

Hülsen und Dorne

Sleeves and arbors



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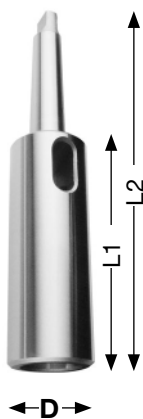
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Reduzierhülsen Reducing sleeves



Ganz gehärtet und geschliffen
Höchste Rundlaufgenauigkeit
*Completely hardened and ground,
max. runout precision*

Verlängerungshülsen Extension sleeves



Ganz gehärtet und geschliffen
Höchste Rundlaufgenauigkeit
*Completely hardened and ground,
max. runout precision*

DIN 2185, ganz gehärtet und geschliffen DIN 2185, completely hardened and ground

Außenkegel / External taper	Innenkegel / Internal taper	L mm	ca. g		Art.-Nr. / Order no.
1	0	80	30	●	01-52-1/0
2	1	92	95	●	01-52-2/1
3	1	99	190	●	01-52-3/1
3	2	112	250	●	01-52-3/2
4	1	124	550	●	01-52-4/1
4	2	124	480	●	01-52-4/2
4	3	140	360	●	01-52-4/3
5	1	156	1700	●	01-52-5/1
5	2	156	1520	●	01-52-5/2
5	3	156	1360	●	01-52-5/3
5	4	171	950	●	01-52-5/4
6	1	218	4400	●	01-52-6/1
6	2	218	4300	●	01-52-6/2
6	3	218	4100	●	01-52-6/3
6	4	218	3600	●	01-52-6/4
6	5	218	2550	●	01-52-6/5

DIN 2187, ganz gehärtet und geschliffen DIN 2187, completely hardened and ground

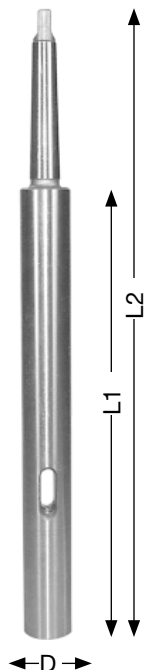
Außenkegel / External taper	Innenkegel / Internal taper	D mm	L2 mm	L1 mm	ca. g		Art.-Nr. / Order no.
1	1	20	145	83	190	●	01-65-1/1
1	2	30	160	98	340	●	01-65-1/2
2	1	20	160	85	250	●	01-65-2/1
2	2	30	175	100	400	●	01-65-2/2
2	3	36	196	121	840	●	01-65-2/3
2	4	48	169	94	1300	●	01-65-2/4
3	1	20	175	81	400	●	01-65-3/1
3	2	30	194	100	550	●	01-65-3/2
3	3	36	215	121	1000	●	01-65-3/3
3	4	48	240	146	1500	●	01-65-3/4
4	1	20	200	82,5	800	●	01-65-4/1
4	2	30	215	97,5	850	●	01-65-4/2
4	3	36	240	122,5	1300	●	01-65-4/3
4	4	48	265	147,5	1900	●	01-65-4/4
4	5	63	300	182,5	3310	●	01-65-4/5
5	1	20	232	82,5	1800	●	01-65-5/1
5	2	30	247	97,5	1900	●	01-65-5/2
5	3	36	268	118,5	2150	●	01-65-5/3
5	4	48	300	150,5	2750	●	01-65-5/4
5	5	63	335	182,5	4200	●	01-65-5/5
5	6	82	396	247	640	●	01-65-5/6
6	3	36	330	120	4580	●	01-65-6/3
6	4	48	355	180	5420	●	01-65-6/4
6	5	63	390	180	6750	●	01-65-6/5
6	6	82	451	241	927	●	01-65-6/6

Sonderhülsen auf Anfrage
Special sleeves available upon request

Bohrer- und Reibahlen-Verlängerungen

Drill and reamer extensions

Ganz geschliffen, Kegel gehärtet
Completely ground, taper hardened



Außenkegel / External taper	Innenkegel / Internal taper	D mm	L1 mm	L2 mm	ca. g	Art.-Nr. / Order no.
1	1	20	138	200	250	01-75-1/1-200
1	1	20	188	250	375	01-75-1/1-250
1	1	20	238	300	500	01-75-1/1-300
1	1	20	288	350	625	01-75-1/1-350
1	1	20	338	400	750	01-75-1/1-400
1	1	20	388	450	900	01-75-1/1-450
1	1	20	438	500	1000	01-75-1/1-500
2	2	25	125	200	430	01-75-2/2-200
2	2	25	175	250	625	01-75-2/2-250
2	2	25	225	300	820	01-75-2/2-300
2	2	25	275	350	1015	01-75-2/2-350
2	2	25	325	400	1200	01-75-2/2-400
2	2	25	375	450	1400	01-75-2/2-450
2	2	25	425	500	1600	01-75-2/2-500
2	2	25	525	600	1800	01-75-2/2-600
3	3	32	156	250	1000	01-75-3/3-250
3	3	32	206	300	1300	01-75-3/3-300
3	3	32	256	350	1550	01-75-3/3-350
3	3	32	306	400	1850	01-75-3/3-400
3	3	32	356	450	2100	01-75-3/3-450
3	3	32	405	500	2400	01-75-3/3-500
3	3	32	506	600	2700	01-75-3/3-600
4	4	40	182,5	300	1650	01-75-4/4-300
4	4	40	232,5	350	2150	01-75-4/4-350
4	4	40	282,5	400	2650	01-75-4/4-400
4	4	40	332,5	450	3100	01-75-4/4-450
4	4	40	382,5	500	3600	01-75-4/4-500
4	4	40	482,5	600	4200	01-75-4/4-600

Sonderhülsen auf Anfrage / Special sleeves available upon request

Reduzierhülsen für Hydrodehnspannfutter

Reducing sleeves for hydraulic expansion mandrels

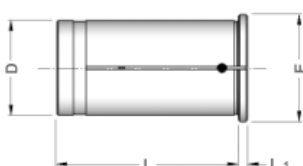


Für die Reduzierung des Spanndurchmessers bei Hydrodehnspannfuttern.

For diameter reduction of hydraulic expansion mandrels.

Kühlmitteldicht bis 60 bar
Mechanically sealed up to 60 bar

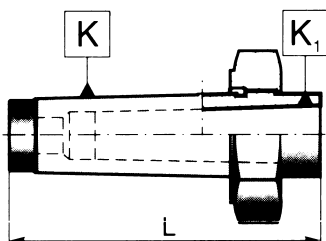
D mm	Bohrungen / Bores mm	E mm	L mm	L1 mm	Art.-Nr. / Order no.
12	Ø 3-10	16	44,5	2	94-52-12/Ø
20	Ø 3-18	24	50,5	2	94-52-20/Ø
32	Ø 4-28	36	60,5	3	94-52-32/Ø



Weitere Abmessungen auf Anfrage
Further sizes available upon request

Spindelhülsen für Werkzeuge mit Morsekegel Spindle sleeves for tools with morse taper

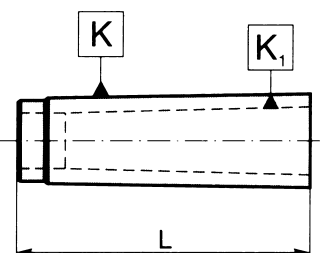
Mit Abdrückgewinde und Mutter With draw-off thread and nut



Außenkegel-MK / External taper-MT	Innenkegel-MK / Internal taper-MT	L mm		Art.-Nr. / Order no.
2*	1	84	●	01-84-2/1
3*	1	102	●	01-84-3/1
4*	1	122	●	01-84-4/1
3	2	102	●	01-84-3/2
4	2	122	●	01-84-4/2
4	3	122	●	01-84-4/3
5	2	153	●	01-84-5/2
5	3	153	●	01-84-5/3
5	4	153	●	01-84-5/4
6	3	212	●	01-84-6/3
6	4	212	●	01-84-6/4
6	5	212	●	01-84-6/5

* mit Austreibrschlitz
* with drift slot

Spindelhülsen für Werkzeuge mit Morsekegel Spindle sleeves for tools with morse taper



Außenkegel-MK / External taper-MT	Innenkegel-MK / Internal taper-MT	L mm		Art.-Nr. / Order no.
2	1	60	●	01-83-2/1
3	1	70	●	01-83-3/1
3	2	70	●	01-83-3/2
4	2	70	●	01-83-4/2
4	3	70	●	01-83-4/3
5	2	77	●	01-83-5/2
5	3	77	●	01-83-5/3
5	4	77	●	01-83-5/4
6	3	110	●	01-83-6/3
6	4	110	●	01-83-6/4
6	5	110	●	01-83-6/5
metrisch / metric 80	5	110	●	01-83-80/5
metrisch / metric 80	6	110	●	01-83-80/6
metrisch / metric 100	6	132	○	01-83-100/6

Klemmhülsen Clamping sleeves



Nach DIN 6328 für Gewindebohrer Acc. to DIN 6328 for taps

MK / MT	Außen-Ø / External-Ø mm	L mm	Bohrung / Bore	Art.-Nr. / Order no.
MK 0	9,2	59,5	2,5/2,8 3,15/3,5/3,55 4,0/4,5	06-500E-Ø
MK 1	12,2	65,5	2,5/2,8 3,15/3,5/3,55 4,0/4,5/5,0/5,5 5,6/6,0/6,3/7,0 7,1/8,0	06-501E-Ø
MK 2	18,0	78,5	4,5/5,0/5,5/5,6 6,0/6,3/7,0/7,1 8,0/9,0/9,5/10,0 11,0/11,2/12,0/12,5	06-504E-Ø
MK 3	24,0	98,0	8,0/9,0/9,5/10,0 11,0/11,2/12,0 12,5/14,0/16,0	06-535E-Ø
MK 4	31,5	123,0	12,0/12,5/14,0 16,0/18,0/20,0 22,0/22,4/25,0	06-538E-Ø
MK 5	44,7	156,0	18,0/20,0/22,0 25,0/28,0/30,0 31,5/32,0/36,0	06-589E-Ø

Nach DIN 6329 für Spiralbohrer Acc. to DIN 6329 for spiral drills

MK / MT	Außen-Ø / External-Ø mm	L mm	Abmessungen / Dimensions	Bohrung / Bore	Art.-Nr. / Order no.
MK 0	9,2	59,5	1,5 - 2,0 2,5 3,0 - 5,5	0,5 0,5 0,5	06-510E-Ø
MK 1	12,2	65,5	3,0 - 8,0	0,5	06-511E-Ø
MK 2	18,0	78,5	5,0 - 13,0	0,5	06-514E-Ø
MK 3	24,0	98,0	8,0 - 18,0	0,5	06-545E-Ø
MK 4	31,5	123,0	12,0 - 20,0	1,0	06-548E-Ø
MK 5	44,7	156,0	20,0 - 36,0	1,0	06-599E-Ø

Weitere Abmessungen lieferbar auf Anfrage
Further dimensions available upon request

Gewindebohrer-Spannhülsen

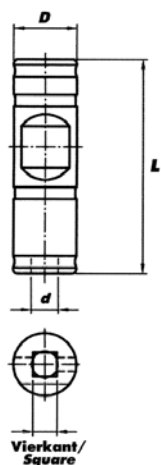
Clamping sleeves for taps

Für Maschinen mit synchroner Gewindeschneideinrichtung

For machines with synchronous tapping equipment



- einsetzbar in herkömmlichen Weldon Spannfuttern nach DIN 1835 B
- kein Schlupf zwischen Hülse und Bohrer
- bei innerer Kühlmittelzufuhr 100% Kühlung an der Schneide
- suitable for standard Weldon chucks according to DIN 1835 B
- no slip between sleeve and drill
- 100% blade cooling if internal coolant supply is selected



Außen-Ø / External-Ø mm	Innen-Ø / Internal-Ø mm	Vierkant / Square mm	L mm		Art.-Nr. / Order no.
8	2,5	2,1	27	●	81-GEW-8X2,5
8	2,8	2,1	27	●	81-GEW-8X2,8
10	3,5	2,7	35	●	81-GEW-10X3,5
10	4,0	3,0	35	●	81-GEW-10X4,0
10	4,5	3,4	35	●	81-GEW-10X4,5
12	6,0	4,9	45	●	81-GEW-12X6,0
14	7,0	5,5	45	●	81-GEW-14X7,0
14	8,0	6,2	45	●	81-GEW-14X8,0
16	9,0	7,0	48	●	81-GEW-16X9,0
16	10,0	8,0	48	●	81-GEW-16X10,0
18	11,0	9,0	48	●	81-GEW-18X11,0
20	12,0	9,0	50	●	81-GEW-20X12,0
25	14,0	11,0	56	●	81-GEW-25X14,0
25	16,0	12,0	56	●	81-GEW-25X16,0
32	18,0	14,5	60	●	81-GEW-32X18,0
32	20,0	16,0	60	●	81-GEW-32X20,0
32	22,0	18,0	60	●	81-GEW-32X22,0
40	25,0	20,0	70	●	81-GEW-40X25,0
40	28,0	22,0	70	●	81-GEW-40X28,0
50	32,0	24,0	80	●	81-GEW-50X32,0
50	36,0	29,0	80	●	81-GEW-50X36,0
50	40,0	32,0	80	●	81-GEW-50X40,0



DIN 238, Kegeldorne mit Morsekegelschaft DIN 238, Taper arbors with morse taper shanks

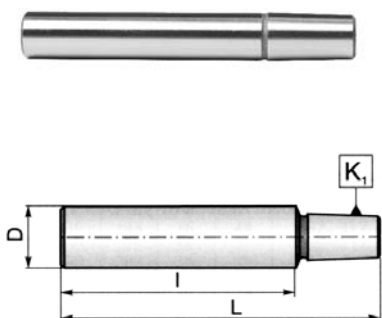


Ganz gehärtet und geschliffen
Completely hardened and ground

MK / MT	Kegel / Taper	L mm	g		Art.-Nr. / Order no.
1	B 10	86	55	●	41-1/B10
1	B 12	89	60	●	41-1/B12
1	B 16	99	90	●	41-1/B16
1	B 18	109	110	●	41-1/B18
1	B 18 VK	97	95	●	41-1/B18VK
2	B 10	105	130	●	41-2/B10
2	B 12	106	135	●	41-2/B12
2	B 16	112	160	●	41-2/B16
2	B 18	119	180	●	41-2/B18
2	B 18 VK	108,5	165	●	41-2/B18VK
2	B 22	130	245	●	41-2/B22
3	B 12	124	280	●	41-3/B12
3	B 16	134	310	●	41-3/B16
3	B 18	140	320	●	41-3/B18
3	B 18 VK	132	320	●	41-3/B18VK
3	B 22	147	390	●	41-3/B22
3	B 24	157	440	●	41-3/B24
4	B 16	158	625	●	41-4/B16
4	B 18	167	660	●	41-4/B18
4	B 18 VK	159	640	●	41-4/B18VK
4	B 22	176	715	●	41-4/B22
4	B 24	186	770	●	41-4/B24
5	B 16	190	1600	●	41-5/B16
5	B 18	204	1600	●	41-5/B18
5	B 22	213	1650	●	41-5/B22
5	B 24	221	1700	●	41-5/B24

VK = verkürzter Bohrfutterkegel
VK = shortened drill chuck taper

Kegeldorne mit Zylinderschaft Taper arbors with cylinder shanks



Ganz gehärtet und geschliffen
Completely hardened and ground

D mm	l mm	Kegel / Taper	L mm		Art.-Nr. / Order no.
8	35	B 10	55	●	13-5348-8-35-B10
10	50	B 10	70	●	13-5348-10-50-B10
10	50	B 12	75	●	13-5348-10-50-B12
10	50	B 16	82	●	13-5348-10-50-B16
12	50	B 16	82	●	13-5348-12-50-B16
12	60	B 16	92	●	13-5348-12-60-B16
16	50	B 16	81	●	13-5348-16-50-B16
16	70	B 16	101	●	13-5348-16-70-B16
16	70	B 18	110	●	13-5348-16-70-B18
20	30	B 16	63	●	13-5348-20-30-B16
20	60	B 12	87	●	13-5348-20-60-B12
20	60	B 16	93	●	13-5348-20-60-B16
20	60	B 18	100	●	13-5348-20-60-B18
25	75	B 16	107	●	13-5348-25-75-B16
30	70	B 16	106	●	13-5348-30-70-B16
30	70	B 18	112	●	13-5348-30-70-B18

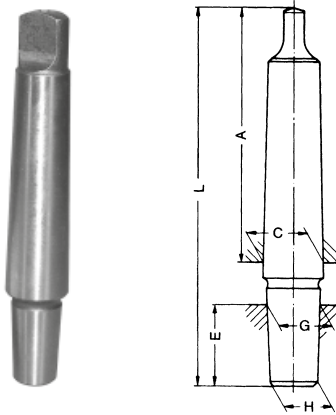
Lagerstandard / in stock

innerhalb weniger Tage / within a few days
auf Anfrage / on request



Kegeldorne mit Jacobs-Kegel Taper arbors with Jacobs taper

Typ 236 Type 236

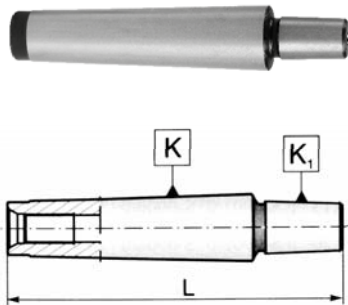


MK / MT	Kegel / Taper	L mm	A mm	C mm	E mm	G mm	H mm		Art.-Nr. / Order no.
1	J1	86,5	62	12,065	16,7	9,754	8,5	○	41-1/J1
1	J2	92	62	12,065	22,2	14,199	12,4	○	41-1/J2
1	J3	101	62	12,065	31	20,599	19	○	41-1/J3
1	J6	95	62	12,065	25,4	17,170	15,9	○	41-1/J6
2	J1	101	75	17,788	16,7	9,754	8,5	○	41-2/J1
2	J2	106,5	75	17,788	22,2	14,199	12,4	○	41-2/J2
2	J3	115,5	75	17,788	31	20,599	19	○	41-2/J3
2	J6	109,5	75	17,788	25,4	17,170	15,9	○	41-2/J6
3	J2	126	94	23,825	22,2	14,199	12,4	○	41-3/J2
3	J3	135	94	23,825	31	20,599	19	○	41-3/J3
3	J33	129	94	23,825	25,4	17,170	15,9	○	41-3/J33
3	J4	144	94	23,825	-	-	28,55	○	41-3/J4
3	J6	129	94	23,825	25,4	15,850	14,2	○	41-3/J6
4	J3	161	117,5	31,267	31	20,599	19	○	41-4/J3
4	J6	155	117,5	31,267	25,4	17,170	15,9	○	41-4/J6

Ganz gehärtet und geschliffen
Completely hardened and ground

Kegeldorne mit Morsekegel und Anzugsgewinde Taper arbors with morse taper and internal thread

DIN 228 A DIN 228 A



MK / MT	L mm	Gewinde / Thread	Kegel / Taper		Art.-Nr. / Order no.
2	95	M 10	B 12	●	41-2/B12-M10
2	101	M 10	B 16	●	41-2/B16-M10
3	121	M 12	B 16	●	41-3/B16-M12
4	143	M 16	B 16	●	41-4/B16-M16

Kegeldorne mit Gewinde Taper arbors with thread



MK / MT	Gewinde / Thread	Länge / Length mm	Gewicht / Weight kg		Art.-Nr. / Order no.
2	3/8-24	101	0,2	●	41-3/8-24
2	1/2-20	104	0,2	●	41-1/2-20
2	5/8-16	106	0,2	●	41-5/8-16
3	M20	122	0,4	●	41-3/M20