

rineck

• Werkzeugtechnik



- Fräswerkzeuge/Werkzeugaufnahmen
Cutting tools/Tool holders

TOOLS ARE OUR PASSION  MADE IN GERMANY

INHALTSVERZEICHNIS

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Fräswerkzeuge / Wendeschneidplatten

Cutting tools / inserts

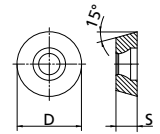
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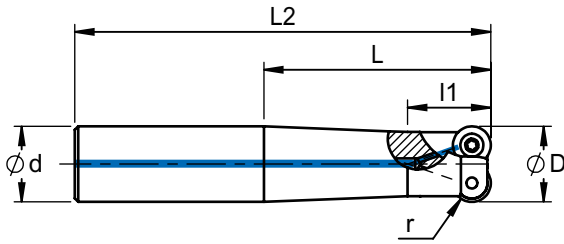
Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Schaftfräser, R2,5 RD__

shank type cutter, R2,5 RD__



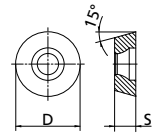
Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



D	Bestell-Nr. order number	L	l1	L2	d	d3	z	WSP DxS	r			
10	2 10 951	30	30	75	10	9	2	5x1,5	2,5	x	993 01	994 06
12	3 12 950	30	30	75	12	11	3	5x1,5	2,5	x	993 01	994 06
15	4 15 949	30	30	80	16	15	4	5x1,5	2,5	x	993 01	994 06

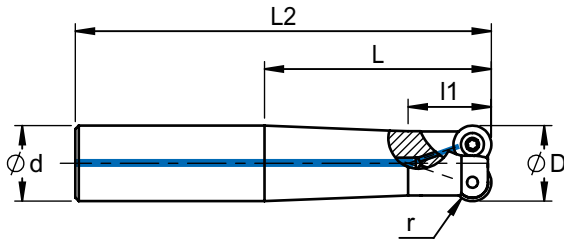
Schafffräser, R3,5 RD__

shank type cutter, R3,5 RD__

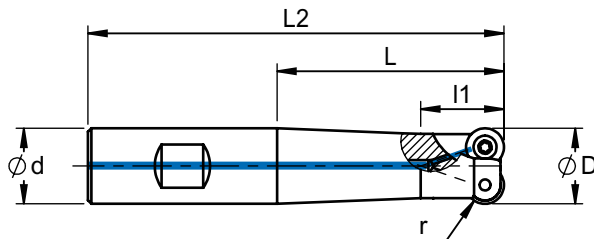


Wendeschneidplatten RD inserts RD

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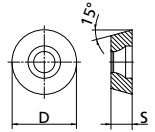
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12	2 12 948	30	-	75	10	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 947	30	-	75	12	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 942	40	16	88	16	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 941	60	16	108	16	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 940	80	16	128	16	-	2	7x1,99	3,5	x	993 02K	994 15
15	2 15 938	40	20	88	16	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 937	60	20	108	16	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 936	80	22	130	20	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 935	100	22	150	20	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 934	120	22	176	25	-	2	7x2,38	3,5	x	993 02	994 15



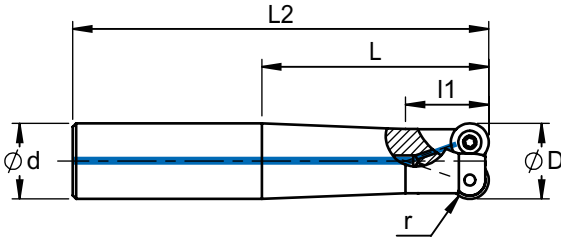
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12	2 12 946	40	16	88	16	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 945	60	16	108	16	-	2	7x1,99	3,5	x	993 02K	994 15
12	2 12 944	80	16	128	16	-	2	7x1,99	3,5	x	993 02K	994 15
15	2 15 961	40	20	88	16	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 960	60	20	108	16	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 959	80	22	130	20	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 958	100	22	150	20	-	2	7x2,38	3,5	x	993 02	994 15
15	2 15 957	120	22	176	25	-	2	7x2,38	3,5	x	993 02	994 15

Schaftfräser, R5 RD__

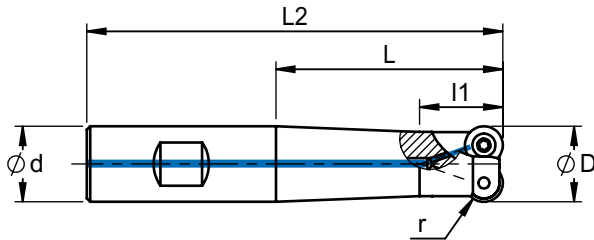
shank type cutter, R5 RD__



Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



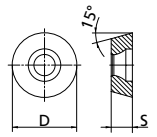
D	Bestell-Nr. order number	L	l1	L2	d	d3	z	WSP DxS	r			
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20	2 20 932	60	22	110	20	-	2	10x3,18	5	x	993 04	994 15
20	2 20 931	80	25	136	25	-	2	10x3,18	5	x	993 04	994 15
20	2 20 930	100	25	156	25	-	2	10x3,18	5	x	993 04	994 15
20	2 20 929	120	25	176	25	-	2	10x3,18	5	x	993 04	994 15



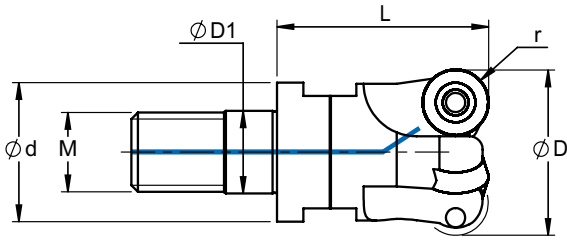
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20	2 20 956	40	20	90	20	-	2	10x3,18	5	x	993 04	994 15
20	2 20 955	60	22	110	20	-	2	10x3,18	5	x	993 04	994 15
20	2 20 954	80	25	136	25	-	2	10x3,18	5	x	993 04	994 15
20	2 20 953	100	25	156	25	-	2	10x3,18	5	x	993 04	994 15
20	2 20 952	120	25	176	25	-	2	10x3,18	5	x	993 04	994 15





Einschraubfräser R2,5 RD__

modular screw in cutter R2,5 RD__



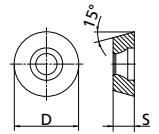
Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



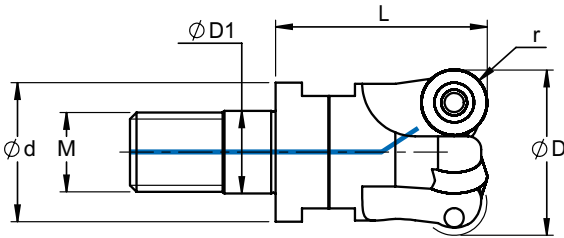
D	Bestell-Nr. order number	L	D1	d	Z	M	WSP DxS	r				
10	2 10 975	20	6,5	9,8	2	6	5x1,5	2,5	x			
12	3 12 817	20	6,5	10	3	6	5x1,5	2,5	x			
12	3 12 973	20	8,5	13,5	3	8	5x1,5	2,5	x			
15	4 15 972	20	8,5	13,5	4	8	5x1,5	2,5	x			
20	5 20 971	25	10,5	18	5	10	5x1,5	2,5	x			
25	6 25 825	28	12,5	21	6	12	5x1,5	2,5	x			

Einschraubfräser R3,5 RD__

modular screw in cutter R3,5 RD__



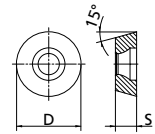
Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



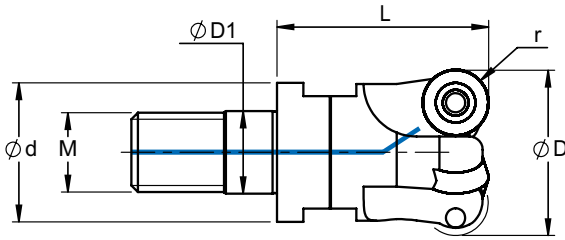
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12	2 12 820	28	6,5	10	2	6	7x1,99	3,5	x	993 02K	994 07
12	2 12 RD07T1M7	23	7,5	11,5	2	7	7x1,99	3,5	x	993 02K	994 07
12	2 13 RD07T1M7	23	7,5	11,5	2	7	7x1,99	3,5	x	993 02K	994 07
12	2 13 RD07T1M8	23	8,5	13,5	2	8	7x1,99	3,5	x	993 02K	994 07
12	2 12 970	28	8,5	13,5	2	8	7x1,99	3,5	x	993 02K	994 07
15	3 15 968	28	8,5	13,5	3	8	7x1,99	3,5	x	993 02	994 07
20	4 20 967	28	10,5	18	4	10	7x1,99	3,5	x	993 02	994 07
25	5 25 966	28	12,5	21	5	12	7x1,99	3,5	x	993 02	994 07
30	6 30 965	28	17	29	6	16	7x1,99	3,5	x	993 02	994 07
35	7 35 964	28	17	29	7	16	7x1,99	3,5	x	993 02	994 07
15	2 15 969	28	8,5	13,5	2	8	7x2,38	3,5	x	993 02	994 07
15	2 15 969-23	23	8,5	13,5	2	8	7x2,38	3,5	x	993 02	994 07
15	3 15 943	28	8,5	13,5	3	8	7x2,38	3,5	x	993 02	994 07
15	3 15 943-23	23	8,5	13,5	3	8	7x2,38	3,5	x	993 02	994 07
16	2 16 850	28	8,5	13,5	2	8	7x2,38	3,5	x	993 02	994 07
16	3 16 RD0702M10	23	10,5	15,4	3	10	7x2,38	3,5	x	993 02	994 07
20	4 20 851	28	10,5	18	4	10	7x2,38	3,5	x	993 02	994 07
25	5 25 852	28	12,5	21	5	12	7x2,38	3,5	x	993 02	994 07
30	5 30 846	28	17	29	6	16	7x2,38	3,5	x	993 02	994 07
35	7 35 847	28	17	29	7	16	7x2,38	3,5	x	993 02	994 07

Einschraubfräser R4 RD__

modular screw in cutter R4 RD__



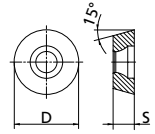
Wendeschneidplatten RD
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s. Seite / see page 36-37



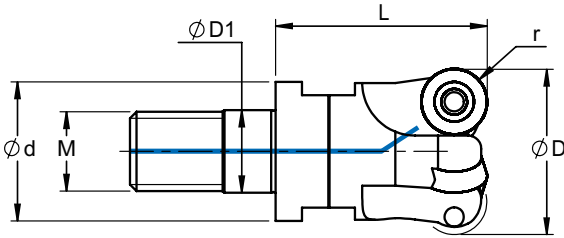
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16	2 16 RD08M8	23	8,5	13,5	2	8	8x2,78	4	x		993 12	994 08
16	2 16 RD08M10	23	10,5	15,4	2	10	8x2,78	4	x		993 12	994 08
20	3 20 RD08M10	25	10,5	18	3	10	8x2,78	4	x		993 12	994 08
25	4 25 RD08M12	29	12,5	21	4	12	8x2,78	4	x		993 12	994 08
32	5 32 RD08M16	33	17	29	5	16	8x2,78	4	x		993 12	994 08
35	5 35 RD08M16	43	17	29	5	16	8x2,78	4	x		993 12	994 08

Einschraubfräser R5 RD__

modular screw in cutter R5 RD__



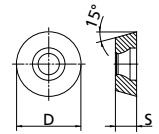
Wendeschneidplatten RD
inserts RD
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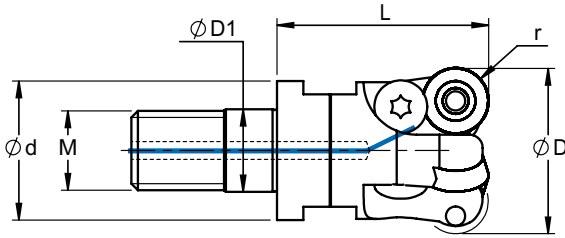
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20	2 20 987	28	10,5	18	2	10	10x3,18	5	x			
20	2 20 987-30	30	10,5	18	2	10	10x3,18	5	x			
25	2 25 986	32	12,5	21	2	12	10x3,18	5	x			
24	3 24 985	32	12,5	21	3	12	10x3,18	5	x			
25	3 25 985	32	12,5	21	3	12	10x3,18	5	x			
25	3 25 985-35	35	12,5	21	3	12	10x3,18	5	x			
30	4 30 984	32	12,5	21	4	12	10x3,18	5	x			
30	4 30 983	42	17	29	4	16	10x3,18	5	x			
32	4 32 983	42	17	29	4	16	10x3,18	5	x			
35	4 35 RD10M16	43	17	29	4	16	10x3,18	5	x			
35	5 35 982	42	17	29	5	16	10x3,18	5	x			
42	5 42 RD10M16	42	17	29	5	16	10x3,18	5	x			
42	6 42 981	42	17	29	6	16	10x3,18	5	x			
42	6 42 981-37	42	17	37	6	16	10x3,18	5	x			

Einschraubfräser R6 RD__

modular screw in cutter R6 RD__



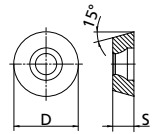
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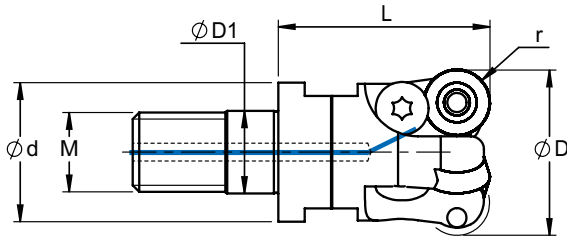
D	Bestell-Nr. order number	L	D1	d	Z	M	WSP DxS	r					
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24	2 24 980-35	35	12,5	21	2	12	12x3,97	6	x	-	-	993 04	994 15
30	3 30 816	42	17	29	3	16	12x3,97	6	x	-	995 05	993 04	994 15
32	3 32 816	42	17	29	3	16	12x3,97	6	x	-	995 05	993 04	994 15
35	3 35 979	42	17	29	3	16	12x3,97	6	x	-	995 05	993 04	994 15
35	4 35 978	42	17	29	4	16	12x3,97	6	x	-	-	993 04	994 15
42	4 42 977	42	17	29	4	16	12x3,97	6	x	-	995 05	993 04	994 15
42	5 42 976	42	17	29	5	16	12x3,97	6	x	-	-	993 04	994 15
42	5 42 976-37	42	17	37	5	16	12x3,97	6	x	-	-	993 04	994 15

Einschraubfräser R8 RD__

modular screw in cutter R8 RD__



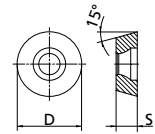
Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



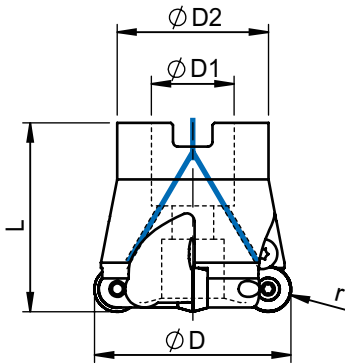
D	Bestell-Nr. order number	L	D1	d	Z	M	WSP DxS	r					
32	2 32 975	42	17	29	2	16	16x4,76	8	x	-	-	993 06	994 20
32	2 32 852	42	17	29	2	16	16x4,76	8	x	995 01	-	993 06	994 20
35	3 35 853	42	17	29	3	16	16x4,76	8	x	-	-	993 06	994 20

Aufsteckfräser R4-R5-R6-R8 RD__

shell cutter R4-R5-R6-R8 RD__



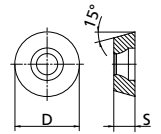
Wendeschneidplatten RD inserts RD
s. Seite / see page 36-37



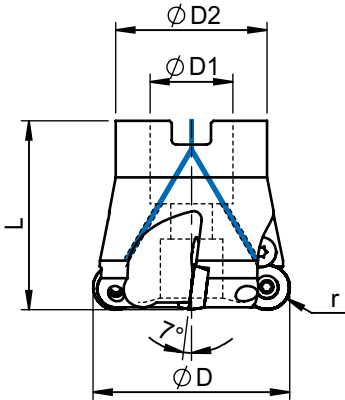
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42	7 42RD08A16	42	16	35	7	8x2,78	4	x	-	-	993 12	994 08	
52	8 52RD08A22	42	22	40	8	8x2,78	4	x	-	-	993 12	994 08	
42	6 42 RD10A16	42	16	35	6	10x3,18	5	x	-	-	993 04	994 15	
52	6 52 RD10A22	50	22	40	6	10x3,18	5	x	-	-	993 04	994 15	
52	7 52 998	50	22	40	7	10x3,18	5	x	-	-	993 04	994 15	
66	7 66 RD10A27	50	27	48	7	10x3,18	5	x	-	-	993 04	994 15	
42	4 42 858	42	16	35	4	12x3,97	6	x	-	-	993 04	994 15	
42	5 42 996	42	16	35	5	12x3,97	6	x	-	-	993 04	994 15	
50	5 50 RD12A22	50	22	40	5	12x3,97	6	x	-	995 05	993 04	994 15	
52	5 52 995	50	22	40	5	12x3,97	6	x	-	995 05	993 04	994 15	
66	6 66 854	50	27	48	6	12x3,97	6	x	-	995 05	993 04	994 15	
80	7 80 851	50	27	60	7	12x3,97	6	x	-	995 05	993 04	994 15	
52	4 52 994	50	22	40	4	16x4,76	8	x	995 01	-	993 06	994 20	
52	5 52 993	50	22	40	5	16x4,76	8	x	-	-	993 06	994 20	
66	5 66 992	50	27	48	5	16x4,76	8	x	995 01	-	993 06	994 20	
80	5 80 RD16A27	52	27	60	5	16x4,76	8	x	-	-	993 06	994 20	
80	6 80 991	52	27	60	6	16x4,76	8	x	995 01	-	993 06	994 20	
100	7 100 990	52	32	70	7	16x4,76	8	-	995 01	-	993 06	994 20	
125	8 125 989	52	40	90	8	16x4,76	8	-	995 01	-	993 06	994 20	
160	9 160 988	52	40	120	9	16x4,76	8	-	995 01	-	993 06	994 20	
200	11 200 RD16A40	52	40	160	11	16x4,76	8	-	995 01	-	993 06	994 20	

Aufsteckfräser R5-R6-R8 RD__ 7° pos.

shell cutter R5-R6-R8 RD__



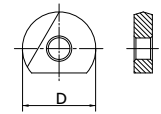
Wendeschneidplatten RD
inserts RD
s. Seite / see page 36-37



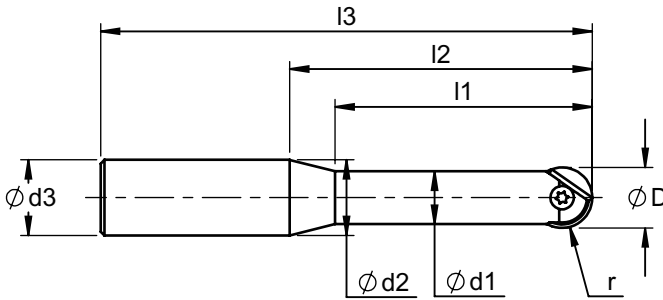
D	Bestell-Nr. order number	L	D1	D2	Z	WSP DxS	r					
42	6 42 RD10A16/7	42	16	35	6	10x3,18	5	x	-	-	993 04	994 15
52	7 52 850	50	22	40	7	10x3,18	5	x	-	-	993 04	994 15
40	4 40 856	42	16	35	4	12x3,97	6	x	-	-	993 04	994 15
50	5 50 RD12A22/7	50	22	40	5	12x3,97	6	x	-	-	993 04	994 15
52	5 52 928	52	22	40	5	12x3,97	6	x	-	995 05	993 04	994 15
66	6 66 927	52	27	48	6	12x3,97	6	x	-	995 05	993 04	994 15
80	7 80 926	52	27	60	7	12x3,97	6	x	-	995 05	993 04	994 15
52	4 52 835	50	22	40	4	16x4,76	8	x	995 01	-	993 06	994 20
66	5 66 925	50	27	48	5	16x4,76	8	x	995 01	-	993 06	994 20
80	6 80 924	52	27	60	6	16x4,76	8	x	995 01	-	993 06	994 20
100	7 100 923	52	32	70	7	16x4,76	8	-	995 01	-	993 06	994 20
125	8 125 922	52	40	90	8	16x4,76	8	-	995 01	-	993 06	994 20
160	9 160 921	52	40	120	9	16x4,76	8	-	995 01	-	993 06	994 20



Kugelbahnschaftfräser ROHX

ball nose cutter ROHX



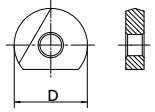
Wendeschneidplatten RO
inserts RO
s. Seite / see page 37



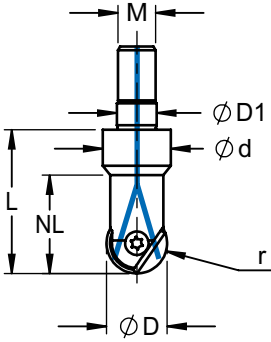
D	Bestell-Nr. order number	l1	l2	l3	d1	d2	d3	Z	r		
8	860RO8G12	30	60	105	7,3	12	12	2	4	993 22	994 07
8	880RO8G12	30	80	125	7,3	12	12	2	4	993 22	994 07
10	1060RO10G16	40	60	108	9	16	16	2	5	993 23	994 08
10	1080RO10G16	40	80	128	9	16	16	2	5	993 23	994 08
12	1240RO12G12	40	40	85	10,5	12	12	2	6	993 24	994 10
12	1260RO12G16	50	60	108	10,5	16	16	2	6	993 24	994 10
12	1280RO12G16	60	80	128	10,5	16	16	2	6	993 24	994 10
12	12100RO12G16	70	100	148	10,5	16	16	2	6	993 24	994 10
16	1640RO16G16	40	40	88	14	16	16	2	8	993 25	994 15
16	1660RO16G16	60	60	108	14	16	16	2	8	993 25	994 15
16	1680RO16G20	60	80	130	14	20	20	2	8	993 25	994 15
16	16100RO16G20	80	100	150	14	20	20	2	8	993 25	994 15



Kugelbahneinschraubfräser ROHX

modular screw in cutter ROHX



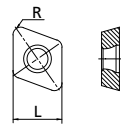
Wendeschneidplatten RO
inserts RO
s. Seite / see page 37



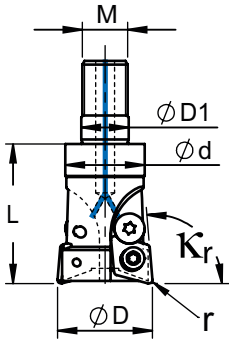
D	Bestell-Nr. order number	L	NL	d	D1	M	r		
8	823RO8M6	23	13	9,8	6,5	6	4	993 22	994 07
10	1023RO10M6	23	23	9,8	6,5	6	5	993 23	994 08
10	1033RO10M8	33	18	13	8,5	8	5	993 23	994 08
12	1223RO12M6	23	23	9,8	6,5	6	6	993 24	994 10
12	1233RO12M8	33	18	13	8,5	8	6	993 24	994 10
16	1628RO16M8	28	28	13,6	8,5	8	8	993 25	994 15
16	1628RO16M10	28	28	15,4	10,5	10	8	993 25	994 15
16	1638RO16M10	38	26	18	10,5	10	8	993 25	994 15
20	2028RO20M10	28	28	18	10,5	10	10	993 27	994 20

Eck-Einschraubfräser für Rhombus WSP - XDHW - XDHT

modular screw in cutter for insert - XDHW - XDHT



Wendeschneidplatten XD
inserts XD
s. Seite / see page 38

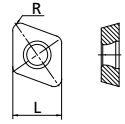


D	Bestell-Nr. order number	L	D1	d	Z	M	K _r	WSP L	r				
12	212XD45M6-95	20	6,5	10	2	6	95°	4	0,5	x	-	993 00	994 06

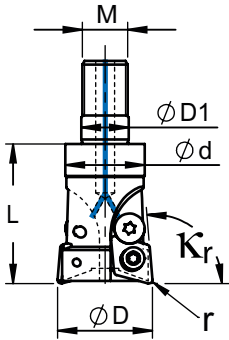
16	216XD75M8-95	23	8,5	13,6	2	8	95°	6,5	0,5	x	-	993 02	994 07
20	320XD75M10-95	30	10,5	18	3	10	95°	6,5	0,5	x	-	993 02	994 07
25	325XD75M12-95	35	12,5	21	3	12	95°	6,5	0,5	x	-	993 02	994 07

Eck-Einschraubfräser für Rhombus WSP - XDHW - XDHT

modular screw in cutter for insert - XDHW - XDHT



Wendeschneidplatten XD
inserts XD
s. Seite / see page 38

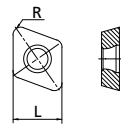


D	Bestell-Nr. order number	L	D1	d	Z	M	K _r	WSP L	r				
10	2 10 897	20	6,5	9,8	2	6	95°	4	1	x	-	993 00	994 06
12	2 12 896	20	6,5	10	2	6	95°	4	1	x	-	993 00	994 06
15	3 15 870	23	8,5	13,6	3	8	95°	4	1	x	-	993 00	994 06
15	2 15 855	23	8,5	13,6	2	8	91°	6,5	1	x	-	993 02	994 07
16	2 16 914	23	8,5	13,6	2	8	95°	6,5	1	x	-	993 02	994 07
16	2 16 XD71M10-95	23	10,5	15,4	2	10	95°	6,5	1	x	-	993 02	994 07
20	3 20 913	30	10,5	18	3	10	95°	6,5	1	x	-	993 02	994 07
25	3 25 912	35	12,5	21	3	12	95°	6,5	1	x	-	993 02	994 07
25	2 25 911	35	12,5	21	2	12	95°	10	1	x	995 05	993 04	994 15
35	3 35 910	43	17	29	3	16	95°	10	1	x	995 05	993 04	994 15
42	4 42 909	43	17	29	4	16	95°	10	1	x	995 05	993 04	994 15

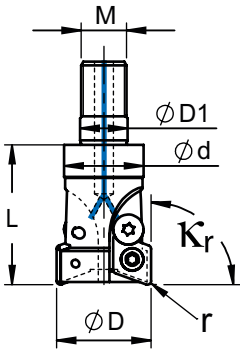
16	216XD72M8-95	23	8,5	13,6	2	8	95°	6,5	2	x	-	993 02	994 07
20	320XD72M10-95	30	10,5	18	3	10	95°	6,5	2	x	-	993 02	994 07

Eck-Einschraubfräser für Rhombus WSP - XDHW - XDHT

modular screw in cutter for insert - XDHW - XDHT



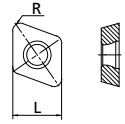
Wendeschneidplatten XD
inserts XD
s. Seite / see page 38



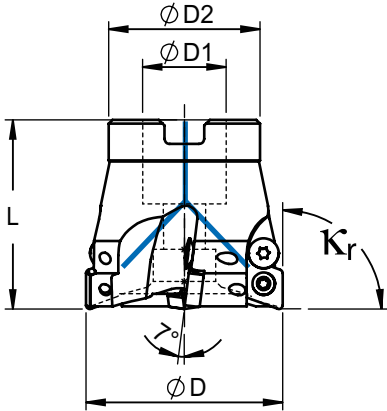
D	Bestell-Nr. order number	L	D1	d	Z	M	K _r	WSP L	r				
12	2 12 899	20	6,5	9,8	2	6	90°	4	-	x	-	993 00	994 06
15	2 15 920	23	8,5	13,6	2	8	90°	6,5	-	x	-	993 02	994 07
16	2 16 901	23	8,5	13,6	2	8	90°	6,5	-	x	-	993 02	994 07
20	3 20 919	30	10,5	18	3	10	90°	6,5	-	x	-	993 02	994 07
25	3 25 918	35	12,5	21	3	12	90°	6,5	-	x	-	993 02	994 07
25	2 25 917	35	12,5	21	2	12	90°	10	-	x	995 05	993 04	994 15
35	3 35 916	43	17	29	3	16	90°	10	-	x	995 05	993 04	994 15
42	4 42 915	43	17	29	4	16	90°	10	-	x	995 05	993 04	994 15

Eck-Aufsteckfräser für Rhombus WSP - XDHW - XDHT

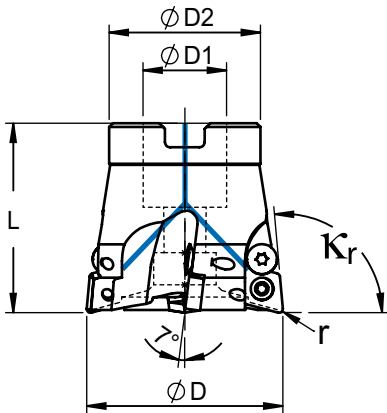
shell cutter for insert - XDHW - XDHT



Wendeschneidplatten XD
inserts XD
s. Seite / see page 38



D	Bestell-Nr. order number	L	D1	D2	Z	K_r	WSP DxS	r				
52	5 52 908	50	22	40	5	90°	10	-	x	995 05	993 04	994 15
66	6 66 907	50	27	48	6	90°	10	-	x	995 05	993 04	994 15
80	7 80 906	50	27	60	7	90°	10	-	x	995 05	993 04	994 15

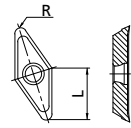


D	Bestell-Nr. order number	L	D1	D2	Z	K_r	WSP DxS	r				
52	5 52 904	50	22	40	5	95°	10	1	x	995 05	993 04	994 15
66	6 66 903	50	27	48	6	95°	10	1	x	995 05	993 04	994 15
80	7 80 902	50	27	60	7	95°	10	1	x	995 05	993 04	994 15
100	7 100 901	50	32	70	7	95°	10	1	x	995 05	993 04	994 15

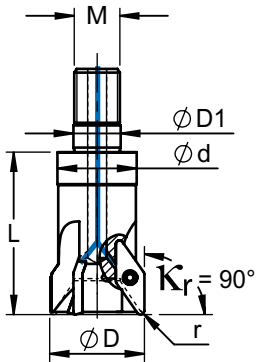
Einschraub-Tauchfräser für Aluminium, Kupfer, Kunststoff, Graphit

VDGT/VCGT

modular screw in cutter for aluminium, copper, plastic, graphite VDGT/VCGT



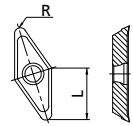
Wendeschneidplatten V
inserts V
s. Seite / see page 39



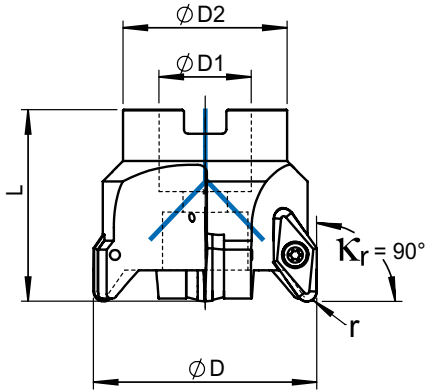
D	Bestell-Nr. order number	L	D1	d	Z	M	WSP L	r			
15	2 15VD11-05M8	36	8,5	13,5	2	8	11	0,5	x	993 02	994 07
16	2 16VD11-05M8	36	8,5	13,5	2	8	11	0,5	x	993 02	994 07
20	2 20VD11-05M10	36	10,5	18	2	10	11	0,5	x	993 02	994 07
25	3 25VD11-05M12	41	12,5	21	3	12	11	0,5	x	993 02	994 07
32	4 32VD11-05M16	45	17	29	4	16	11	0,5	x	993 02	994 07
42	5 42VD11-05M16	45	17	34	5	16	11	0,5	x	993 02	994 07
15	2 15 879	36	8,5	13,5	2	8	11	1	x	993 02	994 07
16	2 16 815	36	8,5	13,5	2	8	11	1	x	993 02	994 07
16	2 16 815-M10	36	10,5	15,4	2	10	11	1	x	993 02	994 07
20	2 20 878	36	10,5	18	2	10	11	1	x	993 02	994 07
25	3 25 877	41	12,5	21	3	12	11	1	x	993 02	994 07
32	4 32 876	45	17	29	4	16	11	1	x	993 02	994 07
42	5 42 875	45	17	34	5	16	11	1	x	993 02	994 07
32	2 32 874	48	17	29	2	16	22	3	x	993 06	994 20
42	3 42 873	48	17	34	3	16	22	3	x	993 06	994 20
42	3 42 873-37	48	17	37	3	16	22	3	x	993 06	994 20

Aufsteck-Tauchfräser für Aluminium, Kupfer, Kunststoff, Graphit VCGT

shell cutter for aluminium, copper, plastic, graphite VCGT



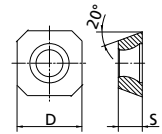
Wendeschneidplatten V
inserts V
s. Seite / see page 39



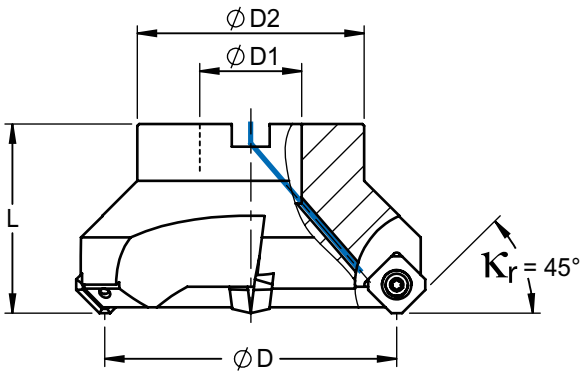
D	Bestell-Nr. order number	L	D1	D2	Z	WSP L	r			
42	3 42 872	57	16	35	3	22	3	x	993 06	994 20
50	3 50 871	57	22	40	3	22	3	x	993 06	994 20
52	3 52 871	57	22	40	3	22	3	x	993 06	994 20
66	4 66 870	57	27	48	4	22	3	x	993 06	994 20
80	4 80 869	57	27	60	4	22	3	x	993 06	994 20
100	5 100 868	55	32	70	5	22	3	-	993 06	994 20
125	6 125 867	55	40	90	6	22	3	-	993 06	994 20




Planmesserkopf 45° SEKX

face milling cutter 45° SEKX



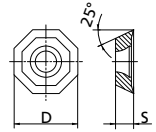
Wendeschneidplatten SE
inserts SE
s. Seite / see page 40



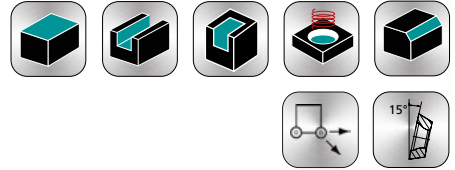
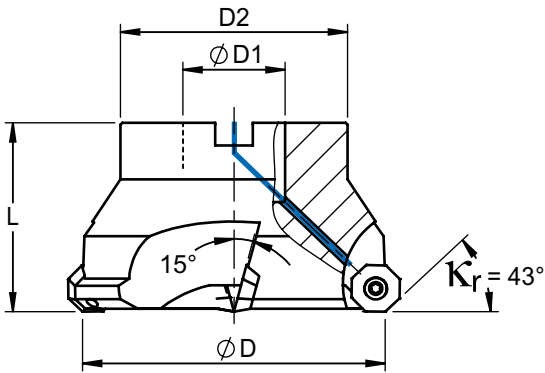
D	Bestell-Nr. order number	L	W	D1	D2	Z	WSP L			
40	340SE12A16-45	40	45°	16	35	3	12,7	x	993 07	994 20
50	450SE12A22-45	45	45°	22	44	4	12,7	x	993 07	994 20
63	563SE12A22-45	45	45°	22	50	5	12,7	x	993 07	994 20
80	680SE12A27-45	50	45°	27	60	6	12,7	x	993 07	994 20
100	6100SE12A32-45	50	45°	32	80	6	12,7	-	993 07	994 20




Aufsteckfräser OFMT

shell cutter OFMT



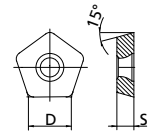
Wendeschneidplatten OF inserts OF
s. Seite / see page 40



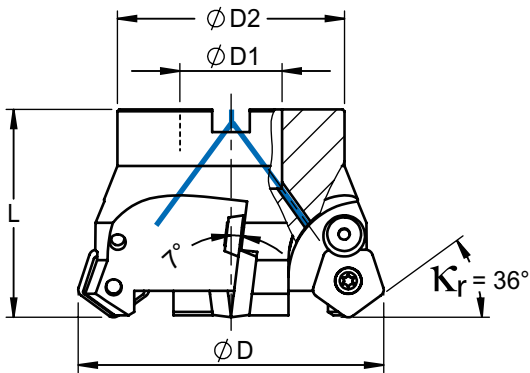
D	Bestell-Nr. order number	L	D1	D2	Z	WSP			
40	440 OF05 A16	40	16	38	4	05	x	993 15	994 15
50	550 OF05 A22	40	22	45	5	05	x	993 15	994 15
63	663 OF05 A22	50	22	50	6	05	x	993 15	994 15
80	780 OF05 A27	50	27	60	7	05	x	993 15	994 15
100	9100 OF05 A32	50	32	80	9	05	x	993 15	994 15

Aufsteckfräser - 5 kant PDHX

shell cutter for pentagon insert PDHX



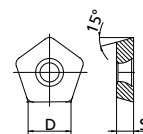
Wendeschneidplatten PD
inserts PD
s. Seite / see page 40



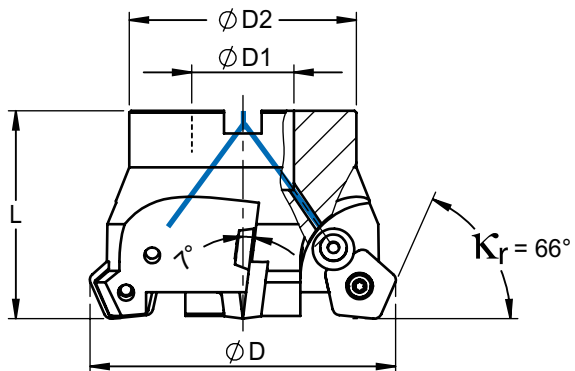
D	Bestell-Nr. order number	L	D1	D2	Z				
52	452PD12A16-36	55	16	40	4	x	995 01	993 06	994 20
66	566PD12A27-36	55	27	48	5	x	995 01	993 06	994 20
80	680PD12A27-36	55	27	60	6	x	995 01	993 06	994 20
100	7100PD12A32-36	55	32	70	7	-	995 01	993 06	994 20
125	8125PD12A40-36	55	40	90	8	-	995 01	993 06	994 20
160	8160PD12A40-36	55	40	120	8	-	995 01	993 06	994 20
160	9160PD12A40-36	55	40	120	9	-	995 01	993 06	994 20
160	10160PD12A40-36	55	40	120	10	-	995 01	993 06	994 20
180	11180PD12A40-36	55	40	140	11	-	995 01	993 06	994 20
180	11180PD12A60-36	55	60	140	11	-	995 01	993 06	994 20
200	9200PD12A60-36	55	60	160	9	-	995 01	993 06	994 20
200	12200PD12A40-36	55	40	160	12	-	995 01	993 06	994 20
200	12200PD12A60-36	55	60	160	12	-	995 01	993 06	994 20
250	15250PD12A60-36	55	60	160	15	-	995 01	993 06	994 20
315	15315PD12A60-36	55	60	160	15	-	995 01	993 06	994 20
315	18315PD12A60-36	55	60	160	18	-	995 01	993 06	994 20





Aufsteckfräser - 5 kant PDHX

shell cutter for pentagon insert PDHX



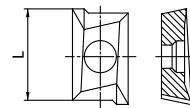
Wendeschneidplatten PD
inserts PD
s. Seite / see page 40



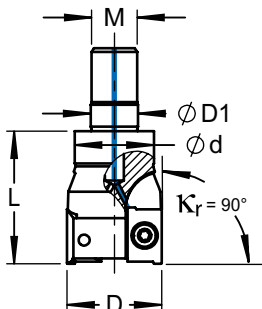
D	Bestell-Nr. order number	L	D1	D2	Z				
52	452PD12A22-66	55	22	40	4	x	995 01	993 06	994 20
66	566PD12A27-66	55	27	48	5	x	995 01	993 06	994 20
80	680PD12A27-66	55	27	60	6	x	995 01	993 06	994 20
100	7100PD12A32-66	55	32	70	7	-	995 01	993 06	994 20

Einschraubfräser ADKT

modular screw in cutter, ADKT



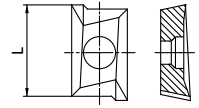
Wendeschneidplatten AD inserts AD
s. Seite / see page 40



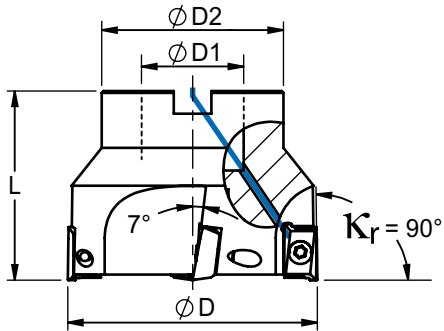
D	Bestell-Nr. order number	L	D1	d	M	Z	WSP L			
25	225AD15M12	35	12,5	21	12	2	15	x	993 15	994 15
32	332AD15M16	43	17	29	16	3	15	x	993 15	994 15
40	440AD15M16	43	17	29	16	4	15	x	993 15	994 15




Aufsteckfräser ADKT

shell cutter ADKT



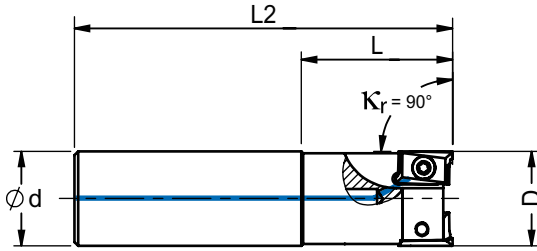
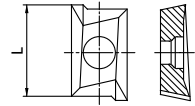
Wendeschneidplatten AD
inserts AD
s. Seite / see page 40



D	Bestell-Nr. order number	L	L2	D1	D2	M	Z	WSP L			
52	552AD15A22	50	-	22	40	-	5	15	x	993 15	994 15
66	666AD15A27	50	-	27	48	-	6	15	x	993 15	994 15

Schafffräser APKT 1003 PD...

shank type cutter APKT 1003 PD...



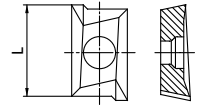
Wendeschneidplatten AP
inserts AP
s. Seite / see page 40



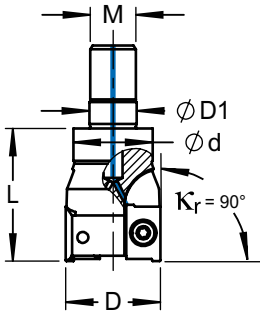
D	Bestell-Nr. order number	L	L2	d	Z	WSP L			
10	110AP10G12A80	25	80	12	1	10	x	993 12	994 08
10	110AP10G12A120	40	120	12	1	10	x	993 12	994 08
12	112AP10G12A80	25	80	12	1	10	x	993 12	994 08
12	112AP10G12A120	40	120	12	1	10	x	993 12	994 08
13	113AP10G12A120	-	120	12	1	10	x	993 12	994 08
16	216AP10G16A85	30	85	16	2	10	x	993 12	994 08
16	216AP10G16A180	50	180	16	2	10	-	993 12	994 08
17	217AP10G16A180	-	180	16	2	10	-	993 12	994 08
20	320AP10G20A90	35	90	20	3	10	x	993 12	994 08
20	320AP10G20A180	50	180	20	3	10	-	993 12	994 08
21	321AP10G20A180	-	180	20	3	10	-	993 12	994 08
25	425AP10G25A100	40	100	25	4	10	x	993 12	994 08
25	425AP10G25A180	70	180	25	4	10	-	993 12	994 08
26	426AP10G25A180	-	180	25	4	10	-	993 12	994 08

Einschraubfräser APKT 1003 PD...

modular screw in cutter APKT 1003 PD...



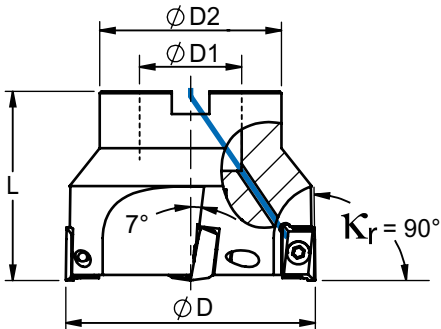
Wendeschneidplatten AP
inserts AP
s. Seite / see page 40



D	Bestell-Nr. order number	L	D1	d	M	Z	WSP L			
16	216AP10M8	25	8,5	13,8	8	2	10	x	993 12	994 08
20	320AP10M10	30	10,5	18	10	3	10	x	993 12	994 08
25	425AP10M12	35	12,5	21	12	4	10	x	993 12	994 08

Aufsteckfräser APKT 1003 PD...

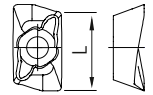
shell cutter, APKT 1003 PD...



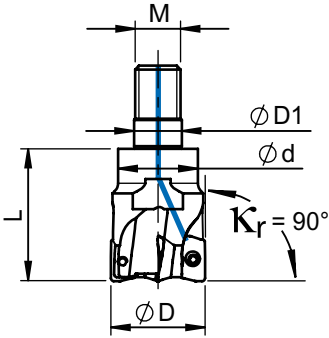
D	Bestell-Nr. order number	L	D1	D2	Z	WSP L			
40	640AP10A16	40	16	35	6	10	x	993 12	994 08
50	750AP10A22	50	22	40	7	10	x	993 12	994 08
52	752AP10A22	50	22	40	7	10	x	993 12	994 08
63	863AP10A27	50	27	48	8	10	x	993 12	994 08
66	866AP10A27	50	27	48	8	10	x	993 12	994 08




Einschraubfräser AXMT

modular screw in cutter, AXMT



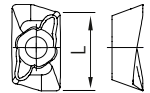
Wendeschneidplatten AX inserts AX
s. Seite / see page 41



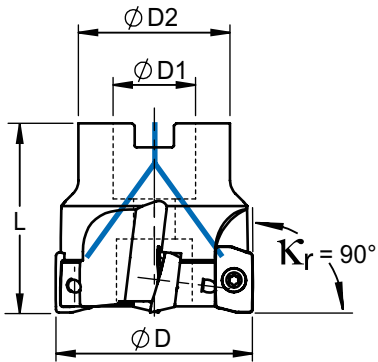
D	Bestell-Nr. order number	L	M	D1	d	Z	WSP L			
16	416AX07M8	23	8	8,5	13,6	4	7	x	99331	99406IP
16	416AX07M10	23	10	10,5	15,4	4	7	x	99331	99406IP
20	520AX07M10	25	10	10,5	18	5	7	x	99331	99406IP
16	216AX11M8	25	8	8,5	13,6	2	11	x	99332	99407IP
16	216AX11M10	25	10	10,5	18	2	11	x	99332	99407IP
20	320AX11M10	30	10	10,5	18	3	11	x	99332	99407IP
25	425AX11M12	35	12	12,5	21	4	11	x	99332	99407IP
32	532AX11M16	43	16	17	29	5	11	x	99332	99407IP
25	225AX16M12	35	12	12,5	21	2	16	x	99335	99415IP
32	332AX16M16	43	16	17	29	3	16	x	99335	99415IP

Aufsteckfräser AXMT

shell cutter AXMT



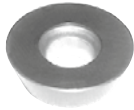
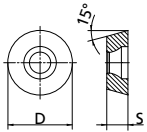
Wendeschneidplatten AX
inserts AX
s. Seite / see page 41



D	Bestell-Nr. order number	L	D1	D2	Z	WSP L			
40	640AX11A22	42	16	35	6	11	x	99332	99407IP
42	642AX11A22	42	16	35	6	11	x	99332	99407IP
50	750AX11A22	45	22	45	7	11	x	99332	99407IP
52	752AX11A22	45	22	45	7	11	x	99332	99407IP
50	550AX16A22	45	22	45	5	16	x	99335	99415IP
52	552AX16A22	45	22	45	5	16	x	99335	99415IP
63	663AX16A22	50	22	50	6	16	x	99335	99415IP
66	666AX16A27	50	27	50	6	16	x	99335	99415IP
80	780AX16A27	50	27	50	7	16	x	99335	99415IP

Runde-Fräswendeschnidplatten RDHX - präzisionsgeschliffen

inserts RDHX - precision ground insert

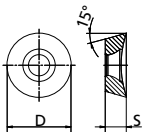


WSP rund, TIALN-beschichtet
inserts round, TIALN-coated

TIALN
coated

Wendeschnidplatte insert	WSP DxS	P 40	P 25	K 10	K 03
RDHX 05 01 MOT	5x1,5	-	80 111	-	80 113
RDHX 07 01 MOT	7x1,99	-	80 131	80 132	-
RDHX 07 02 MOT	7x2,38	-	80 141	80 142	-
RDHX 08 T2 MOE	8x2,78	80 254	80 255	-	-
RDHX 10 03 MOT	10x3,18	80 264	80 265	80 162	-
RDHX 12 T3 MOT	12x3,97	80 274	80 275	80 172	-
RDHX 16 04 MOT	16x4,76	80 180	80 181	80 182	80 183

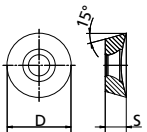
Wendeschnidplatte insert	WSP DxS	TIALN-beschichtet hartfräsen bis 60HRc TIALN-coated hardmilling up to 60HRc	RK 15F
RDHX 05 01 MOT	5x1,5		80 217
RDHX 07 01 MOT	7x1,99		80 237
RDHX 07 02 MOT	7x2,38		80 247
RDHX 08 T2 MOE	8x2,78		80 257
RDHX 10 03 MOT	10x3,18		80 267
RDHX 12 T3 MOT	12x3,97		80 277



WSP rund mit Hohlkehle, für Alu, Kupfer, Kunststoff, beschichtet
for alu, copper, plastic, coated

R-Cut
coated

Wendeschnidplatte insert	WSP DxS				K 05
RDHT 07 01 MOE	7x1,99	-	-	-	82 132
RDHT 07 02 MOE	7x2,38	-	-	-	82 142
RDHT 10 03 MOE	10x3,18	-	-	-	82 162
RDHT 12 T3 MOE	12x3,97	-	-	-	82 172
RDHT 16 04 MOE	16x4,76	-	-	-	82 182



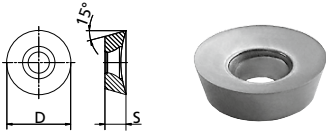
WSP rund mit polierter Hohlkehle,
für Alu, Kupfer, Kunststoff, unbeschichtet
hollow ground polished, uncoated

uncoated

Wendeschnidplatte insert	WSP DxS				K 05
RDHT 07 01 MOE	7x1,99	-	-	-	82 032
RDHT 07 02 MOE	7x2,38	-	-	-	82 042
RDHT 10 03 MOE	10x3,18	-	-	-	82 062
RDHT 12 T3 MOE	12x3,97	-	-	-	82 072
RDHT 16 04 MOE	16x4,76	-	-	-	82 082

Runde-Fräswendeschneidplatten mit Hohlkehle RDHT

inserts RDHT



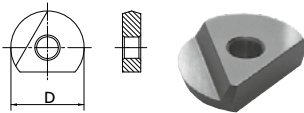
WSP rund mit Hohlkehle, Diamant beschichtet
Diamond coated



Wendeschneidplatte insert	WSP DxS			K 10	
RDHT 07 01 MOE	7x1,99	-	-	82 832	-
RDHT 07 02 MOE	7x2,38	-	-	82 842	-
RDHT 10 03 MOE	10x3,18	-	-	82 862	-
RDHT 12 T3 MOE	12x3,97	-	-	82 872	-

Kugelbahn-Wechselplatten ROHX

inserts ROHX



Kugelplatte, TIALN-beschichtet
TIALN-coated



Wendeschneidplatte insert	WSP D	R		P 40	P 25	K 10	K 05
ROHX 08	8	4		-	83 111	-	83 113
ROHX 10	10	5		-	83 121	-	83 123
ROHX 12	12	6		-	83 131	-	83 133
ROHX 16	16	8		-	83 151	-	83 153
ROHX 20	20	10		-	83 161	-	83 163

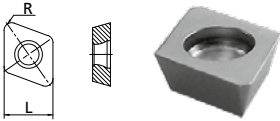
Kugelplatte, Diamant beschichtet
diamond-coated



Wendeschneidplatte insert	WSP D	R		P 40	P 25	K 10	K 05
ROHX 08	8	4		-	-	83 812	-
ROHX 10	10	5		-	-	83 822	-
ROHX 12	12	6		-	-	83 832	-
ROHX 16	16	8		-	-	83 852	-

Rhombus-Wendeschneidplatten XDHW

inserts XDHW - rhombic



WSP rhombisch, TIALN-beschichtet
inserts rhombic, TIALN-coated

TIALN
coated

Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 03
XDHW 01 04-05	4	0,5	-	-	-	84 103.05
XDHW 01 04-10	4	1	-	84 101.10	-	84 103.10
XDHW 02 06-05	6,5	0,5	-	84 111.05	84 112.05	84 113.05
XDHW 02 06-10	6,5	1	84 110	84 111	84 112	-
XDHW 02 06-20	6,5	2	-	84 111.20	84 112.20	84 113.20
XDHW 03 10-10	10	1	84 120	84 121	84 122	-

WSP rhombisch, Diamant beschichtet
inserts rhombic, diamond-coated



Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 03
XDHW 01 04-10	-	1	-	-	84 802.10	-
XDHW 02 06-10	-	1	-	-	84 812	-

Rhombus-Wendeschneidplatten XDHT, mit Spanformer

inserts XDHT - rhombic



WSP rhombisch, poliert, beschichtet
inserts rhombic, polished, coated

R-Cut
coated

Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
XDHT 02 06-10	6,5	1	-	-	-	84 142
XDHT 03 10-10	10	1	-	-	-	84 152

WSP rhombisch, poliert unbeschichtet
inserts rhombic, uncoated polished

uncoated

Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
XDHT 02 06-10	6,5	1	-	-	-	84 042
XDHT 03 10-10	10	1	-	-	-	84 052

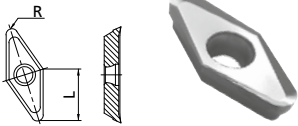
WSP rhombisch, Diamant beschichtet
inserts rhombic, diamond-coated



Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
XDHT 02 06-10	6,5	1	-	-	84 842	-
XDHT 03 10-10	10	1	-	-	84 852	-

Fräs-Wendeschneidplatten für Alu-Tauchfräser VDGT/VCGT

insert VDGT/VCGT



WSP für Alu, Kupfer und Kunststoff, poliert, beschichtet
for alu, copper, plastic, polished, coated



Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
VDGT 11 02-05	11	0,5	-	-	85 112.05	-
VDGT 11 02	11	1	-	-	85 112	-
VCGT 22 05	22	3	-	-	85 122	-

WSP für Alu, Kupfer und Kunststoff, poliert unbeschichtet
for alu, copper, plastic, uncoated polished



Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
VDGT 11 02-05	11	0,5	-	-	85 012.05	-
VDGT 11 02	11	1	-	-	85 012	-
VCGT 22 05	22	3	-	-	85 022	-

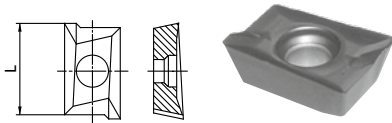
WSP für Alu, Kupfer und Kunststoff, Diamant beschichtet
for alu, copper, plastic, diamond coated



Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	K 05
VDGT 11 02	11	1	-	-	85 812	-
VCGT 22 05	22	3	-	-	85 822	-

Wendeschneidplatten APKT / ADKT / SEKX / SEET / PDHX / OFKT / OFEX

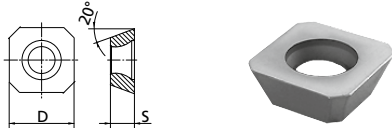
inserts APKT / ADKT / SEKX / SEET / PDHX / OFKT / OFEX



WSP beschichtet
inserts coated

TIALN
coated

Wendeschneidplatte insert	WSP L		P 40	P 25	K 10	K 20
APKT 10 03PDER	10		-	90 111	90 112	-
APKT 10 03PDFR-ALP	10		-	-	90 012	-
APKT 10 03PDSR	10		90 110	-	-	-
APHT 10 03PDFR-AL	10					90 114
ADKT 15 05	15		91 110	91 111	91 112	-



WSP beschichtet
inserts coated

TIALN
coated

Wendeschneidplatte insert	WSP L		P 40	P 25	K 10	
SEKX 12 04	12,7		-	87 171	-	-
SEET 12 04	12,7		-	87 151	87 152	-



WSP 5 kant, TIALN-beschichtet
inserts 5 edge, TIALN-coated

TIALN
coated

Wendeschneidplatte insert	WSP L		P 40	P 25	K 10	
PDHX 12 04	12		87 180	87 181	87 182	-

Fräs-Wendeschneidplatten Octa-Cut für Aluminiumbearbeitung OFKT

insert Octa-Cut for aluminium machining OFKT



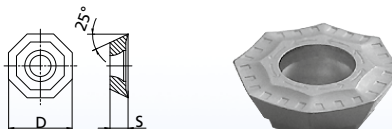
WSP, poliert unbeschichtet
inserts, uncoated polished

uncoated

Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	
OFKT-05T3-FNALP	12,7	-	-	-	93 062	-

Fräs-Wendeschneidplatten Octa-Cut für Stahlbearbeitung OFEX

insert Octa-Cut for steel machining OFEX



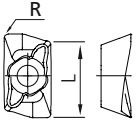
WSP beschichtet;
inserts coated

TIALN
coated

Wendeschneidplatte insert	WSP L	R	P 40	P 25	K 10	
OFEX-05T35N	12,7	-	-	93 161	-	-

Wendeschneidplatten AXMT

inserts AXMT



WSP beschichtet
inserts coated



Wendeschneidplatte insert	WSP L	R	RM 20	P 40	P 25	K 10
AXMT 070204	7	0,4	88 246.04	-	88 245.04	88 042.04
AXMT 11T304	11	0,4	88 266.04	-	-	88 062.04
AXMT 11T308	11	0,8	88 266.08	-	88 265.08	-
AXMT 160604	16	0,4	-	-	-	88 082.04
AXMT 160608	16	0,8	88 286.08	88 284.08	88 285.08	88 082.08

Werkzeugaufnahmen HSK-A

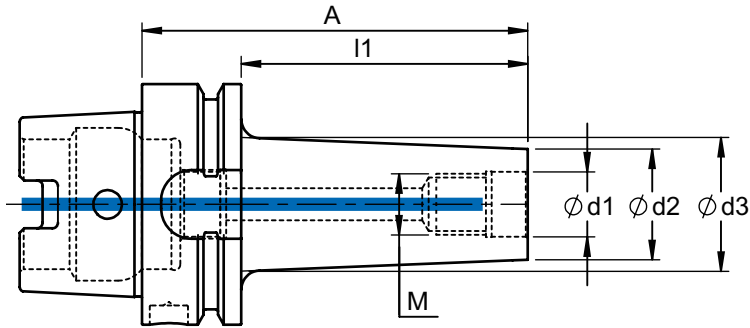
Tool holders HSK-A

	Seite Page
Fräsaufnahmen für Einschraubfräser Modular screw on holder	44 - 53
Fräsdorne Arbors for shell cutters	54 - 61
Fräserhülsen / Zwischenhülsen Morse taper adaptors	62 - 63
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Spannzangenfutter Collet chucks	68 - 71
CNC-Bohrfutter CNC-drill chucks	73
Rohlinge Blanks	74

Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahme HSK-A50 für Einschraubfräser

modular screw on holder HSK-A50

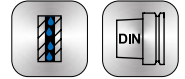
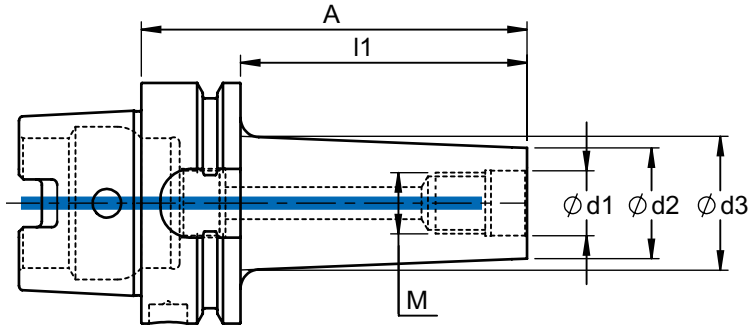


69893-1


Bestell-Nr. order number	M	d1	d2	d3	A	l1		
920 - A500625	M 6	6,5	10	22	51	25	G2,5/15.000 oder/or U<1gmm	
920 - A500650	M 6	6,5	10	22	76	50		
920 - A500675	M 6	6,5	10	26	101	75		
920 - A500825	M 8	8,5	13,8	18	51	25		
920 - A500850	M 8	8,5	13,8	23	76	50		
920 - A500850ZY	M 8	8,5	13,8	13,8	76	50		
920 - A500875	M 8	8,5	13,8	25	101	75		
920 - A5008100	M 8	8,5	13,8	30	126	100		
920 - A5008125	M 8	8,5	13,8	36	151	125		
920 - A501025	M 10	10,5	18	23	51	25		
920 - A501025ZY	M 10	10,5	18	18	51	25		
920 - A501050	M 10	10,5	18	25	76	50		
920 - A501050ZY	M 10	10,5	18	18	76	50		
920 - A501075	M 10	10,5	18	30	101	75		
920 - A5010100	M 10	10,5	18	35	126	100		
920 - A5010125	M 10	10,5	18	41	151	125		
920 - A501225	M 12	12,5	21	24	51	25		
920 - A501250	M 12	12,5	21	30	76	50		
920 - A501250ZY	M 12	12,5	23	23	76	50		
920 - A501275	M 12	12,5	21	35	101	75		
920 - A501275ZY	M 12	12,5	23	23	101	75		
920 - A5012100	M 12	12,5	21	38	126	100		
920 - A5012125	M 12	12,5	21	42	151	125		
920 - A501625	M 16	17	29	29	51	25		
920 - A501650	M 16	17	29	34	76	50		
920 - A501650ZY	M 16	17	29	29	76	50		
920 - A501675	M 16	17	29	35	101	75		
920 - A501675ZY	M 16	17	29	29	101	75		
920 - A5016100	M 16	17	29	40	126	100		
920 - A5016125	M 16	17	29	42	151	125		

Fräsaufnahme HSK-A63 für Einschraubfräser

modular screw on holder HSK-A63

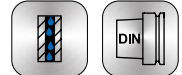
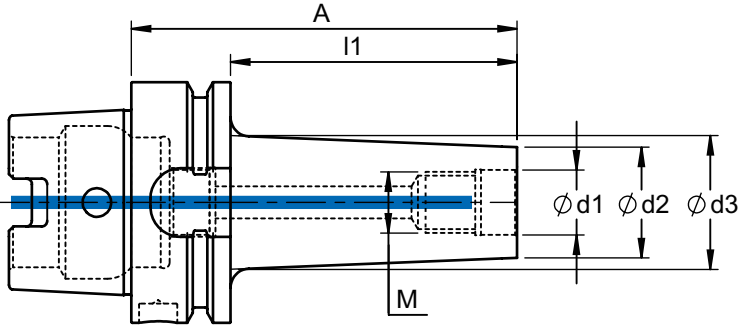


69893-1


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - A630625	M 6	6,5	10	22	51	25	G2,5/15.000 oder/or U<1gmm
920 - A630650	M 6	6,5	10	22	76	50	
920 - A630675	M 6	6,5	10	26	101	75	
920 - A630825	M 8	8,5	13,8	18	51	25	
920 - A630825ZY	M 8	8,5	13,8	13,8	51	25	
920 - A630850	M 8	8,5	13,8	23	76	50	
920 - A630850ZY	M 8	8,5	13,8	13,8	76	50	
920 - A630875	M 8	8,5	13,8	25	101	75	
920 - A630875ZY	M 8	8,5	13,8	13,8	101	75	
920 - A6308100	M 8	8,5	13,8	30	126	100	
920 - A6308125	M 8	8,5	13,8	32	151	125	
920 - A6308125ZY	M 8	8,5	13,8	13,8	151	125	
920 - A6308200	M 8	8,5	13,8	50	226	200	
920 - A631025	M 10	10,5	18	23	51	25	
920 - A631025ZY	M 10	10,5	18	18	51	25	
920 - A631050	M 10	10,5	18	25	76	50	
920 - A631050ZY	M 10	10,5	18	18	76	50	
920 - A631075	M 10	10,5	18	30	101	75	
920 - A631075ZY	M 10	10,5	18	18	101	75	
920 - A6310100	M 10	10,5	18	35	126	100	
920 - A6310100ZY	M 10	10,5	18	18	126	100	
920 - A6310125	M 10	10,5	18	40	151	125	
920 - A6310125ZY	M 10	10,5	18	18	151	125	
920 - A6310150	M 10	10,5	18	44	176	150	
920 - A6310200	M 10	10,5	18	50	226	200	
920 - A631225	M 12	12,5	21	24	51	25	
920 - A631250	M 12	12,5	21	30	76	50	
920 - A631250ZY	M 12	12,5	23	23	76	50	
920 - A631260ZY	M 12	12,5	23	23	86	60	
920 - A631275	M 12	12,5	21	35	101	75	
920 - A631275ZY	M 12	12,5	23	23	101	75	
920 - A6312100	M 12	12,5	21	38	126	100	
920 - A6312100ZY	M 12	12,5	23	23	126	100	
920 - A6312125	M 12	12,5	21	43	151	125	
920 - A6312125ZY	M 12	12,5	23	23	151	125	
920 - A6312150	M 12	12,5	21	45	176	150	
920 - A6312150ZY	M 12	12,5	23	23	176	150	

Fräsaufnahme HSK-A100 für Einschraubfräser

modular screw on holder HSK-A100



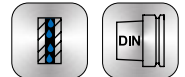
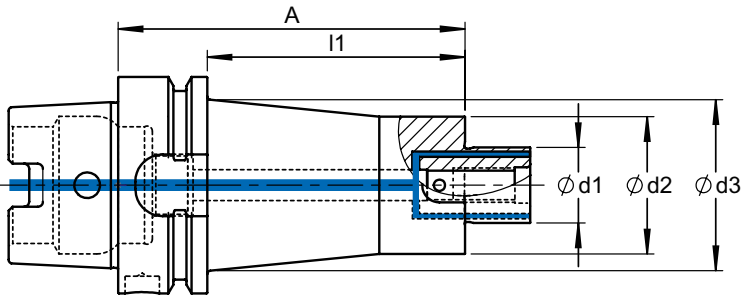
69893-1

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - A1000850	M 8	8,5	13,8	28	79	50	G2,5/15.000 oder/or U<1gmm
920 - A1000875	M 8	8,5	13,8	30	104	75	
920 - A10008100	M 8	8,5	13,8	30	129	100	
920 - A10008150	M 8	8,5	13,8	33	179	150	
920 - A10008200	M 8	8,5	13,8	38	229	200	
920 - A1001050	M 10	10,5	18	30	79	50	
920 - A1001050ZY	M 10	10,5	18	18	79	50	
920 - A1001075	M 10	10,5	18	33	104	75	
920 - A1001075ZY	M 10	10,5	18	18	104	75	
920 - A10010100	M 10	10,5	18	35	129	100	
920 - A10010100ZY	M 10	10,5	18	18	129	100	
920 - A10010125	M 10	10,5	18	35	154	125	
920 - A10010150	M 10	10,5	18	38	179	150	
920 - A10010200	M 10	10,5	18	40	229	200	
920 - A1001230	M 12	12,5	21	30	59	30	
920 - A1001250	M 12	12,5	21	33	79	50	
920 - A1001250ZY	M 12	12,5	23	23	79	50	
920 - A1001275	M 12	12,5	21	35	104	75	
920 - A1001275ZY	M 12	12,5	23	23	104	75	
920 - A10012100	M 12	12,5	21	38	129	100	
920 - A10012100ZY	M 12	12,5	23	23	129	100	
920 - A10012125	M 12	12,5	21	43	154	125	
920 - A10012150	M 12	12,5	21	45	179	150	
920 - A10012200	M 12	12,5	21	50	229	200	
920 - A10012250	M 12	12,5	21	60	279	250	
920 - A10012300	M 12	12,5	21	70	329	300	







Fräsdorne HSK-A50

arbor HSK-A50 for shell cutter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw



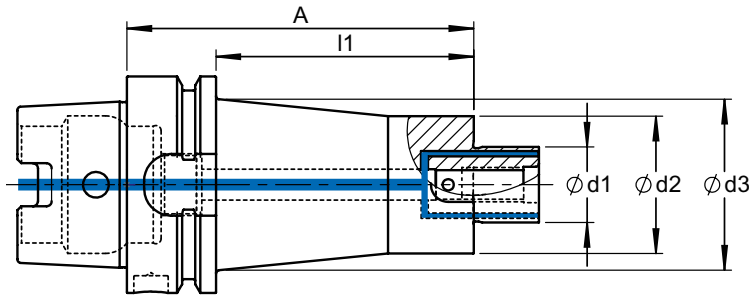
69893-1

Bestell-Nr. order number	d1	d2	d3	l1	A						
901 - A5016	16	35	35	20	46	x	959-16	-	957-M8	-	G6,3/8.000
901 - A5022	22	40	40	22	48	x	959-22	-	957-M10	-	
901 - A5027	27	48	48	32	58	x	959-27	-	957-M12	-	





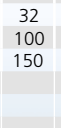
Fräsdorne HSK-A63

arbor HSK-A63 for shell cutter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw



69893-1

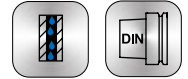
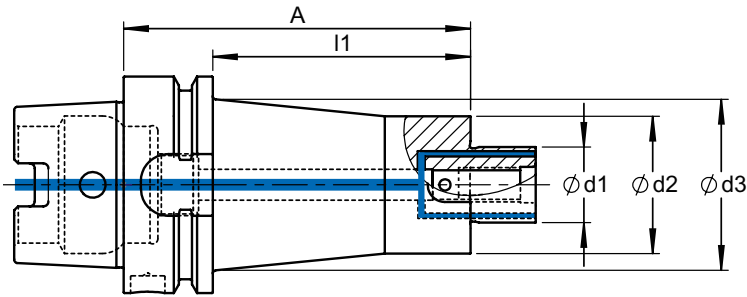
Bestell-Nr. order number	d1	d2	d3	l1	A					
901 - A6316	16	35	35	20	46	x	959-16	-	957-M8	-
901 - A631625	16	35	35	25	51	x	959-16	-	957-M8	-
901 - A631650	16	35	42	50	76	x	959-16	-	957-M8	-
901 - A631650ZY	16	35	35	50	76	x	959-16	-	957-M8	-
901 - A631675	16	35	45	75	101	x	959-16	-	957-M8	-
901 - A631675ZY	16	35	35	75	101	x	959-16	-	957-M8	-
901 - A6316100	16	35	50	100	126	x	959-16	-	957-M8	-
901 - A6316100ZY	16	35	35	100	126	x	959-16	-	957-M8	-
901 - A6316150	16	35	50	150	176	x	959-16	-	957-M8	-
901 - A6316200	16	35	53	200	226	x	959-16	-	957-M8	-
901 - A6316250	16	35	53	250	276	x	959-16	-	957-M8	-
901 - A6316300	16	35	53	300	326	x	959-16	-	957-M8	-
901 - A6322	22	40	40	20	46	x	959-22	-	957-M10	-
901 - A632225	22	40	40	25	51	x	959-22	-	957-M10	-
901 - A632250	22	40	45	50	76	x	959-22	-	957-M10	-
901 - A632250ZY	22	48	48	50	76	x	959-22	-	957-M10	-
901 - A632275	22	40	50	75	101	x	959-22	-	957-M10	-
901 - A632275ZY	22	48	48	75	101	x	959-22	-	957-M10	-
901 - A6322100	22	40	50	100	126	x	959-22	-	957-M10	-
901 - A6322100ZY	22	48	48	100	126	x	959-22	-	957-M10	-
901 - A6322150	22	40	50	150	176	x	959-22	-	957-M10	-
901 - A6322150ZY	22	48	48	150	176	x	959-22	-	957-M10	-
901 - A6322200	22	40	53	200	226	x	959-22	-	957-M10	-
901 - A6322200ZY	22	48	48	200	226	x	959-22	-	957-M10	-
901 - A6322250	22	40	53	250	276	x	959-22	-	957-M10	-
901 - A6322300	22	40	53	300	326	x	959-22	-	957-M10	-
901 - A632725	27	48	48	25	51	x	959-27	-	957-M12	-
901 - A632750	27	48	53	50	76	x	959-27	-	957-M12	-
901 - A6327100	27	48	53	100	126	x	959-27	-	957-M12	-
901 - A6327100ZY	27	48	48	100	126	x	959-27	-	957-M12	-
901 - A6327150	27	48	53	150	176	x	959-27	-	957-M12	-
901 - A6327200	27	48	53	200	226	x	959-27	-	957-M12	-
901 - A6327250	27	48	53	250	276	x	959-27	-	957-M12	-
901 - A6327300	27	48	53	300	326	x	959-27	-	957-M12	-
901 - A6332	32	60	60	32	58	x	959-32	957-32	-	958-32
901 - A6332100	32	60	60	100	126	x	959-32	957-32	-	958-32
901 - A6332150	32	60	60	150	176	x	959-32	957-32	-	958-32

G6,3/8.000







Fräsdorne HSK-A100

arbors HSK-A63 for shell cutter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw



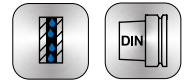
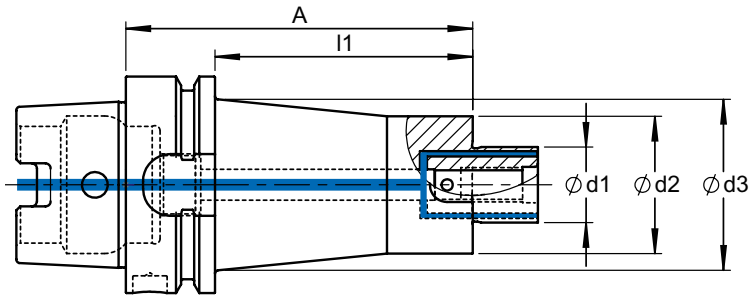
69893-1

Bestell-Nr. order number	d1	d2	d3	l1	A						
901 - A1001625	16	35	35	25	54	x	959-16	-	957-M8	-	G6,3/8.000
901 - A1001650	16	35	45	50	79	x	959-16	-	957-M8	-	
901 - A1001650ZY-35	16	35	35	50	79	x	959-16	-	957-M8	-	
901 - A10016100	16	35	50	100	129	x	959-16	-	957-M8	-	
901 - A10016100ZY-35	16	35	35	100	129	x	959-16	-	957-M8	-	
901 - A10016150	16	35	60	150	179	x	959-16	-	957-M8	-	
901 - A10016150ZY-35	16	35	35	150	179	x	959-16	-	957-M8	-	
901 - A10016200	16	35	60	200	229	x	959-16	-	957-M8	-	
901 - A10016200ZY-35	16	35	35	200	229	x	959-16	-	957-M8	-	
901 - A1002225	22	40	40	25	54	x	959-22	-	957-M10	-	
901 - A1002250	22	40	45	50	79	x	959-22	-	957-M10	-	
901 - A1002275	22	40	50	75	104	x	959-22	-	957-M10	-	
901 - A10022100	22	40	50	100	129	x	959-22	-	957-M10	-	
901 - A10022100ZY-48	22	48	48	100	129	x	959-22	-	957-M10	-	
901 - A10022125	22	40	50	125	154	x	959-22	-	957-M10	-	
901 - A10022150	22	40	60	150	179	x	959-22	-	957-M10	-	
901 - A10022150ZY-48	22	48	48	150	179	x	959-22	-	957-M10	-	
901 - A10022200	22	40	68	200	229	x	959-22	-	957-M10	-	
901 - A10022200ZY-48	22	48	48	200	229	x	959-22	-	957-M10	-	
901 - A10022250ZY-48	22	48	48	250	279	x	959-22	-	957-M10	-	
901 - A10022300	22	48	70	300	329	x	959-22	-	957-M10	-	
901 - A10022300ZY-48	22	48	48	300	329	x	959-22	-	957-M10	-	
901 - A10022350ZY-48	22	48	48	350	379	x	959-22	-	957-M10	-	


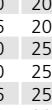

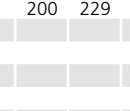
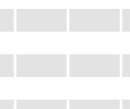
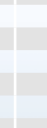
Fräsdorne HSK-A100

arbors HSK-A63 for shell cutter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw



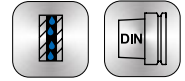
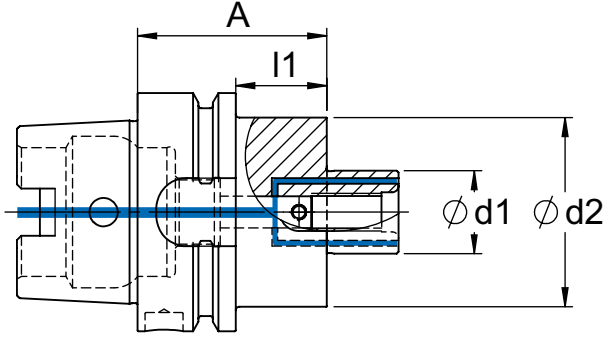
69893-1

Bestell-Nr. order number	d1	d2	d3	l1	A						
901 - A1002725	27	60	60	25	54	x	959-27	-	957-M12	-	G6,3/8.000
901 - A1002750ZY-60	27	60	60	50	79	x	959-27	-	957-M12	-	
901 - A1002750ZY-76	27	76	76	50	79	x	959-27	-	957-M12	-	
901 - A10027100	27	60	70	100	129	x	959-27	-	957-M12	-	
901 - A10027100ZY-60	27	60	60	100	129	x	959-27	-	957-M12	-	
901 - A10027100ZY-76	27	76	76	100	129	x	959-27	-	957-M12	-	
901 - A10027150	27	60	75	150	179	x	959-27	-	957-M12	-	
901 - A10027150ZY-60	27	60	60	150	179	x	959-27	-	957-M12	-	
901 - A10027150ZY-76	27	76	76	150	179	x	959-27	-	957-M12	-	
901 - A10027200	27	60	80	200	229	x	959-27	-	957-M12	-	
901 - A10027200ZY-60	27	60	60	200	229	x	959-27	-	957-M12	-	
901 - A10027200ZY-76	27	76	76	200	229	x	959-27	-	957-M12	-	
901 - A10027250	27	60	80	250	279	x	959-27	-	957-M12	-	
901 - A10027250ZY-60	27	60	60	250	279	x	959-27	-	957-M12	-	
901 - A10027250ZY-76	27	76	76	250	279	x	959-27	-	957-M12	-	
901 - A10027300	27	60	85	300	329	x	959-27	-	957-M12	-	
901 - A10027300ZY-60	27	60	60	300	329	x	959-27	-	957-M12	-	
901 - A10027300ZY-76	27	76	76	300	329	x	959-27	-	957-M12	-	
901 - A1003250	32	70	70	50	79	-	959-32	957-32	-	958-32	
901 - A10032100	32	70	85	100	129	-	959-32	957-32	-	958-32	
901 - A10032100ZY-85	32	85	85	100	129	-	959-32	957-32	-	958-32	
901 - A10032150ZY-85	32	85	85	150	179	-	959-32	957-32	-	958-32	
901 - A10032200ZY-85	32	85	85	200	229	-	959-32	957-32	-	958-32	


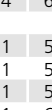


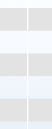
Fräsdorne HSK-A63 - 100 mit vergrößertem Anlagedurchmesser

arbors HSK-A63 - 100 with enlarged contact surface diameter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw

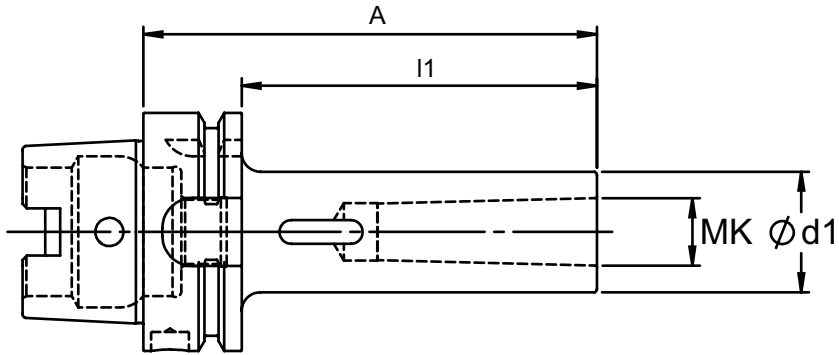


69893-1



Bestell-Nr. order number	HSK	d1	d2	l1	A						
922 - A6322	A63	22	50	24	50	x	959-22	957-22	958-22	G6,3/8.000	
922 - A6327	A63	27	60	34	60	x	959-27	957-27	958-27		
922 - A6332	A63	32	78	34	60	x	959-32	957-32	958-32		
922 - A6340	A63	40	89	34	60	x	959-40	957-40	958-40		
922 - A8022	A80	22	50	24	50	x	959-22	957-22	958-22		
922 - A8027	A80	27	60	34	60	x	959-27	957-27	958-27		
922 - A8032	A80	32	78	34	60	x	959-32	957-32	958-32		
922 - A8040	A80	40	89	34	60	x	959-40	957-40	958-40		
922 - A10022	A100	22	50	21	50	x	959-22	957-22	958-22		
922 - A10027	A100	27	60	21	50	x	959-27	957-27	958-27		
922 - A10032	A100	32	78	21	50	x	959-32	957-32	958-32		
922 - A10040	A100	40	89	31	60	x	959-40	957-40	958-40		
922 - A10050	A100	50	120	41	70	x	959-50	957-50	958-50		

Zwischenhülsen HSK-A50 - 100

morse taper adaptor, HSK-A50 - 100



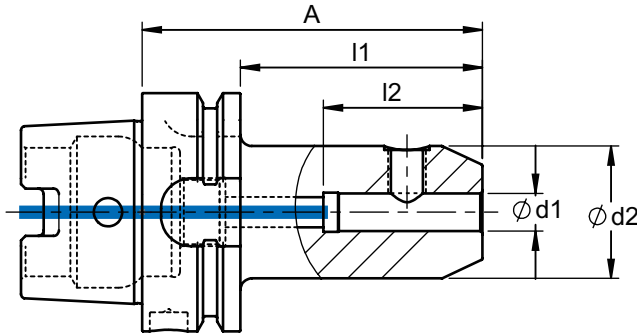
69893-1

Bestell-Nr. order number	HSK	MK	d1	l1	A		
906 - A50MK1	A50	1	25	74	100		
906 - A50MK2	A50	2	32	94	120		
906 - A50MK3	A50	3	40	114	140		
906 - A63MK1	A63	1	25	74	100		
906 - A63MK2	A63	2	32	94	120		
906 - A63MK3	A63	3	40	114	140		
906 - A63MK4	A63	4	48	134	160		
906 - A63MK5	A63	5	63	174	200		
906 - A80MK1	A80	1	25	74	100		G6,3/8.000
906 - A80MK2	A80	2	32	94	120		
906 - A80MK3	A80	3	40	114	140		
906 - A80MK4	A80	4	48	134	160		
906 - A80MK5	A80	5	63	164	190		
906 - A100MK1	A100	1	25	81	110		G6,3/8.000
906 - A100MK2	A100	2	32	91	120		
906 - A100MK3	A100	3	40	121	150		
906 - A100MK4	A100	4	48	141	170		
906 - A100MK5	A100	5	63	171	200		




Weldonfutter HSK-A63

side lock adapter HSK-A63

Lieferumfang: HSK-Aufnahme mit Spannschraube
 delivery: side lock adapter with tightening screw



69893-1

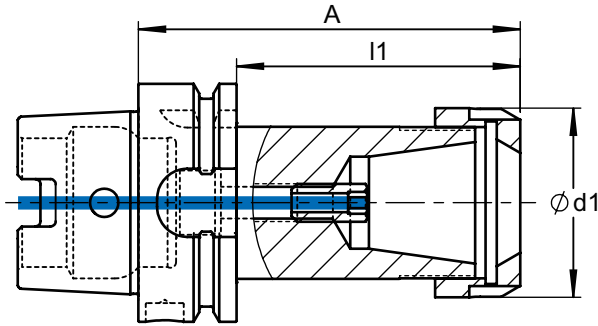
Bestell-Nr. order number	d1	D	l1	l2	A		
903 - A6306	6	25	39	38	65	949-M6	
903 - A6308	8	28	39	38	65	949-M8	
903 - A6310	10	35	39	42	65	949-M10	
903 - A6312	12	42	54	47	80	949-M12	
903 - A6314	14	44	54	47	80	949-M12	
903 - A6316	16	48	54	50	80	949-M14	
903 - A6318	18	50	54	50	80	949-M14	
903 - A6320	20	52	54	52	80	949-M16	
903 - A6325	25	65	84	60	110	949-M18X2	
903 - A6332	32	72	84	64	110	949-M20X2	
903 - A6340	40	80	94	74	120	949-M20X2	
903 - A6306A125	6	25	99	38	125	949-M6	
903 - A6308A125	8	28	99	38	125	949-M8	
903 - A6310A125	10	35	99	42	125	949-M10	
903 - A6312A125	12	42	99	47	125	949-M12	
903 - A6314A125	14	44	99	47	125	949-M12	
903 - A6316A125	16	48	99	50	125	949-M14	
903 - A6318A125	18	50	99	50	125	949-M14	
903 - A6320A125	20	52	99	52	125	949-M16	
903 - A6306A160	6	25	134	38	160	949-M6	
903 - A6308A160	8	28	134	38	160	949-M8	
903 - A6310A160	10	35	134	42	160	949-M10	
903 - A6312A160	12	42	134	47	160	949-M12	
903 - A6314A160	14	44	134	47	160	949-M12	
903 - A6316A160	16	48	134	50	160	949-M14	
903 - A6318A160	18	50	134	50	160	949-M14	
903 - A6320A160	20	52	134	52	160	949-M16	
903 - A6325A160	25	65	134	60	160	949-M18X2	
903 - A6332A160	32	72	134	64	160	949-M20X2	
903 - A6340A160	40	80	134	74	160	949-M20X2	
903 - A6306A200	6	25	174	38	200	949-M6	
903 - A6308A200	8	28	174	38	200	949-M8	
903 - A6310A200	10	35	174	42	200	949-M10	
903 - A6312A200	12	42	174	47	200	949-M12	
903 - A6316A200	16	48	174	50	200	949-M14	
903 - A6320A200	20	52	174	52	200	949-M16	

G6,3/8.000





Spannzangenfutter HSK-A32 - 100 für Spannzangen ER 25/32/40 mit Spannmutter UM

collet chucks HSK-A32 - 100 for collets ER 25/32/40 with nut UM

Lieferumfang: HSK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



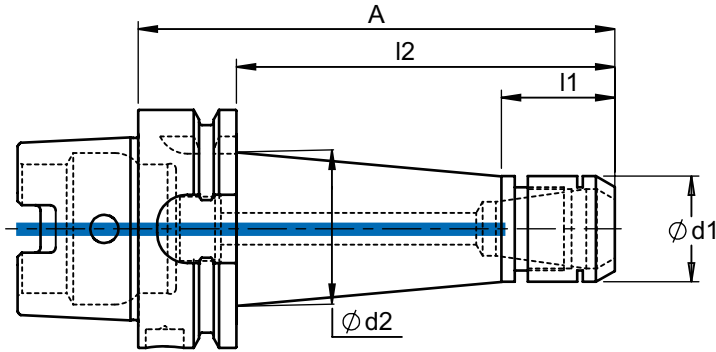
69893-1

Bestell-Nr. order number	HSK	ER	d1	l1	A				
912 - A3245	A32	25	42	45	45	953-UM25	-	954-013ER25	G6,3/8.000
913 - A3260	A32	32	50	60	80	953-UM32	-	954-014ER32	
912 - A4060	A40	25	42	60	80	953-UM25	948-M12	954-013ER25	
913 - A4060	A40	32	50	60	80	953-UM32	948-M16	954-014ER32	
912 - A5050	A50	25	42	50	76	953-UM25	-	954-013ER25	
913 - A5050	A50	32	50	50	76	953-UM32	-	954-014ER32	
912 - A6350	A63	25	42	50	76	953-UM25	-	954-013ER25	
912 - A6375	A63	25	42	75	101	953-UM25	-	954-013ER25	
912 - A63100	A63	25	42	100	126	953-UM25	948-M12	954-013ER25	
913 - A6350	A63	32	50	50	76	953-UM32	-	954-014ER32	
913 - A6375	A63	32	50	75	101	953-UM32	948-M16	954-014ER32	
913 - A63100	A63	32	50	100	126	953-UM32	948-M16	954-014ER32	
914 - A6350	A63	40	63	50	76	953-UM40	-	954-015ER40	
914 - A6390	A63	40	63	90	116	953-UM40	948-M16	954-015ER40	
914 - A63A120	A63	40	63	94	120	953-UM40	948-M16	954-015ER40	
914 - A63A160	A63	40	63	134	160	953-UM40	948-M16	954-015ER40	
913 - A8075	A80	32	50	75	101	953-UM32	948-M16	954-014ER32	
914 - A8075	A80	40	63	75	101	953-UM40	948-M16	954-015ER40	
914 - A80A120	A80	40	63	94	120	953-UM40	948-M16	954-015ER40	
912 - A10070	A100	25	42	70	99	953-UM25	948-M12	954-013ER25	
912 - A100100	A100	25	42	100	129	953-UM25	948-M12	954-013ER25	
912 - A100A160	A100	25	42	131	160	953-UM25	948-M12	954-013ER25	
912 - A100A200	A100	25	42	171	200	953-UM25	948-M12	954-013ER25	
913 - A10050	A100	32	50	50	79	953-UM32	-	954-014ER32	
913 - A10070	A100	32	50	70	99	953-UM32	948-M16	954-014ER32	
913 - A100100	A100	32	50	100	129	953-UM32	948-M16	954-014ER32	
913 - A100A100	A100	32	50	71	100	953-UM32	948-M16	954-014ER32	
913 - A100A120	A100	32	50	91	120	953-UM32	948-M16	954-014ER32	
913 - A100A160	A100	32	50	131	160	953-UM32	948-M16	954-014ER32	
913 - A100A200	A100	32	50	171	200	953-UM32	948-M16	954-014ER32	
914 - A10075	A100	40	63	75	104	953-UM40	948-M16	954-015ER40	
914 - A10090	A100	40	63	90	119	953-UM40	948-M16	954-015ER40	
914 - A100100	A100	40	63	100	129	953-UM40	948-M16	954-015ER40	
914 - A100A120	A100	40	63	91	120	953-UM40	948-M16	954-015ER40	




Spannzangenfutter HSK-A32 - 100 für Spannzangen ER 11/16/20 mit Spannmutter HS

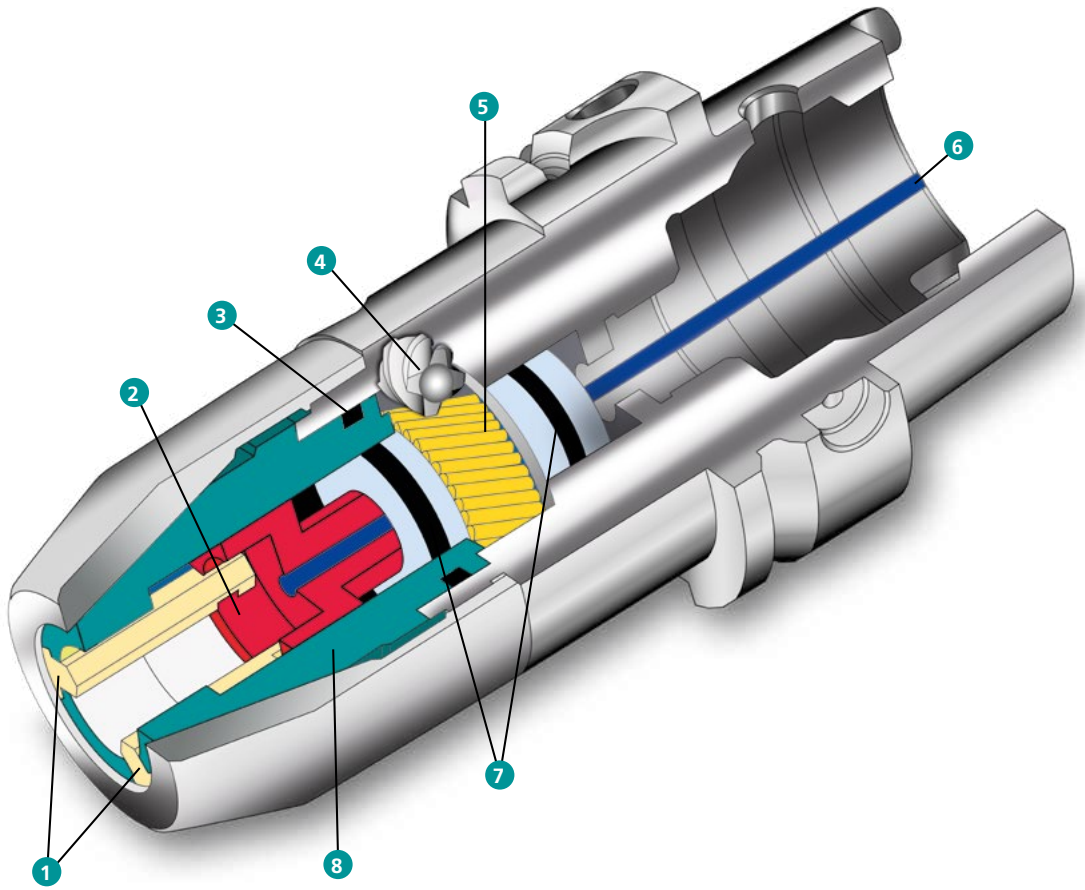
collet chucks HSK-A32 - 100 for collets ER 11/16/20 with nut HS

Lieferumfang: HSK-Aufnahme mit Spannmutter HS
delivery: collet chuck with nut HS



69893-1

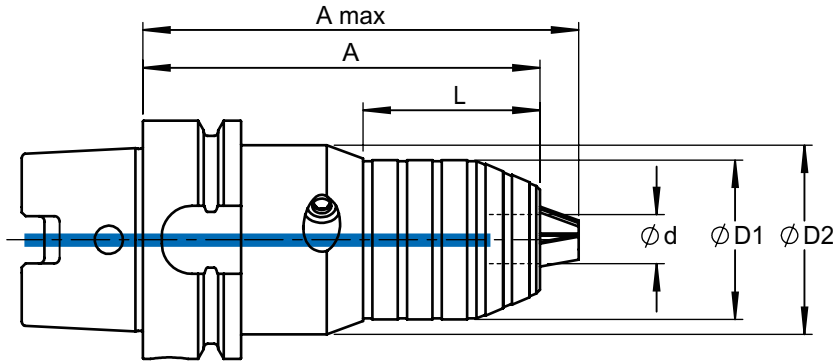
Bestell-Nr. order number	HSK	ER	d1	d2	l1	l2	A			
918 - A3230	A32	11	16	19	21	30	50	953-ER11-02	954-11	G2,5/15.000 oder/or U<1gmm
919 - A3230	A32	16	22	22	-	30	50	953-ER16-02	954-16	
919 - A3270	A32	16	22	26	28	70	90	953-ER16-02	954-16	
911 - A3235	A32	20	28	24	-	35	55	953-ER20-02	954-063E20	
919 - A4050	A40	16	22	30	29	50	70	953-ER16-02	954-16	
911 - A4050	A40	20	28	32	30	50	70	953-ER20-02	954-063E20	
911 - A5040	A50	20	28	34	30	40	66	953-ER20-02	954-063E20	
911 - A5080	A50	20	28	37	30	80	106	953-ER20-02	954-063E20	
911 - A6350	A63	20	28	37	30	50	76	953-ER20-02	954-063E20	
911 - A63100	A63	20	28	50	30	100	126	953-ER20-02	954-063E20	
911 - A63150	A63	20	28	53	30	150	176	953-ER20-02	954-063E20	
911 - A63150ZY	A63	20	28	28	-	150	176	953-ER20-02	954-063E20	
911 - A63200	A63	20	28	53	30	200	226	953-ER20-02	954-063E20	
911 - A8050	A80	20	28	37	30	50	76	953-ER20-02	954-063E20	
911 - A80100	A80	20	28	50	30	100	126	953-ER20-02	954-063E20	
911 - A10050	A100	20	28	37	30	50	79	953-ER20-02	954-063E20	
911 - A100100	A100	20	28	50	30	100	129	953-ER20-02	954-063E20	




- | | |
|----------------------------|-----------------------|
| 1 Spannbacken | 1 Clamping jaws |
| 2 Backenantrieb | 2 Jaws driver |
| 3 Abdichtung Backenführung | 3 Seal for jaws guide |
| 4 Schnecke | 4 Worm |
| 5 Schneckenrad | 5 Worm gear |
| 6 IKZ | 6 Internal cooling |
| 7 Abdichtung Getriebe | 7 Seal for gearbox |
| 8 Backenführung | 8 Jaws guide |

CNC- Bohrfutter HSK-A40 - 100 für Rechts- und Linkslauf

CNC - drill chucks HSK-A40 - 100 for clockwise and anti clockwise rotation



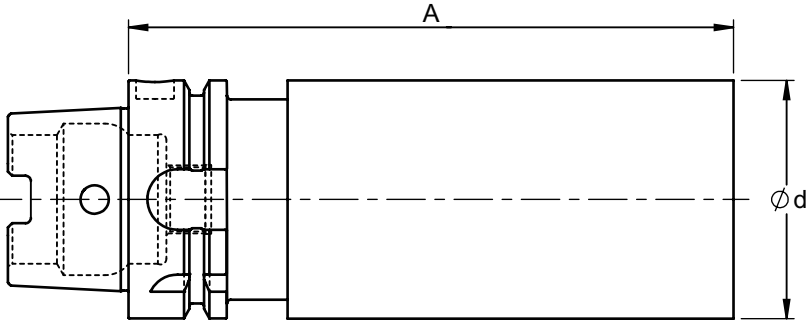
69893-1

Bestell-Nr. order number	HSK	d	D1	D2	L	A	A max.		
407 - A4008A95	A40	0,5 - 8	34,5	45,0	40,0	95,0	97,5	G6,3/8.000	
407 - A5008A100	A50	0,5 - 8	34,5	45,0	40,0	100,0	102,5		
407 - A5013A110	A50	1 - 13	42,0	50,0	47,0	110,0	119,0		
407 - A5016A110	A50	2,5 - 16	49,0	50,0	50,0	110,0	121,0		
407 - A6308A92	A63	0,5 - 8	34,5	45,0	40,0	92,0	94,5		
407 - A6313A105	A63	1 - 13	42,0	50,0	47,0	105,0	114,0		
407 - A6313A160	A63	1 - 13	42,0	50,0	47,0	160,0	169,0		
407 - A6316A105	A63	2,5 - 16	49,0	50,0	50,0	105,0	116,0		
407 - A8013A105	A80	1 - 13	42,0	50,0	47,0	105,0	114,0		
407 - A8016A105	A80	2,5 - 16	49,0	50,0	50,0	105,0	116,0		
407 - A10013A110	A100	1 - 13	42,0	50,0	47,0	110,0	119,0		
407 - A10016A110	A100	2,5 - 16	49,0	50,0	50,0	110,0	121,0		

Rohlinge HSK-A32 - 100

blanks HSK-A32 - 100

Ausführung: Kegel und Bund gehärtet und geschliffen.
 Verwendung: Zur Herstellung von Sonderwerkzeugen.
 Execution: taper and collar hardened and ground.
 Application: For producing your own special tools.



69 893-1

Bestell-Nr. order number	HSK	d	A				
917 - A32140	A32	32	140				
917 - A32120-40	A32	40	120				
917 - A4070	A40	40	70				
917 - A40120	A40	40	120				
917 - A50150	A50	51	150				
917 - A63160	A63	63	160				
917 - A63200	A63	63	200				
917 - A63250-84	A63	84	250				
917 - A80125-65	A80	65	125				
917 - A80250	A80	82	250				
917 - A100250	A100	95	250				

Werkzeugaufnahmen HSK-E

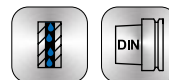
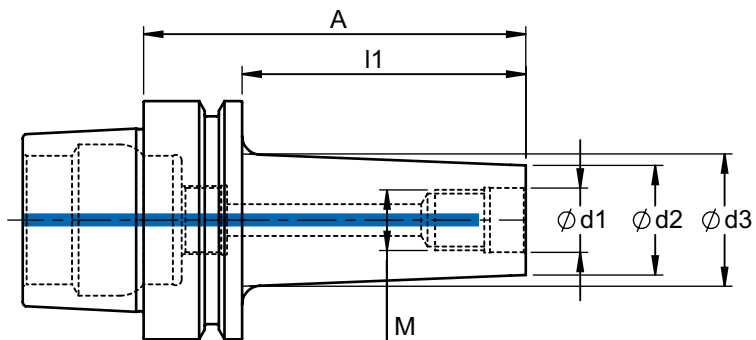
Tool holders HSK-E

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Fräsaufnahmen für Einschraubfräser Modular screw on holder	76 - 81
Fräsdorne Arbors for shell cutters	82 - 83
Zwischenhülsen Morse taper adaptors	84
Weldonfutter Side lock adapter	85
Spannzangenfutter Collet chucks	86 - 88
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Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahme HSK-E32 für Einschraubfräser

modular screw on holder HSK-E32

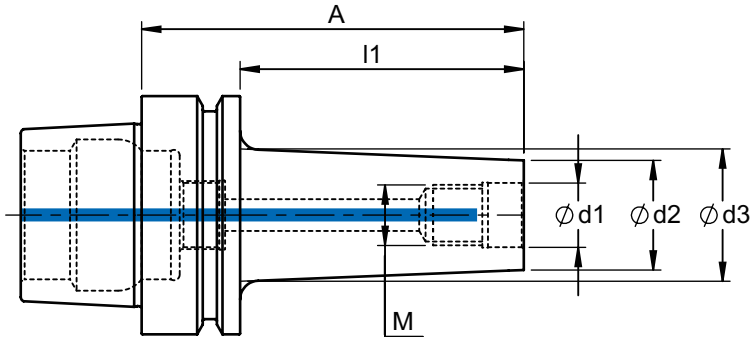


69893-5

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - E320650	M6	6,5	10	22	70	50	G2,5/15.000 oder/or U<1gmm
920 - E320825	M8	8,5	13,8	17	45	25	
920 - E320850	M8	8,5	13,8	24	70	50	
920 - E321025	M10	10,5	18	23	45	25	
920 - E321050	M10	10,5	18	25	70	50	
920 - E321225	M12	12,5	21	25	45	25	

Fräsaufnahme HSK-E40 für Einschraubfräser

modular screw on holder HSK-E40

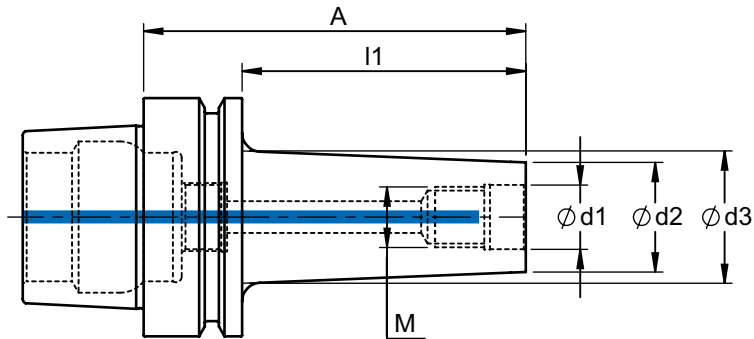


69893-5


Bestell-Nr. order number	M	d1	d2	d3	A	l1		
920 - E400525	M5	5,5	10	18	45	25	G2,5/15.000 oder/or U<1gmm	
920 - E400550	M5	5,5	10	22	70	50		
920 - E400575	M5	5,5	10	26	95	75		
920 - E400625	M6	6,5	10	18	45	25		
920 - E400650	M6	6,5	10	22	70	50		
920 - E400675	M6	6,5	10	26	95	75		
920 - E400825	M8	8,5	13,8	18	45	25		
920 - E400850	M8	8,5	13,8	23	70	50		
920 - E400875	M8	8,5	13,8	25	95	75		
920 - E4008100	M8	8,5	13,8	30	120	100		
920 - E401025	M10	10,5	18	23	45	25		
920 - E401050	M10	10,5	18	25	70	50		
920 - E401075	M10	10,5	18	30	95	75		
920 - E4010100	M10	10,5	18	34	120	100		
920 - E401225	M12	12,5	21	24	45	25		
920 - E401250	M12	12,5	21	30	70	50		
920 - E401275	M12	12,5	21	34	95	75		
920 - E401625	M16	17	29	34	45	25		

Fräsaufnahme HSK-E50 für Einschraubfräser

modular screw on holder HSK-E50

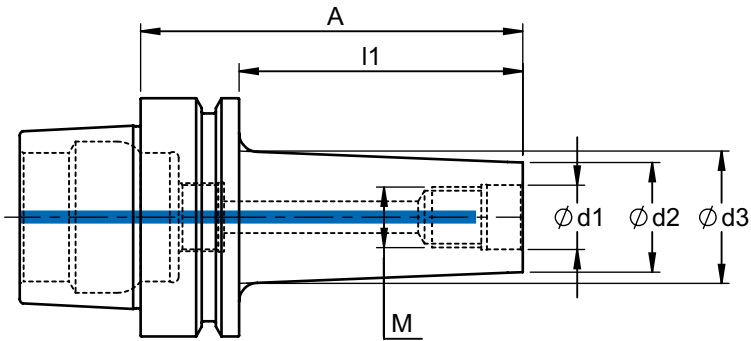


69893-5


Bestell-Nr. order number	M	d1	d2	d3	A	l1		
920 - E500625	M 6	6,5	10	22	51	25	G2,5/15.000 oder/or U<1gmm	
920 - E500650	M 6	6,5	10	22	76	50		
920 - E500675	M 6	6,5	10	26	101	75		
920 - E500825	M 8	8,5	13,8	18	51	25		
920 - E500825ZY	M 8	8,5	13,8	13,8	51	25		
920 - E500850	M 8	8,5	13,8	23	76	50		
920 - E500850ZY	M 8	8,5	13,8	13,8	76	50		
920 - E500875	M 8	8,5	13,8	25	101	75		
920 - E5008100	M 8	8,5	13,8	30	126	100		
920 - E5008125	M 8	8,5	13,8	36	151	125		
920 - E501025	M 10	10,5	18	23	51	25		
920 - E501025ZY	M 10	10,5	18	18	51	25		
920 - E501050	M 10	10,5	18	25	76	50		
920 - E501050ZY	M 10	10,5	18	18	76	50		
920 - E501075	M 10	10,5	18	30	101	75		
920 - E5010100	M 10	10,5	18	35	126	100		
920 - E5010125	M 10	10,5	18	41	151	125		
920 - E501225	M 12	12,5	21	24	51	25		
920 - E501250	M 12	12,5	21	30	76	50		
920 - E501250ZY	M 12	12,5	23	23	76	50		
920 - E501275	M 12	12,5	21	35	101	75		
920 - E501275ZY	M 12	12,5	23	23	101	75		
920 - E5012100	M 12	12,5	21	38	126	100		
920 - E5012125	M 12	12,5	21	42	151	125		
920 - E501625	M 16	17	29	29	51	25		
920 - E501650	M 16	17	29	34	76	50		
920 - E501650ZY	M 16	17	29	29	76	50		
920 - E501675	M 16	17	29	35	101	75		
920 - E501675ZY	M 16	17	29	29	101	75		
920 - E5016100	M 16	17	29	40	126	100		
920 - E5016125	M 16	17	29	42	151	125		

Fräsaufnahme HSK-E63 für Einschraubfräser

modular screw on holder HSK-E63

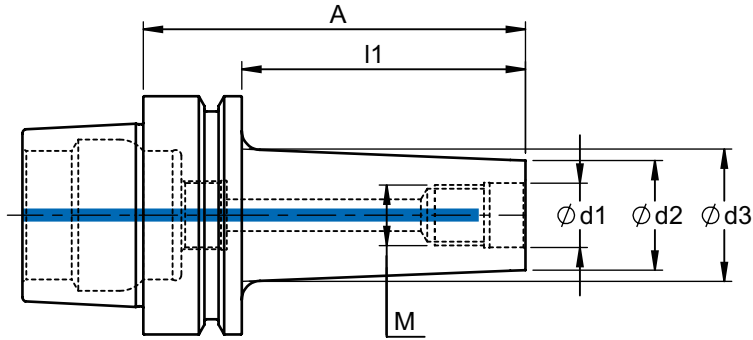


69893-5


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - E630625	M 6	6,5	10	22	51	25	G2,5/15.000 oder/or U<1gmm
920 - E630650	M 6	6,5	10	22	76	50	
920 - E630825	M 8	8,5	13,8	18	51	25	
920 - E630825ZY	M 8	8,5	13,8	13,8	51	25	
920 - E630850	M 8	8,5	13,8	23	76	50	
920 - E630850ZY	M 8	8,5	13,8	13,8	76	50	
920 - E630875	M 8	8,5	13,8	25	101	75	
920 - E6308100	M 8	8,5	13,8	30	126	100	
920 - E6308125	M 8	8,5	13,8	32	151	125	
920 - E631025	M 10	10,5	18	23	51	25	
920 - E631025ZY	M 10	10,5	18	18	51	25	
920 - E631050	M 10	10,5	18	25	76	50	
920 - E631050ZY	M 10	10,5	25	25	76	50	
920 - E631075	M 10	10,5	18	30	101	75	
920 - E631075ZY	M 10	10,5	18	18	101	75	
920 - E6310100	M 10	10,5	18	35	126	100	
920 - E6310125	M 10	10,5	18	40	151	125	
920 - E6310150	M 10	10,5	18	44	176	150	
920 - E631225	M 12	12,5	21	24	51	25	
920 - E631250	M 12	12,5	21	30	76	50	
920 - E631250ZY	M 12	12,5	23	23	76	50	
920 - E631275	M 12	12,5	21	35	101	75	
920 - E631275ZY	M 12	12,5	23	23	101	75	
920 - E6312100	M 12	12,5	21	38	126	100	
920 - E6312100ZY	M 12	12,5	23	23	126	100	
920 - E6312125	M 12	12,5	21	43	151	125	
920 - E6312150	M 12	12,5	21	45	176	150	
920 - E6312175	M 12	12,5	21	46	201	175	
920 - E6312200	M 12	12,5	21	46	226	200	

Fräsaufnahme HSK-E63 für Einschraubfräser

modular screw on holder HSK-E63



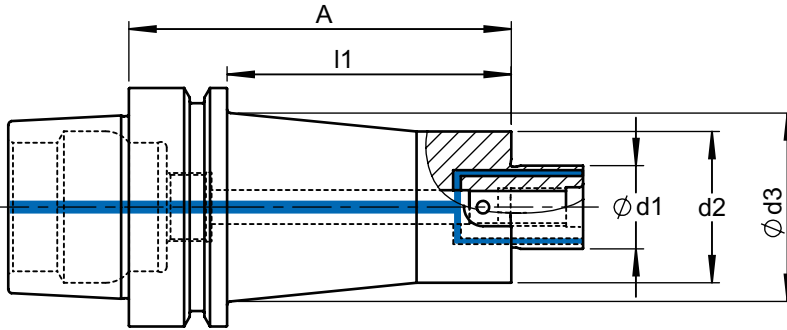
69893-5

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - E631625	M 16	17	29	29	51	25	G2,5/15.000 oder/or U<1gmm
920 - E631650	M 16	17	29	34	76	50	
920 - E631650ZY	M 16	17	29	29	76	50	
920 - E631675	M 16	17	29	35	101	75	
920 - E631675ZY	M 16	17	29	29	101	75	
920 - E6316100	M 16	17	29	40	126	100	
920 - E6316100ZY	M 16	17	29	29	126	100	
920 - E6316125	M 16	17	29	44	151	125	
920 - E6316150	M 16	17	29	47	176	150	
920 - E6316175	M 16	17	29	52	201	175	
920 - E6316200	M 16	17	29	52	226	200	





Fräsdorne HSK-E40 - 63

arbors HSK-E40 - 63 for shell cutter

Lieferumfang: HSK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw



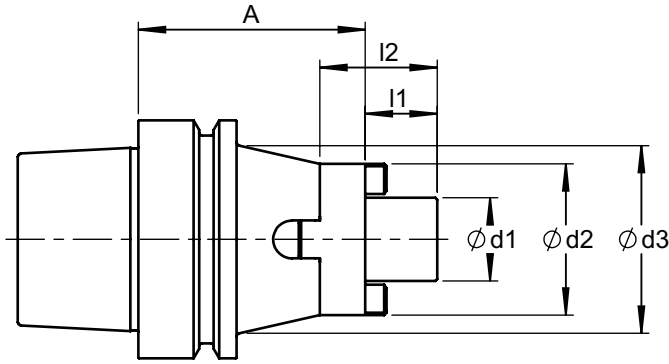
69893-5

Bestell-Nr. order number	HSK	d1	d2	d3	l1	A					
901 - E4016	E40	16	35	35	15	35	x	959-16	957-M8	G6,3/8.000	
901 - E5016	E50	16	35	35	20	46	x	959-16	957-M8		
901 - E5022	E50	22	40	40	22	48	x	959-22	957-M10		
901 - E502250	E50	22	40	40	22	76	x	959-22	957-M10		
901 - E5022100	E50	22	40	40	22	126	x	959-22	957-M10		
901 - E5022150	E50	22	40	40	22	176	x	959-22	957-M10		
901 - E6316	E63	16	35	35	20	46	x	959-16	957-M8		
901 - E631625	E63	16	35	35	25	51	x	959-16	957-M8		
901 - E632250	E63	22	40	45	50	76	x	959-22	957-M10		
901 - E632275	E63	22	40	50	75	101	x	959-22	957-M10		
901 - E6322100	E63	22	40	50	100	126	x	959-22	957-M10		
901 - E632725	E63	27	48	48	25	61	x	959-27	957-M12		






Kombi - Aufsteckfräserdorne HSK-E50

combi-arbors with tenon and parallel key drive, HSK-E50

Lieferumfang: HSK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw

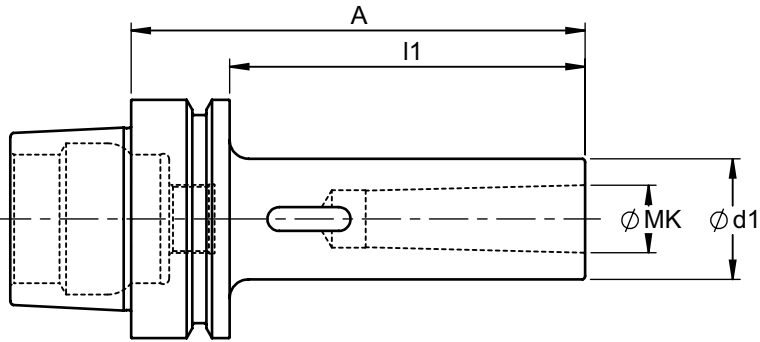


69893-5


Bestell-Nr. order number	d1	d2	d3	l1	l2	A					
902 - E5016	16	32	32	17	27	50	955-16	956-16	957-16	958-16	G6,3/8.000
902 - E5022	22	40	40	19	31	50	955-22	956-22	957-22	958-22	
902 - E5027	27	48	48	21	33	65	955-27	956-27	957-27	958-27	

Zwischenhülsen HSK-E50

morse taper adaptor, HSK-E50



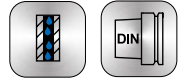
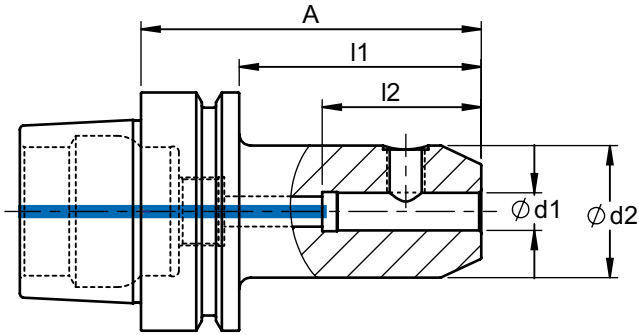
69893-5

Bestell-Nr. order number	HSK	MK	d1	l1	A	
906 - E50MK2	E50	2	32	94	120	G6,3/8.000
906 - E50MK3	E50	3	40	114	140	




Weldonfutter HSK-E40 - 63

weldon chuck HSK-E40 - 63

Lieferumfang: HSK-Aufnahme mit Spannschraube
 delivery: weldon chuck with tightening screw



69893-5

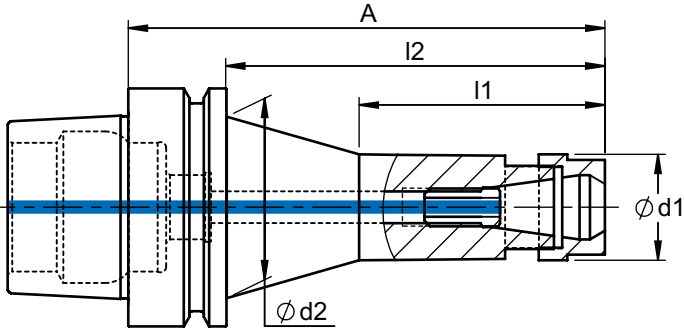
Bestell-Nr. order number	HSK	d1	D	l1	l2	A		
903 - E4006	E40	6	25	40	38	60	949-M6	
903 - E4008	E40	8	28	40	38	60	949-M8	
903 - E4010	E40	10	35	40	42	60	949-M10	
903 - E4012	E40	12	42	50	47	70	949-M12	
903 - E4014	E40	14	44	55	47	75	949-M12	
903 - E4016	E40	16	48	55	50	75	949-M14	
903 - E5006	E50	6	25	39	38	65	949-M6	
903 - E5008	E50	8	28	39	38	65	949-M8	
903 - E5010	E50	10	35	39	42	65	949-M10	
903 - E5012	E50	12	42	54	47	80	949-M12	
903 - E5014	E50	14	44	54	47	80	949-M12	
903 - E5016	E50	16	48	54	50	80	949-M14	
903 - E5018	E50	18	50	54	50	80	949-M14	
903 - E5020	E50	20	52	54	52	80	949-M16	
903 - E5025	E50	25	65	84	58	110	949-M18X2	
903 - E6306	E63	6	25	39	38	65	949-M6	
903 - E6308	E63	8	28	39	38	65	949-M8	
903 - E6310	E63	10	35	39	42	65	949-M10	
903 - E6312	E63	12	42	54	47	80	949-M12	
903 - E6314	E63	14	44	54	47	80	949-M12	
903 - E6316	E63	16	48	54	50	80	949-M14	
903 - E6318	E63	18	50	54	50	80	949-M14	
903 - E6320	E63	20	52	54	52	80	949-M16	

G6,3/15.000





Spannzangenfutter HSK-E32 - 50 für Spannzangen ER 16 mit Spannmutter UM

collet chucks HSK type-E32 - 50 for collets ER 16 with nut UM

Lieferumfang: HSK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



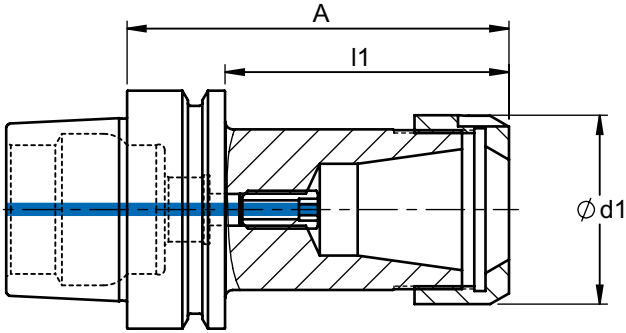
69893-5

Bestell-Nr. order number	HSK	d1	d2	l1	l2	A				
910 - E3230	E32	28	28	-	30	50	953-UM16	-	954-034	
910 - E4050	E40	28	32	45	50	70	953-UM16	-	954-034	G6,3/15.000
910 - E40100	E40	28	32	65	100	120	953-UM16	948-M10	954-034	
910 - E5050	E50	28	42	43	50	76	953-UM16	948-M10	954-034	
910 - E50100	E50	28	42	65	100	126	953-UM16	948-M10	954-034	
910 - E50160	E50	28	42	65	160	186	953-UM16	948-M10	954-034	





Spannzangenfutter HSK-E40 - 63 für Spannzangen ER 25/32/40 mit Spannmutter UM

collet chucks HSK-E40 - 63 for collets ER 25/32/40 with nut UM

Lieferumfang: HSK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



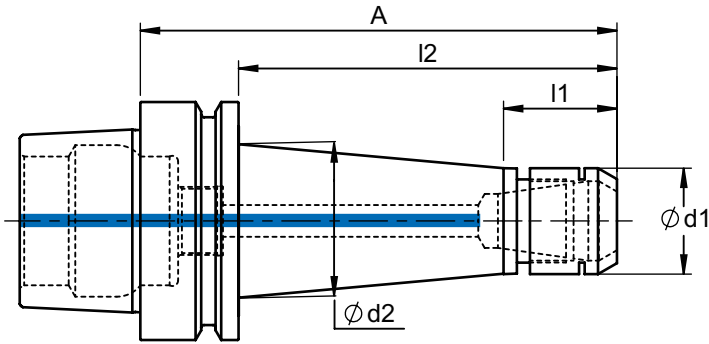
69893-5

Bestell-Nr. order number	HSK	ER	d1	l1	A				
912 - E4050	E40	25	42	50	70	953-UM25	948-M12	954-013ER25	G6,3/15.000
912 - E5050	E50	25	42	50	76	953-UM25	948-M12	954-013ER25	
913 - E5050	E50	32	50	50	76	953-UM32	-	954-014ER32	
913 - E6350	E63	32	50	50	76	953-UM32	-	954-014ER32	
913 - E6375	E63	32	50	75	101	953-UM32	948-M16	954-014ER32	
914 - E6390	E63	40	63	90	116	953-UM40	-	954-013ER40	



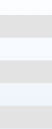
Spannzangenfutter HSK-E25 - 63 für Spannzangen ER 11/16/20 mit Spannmutter MS

collet chucks HSK-E25 - 63 for collets ER 11/16/20 with nut MS

Lieferumfang: HSK-Aufnahme mit Spannmutter MS
delivery: collet chuck with nut MS

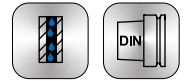
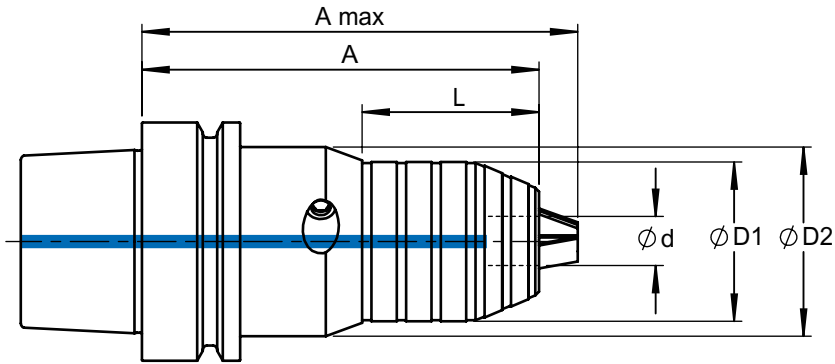


69893-5


Bestell-Nr. order number	HSK	ER	d1	d2	l1	l2	A			
918 - E2525	E25	11	16	16	-	25	35	953-MS11	954-11	G2,5/15.000 oder/or U<1gmm
918 - E2560	E25	11	16	20	21	60	70	953-MS11	954-11	
919 - E2525	E25	16	22	22	-	25	35	953-MS16	954-16	
919 - E3230	E32	16	22	22	-	30	50	953-MS16	954-16	
919 - E3270	E32	16	22	26	28	70	90	953-MS16	954-16	
989 - E4030	E40	8	13	13	-	30	50	953-MS8	954-8	
918 - E4030	E40	11	16	20	20	30	50	953-MS11	954-11	
918 - E4080	E40	11	16	20	20	80	100	953-MS11	954-11	
919 - E4030	E40	16	22	22	-	30	50	953-MS16	954-16	
919 - E4050	E40	16	22	29	28	50	70	953-MS16	954-16	
919 - E4080	E40	16	22	29	28	80	100	953-MS16	954-16	
911 - E4030	E40	20	28	28	-	30	50	953-MS20	954-063E20	
911 - E4040	E40	20	28	30	30	40	60	953-MS20	954-063E20	
911 - E4050	E40	20	28	32	30	50	70	953-MS20	954-063E20	
911 - E4070	E40	20	28	34	30	70	90	953-MS20	954-063E20	
919 - E5080	E50	16	22	29	28	80	100	953-MS16	954-16	
911 - E5040	E50	20	28	34	30	40	66	953-MS20	954-063E20	
911 - E5050	E50	20	28	34	30	50	76	953-MS20	954-063E20	
911 - E5080	E50	20	28	37	30	80	106	953-MS20	954-063E20	
911 - E6350	E63	20	28	37	30	50	76	953-MS20	954-063E20	
911 - E63100	E63	20	28	50	30	100	126	953-MS20	954-063E20	
911 - E63150	E63	20	28	53	30	150	176	953-MS20	954-063E20	

CNC- Bohrfutter HSK-E40 - 63 für Rechts- und Linkslauf

CNC- drill chucks HSK-E40 - 63 for clockwise and anti clockwise rotation



69893-1

Bestell-Nr. order number	HSK	d	D1	D2	L	A	A max.	
407 - E4008A95	E40	0,5 - 8	34,5	45,0	40,0	95,0	97,5	G6,3/8.000
407 - E5008A100	E50	0,5 - 8	34,5	45,0	40,0	100,0	102,5	
407 - E5013A110	E50	1 - 13	42,0	50,0	47,0	110,0	119,0	
407 - E5016A110	E50	2,5 - 16	49,0	50,0	50,0	110,0	121,0	
407 - E6313A105	E63	1 - 13	42,0	50,0	47,0	105,0	114,0	
407 - E6316A105	E63	2,5 - 16	49,0	50,0	50,0	105,0	116,0	

Werkzeugaufnahmen HSK-F

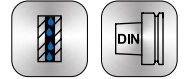
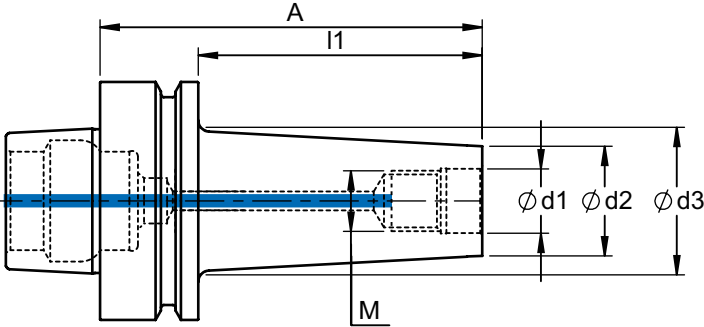
Tool holders HSK-F

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Fräsaufnahmen für Einschraubfräser Modular screw on holder	92 - 93
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Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahme HSK-F63 für Einschraubfräser

modular screw on holder HSK-F63

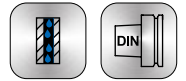
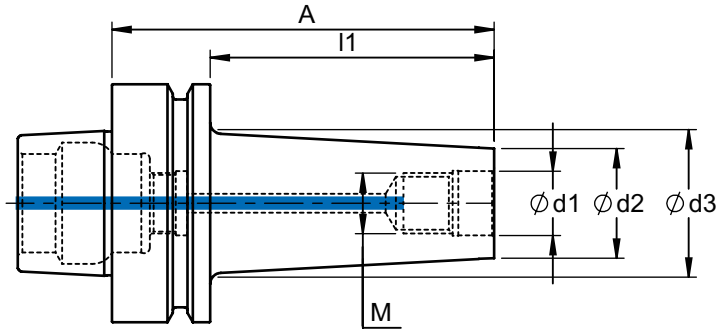


69893-6


Bestell-Nr. order number	M	d1	d2	d3	A	l1		
920 - F630825	M8	8,5	13,8	16	51	25	G2,5/15.000 oder/or U<1gmm	
920 - F630850	M8	8,5	13,8	19	76	50		
920 - F630875	M8	8,5	13,8	22	101	75		
920 - F6308100	M8	8,5	13,8	24	126	100		
920 - F631050	M10	10,5	18	23	76	50		
920 - F631075	M10	10,5	18	26	101	75		
920 - F6310100	M10	10,5	18	28	126	100		
920 - F6310125	M10	10,5	18	31	151	125		
920 - F6310150	M10	10,5	18	34	176	150		
920 - F6310200	M10	10,5	18	50	226	200		
920 - F631225	M12	12,5	21	23	51	25		
920 - F631250	M12	12,5	21	26	76	50		
920 - F6312100	M12	12,5	21	31	126	100		
920 - F6312125	M12	12,5	21	34	151	125		
920 - F6312150	M12	12,5	21	37	176	150		
920 - F6312200	M12	12,5	21	46	226	200		
920 - F6312200ZY	M12	12,5	23	23	226	200		
920 - F631625	M16	17	29	31	51	25		
920 - F631650	M16	17	29	34	76	50		
920 - F631675	M16	17	29	37	101	75		
920 - F631675ZY	M16	17	29	29	101	75		
920 - F6316125	M16	17	29	42	151	125		
920 - F6316150	M16	17	29	45	176	150		
920 - F6316150ZY	M16	17	29	29	176	150		
920 - F6316175	M16	17	29	48	201	175		
920 - F6316200	M16	17	29	50	226	200		

Fräsaufnahme HSK-F63 für Einschraubfräser mit Gewinde für Kühlmittelübergaberohr

modular screw on holder HSK-F63 with thread for coolant tube

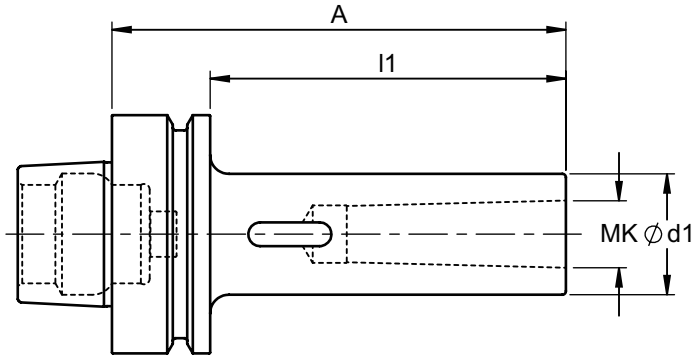


69893-6

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - F63K0825	M8	8,5	13,8	16	51	25	G2,5/15.000 oder/or U<1gmm
920 - F63K0850	M8	8,5	13,8	19	76	50	
920 - F63K0875	M8	8,5	13,8	22	101	75	
920 - F63K08100	M8	8,5	13,8	24	126	100	
920 - F63K1025	M10	10,5	18	20	51	25	
920 - F63K1050	M10	10,5	18	23	76	50	
920 - F63K1075	M10	10,5	18	26	101	75	
920 - F63K10100	M10	10,5	18	28	126	100	
920 - F63K10125	M10	10,5	18	31	151	125	
920 - F63K10150	M10	10,5	18	34	176	150	
920 - F63K10200	M10	10,5	18	50	226	200	
920 - F63K1225	M12	12,5	21	23	51	25	
920 - F63K1250	M12	12,5	21	26	76	50	
920 - F63K1275	M12	12,5	21	29	101	75	
920 - F63K12100	M12	12,5	21	31	126	100	
920 - F63K12125	M12	12,5	21	34	151	125	
920 - F63K12150	M12	12,5	21	37	176	150	
920 - F63K12200	M12	12,5	21	46	226	200	
920 - F63K12200ZY	M12	12,5	23	23	226	200	
920 - F63K1625	M16	17	29	31	51	25	
920 - F63K1650	M16	17	29	34	76	50	
920 - F63K1675	M16	17	29	37	101	75	
920 - F63K1675ZY	M16	17	29	29	101	75	
920 - F63K16100	M16	17	29	39	126	100	
920 - F63K16100ZY	M16	17	29	29	126	100	
920 - F63K16125	M16	17	29	42	151	125	
920 - F63K16150	M16	17	29	45	176	150	
920 - F63K16150ZY	M16	17	29	29	176	150	
920 - F63K16175	M16	17	29	48	201	175	
920 - F63K16200	M16	17	29	50	226	200	
920 - F63K16200ZY	M16	17	29	29	226	200	

Zwischenhülsen HSK-F63

morse taper adaptor, HSK-F63



69893-6

Bestell-Nr. order number	MK	d1	l1	A	
906 - F63MK1	1	25	74	100	
906 - F63MK2	2	32	94	120	G6,3/8.000
906 - F63MK3	3	40	114	140	

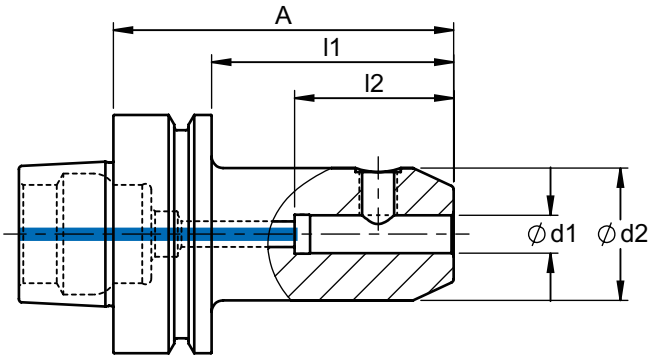


G6,3/8.000



Weldonfutter HSK-F63

weldon chuck HSK-F63

Lieferumfang: HSK-Aufnahme mit Spannschraube
 delivery: weldon chuck with tightening screw

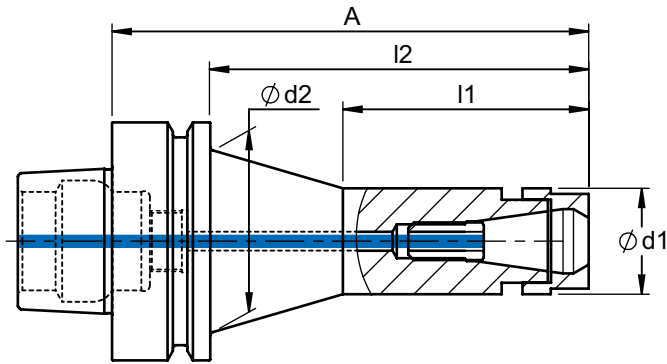


69893-6

Bestell-Nr. order number	d1	D	l1	l2	A		
903 - F6306	6	25	39	38	65	949-M6	G6,3/15.000
903 - F6308	8	28	39	38	65	949-M8	
903 - F6310	10	35	39	42	65	949-M10	
903 - F6312	12	42	54	47	80	949-M12	
903 - F6314	14	44	54	47	80	949-M12	
903 - F6316	16	48	54	50	80	949-M14	
903 - F6318	18	50	54	50	80	949-M14	
903 - F6320	20	52	54	52	80	949-M16	
903 - F6325	25	65	84	60	110	949-M18X2	
903 - F6332	32	72	84	64	110	949-M20X2	

Spannzangenfutter HSK-F63 für Spannzangen ER 16/25/32/40 mit Spannmutter UM




collet chucks HSK-F63 for collets ER 16/25/32/40 with nut UM

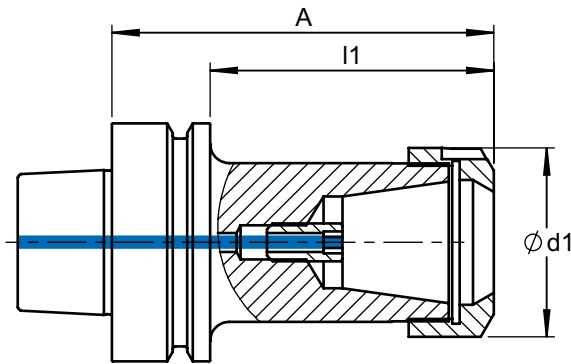
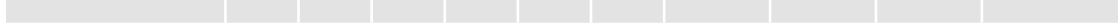


Lieferumfang: HSK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



69893-6




Bestell-Nr. order number	ER	d1	d2	l1	l2	A				
910 - F6350	16	28	28	-	50	76	953-UM16	-	954-034	G6,3/15.000
910 - F6375	16	28	28	-	75	101	953-UM16	-	954-034	G6,3/15.000
910 - F63100	16	28	48	65	100	126	953-UM16	948-M10	954-034	G6,3/15.000



Lieferumfang: HSK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



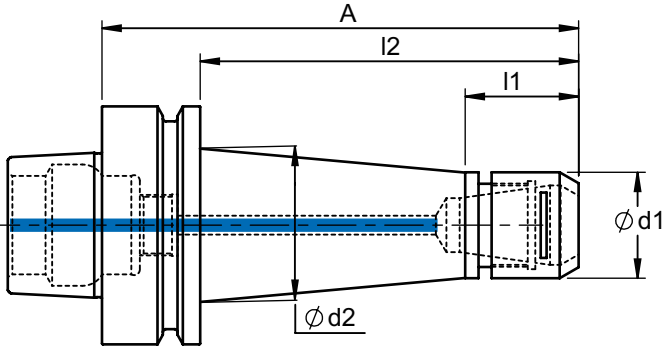
69893-6

Bestell-Nr. order number	ER	d1	l1	A			
912 - F6350	25	42	50	76	953-UM25	-	954-013ER25
912 - F6375	25	42	75	101	953-UM25	948-M12	954-013ER25
912 - F63100	25	42	100	126	953-UM25	948-M12	954-013ER25
913 - F6350	32	50	50	76	953-UM32	-	954-013ER32
913 - F6375	32	50	75	101	953-UM32	948-M16	954-013ER32
913 - F63100	32	50	100	126	953-UM32	948-M16	954-013ER32
914 - F6350	40	63	50	76	953-UM40	-	954-014ER40




Spannzangenfutter HSK-F63 für Spannzangen ER 11/20 mit Spannmutter MS

collet chucks HSK-F63 for collets ER 11/20 with nut MS

Lieferumfang: HSK-Aufnahme mit Spannmutter MS
delivery: collet chuck with nut MS

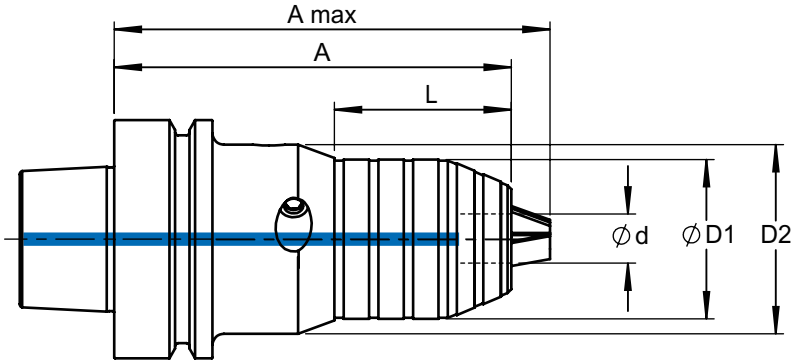


69893-6


Bestell-Nr. order number	ER	d1	d2	l1	l2	A			
918 - F63100	11	16	33	20	100	126	953-MS11	954-11	
918 - F63200	11	16	32	20	200	226	953-MS11	954-11	
911 - F6350	20	28	37	30	50	76	953-MS20	954-063E20	G2,5/15.000
911 - F63100	20	28	50	30	100	126	953-MS20	954-063E20	
911 - F63150	20	28	53	30	150	176	953-MS20	954-063E20	
911 - F63200	20	28	53	30	200	226	953-MS20	954-063E20	

CNC- Bohrfutter HSK-F40 - 63 für Rechts- und Linkslauf

CNC - drill chucks HSK-F40 - 63 for clockwise and anti clockwise rotation



69893-1

Bestell-Nr. order number	HSK	d	D1	D2	L	A	A max.	 G6,3/8.000
407 - F4008A95	F40	0,5 - 8	34,5	45,0	40,0	95,0	97,5	
407 - F5008A100	F50	0,5 - 8	34,5	45,0	40,0	100,0	102,5	
407 - F5013A110	F50	1 - 13	42,0	50,0	47,0	110,0	119,0	
407 - F5016A110	F50	2,5 - 16	49,0	50,0	50,0	110,0	121,0	
407 - F6313A105	F63	1 - 13	42,0	50,0	47,0	105,0	114,0	
407 - F6316A105	F63	2,5 - 16	49,0	50,0	50,0	105,0	116,0	

Werkzeugaufnahmen PSC

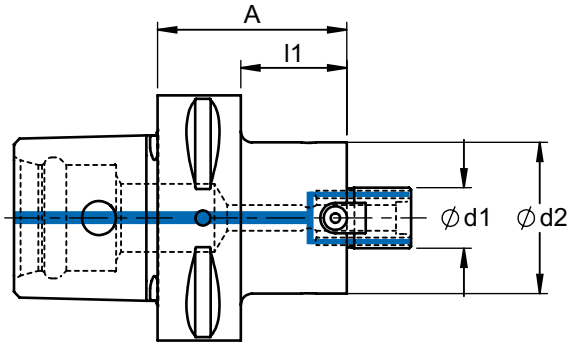
Tool holders PSC





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Weldonfutter Side lock adapter	104
Spannzangenfutter Collet chucks	105
CNC-Bohrfutter CNC-drill chucks	106

Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsdorne PSC-63

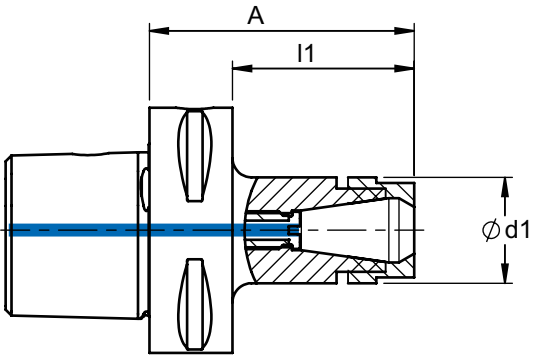
arbors PSC-63 for shell cutter







Bestell-Nr. order number	d1	d2	l1	A					
922-PSC6316A50	16	40	28	50	959-16	-	957-M8	-	G6,3/8.000
922-PSC6316A100	16	40	78	100	959-16	-	957-M8	-	
922-PSC6322A50	22	50	28	50	959-22	-	957-M10	-	
922-PSC6322A100	22	50	78	100	959-22	-	957-M10	-	
922-PSC6327A50	27	60	28	50	959-27	-	957-M12	-	
922-PSC6327A100	27	60	78	100	959-27	-	957-M12	-	
922-PSC6332A60	32	63	38	60	959-32	957-32	-	958-32	

ER-Spannzangenfutter PSC-63

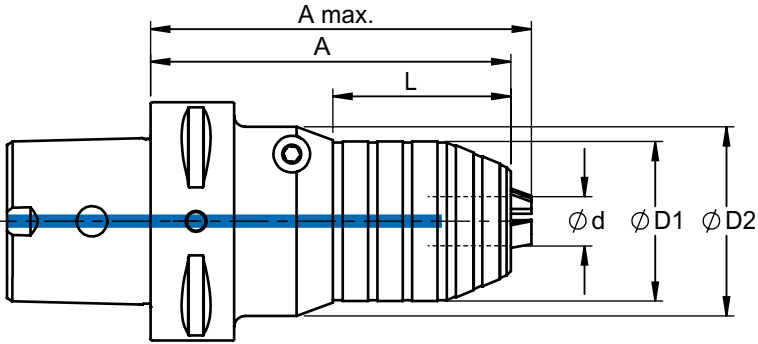
collet chucks for collets ER PSC-63




Bestell-Nr. order number	d1	l1	A				
910-PSC63A70	28	48	70	953-UM16	-	954-013ER16	G6,3/8.000
910-PSC63A100	28	78	100	953-UM16	948-M10	954-013ER16	
912-PSC63A70	42	48	70	953-UM25	-	954-013ER25	
912-PSC63A110	42	88	110	953-UM25	948-M12	954-013ER25	
913-PSC63A70	50	48	70	953-UM32	-	954-013ER32	
913-PSC63A110	50	88	110	953-UM32	948-M16	954-013ER32	
914-PSC63A80	63	58	80	953-UM40	-	954-013ER40	

CNC- Bohrfutter PSC40 - 80 für Rechts- und Linkslauf

CNC- drill chucks PSC40 - 80 for clockwise and anti clockwise rotation



Bestell-Nr. order number	PSC	d	D1	D2	L	A	A max.		
407-PSC4008A80	40	0,5 - 8	34,5	45,0	40,0	80,0	82,5	G6,3/8.000	
407-PSC5008A80	50	0,5 - 8	34,5	45,0	40,0	80,0	82,5		
407-PSC5013A90	50	1 - 13	42,0	50,0	47,0	90,0	99,0		
407-PSC5016A90	50	2,5 - 16	49,0	50,0	50,0	90,0	101,0		
407-PSC6308A85	63	0,5 - 8	34,5	45,0	40,0	85,0	87,5		
407-PSC6313A95	63	1 - 13	42,0	50,0	47,0	95,0	104,0		
407-PSC6316A95	63	2,5 - 16	49,0	50,0	50,0	95,0	106,0		
407-PSC8013A100	80	1 - 13	42,0	50,0	47,0	100,0	109,0		
407-PSC8016A100	80	2,5 - 16	49,0	50,0	50,0	100,0	111,0		

Werkzeugaufnahmen SK

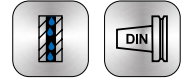
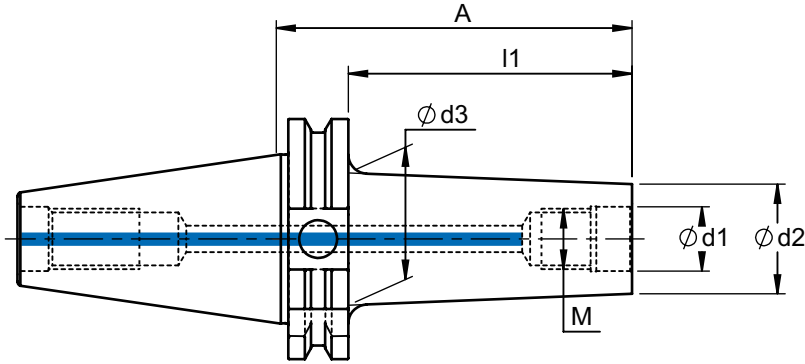
Tool holders SK

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Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahmen SK30 für Einschraubfräser

modular screw on holder SK30

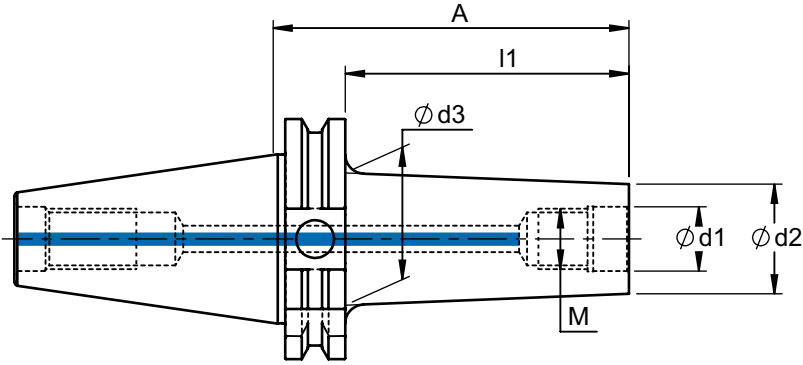


69871-AD


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
962 - SK300625	M6	6,5	10	17	44,1	25	G6,3/10.000
962 - SK300650	M6	6,5	10	20	69,1	50	
962 - SK300825	M8	8,5	14	18	44,1	25	
962 - SK300850	M8	8,5	14	23	69,1	50	
962 - SK301025	M10	10,5	18	23	44,1	25	
962 - SK301050	M10	10,5	18	27	69,1	50	
962 - SK301225	M12	12,5	21	25	44,1	25	
962 - SK301250	M12	12,5	21	31	69,1	50	
962 - SK301625	M16	17	29	29	44,1	25	
962 - SK301650	M16	17	29	34	69,1	50	

Fräsaufnahmen SK40 für Einschraubfräser

modular screw on holder SK40

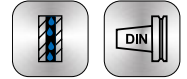
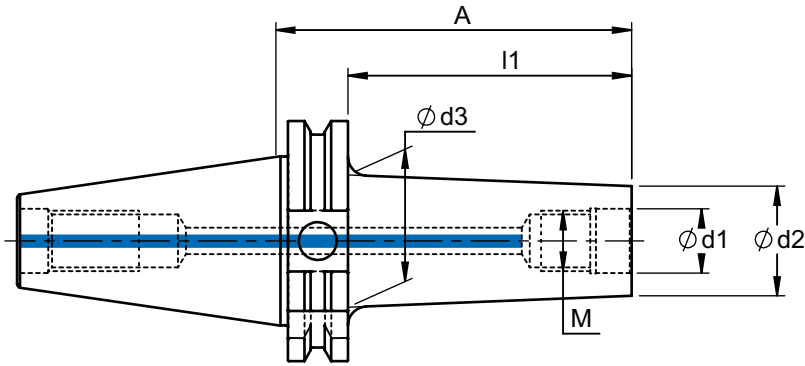


69871-AD



Bestell-Nr. order number	M	d1	d2	d3	A	l1	
962 - 0625	M6	6,5	10	17	44,1	25	G6,3/10.000
962 - 0625ZY	M6	6,5	10	10	44,1	25	
962 - 0650	M6	6,5	10	23	69,1	50	
962 - 0675	M6	6,5	10	25	94,1	75	
962 - 0825	M8	8,5	13,8	18	44,1	25	
962 - 0825ZY	M8	8,5	13,8	13,8	44,1	25	
962 - 0850	M8	8,5	13,8	23	69,1	50	
962 - 0850ZY	M8	8,5	13,8	13,8	69,1	50	
962 - 0875	M8	8,5	13,8	25	94,1	75	
962 - 0875ZY	M8	8,5	13,8	13,8	94,1	75	
962 - 08100	M8	8,5	13,8	30	119,1	100	
962 - 08125	M8	8,5	13,8	34	144,1	125	
962 - 1025K	M10	10,5	15,4	18	44,1	25	
962 - 1050K	M10	10,5	15,4	21	69,1	50	
962 - 1025	M10	10,5	18	23	44,1	25	
962 - 1025ZY	M10	10,5	18	18	44,1	25	
962 - 1050	M10	10,5	18	25	69,1	50	
962 - 1050ZY	M10	10,5	18	18	69,1	50	
962 - 1075	M10	10,5	18	30	94,1	75	
962 - 1075ZY	M10	10,5	18	18	94,1	75	
962 - 10100	M10	10,5	18	35	119,1	100	
962 - 10100ZY	M10	10,5	18	18	119,1	100	
962 - 10125	M10	10,5	18	40	144,1	125	
962 - 10150	M10	10,5	18	45	169,1	150	

Fräsaufnahmen SK40 für Einschraubfräser

modular screw on holder SK40



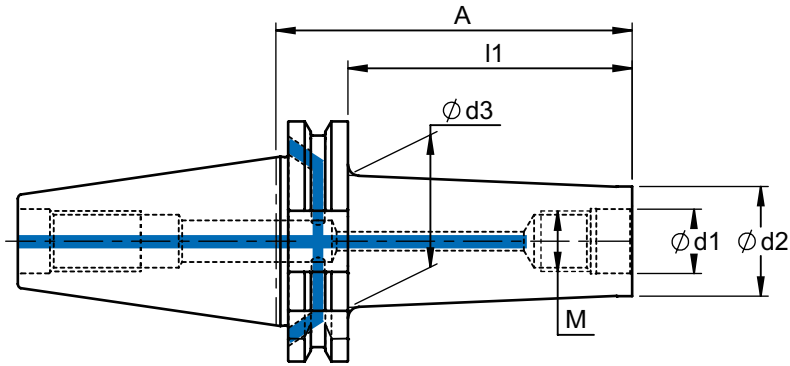
69871-AD

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
962 - 1225	M12	12,5	21	24	44,1	25	
962 - 1250	M12	12,5	21	30	69,1	50	
962 - 1250ZY	M12	12,5	22	22	69,1	50	
962 - 1275	M12	12,5	21	35	94,1	75	
962 - 1275ZY	M12	12,5	22	22	94,1	75	
962 - 12100	M12	12,5	21	38	119,1	100	
962 - 12100ZY	M12	12,5	22	22	119,1	100	
962 - 12125	M12	12,5	21	43	144,1	125	
962 - 12150	M12	12,5	21	45	169,1	150	
962 - 12175	M12	12,5	21	50	194,1	175	
962 - 12200	M12	12,5	21	50	219,1	200	
962 - 12250	M12	12,5	21	50	269,1	250	
962 - 1625	M16	17	29	29	44,1	25	
962 - 1650	M16	17	29	34	69,1	50	
962 - 1650-37	M16	17	37	43	69,1	50	
962 - 1650ZY	M16	17	29	29	69,1	50	
962 - 1675	M16	17	29	35	94,1	75	
962 - 1675-37	M16	17	37	46	94,1	75	
962 - 1675ZY	M16	17	29	29	94,1	75	
962 - 16100	M16	17	29	40	119,1	100	
962 - 16100-37	M16	17	37	49	119,1	100	
962 - 16100ZY	M16	17	29	29	119,1	100	
962 - 16125	M16	17	29	44	144,1	125	
962 - 16150	M16	17	29	45	169,1	150	
962 - 16150ZY	M16	17	29	29	169,1	150	
962 - 16175	M16	17	29	50	194,1	175	
962 - 16200	M16	17	29	50	219,1	200	
962 - 16200ZY	M16	17	29	29	219,1	200	
962 - 16225	M16	17	29	50	244,1	225	
962 - 16250	M16	17	29	50	269,1	250	

G6,3/10.000

Fräsaufnahmen SK40 für Einschraubfräser

modular screw on holder SK40

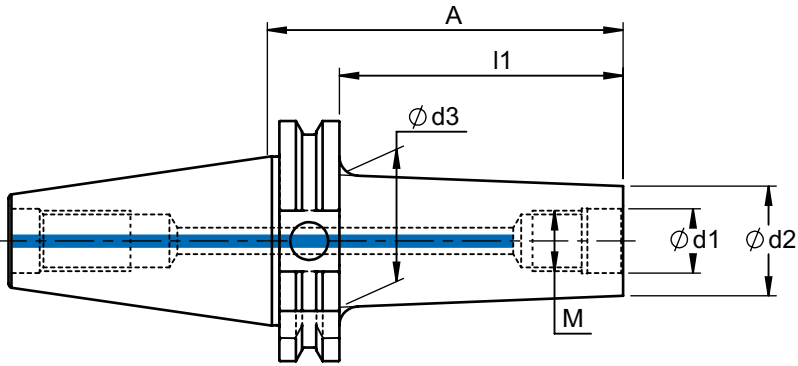


69871 AD/B


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - SK400825	M8	8,5	13,8	18	44,1	25	G6,3/10.000
920 - SK400825ZY	M8	8,5	13,8	13,8	44,1	25	
920 - SK400850	M8	8,5	13,8	23	69,1	50	
920 - SK400850ZY	M8	8,5	13,8	13,8	69,1	50	
920 - SK400875	M8	8,5	13,8	25	94,1	75	
920 - SK400875ZY	M8	8,5	13,8	13,8	94,1	75	
920 - SK4008100	M8	8,5	13,8	30	119,1	100	
920 - SK4008125	M8	8,5	13,8	34	144,1	125	
920 - SK401025	M10	10,5	18	23	44,1	25	
920 - SK401025ZY	M10	10,5	18	18	44,1	25	
920 - SK401050	M10	10,5	18	25	69,1	50	
920 - SK401050ZY	M10	10,5	18	18	69,1	50	
920 - SK401075	M10	10,5	18	30	94,1	75	
920 - SK401075ZY	M10	10,5	18	18	94,1	75	
920 - SK4010100	M10	10,5	18	35	119,1	100	
920 - SK4010100ZY	M10	10,5	18	18	119,1	100	
920 - SK4010150	M10	10,5	18	45	169,1	150	
920 - SK401225	M12	12,5	21	24	44,1	25	
920 - SK401250	M12	12,5	21	30	69,1	50	
920 - SK401250ZY	M12	12,5	22	22	69,1	50	
920 - SK401275	M12	12,5	21	35	94,1	75	
920 - SK401275ZY	M12	12,5	22	22	94,1	75	
920 - SK4012100	M12	12,5	21	38	119,1	100	
920 - SK4012100ZY	M12	12,5	22	22	119,1	100	
920 - SK401625	M16	17	29	29	44,1	25	
920 - SK401650	M16	17	29	34	69,1	50	
920 - SK401650ZY	M16	17	29	29	69,1	50	
920 - SK401675	M16	17	29	35	94,1	75	
920 - SK401675ZY	M16	17	29	29	94,1	75	
920 - SK4016100	M16	17	29	40	119,1	100	
920 - SK4016100ZY	M16	17	29	29	119,1	100	
920 - SK4016125	M16	17	29	44	144,1	125	
920 - SK4016150	M16	17	29	45	169,1	150	
920 - SK4016175	M16	17	29	50	194,1	175	
920 - SK4016200	M16	17	29	50	219,1	200	
920 - SK4016225	M16	17	29	50	244,1	225	

Fräsaufnahmen SK50 für Einschraubfräser

modular screw on holder SK50

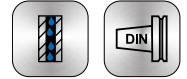
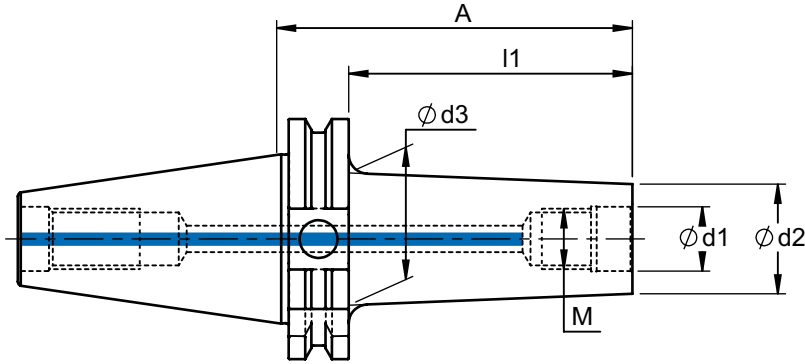


69871-AD


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
463 - SK500850	M8	8,5	13,8	23	69,1	50	G6,3/8.000
463 - SK500875	M8	8,5	13,8	25	94,1	75	
463 - SK5008100	M8	8,5	13,8	30	119,1	100	
463 - SK5008150	M8	8,5	13,8	35	169,1	150	
463 - SK501050	M10	10,5	18	25	69,1	50	
463 - SK501050ZY	M10	10,5	18	18	69,1	50	
463 - SK501075	M10	10,5	18	30	94,1	75	
463 - SK5010100	M10	10,5	18	35	119,1	100	
463 - SK5010150	M10	10,5	18	38	169,1	150	
463 - SK501250	M12	12,5	21	34	69,1	50	
463 - SK501250ZY	M12	12,5	22	22	69,1	50	
463 - SK501275	M12	12,5	21	37	94,1	75	
463 - SK501275ZY	M12	12,5	22	22	94,1	75	
463 - SK5012100	M12	12,5	21	41	119,1	100	
463 - SK5012100ZY	M12	12,5	22	22	119,1	100	
463 - SK5012150	M12	12,5	21	50	169,1	150	
463 - SK5012150ZY	M12	12,5	23	23	169,1	150	
463 - SK5012200	M12	12,5	21	57	219,1	200	
463 - SK5012250	M12	12,5	21	62	269,1	250	
463 - SK5012300	M12	12,5	21	67	319,1	300	
463 - SK5012350	M12	12,5	21	70	369,5	350	

Fräsaufnahmen SK50 für Einschraubfräser

modular screw on holder SK50

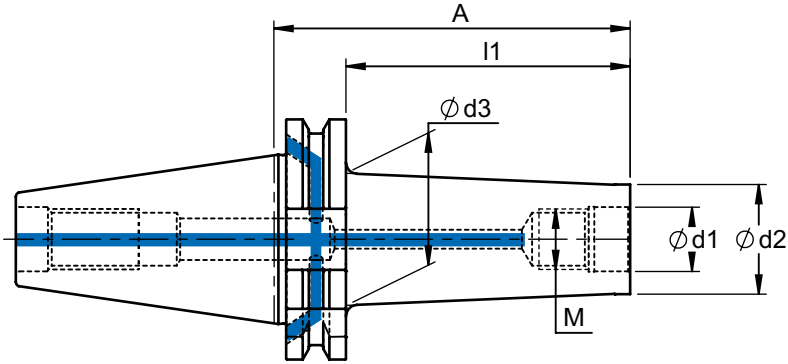


69871-AD


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
463 - SK501650	M16	17	29	35	69,1	50	G6,3/8.000
463 - SK501650-37	M16	17	37	43	69,1	50	
463 - SK501650ZY	M16	17	29	29	69,1	50	
463 - SK501675	M16	17	29	37	94,1	75	
463 - SK501675-37	M16	17	37	46	94,1	75	
463 - SK501675ZY	M16	17	29	29	94,1	75	
463 - SK501675ZY-37	M16	17	37	37	94,1	75	
463 - SK5016100	M16	17	29	41	119,1	100	
463 - SK5016100-37	M16	17	37	49	119,1	100	
463 - SK5016100ZY	M16	17	29	29	119,1	100	
463 - SK5016100ZY-37	M16	17	37	37	119,1	100	
463 - SK5016150	M16	17	29	50	169,1	150	
463 - SK5016150ZY	M16	17	29	29	169,1	150	
463 - SK5016200	M16	17	29	57	219,1	200	
463 - SK5016200ZY	M16	17	29	29	219,1	200	
463 - SK5016250	M16	17	29	62	269,1	250	
463 - SK5016250ZY-38	M16	17	38	38	269,1	250	
463 - SK5016300	M16	17	29	67	319,1	300	
463 - SK5016350	M16	17	29	70	369,1	350	
463 - SK5016400	M16	17	29	70	419,1	400	
463 - SK5016450	M16	17	29	70	469,1	450	

Fräsaufnahmen SK50 für Einschraubfräser

modular screw on holder SK50



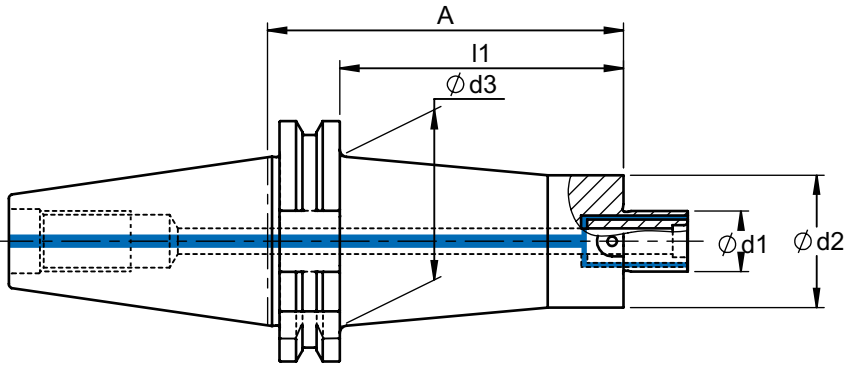
69871 AD/B

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
920 - SK501275	M12	12,5	21	37	94,1	75	G6,3/8.000
920 - SK5012100	M12	12,5	21	41	119,1	100	
920 - SK5012150	M12	12,5	21	50	169,1	150	
920 - SK501675	M16	17	29	37	94,1	75	
920 - SK5016100	M16	17	29	41	119,1	100	
920 - SK5016150	M16	17	29	50	169,1	150	


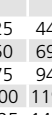


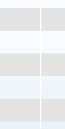
Fräsdorne SK40

arbors SK40 for shell cutter

Lieferumfang: SK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw



69871-AD

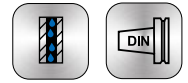
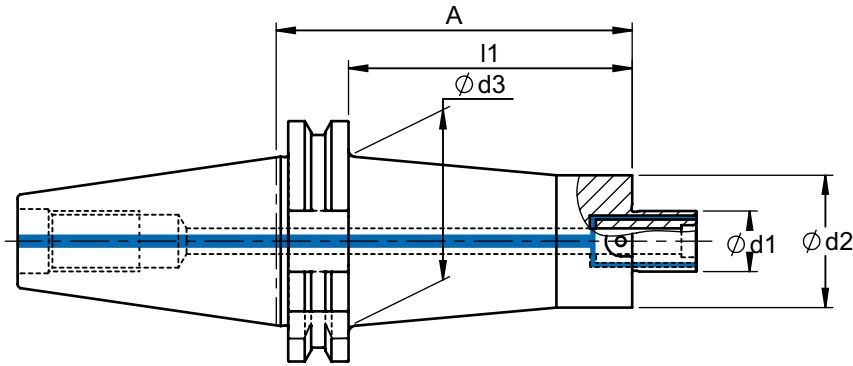
Bestell-Nr. order number	d1	d2	d3	l1	A					
972-SK401625	16	35	35	25	44,1	x	959-16	-	957-M8	-
972-SK401625ZY-30	16	30	30	25	44,1	x	959-16	-	957-M8	-
972-SK401650	16	35	42	50	69,1	x	959-16	-	957-M8	-
972-SK401650ZY-30	16	30	30	50	69,1	x	959-16	-	957-M8	-
972-SK401675	16	35	45	75	94,1	x	959-16	-	957-M8	-
972-SK4016100	16	35	50	100	119,1	x	959-16	-	957-M8	-
972-SK4016150	16	35	50	150	169,1	x	959-16	-	957-M8	-
972-SK4016200	16	35	50	200	219,1	x	959-16	-	957-M8	-
972-SK402225	22	40	40	25	44,1	x	959-22	-	957-M10	-
972-SK402250	22	40	45	50	69,1	x	959-22	-	957-M10	-
972-SK402275	22	40	50	75	94,1	x	959-22	-	957-M10	-
972-SK4022100	22	40	50	100	119,1	x	959-22	-	957-M10	-
972-SK4022125	22	40	50	125	144,1	x	959-22	-	957-M10	-
972-SK4022150	22	40	50	150	169,1	x	959-22	-	957-M10	-
972-SK4022200	22	40	50	200	219,1	x	959-22	-	957-M10	-
972-SK402725	27	45	45	25	44,1	x	959-27	-	957-M12	-
972-SK402750	27	45	45	50	69,1	x	959-27	-	957-M12	-
972-SK402775	27	45	45	75	94,1	x	959-27	-	957-M12	-
972-SK4027100	27	45	45	100	119,1	x	959-27	-	957-M12	-
972-SK4027150	27	48	50	150	169,1	x	959-27	-	957-M12	-

G6,3/8.000






Fräsdorne SK50

arbors SK50 for shell cutter

Lieferumfang: SK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw



69871-AD

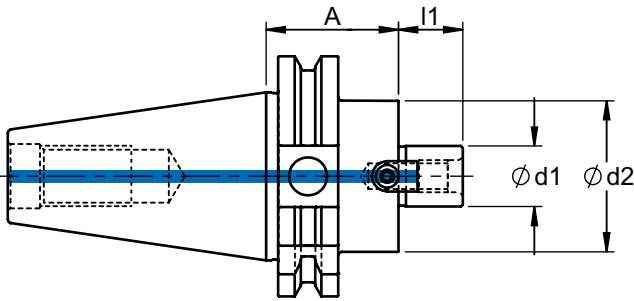
Bestell-Nr. order number	d1	d2	d3	l1	A					
972-SK501650	16	35	40	50	69,1	x	959-16	-	957-M8	-
972-SK5016100	16	35	50	100	119,1	x	959-16	-	957-M8	-
972-SK5016150	16	35	53	150	169,1	x	959-16	-	957-M8	-
972-SK5016200	16	35	60	200	219,1	x	959-16	-	957-M8	-
972-SK502250	22	40	40	50	69,1	x	959-22	-	957-M10	-
972-SK5022100	22	40	50	100	119,1	x	959-22	-	957-M10	-
972-SK5022100ZY	22	48	48	100	119,1	x	959-22	-	957-M10	-
972-SK5022150	22	40	62	150	169,1	x	959-22	-	957-M10	-
972-SK5022150ZY	22	48	48	150	169,1	x	959-22	-	957-M10	-
972-SK5022200	22	40	68	200	219,1	x	959-22	-	957-M10	-
972-SK5022200ZY	22	48	48	200	219,1	x	959-22	-	957-M10	-
972-SK5022250	22	48	68	250	269,1	x	959-22	-	957-M10	-
972-SK5022250ZY	22	48	48	250	269,1	x	959-22	-	957-M10	-
972-SK5022300	22	48	68	300	319,1	x	959-22	-	957-M10	-
972-SK5022300ZY	22	48	48	300	319,1	x	959-22	-	957-M10	-
972-SK5022350	22	48	68	350	369,1	x	959-22	-	957-M10	-
972-SK502720	27	60	60	20	39,1	x	959-27	-	957-M12	-
972-SK502750	27	60	60	50	69,1	x	959-27	-	957-M12	-
972-SK5027100	27	60	70	100	119,1	x	959-27	-	957-M12	-
972-SK5027100ZY	27	60	60	100	119,1	x	959-27	-	957-M12	-
972-SK5027150	27	60	78	150	169,1	x	959-27	-	957-M12	-
972-SK5027150ZY	27	60	60	150	169,1	x	959-27	-	957-M12	-
972-SK5027200	27	60	78	200	219,1	x	959-27	-	957-M12	-
972-SK5027200ZY	27	60	60	200	219,1	x	959-27	-	957-M12	-
972-SK5027250	27	60	78	250	269,1	x	959-27	-	957-M12	-
972-SK5027250ZY	27	60	60	250	269,1	x	959-27	-	957-M12	-
972-SK5027300	27	60	78	300	319,1	x	959-27	-	957-M12	-
972-SK5027300ZY	27	60	60	300	319,1	x	959-27	-	957-M12	-
972-SK503250	32	70	70	50	69,1	x	959-32	957-32	-	958-32
972-SK5032100	32	70	95	100	119,1	x	959-32	957-32	-	958-32
972-SK5032150	32	70	95	150	169,1	x	959-32	957-32	-	958-32
972-SK504050	40	95	95	50	69,1	x	959-40	957-40	-	958-40
972-SK5040100	40	95	95	100	119,1	x	959-40	957-40	-	958-40

G6,3/8.000




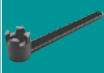

Fräsdorne SK40, 50 mit vergrößertem Anlagedurchmesser

arbors SK40, 50 with enlarged contact surface diameter

Lieferumfang: SK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw



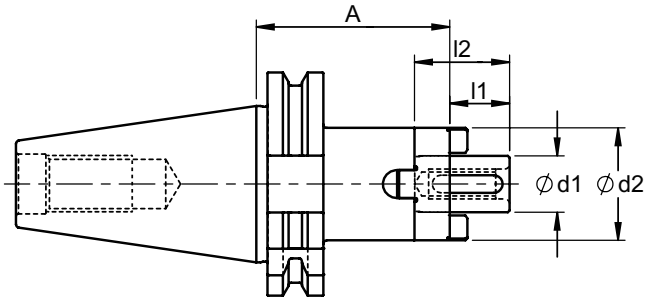
69 871-AD

Bestell-Nr. order number	SK	d1	d2	l1	A					
968 - SK4016	SK40	16	40	17	35	x	959-16	957-16	958-16	G6,3/8.000
968 - SK4022	SK40	22	50	19	35	x	959-22	957-22	958-22	
968 - SK4027	SK40	27	50	21	35	x	959-27	957-27	958-27	
968 - SK4032	SK40	32	78	24	50	x	959-32	957-32	958-32	
968 - SK5022	SK50	22	50	19	35	x	959-22	957-22	958-22	
968 - SK5027	SK50	27	60	21	35	x	959-27	957-27	958-27	
968 - SK5032	SK50	32	78	24	35	x	959-32	957-32	958-32	
968 - SK5040	SK50	40	89	27	50	x	959-40	957-40	958-40	
968 - SK5050	SK50	50	120	30	70	x	959-50	957-50	958-50	




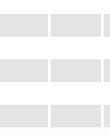
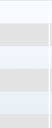
Kombi - Aufsteckfräserdorne SK40, 50

combi-arbors with tenon and parallel key drive, SK40, 50

Lieferumfang: SK-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw

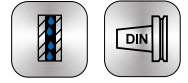
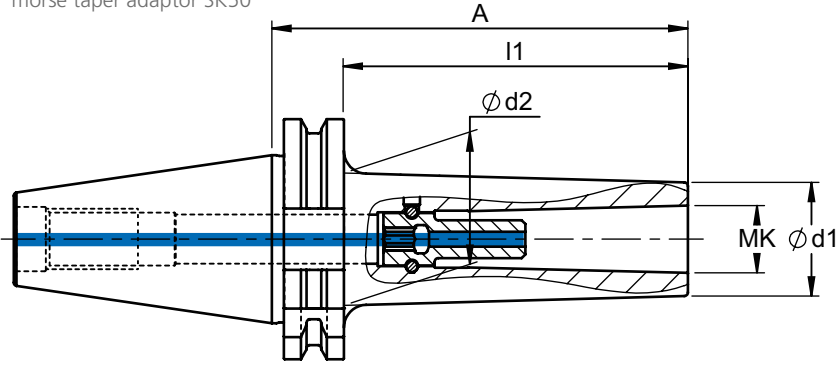


69 871 A




Bestell-Nr. order number	SK	d1	d2	l1	l2	A					
966 - SK4016	SK40	16	32	17	27	55	955-16	956-16	957-16	958-16	G6,3/8.000
966 - SK4022	SK40	22	40	19	31	55	955-22	956-22	957-22	958-22	
966 - SK4027	SK40	27	48	21	33	55	955-27	956-27	957-27	958-27	
966 - SK4032	SK40	32	58	24	38	60	955-32	956-32	957-32	958-32	
966 - SK5016	SK50	16	32	17	27	55	955-16	956-16	957-16	958-16	
966 - SK5022	SK50	22	40	19	31	55	955-22	956-22	957-22	958-22	
966 - SK5027	SK50	27	48	21	33	55	955-27	956-27	957-27	958-27	
966 - SK5032	SK50	32	58	24	38	55	955-32	956-32	957-32	958-32	
966 - SK5040	SK50	40	70	27	41	55	955-40	956-40	957-40	958-40	

Fräserhülsen SK50 mit Anzugsgewinde für Morsekegel

morse taper adaptor SK50

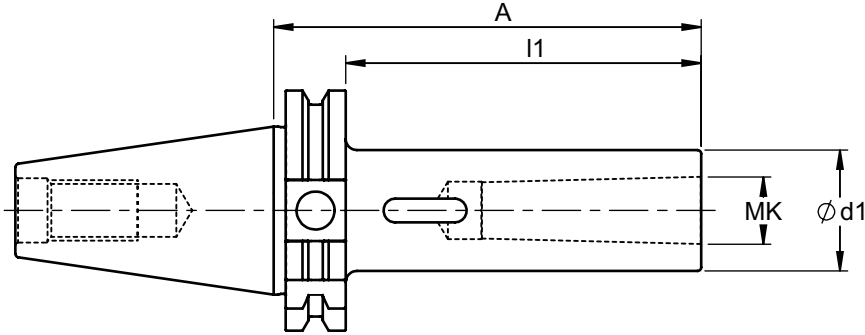


69871-AD

Bestell-Nr. order number	MK	d1	d2	l1	A				
405 - SK50 MK2A60	MK 2	30	35	40,9	60	957-MK2-SW6	952-SW6-490	G6,3/8.000	
405 - SK50 MK2A110	MK 2	30	40	90,9	110	957-MK2-SW6	952-SW6-490		
405 - SK50 MK2A160	MK 2	30	45	140,9	160	957-MK2-SW6	952-SW6-490		
405 - SK50 MK3A65	MK 3	36	43	45,9	65	957-MK3-SW7	952-SW7-450		
405 - SK50 MK3A120	MK 3	36	50	100,9	120	957-MK3-SW7	952-SW7-450		
405 - SK50 MK3A170	MK 3	36	60	150,9	170	957-MK3-SW7	952-SW7-450		
405 - SK50 MK3A220	MK 3	36	70	200,9	220	957-MK3-SW7	952-SW7-450		
405 - SK50 MK3A300	MK 3	36	70	280,9	300	957-MK3-SW7	952-SW7-450		
405 - SK50 MK4A100	MK 4	44	55	80,9	100	957-MK4-SW8	952-SW8-450		
405 - SK50 MK4A150	MK 4	44	60	130,9	150	957-MK4-SW8	952-SW8-450		
405 - SK50 MK4A200	MK 4	44	70	180,9	200	957-MK4-SW8	952-SW8-450		
405 - SK50 MK4A250	MK 4	44	70	230,9	250	957-MK4-SW8	952-SW8-450		
405 - SK50 MK4A300	MK 4	44	70	280,9	300	957-MK4-SW8	952-SW8-450		
405 - SK50 MK5A120	MK 5	56	70	100,9	120	957-MK5-SW10	952-SW10-355		
405 - SK50 MK5A170	MK 5	56	70	150,9	170	957-MK5-SW10	952-SW10-355		
405 - SK50 MK5A220	MK 5	56	75	200,9	220	957-MK5-SW10	952-SW10-355		

Zwischenhülsen SK40, 50

morse taper adaptor, SK40, 50



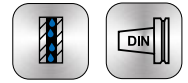
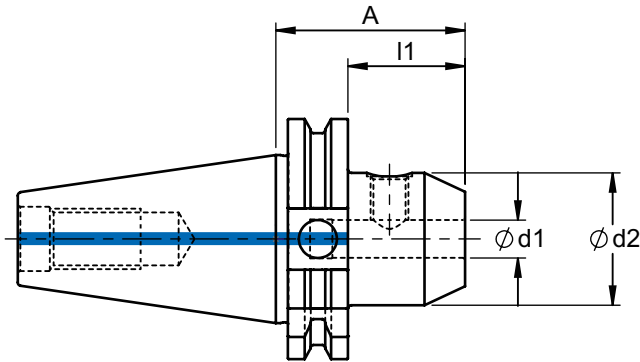
69 871 A

Bestell-Nr. order number	SK	MK	d1	l1	A	
906 - 40MK150	SK40	MK1	25	30,9	50	G6,3/8.000
906 - 40MK250	SK40	MK2	32	30,9	50	
906 - 40MK2113	SK40	MK2	32	93,9	113	
906 - 40MK370	SK40	MK3	40	50,9	70	
906 - 40MK3133	SK40	MK3	40	113,9	133	
906 - 40MK495	SK40	MK4	48	75,9	95	
906 - 40MK4156	SK40	MK4	48	136,9	156	
906 - 50MK145	SK50	MK1	25	25,9	45	
906 - 50MK260	SK50	MK2	32	40,9	60	
906 - 50MK2117	SK50	MK2	32	97,9	117	
906 - 50MK365	SK50	MK3	40	45,9	65	
906 - 50MK3137	SK50	MK3	40	117,9	137	
906 - 50MK495	SK50	MK4	48	75,9	95	
906 - 50MK4167	SK50	MK4	48	147,9	107	
906 - 50MK5105	SK50	MK5	63	85,9	105	
906 - 50MK5197	SK50	MK5	63	177,9	197	



Weldonfutter SK40, 50

weldon chuck SK40, 50

Lieferumfang: SK-Aufnahme mit Spannschraube
 delivery: weldon chuck with tightening screw



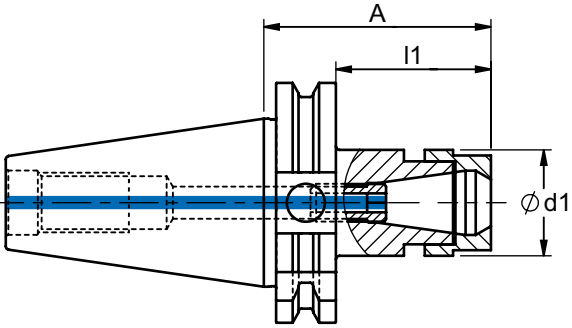
69871-AD

Bestell-Nr. order number	SK	d1	d2	l1	A		
965 - SK4006	SK40	6	25	30,9	50	949-M6	G6,3/8.000
965 - SK4008	SK40	8	28	30,9	50	949-M8	
965 - SK4010	SK40	10	35	30,9	50	949-M10	
965 - SK4012	SK40	12	42	30,9	50	949-M12	
965 - SK4014	SK40	14	44	30,9	50	949-M12	
965 - SK4016	SK40	16	48	40,9	63	949-M14	
965 - SK4018	SK40	18	50	40,9	63	949-M14	
965 - SK4020	SK40	20	52	40,9	63	949-M16	
965 - SK4025	SK40	25	65	80,9	100	949-M18X2	
965 - SK4032	SK40	32	72	80,9	100	949-M20X2	
965 - SK5006	SK50	6	25	43,9	63	949-M6	
965 - SK5008	SK50	8	28	43,9	63	949-M8	
965 - SK5010	SK50	10	32	43,9	63	949-M10	
965 - SK5012	SK50	12	42	43,9	63	949-M12	
965 - SK5014	SK50	14	44	43,9	63	949-M12	
965 - SK5016	SK50	16	48	43,9	63	949-M14	
965 - SK5018	SK50	18	50	43,9	63	949-M14	
965 - SK5020	SK50	20	52	43,9	63	949-M16	
965 - SK5025	SK50	25	65	60,9	80	949-M18X2	
965 - SK5032	SK50	32	72	80,9	100	949-M20X2	
965 - SK5040	SK50	40	90	80,9	100	949-M20X2	





**Spannzangenfutter SK30 - 50
für Spannzangen ER 16/25/32/40 mit Spannmutter UM**

collet chucks SK30 - 50 for collets ER 16/25/32/40 with nut type UM

Lieferumfang: SK-Aufnahme mit Spannmutter UM
delivery: collet chuck with nut UM



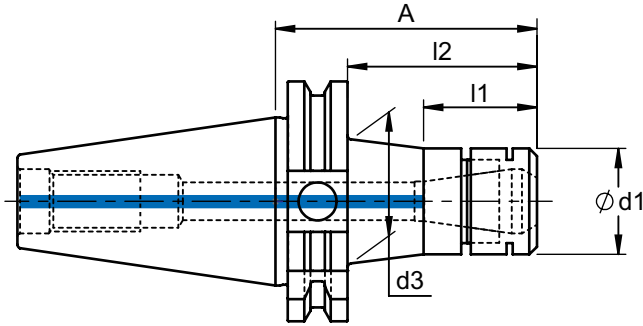
69871-AD

Bestell-Nr. order number	SK	ER	d1	l1	A					
910 - SK3050	SK30	16	28	50	69,1	953-UM16	948-M10	954-034	G6,3/8.000	
912 - SK3050	SK30	25	42	50	69,1	953-UM25	948-M12	954-013ER25		
910 - SK4060	SK40	16	28	40,9	60	953-UM16	948-M10	954-034		
912 - SK4060	SK40	25	42	40,9	60	953-UM25	948-M12	954-013ER25		
913 - SK4070	SK40	32	50	50,9	70	953-UM32	948-M16	954-013ER32		
914 - SK4080	SK40	40	63	60,9	80	953-UM40	948-M16	954-013ER40		
912 - SK5060	SK50	25	42	40,9	60	953-UM25	948-M12	954-013ER25		
913 - SK5070	SK50	32	50	50,9	70	953-UM32	948-M16	954-013ER32		
913 - SK50100	SK50	32	50	80,9	100	953-UM32	948-M16	954-013ER32		
914 - SK5080	SK50	40	63	60,9	80	953-UM40	948-M16	954-013ER40		




Spannzangenfutter SK30, 40 für Spannzangen ER 11/16/20 mit Spannmutter MS

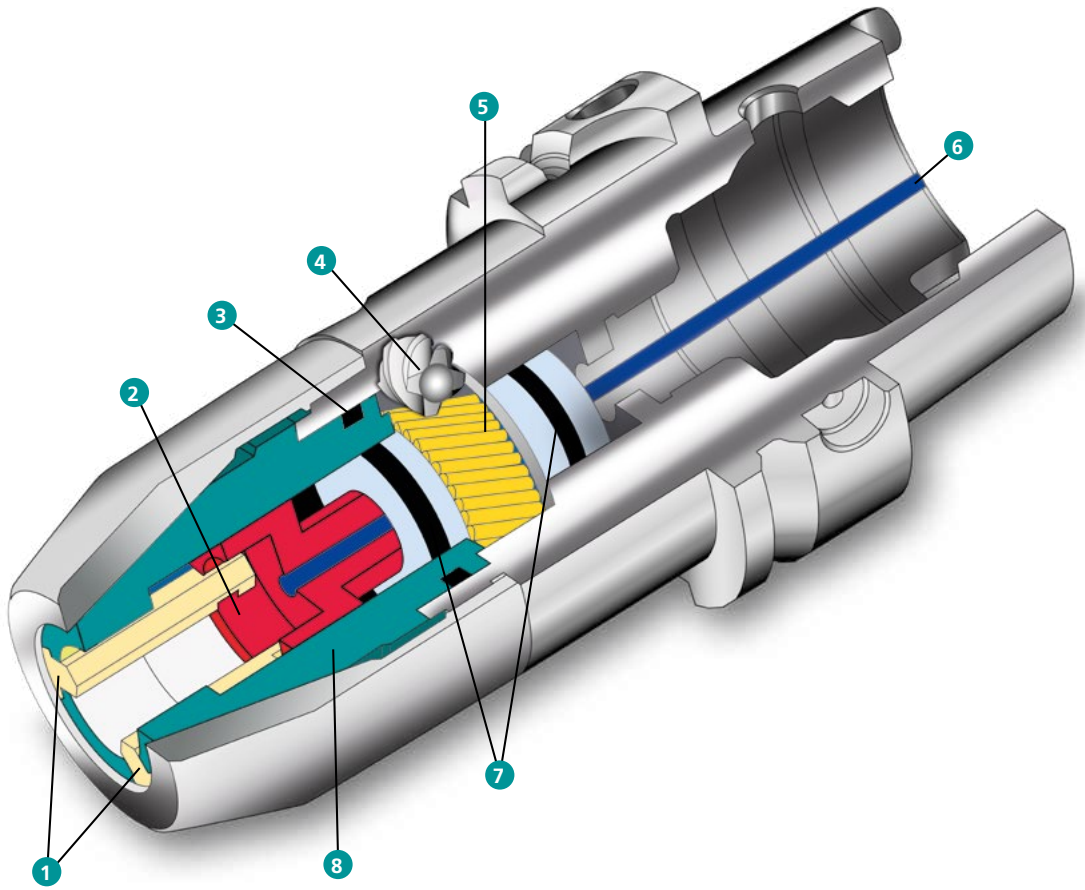
collet chucks SK30, 40 for collets ER 11/16/20 with nut type MS

Lieferumfang: SK-Aufnahme mit Spannmutter MS
delivery: collet chuck with nut MS



69871-AD

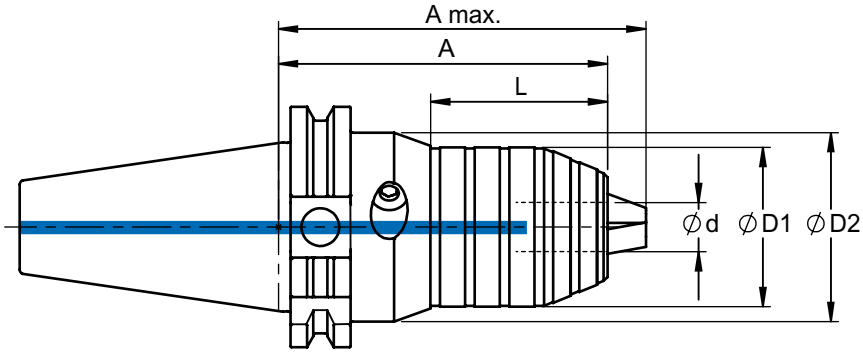
Bestell-Nr. order number	SK	ER	d1	d2	l1	l2	A				
911 - SK3040	SK30	20	28	33	30	40	59,1	953-MS20	954-063E20	G2,5/15.000 oder/or U<1gmm	
911 - SK3080	SK30	20	28	39	30	80	99,1	953-MS20	954-063E20		
918 - SK4050	SK40	11	16	20	21	50	69,1	953-MS11	954-11		
918 - SK40100	SK40	11	16	26	21	100	119,1	953-MS11	954-11		
918 - SK40150	SK40	11	16	33	21	150	169,1	953-MS11	954-11		
918 - SK40200	SK40	11	16	33	21	200	219,1	953-MS11	954-11		
919 - SK40100	SK40	16	22	35	30	100	119,1	953-MS16	954-16		
919 - SK40A175	SK40	16	22	34	30	155,9	175	953-MS16	954-16		
911 - SK4050	SK40	20	28	33	30	50	69,1	953-MS20	954-063E20		
911 - SK40100	SK40	20	28	35	30	100	119,1	953-MS20	954-063E20		
911 - SK40150	SK40	20	28	36	30	150	169,1	953-MS20	954-063E20		
911 - SK40200	SK40	20	28	36	30	200	219,1	953-MS20	954-063E20		




- | | | | |
|---|--------------------------|---|---------------------|
| 1 | Spannbacken | 1 | Clamping jaws |
| 2 | Backenantrieb | 2 | Jaws driver |
| 3 | Abdichtung Backenführung | 3 | Seal for jaws guide |
| 4 | Schnecke | 4 | Worm |
| 5 | Schneckenrad | 5 | Worm gear |
| 6 | IKZ | 6 | Internal cooling |
| 7 | Abdichtung Getriebe | 7 | Seal for gearbox |
| 8 | Backenführung | 8 | Jaws guide |

CNC- Bohrfutter SK30 - 50 für Rechts- und Linkslauf

CNC - drill chucks SK30 - 50 for clockwise and anti clockwise rotation

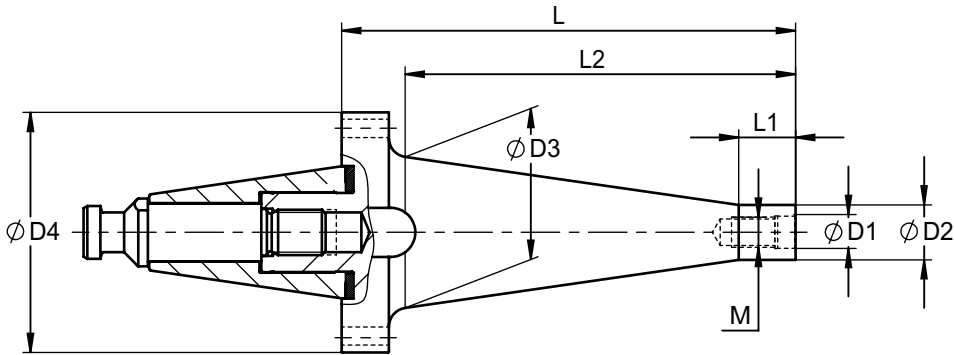


69871 AD/B

Bestell-Nr. order number	SK	d	D1	D2	L	A	A max.	 G6,3/8.000
407 - SK3008A80	30	0,5 - 8	34,5	45,0	40,0	80,0	82,5	
407 - SK4008A80	40	0,5 - 8	34,5	45,0	40,0	80,0	82,5	
407 - SK4013A87	40	1 - 13	42,0	50,0	47,0	87,0	96,0	
407 - SK4013A160	40	1 - 13	42,0	50,0	47,0	160,0	169,0	
407 - SK4016A87	40	2,5 - 16	49,0	50,0	50,0	87,0	98,0	
407 - SK4016A160	40	2,5 - 16	49,0	50,0	50,0	160,0	171,0	
407 - SK5013A100	50	1 - 13	42,0	50,0	47,0	100,0	109,0	
407 - SK5016A100	50	2,5 - 16	49,0	50,0	50,0	100,0	111,0	

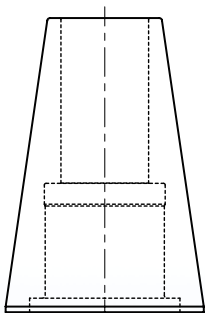
Steilkegel-Plananlagen SK50 für Einschraubfräser

modular screw on holder SK50 with face contact



Bestell-Nr. order number	M	d1	d2	d3	d4	L	L1	L2	
963P - SK5016 250	16	17	29	78	127	290	30	250	
963P - SK5016 300	16	17	29	78	127	340	30	300	
963P - SK5016 350	16	17	29	78	127	390	30	350	
963P - SK5016 400	16	17	29	78	127	440	30	400	
963P - SK5016 450	16	17	29	78	127	490	30	450	
963P - SK5016 500	16	17	29	78	127	540	30	500	

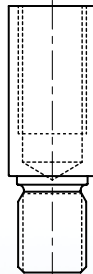
Die Zubehöerteile sind nicht im Lieferumfang enthalten und müssen separat bestellt werden.
Accessories have to be ordered separately.



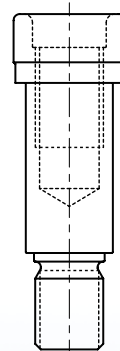
KH50



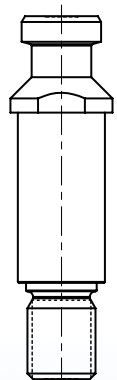
GR50



AB50/01



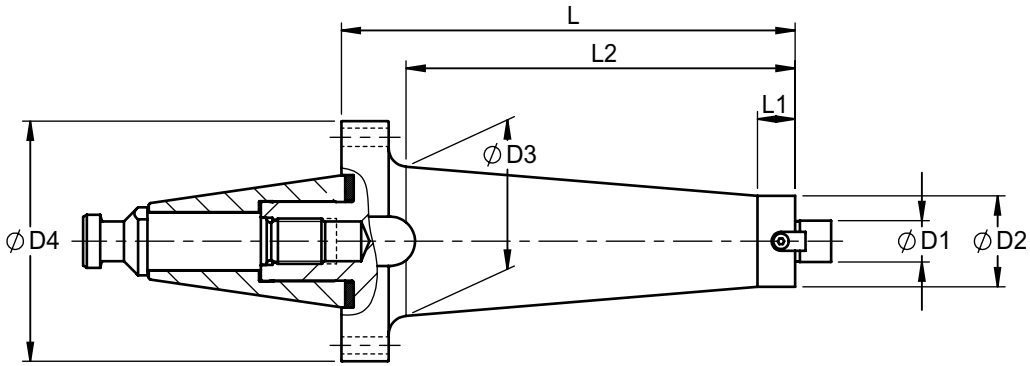
AB50/2080





AB50/69872

Steilkegel-Plananlagen SK50 für Aufsteckfräser

arbors SK50 with face contact for shell cutters



Bestell-Nr. order number	D	D1	D2	D3	L	L1	L2		
972P - SK5022 150ZY	22	48	48	127	190	-	150	959-22	957-M10
972P - SK5022 200	22	48	78	127	240	20	200	959-22	957-M10
972P - SK5022 200ZY	22	48	48	127	240	-	200	959-22	957-M10
972P - SK5022 225ZY	22	48	48	127	265	-	225	959-22	957-M10
972P - SK5022 250	22	48	78	127	290	20	250	959-22	957-M10
972P - SK5022 300	22	48	78	127	340	20	300	959-22	957-M10
972P - SK5022 350	22	48	78	127	390	20	350	959-22	957-M10
972P - SK5022 400	22	48	78	127	440	20	400	959-22	957-M10
972P - SK5022 450	22	48	78	127	490	20	450	959-22	957-M10
972P - SK5022 500	22	48	78	127	540	20	500	959-22	957-M10
972P - SK5027 200	27	58	78	127	240	20	200	959-27	957-M12
972P - SK5027 250	27	58	78	127	290	20	250	959-27	957-M12
972P - SK5027 300	27	58	78	127	340	20	300	959-27	957-M12
972P - SK5027 350	27	58	78	127	390	20	350	959-27	957-M12
972P - SK5027 400	27	58	78	127	440	20	400	959-27	957-M12
972P - SK5027 450	27	58	78	127	490	20	450	959-27	957-M12
972P - SK5027 500	27	58	78	127	540	20	500	959-27	957-M12

Werkzeugaufnahmen SK50 DIN 2080

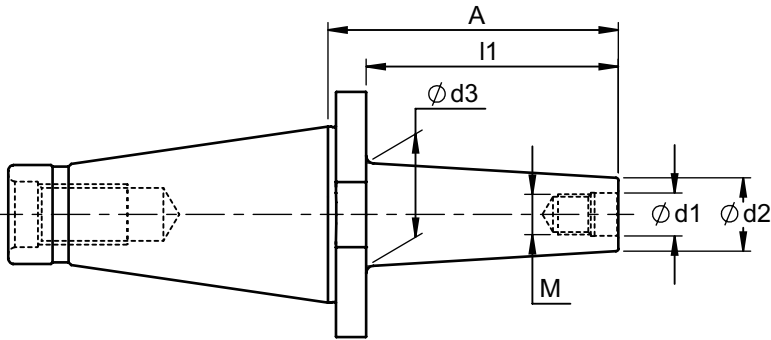
Tool holders SK50 DIN 2080

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Fräsdorne Arbors for shell cutters	135
Fräserhülsen / Zwischenhülsen Morse taper adaptors	136

Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahmen SK50 für Einschraubfräser, DIN 2080

modular screw on holder SK50 DIN 2080

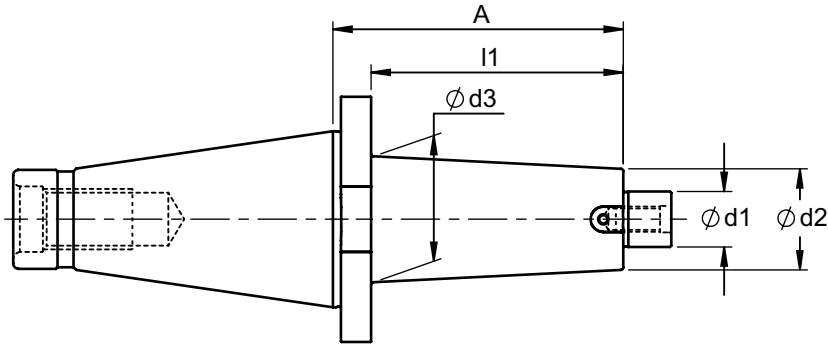


Bestell-Nr. order number	M	d1	d2	d3	A	l1
964 - SK501250	M12	12,5	21	37	65,2	50
964 - SK5012100	M12	12,5	21	41	115,2	100
964 - SK5012150	M12	12,5	21	50	165,2	150
964 - SK5012200	M12	12,5	21	57	215,2	200
964 - SK5012250	M12	12,5	21	62	265,2	250
964 - SK501650	M16	17	29	37	65,2	50
964 - SK5016100	M16	17	29	41	115,2	100
964 - SK5016150	M16	17	29	50	165,2	150





Fräsdorne SK50, DIN 2080

arbors SK50 for shell cutter

Lieferumfang: SK-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw

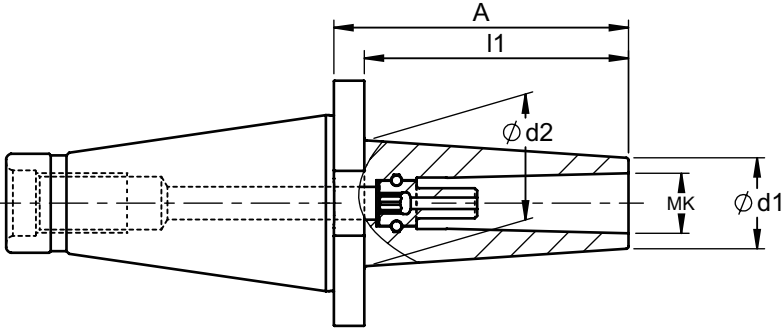


2080




Bestell-Nr. order number	d1	d2	d3	l1	A				
973-SK502250	22	40	40	50	65,2	959-22	-	957-M10	-
973-SK5022100	22	40	50	100	115,2	959-22	-	957-M10	-
973-SK5022100ZY	22	48	48	100	115,2	959-22	-	957-M10	-
973-SK5022150	22	40	62	150	165,2	959-22	-	957-M10	-
973-SK5022150ZY	22	48	48	150	165,2	959-22	-	957-M10	-
973-SK5022200	22	40	68	200	215,2	959-22	-	957-M10	-
973-SK5022200ZY	22	48	48	200	215,2	959-22	-	957-M10	-
973-SK502750	27	60	60	50	65,2	959-27	-	957-M12	-
973-SK5027100	27	60	70	100	115,2	959-27	-	957-M12	-
973-SK5027150	27	60	78	150	165,2	959-27	-	957-M12	-
973-SK5027150ZY	27	60	60	150	165,2	959-27	-	957-M12	-
973-SK5027200	27	60	78	200	215,2	959-27	-	957-M12	-
973-SK5027200ZY	27	60	60	200	215,2	959-27	-	957-M12	-

Fräserhülsen SK50 mit Anzugsgewinde für Morsekegel, DIN 2080

morse taper adaptor SK50



2080

Bestell-Nr. order number	MK	d1	d2	l1	A				
909 - 50 MK260	MK 2	30	35	44,8	60	959-MK2	957-MK2	952-MK2	
909 - 50 MK2110	MK 2	30	40	94,8	110	959-MK2	957-MK2	952-MK2	
909 - 50 MK2160	MK 2	30	45	144,8	160	959-MK2	957-MK2	952-MK2	
909 - 50 MK3170	MK 3	36	60	154,8	170	959-MK3	957-MK3	952-MK3	
909 - 50 MK3220	MK 3	36	70	204,8	220	959-MK3	957-MK3	952-MK3	
909 - 50 MK4150	MK 4	44	60	134,8	150	959-MK4	957-MK4	952-MK4	
909 - 50 MK5120	MK 5	56	70	104,8	120	959-MK5	957-MK5	952-MK5	
909 - 50 MK5170	MK 5	56	70	154,8	170	959-MK5	957-MK5	952-MK5	
909 - 50 MK5220	MK 5	56	75	204,8	220	959-MK5	957-MK5	952-MK5	

Werkzeugaufnahmen BT

Tool holders BT

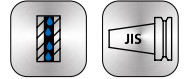
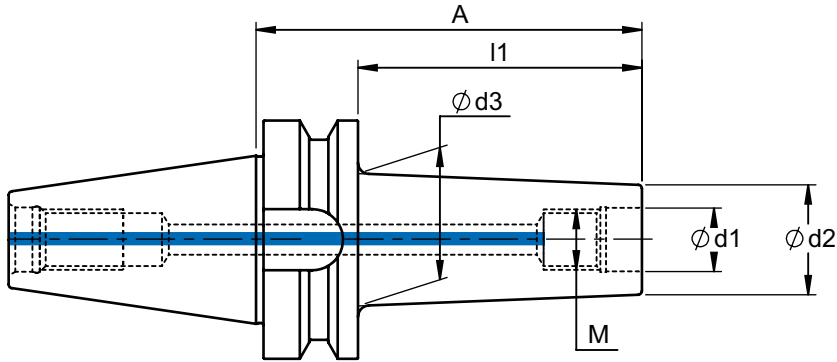
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CNC-Bohrfutter CNC-drill chucks	151
Rohlinge Blanks	152


Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Fräsaufnahme BT30 für Einschraubfräser

modular screw on holder BT30

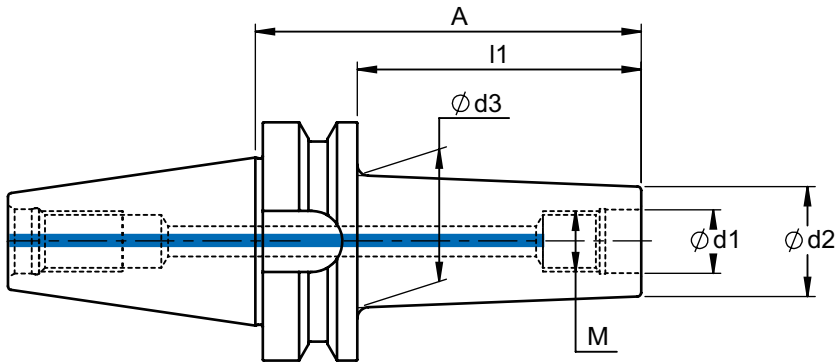


JIS B6339
MAS403BT


Bestell-Nr. order number	M	d1	d2	d3	A	l1	
962 - BT300825	M8	8,5	14	18	47	25	G6,3/10.000
962 - BT300850	M8	8,5	14	23	72	50	
962 - BT301025	M10	10,5	18	23	47	25	
962 - BT301050	M10	10,5	18	27	72	50	
962 - BT301225	M12	12,5	21	25	47	25	
962 - BT301250	M12	12,5	21	31	72	50	
962 - BT301625	M16	17	29	29	47	25	
962 - BT301650	M16	17	29	34	47	50	

Fräsaufnahme BT40 für Einschraubfräser

modular screw on holder BT40

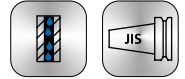
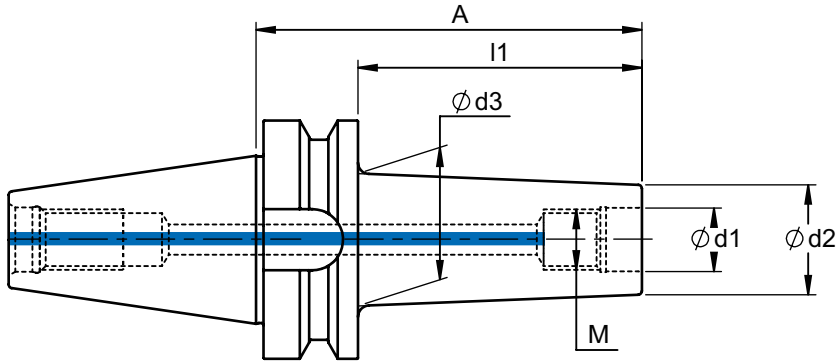


JIS B6339
MAS403BT

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
962 - 0625BT	M6	6,5	10	17	52	25	G6,3/10.000
962 - 0625BTZY	M6	6,5	10	10	52	25	
962 - 0650BT	M6	6,5	10	23	77	50	
962 - 0675BT	M6	6,5	10	25	102	75	
962 - 0825BT	M8	8,5	13,8	18	52	25	
962 - 0825BTZY	M8	8,5	13,8	13,8	52	25	
962 - 0850BT	M8	8,5	13,8	23	77	50	
962 - 0850BTZY	M8	8,5	13,8	13,8	77	50	
962 - 0875BT	M8	8,5	13,8	25	102	75	
962 - 0875BTZY	M8	8,5	13,8	13,8	102	75	
962 - 08100BT	M8	8,5	13,8	30	127	100	
962 - 08125BT	M8	8,5	13,8	34	152	125	
962 - 1025BT	M10	10,5	18	23	52	25	
962 - 1025BTZY	M10	10,5	18	18	52	25	
962 - 1050BT	M10	10,5	18	25	77	50	
962 - 1050BTZY	M10	10,5	18	18	77	50	
962 - 1075BT	M10	10,5	18	30	102	75	
962 - 1075BTZY	M10	10,5	18	18	102	75	
962 - 10100BT	M10	10,5	18	35	127	100	
962 - 10100BTZY	M10	10,5	18	18	127	100	
962 - 10125BT	M10	10,5	18	40	152	125	
962 - 10150BT	M10	10,5	18	45	177	150	

Fräsaufnahme BT40 für Einschraubfräser

modular screw on holder BT40

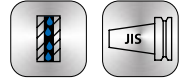
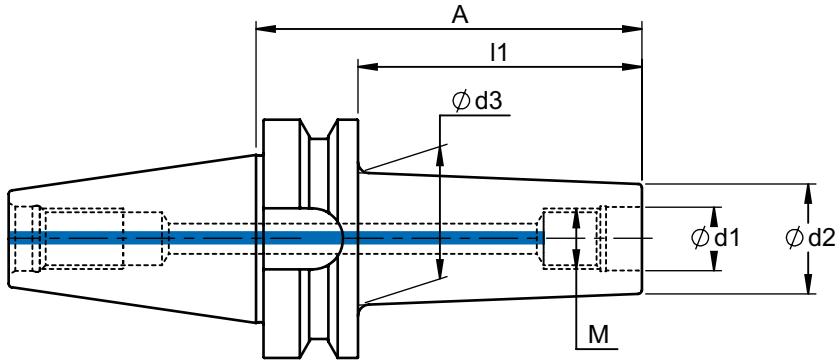


JIS B6339
MAS403BT


Bestell-Nr. order number	M	d1	d2	d3	A	l1		
962 - 1225BT	M12	12,5	21	24	52	25	G6,3/10.000	
962 - 1250BT	M12	12,5	21	30	77	50		
962 - 1250BTZY	M12	12,5	22	22	77	50		
962 - 1275BT	M12	12,5	21	35	102	75		
962 - 1275BTZY	M12	12,5	22	22	102	75		
962 - 12100BT	M12	12,5	21	38	127	100		
962 - 12100BTZY	M12	12,5	22	22	127	100		
962 - 12125BT	M12	12,5	21	43	152	125		
962 - 12150BT	M12	12,5	21	45	177	150		
962 - 1625BT	M16	17	29	29	52	25		
962 - 1650BT	M16	17	29	34	77	50		
962 - 1650BTZY	M16	17	29	29	77	50		
962 - 1675BT	M16	17	29	35	102	75		
962 - 1675BTZY	M16	17	29	29	102	75		
962 - 16100BT	M16	17	29	40	127	100		
962 - 16100BTZY	M16	17	29	29	127	100		
962 - 16125BT	M16	17	29	44	152	125		
962 - 16125BTZY	M16	17	29	29	152	125		
962 - 16150BT	M16	17	29	45	177	150		
962 - 16175BT	M16	17	29	50	202	175		
962 - 16200BT	M16	17	29	50	227	200		
962 - 16225BT	M16	17	29	50	252	225		
962 - 16250BT	M16	17	29	50	277	250		

Fräsaufnahme BT50 für Einschraubfräser

modular screw on holder BT50



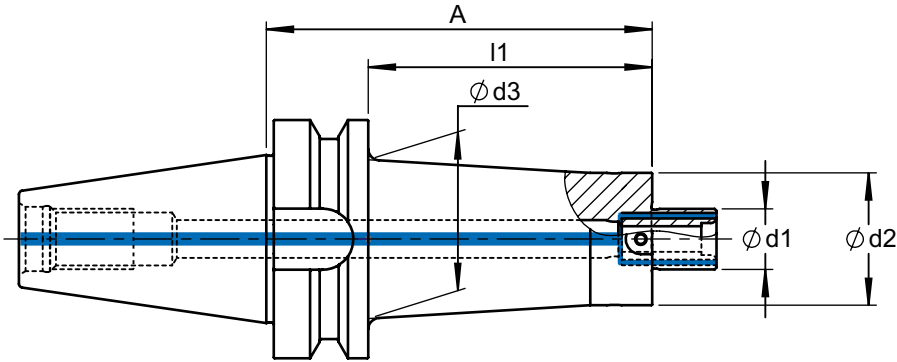
JIS B6339
MAS403BT

Bestell-Nr. order number	M	d1	d2	d3	A	l1	
963 - 0850BT	M8	8,5	13,8	23	88	50	G6,3/8.000
963 - 08100BT	M8	8,5	13,8	30	138	100	
963 - 08150BT	M8	8,5	13,8	35	188	150	
963 - 1050BT	M10	10,5	18	25	88	50	
963 - 10100BT	M10	10,5	18	35	138	100	
963 - 10150BT	M10	10,5	18	38	188	150	
963 - 1250BT	M12	12,5	21	34	88	50	
963 - 1250BTZY	M12	12,5	22	22	88	50	
963 - 1275BT	M12	12,5	21	37	113	75	
963 - 1275BTZY	M12	12,5	22	22	113	75	
963 - 12100BT	M12	12,5	21	41	138	100	
963 - 12100BTZY	M12	12,5	22	22	138	100	
963 - 12150BT	M12	12,5	21	50	188	150	
963 - 12200BT	M12	12,5	21	57	238	200	
963 - 12250BT	M12	12,5	21	62	288	250	
963 - 12300BT	M12	12,5	21	67	338	300	
963 - 1650BT	M16	17	29	35	88	50	
963 - 1650BTZY	M16	17	29	29	88	50	
963 - 1675BT	M16	17	29	37	113	75	
963 - 1675BTZY	M16	17	29	29	113	75	
963 - 16100BT	M16	17	29	41	138	100	
963 - 16100BTZY	M16	17	29	29	138	100	
963 - 16150BT	M16	17	29	50	188	150	
963 - 16150BTZY	M16	17	29	29	188	150	
963 - 16200BT	M16	17	29	57	238	200	
963 - 16200BTZY	M16	17	29	29	238	200	
963 - 16250BT	M16	17	29	62	288	250	
963 - 16300BT	M16	17	29	67	338	300	






Fräsdorne BT40

arbors BT40 for shell cutter

Lieferumfang: BT-Aufnahme mit Anzugsschraube
und Mitnehmersteinen
delivery: with drive keys and retaining screw



JIS B6339
MAS403BT

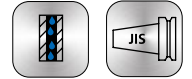
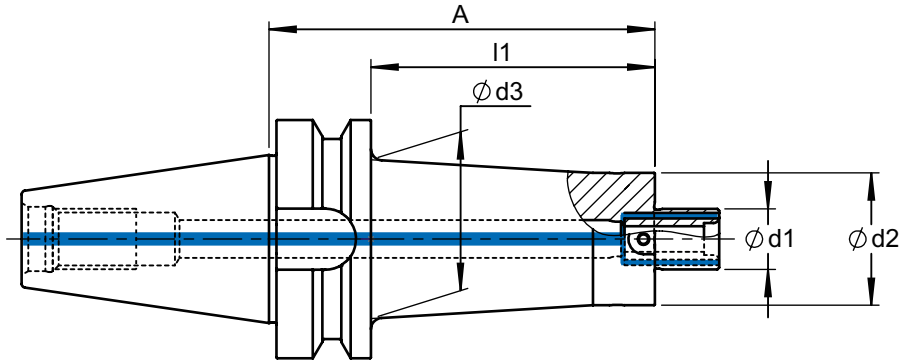
Bestell-Nr. order number	d1	d2	d3	l1	A					
972-BT401625	16	35	35	25	52	x	959-16	-	957-M8	-
972-BT401650	16	35	42	50	77	x	959-16	-	957-M8	-
972-BT401675	16	35	45	75	102	x	959-16	-	957-M8	-
972-BT4016100	16	35	50	100	127	x	959-16	-	957-M8	-
972-BT4016150	16	35	50	150	177	x	959-16	-	957-M8	-
972-BT4016200	16	35	50	200	227	x	959-16	-	957-M8	-
972-BT402225	22	40	40	25	52	x	959-22	-	957-M10	-
972-BT402250	22	40	45	50	77	x	959-22	-	957-M10	-
972-BT402275	22	40	50	75	102	x	959-22	-	957-M10	-
972-BT4022100	22	40	50	100	127	x	959-22	-	957-M10	-
972-BT4022150	22	40	50	150	177	x	959-22	-	957-M10	-
972-BT4022200	22	40	50	200	227	x	959-22	-	957-M10	-
972-BT402725	27	45	45	25	52	x	959-27	-	957-M12	-
972-BT402750	27	45	45	50	77	x	959-27	-	957-M12	-
972-BT402775	27	45	45	75	102	x	959-27	-	957-M12	-
972-BT4027100	27	45	45	100	127	x	959-27	-	957-M12	-

G6,3/8.000







Fräsdorne BT50

arbors BT50 for shell cutter

Lieferumfang: BT-Aufnahme mit Anzugsschraube und Mitnehmersteinen
 delivery: with drive keys and retaining screw

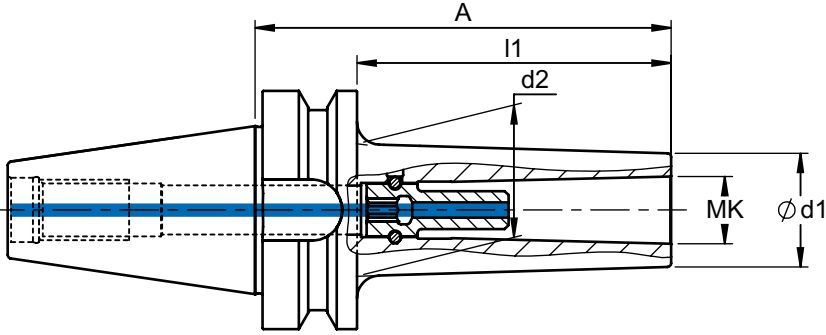


JIS B6339
 MAS403BT




Bestell-Nr. order number	d1	d2	d3	l1	A						
972-BT501650	16	35	40	50	88	x	959-16	-	957-M8	-	G6,3/8.000
972-BT5016100	16	35	50	100	138	x	959-16	-	957-M8	-	
972-BT5016150	16	35	53	150	188	-	959-16	-	957-M8	-	
972-BT5016200	16	35	60	200	238	-	959-16	-	957-M8	-	
972-BT502250	22	40	40	50	88	x	959-22	-	957-M10	-	
972-BT5022100	22	40	50	100	138	x	959-22	-	957-M10	-	
972-BT5022150	22	40	62	150	188	-	959-22	-	957-M10	-	
972-BT5022200	22	40	68	200	238	-	959-22	-	957-M10	-	
972-BT502720	27	60	60	20	58	x	959-27	-	957-M12	-	
972-BT502750	27	60	60	50	88	x	959-27	-	957-M12	-	
972-BT5027100	27	60	70	100	138	x	959-27	-	957-M12	-	
972-BT5027150	27	60	78	150	188	-	959-27	-	957-M12	-	
972-BT5027200	27	60	78	200	238	-	959-27	-	957-M12	-	
972-BT503250	32	70	70	50	88	-	959-32	957-32	-	958-32	
972-BT5032100	32	70	95	100	138	-	959-32	957-32	-	958-32	
972-BT5032150	32	70	95	150	188	-	959-32	957-32	-	958-32	
972-BT504050	40	95	95	50	88	-	959-40	957-40	-	958-40	
972-BT5040100	40	95	95	100	138	-	959-40	957-40	-	958-40	

Fräserhülsen BT40, 50 mit Anzugsgewinde für Morsekegel

morse taper adaptor BT40, 50

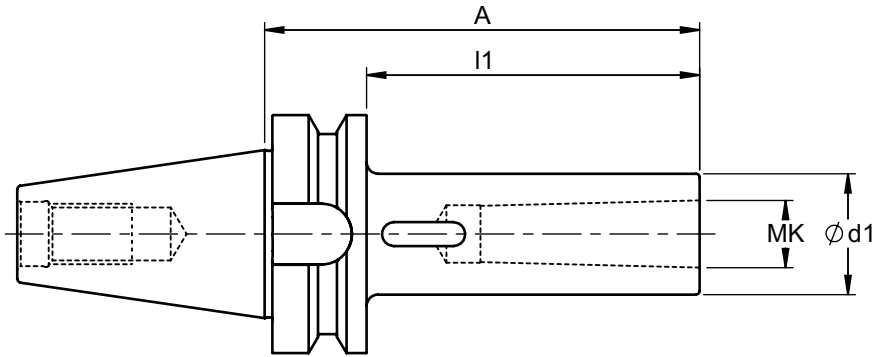


JIS B6339
MAS403BT


Bestell-Nr. order number	MK	d1	d2	l1	A			
405 - BT50 MK2A60	MK 2	30	35	22	60	957-MK2-SW6	952-SW6-490	G6,3/8.000
405 - BT50 MK2A110	MK 2	30	40	72	110	957-MK2-SW6	952-SW6-490	
405 - BT50 MK2A160	MK 2	30	45	122	160	957-MK2-SW6	952-SW6-490	
405 - BT50 MK3A65	MK 3	36	43	27	65	957-MK3-SW7	952-SW7-450	
405 - BT50 MK3A120	MK 3	36	50	82	120	957-MK3-SW7	952-SW7-450	
405 - BT50 MK3A170	MK 3	36	60	132	170	957-MK3-SW7	952-SW7-450	
405 - BT50 MK3A220	MK 3	36	70	182	220	957-MK3-SW7	952-SW7-450	
405 - BT50 MK4A100	MK 4	44	55	62	100	957-MK4-SW8	952-SW8-450	
405 - BT50 MK4A150	MK 4	44	60	112	150	957-MK4-SW8	952-SW8-450	
405 - BT50 MK4A200	MK 4	44	70	162	200	957-MK4-SW8	952-SW8-450	
405 - BT50 MK5A120	MK 5	56	70	82	120	957-MK5-SW10	952-SW10-355	
405 - BT50 MK5A170	MK 5	56	70	132	170	957-MK5-SW10	952-SW10-355	
405 - BT50 MK5A220	MK 5	56	75	182	220	957-MK5-SW10	952-SW10-355	

Zwischenhülsen BT40, 50

morse taper adaptor BT40, 50



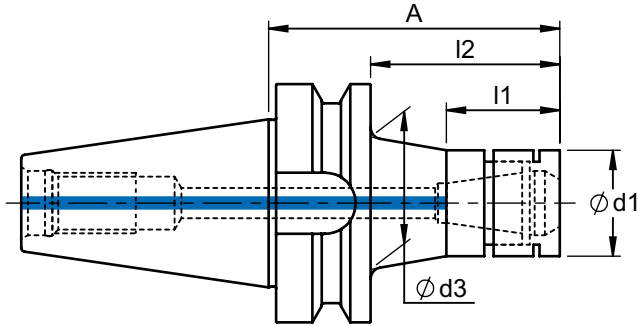
JIS B6339
MAS403BT

Bestell-Nr. order number	MAS	MK	d1	l1	A	 G6,3/8.000
906 - BT40MK150	BT40	MK1	25	23	50	
906 - BT40MK250	BT40	MK2	32	23	50	
906 - BT40MK370	BT40	MK3	40	43	70	
906 - BT40MK495	BT40	MK4	48	68	95	
906 - BT50MK260	BT50	MK2	32	22	60	
906 - BT50MK365	BT50	MK3	40	27	65	
906 - BT50MK495	BT50	MK4	48	57	95	
906 - BT50MK5105	BT50	MK5	63	67	105	




Spannzangenfutter BT30, 40 für Spannzangen ER 20 mit Spannmutter MS

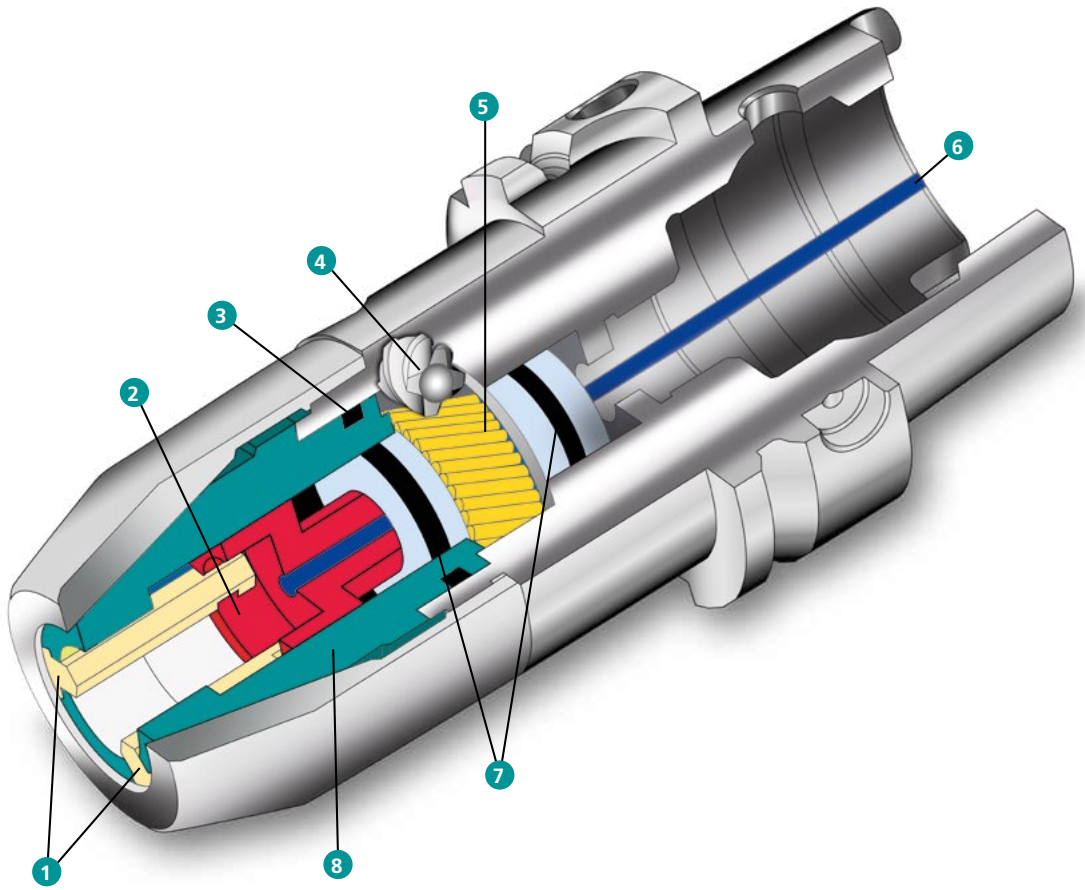
collet chucks BT30, 40 for collets ER 20 with nut type MS

Lieferumfang: BT-Aufnahme mit Spannmutter MS
delivery: collet chuck with nut MS



JIS B6339
MAS403BT

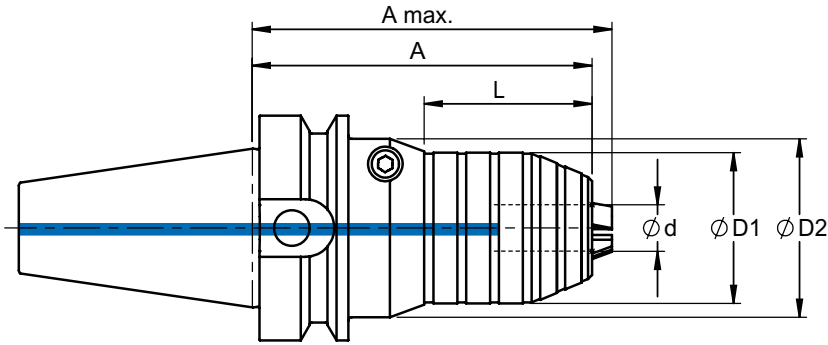
Bestell-Nr. order number	MAS	d1	d3	l1	l2	A			
911 - BT3040	BT30	28	33	30	40	62	953-MS20	954-063E20	G2,5/15.000 oder/or U<1gmm
911 - BT3080	BT30	28	39	30	80	102	953-MS20	954-063E20	
911 - BT4050	BT40	28	33	30	50	77	953-MS20	954-063E20	
911 - BT40100	BT40	28	35	30	100	127	953-MS20	954-063E20	
911 - BT40150	BT40	28	36	30	150	177	953-MS20	954-063E20	
911 - BT40200	BT40	28	36	30	200	227	953-MS20	954-063E20	




- | | |
|----------------------------|-----------------------|
| 1 Spannbacken | 1 Clamping jaws |
| 2 Backenantrieb | 2 Jaws driver |
| 3 Abdichtung Backenführung | 3 Seal for jaws guide |
| 4 Schnecke | 4 Worm |
| 5 Schneckenrad | 5 Worm gear |
| 6 IKZ | 6 Internal cooling |
| 7 Abdichtung Getriebe | 7 Seal for gearbox |
| 8 Backenführung | 8 Jaws guide |

CNC- Bohrfutter BT30 - 50 für Rechts- und Linkslauf

CNC - drill chucks BT30 - 50 for clockwise and anti clockwise rotation



JIS B6339
MAS403BT

Bestell-Nr. order number	SK	d	D1	D2	L	A	A max.	 G6,3/8.000
407 - BT3008A80	30	0,5 - 8	34,5	45,0	40,0	80,0	82,5	
407 - BT4008A85	40	0,5 - 8	34,5	45,0	40,0	85,0	87,5	
407 - BT4013A95	40	1 - 13	42,0	50,0	47,0	95,0	104,0	
407 - BT4016A95	40	2,5 - 16	49,0	50,0	50,0	95,0	106,0	
407 - BT5013A110	50	1 - 13	42,0	50,0	47,0	110,0	119,0	
407 - BT5016A110	50	2,5 - 16	49,0	50,0	50,0	110,0	121,0	

Verlängerungen/Reduzierungen für Einschraubfräser

extensions/reducers for threaded type cutters

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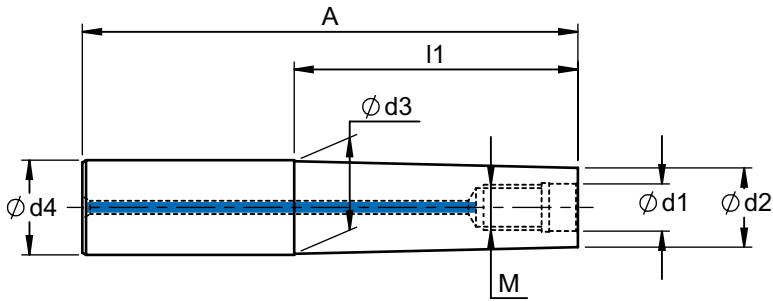
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Hartmetallverlängerungen für Einschraubfräser Carbide modular screw on extension	154 - 155
Frässtangen mit zyl. Schaft für Einschraubfräser Modular screw on extension	156 - 157
Verlängerungen / Reduzierungen für Einschraubfräser Extensions for modular screw in cutter	158 - 159
Frässtangen MK für Einschraubfräser Adapters with morse taper for modular screw in cutter	160 - 161
Einschraubadapter für ER-Spannzangen Modular screw on adapter for ER-collets	162

Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

Hartmetallverlängerungen für Einschraubfräser

modular screw on **carbide** extensions

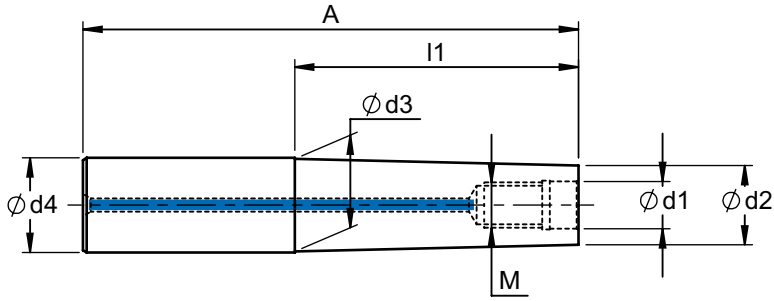


1835-A

Bestell-Nr. order number	M	d1	d2	d3	d4	A	l1
979HM - 120620ZY	M6	6,5	9,8	9,8	12	65	20
979HM - 120640	M6	6,5	9,8	11,5	12	85	40
979HM - 120640ZY	M6	6,5	9,8	9,8	12	85	40
979HM - 120660	M6	6,5	9,8	11,5	12	105	60
979HM - 120660ZY	M6	6,5	9,8	9,8	12	105	60
979HM - 120680	M6	6,5	9,8	11,5	12	125	80
979HM - 120680ZY	M6	6,5	9,8	9,8	12	125	80
979HM - 1206100	M6	6,5	9,8	11,5	12	145	100
979HM - 120720ZY	M7	7,5	11,5	11,5	12	65	20
979HM - 120740ZY	M7	7,5	11,5	11,5	12	85	40
979HM - 120760ZY	M7	7,5	11,5	11,5	12	105	60
979HM - 120780ZY	M7	7,5	11,5	11,5	12	125	80
979HM - 1607100	M7	7,5	11,5	15,5	16	148	100
979HM - 160820ZY	M8	8,5	13,6	13,6	16	68	20
979HM - 160840	M8	8,5	13,6	15,5	16	88	40
979HM - 160840ZY	M8	8,5	13,6	13,6	16	88	40
979HM - 160840ZY-12,5	M8	8,5	12,5	12,5	16	88	40
979HM - 160860	M8	8,5	13,6	15,5	16	108	60
979HM - 160860ZY	M8	8,5	13,6	13,6	16	108	60
979HM - 160860ZY-12,5	M8	8,5	12,5	12,5	16	108	60
979HM - 160880	M8	8,5	13,6	15,5	16	128	80
979HM - 160880ZY	M8	8,5	13,6	13,6	16	128	80
979HM - 160880ZY-12,5	M8	8,5	12,5	12,5	16	128	80
979HM - 1608100	M8	8,5	13,6	15,5	16	148	100
979HM - 1608100ZY	M8	8,5	13,6	13,6	16	148	100
979HM - 1608120	M8	8,5	13,6	15,5	16	168	120
979HM - 161020ZY-15,4	M10	10,5	15,4	15,4	16	68	20
979HM - 161040ZY-15,4	M10	10,5	15,4	15,4	16	88	40
979HM - 161060ZY-15,4	M10	10,5	15,4	15,4	16	108	60
979HM - 161080ZY-15,4	M10	10,5	15,4	15,4	16	128	80
979HM - 1610100ZY-15,4	M10	10,5	15,4	15,4	16	148	100
979HM - 1610120ZY-15,4	M10	10,5	15,4	15,4	16	168	120
979HM - 1610205ZY-15,4	M10	10,5	15,4	15,4	16	250	205

Frässtangen mit zyl. Schaft für Einschraubfräser

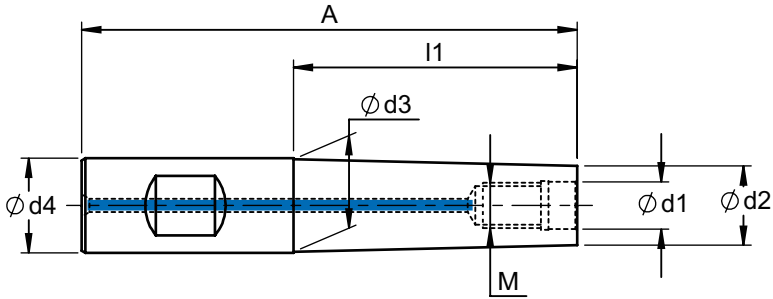
modular screw on extensions



Bestell-Nr. order number	M	d1	d2	d3	d4	A	l1
978 - 120620	M6	6,5	10	11,5	12	65	20
978 - 160820	M8	8,5	13,8	15,5	16	68	20
978 - 160825ZY	M8	8,5	13,8	13,8	16	73	25
978 - 160840	M8	8,5	13,8	15,5	16	88	40
978 - 201025	M10	10,5	18	19,5	20	75	25
978 - 201045	M10	10,5	18	19,5	20	95	45
978 - 251230	M12	12,5	21	24,5	25	86	30
978 - 251250	M12	12,5	21	24,5	25	106	50
978 - 321630	M16	17	29	31,5	32	90	30
978 - 321650	M16	17	29	31,5	32	110	50
978 - 3216100	M16	17	29	31,5	32	160	100

Frässtangen mit zyl. Schaft für Einschraubfräser

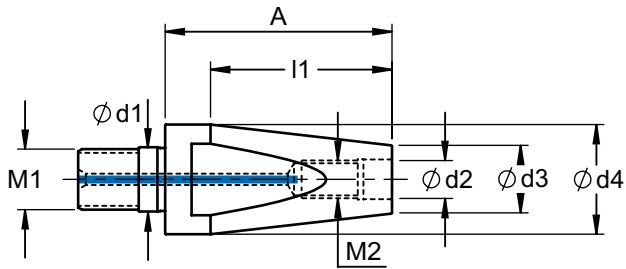
modular screw on extensions



Bestell-Nr. order number	M	d1	d2	d3	d4	A	l1
975 - 120620	M6	6,5	10	11,5	12	65	20
975 - 160820	M8	8,5	13,8	15,5	16	68	20
975 - 160840	M8	8,5	13,8	15,5	16	88	40
975 - 201025	M10	10,5	18	19,5	20	75	25
975 - 201045	M10	10,5	18	19,5	20	95	45
975 - 251230	M12	12,5	21	24,5	25	86	30
975 - 251250	M12	12,5	21	24,5	25	106	50
975 - 321630	M16	17	29	31,5	32	90	30
975 - 321650	M16	17	29	31,5	32	110	50

Reduzierungen für Einschraubfräser

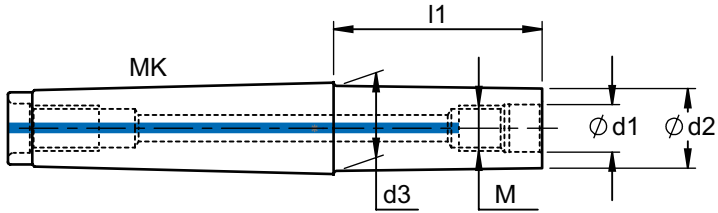
modular screw on reducers



Bestell-Nr. order number	M1	d1	M2	d2	d3	d4	A	l1
977 - 080640	8	8,5	6	6,5	10	13,8	40	25
977 - 100640	10	10,5	6	6,5	10	18	40	32
977 - 100840	10	10,5	8	8,5	13,8	18	40	25
977 - 120840	12	12,5	8	8,5	13,8	21	40	32
977 - 120860	12	12,5	8	8,5	13,8	21	60	52
977 - 121040	12	12,5	10	10,5	18	21	40	15
977 - 121060	12	12,5	10	10,5	18	21	60	40
977 - 160840	16	17	8	8,5	13,8	29	40	35
977 - 161040	16	17	10	10,5	18	29	40	28
977 - 161060	16	17	10	10,5	18	29	60	48
977 - 161240	16	17	12	12,5	21	29	40	19
977 - 161260	16	17	12	12,5	21	29	60	39

Frässtangen mit Morsekegel für Einschraubfräser

modular screw on extension, morse taper

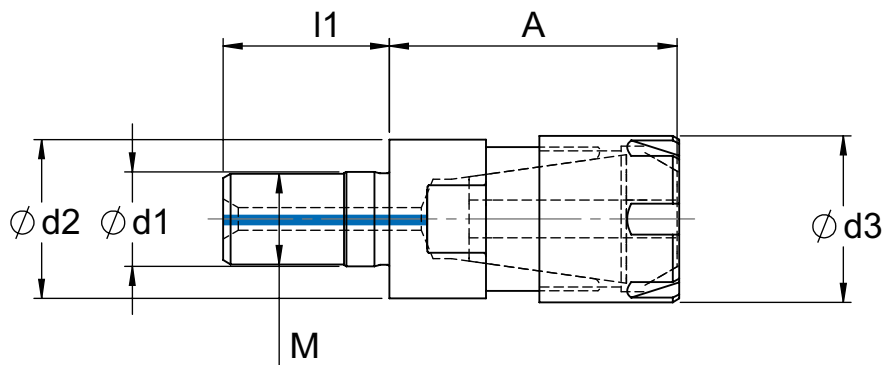




228-A

Bestell-Nr. order number	MK	M	d1	d2	d3	l1	
MK2 - 0640	MK2	M6	6,5	9,8	18	40	
MK2 - 0660	MK2	M6	6,5	9,8	18	60	
MK2 - 0680	MK2	M6	6,5	9,8	18	80	
MK2 - 0820	MK2	M8	8,5	13,8	18	20	
MK2 - 0840	MK2	M8	8,5	13,8	18	40	
MK2 - 0860	MK2	M8	8,5	13,8	18	60	
MK2 - 1020	MK2	M10	10,5	18	18	20	
MK2 - 1040	MK2	M10	10,5	18	18	40	
MK2 - 1060	MK2	M10	10,5	18	18	60	
MK3 - 0880	MK3	M8	8,5	13,8	24	80	
MK3 - 08100	MK3	M8	8,5	13,8	24	100	
MK3 - 1080	MK3	M10	10,5	18	24	80	
MK3 - 10100	MK3	M10	10,5	18	24	100	
MK3 - 1210	MK3	M12	12,5	21	24	10	
MK3 - 1230	MK3	M12	12,5	21	24	30	
MK3 - 1245	MK3	M12	12,5	21	24	45	
MK3 - 1260	MK3	M12	12,5	21	24	60	
MK3 - 1275	MK3	M12	12,5	21	24	75	
MK3 - 1285	MK3	M12	12,5	21	24	85	
MK3 - 1295	MK3	M12	12,5	21	24	95	
MK3 - 12110	MK3	M12	12,5	21	24	110	
MK4 - 12120	MK4	M12	12,5	21	31,5	120	

Einschraubadapter für ER-Spannzangen

modular screw on adapter for ER-collets



Bestell-Nr. order number	ER	M	d1	d2	d3	A	l1		
919-M1038ERM	16	10	10,5	18	22	38	18	953-ER16-03	954-ERM16
919-M1238ERM	16	12	12,5	21	22	38	21	953-ER16-03	954-ERM16
910-M1640ER	16	16	17	29	28	40	23	953-ER16-01	954-ER16
911-M1645ER	20	16	17	29	34	45	23	953-ER20-01	954-ER20

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Accessories

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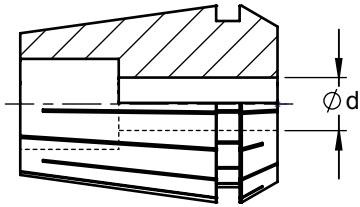
ER - Spannzangen / Standard nach DIN 6499 Form B Collets type ER DIN 6499 form B	164 - 165
Montageblock Tightening fixtures	167
Torxschrauben / Torxschlüssel Clamping screws / torx wrenches	168
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Andere Ausführungen und Längen auf Anfrage lieferbar.
Specials on request.

ER 11 - 25 Spannzangen / Standard nach DIN 6499 Form B

collets type ER 11 - 25 DIN 6499 form B

Ausführung:
Rundlauf 0,010 mm
Execution:
Admissable concentricity 0,010 mm



Spannzangen ER11 Spannbereich d max / min	Bestell-Nr. order number
1,0 - 0,5	950 - 1101
1,5 - 1,0	950 - 11015
2,0 - 1,5	950 - 1102
2,5 - 2,0	950 - 11025
3,0 - 2,5	950 - 1103
3,5 - 3,0	950 - 11035
4,0 - 3,5	950 - 1104
4,5 - 4,0	950 - 11045
5,0 - 4,5	950 - 1105
5,5 - 5,0	950 - 11055
6,0 - 5,5	950 - 1106
6,5 - 6,0	950 - 11065
7,0 - 6,5	950 - 1107

Holzsockel für ER11	950 - 1198
Standard Satz = 13 Stk. d = 1,0... 7,0	950 - 1199

Spannzangen ER16 Spannbereich d max / min	Bestell-Nr. order number
1,0 - 0,5	950 - 1601
2,0 - 1,0	950 - 1602
3,0 - 2,0	950 - 1603
4,0 - 3,0	950 - 1604
5,0 - 4,0	950 - 1605
6,0 - 5,0	950 - 1606
7,0 - 6,0	950 - 1607
8,0 - 7,0	950 - 1608
9,0 - 8,0	950 - 1609
10,0 - 9,0	950 - 1610

Holzsockel für ER16	950 - 1698
Standard Satz = 10 Stk. d = 1,0... 10,0	950 - 1699

Spannzangen ER20 Spannbereich d max / min	Bestell-Nr. order number
1,0 - 0,5	950 - 2001
2,0 - 1,0	950 - 2002
3,0 - 2,0	950 - 2003
4,0 - 3,0	950 - 2004
5,0 - 4,0	950 - 2005
6,0 - 5,0	950 - 2006
7,0 - 6,0	950 - 2007
8,0 - 7,0	950 - 2008
9,0 - 8,0	950 - 2009
10,0 - 9,0	950 - 2010
11,0 - 10,0	950 - 2011
12,0 - 11,0	950 - 2012
13,0 - 12,0	950 - 2013

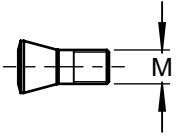
Holzsockel für ER20	950 - 2098
Standard Satz = 12 Stk. d = 2,0... 13,0	950 - 2099

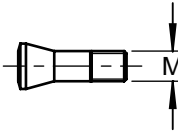
Spannzangen ER25 Spannbereich d max / min	Bestell-Nr. order number
1,0 - 0,5	950 - 2501
2,0 - 1,0	950 - 2502
3,0 - 2,0	950 - 2503
4,0 - 3,0	950 - 2504
5,0 - 4,0	950 - 2505
6,0 - 5,0	950 - 2506
7,0 - 6,0	950 - 2507
8,0 - 7,0	950 - 2508
9,0 - 8,0	950 - 2509
10,0 - 9,0	950 - 2510
11,0 - 10,0	950 - 2511
12,0 - 11,0	950 - 2512
13,0 - 12,0	950 - 2513
14,0 - 13,0	950 - 2514
15,0 - 14,0	950 - 2515
16,0 - 15,0	950 - 2516


Holzsockel für ER25	950 - 2598
Standard Satz = 15 Stk. d = 2,0... 16,0	950 - 2599

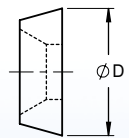
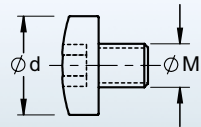
Zubehör

accessories

Torxschrauben clamping screws	Bestell-Nr. order number	Größe (Gewinde) size
	993 00	M 1,8
	993 01	M 2
	993 02	M 2,5
	993 02K	M 2,5
	993 12	M 2,5
	993 03	M 3
	993 04	M 3,5
	993 15	M 4
	993 06	M 4,5
	993 07	M 5
	993 31	M 2
	993 32	M 2,5
	993 35	M 4

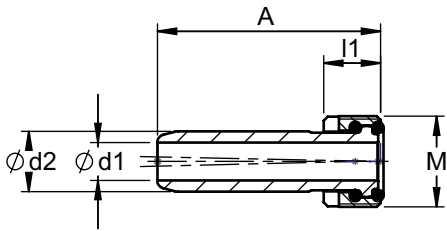
Passschrauben clamping screws	Bestell-Nr. order number	Größe (Gewinde) size
	993 22	M 2,5 x 0,35
	993 23	M 3 x 0,35
	993 24	M 3,5
	993 25	M 4
	993 27	M 5

Torxschlüssel torx wrenches	Bestell-Nr. order number	Größe (Gewinde) size
	994 06	T 6
	994 07	T 7
	994 08	T 8
	994 10	T 10
	994 15	T 15
	994 20	T 20
	994 06IP	T 6IP
	994 07IP	T 7IP
	994 15IP	T 15IP

Klemmscheiben, -schrauben clamp washer	Bestell-Nr. order number	Größe size	M	Torxschlüssel torx wrenches	Bezeichnung name
	995 01	Ø12			Klemmscheibe
	995 05	Ø 8	3,5	994 15	Klemmschraube für WSP Ø 12

Kühlmittelübergaberohre für HSK- Aufnahmen

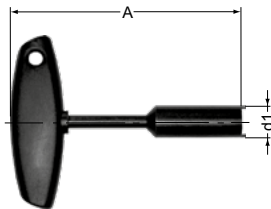
coolant tubes



Bestell-Nr. order number	HSK	d1	d2	M	l1	A
951 - A32	A - 32	3,5	6	M 10x 1,0	5,5	25,7
951 - A40	A - 40	5	8	M 12x 1,0	7,5	29,2
951 - A50	A - 50	6,4	10	M 16x 1,0	9,5	32,7
951 - A63	A - 63	8	12	M 18x 1,0	11,5	36,2
951 - A80	A - 80	10	14	M 20x 1,5	13,5	39,7
951 - A100	A - 100	12	16	M 24x 1,5	15,5	43,6

Schlüssel für Kühlmittelübergaberohre

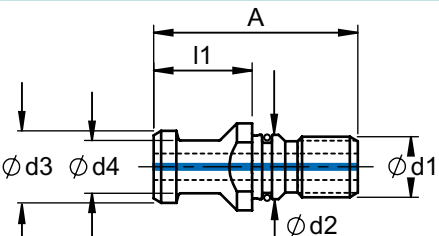
wrench for coolant pipe

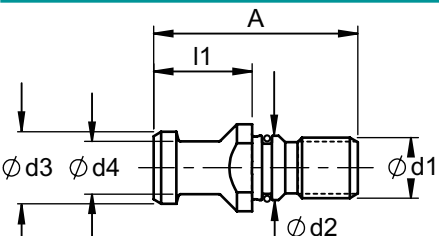


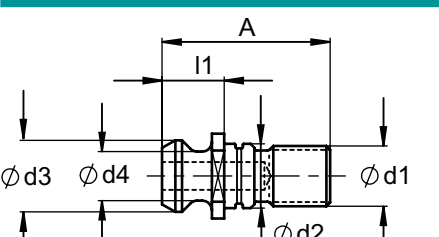
Bestell-Nr. order number	HSK	d1	L			
952 - A32	A - 32	8,8	110			
952 - A40	A - 40	10,8	110			
952 - A50	A - 50	14,5	120			
952 - A63	A - 63	16,5	130			
952 - A80	A - 80	18	140			
952 - A100	A - 100	22	140			

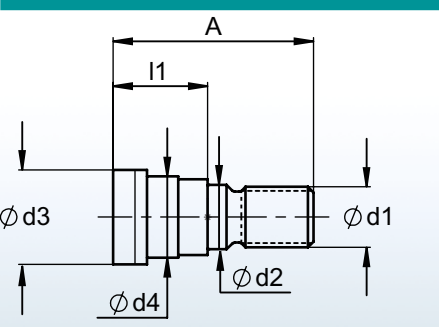
Anzugsbolzen

pull studs

DIN 69 872 A	Bestell-Nr. order number	SK	d1	d2	d3	d4	l1	A
	980 - A40	40	M16	17	19	14	26	54
	980 - A50	50	M24	25	28	21	34	74

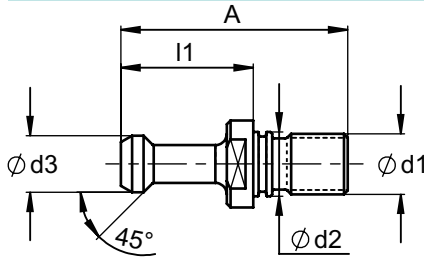
DIN 69 872 B	Bestell-Nr. order number	SK	d1	d2	d3	d4	l1	A
	980 - B40	M16	17	19	14	26	54	54
	980 - B50	M24	25	28	21	34	34	74

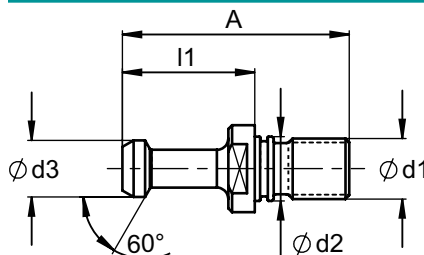
ISO 7388	Bestell-Nr. order number	SK	d1	d2	d3	d4	l1	A
	981 - 40	40	M16	17	18,95	12,95	16,4	44,5
	981 - 50	50	M24	25	29,1	19,6	25,55	65,5

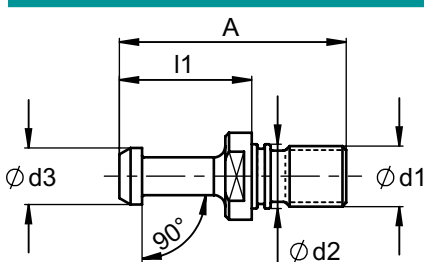
DIN 20 80	Bestell-Nr. order number	SK	d1	d2	d3	d4	l1	A
	982 - 40	40	M16	17	25	21,1	25	53
	982 - 50	50	M24	25	39,3	32	35,8	64,8

Anzugsbolzen

pull studs

MAS BT - Typ 1	Bestell-Nr. order number	BT	d1	d2	d3	45°	l1	A
	983 - 40	40	M16	17	15	45°	35	60
	983 - 50	50	M24	25	23	45°	45	85

MAS BT - Typ 2	Bestell-Nr. order number	BT	d1	d2	d3	60°	l1	A
	984 - 40	40	M16	17	15	60°	35	60
	984 - 50	50	M24	25	23	60°	45	85

MAS BT - Typ 3	Bestell-Nr. order number	BT	d1	d2	d3	90°	l1	A
	985 - 40	40	M16	17	15	90°	35	60
	985 - 50	50	M24	25	23	90°	45	85

PIKTOGRAMME

Pictograms



Bearbeitungsrichtung
machining direction



Bearbeitungsrichtung
machining direction



Bearbeitungsrichtung
machining direction



Planfräsen
face milling



Nutfräsen
slot milling



Eckfräsen / Umfangfräsen
step milling / side milling



Fasfräsen
chamfering



Freiformflächenfräsen
contour milling



Eintauchwinkel
ramping



Zirkularfräsen
helix milling



Innenkühlung wahlweise, zentral oder über Bund
through coolant either central or radial



Guss
cast iron



Stahl
steel



Mit Innenkühlung
through coolant



Ohne Innenkühlung
without coolant



Wendeplatteneinstellung 0°
rake angle of insert pocket 0°



Wendeplatteneinstellung 7° positiv
rake angle of insert pocket 7° positiv



Wendeplatteneinstellung 12° positiv
rake angle of insert pocket 12° positiv



Diamant beschichtet
diamond coated



Diamant beschichtet
diamond coated



beschichtet / unbeschichtet
coated / uncoated



Unbeschichtet
uncoated

PIKTOGRAMME

Pictograms



Aluminium und Nichteisenwerkstoffe
aluminium and non ferrous material



R-Cut beschichtet
R-Cut coated



TIALN beschichtet
TIALN coated



6535-HA

Schaftausführung DIN 6535-HA
shank DIN 6535-HA



6535-HB

Schaftausführung DIN 6535-HB
shank DIN 6535-HB



228-A

Morsekegel DIN 228-A
morse taper DIN 228-A



2080

Steilkegel DIN 2080
shank DIN 2080



6499

Spannzange DIN 6499
collet DIN 6499



69871 A

Steilkegel DIN 69 871 A
shank DIN 69 871 A



69871-AD

Steilkegel DIN 69 871 AD
shank DIN 69 871 AD



69871 AD/B

Steilkegel DIN 69 871 AD/B
shank DIN 69 871 AD/B



69 893-1

Hohlschaftkegel DIN 69 893-1
hollow taper shank DIN 69 893-1



69 893-5

Hohlschaftkegel DIN 69 893-5
hollow taper shank DIN 69 893-5



69 893-6

Hohlschaftkegel DIN 69 893-6
hollow taper shank DIN 69 893-6



JIS B6339
MAS403BT

Steilkegel MAS-BT JIS B 6339
shank MAS-BT JIS B 6339

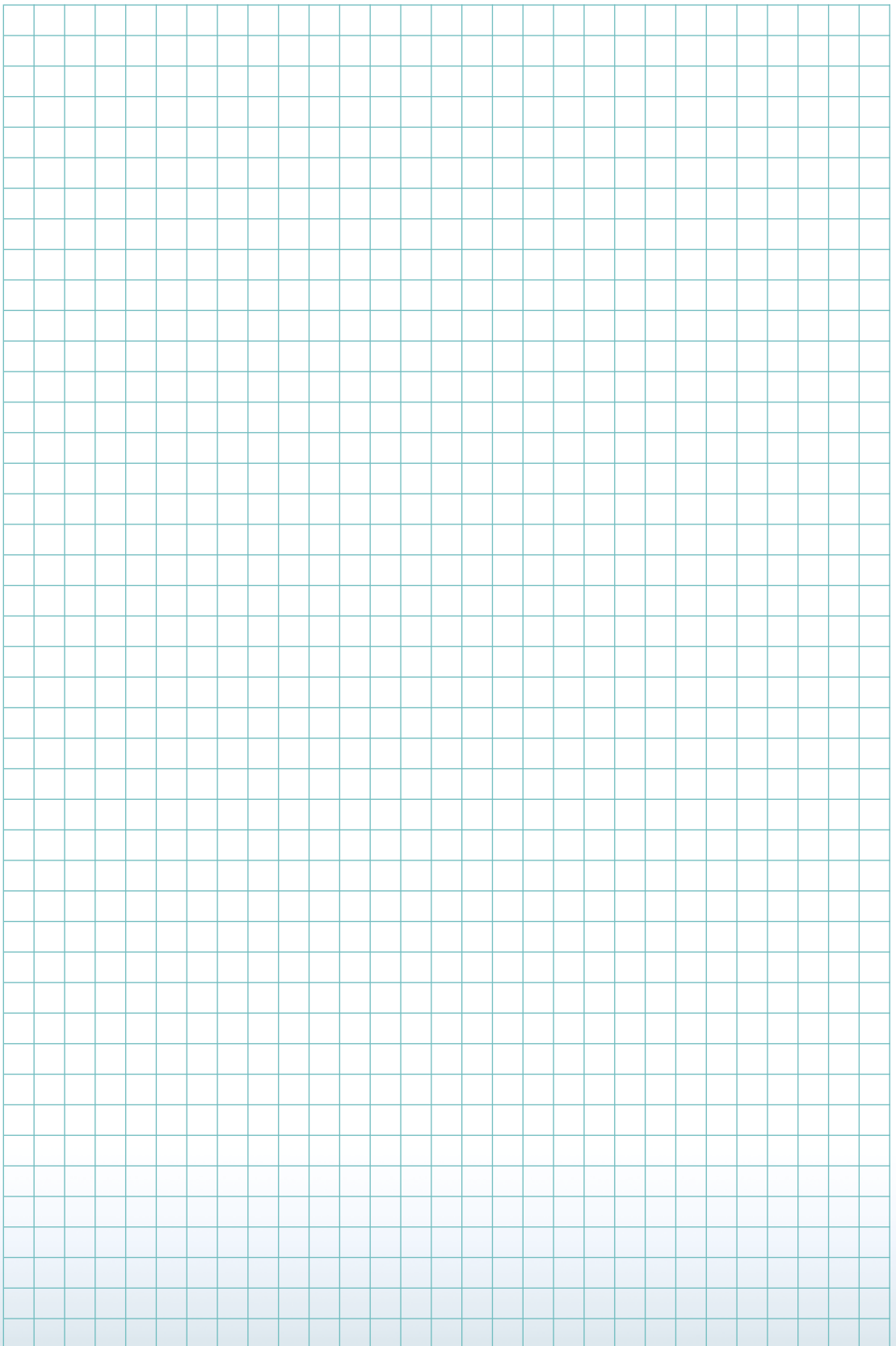


ISO
26623-1

Polygonschaftkegel ISO 26623-1
Polygonal taper interface ISO 26623-1



Polygonschaftkegel ISO 26623-1
Polygonal taper interface ISO 26623-1



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