	Typ	d	d1	D	l	l1
820101	ER 25	32	2-16 430E	42	58	21-25
836101	ER 32	32	2-20 470E	50	58	31-35
117102	ER 32	40	2-20 470E	50	64	24-29

INCH

843101	ER 25	1 1/4"	2-16 430E	42	58	21-25
827101	ER 32	1 1/2"	2-20 470E	50	64	24-29

Art.-Nr.	Typ	d	d1	D	l	l1
823101	ER 25	32	2-16 430E	42	85	21-25
824101	ER 32	40	2-20 470E	50	85	24-29
826101	ER 25	1 1/4"	2-16 430E	42	85	21-25

Art.-Nr.	Typ	d	d1	d2	l	l1
830101	ER 25	32	2-16 430E	6	85	21-25
831101	ER 25	32	2-16 430E	8	85	21-25
832101	ER 25	32	2-16 430E	10	85	21-25
833101	ER 25	32	2-16 430E	12	85	21-25
834101	ER 25	32	2-16 430E	14	85	21-25
835101	ER 25	32	2-16 430E	16	85	21-25

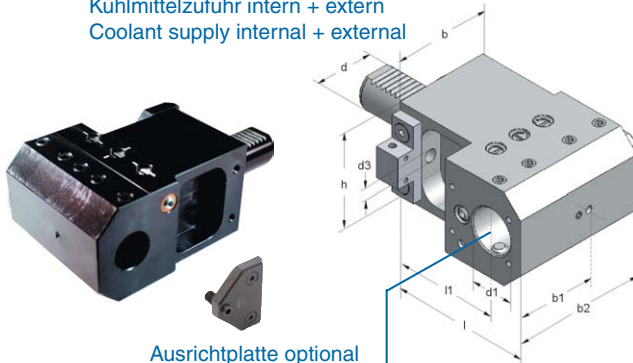
INCH

850101	ER 25	1 1/4"	2-16 430E	6	85	21-25
851101	ER 25	1 1/4"	2-16 430E	8	85	21-25
852101	ER 25	1 1/4"	2-16 430E	10	85	21-25
853101	ER 25	1 1/4"	2-16 430E	12	85	21-25
854101	ER 25	1 1/4"	2-16 430E	14	85	21-25
855101	ER 25	1 1/4"	2-16 430E	16	85	21-25

841101	Verschlussmutter ER25 / Sealing nut ER25					
842101	Verschlussmutter ER32 / Sealing nut ER32					

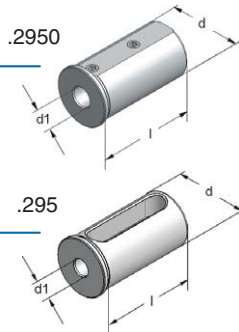
VDI 30 Kombiwerkzeughalter

VDI 40 Combi toolholder
 Kühlmittelzufuhr intern + extern
 Coolant supply internal + external



Ausrichtplatte optional
 Adjust plate optional

Reduzierbuchse
 Reduction bushes



Art.-Nr.	Typ	d	d1	b	b1	b2	h	l	l1	d3
30.32.00853	VDI30x32x 85	30	32	70	57,5	98	68	110	85	9
30.32.0103	VDI30x32x100	30	32	70	57,5	98	68	125	100	9
30.32.0123	VDI30x32x120	30	32	70	57,5	98	68	145	120	9

40.32.0103	VDI40x32x100	40	32	85	77,5	120	76	129	100	11
40.32.0123	VDI40x32x120	40	32	85	77,5	120	76	149	120	11

Anschlagplatte links und rechts montierbar
 Stop plate left and right mountable
 VDI40-Schaft mit Doppelverzahnung
 VDI40-Shank with double tooththing

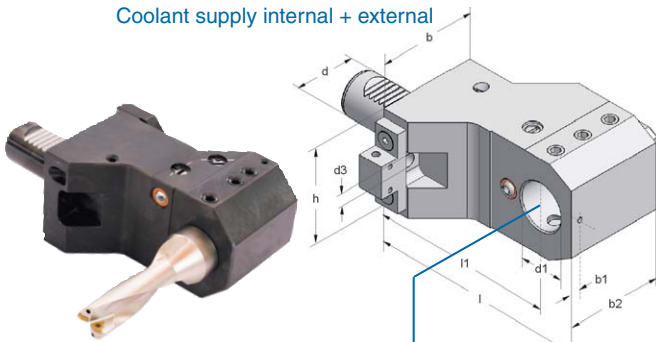
Ausrichtplatte für Kombiwerkzeughalter VDI 25, 30, 40
 Adjust plate for combi toolholder VDI 25, 30, 40

Art.-Nr.	Typ
579101	VDI25x....
576101	VDI30x....
523101	VDI40x....

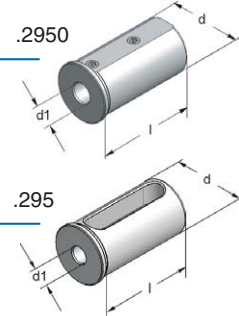
Art.-Nr.	d	d1	l
32....2950	32	6,8,10	60
32....295	32	12,16,20,25	60

VDI 30 Kombiwerkzeughalter zurückgesetzt

VDI 40 Combi toolholder set back
 Kühlmittelzufuhr intern + extern
 Coolant supply internal + external



Reduzierbuchse
 Reduction bushes



Art.-Nr.	Typ	d	d1	b	b1	b2	h	l	l1	d3
30.32.00085	VDI30x32x 85	30	32	70	7	69	68	110	85	9
30.30.00100	VDI30x30x100	30	30	70	7	69	68	125	100	9
30.32.00100	VDI30x32x100	30	32	70	7	69	68	125	100	9
30.40.00100	VDI30x40x100	30	40	70	7	69	68	129	100	9

40.40.00100	VDI40x40x100	40	40	85	7	75	76	129	100	11
40.40.00120	VDI40x40x120	40	40	85	7	75	76	149	120	11

Anschlagplatte links und rechts montierbar
 Stop plate left and right mountable
 VDI-Schaft mit Doppelverzahnung
 VDI-Shank with double tooththing

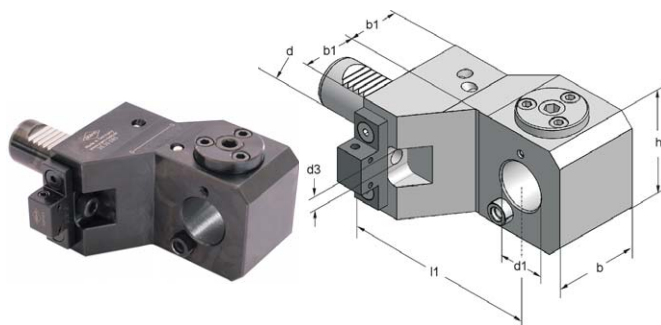
Art.-Nr.	d	d1	l
32....2950	32	6,8,10	60
32....295	32	12,16,20,25	60
40....2950	40	6,8,10,12	72
40....295	40	16,20,25,32	72

Spannzangenfutter DIN 6499
 Collet chuck DIN 6499



Art.-Nr.	Typ	d	d1	D	l	l1
820101	ER 25	32	2-16	430E	42	58
836101	ER 32	32	2-20	470E	50	58
117102	ER 32	40	2-20	470E	50	64

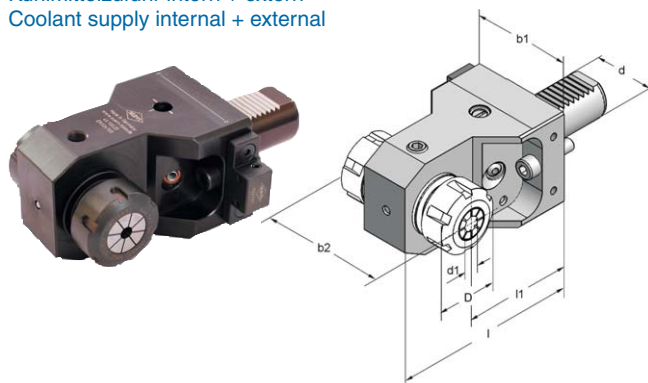
Ausgleichshalter VDI 30 + VDI 40
Adaptor for VDI 30 + VDI 40



Art.-Nr.	Typ	d	d1	b	b1	h	l1	d3
30.30.085	VDI30x30x 85	30	30	55	35	68	85	9
30.30.100	VDI30x30x100	30	30	55	35	68	100	9
40.40.100	VDI40x40x100	40	40	63	42,5	85	100	11
40.40.120	VDI40x40x120	40	40	63	42,5	85	120	11

VDI-Schaft mit Doppelverzahnung
 VDI-Shank with double toothing
 Anschlagplatte links und rechts montierbar
 Stop plate left and right mountable

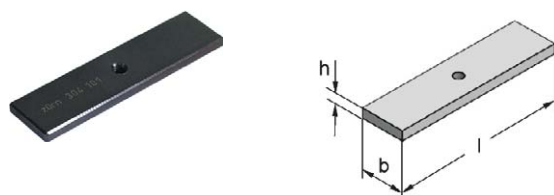
Doppel-Spannzangenhalter VDI 30 + VDI 40
Double-collet chuck toolholder VDI 30 + VDI 40
 Kühlmittelzufuhr intern + extern
 Coolant supply internal + external



Art.-Nr.	Typ	d	d1	D	b1	b2	l1	l
30.085.16	VDI30xER25x	85	30	1-16	42	70	88	110
40.100.20	VDI40xER32x100	40	2-20	50	85	104	100	129
841101	Verschlussmutter ER25 / Sealing nut							
842101	Verschlussmutter ER32 / Sealing nut							

Anschlagplatte links und rechts montierbar
 Stop plate left and right mountable

Unterlegplatte
Shim



Art.-Nr.	für Typ	l	bxh
314101	20.16.020 20.16.030 20.16.040 20.16.050	54	14x4
315101	20.16.060 20.16.070 20.16.080 20.16.090	49	14x4
303101	20.16.100 20.16.110 20.16.120 20.16.130	74	14x4
324101	20.16.150 20.16.160	65	14x4
304101	30.20.020 .030 .040 .050 .060 .070	69	18x4
	30.20.080 .090 .150 .160 .170 .180		
309101	30.20.100 30.20.110 30.20.120 30.20.130	97	18x4
310101	40.25.020 40.25.030 40.25.040 40.25.050	84	22x5
	40.25.060 40.25.070 40.25.080 40.25.090		
311101	40.25.100 40.25.110 40.25.120 40.25.130	107	22x5
326101	40.25.150 40.25.160 40.25.170 40.25.180	83	22x5
306101	50.32.020 50.32.030 50.32.150 50.32.170	99	24x7
301101	50.32.040 50.32.050 50.32.060 50.32.070	98	25x7
	50.32.080 50.32.090		
305101	50.32.100 50.32.110 50.32.120 50.32.130	128	25x7
331101	50.32.150 50.32.170	120	24x7
327101	50.32.160 50.32.180	105	25x7
312101	60.32.020 .030 .040 .050 .060 .070	124	30x7
	60.32.080 .090 .150 .160 .170 .180		
313101	60.32.100 60.32.110 60.32.120 60.32.130	144	30x7

Reduzierbuchse für Bohrstangenhalter Reduction bushes for boring bar holders		Art.-Nr.	für Typ	d	d1	l
	25....2950	30.25.290	25	6,8	50	
	25....295	30.25.290	25	10,12,16,20	50	
	32....2950	40.32.290	32	6,8,10	60	
	32....295	40.32.290	32	12,16,20,25	60	
	40....2950	50.40.290	40	6,8,10,12	72	
	40....295	50.40.290	40	16,20,25,32	72	
	50....2950	60.50.290	50	10,12,16	80	
	50....295	60.50.290	50	20,25,32,40	80	

Hakenschlüssel für Ortlieb-Spannmuttern DIN 6388 Hook spanner for Ortlieb-nuts DIN 6388		Art.-Nr.	Typ	d
	54635	40 - 42	40 - 42	
	54643	45 - 50	45 - 50	
	54668	58 - 65	58 - 65	
	54676	68 - 75	68 - 75	

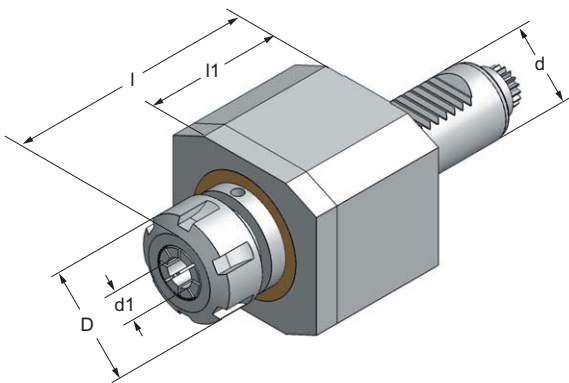
Hakenschlüssel für Spannmuttern DIN 6499 Hook spanner for nuts DIN 6499		Art.-Nr.	Typ	d
	911180	GS 17	SW17	
	916180	GS 25	SW25	
	920180	GS 30	SW30	
	916181	E 16	32	
	920181	E 20	34	
	925180	E 25	42	
	932180	E 32	50	
	940180	E 40	63	
	950180	E 50	78	

Spritzdüsen-Element Coolant nozzle													Gewindestift Threaded pin		Düse Nozzle	
Art.-Nr.	d	d1	d2	M	l	l1	l2	D	D1	L	L1	α°	Art.-Nr.	Art.-Nr.		
1005	6	4,0	4	$\emptyset 2,5$	4,5	-	-	6	-	5,0	-	30				
1007	8	5,5	7	3,5	6,0	1,5	0,8	8	8,8	6,5	8,5	30	1021 M3,5x4			
1008	10	5,5	8	4	7,0	1,5	0,8	10	10,8	8,0	9,5	30	1024 M4 x4			
1010	12	7,5	10	5	8,0	1,5	1,0	12	13,0	9,0	10,5	30	1025 M5 x5	1035 M5x5		
1010-4	12	7,5	10	6	8,0	1,5	1,0	12	13,0	9,0	10,5	30	1026 M6 x6	1036 M6x6		
1012	14	9,0	12	6	10,0	1,5	1,0	14	15,0	11,0	12,5	40	1026 M6 x6	1036 M6x6		
1012-4	14	9,0	12	6x0,75	10,0	1,5	1,0	14	15,0	11,0	12,5	40				
1012-5	14	9,0	12	7	10,0	1,5	1,0	14	15,0	11,0	12,5	30	1027 M7 x7	1037 M7x7		
1014	16	10,0	14	7	11,0	2,0	1,6	16	17,6	12,0	14,6	40	1027 M7 x7	1037 M7x7		

Spritzkugel Injection ball		Art.-Nr.	d	M
	08.920	8	4	
	10.920	10	5	
	10.920-4	10	6	
	12.920	12	6	
	14.920	14	7	

Spritzrohr Cu Injection tube Cu		Art.-Nr.	(für Typ Nr.)	G	D	d	L	L1
	10086	(1008)	M4	4	2,5	30	5	
	10106	(1010)	M5	5	3,0	35	6	
	10126	(1012/1010-4)	M6	6	4,0	40	6	
	10146	(1014/1012-5)	M7	7	4,5	50	6	

Axial Bohr- und Fräskopf
 Axial drilling and milling head



Sauter-Revolver DIN 5480 **CTX**



Sauter-Revolver DIN 5482 **5482**



Diplomatic DIN 1809 **1809**



Barrufaldi TOEM **TOEM**

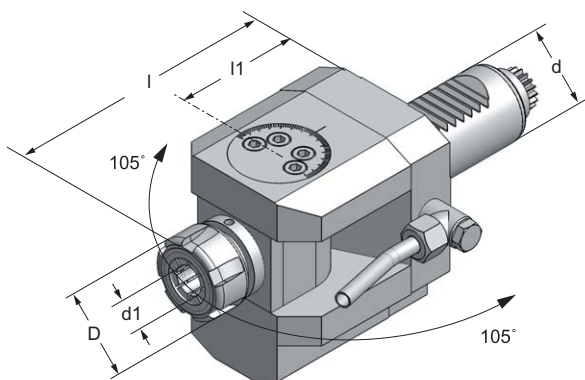


Bitte geben Sie bei Ihrer Anfrage den **Maschinentyp** an
 In case of inquiry please indicate details of **type** of machine as shown

Art.-Nr.	Typ	d	d1	D	l	l1
4.20165480	VDI20xER16	20	1-10	28	76	49
4.2020CTX	VDI20xER20	20	1-13	34	76	49
4.20161809	VDI20xER16	20	1-10	28	76	40
<hr/>						
4.2525K5480	VDI25xER25	25	1-16	42	86	58
4.2520G200	VDI25xER20	25	1-13	34	66	55
<hr/>						
4.3025CTX	VDI30xER25	30	1-16	42	88	58
4.3025CTXk	VDI30xER25	30	1-16	42	88	58
4.30255482	VDI30xER25	30	1-16	42	88	58
4.30255482k	VDI30xER25	30	1-16	42	88	58
4.30251809	VDI30xER25	30	1-16	42	88	58
4.30251809k	VDI30xER25	30	1-16	42	88	58
4.3025TOEM	VDI30xER25	30	1-16	42	88	58
4.3025TOEMk	VDI30xER25	30	1-16	42	88	58
4.3025LT10	VDI30xER25	30	1-16	42	88	58
4.3025LT10k	VDI30xER25	30	1-16	42	88	58
4.3025GU600	VDI30xER25	30	1-16	42	88	58
<hr/>						
4.4032CTX	VDI40xER32	40	2-20	50	110	76
4.4032CTXk	VDI40xER32	40	2-20	50	110	76
4.40325482	VDI40xER32	40	2-20	50	110	76
4.40325482k	VDI40xER32	40	2-20	50	110	76
4.40321809	VDI40xER32	40	2-20	50	110	76
4.40321809k	VDI40xER32	40	2-20	50	110	76
4.4032TOEM	VDI40xER32	40	2-20	50	110	76
4.4032TOEMk	VDI40xER32	40	2-20	50	110	76
4.4032LT15	VDI40xER32	40	2-20	50	110	76
4.4032LT15k	VDI40xER32	40	2-20	50	110	76
4.4032HAASL20	VDI40xER32	40	2-20	50	110	76
4.4032GU800	VDI40xER32	40	2-20	50	110	58
4.4032GU800k	VDI40xER32	40	2-20	50	110	58
4.4032TMM250	VDI40xER32	40	2-20	50	110	58
<hr/>						
4.50405480	VDI50xER40	50	3-30	63	120	80
4.50405480k	VDI50xER40	50	3-30	63	120	80
4.50405482	VDI50xER40	50	3-30	63	120	80
4.50405482k	VDI50xER40	50	3-30	63	120	80
4.50401809	VDI50xER40	50	3-30	63	120	80
4.50401809k	VDI50xER40	50	3-30	63	120	80

Ausführung k mit innerer Kühlmittelzufuhr
Type k with internal cooling supply

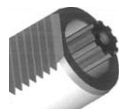
Schwenkkopf
 Swivel head



Sauter-Revolver DIN 5480 **CTX**



Sauter-Revolver DIN 5482 **5482**



Diplomatic DIN 1809 **1809**



Barrufaldi TOEM **TOEM**



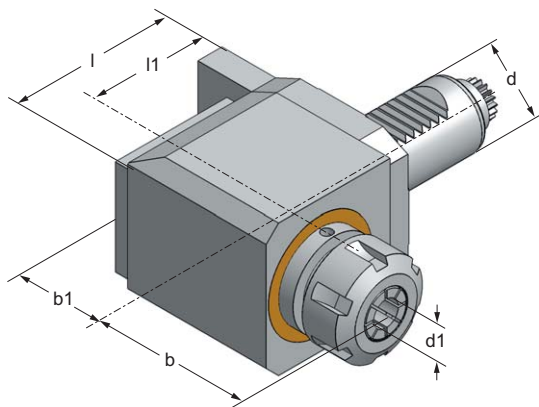
Bitte geben Sie bei Ihrer Anfrage den **Maschinentyp** an
 In case of inquiry please indicate details of **type** of machine as shown

Art.-Nr.	Typ	d	d1	D	l	l1
5.20165480	VDI20xER16	20	1-10	28	118	64
5.20161809	VDI20xER16	20	1-10	28	118	64
5.2016TOEM	VDI20xER16	20	1-10	28	118	64
5.25205480	VDI25xER20	25	1-13	34	115	58
5.3020CTX	VDI30xER25	30	1-16	42	117	60
5.30205482	VDI30xER25	30	1-16	42	102	53
5.30201809	VDI30xER25	30	1-16	42	102	53
5.3020TOEM	VDI30xER25	30	1-16	42	102	53
5.4025CTX	VDI40xER25	40	1-16	42	129	66
5.4025LCTX	VDI40xER25	40	1-16	42	150	87
5.40255482	VDI40xER25	40	1-16	42	120	57
5.40251809	VDI40xER25	40	1-16	42	120	57
5.4025TOEM	VDI40xER25	40	1-16	42	120	57
5.50325480	VDI50xER32	50	3-20	50	150	87

Radial Bohr- und Fräskopf
 Radial drilling and milling head



Abb. zeigt Ausführung R / Picture shows Type R



Sauter-Revolver DIN 5480 **CTX**



Sauter-Revolver DIN 5482 **5482**



Duplomatic DIN 1809 **1809**



Barrufaldi TOEM **TOEM**



Bitte geben Sie bei Ihrer Anfrage den **Maschinentyp** an
 In case of inquiry please indicate details of **type** of machine as shown

Art.-Nr.	Typ	d	d1	l	l1	b	b1
6.20165480 R/L	VDI20xER16	20	1-10	68	45	57	78
6.2016LCTX R/L	VDI20xER16	20	1-10	101	75	62	48
6.20161809 R/L	VDI20xER16	20	1-10	68	48	58	25
6.25255480L R/L	VDI25xER25	25	1-16	101	75	63	40
6.3025CTX R/L	VDI30xER25	30	1-16	81	55	63	48
6.3025CTX R/Lk	VDI30xER25	30	1-16	81	55	63	48
6.3025LCTX RL	VDI30xER25	30	1-16	126	100	63	48
6.3025LCTX RLk	VDI30xER25	30	1-16	126	100	63	48
6.30255482 R/L	VDI30xER25	30	1-16	81	55	63	48
6.30255482 R/Lk	VDI30xER25	30	1-16	81	55	63	48
6.30251809 R/L	VDI30xER25	30	1-16	81	55	63	48
6.30251809 R/Lk	VDI30xER25	30	1-16	81	55	63	48
6.3025LT10 R/L	VDI30xER25	30	1-16	81	55	63	48
6.3025LT10 R/Lk	VDI30xER25	30	1-16	81	55	63	48
6.4032CTX R/L	VDI40xER32	40	2-20	103	65	82	72
6.4032CTX R/Lk	VDI40xER32	40	2-20	103	65	82	72
6.4032CTX RL	VDI40xER32	40	2-20	138	100	85	53
6.4032CTX RLk	VDI40xER32	40	2-20	138	100	85	53
6.4032LCTX RL	VDI40xER32	40	2-20	158	120	85	53
6.4032LCTX RLk	VDI40xER32	40	2-20	158	120	85	53
6.40325482 R/L	VDI40xER32	40	2-20	103	65	82	72
6.40325482 R/Lk	VDI40xER32	40	2-20	103	65	82	72
6.40321809 R/L	VDI40xER32	40	2-20	103	65	82	72
6.40321809 R/Lk	VDI40xER32	40	2-20	103	65	82	72
6.4032TOEM R/L	VDI40xER32	40	2-20	103	65	82	72
6.4032LT15 RL	VDI40xER32	40	2-20	103	65	82	72
6.4032LT15 RLk	VDI40xER32	40	2-20	103	65	82	72
6.4032TMM250	VDI40xER32	40	2-20	128	90	82	72
6.50405480 R/L	VDI50xER40	50	3-30	119	75	96	84
6.50401809 R/L	VDI50xER40	50	3-30	119	75	96	84
6.50401809 R/Lk	VDI50xER40	50	3-30	119	75	96	84

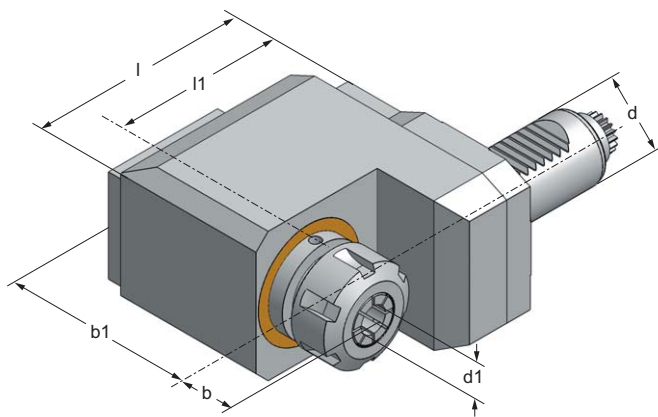
Ausführung R wie gezeichnet / **Type R** right hand design as shown
Ausführung L spiegelbildlich / **Type L** left hand design reversed
Ausführung RL mit doppelverzahntem VDI-Schaft
Type RL with doubletoothed VDI-shaft

Ausführung k mit innerer Kühlmittelzufuhr
Type k with internal cooling supply

Radial Bohr- und Fräskopf achsversetzt
Radial drilling and milling head offset



Abb. zeigt Ausführung R / Picture shows Type R



Sauter-Revolver DIN 5480 CTX



Sauter-Revolver DIN 5482 5482



Diplomatic DIN 1809 1809



Barrufaldi TOEM TOEM



Bitte geben Sie bei Ihrer Anfrage den **Maschinentyp** an
In case of inquiry please indicate details of **type** of machine as shown

Art.-Nr.	Typ	d	d1	l	l1	b	b1
8.16125480ZR	VDI16xER11	16	1- 7	61	45	15	53
8.20165480 R/L	VDI20xER16	20	1-10	77	54	22	81
8.20161809 R/L	VDI20xER16	20	1-10	77	54	22	81
8.2016TOEM R/L	VDI20xER16	20	1-10	78	58	22	80
8.2525L5480 R/L	VDI25xER25	25	1-16	104	75	42	70
8.3025CTX R/L	VDI30xER25	30	1-16	115	70	21	83
8.3025LCTX RL	VDI30xER25	30	1-16	126	100	42	69
8.3025LCTX RLk	VDI30xER25	30	1-16	126	100	42	69
8.30255482 R/L	VDI30xER25	30	1-16	115	70	21	83
8.30251809 R/L	VDI30xER25	30	1-16	115	70	21	83
8.3025TOEM R/L	VDI30xER25	30	1-16	115	70	21	83
8.3025TOEM R/Lk	VDI30xER25	30	1-16	115	70	21	83
8.4032CTX R/L	VDI40xER32	40	2-20	128	90	32	100
8.4032CTX R/Lk	VDI40xER32	40	2-20	128	90	32	100
8.4032CTX RL	VDI40xER32	40	2-20	138	100	31	100
8.4032CTX RLk	VDI40xER32	40	2-20	138	100	31	100
8.4032LCTX RL	VDI40xER32	40	2-20	158	120	31	100
8.40325482 R/L	VDI40xER32	40	2-20	128	90	32	100
8.40321809 R/L	VDI40xER32	40	2-20	128	90	32	100
8.40321809 R/Lk	VDI40xER32	40	2-20	128	90	32	100
8.4032TOEM R/L	VDI40xER32	40	2-20	128	90	32	100
8.4032TMM250	VDI40xER32	40	2-20	128	90	32	100
8.50405480R/L	VDI50xER40	50	3-30	156	112	30	126
8.50405480R/Lk	VDI50xER40	50	3-30	156	112	30	126

Ausführung R wie gezeichnet / **Type R** right hand design as shown
Ausführung L spiegelbildlich / **Type L** left hand design reversed
Ausführung RL mit doppelverzahntem VDI-Schaft
Type RL with doubletoothed VDI-shaft

Ausführung k mit innerer Kühlmittelzufuhr
Type k with internal cooling supply



415 E		462 E		467 E		467 E	
Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ
415020	ø2,0 - 1,5	462020	ø2,0 - 1,5			467165	ø16,5 - 16,0
415025	ø2,5 - 2,0	462025	ø2,5 - 2,0			467170	ø17,0 - 16,5
415030	ø3,0 - 2,5	462030	ø3,0 - 2,5			467175	ø17,5 - 17,0
415035	ø3,5 - 3,0	462035	ø3,5 - 3,0			467180	ø18,0 - 17,5
415040	ø4,0 - 3,5	462040	ø4,0 - 3,5	467040	ø4,0 - 3,5	467185	ø18,5 - 18,0
415045	ø4,5 - 4,0	462045	ø4,5 - 4,0	467045	ø4,5 - 4,0	467190	ø19,0 - 18,5
415050	ø5,0 - 4,5	462050	ø5,0 - 4,5	467050	ø5,0 - 4,5	467195	ø19,5 - 19,0
415055	ø5,5 - 5,0	462055	ø5,5 - 5,0	467055	ø5,5 - 5,0	467200	ø20,0 - 19,5
415060	ø6,0 - 5,5	462060	ø6,0 - 5,5	467060	ø6,0 - 5,5	467205	ø20,5 - 20,0
415065	ø6,5 - 6,0	462065	ø6,5 - 6,0	467065	ø6,5 - 6,0	467210	ø21,0 - 20,5
415070	ø7,0 - 6,5	462070	ø7,0 - 6,5	467070	ø7,0 - 6,5	467215	ø21,5 - 21,0
415075	ø7,5 - 6,5	462075	ø7,5 - 7,0	467075	ø7,5 - 7,0	467220	ø22,0 - 21,5
415080	ø8,0 - 7,5	462080	ø8,0 - 7,5	467080	ø8,0 - 7,5	467225	ø22,5 - 22,0
415085	ø8,5 - 8,0	462085	ø8,5 - 8,0	467085	ø8,5 - 8,0	467230	ø23,0 - 22,5
415090	ø9,0 - 8,5	462090	ø9,0 - 8,5	467090	ø9,0 - 8,5	467235	ø23,5 - 23,0
415095	ø9,5 - 9,0	462095	ø9,5 - 9,0	467095	ø9,5 - 9,0	467240	ø24,0 - 23,5
415100	ø10,0 - 9,5	462100	ø10,0 - 9,5	467100	ø10,0 - 9,5	467245	ø24,5 - 24,0
415105	ø10,5 - 10,0	462105	ø10,5 - 10,0	467105	ø10,5 - 10,0	467250	ø25,0 - 24,5
415110	ø11,0 - 10,5	462110	ø11,0 - 10,5	467110	ø11,0 - 10,5	467255	ø25,5 - 25,0
415115	ø11,5 - 11,0	462115	ø11,5 - 11,0	467115	ø11,5 - 11,0	467260	ø26,0 - 25,5
415120	ø12,0 - 11,5	462120	ø12,0 - 11,5	467120	ø12,0 - 11,5	467265	ø26,5 - 26,0
415125	ø12,5 - 12,0	462125	ø12,5 - 12,0	467125	ø12,5 - 12,0	467270	ø27,0 - 26,5
415130	ø13,0 - 12,5	462130	ø13,0 - 12,5	467130	ø13,0 - 12,5	467275	ø27,5 - 27,0
415135	ø13,5 - 13,0	462135	ø13,5 - 13,0	467135	ø13,5 - 13,0	467280	ø28,0 - 27,5
415140	ø14,0 - 13,5	462140	ø14,0 - 13,5	467140	ø14,0 - 13,5	467285	ø28,5 - 28,0
415145	ø14,5 - 14,0	462145	ø14,5 - 14,0	467145	ø14,5 - 14,0	467290	ø29,0 - 28,5
415150	ø15,0 - 14,5	462150	ø15,0 - 14,5	467150	ø15,0 - 14,5	467295	ø29,5 - 29,0
415155	ø15,5 - 15,0	462155	ø15,5 - 15,0	467155	ø15,5 - 15,0	467300	ø30,0 - 29,5
415160	ø16,0 - 15,5	462160	ø16,0 - 15,5	467160	ø16,0 - 15,5	467305	ø30,5 - 30,0
		462165	ø16,5 - 16,0			467310	ø31,0 - 30,5
		462170	ø17,0 - 16,5			467315	ø31,5 - 31,0
		462175	ø17,5 - 17,0			467320	ø32,0 - 31,5
		462180	ø18,0 - 17,5				
		462185	ø18,5 - 18,0				
		462190	ø19,0 - 18,5				
		462195	ø19,5 - 19,0				
		462200	ø20,0 - 19,5				
		462205	ø20,5 - 20,0				
		462210	ø21,0 - 20,5				
		462215	ø21,5 - 21,0				
		462220	ø22,0 - 21,5				
		462225	ø22,5 - 22,0				
		462230	ø23,0 - 22,5				
		462235	ø23,5 - 23,0				
		462240	ø24,0 - 23,5				
		462245	ø24,5 - 24,0				
		462250	ø25,0 - 24,5				

Original rego-fix



ER 8		ER 11/424 E		ER 16/426 E		ER 20/428 E	
Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ
108001	Satz / Set	111001	Satz / Set	116001	Satz / Set	120001	Satz / Set
		111001.	Satz / Set	116001.	Satz / Set	120001.	Satz / Set
	9 Stück/pcs.		13 Stück/pcs.		10 Stück/pcs.		12 Stück/pcs.
108010	Ø1,0 - 0,5	111010	Ø1,0 - 0,5	116010	Ø1,0 - 0,5	120010	Ø1,0 - 0,5
108015	Ø1,5 - 1,0	111015	Ø1,5 - 1,0	116020	Ø2,0 - 1,0	120020	Ø2,0 - 1,0
108020	Ø2,0 - 1,5	111020	Ø2,0 - 1,5	116030	Ø3,0 - 2,0	120030	Ø3,0 - 2,0
108025	Ø2,5 - 2,0	111025	Ø2,5 - 2,0	116040	Ø4,0 - 3,0	120040	Ø4,0 - 3,0
108030	Ø3,0 - 2,5	111030	Ø3,0 - 2,5	116050	Ø5,0 - 4,0	120050	Ø5,0 - 4,0
108035	Ø3,5 - 3,0	111035	Ø3,5 - 3,0	116060	Ø6,0 - 5,0	120060	Ø6,0 - 5,0
108040	Ø4,0 - 3,5	111040	Ø4,0 - 3,5	116070	Ø7,0 - 6,0	120070	Ø7,0 - 6,0
108045	Ø4,5 - 4,0	111045	Ø4,5 - 4,0	116080	Ø8,0 - 7,0	120080	Ø8,0 - 7,0
108050	Ø5,0 - 4,5	111050	Ø5,0 - 4,5	116090	Ø9,0 - 8,0	120090	Ø9,0 - 8,0
		111055	Ø5,5 - 5,0	116100	Ø10,0 - 9,0	120100	Ø10,0 - 9,0
		111060	Ø6,0 - 5,5		ER 40/472 E	120110	Ø11,0 - 10,0
		111065	Ø6,5 - 6,0	140001	Satz / Set	120120	Ø12,0 - 11,0
		111070	Ø7,0 - 6,5	140001.	Satz / Set	120130	Ø13,0 - 12,0
					23 Stück/pcs.		ER 50/474 E
	ER 25/430 E		ER 32/470 E	140030	Ø3,0 - 2,0	150001	Satz / Set
125001	Satz / Set	132001	Satz / Set	140040	Ø4,0 - 3,0		12 Stück/pcs.
125001.	Satz / Set	132001.	Satz / Set	140050	Ø5,0 - 4,0	150060	Ø6,0 - 5,0
	15 Stück/pcs.		18 Stück/pcs.	140060	Ø6,0 - 5,0	150080	Ø8,0 - 6,0
125010	Ø1,0 - 0,5			140070	Ø7,0 - 6,0	150100	Ø10,0 - 8,0
125020	Ø2,0 - 1,0	132020	Ø2,0 - 1,0	140080	Ø8,0 - 7,0	150120	Ø12,0 - 10,0
125030	Ø3,0 - 2,0	132030	Ø3,0 - 2,0	140090	Ø9,0 - 8,0	150140	Ø14,0 - 12,0
125040	Ø4,0 - 3,0	132040	Ø4,0 - 3,0	140100	Ø10,0 - 9,0	150160	Ø16,0 - 14,0
125050	Ø5,0 - 4,0	132050	Ø5,0 - 4,0	140110	Ø11,0 - 10,0	150180	Ø18,0 - 16,0
125060	Ø6,0 - 5,0	132060	Ø6,0 - 5,0	140120	Ø12,0 - 11,0	150200	Ø20,0 - 18,0
125070	Ø7,0 - 6,0	132070	Ø7,0 - 6,0	140130	Ø13,0 - 12,0	150220	Ø22,0 - 20,0
125080	Ø8,0 - 7,0	132080	Ø8,0 - 7,0	140140	Ø14,0 - 13,0	150240	Ø24,0 - 22,0
125090	Ø9,0 - 8,0	132090	Ø9,0 - 8,0	140150	Ø15,0 - 14,0	150250	Ø25,0 - 23,0
125100	Ø10,0 - 9,0	132100	Ø10,0 - 9,0	140160	Ø16,0 - 15,0	150260	Ø26,0 - 24,0
125110	Ø11,0 - 10,0	132110	Ø11,0 - 10,0	140170	Ø17,0 - 16,0	150280	Ø28,0 - 26,0
125120	Ø12,0 - 11,0	132120	Ø12,0 - 11,0	140180	Ø18,0 - 17,0	150300	Ø30,0 - 28,0
125130	Ø13,0 - 12,0	132130	Ø13,0 - 12,0	140190	Ø19,0 - 18,0	150320	Ø32,0 - 30,0
125140	Ø14,0 - 13,0	132140	Ø14,0 - 13,0	140200	Ø20,0 - 19,0	150340	Ø34,0 - 32,0
125150	Ø15,0 - 14,0	132150	Ø15,0 - 14,0	140210	Ø21,0 - 20,0		
125160	Ø16,0 - 15,0	132160	Ø16,0 - 15,0	140220	Ø22,0 - 21,0		
		132170	Ø17,0 - 16,0	140230	Ø23,0 - 22,0		
		132180	Ø18,0 - 17,0	140240	Ø24,0 - 23,0		
		132190	Ø19,0 - 18,0	140250	Ø25,0 - 24,0		
		132200	Ø20,0 - 19,0	140260	Ø26,0 - 25,0		
				140270	Ø27,0 - 26,0		
				140280	Ø28,0 - 27,0		
				140290	Ø29,0 - 28,0		
				140300	Ø30,0 - 29,0		
Sätze mit . z.B. 125001. nicht Original rego-fix Sets with . e.g. 125001. no original rego-fix							

Gewindebohrzangen ohne Längenausgleich Zubehör + Ersatzteile

Tapping collets without axial compensation / Accessories and spare parts



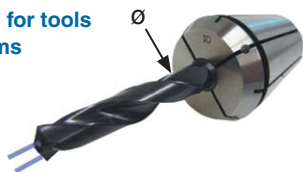
Original rego-fix



ER 16-GB		ER 25-GB		ER 32-GB		ER 40-GB	
Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ
GB116045	ø4,5x3,4	GB125045	ø4,5x3,4	GB132045	ø4,5x 3,4	GB140070	ø7,0x 5,5
GB116055	ø5,5x4,3	GB125055	ø5,5x4,3	GB132055	ø5,5x 4,3	GB140080	ø8,0x 6,2
GB116060	ø6,0x4,9	GB125060	ø6,0x4,9	GB132060	ø6,0x 4,9	GB140090	ø9,0x 7,0
GB116070	ø7,0x5,5	GB125070	ø7,0x5,5	GB132070	ø7,0x 5,5	GB140100	ø10,0x 8,0
ER 20-GB		GB125080	ø8,0x6,2	GB132080	ø8,0x 6,2	GB140110	ø11,0x 9,0
GB120045	ø4,5x3,4	GB125090	ø9,0x7,0	GB132090	ø9,0x 7,0	GB140120	ø12,0x 9,0
GB120055	ø5,5x4,3	GB125100	ø10,0x8,0	GB132100	ø10,0x 8,0	GB140140	ø14,0x11,0
GB120060	ø6,0x4,9	GB125110	ø11,0x9,0	GB132110	ø11,0x 9,0	GB140160	ø16,0x12,0
GB120070	ø7,0x5,5	GB125120	ø12,0x9,0	GB132120	ø12,0x 9,0	GB140180	ø18,0x14,5
GB120080	ø8,0x6,2			GB132140	ø14,0x11,0	GB140200	ø20,0x16,0
GB120090	ø9,0x7,0			GB132160	ø16,0x12,0	GB140220	ø22,0x18,0
GB120100	ø10,0x8,0						

Spannzangen DIN 6499 abgedichtet mit Nennmaß für Werkzeuge mit Innenkühlung

Nominal diameter collets for tools with inner cooling systems



Gewindebohrzangen PCM ET1 mit Längenausgleich

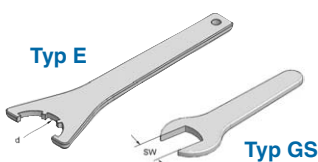
Tapping collets PCM ET1 with compensation



Art.-Nr.	Typ	ø	Art.-Nr.	Typ	ø max.
116...C	ER16	3-10	ET1-16...	M1 - M 6	6,3
120...C	ER20	3-13	ET1-20...	M1 - M 8	7,1
125...C	ER25	3-16	ET1-25...	M3 - M12	10,0
132...C	ER32	3-20	ET1-32...	M4 - M16	12,5
140...C	ER40	4-26	ET1-40...	M6 - M20	17,0
150...C	ER50	12-34			

Gewindebohrerschaft-ø angeben
Please indicate tap shank-ø

Hakenschlüssel Hook spanner



Schlüssel DIN 6368 Key DIN 6368



Spannschraube Weldon Clamping screw Weldon



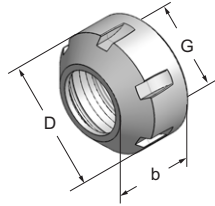
Fräseranzugschraube DIN 6367 Drawn - in bolt to DIN 6367



Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ	Art.-Nr.	Typ
911180	GS 17	170101	ø16	147100	M 6x10	163100	M 8x ø16
916180	GS 25	171101	ø22	148100	M 8x10	164100	M10x ø22
920180	GS 30	172101	ø27	149100	M10x12	165100	M12x ø27
916181	E 16	173101	ø32	150100	M12x16	166100	M16x ø32
920181	E 20	174101	ø40	151100	M14x16	167100	M20x ø40
925180	E 25			152100	M16x16	168100	M24x ø50
932180	E 32			153100	M18x2x20		
940180	E 40			154100	M20x2x20		
950180	E 50						

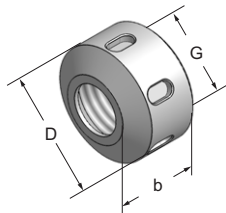
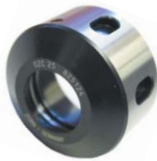


Spannmutter gleitgelagert DIN 6499 für Dichtscheiben
Clamping nut friction bearing DIN 6499
for sealing disc



Art.-Nr.	Typ	D	b	G	Nm max.
716124	GMGC / ER16	28	23	M 22x1,50	70
720124	GMGC / ER20	34	25	M 25x1,50	100
725124	GMGC / ER25	42	26	M 32x1,50	130
732124	GMGC / ER32	50	28	M 40x1,50	170
740124	GMGC / ER40	63	31	M 50x1,50	220

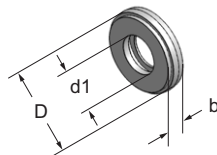
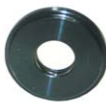
Spannmutter DIN 6388 für Dichtscheiben
Clamping nut DIN 6388 for sealing disc



Art.-Nr.	Typ	D	b	G	Nm max.
816124	OZC 16	43	29	M 33x1,50	130
825124	OZC 25	60	35	M 48x2,00	200
832124	OZC 32	72	38	M 60x2,50	220

Dichtscheiben für / Sealing disc for
OZC16 = DS/ER25, OZC25 = DS/OZ25, OZC32 = DS/ER40

Dichtscheiben für Werkzeuge mit interner Kühlmittelzufuhr
Sealing discs for tools with internal coolant supply



Art.-Nr.	Typ	D	b	d1
316...	DS / ER16	13,0	4	316050 - 316100
320...	DS / ER20	16,0	4	320050 - 320130
325...	DS / ER25	21,0	4	325050 - 325160
332...	DS / ER32	27,0	4	332050 - 332200
340...	DS / ER40	33,5	4	340050 - 340260
350...	DS / OZ25	31,0	4	350050 - 350250

Kühlmitteldruck / Coolant pressure min. 5 bar - max. 100 bar

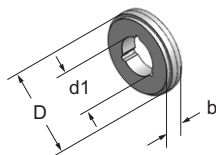
Der eingelegte O-Ring gewährleistet interne Kühlmittelzufuhr durch das gespannte Werkzeug direkt zur Werkzeugschneide

The inserted O-ring seal ensures a coolant supply internally through the clamped tool directly to the cutting edge



Bestellbeispiel / Example for order:
D = ø21, d1 = ø12 entspricht / equals Art.-Nr. 325120

Dichtscheiben für Werkzeuge mit externer Kühlmittelzufuhr
Sealing discs for tools with external coolant supply

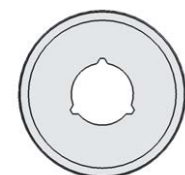


Art.-Nr.	Typ	D	b	d1
316...C	DS / ER16	13,0	4	4,6,8
325...C	DS / ER25	21,0	4	6,8,10,12,14,16
332...C	DS / ER32	27,0	4	6,8,10,12,14,16,20
350...C	DS / OZ25	31,0	4	6,8,10,12,14,16,20,25

Kühlmitteldruck / Coolant pressure min. 5 bar - max. 100 bar

Dichtscheibe ohne O-Ring-Nut mit 3 Kühlkanälen für externe Kühlmittelzufuhr direkt zur Werkzeugschneide, Mindermengenschmierung MMS

Sealing disk without O-ring seal groove with 3 coolant channels for coolant supply externally directly to the cutting edge, min. lubrication MMS



Bestellbeispiel / Example for order:
D = ø21, d1 = ø12 entspricht / equals Art.-Nr. 325120C



alpha-set 33 swift

Werkzeug-Voreinstellung mit Kamera, Touchscreen und automatischer Werkzeugvermessung

alfa-set 33 swift ist das einfach zu bedienende Voreinstellgerät mit elektronischer Bildverarbeitung, 5,7" TFT-Farb-Touchscreen und CMOS-Kamera. Die Werkzeugschneide wird durch den Bildschirmbereich geschwenkt. Dabei wird die Schneidenform blitzschnell automatisch erkannt und die Koordinaten in der X- und Z-Achse angezeigt. Schneidenwinkel und Radien werden ebenso vermessen. Im Gegensatz zum Profilprojektor sind die elektronischen Messungen bedienerunabhängig und daher von höchster Wiederholgenauigkeit.

Einfach anzuwählen sind die 99 frei programmierbaren Bezugsnullpunkte. Alle relevanten Messresultate werden auf dem Touchscreen angezeigt. Auch die Bedienung mit einer Maus ist möglich.

Die pneumatische, selektive Einhandbedienung ist einzigartig in dieser Preisklasse. Die Feinverstellhandräder erlauben bei Bedarf das µm-genaue Positionieren des Fadenkreuzes an die Werkzeugschneide.



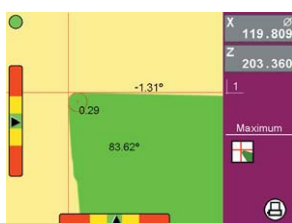
alpha-set 33 swift

Tool-presetting with camera and touchscreen, the easiest to use image processing system for automatic tool measuring

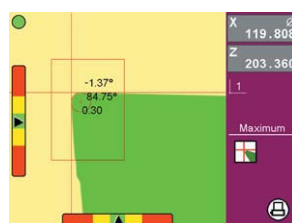
The electronic image processing system alfa-set swift with a 5.7" TFT-colour touchscreen work in micrometer accuracy range. Measurements are made within seconds and image evaluation takes place independent from the operator. „swift“ recommends the most suitable measuring method and display the values in X- and Z-axes on the screen. Manually selection of other measuring method by touch or mouse. Tool tip angle and radius are automatically recognized and displayed.

99 freely selectable zero points (adapters) and multilingual dialogue are standard. Mouse or touchscreen operation.

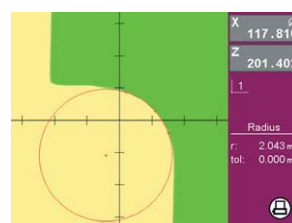
The pneumatic, selective one-hand operation is unique. The fine adjustment handwheels allow µm-precise positioning if you will measure with the fixed instead of the floating crosshair.



Virtuelles Fadenkreuz
Floating crosshair



Auswertefenster
Measuring window



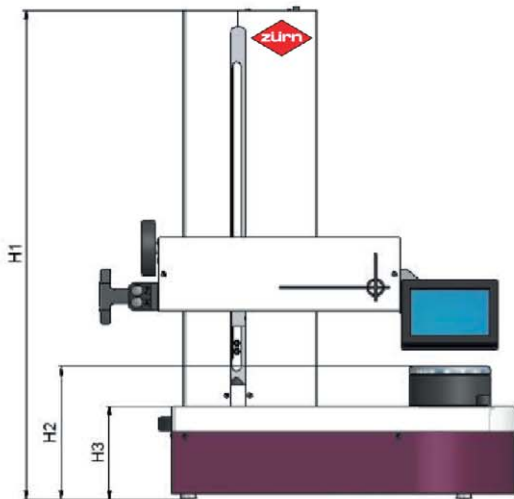
Radiusmessung
Radius measurement



Auswahl Adapter
Up to 99 adapters

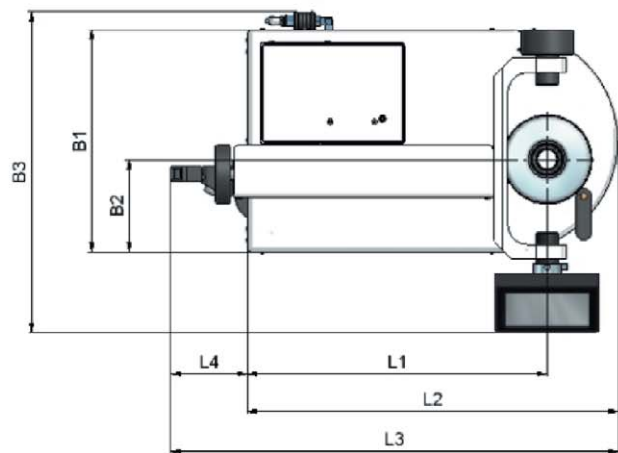
Technische Daten

- Glasmasstäbe AcuRite, Auflösung 1µm
- Mehrsprachige Dialogführung über 5,7" TFT-Farb-Touchscreen oder Maus
- Virtuelles Fadenkreuz
- 99 Bezugsnullpunkte (Adapter) frei programmierbar
- Messprogramme für Radius- und Winkelmessungen
- Absolut- / Differenzmessung
- Radius / Durchmesser
- Haltefunktion
- Achsparallelitätskompensation
- Schnittstelle USB für Etikettendrucker und Maus
- Passwortschutz



Technical Data

- AcuRite glass scales, resolution 1µm
- multilingual dialogue menu on 5.7" TFT-colour touchscreen
- 99 reference zero points (adapter)
- freely selectable axis designation and counting direction
- measuring programs for radius and angle measurements
- absolute / difference measurement
- radius / diameter
- hold function
- axis parallelism compensation
- USB-interface for label-printer
- password protected



Art.-Nr.	Bezeichnung	X=ø	z=Länge	SK	L1	L2	L3	L3	B1	B2	B3	H1	H2	H3	Gewicht
304410	alpha-set 33 swift	200	380	50	405	500	604	104	300	125	433	712	194	136	42 kg
305410	alpha-set 35 swift	200	500	50	405	500	604	104	300	125	433	832	194	136	46 kg

Alle Maße in mm / All dimensions in mm

Geräte auf Wunsch auch mit SK 40 Aufnahme lieferbar!

alfa-set also with ISO 40 taperseat on available!

Kugelgelagerte Werkzeugaufnahme für höchste Rundlaufgenauigkeit

Taper pot with ball bearing seat for highest runout accuracy

Anschlussdaten:

Elektrisch: 100 – 240 V AC / 50/60 Hz
 Druckluft: 4-6 bar, trocken

Zubehör:

Drucker Dymo 400
 Reduktionen
 Einstellhorn
 Tischablage für Reduktionen
 ab Lager lieferbar

Lieferumfang:

Grundgerät Tischmodell
 Tischnetzteil 12 V
 Schneidkantenreiniger
 Bedienungsanleitung
 Garantieurkunde

Power supply:

Electrical: 100-240 VAC /50-60 Hz
 Pneumatic: 4-6 bar, dry

Accessories:

Printer Dymo 400
 Adapters
 Master mandrel
 Table rack for adapters
 are available from stock

Delivery contents:

Basic unit, desktop model
 Power supply unit 12 V
 Cutting-edge cleaner
 Instruction manual
 Guarantee certificate

Technische Änderungen vorbehalten! / We reserve all rights to make technical improvements!

Typ TS
 Presetting equipment TOOLSET



Typ TSO
 Optikversion mit Durchlichtprojektor 100/20 fach,
 mit drehbarem Fadenkreuz
 Optical type with trans-illumination projector 100/20x enlarge-
 ment with rotatable crosshairs



Art.-Nr.	Typ	SK	Xd	Z	Gewicht
107410	TS 240	40	260	330	45 kg
108410	TS 250	50	260	330	45 kg
109410	TS 350	50	360	430	55 kg

Art.-Nr.	Typ	SK	Xd	Z	Gewicht
118410	TSO 240	40	220	310	50 kg
119410	TSO 250	50	220	320	50 kg
120410	TSO 350	50	320	420	60 kg

121410 Drucker für Toolset / Printer for Toolset

121410 Drucker für Toolset / Printer for Toolset

Reduktionen
 Reductions



TOOLFIX Werkzeugmontagegerät
 TOOLFIX mounting equipment



Art.-Nr.	Typ	SK	VDI	HSK	CAPTO
234410	SK40xSK30	40			
238410	SK50xSK30	50			
236410	SK50xSK40	50			
226410	SK40xVDI20	40	20		
227410	SK40xVDI25	40	25		
228410	SK40xVDI30	40	30		
231410	SK50xVDI40	50	40		
232410	SK50xVDI50	50	50		
240410	SK40xHSK 40	40		A+E40	
241410	SK40xHSK 50	40		A+E50	
242410	SK40xHSK 63	40		A+E63	
246410	SK50xHSK 63	50		A+E63	
248410	SK50xHSK100	50		A100	
280410	SK50xCAPTO-C3	50			C3
281410	SK50xCAPTO-C4	50			C4
282410	SK50xCAPTO-C5	50			C5
283410	SK50xCAPTO-C6	50			C6

Art.-Nr.	Typ	SK	VDI	HSK	CAPTO
250410	SK 30	30			
251410	SK 40	40			
252410	SK 50	50			
253410	HSK-A40			A40	
254410	HSK-E40			E40	
255410	HSK-A50			A50	
257410	HSK-A63			A63	
258410	HSK-E63			E63	
259410	VDI 20		20		
260410	VDI 30		30		
261410	VDI 40		40		
262410	VDI 50		50		
263410	CAPTO-C4				C4
264410	CAPTO-C5				C5
265410	CAPTO-C6				C6

TOOLFIX VARIO Adaptersystem

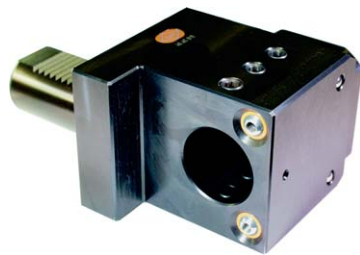


VARIO ist die Version mit Schnellwechselverschluss zum Auswechseln von verschiedenen Werkzeugadaptern. Die VARIO-Version bietet Anwendern von verschiedenen Werkzeugaufnahmen die Möglichkeit verschiedene Adapterformen auf einem Basiskörper zu verwenden.

VARIO is a version with quick change lock for changing different tool adapters. The VARIO-version makes possible to use different forms of adapters on the same base-body for users with different toolholders.

Art.-Nr.	Typ	SK	VDI	HSK	CAPTO	Art.-Nr.	Typ	SK	VDI	HSK	CAPTO
31000	Toolfix Vario					31232	VARIO-Adapter			A 32	
	Basiskörper					31240	VARIO-Adapter			A 40	
31030	VARIO-Adapter	30				31250	VARIO-Adapter			A 50	
31040	VARIO-Adapter	40				31263	VARIO-Adapter			A 63	
31050	VARIO-Adapter	50				31280	VARIO-Adapter			A 80	
31116	VARIO-Adapter		16			31210	VARIO-Adapter			A100	
31120	VARIO-Adapter		20			31632	VARIO-Adapter			E 32	
31125	VARIO-Adapter		25			31640	VARIO-Adapter			E 40	
31130	VARIO-Adapter		30			31650	VARIO-Adapter			E 50	
31140	VARIO-Adapter		40			31663	VARIO-Adapter			E 63	
31150	VARIO-Adapter		50			31663	VARIO-Adapter			E 63	
						31803	VARIO-Adapter				C 3
						31804	VARIO-Adapter				C 4
						31805	VARIO-Adapter				C 5
						31806	VARIO-Adapter				C 6

Sonderfertigungen nach Kundenwunsch Special fabrications according to customer's requirements



VDI 40 Bohrstangenhalter für HITACHI-SEIKI
VDI 40 Boring bar holder for HITACHI-SEIKI



VDI 30 Werkzeughalter
mit HSK-T40 Spanneinheit
VDI 30 toolholders
with HSK-T40 clamping unit



VDI 30 Werkzeughalter mit Aufnahme AWN 28
VDI 30 Toolholder with AWN 28



VDI 30 Ausgleichhalter für Gildemeister MF-Sprint
VDI 30 Adapter for Gildemeister MF-Sprint



Abstechhalter System ARNO
Infeed toolholder System ARNO



zürn

Werkzeughalter für CNC-Drehmaschinen DIN 69880 / DIN ISO 10889

Toolholders for CNC machines
DIN 69880 / DIN ISO 10889

