



Clarkson GmbH



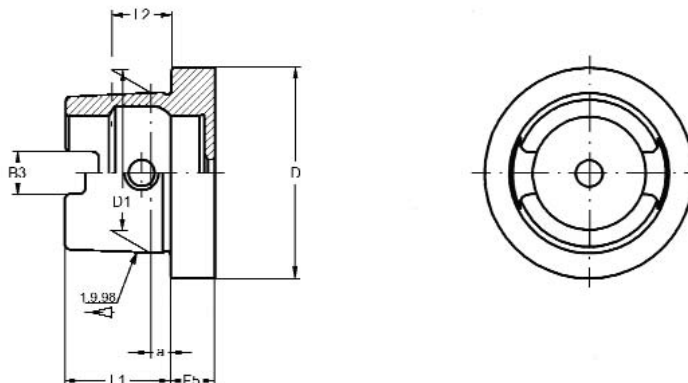
HSK-C
HSK-E
HSK-F

04/2017



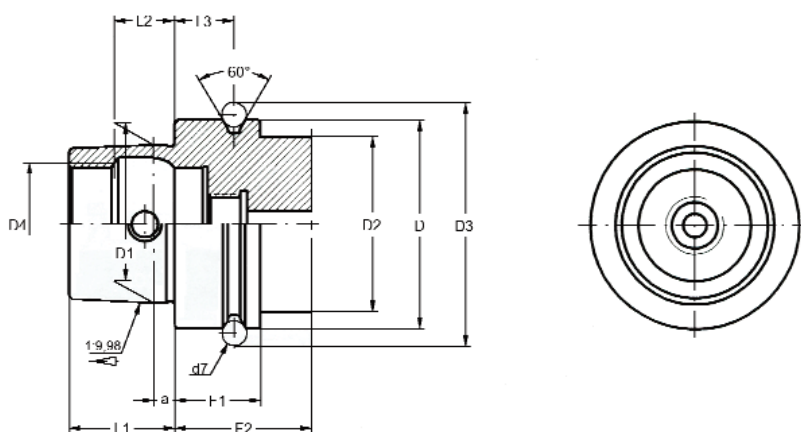
Werkzeugaufnahme HSK Toolholders HSK

DIN 69893-HSK Form C



HSK	D h10	D1	B3 ^{+0.04}	L1 ^{-0.2}	L2 JS10	F5 ^{-0.1}	a
25	25	19	6,05	13	7,21	8	2,5
32	32	24	7,05	16	8,92	10	3,2
40	40	30	8,05	20	11,42	10	4
50	50	38	10,54	25	14,13	12,5	5
63	63	48	12,54	32	18,13	12,5	6,3
80	80	60	16,04	40	22,85	16	8
100	100	75	20,02	50	28,56	16	10

DIN 69893-HSK Form E

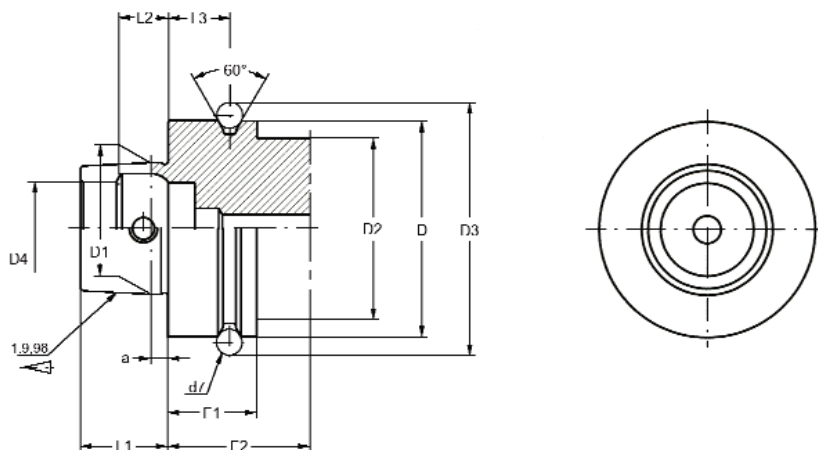


HSK	D h10	D1	D2 max.	D3 ^{-0.1}	D4	L1 ^{-0.2}	L2 JS10	L3 ^{+0.1}	F1 ^{-0.1}	F2 min.	d7	a
25	25	19	20	28,5	15	13	7,21	4,5	10	20	3	2,5
32	32	24	26	37	19	16	8,92	16	20	35	4	3,2
40	40	30	34	45	23	20	11,42	16	20	35	4	4
50	50	38	42	59,3	29	25	14,13	18	26	42	7	5
63	63	48	53	72,3	37	32	18,13	18	26	42	7	6,3



Werkzeugaufnahme HSK Toolholders HSK

DIN 69893-HSK Form F



HSK	D h10	D1	D2 max.	D3 ^{+0.1}	D4	L1 ^{+0.2}	L2 JS10	L3 ^{+0.1}	F1 ^{-0.1}	F2 min.	d7	a
63	63	38	53	72,3	26	25	14,13	18	26	42	7	5

Werkstoff:

Hochlegierter Einsatzstahl

Zugfestigkeit im Kern:

min. 1200 N/mm².

Einsatzgehärtet HRC 60 ± 2 (HV 700 ± 50)

Härtetiefe 0,8mm ± 0,2mm

Genauigkeit:

Kegelwinkel-Toleranzqualität < AT 3 nach DIN7187

Material:

High alloyed case-hardened steel

Tensile core strength:

of min. 1200 N/mm²

Case hardened HRC 60 ± 2 (HV 700 ± 50)

Hardening depth 0,8mm ± 0,2mm

Accuracy:

quality of taper < AT 3 according to DIN 7187



Inhaltsverzeichnis

241-C Seite/page :A05/06	239-E Seite/page :A17	239-F Seite/page :A31	258 Seite/page :B09
269-C Seite/page :A07	240-E Seite/page :A18	342-F Seite/page :A32	276 Seite/page :B10
268-C Seite/page :A08	254-E Seite/page :A19	271-F Seite/page :A33	435 Seite/page :C01
239-C Seite/page :A09	342-E Seite/page :A20	260-F Seite/page :A34	228 Seite/page :C02-06
342-C Seite/page :A10	271-E Seite/page :A21-23	361-F Seite/page :A35	231 Seite/page :C07
271-C Seite/page :A11	272-E Seite/page :A24	898-F Seite/page :A35	456-484 Seite/page :C08
260-C Seite/page :A12	260-E Seite/page :A25	253 Seite/page :B01-04	458-457 Seite/page :C09
361-C Seite/page :A13	361-E Seite/page :A26	286 Seite/page :B05	Seite/page :C10-13
			Ersatzteile Spar-parts
898-C Seite/page :A13	241-F Seite/page :A27	288 Seite/page :B05	
241-E Seite/page :A14	269-F Seite/page :A28	283 Seite/page :B06/07	
269-E Seite/page :A15	268-F Seite/page :A29	267 Seite/page :B08	
268-E Seite/page :A16	220-F Seite/page :A30	257 Seite/page :B09	

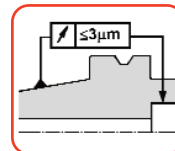
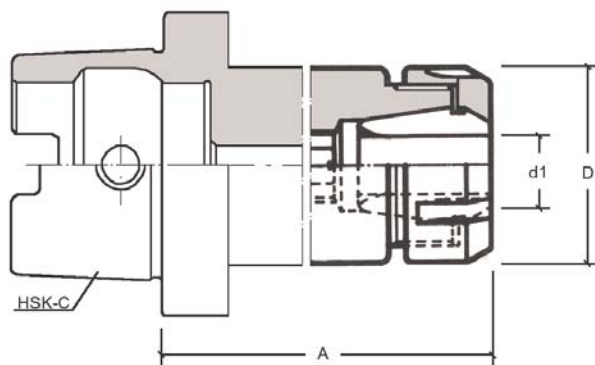


Zangenfutter für ER-Spannzangen DIN 6499

HSK-C

Collet chucks for ER-Collets to DIN 6499

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Zange Collet ER	Spannbereich Capacity d1	A mm	D mm
241.C25.011.040	25	ER11	1-6	40	16
241.C25.011.060	25	ER11	1-7	60	16
241.C25.016.055	25	ER16	1-10	55	22
241.C32.011.060	32	ER11	1-7	60	16
241.C32.016.060	32	ER16	1-10	60	28
241.C40.011.060	40	ER11	1-7	60	16
241.C40.016.060	40	ER16	1-10	60	28
241.C40.016.070	40	ER16	1-10	70	22
241.C40.025.070	40	ER25	2-16	70	42
241.C40.032.075	40	ER32	2-20	75	50
241.C40.032.090	40	ER32	2-20	90	50
241.C40.040.085	40	ER40	3-26	85	63
241.C50.016.060	50	ER16	1-10	60	28
241.C50.016.100	50	ER16	1-10	100	28
241.C50.025.070	50	ER25	2-16	70	42
241.C50.032.075	50	ER32	2-20	75	50
241.C50.032.080	50	ER32	2-20	80	50
241.C50.032.090	50	ER32	2-20	90	50
241.C50.040.080	50	ER40	3-26	80	63
241.C63.016.060	63	ER16	1-10	60	28
241.C63.016.100	63	ER16	1-10	100	28
241.C63.025.070	63	ER25	2-16	70	42
241.C63.032.075	63	ER32	2-20	75	50
241.C63.032.090	63	ER32	2-20	90	50
241.C63.040.080	63	ER40	3-26	80	63
241.C63.040.108	63	ER40	3-26	108	63



C08-09



C13



C02-03-04



C05

Lieferumfang:
Mit gewuchteter Spannmutter
Delivery:
With balanced clamping nut

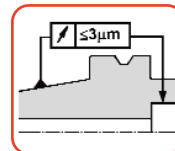
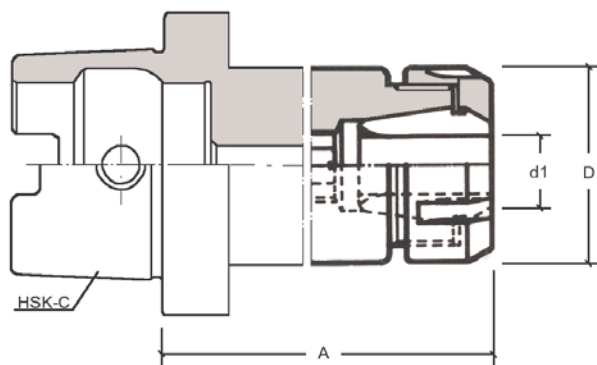


Zangenfutter für ER-Spannzangen DIN 6499

HSK-C

Collet chucks for ER-Collets to DIN 6499

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Zange Collet ER	Spannbereich Capacity d1	A mm	D mm
241.C80.016.100	80	ER16	1-10	100	28
241.C80.016.160	80	ER16	1-10	160	28
241.C80.032.080	80	ER32	2-20	80	50
241.C80.040.085	80	ER40	3-26	85	63
241.C10.016.100	100	ER16	1-10	100	28
241.C10.016.160	100	ER16	1-10	160	28
241.C10.032.080	100	ER32	2-20	80	50
241.C10.040.090	100	ER40	3-26	90	63



C08-09



C13



C02-03-04



C05

Lieferumfang:
Mit gewuchteter Spannmutter
Delivery:
With balanced clamping nut

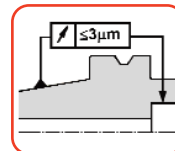
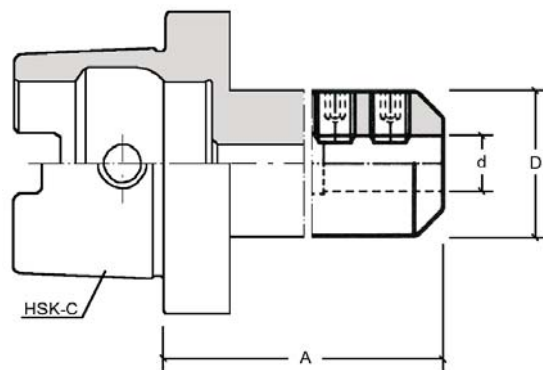


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

HSK-C

Weldon chucks DIN 6359 for shanks to DIN1835B

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
269.C40.008.060	40	8	60	28
269.C40.010.070	40	10	70	35
269.C40.012.070	40	12	70	42
269.C40.014.075	40	14	75	44
269.C40.016.075	40	16	75	48
269.C40.018.080	40	18	80	50
269.C40.020.080	40	20	80	52
269.C50.006.060	50	6	60	25
269.C50.008.060	50	8	60	28
269.C50.010.065	50	10	65	35
269.C50.012.075	50	12	75	42
269.C50.014.075	50	14	75	44
269.C50.016.080	50	16	80	48
269.C50.018.080	50	18	80	50
269.C50.020.080	50	20	80	50
269.C50.025.080	50	25	80	50

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
269.C63.006.060	63	6	60	25
269.C63.008.060	63	8	60	28
269.C63.010.065	63	10	65	35
269.C63.012.075	63	12	75	42
269.C63.014.075	63	14	75	44
269.C63.016.080	63	16	80	48
269.C63.018.080	63	18	80	50
269.C63.020.080	63	20	80	52
263.C63.025.095	63	25	95	65
269.C63.032.100	63	32	100	72
269.C10.006.065	100	6	65	25
269.C10.008.065	100	8	65	28
269.C10.010.070	100	10	70	35
269.C10.012.075	100	12	75	42
269.C10.014.075	100	14	75	44
269.C10.016.080	100	16	80	48
269.C10.018.080	100	18	80	50
269.C10.020.085	100	20	85	52
269.C10.025.095	100	25	95	65
269.C10.032.100	100	32	100	72
269.C10.040.100	100	40	100	80



C11

Hinweis:
Ab Ød 25mm mit 2 Spannschrauben
Note:
From Ød 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n)
Delivery:
With clamping screw(s)

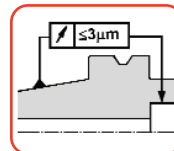
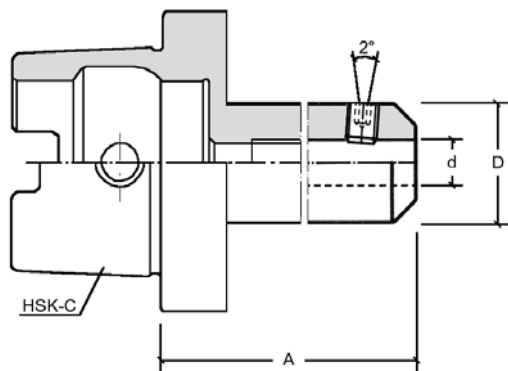


Fräsfutter DIN 6359 Whistle Notch für Zylinderschäfte DIN1835E

HSK-C

Whistle Notch chucks DIN 6359 for shanks to DIN1835E

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
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268.C32.006.060	32	6	60	25
268.C32.008.060	32	8	60	28
268.C32.010.065	32	10	65	35
268.C32.012.070	32	12	70	42
268.C32.014.070	32	14	70	44

268.C40.006.060	40	6	60	25
268.C40.008.060	40	8	60	28
268.C40.010.065	40	10	65	35
268.C40.012.070	40	12	70	40
268.C40.014.070	40	14	70	40
268.C40.016.075	40	16	75	40
268.C40.018.075	40	18	75	40
268.C40.020.080	40	20	80	46
268.C40.025.100	40	25	100	48

268.C50.006.060	50	6	60	25
268.C50.008.060	50	8	60	28
268.C50.010.065	50	10	65	35
268.C50.012.075	50	12	75	42
268.C50.014.075	50	14	75	44
268.C50.016.080	50	16	80	48
268.C50.018.080	50	18	80	50
268.C50.020.080	50	20	80	52
268.C50.025.085	50	25	85	65

268.C63.006.060	63	6	60	25
268.C63.008.060	63	8	60	28
268.C63.010.065	63	10	65	35
268.C63.012.075	63	12	75	42
268.C63.014.075	63	14	75	44
268.C63.016.080	63	16	80	48
268.C63.018.080	63	18	80	50
268.C63.020.080	63	20	80	52
268.C63.025.095	63	25	95	65
268.C63.032.100	63	32	100	72

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
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268.C80.006.065	80	6	65	25
268.C80.008.065	80	8	65	28
268.C80.010.070	80	10	70	35
268.C80.012.075	80	12	75	42
268.C80.014.075	80	14	75	44
268.C80.016.080	80	16	80	48
268.C80.018.080	80	18	80	50
268.C80.020.085	80	20	85	52
268.C80.025.095	80	25	95	65
268.C80.032.100	80	32	100	72

268.C10.006.065	100	6	65	25
268.C10.008.065	100	8	65	28
268.C10.010.070	100	10	70	35
268.C10.012.075	100	12	75	42
268.C10.014.075	100	14	75	44
268.C10.016.080	100	16	80	48
268.C10.018.080	100	18	80	50
268.C10.020.085	100	20	85	52
268.C10.025.095	100	25	95	65
268.C10.032.100	100	32	100	72



Hinweis:
Ab $\varnothing d$ 25mm mit 2 Spannschrauben
Note:
From $\varnothing d$ 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n) und axialer
Anschlagschraube
Delivery:
With clamping screw(s) and stopscrew

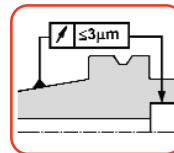
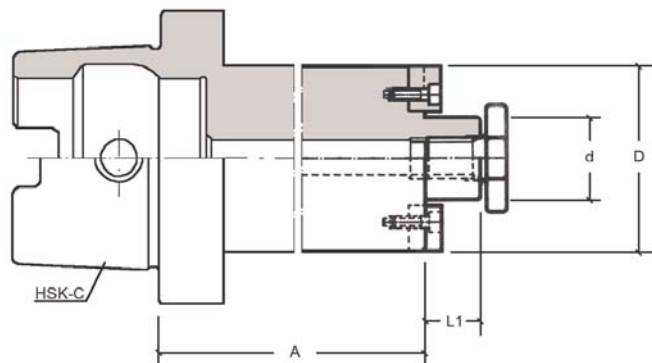


Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser

HSK-C

Shell mill holders DIN 6357 with enlarged contact face

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	L1 mm	A mm	D mm
239.C40.016.050	40	16	17	50	40
239.C40.022.060	40	22	19	60	40
239.C50.016.060	50	16	17	60	40
239.C50.022.060	50	22	19	60	50
239.C50.027.060	50	27	21	60	50
239.C63.022.050	63	22	19	50	48
239.C63.027.060	63	27	21	60	60
239.C63.032.060	63	32	24	60	78
239.C63.040.060	63	40	27	60	89
239.C80.032.048	80	32	24	48	78
239.C80.032.060	80	32	24	60	78
239.C80.040.060	80	40	27	60	89
239.C10.022.050	100	22	19	50	48
239.C10.027.050	100	27	21	50	60
239.C10.032.050	100	32	24	50	78
239.C10.040.060	100	40	27	60	89
239.C10.050.070	100	50	30	70	120



Lieferumfang:
Mit Mitnehmersteinen, Kreuzschraube und Schraube DIN912
Delivery:
With drivers, cross head retaining screw and screw DIN912

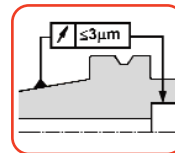
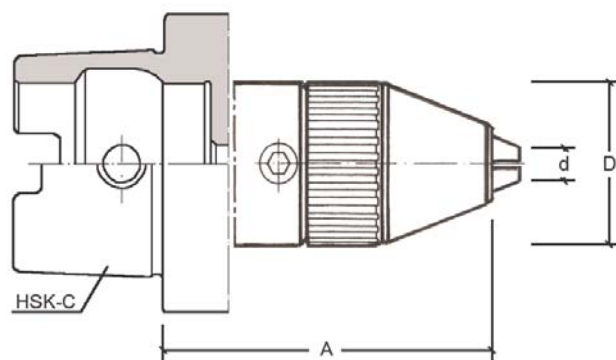


NC-Bohrfutter für Rechts- und Linkslauf

HSK-C

NC-Drill chuck for right- and left hand rotation

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d mm	A mm	D mm
342.C50.013.110	50	1-13	110	50
342.C50.016.115	50	3-16	115,5	50
342.C63.013.110	63	1-13	110	50
342.C63.016.115	63	3-16	115,5	50
342.C10.013.112	100	1-13	112,5	50
342.C10.016.118	100	3-16	118	50

Höchste Präzision sowie genauester Rundlauf, mechanische Spannkraftverstärkung garantiert eine sichere Spannung. Während der Bearbeitung, ob Rechts- oder Linkslauf sowie bei Spindelstop, ist ein selbständiges Lösen nicht möglich.
 High precision and accurate concentricity, mechanical amplification is the guarantee of the very high clamping force.
 During the working process, if with right- or left-hand rotation or spindle stop, no automatic slackening will be possible.

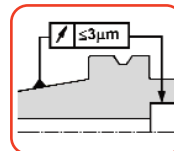
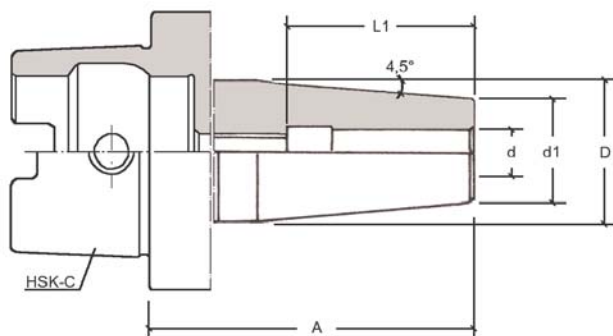


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-C

Shrink chucks for mounting solid carbide and HSS shanks

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.C32.006.065	32	6	65	21	27	36
271.C32.006.075	32	6	75	21	27	36
271.C32.008.065	32	8	65	21	27	36
271.C32.008.075	32	8	75	21	27	36
271.C32.010.065	32	10	65	24	32	42
271.C32.010.080	32	10	80	24	32	42
271.C32.012.075	32	12	75	24	32	47
271.C32.014.080	32	14	80	27	34	47
271.C32.016.080	32	16	80	27	34	50

271.C40.003.070	40	3	70	11	15	10
271.C40.004.070	40	4	70	14	22	20
271.C40.005.070	40	5	70	16	22	20
271.C40.006.070	40	6	70	21	27	36
271.C40.008.070	40	8	70	21	27	36
271.C40.010.070	40	10	70	24	32	42
271.C40.012.080	40	12	80	24	32	47
271.C40.014.080	40	14	80	27	34	47
271.C40.016.080	40	16	80	27	34	50
271.C40.018.080	40	18	80	33	42	50
271.C40.020.080	40	20	80	33	42	52

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.C50.006.070	50	6	70	21	27	36
271.C50.008.070	50	8	70	21	27	36
271.C50.010.075	50	10	75	24	32	42
271.C50.012.075	50	12	75	24	32	47
271.C50.014.080	50	14	80	27	34	47
271.C50.016.085	50	16	85	27	34	50
271.C50.018.085	50	18	85	33	42	50
271.C50.020.090	50	20	90	33	42	52

271.C63.006.070	63	6	70	21	27	36
271.C63.008.070	63	8	70	21	27	36
271.C63.010.075	63	10	75	24	32	42
271.C63.012.080	63	12	80	24	32	47
271.C63.014.080	63	14	80	27	34	47
271.C63.016.085	63	16	85	27	34	50
271.C63.018.085	63	18	85	33	42	50
271.C63.020.090	63	20	90	33	42	52
271.C63.025.100	63	25	100	44	53	58
271.C63.032.110	63	32	110	44	53	61

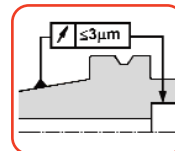
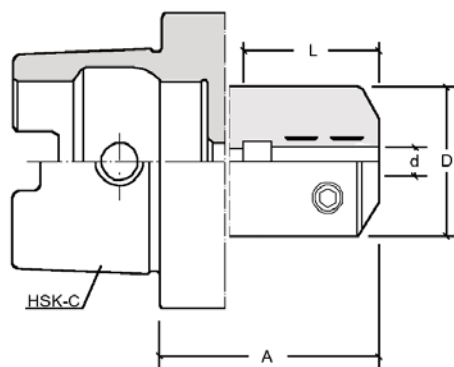


Hydro-Dehnspannfutter

Hydraulic expansibles chuck

HSK-C

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	D mm	L mm
260.C25.006.060	25	6	60	26	37
260.C25.008.060	25	8	60	28	37
260.C25.010.065	25	10	65	30	42
260.C32.006.060	32	6	60	26	37
260.C32.008.060	32	8	60	28	37
260.C32.008.067	32	8	67	26	37
260.C32.010.065	32	10	65	30	42
260.C32.010.072	32	10	72,5	30	42
260.C32.012.070	32	12	70	32	47
260.C32.012.076	32	12	76	32	47
260.C32.014.075	32	14	75	34	47
260.C40.006.060	40	6	60	26	37
260.C40.008.060	40	8	60	28	37
260.C40.010.065	40	10	65	30	42
260.C40.012.070	40	12	70	32	47
260.C40.014.080	40	14	80	34	47
260.C40.016.080	40	16	80	38	52
260.C40.018.080	40	18	80	40	52
260.C40.020.080	40	20	80	42	52

Bestell Nr. Code No.	HSK	d mm	A mm	D mm	L mm
260.C50.006.060	50	6	60	26	37
260.C50.008.060	50	8	60	28	37
260.C50.010.065	50	10	65	30	42
260.C50.012.075	50	12	75	32	47
260.C50.014.075	50	14	75	34	47
260.C50.016.080	50	16	80	38	52
260.C50.018.080	50	18	80	40	52
260.C50.020.080	50	20	80	42	52
260.C63.006.060	63	6	60	26	37
260.C63.008.060	63	8	60	28	37
260.C63.010.065	63	10	65	30	42
260.C63.012.075	63	12	75	32	47
260.C63.014.075	63	14	75	34	47
260.C63.016.080	63	16	80	38	52
260.C63.018.080	63	18	80	40	52
260.C63.020.080	63	20	80	42	52
260.C63.025.095	63	25	95	50	58
260.C63.032.100	63	32	100	60	62



C07



C10

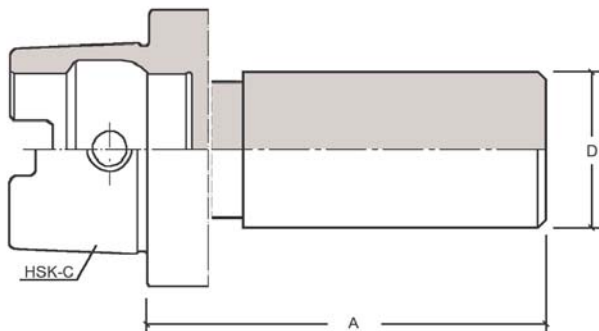


Rohlinge zur Anfertigung von Sonderwerkzeugen

HSK-C

Blanks for production of special tools

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	D mm	A mm
361.C25.025.100	25	25	100
361.C32.032.100	32	32	100
361.C32.040.160	32	40	160
361.C40.040.100	40	40	100
361.C40.050.160	40	50	160
361.C50.050.100	50	50	100
361.C50.063.100	50	63	100
361.C50.063.200	50	63	200

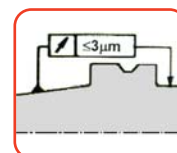
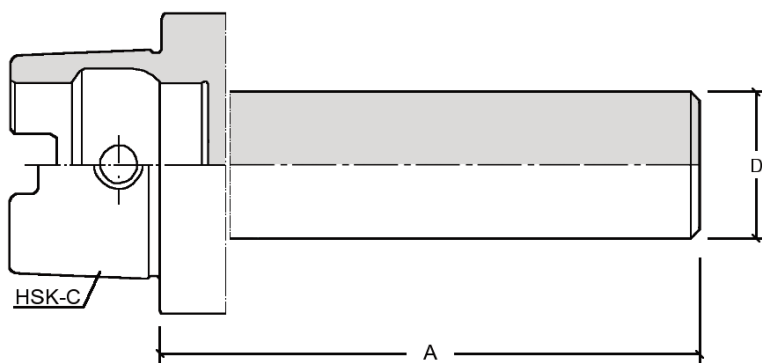
Bestell Nr. Code No.	HSK	D mm	A mm
361.C63.063.100	63	63	100
361.C63.080.160	63	80	160
361.C63.080.200	63	80	200
361.C80.080.200	80	80	200
361.C10.100.100	100	100	100

Kontrolldorne

HSK-C

Test abors

HSK-C



Preise auf Anfrage

Bestell Nr. Code No.	HSK	D mm	A mm
898.C32.025.160	32	25	160
898.C40.025.160	40	25	160
898.C50.032.300	50	32	300
898.C63.040.300	63	40	300
898.C80.040.300	80	40	300
898.C10.050.300	100	50	300



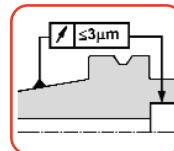
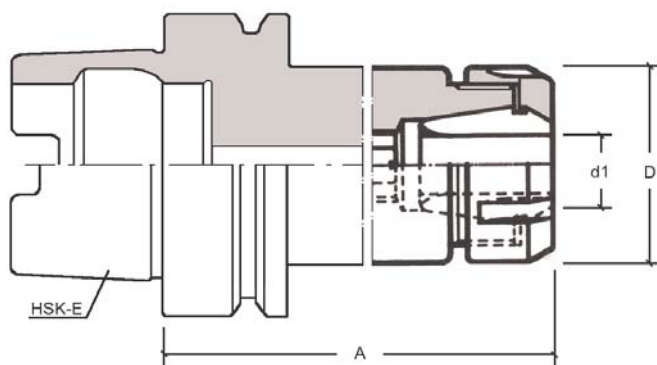


Zangenfutter für ER-Spannzangen DIN 6499

HSK-E

Collet chucks for ER-Collets to DIN 6499

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Zange Collet ER	Spannbereich Capacity d1	A mm	D mm
241.E25.011.045	25	ER11	1-7	45	16
241.E25.016.045	25	ER16	1-10	45	22
241.E25.016.052	25	ER16	1-10	52	22
241.E25.016.060	25	ER16	1-10	60	28
241.E25.016.065	25	ER16	1-10	65	28
241.E25.025.070	25	ER25	2-16	70	42
241.E32.011.060	32	ER11	1-7	60	16,5
241.E32.016.060	32	ER16	1-10	60	28
241.E32.A16.065	32	ER16	1-10	65	22
241.E32.016.065	32	ER16	1-10	65	28
241.E32.016.080	32	ER16	1-10	80	28
241.E32.025.080	32	ER25	2-16	80	42
241.E32.025.085	32	ER25	2-16	85	42
241.E32.032.095	32	ER32	2-20	95	50
241.E40.011.060	40	ER11	1-7	60	16
241.E40.016.060	40	ER16	1-10	60	28
241.E40.016.065	40	ER16	1-10	65	28
241.E40.016.080	40	ER16	1-10	80	28
241.E40.016.100	40	ER16	1-10	100	22
241.E40.025.070	40	ER25	2-16	70	42
241.E40.025.075	40	ER25	2-16	75	42
241.E40.025.080	40	ER25	2-16	80	42
241.E40.032.100	40	ER32	2-20	100	50

Bestell Nr. Code No.	HSK	Zange Collet ER	Spannbereich Capacity d1	A mm	D mm
241.E50.016.080	50	ER16	1-10	80	28
241.E50.016.100	50	ER16	1-10	100	28
241.E50.025.070	50	ER25	2-16	70	42
241.E50.025.080	50	ER25	2-16	80	42
241.E50.032.080	50	ER32	2-20	80	50
241.E50.032.085	50	ER32	2-20	85	50
241.E50.032.100	50	ER32	2-20	100	50
241.E50.040.100	50	ER40	3-26	100	63
241.E63.016.075	63	ER16	1-10	75	28
241.E63.016.080	63	ER16	1-10	80	28
241.E63.025.080	63	ER25	1-16	80	42
241.E63.032.075	63	ER32	2-20	75	50
241.E63.032.090	63	ER32	2-20	90	50
241.E63.032.100	63	ER32	2-20	100	50
241.E63.040.080	63	ER40	3-26	80	63
241.E63.040.120	63	ER40	3-26	120	63



Lieferumfang:
Mit gewuchteter Spannmutter
Delivery:
With balanced clamping nut

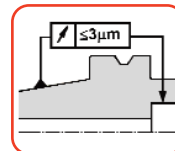
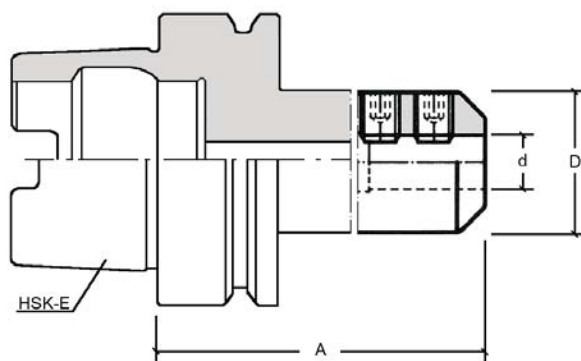


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

HSK-E

Weldon chucks DIN 6359 for shanks to DIN1835B

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
269.E25.006.050	25	6	50	25
269.E25.008.050	25	8	50	28
269.E32.006.055	32	6	55	25
269.E32.006.060	32	6	60	25
269.E32.008.055	32	8	55	28
269.E32.008.060	32	8	60	28
269.E32.010.060	32	10	60	35
269.E32.010.065	32	10	65	35
269.E32.012.065	32	12	65	42
269.E40.006.060	40	6	60	25
269.E40.008.060	40	8	60	28
269.E40.010.060	40	10	60	35
269.E40.012.070	40	12	70	42
269.E40.014.070	40	14	70	44
269.E40.014.075	40	14	75	44
269.E40.016.075	40	16	75	48
269.E40.020.075	40	20	75	52

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
269.E50.006.065	50	6	65	25
269.E50.008.065	50	8	65	28
269.E50.010.065	50	10	65	35
269.E50.012.080	50	12	80	42
269.E50.014.080	50	14	80	44
269.E50.016.080	50	16	80	48
269.E50.018.080	50	18	80	50
269.E50.020.080	50	20	80	52
269.E50.025.102	50	25	102	65
269.E63.006.065	63	6	65	25
269.E63.008.065	63	8	65	28
269.E63.010.065	63	10	65	35
269.E63.012.080	63	12	80	42
269.E63.014.080	63	14	80	44
269.E63.016.080	63	16	80	48
269.E63.018.080	63	18	80	50
269.E63.020.080	63	20	80	52
269.E63.025.110	63	25	110	65
269.E63.032.110	63	32	110	72
269.E63.040.120	63	40	120	63



C11

Hinweis:
Ab Ød 25mm mit 2 Spannschrauben
Note:
From Ød 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n)
Delivery:
With clamping screw(s)

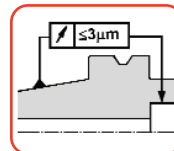
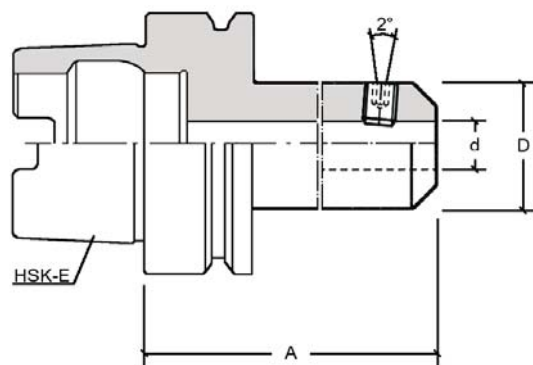


Fräsfutter DIN 6359 Whistle Notch für Zylinderschäfte DIN1835E

HSK-E

Whistle Notch chucks DIN 6359 for shanks to DIN1835E

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
268.E32.006.060	32	6	60	25
268.E32.008.080	32	8	80	28
268.E32.010.080	32	10	80	35
268.E40.006.060	40	6	60	25
268.E40.008.080	40	8	80	28
268.E40.010.080	40	10	80	35
268.E40.012.090	40	12	90	42
268.E40.014.090	40	14	90	44
268.E40.016.090	40	16	90	48
268.E50.006.080	50	6	80	25
268.E50.008.080	50	8	80	28
268.E50.010.080	50	10	80	35
268.E50.012.090	50	12	90	42
268.E50.014.090	50	14	90	44
268.E50.016.090	50	16	90	48
268.E50.018.090	50	18	90	50
268.E50.020.100	50	20	100	52
268.E63.006.080	63	6	80	25
268.E63.008.080	63	8	80	28
268.E63.010.080	63	10	80	35
268.E63.012.090	63	12	90	42
268.E63.014.090	63	14	90	44
268.E63.016.100	63	16	100	48
268.E63.018.100	63	18	100	50
268.E63.020.100	63	20	100	52
268.E63.025.110	63	25	110	65
268.E63.032.110	63	32	110	72



Hinweis:
Ab \varnothing 25mm mit 2 Spannschrauben
Note:
From \varnothing 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n) und axialer
Anschlagschraube
Delivery:
With clamping screw(s) and stopscrew

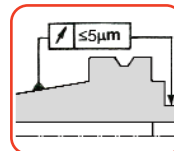
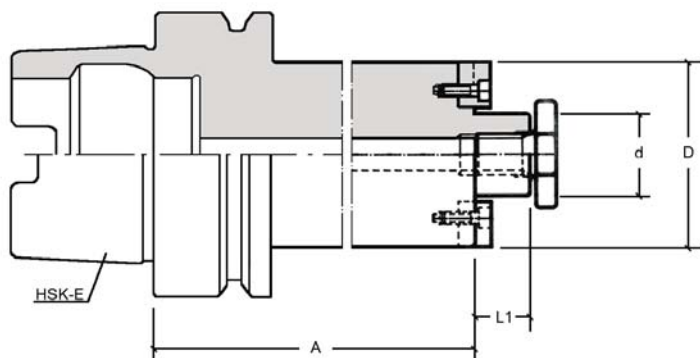


Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser

HSK-E

Shell mill holders DIN 6357 with enlarged contact face

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	L1 mm	A mm	D mm
239.E32.016.050	32	16	17	50	34
239.E40.016.050	40	16	17	50	34
239.E40.022.050	40	22	19	50	48
239.E40.027.050	40	27	21	50	60
239.E50.016.050	50	16	17	50	38
239.E50.022.060	50	22	19	60	48
239.E50.027.060	50	27	21	60	58
239.E50.032.060	50	32	24	60	65
239.E63.016.050	63	16	17	50	38
239.E63.022.060	63	22	19	60	48
239.E63.027.060	63	27	21	60	58
239.E63.032.060	63	32	24	60	65
239.E63.040.060	63	40	27	60	89



C12



C13



C12

Lieferumfang:
Mit Mitnehmersteinen, Kreuzschraube und Schraube DIN912
Delivery:
With drivers, cross head retaining screw and screw DIN912

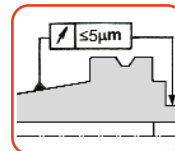
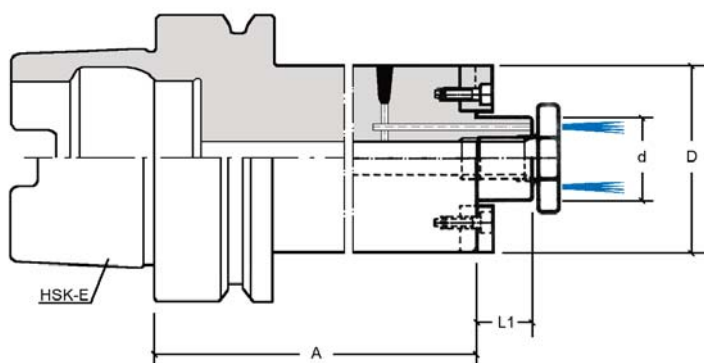


Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser

HSK-E

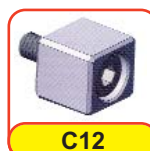
Shell mill holders DIN 6357 with enlarged contact face

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	L1 mm	A mm	D mm
240.E40.016.050	40	16	17	50	38
240.E50.016.050	50	16	17	50	38
240.E50.022.060	50	22	19	60	48
240.E63.016.050	63	16	17	50	38
240.E63.022.050	63	22	19	50	48



Lieferumfang:
Mit Mitnehmersteinen, Kreuzschraube und Schraube DIN912
Delivery:
With drivers, cross head retaining screw and screw DIN912

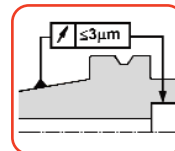
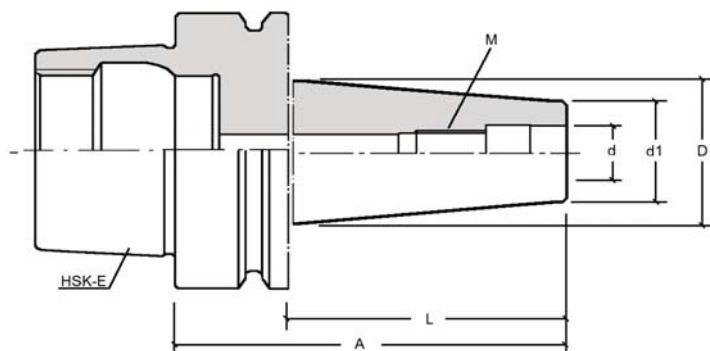


Fräseraufnahme für Einschraubfräser

HSK-E

Milling abors for screw in tool

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	M	d mm	d1 mm	D mm	A mm	L mm
254.E40.M06.050	40	M6	6,5	9,8	10	50	25
254.E40.M06.100	40	M6	6,5	9,8	24	100	75
254.E40.M08.050	40	M8	8,5	12,8	16	50	25
254.E40.M08.100	40	M8	8,5	12,8	24	100	75
254.E50.M06.055	50	M6	6,5	9,8	12	55	25
254.E50.M06.105	50	M6	6,5	9,8	20	105	75
254.E50.M08.055	50	M8	8,5	12,8	16	55	25
254.E50.M08.105	50	M8	8,5	12,8	24	105	75
254.E50.M10.055	50	M10	10,5	17,8	20	55	25



B09



B09



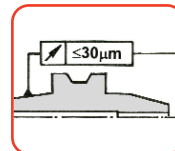
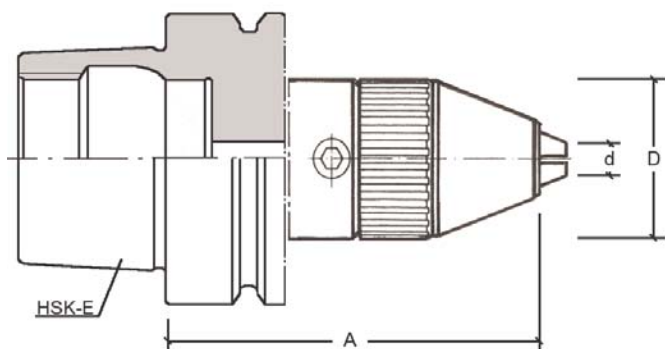


NC-Bohrfutter für Rechts- und Linkslauf

HSK-E

NC-Drill chuck for right- and left hand rotation

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d mm	A mm	D mm
342.E25.008.070	25	0-8	70	36
342.E32.008.075	32	0-8	75	36
342.E40.008.080	40	0-8	80	36
342.E40.013.119	40	1-13	119	50
342.E40.016.124	40	3-16	124,5	50
342.E50.008.080	50	0-8	80	36
342.E50.013.121	50	1-13	121	50
342.E50.016.126	50	3-16	126,5	50
342.E63.013.123	63	1-13	123,5	50
342.E63.016.129	63	3-16	129	50

Höchste Präzision sowie genauester Rundlauf, mechanische Spannkraftverstärkung garantiert eine sichere Spannung. Während der Bearbeitung, ob Rechts- oder Linkslauf sowie bei Spindelstop, ist ein selbständiges Lösen nicht möglich.
 High precision and accurate concentricity, mechanical amplification is the guarantee of the very high clamping force.
 During the working process, if with right- or left-hand rotation or spindle stop, no automatic slackening will be possible.

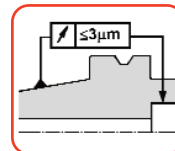
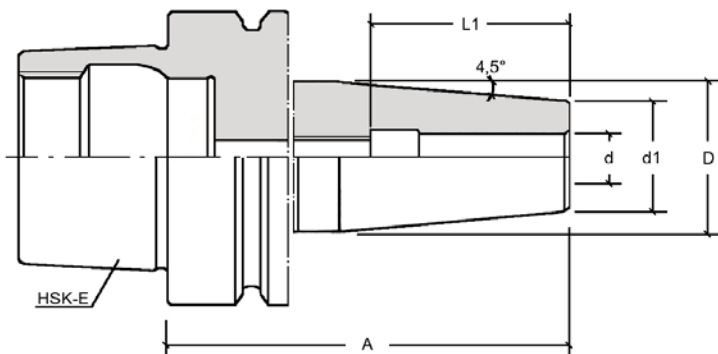


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-E

Shrink chucks for mounting solid carbide and HSS shanks

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.E25.003.040	25	3	40	11	15	10
271.E25.003.045	25	3	45	12	17,5	15
271.E25.003.060	25	3	60	8	16	15
271.E25.004.040	25	4	40	16	22	20
271.E25.004.045	25	4	45	12	17,5	15
271.E25.004.060	25	4	60	9	17	15
271.E25.A04.060	25	4	60	10	18	20
271.E25.005.050	25	5	50	16	22	20
271.E25.006.045	25	6	45	12	17,5	20
271.E25.006.050	25	6	50	21	26	36
271.E25.006.070	25	6	70	12	20	36
271.E25.008.050	25	8	50	21	26	36
271.E25.008.070	25	8	70	14	20	36
271.E25.010.050	25	10	50	21	26	42
271.E25.010.070	25	10	70	16	20	41
271.E25.012.050	25	12	50	24	26	47

271.E32.003.060	32	3	60	10	16	14
271.E32.A03.060	32	3	60	12	18	20
271.E32.003.070	32	3	70	11	15	10
271.E32.004.060	32	4	60	12	18	20
271.E32.A04.060	32	4	60	14	20	20
271.E32.004.070	32	4	70	16	22	20
271.E32.004.160	32	4	160	14	21	10
271.E32.005.060	32	5	60	12	18	20
271.E32.A05.060	32	5	60	16	22	25
271.E32.005.070	32	5	70	16	22	20
271.E32.005.160	32	5	160	16	24	20
271.E32.006.070	32	6	70	21	22	36
271.E32.A06.070	32	6	70	21	25	36
271.E32.006.160	32	6	160	21	27	36
271.E32.008.070	32	8	70	21	25	36
271.E32.008.160	32	8	160	21	27	36
271.E32.010.070	32	10	70	24	26	42
271.E32.A10.070	32	10	70	24	29	42
271.E32.010.075	32	10	75	24	29	41
271.E32.010.160	32	10	160	24	32	41
271.E32.012.080	32	12	80	24	26	47
271.E32.A12.080	32	12	80	24	29	47
271.E32.012.160	32	12	160	24	32	47

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.E40.003.060	40	3	60	10	16	14
271.E40.A03.060	40	3	60	12	18	15
271.E40.003.075	40	3	75	11	15	10
271.E40.003.120	40	3	120	10	16	9
271.E40.A03.120	40	3	120	12	18	20
271.E40.003.160	40	3	160	10	16	9
271.E40.004.060	40	4	60	12	18	17
271.E40.A04.060	40	4	60	14	20	20
271.E40.004.080	40	4	80	16	22	20
271.E40.004.120	40	4	120	12	20	12
271.E40.A04.120	40	4	120	14	20	20
271.E40.004.160	40	4	160	12	20	12
271.E40.005.060	40	5	60	12	18	20
271.E40.A05.060	40	5	60	14	20	20
271.E40.005.080	40	5	80	16	22	20
271.E40.005.120	40	5	120	12	22	15
271.E40.A05.120	40	5	120	16	22	25
271.E40.005.160	40	5	160	12	22	15
271.E40.006.060	40	6	60	21	27	22
271.E40.006.080	40	6	80	21	27	36
271.E40.006.120	40	6	120	21	27	36
271.E40.006.130	40	6	130	21	27	36
271.E40.006.160	40	6	160	21	27	36
271.E40.008.060	40	8	60	21	27	26
271.E40.008.080	40	8	80	21	27	36
271.E40.008.120	40	8	120	21	27	36
271.E40.008.130	40	8	130	21	27	36
271.E40.008.160	40	8	160	21	27	36
271.E40.010.060	40	10	60	24	32	29
271.E40.010.080	40	10	80	24	32	42
271.E40.010.120	40	10	120	24	32	42
271.E40.010.130	40	10	130	24	32	41
271.E40.010.160	40	10	160	24	32	42
271.E40.012.060	40	12	60	24	32	46
271.E40.012.090	40	12	90	24	32	47
271.E40.012.120	40	12	120	24	32	47
271.E40.012.130	40	12	130	24	32	47
271.E40.012.160	40	12	160	24	32	47
271.E40.014.060	40	14	60	27	34	46
271.E40.014.090	40	14	90	27	34	47
271.E40.014.120	40	14	120	27	34	47
271.E40.014.130	40	14	130	27	34	47
271.E40.014.160	40	14	160	27	34	47
271.E40.016.060	40	16	60	27	34	49
271.E40.016.090	40	16	90	27	34	50
271.E40.016.120	40	16	120	27	34	50
271.E40.016.130	40	16	130	27	34	50
271.E40.016.160	40	16	160	27	34	50



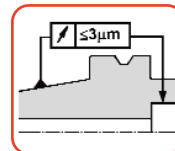
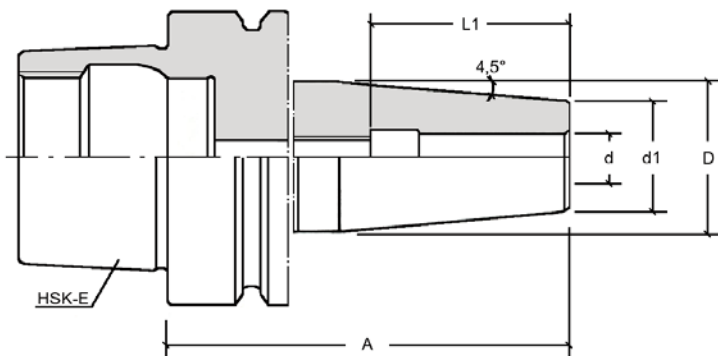


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-E

Shrink chucks for mounting solid carbide and HSS shanks

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
-------------------------	-----	---------	---------	----------	---------	----------

271.E50.003.065	50	3	65	12	18	15
271.E50.003.080	50	3	80	10	16	14
271.E50.A03.080	50	3	80	11	15	10
271.E50.003.120	50	3	120	10	16	9
271.E50.A03.120	50	3	120	11	21	10
271.E50.B03.120	50	3	120	12	18	20
271.E50.003.160	50	3	160	10	16	9
271.E50.A03.160	50	3	160	11	21	10
271.E50.004.065	50	4	65	14	20	15
271.E50.004.080	50	4	80	12	20	17
271.E50.A04.080	50	4	80	16	22	20
271.E50.004.120	50	4	120	12	20	12
271.E50.A04.120	50	4	120	14	20	20
271.E50.B04.120	50	4	120	14	21	10
271.E50.004.160	50	4	160	12	20	12
271.E50.A04.160	50	4	160	14	21	10
271.E50.005.065	50	5	65	14	22	20
271.E50.005.080	50	5	80	12	20,5	20
271.E50.A05.080	50	5	80	16	22	20
271.E50.005.120	50	5	120	12	22	15
271.E50.A05.120	50	5	120	16	22	20
271.E50.B05.120	50	5	120	16	24	20
271.E50.005.160	50	5	160	12	22	15
271.E50.A05.160	50	5	160	16	24	20
271.E50.006.065	50	6	65	21	27	23
271.E50.006.080	50	6	80	21	27	36
271.E50.006.120	50	6	120	21	27	36
271.E50.006.160	50	6	160	21	27	36

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.E50.008.065	50	8	65	21	27	26
271.E50.008.080	50	8	80	21	27	36
271.E50.008.120	50	8	120	21	27	36
271.E50.008.160	50	8	160	21	27	36
271.E50.010.065	50	10	65	24	32	31
271.E50.010.080	50	10	80	24	32	41
271.E50.010.085	50	10	85	24	32	42
271.E50.010.120	50	10	120	24	32	42
271.E50.010.160	50	10	160	24	32	42
271.E50.012.065	50	12	65	24	32	36
271.E50.012.090	50	12	90	24	32	47
271.E50.012.120	50	12	120	24	32	47
271.E50.012.160	50	12	160	24	32	47
271.E50.014.065	50	14	65	27	34	36
271.E50.014.090	50	14	90	27	34	47
271.E50.014.120	50	14	120	27	34	47
271.E50.014.160	50	14	160	27	34	47
271.E50.016.065	50	16	65	27	34	36
271.E50.016.095	50	16	95	27	34	50
271.E50.016.120	50	16	120	27	34	50
271.E50.016.160	50	16	160	27	34	50
271.E50.018.095	50	18	95	33	42	50
271.E50.018.120	50	18	120	33	42	50
271.E50.018.160	50	18	160	33	42	50
271.E50.020.100	50	20	100	33	42	52
271.E50.020.120	50	20	120	33	42	52
271.E50.020.160	50	20	160	33	42	52



C11

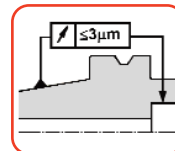
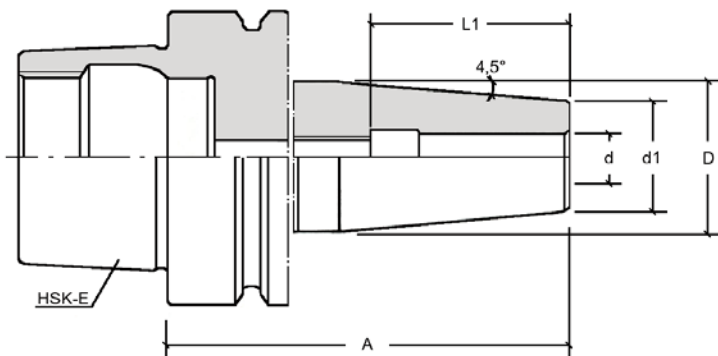


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-E

Shrink chucks for mounting solid carbide and HSS shanks

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
-------------------------	-----	---------	---------	----------	---------	----------

271.E63.003.080	63	3	80	10	16	14
271.E63.A03.080	63	3	80	11	15	10
271.E63.B03.080	63	3	80	12	18	20
271.E63.003.120	63	3	120	10	16	9
271.E63.A03.120	63	3	120	12	18	20
271.E63.003.160	63	3	160	10	16	9
271.E63.A03.160	63	3	160	11	21	10
271.E63.004.080	63	4	80	12	20	17
271.E63.A04.080	63	4	80	14	20	20
271.E63.B04.080	63	4	80	14	22	20
271.E63.004.120	63	4	120	12	20	12
271.E63.A04.120	63	4	120	14	20	20
271.E63.B04.120	63	4	120	14	21	10
271.E63.004.160	63	4	160	12	20	12
271.E63.A04.160	63	4	160	14	21	10
271.E63.005.080	63	5	80	12	20,5	20
271.E63.A05.080	63	5	80	16	22	20
271.E63.B05.080	63	5	80	16	22	25
271.E63.005.120	63	5	120	12	22	15
271.E63.A05.120	63	5	120	16	22	25
271.E63.005.160	63	5	160	12	22	15
271.E63.A05.160	63	5	160	16	24	20
271.E63.006.080	63	6	80	21	27	36
271.E63.006.120	63	6	120	21	27	36
271.E63.006.160	63	6	160	21	27	36
271.E63.008.080	63	8	80	21	27	36
271.E63.008.120	63	8	120	21	27	36
271.E63.008.160	63	8	160	21	27	36

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
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271.E63.010.085	63	10	85	24	32	41
271.E63.010.120	63	10	120	24	32	41
271.E63.010.160	63	10	160	24	32	41
271.E63.012.085	63	12	85	24	32	46
271.E63.012.090	63	12	90	24	32	47
271.E63.012.120	63	12	120	24	32	47
271.E63.012.160	63	12	160	24	32	47
271.E63.014.090	63	14	90	27	34	47
271.E63.014.120	63	14	120	27	34	47
271.E63.014.160	63	14	160	27	34	47
271.E63.016.090	63	16	90	27	34	49
271.E63.016.095	63	16	95	27	34	50
271.E63.016.120	63	16	120	27	34	50
271.E63.016.160	63	16	160	27	34	50
271.E63.018.095	63	18	95	33	42	50
271.E63.018.120	63	18	120	33	42	50
271.E63.018.160	63	18	160	33	42	50
271.E63.020.100	63	20	100	33	42	52
271.E63.020.120	63	20	120	33	42	52
271.E63.020.160	63	20	160	33	42	52
271.E63.025.115	63	25	115	44	53	58
271.E63.025.120	63	25	120	44	53	58
271.E63.025.160	63	25	160	44	53	58
271.E63.A25.160	63	25	160	44	53	58
271.E63.032.120	63	32	120	44	53	62
271.E63.032.160	63	32	160	44	53	62



C11

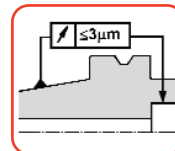
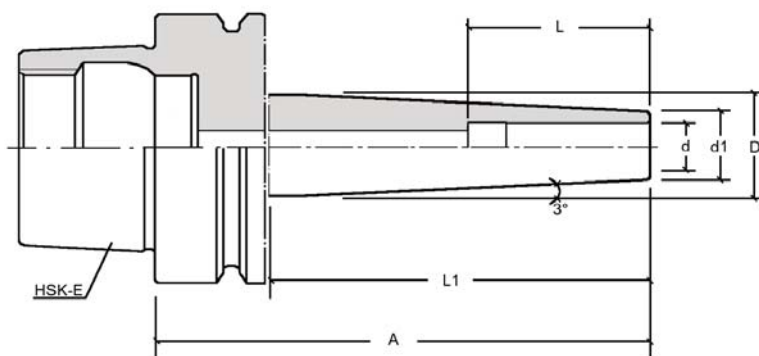


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-E

Shrink chucks for mounting solid carbide and HSS shanks

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm	L mm
272.E25.003.060	25	3	60	8	16	50	15
272.E25.004.060	25	4	60	9	17	50	15
272.E25.005.060	25	5	60	10	18	50	20
272.E40.003.080	40	3	80	8	14	60	20
272.E40.004.080	40	4	80	9	15	60	20
272.E40.005.080	40	5	80	10	16	60	25
272.E40.006.080	40	6	80	12	18	60	36
272.E40.008.080	40	8	80	14	20	60	36
272.E40.010.080	40	10	80	16	22	60	41
272.E50.003.080	50	3	80	8	14	54	20
272.E50.004.080	50	4	80	9	15	54	20
272.E50.005.080	50	5	80	10	16	54	25
272.E50.006.080	50	6	80	12	18	54	36
272.E50.008.080	50	8	80	14	20	54	36
272.E50.010.080	50	10	80	16	22	54	41

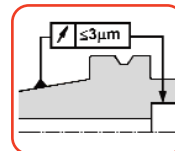
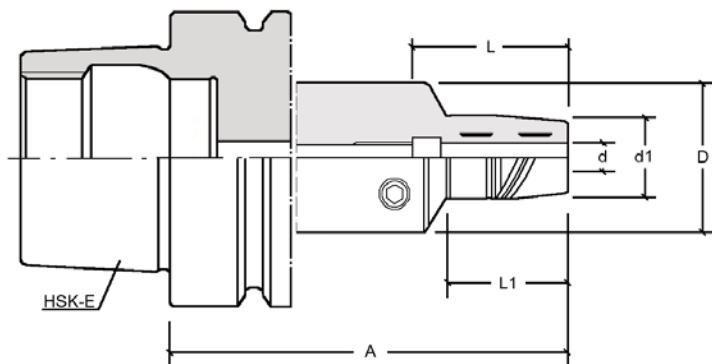


Hydro-Dehnspannfutter

Hydraulic expansibles chuck

HSK-E

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	L mm
260.E25.006.070	25	6	70	26	37
260.E25.008.080	25	8	80	28	37
260.E25.010.085	25	10	85	30	42
260.E25.012.090	25	12	90	32	47
260.E32.006.080	32	6	80	26	37
260.E32.008.080	32	8	80	28	37
260.E32.010.085	32	10	85	30	42
260.E32.012.090	32	12	90	32	47
260.E40.006.070	40	6	70	26	37
260.E40.006.080	40	6	80	26	37
260.E40.008.070	40	8	70	28	37
260.E40.008.080	40	8	80	28	37
260.E40.010.075	40	10	75	30	41
260.E40.010.085	40	10	85	30	42
260.E40.012.080	40	12	80	32	46
260.E40.012.090	40	12	90	32	47
260.E40.014.090	40	14	90	34	47
260.E40.016.100	40	16	100	38	52
260.E40.020.100	40	20	100	42	52

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	L mm
260.E50.006.070	50	6	70	26	37
260.E50.006.080	50	6	80	26	37
260.E50.008.070	50	8	70	28	37
260.E50.008.080	50	8	80	28	37
260.E50.010.075	50	10	75	30	41
260.E50.010.085	50	10	85	30	42
260.E50.012.085	50	12	85	32	46
260.E50.012.090	50	12	90	32	47
260.E50.014.085	50	14	85	34	46
260.E50.014.090	50	14	90	34	47
260.E50.016.090	50	16	90	38	49
260.E50.016.095	50	16	95	38	52
260.E50.018.090	50	18	90	40	49
260.E50.018.095	50	18	95	40	52
260.E50.020.090	50	20	90	42	51
260.E50.020.100	50	20	100	42	52
260.E63.006.080	63	6	80	26	37
260.E63.008.080	63	8	80	28	37
260.E63.010.085	63	10	85	30	42
260.E63.012.090	63	12	90	32	47
260.E63.014.090	63	14	90	34	47
260.E63.016.095	63	16	95	38	52
260.E63.018.095	63	18	95	40	52
260.E63.020.100	63	20	100	42	52
260.E63.025.120	63	25	120	50	58
260.E63.032.125	63	32	125	60	62



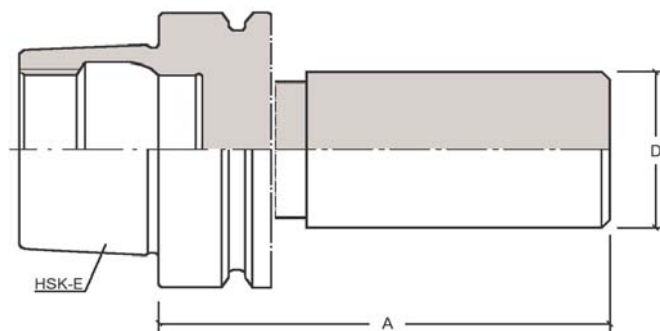


Rohlinge zur Anfertigung von Sonderwerkzeugen

HSK-E

Blanks for production of special tools

HSK-E



Preise auf Anfrage

Bestell Nr. Code No.	HSK	D mm	A mm
361.E25.030.040	25	30	40
361.E25.025.100	25	25	100
361.E32.032.100	32	32	100
361.E40.040.100	40	40	100
361.E40.040.125	40	40,5	125
361.E50.050.100	50	50	100
361.E50.050.125	50	50,5	125
361.E63.063.100	63	63	100
361.E63.063.250	63	63,5	250

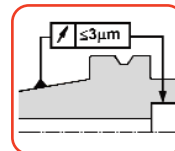
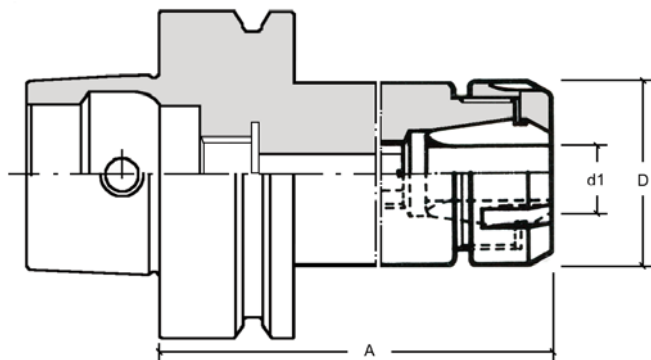


Zangenfutter für ER-Spannzangen DIN 6499

HSK-F

Collet chucks for ER-Collets to DIN 6499

HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Zange Collet ER	Spannbereich Capacity d1	A mm	D mm
241.F40.016.060	40	ER16	1-10	60	28
241.F40.025.060	40	ER25	2-16	60	50
241.F50.025.070	50	ER25	2-16	70	42
241.F50.032.080	50	ER32	2-20	80	50
241.F50.040.080	50	ER40	3-26	80	63
241.F63.016.060	63	ER16	1-10	60	28
241.F63.016.080	63	ER16	1-10	80	28
241.F63.016.100	63	ER16	1-10	100	28
241.F63.016.160	63	ER16	1-10	160	28
241.F63.025.070	63	ER25	2-16	70	42
241.F63.025.080	63	ER25	2-16	80	42
241.F63.032.090	63	ER32	2-20	90	50
241.F63.032.100	63	ER32	2-20	100	50
241.F63.032.160	63	ER32	2-20	160	50
241.F63.040.075	63	ER40	3-26	75	63
241.F63.040.090	63	ER40	3-26	90	63
241.F63.040.125	63	ER40	3-26	125	63
241.F63.040.160	63	ER40	3-26	160	63



C08-09



C13



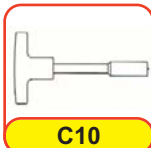
C02-03-04



C05



C10



C10

Lieferumfang:
Mit gewuchteter Spannmutter
Delivery:
With balanced clamping nut

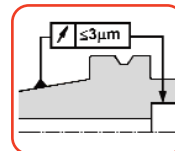
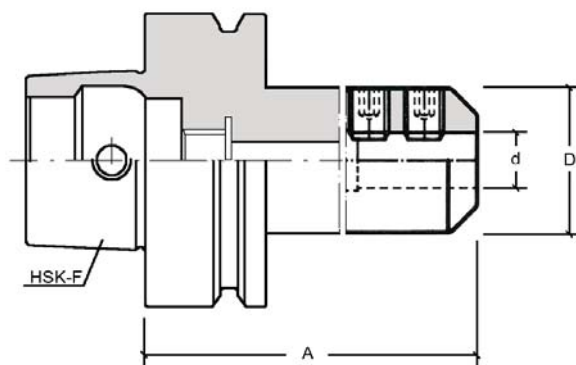


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

HSK-F

Weldon chucks DIN 6359 for shanks to DIN1835B

HSK-F



Preise auf Anfrage

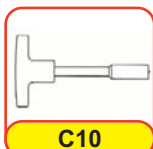
Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
269.F63.006.065	63	6	65	25
269.F63.008.065	63	8	65	28
269.F63.010.065	63	10	65	35
269.F63.012.080	63	12	80	42
269.F63.014.080	63	14	80	44
269.F63.016.080	63	16	80	48
269.F63.018.080	63	18	80	48
269.F63.020.080	63	20	80	52
269.F63.025.110	63	25	110	65
269.F63.032.110	63	32	110	72



C11



C10



C10

Hinweis:
Ab $\varnothing d$ 25mm mit 2 Spannschrauben
Note:
From $\varnothing d$ 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n)
Delivery:
With clamping screw(s)

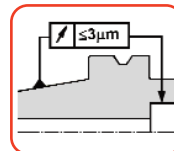
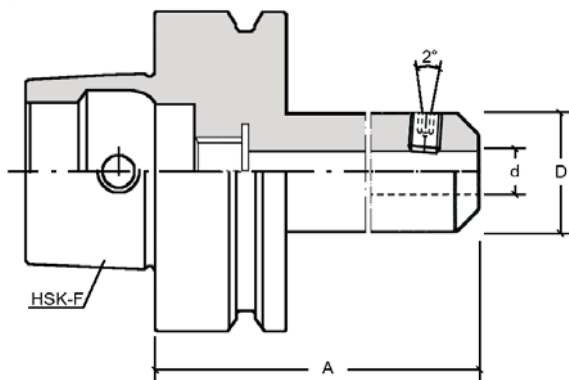


Fräsfutter DIN 6359 Whistle Notch für Zylinderschäfte DIN1835E

HSK-F

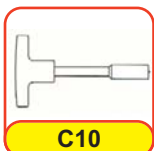
Whistle Notch chucks DIN 6359 for shanks to DIN1835E

HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d	A mm	D mm
268.F63.006.100	63	6	100	25
268.F63.008.100	63	8	100	28
268.F63.010.100	63	10	100	35
268.F63.012.100	63	12	100	42
268.F63.014.100	63	14	100	44
268.F63.016.100	63	16	100	48
268.F63.018.100	63	18	100	48
268.F63.020.100	63	20	100	52
268.F63.025.120	63	25	120	65
268.F63.032.120	63	32	120	72



Hinweis:
Ab $\varnothing d$ 25mm mit 2 Spannschrauben
Note:
From $\varnothing d$ 25mm with 2 clamping screws

Lieferumfang:
Mit Spannschraube(n) und axialer Anschlagschraube
Delivery:
With clamping screw(s) and stopscrew

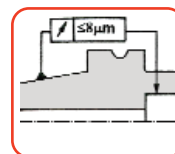
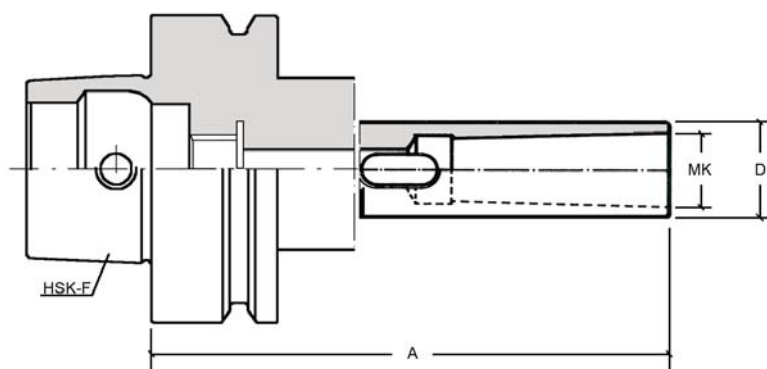


Zwischenhülse für MK mit Austreibblappen DIN 6383

HSK-F

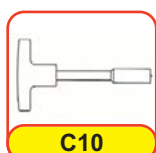
Morse taper adaptor for MT with tang DIN 6383

HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Morse Kegel Morse Taper MK	A mm	D mm
220.F63.001.100	63	1	100	25
220.F63.002.120	63	2	120	32
220.F63.003.140	63	3	140	40
220.F63.004.160	63	4	160	48



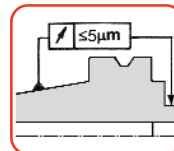
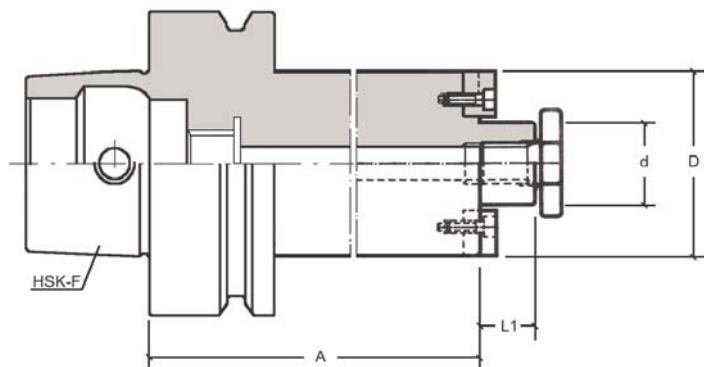


Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser

HSK-F

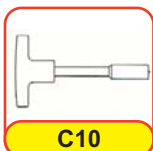
Shell mill holders DIN 6357 with enlarged contact face

HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	L1 mm	A mm	D mm
239.F63.016.050	63	16	17	50	40
239.F63.016.160	63	16	17	160	40
239.F63.022.050	63	22	19	50	48
239.F63.022.100	63	22	19	100	48
239.F63.022.160	63	22	19	160	48
239.F63.027.060	63	27	21	60	60
239.F63.027.100	63	27	21	100	60
239.F63.032.060	63	32	24	60	78
239.F63.032.100	63	32	24	100	78
239.F63.040.100	63	40	27	100	89



Lieferumfang:
Mit Mitnehmersteinen, Kreuzschraube und Schraube
DIN912
Delivery:
With drivers, cross head retaining screw and screw
DIN912

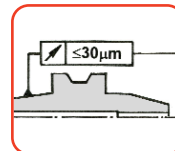
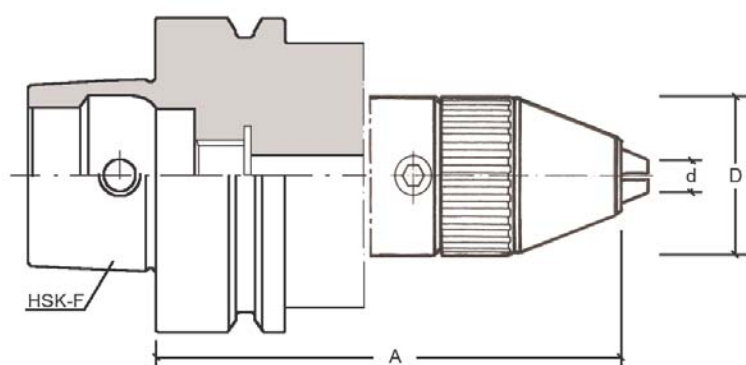


NC-Bohrfutter für Rechts- und Linkslauf

HSK-F

NC-Drill chuck for right- and left hand rotation

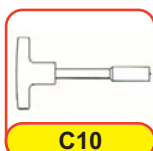
HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	Spannbereich Capacity d mm	A mm	D mm
342.F63.013.123	63	1-13	123,5	50
342.F63.016.129	63	3-16	129,5	50

Höchste Präzision sowie genauester Rundlauf, mechanische Spannkraftverstärkung garantiert eine sichere Spannung. Während der Bearbeitung, ob Rechts- oder Linkslauf sowie bei Spindelstop, ist ein selbständiges Lösen nicht möglich.
 High precision and accurate concentricity, mechanical amplification is the guarantee of the very high clamping force.
 During the working process, if with right- or left-hand rotation or spindle stop, no automatic slackening will be possible.



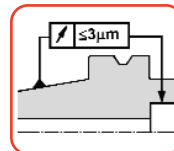
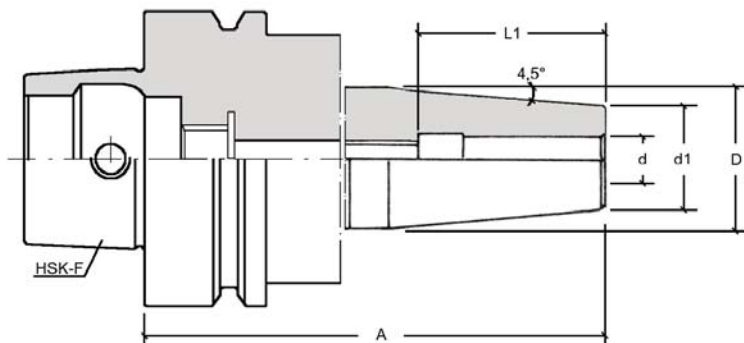


Schrumpffutter zum Spannen von HM und HSS Schäften

HSK-F

Shrink chucks for mounting solid carbide and HSS shanks

HSK-F



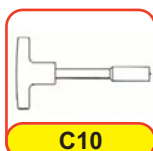
Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
271.F63.003.080	63	3	80	11	15	10
271.F63.A03.080	63	3	80	12	18	20
271.F63.003.120	63	3	120	11	15	10
271.F63.004.080	63	4	80	14	20	20
271.F63.A04.080	63	4	80	14	22	20
271.F63.004.120	63	4	120	16	22	20
271.F63.004.160	63	4	160	16	22	20
271.F63.005.080	63	5	80	16	22	20
271.F63.A05.080	63	5	80	16	22	25
271.F63.005.120	63	5	120	16	22	20
271.F63.005.160	63	5	160	16	22	20
271.F63.006.080	63	6	80	21	27	36
271.F63.006.120	63	6	120	21	27	36
271.F63.006.160	63	6	160	21	27	36
271.F63.008.080	63	8	80	21	27	36
271.F63.008.120	63	8	120	21	27	36
271.F63.008.160	63	8	160	21	27	36
271.F63.010.085	63	10	85	24	32	42
271.F63.010.120	63	10	120	24	32	42
271.F63.010.160	63	10	160	24	32	42

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	D mm	L1 mm
271.F63.012.090	63	12	90	24	32	47
271.F63.012.120	63	12	120	24	32	47
271.F63.012.160	63	12	160	24	32	47
271.F63.014.090	63	14	90	27	34	47
271.F63.014.095	63	14	95	27	34	47
271.F63.014.120	63	14	120	27	34	47
271.F63.014.160	63	14	160	27	34	47
271.F63.016.095	63	16	95	27	34	50
271.F63.016.120	63	16	120	27	34	50
271.F63.016.160	63	16	160	27	34	50
271.F63.018.095	63	18	95	33	42	50
271.F63.018.120	63	18	120	33	42	50
271.F63.018.160	63	18	160	33	42	50
271.F63.020.100	63	20	100	33	42	52
271.F63.020.160	63	20	160	33	42	52
271.F63.025.115	63	25	115	44	54	58



C10



C10



C11

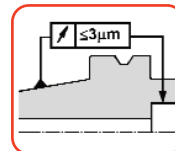
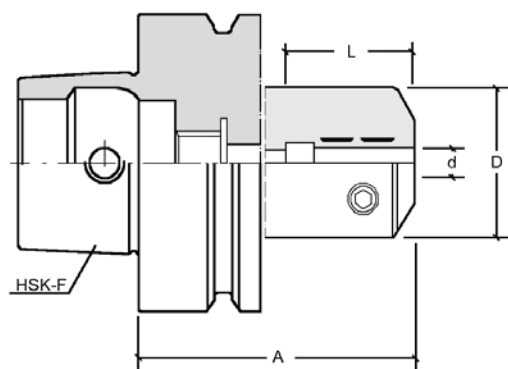


Hydro-Dehnspannfutter

Hydraulic expansibles chuck

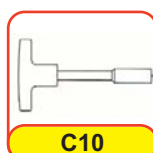
HSK-F

HSK-F



Preise auf Anfrage

Bestell Nr. Code No.	HSK	d mm	A mm	d1 mm	L mm
260.F63.006.100	63	6	100	26	37
260.F63.008.100	63	8	100	28	37
260.F63.010.100	63	10	100	30	42
260.F63.012.100	63	12	100	32	47
260.F63.014.100	63	14	100	34	47
260.F63.016.100	63	16	100	38	52
260.F63.018.100	63	18	100	40	52
260.F63.020.100	63	20	100	42	52
260.F63.025.120	63	25	120	50	58
260.F63.032.125	63	32	125	60	62



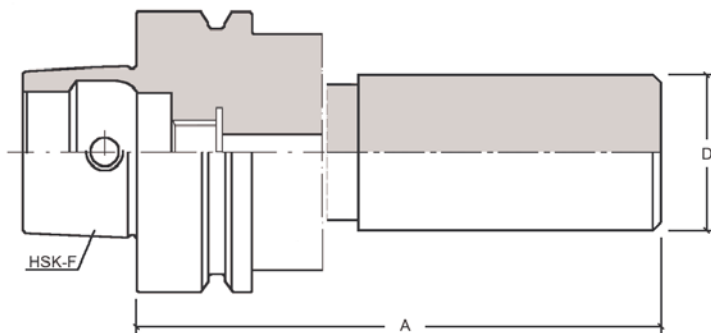


Rohlinge zur Anfertigung von Sonderwerkzeugen

HSK-F

Blanks for production of special tools

HSK-F



Preise auf Anfrage

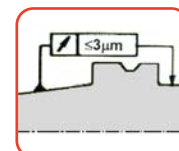
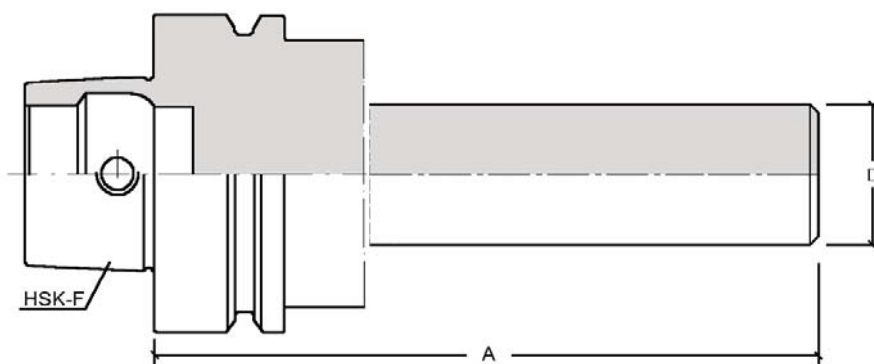
Bestell Nr. Code No.	HSK	D mm	A mm
361.F63.063.100	63	63	100
361.F63.063.125	63	63	125
361.F63.063.250	63	63	250

Kontrolldorne

HSK-F

Test abors

HSK-F



Preise auf Anfrage

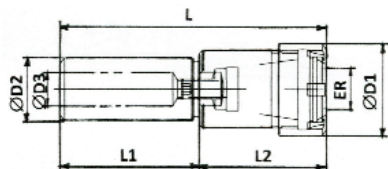
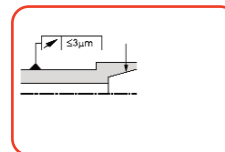
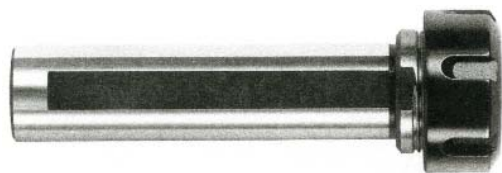
Bestell Nr. Code No.	HSK	D mm	A mm
898.F63.040.250	63	40	250





ER-Spannfutter mit Zylinderschaft mit Standard Spannmutter

ER-Collet with cylindrical shank and with standard nut



Bestell Nr. Code No.	ØD2 h6	Spannbereich Capacity	ØD1 mm	ØD3 mm	L1 mm	L2 mm	L mm
ER16							
253.W16.N16.166	16	1-10	32	7	130	36	166
253.W20.N16.081	20	1-10	32	11	50	31	81
253.W20.N16.131	20	1-10	32	11	100	31	131
253.W20.N16.161	20	1-10	32	11	130	31	161
253.W25.N16.087	25	1-10	32	11	60	27	87
ER20							
253.W20.N20.082	20	1-13	35	11	46	36	82
253.W20.N20.096	20	1-13	35	11	60	36	96
253.W20.N20.136	20	1-13	35	11	100	36	136
253.W25.N20.088	25	1-13	35	13	60	28	88



C08-09



C13



C02-03-04



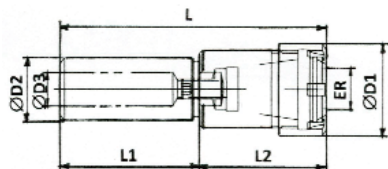
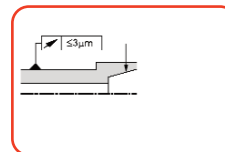
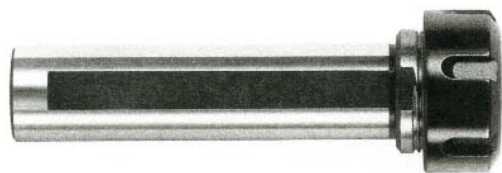
C11

Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube
Delivery: With balanced clamping nut and axial stop screw



ER-Spannfutter mit Zylinderschaft mit Standard Spannmutter

ER-Collet with cylindrical shank and with standard nut



Bestell Nr. Code No.	ØD2 h6	Spannbereich Capacity	ØD1 mm	ØD3 mm	L1 mm	L2 mm	L mm
ER25							
253.W16.N25.116	16	1-16	42	9	70	46	116
253.W20.N25.096	20	1-16	42	11	50	46	96
253.W20.N25.146	20	1-16	42	11	100	46	146
253.W20.N25.206	20	1-16	42	11	160	46	206
253.W25.N25.082	25	1-16	42	13	50	32	82
253.W25.N25.102	25	1-16	42	13	70	32	102
253.W25.N25.132	25	1-16	42	13	100	32	132
253.W25.N25.192	25	1-16	42	13	160	32	192
253.W32.N25.098	32	1-16	42	19	70	28	98
253.W32.N25.128	32	1-16	42	19	100	28	128
253.W32.N25.148	32	1-16	42	19	120	28	148
253.W32.N25.178	32	1-16	42	19	150	28	178
253.W40.N25.112	40	1-16	42	19	70	42	112
ER32							
253.W20.N32.104	20	2-20	50	13	50	54	104
253.W20.N32.154	20	2-20	50	13	100	54	154
253.W20.N32.214	20	2-20	50	13	160	54	214
253.W25.N32.104	25	2-20	50	13	50	54	104
253.W25.N32.124	25	2-20	50	13	70	54	124
253.W25.N32.154	25	2-20	50	13	100	54	154
253.W25.N32.184	25	2-20	50	13	130	54	184
253.W32.N32.088	32	2-20	50	23	50	38	88
253.W32.N32.108	32	2-20	50	23	70	38	108
253.W32.N32.138	32	2-20	50	23	100	38	138
253.W32.N32.158	32	2-20	50	23	120	38	158
253.W32.N32.188	32	2-20	50	23	150	38	188
253.W40.N32.100	40	2-20	50	23	70	30	100
253.W40.N32.130	40	2-20	50	23	100	30	130
253.W40.N32.160	40	2-20	50	23	130	30	160

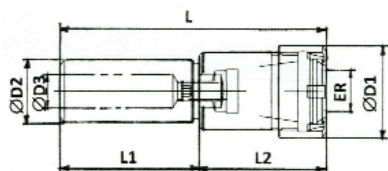
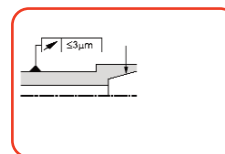


Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagsschraube
Delivery: With balanced clamping nut and axial stop screw



ER-Spannfutter mit Zylinderschaft mit MINI Spannmutter

ER-Collet with cylindrical shank and with MINI nut



Bestell Nr. Code No.	ØD2 h6	Spannbereich Capacity	ØD1 mm	ØD3 mm	L1 mm	L2 mm	L mm
ER11							
253.W10.011.100	10	1-7	16	~	75	25	100
253.W12.011.100	12	1-7	16	~	75	25	100
253.W16.011.100	16	1-7	16	~	75	25	100
253.W16.011.130	16	1-7	16	~	105	25	130
253.W16.011.160	16	1-7	16	~	135	25	160
253.W20.011.050	20	1-7	16	~	25	25	50
253.W20.011.100	20	1-7	16	~	75	25	100
253.W20.011.130	20	1-7	16	~	105	25	130
253.W20.011.160	20	1-7	16	~	135	25	160
ER16							
253.W12.016.080	12	1-10	22	5	50	30	80
253.W12.016.120	12	1-10	22	5	90	30	120
253.W16.016.100	16	1-10	22	5	70	30	100
253.W16.016.130	16	1-10	22	5	100	30	130
253.W16.016.160	16	1-10	22	5	130	30	160
253.W16.016.200	16	1-10	22	5	170	30	200
253.W20.016.100	20	1-10	22	5	70	30	100
253.W20.016.130	20	1-10	22	5	100	30	130
253.W20.016.160	20	1-10	22	5	130	30	160
ER20							
253.W20.020.100	20	1-13	28	9	60	40	100
253.W20.020.160	20	1-13	28	9	120	40	160
253.W20.020.200	20	1-13	28	9	160	40	200
253.W25.020.160	25	1-13	28	9	120	40	160



C08



C13



C02-03-04



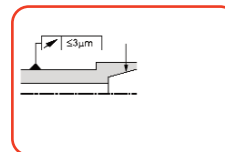
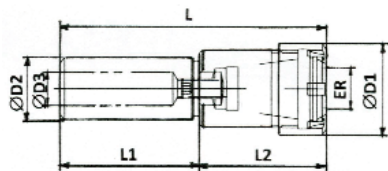
C11

Lieferumfang: Mit gewuchteter Spannmutter und axialer Anschlagsschraube
Delivery: With balanced clamping nut and axial stopscrew



ER-Spannfutter mit Zylinderschaft mit MINI Spannmutter

ER-Collet with cylindrical shank and with MINI nut



Bestell Nr. Code No.	ØD2 h6	Spannbereich Capacity	ØD1 mm	ØD3 mm	L1 mm	L2 mm	L mm
ER11							
253.006.011.070	6	1-7	16	~	45	25	70
253.007.011.070	7	1-7	16	~	45	25	70
253.008.011.080	8	1-7	16	~	55	25	80
253.008.011.125	8	1-7	16	~	100	25	125
253.010.011.080	10	1-7	16	5	55	25	80
253.010.011.105	10	1-7	16	5	80	25	105
253.010.011.125	10	1-7	16	5	100	25	125
253.010.011.155	10	1-7	16	5	130	25	155
253.012.011.080	12	1-7	16	7	55	25	80
253.012.011.095	12	1-7	16	7	70	25	95
253.012.011.125	12	1-7	16	7	100	25	125
253.012.011.165	12	1-7	16	7	140	25	165
253.016.011.062	16	1-7	16	7	40	22	62
253.016.011.082	16	1-7	16	7	60	22	82
253.016.011.102	16	1-7	16	7	80	22	102
253.016.011.122	16	1-7	16	7	100	22	122
253.016.011.152	16	1-7	16	7	130	22	152
253.016.011.182	16	1-7	16	7	160	22	182
253.016.011.222	16	1-7	16	7	200	22	222
ER16							
253.008.016.092	8	1-10	22	~	55	37	92
253.010.016.097	10	1-10	22	5	60	37	97
253.010.016.137	10	1-10	22	5	100	37	137
253.012.016.092	12	1-10	22	7	55	37	92
253.012.016.117	12	1-10	22	7	80	37	117
253.012.016.157	12	1-10	22	7	120	37	157
253.016.016.072	16	1-10	22	7	35	37	72
253.016.016.097	16	1-10	22	7	60	37	97
253.016.016.117	16	1-10	22	7	80	37	117
253.016.016.137	16	1-10	22	7	100	37	137
253.016.016.167	16	1-10	22	7	130	37	167
253.016.016.197	16	1-10	22	7	160	37	197
253.016.016.237	16	1-10	22	7	200	37	237
ER20							
253.016.020.095	16	1-13	28	9	55	40	95
253.016.020.140	16	1-13	28	9	100	40	140
253.016.020.200	16	1-13	28	9	160	40	200



C08



C13



C02-03-04



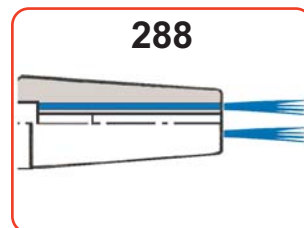
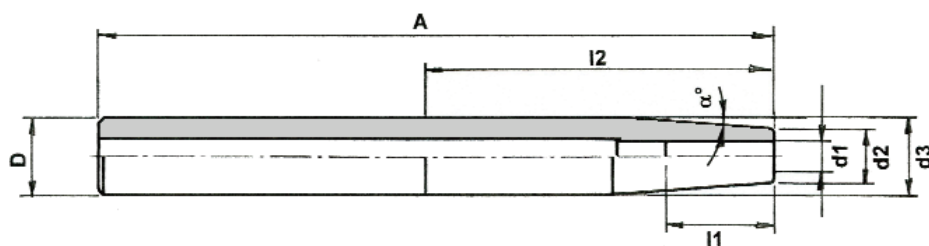
C11

Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube
Delivery: With balanced clamping nut and axial stopscrew



Schrumpfverlängerungen ohne Längeneinstellschraube

Shrink fit extensions without length adjustment screw

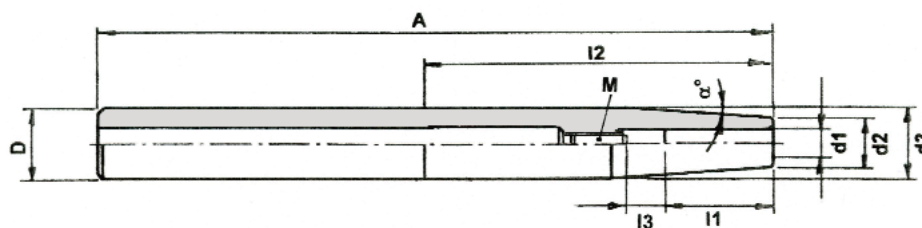


Bestell Nr. Code No.	D h6	d1 mm	d2 mm	d3 mm	α°	l1 mm	l2 mm	A mm
286.012.003.110	12	3	8	11,8	3°	12	63	110
286.012.003.160	12	3	8	12	4°30'	12	~	160
286.012.004.110	12	4	10	11,8	3°	16	63	110
286.012.004.160	12	4	8	12	4°30'	16	~	160
286.012.005.110	12	5	11	11,8	3°	20	63	110
286.016.003.160	16	3	10	16	4°30'	12	~	160
286.016.003.200	16	3	9	16	3°	12	150	200
286.016.004.160	16	4	10	16	4°30'	16	~	160
286.016.004.200	16	4	10	16	3°	16	150	200
286.016.005.160	16	5	10	16	4°30'	20	~	160
286.016.005.200	16	5	10	16	3°	20	150	200
286.016.006.160	16	6	10	16	4°30'	26	~	160
286.020.005.160	20	5	14	20	4°30'	20	~	160
286.020.006.160	20	6	14	20	4°30'	26	~	160
286.020.006.300	20	6	14	20	4°30'	26	~	300
286.020.008.160	20	8	14	20	4°30'	26	~	160
286.020.008.300	20	8	14	20	4°30'	26	~	300
286.025.008.160	25	8	19	25	4°30'	26	~	160
286.025.008.300	25	8	19	25	4°30'	26	~	300
286.025.010.160	25	10	20	25	4°30'	32	~	160
286.025.010.300	25	10	20	25	4°30'	32	~	300
286.025.012.160	25	12	20	25	4°30'	37	~	160
286.025.012.300	25	12	20	25	4°30'	37	~	300
286.025.014.160	25	14	20	25	4°30'	37	~	160
286.025.014.300	25	14	20	25	4°30'	37	~	300
286.025.016.160	25	16	22	25	4°30'	40	~	160
286.025.016.300	25	16	22	25	4°30'	40	~	300
286.032.010.160	32	10	24	32	4°30'	32	~	160
286.032.010.300	32	10	24	32	4°30'	32	~	300
286.032.012.160	32	12	24	32	4°30'	37	~	160
286.032.012.300	32	12	24	32	4°30'	37	~	300
286.032.014.160	32	14	27	32	4°30'	37	~	160
286.032.014.300	32	14	27	32	4°30'	37	~	300
286.032.016.160	32	16	27	32	4°30'	40	~	160
286.032.016.300	32	16	27	32	4°30'	40	~	300
286.032.018.160	32	18	27	32	4°30'	40	~	160
286.032.020.160	32	20	27	32	4°30'	42	~	160
286.032.020.300	32	20	27	32	4°30'	42	~	300
288.020.006.160	25	6	14	20	4°30'	26	~	160
288.025.008.160	25	8	19	25	4°30'	26	~	160
288.025.010.160	25	10	20	25	4°30'	32	~	160
288.032.010.160	32	10	24	32	4°30'	32	~	160
288.032.012.160	32	12	24	32	4°30'	37	~	160
288.032.014.160	32	14	27	32	4°30'	37	~	160
288.032.016.160	32	16	27	32	4°30'	40	~	160



Schrumpfverlängerungen mit Längeneinstellschraube

Shrink fit extensions with length adjustment screw



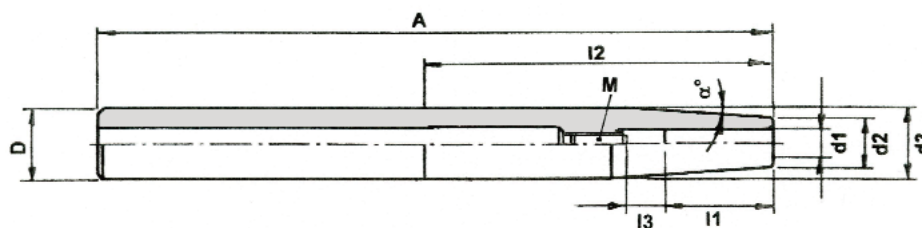
Bestell Nr. Code No.	D h6	d1 mm	d2 mm	d3 mm	α°	I1 mm	I2 mm	I3 mm	M	A mm
283.012.003.150	12	3	8	12	4°30'	12	~	~	M5	150
283.012.004.150	12	4	8	12	4°30'	16	~	~	M5	150
283.012.006.110	12	6	12	17	3°	26	63	10	M5	110
283.012.008.110	12	8	14	19	3°	26	63	10	M6	110
283.016.003.110	16	3	9	13	3°	12	60	10	M6	110
283.016.003.150	16	3	10	16	4°30'	12	~	~	M5	150
283.016.004.110	16	4	10	14	3°	16	60	10	M6	110
283.016.004.150	16	4	10	16	4°30'	16	~	~	M5	150
283.016.005.110	16	5	11	15	3°	20	58	10	M6	110
283.016.005.150	16	5	10	16	4°30'	20	~	~	M6	150
283.016.006.110	16	6	12	15,8	3°	26	60	10	M5	110
283.016.006.150	16	6	10	16	4°30'	26	~	10	M5	150
283.016.006.200	16	6	12	16	3°	26	150	10	M5	200
283.016.008.110	16	8	14	19	3°	26	60	10	M6	110
283.016.008.160	16	8	14	16	4°30'	26	~	10	M5	160
283.020.003.110	20	3	9	13	3°	12	58	10	M6	110
283.020.003.150	20	3	10	20	4°30'	12	~	~	M5	150
283.020.004.110	20	4	10	14	3°	16	58	10	M6	110
283.020.004.150	20	4	10	20	4°30'	16	~	~	M5	150
283.020.005.110	20	5	11	15	3°	20	58	10	M6	110
283.020.005.150	20	5	10	20	4°30'	20	~	~	M6	150
283.020.006.110	20	6	12	16	3°	26	58	10	M5	110
283.020.006.150	20	6	10	20	4°30'	26	~	10	M5	150
283.020.006.160	20	6	14	20	4°30'	26	~	10	M5	160
283.020.006.250	20	6	12	20	3°	26	198	10	M5	250
283.020.008.110	20	8	14	19	3°	26	58	10	M6	110
283.020.008.150	20	8	12	20	4°30'	26	~	10	M6	150
283.020.008.160	20	8	14	20	4°30'	26	~	10	M6	160
283.020.008.250	20	8	14	20	3°	26	198	10	M6	250
283.020.010.110	20	10	16	19,8	3°	32	58	10	M8x1	110
283.020.010.150	20	10	14	20	4°30'	32	~	10	M6	150
283.020.010.250	20	10	16	20	3°	32	198	10	M8x1	250
283.020.012.110	20	12	18	19,8	3°	37	58	10	M10x1	110
283.020.012.150	20	12	16	20	4°30'	37	~	10	M10x1	150





Schrumpfverlängerungen mit Längeneinstellschraube

Shrink fit extensions with length adjustment screw



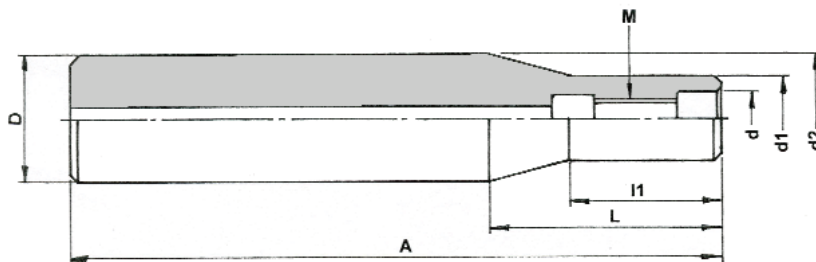
Bestell Nr. Code No.	D h6	d1 mm	d2 mm	d3 mm	α°	I1 mm	I2 mm	I3 mm	M	A mm
283.025.008.150	25	8	20	25	4°30'	26	~	10	M6	150
283.025.008.160	25	8	19	25	4°30'	26	~	10	M6	160
283.025.010.150	25	10	20	25	4°30'	32	~	10	M6	150
283.025.010.160	25	10	20	25	4°30'	32	~	10	M8x1	160
283.025.012.150	25	12	20	25	4°30'	37	~	10	M10x1	150
283.025.012.160	25	12	20	25	4°30'	37	~	10	M10x1	160
283.025.012.250	25	12	18	25	3°	37	193	10	M10x1	250
283.025.014.150	25	14	20	25	4°30'	37	~	10	M10x1	150
283.025.014.160	25	14	20	25	4°30'	37	~	10	M10x1	160
283.025.016.150	25	16	22	25	4°30'	40	~	10	M10x1	150
283.025.016.160	25	16	22	25	4°30'	40	~	10	M12x1	160
283.025.016.250	25	16	22	25	3°	40	193	10	M12x1	250
283.032.010.150	32	10	24	32	4°30'	32	~	10	M6	150
283.032.010.160	32	10	24	32	4°30'	32	~	10	M8x1	160
283.032.012.150	32	12	24	32	4°30'	37	~	10	M10x1	150
283.032.012.160	32	12	24	32	4°30'	37	~	10	M10x1	160
283.032.014.150	32	14	27	32	4°30'	37	~	10	M10x1	150
283.032.014.160	32	14	27	32	4°30'	37	~	10	M10x1	160
283.032.016.150	32	16	27	32	4°30'	40	~	10	M10x1	150
283.032.016.160	32	16	27	32	4°30'	40	~	10	M12x1	160
283.032.018.150	32	18	27	32	4°30'	40	~	10	M10x1	150
283.032.018.160	32	18	27	32	4°30'	40	~	10	M12x1	160
283.032.020.150	32	20	27	32	4°30'	42	~	10	M10x1	150
283.032.020.160	32	20	27	32	4°30'	42	~	10	M16x1	160



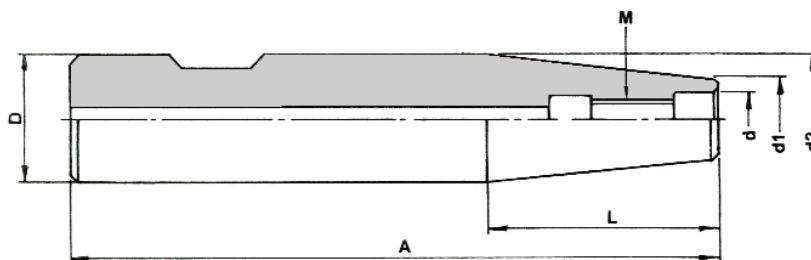


Fräsdorne mit Zyl.Schaft nach DIN 1835A + B für Einschraubfräser

Milling arbors with shank to DIN 1835A + B for screw in tools



Bestell Nr. Code No.	D mm	M	d mm	d1 mm	d2 mm	l1 mm	A mm	L mm
267.020.M10.160	20	M10	10,5	18,5	20	67	160	68,7
267.025.M12.240	25	M12	12,5	23	25	77	240	87,5
267.032.M12.160	32	M12	12,5	23	32	23	160	54
267.032.M12.300	32	M12	12,5	23	32	59,5	300	134
267.032.M16.160	32	M16	17,0	30	32	66	160	68,7
267.032.M16.300	32	M16	17,0	30	32	146	300	148,7

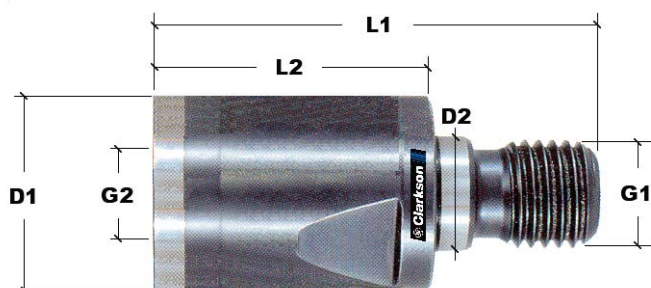


Bestell Nr. Code No.	D mm	M	d mm	d1 mm	d2 mm	A mm	L mm
267.W20.M06.075	20	M6	6,5	10	18	75	25
267.W20.M06.100	20	M6	6,5	10	18	100	50
267.W20.M06.125	20	M6	6,5	10	18	125	75
267.W16.M08.088	16	M8	8,5	13	16	88	40
267.W20.M08.075	20	M8	8,5	13	18	75	25
267.W20.M08.100	20	M8	8,5	13	18	100	50
267.W20.M08.125	20	M8	8,5	13	18	125	75
267.W20.M10.075	20	M10	10,5	18	18	75	25
267.W20.M10.080	20	M10	10,5	18,5	20	80	25
267.W20.M10.100	20	M10	10,5	18	18	100	50
267.W20.M10.125	20	M10	10,5	18	18	125	75
267.W20.M10.152	20	M10	10,5	18,5	20	152	97
267.W25.M12.081	25	M12	12,5	21	25	81	35
267.W25.M12.101	25	M12	12,5	23	25	101	40
267.W25.M12.131	25	M12	12,5	21	25	131	75
267.W25.M12.170	25	M12	12,5	23	25	170	109
267.W25.M12.181	25	M12	12,5	21	25	181	125
267.W32.M12.170	32	M12	12,5	23	25	170	170
267.W32.M16.085	32	M16	17,0	29	32	85	25
267.W32.M16.105	32	M16	17,0	30	32	105	40
267.W32.M16.135	32	M16	17,0	29	32	135	75
267.W32.M16.185	32	M16	17,0	29	32	185	125



Verlängerungen für Einschraubfräser

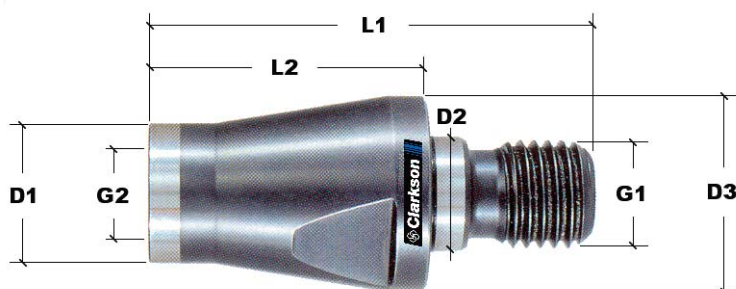
Extensions for screw in tools



Bestell Nr. Code No.	G1 M	G2 M	D1 mm	D2 mm	L1 mm	L2 mm
257.M06.M06.025	M6	M6	9,8	6,5	40	25
257.M08.M08.030	M8	M8	12,8	8,5	48	30
257.M10.M10.A35	M10	M10	15,4	10,5	55	35
257.M10.M10.035	M10	M10	17,8	10,5	55	35
257.M12.M12.040	M12	M12	20,8	12,5	62	40
257.M16.M16.045	M16	M16	28,8	17,0	64	45

Reduzierung für Einschraubfräser

Reductions for screw in tools

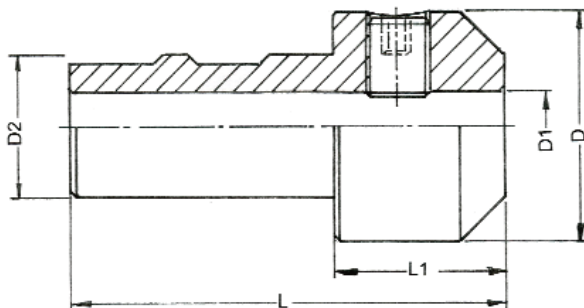


Bestell Nr. Code No.	G1 M	G2 M	D1 mm	D2 mm	D3 mm	L1 mm	L2 mm
258.M08.M06.025	M8	M6	9,8	8,5	12,8	43	25
258.M10.M08.030	M10	M8	12,8	10,5	17,8	50	30
258.M12.M06.040	M12	M6	9,8	12,5	20,8	62	40
258.M12.M08.040	M12	M8	12,8	12,5	20,8	62	40
258.M12.M10.035	M12	M10	15,4	12,5	20,8	57	35
258.M12.M10.A35	M12	M10	17,8	12,5	20,8	57	35
258.M16.M08.060	M16	M8	12,8	17,0	28,8	84	60
258.M16.M10.060	M16	M10	15,4	17,0	28,8	84	60
258.M16.M10.A60	M16	M10	17,8	17,0	28,8	84	60
258.M16.M12.040	M16	M12	20,8	17,0	28,8	64	40



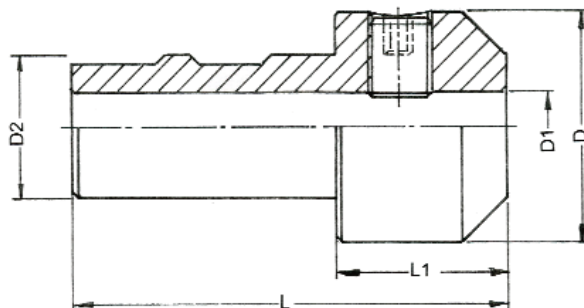
Reduziereinsätze DIN 1835B für Zylinderschäfte DIN 1835B + E

Reducing bushes DIN 1835B for cylindrical shanks DIN 1835B + E



Form: AD
mit Durchgangsbohrung

Bestell Nr. Code No.	D1 mm	D2 h6	D mm	L1 mm	L mm
276.020.006.030	6	20	25	30	80
276.020.008.030	8	20	28	30	80
276.020.010.030	10	20	35	30	80
276.020.012.035	12	20	42	35	85



Bestell Nr. Code No.	D1 mm	D2 h6	D mm	L1 mm	L mm
276.032.006.030	6	32	25	30	90
276.032.008.030	8	32	28	30	90
276.032.010.030	10	32	35	30	90
276.032.012.035	12	32	42	35	95
276.032.014.035	14	32	44	35	95
276.032.016.038	16	32	48	38	98
276.032.018.038	18	32	50	38	98
276.032.020.040	20	32	52	40	100

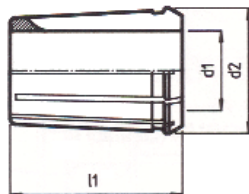


C11



Spannzangen DIN 6388 B (ISO 10897 B) System OZ

Collets DIN 6388 B (ISO 10897 B) OZ system



Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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OZ 16				
435.016.002.000	OZ 16	2	25,5	40
435.016.003.000	OZ 16	3	25,5	40
435.016.004.000	OZ 16	4	25,5	40
435.016.005.000	OZ 16	5	25,5	40
435.016.006.000	OZ 16	6	25,5	40
435.016.007.000	OZ 16	7	25,5	40
435.016.008.000	OZ 16	8	25,5	40
435.016.009.000	OZ 16	9	25,5	40
435.016.010.000	OZ 16	10	25,5	40
435.016.011.000	OZ 16	11	25,5	40
435.016.012.000	OZ 16	12	25,5	40
435.016.013.000	OZ 16	13	25,5	40
435.016.014.000	OZ 16	14	25,5	40
435.016.015.000	OZ 16	15	25,5	40
435.016.016.000	OZ 16	16	25,5	40

OZ 25				
435.025.002.000	OZ 25	2	35,05	52
435.025.003.000	OZ 25	3	35,05	52
435.025.004.000	OZ 25	4	35,05	52
435.025.005.000	OZ 25	5	35,05	52
435.025.006.000	OZ 25	6	35,05	52
435.025.007.000	OZ 25	7	35,05	52
435.025.008.000	OZ 25	8	35,05	52
435.025.009.000	OZ 25	9	35,05	52
435.025.010.000	OZ 25	10	35,05	52
435.025.011.000	OZ 25	11	35,05	52
435.025.012.000	OZ 25	12	35,05	52
435.025.013.000	OZ 25	13	35,05	52
435.025.014.000	OZ 25	14	35,05	52
435.025.015.000	OZ 25	15	35,05	52
435.025.016.000	OZ 25	16	35,05	52
435.025.017.000	OZ 25	17	35,05	52
435.025.018.000	OZ 25	18	35,05	52
435.025.019.000	OZ 25	19	35,05	52
435.025.020.000	OZ 25	20	35,05	52
435.025.021.000	OZ 25	21	35,05	52
435.025.022.000	OZ 25	22	35,05	52
435.025.023.000	OZ 25	23	35,05	52
435.025.024.000	OZ 25	24	35,05	52
435.025.025.000	OZ 25	25	35,05	52

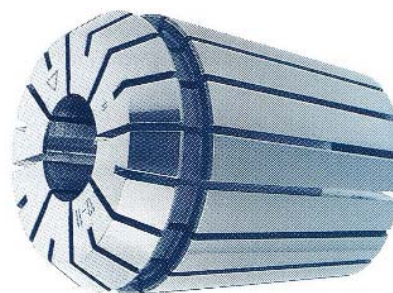
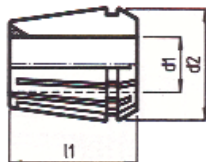
Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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OZ 32				
435.032.003.000	OZ 32	3	43,7	60
435.032.004.000	OZ 32	4	43,7	60
435.032.005.000	OZ 32	5	43,7	60
435.032.006.000	OZ 32	6	43,7	60
435.032.007.000	OZ 32	7	43,7	60
435.032.008.000	OZ 32	8	43,7	60
435.032.009.000	OZ 32	9	43,7	60
435.032.010.000	OZ 32	10	43,7	60
435.032.011.000	OZ 32	11	43,7	60
435.032.012.000	OZ 32	12	43,7	60
435.032.013.000	OZ 32	13	43,7	60
435.032.014.000	OZ 32	14	43,7	60
435.032.015.000	OZ 32	15	43,7	60
435.032.016.000	OZ 32	16	43,7	60
435.032.017.000	OZ 32	17	43,7	60
435.032.018.000	OZ 32	18	43,7	60
435.032.019.000	OZ 32	19	43,7	60
435.032.020.000	OZ 32	20	43,7	60
435.032.021.000	OZ 32	21	43,7	60
435.032.022.000	OZ 32	22	43,7	60
435.032.023.000	OZ 32	23	43,7	60
435.032.024.000	OZ 32	24	43,7	60
435.032.025.000	OZ 32	25	43,7	60
435.032.026.000	OZ 32	26	43,7	60
435.032.027.000	OZ 32	27	43,7	60
435.032.028.000	OZ 32	28	43,7	60
435.032.029.000	OZ 32	29	43,7	60
435.032.030.000	OZ 32	30	43,7	60
435.032.031.000	OZ 32	31	43,7	60
435.032.032.000	OZ 32	32	43,7	60



Spannzangen DIN 6499 B (ISO 15488 B) System ER

Collets DIN 6499 B (ISO 15488 B) ER system



Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 8

228.008.001.000	ER 8	1	8,5	13,6
228.008.001.500	ER 8	1,5	8,5	13,6
228.008.002.000	ER 8	2	8,5	13,6
228.008.002.500	ER 8	2,5	8,5	13,6
228.008.003.000	ER 8	3	8,5	13,6
228.008.003.500	ER 8	3,5	8,5	13,6
228.008.004.000	ER 8	4	8,5	13,6
228.008.004.500	ER 8	4,5	8,5	13,6
228.008.005.000	ER 8	5	8,5	13,6

ER 11

228.011.001.000	ER 11	1	11,5	18
228.011.001.500	ER 11	1,5	11,5	18
228.011.002.000	ER 11	2	11,5	18
228.011.002.500	ER 11	2,5	11,5	18
228.011.003.000	ER 11	3	11,5	18
228.011.003.500	ER 11	3,5	11,5	18
228.011.004.000	ER 11	4	11,5	18
228.011.004.500	ER 11	4,5	11,5	18
228.011.005.000	ER 11	5	11,5	18
228.011.005.500	ER 11	5,5	11,5	18
228.011.006.000	ER 11	6	11,5	18
228.011.006.500	ER 11	6,5	11,5	18
228.011.007.000	ER 11	7	11,5	18

ER 16

228.016.001.000	ER 16	1	17	27,5
228.016.001.500	ER 16	1,5	17	27,5
228.016.002.000	ER 16	2	17	27,5
228.016.002.500	ER 16	2,5	17	27,5
228.016.003.000	ER 16	3	17	27,5
228.016.003.500	ER 16	3,5	17	27,5
228.016.004.000	ER 16	4	17	27,5
228.016.004.500	ER 16	4,5	17	27,5
228.016.005.000	ER 16	5	17	27,5
228.016.005.500	ER 16	5,5	17	27,5
228.016.006.000	ER 16	6	17	27,5
228.016.006.500	ER 16	6,5	17	27,5
228.016.007.000	ER 16	7	17	27,5
228.016.007.500	ER 16	7,5	17	27,5
228.016.008.000	ER 16	8	17	27,5
228.016.008.500	ER 16	8,5	17	27,5
228.016.009.000	ER 16	9	17	27,5
228.016.009.500	ER 16	9,5	17	27,5
228.016.010.000	ER 16	10	17	27,5

Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 20

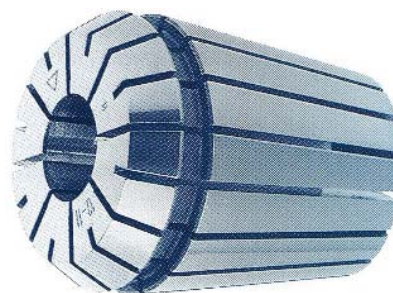
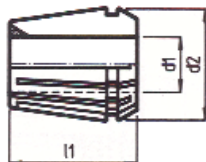
228.020.002.000	ER 20	2	21	31,5
228.020.002.500	ER 20	2,5	21	31,5
228.020.003.000	ER 20	3	21	31,5
228.020.003.500	ER 20	3,5	21	31,5
228.020.004.000	ER 20	4	21	31,5
228.020.004.500	ER 20	4,5	21	31,5
228.020.005.000	ER 20	5	21	31,5
228.020.005.500	ER 20	5,5	21	31,5
228.020.006.000	ER 20	6	21	31,5
228.020.006.500	ER 20	6,5	21	31,5
228.020.007.000	ER 20	7	21	31,5
228.020.007.500	ER 20	7,5	21	31,5
228.020.008.000	ER 20	8	21	31,5
228.020.008.500	ER 20	8,5	21	31,5
228.020.009.000	ER 20	9	21	31,5
228.020.009.500	ER 20	9,5	21	31,5
228.020.010.000	ER 20	10	21	31,5
228.020.010.500	ER 20	10,5	21	31,5
228.020.011.000	ER 20	11	21	31,5
228.020.011.500	ER 20	11,5	21	31,5
228.020.012.000	ER 20	12	21	31,5
228.020.012.500	ER 20	12,5	21	31,5
228.020.013.000	ER 20	13	21	31,5

Präzisionszangen ≤ 0,005
auf Anfrage lieferbar
Precision collets ≤ 0,005



Spannzangen DIN 6499 B (ISO 15488 B) System ER

Collets DIN 6499 B (ISO 15488 B) ER system



Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 25				
228.025.002.000	ER 25	2	26	34
228.025.002.500	ER 25	2,5	26	34
228.025.003.000	ER 25	3	26	34
228.025.003.500	ER 25	3,5	26	34
228.025.004.000	ER 25	4	26	34
228.025.004.500	ER 25	4,5	26	34
228.025.005.000	ER 25	5	26	34
228.025.005.500	ER 25	5,5	26	34
228.025.006.000	ER 25	6	26	34
228.025.006.500	ER 25	6,5	26	34
228.025.007.000	ER 25	7	26	34
228.025.007.500	ER 25	7,5	26	34
228.025.008.000	ER 25	8	26	34
228.025.008.500	ER 25	8,5	26	34
228.025.009.000	ER 25	9	26	34
228.025.009.500	ER 25	9,5	26	34
228.025.010.000	ER 25	10	26	34
228.025.010.500	ER 25	10,5	26	34
228.025.011.000	ER 25	11	26	34
228.025.011.500	ER 25	11,5	26	34
228.025.012.000	ER 25	12	26	34
228.025.012.500	ER 25	12,5	26	34
228.025.013.000	ER 25	13	26	34
228.025.013.500	ER 25	13,5	26	34
228.025.014.000	ER 25	14	26	34
228.025.014.500	ER 25	14,5	26	34
228.025.015.000	ER 25	15	26	34
228.025.015.500	ER 25	15,5	26	34
228.025.016.000	ER 25	16	26	34

Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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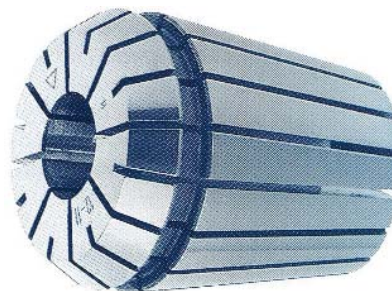
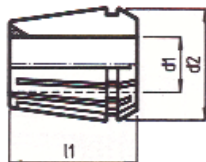
ER 32				
228.032.002.000	ER 32	2	33	40
228.032.002.500	ER 32	2,5	33	40
228.032.003.000	ER 32	3	33	40
228.032.003.500	ER 32	3,5	33	40
228.032.004.000	ER 32	4	33	40
228.032.004.500	ER 32	4,5	33	40
228.032.005.000	ER 32	5	33	40
228.032.005.500	ER 32	5,5	33	40
228.032.006.000	ER 32	6	33	40
228.032.006.500	ER 32	6,5	33	40
228.032.007.000	ER 32	7	33	40
228.032.007.500	ER 32	7,5	33	40
228.032.008.000	ER 32	8	33	40
228.032.008.500	ER 32	8,5	33	40
228.032.009.000	ER 32	9	33	40
228.032.009.500	ER 32	9,5	33	40
228.032.010.000	ER 32	10	33	40
228.032.010.500	ER 32	10,5	33	40
228.032.011.000	ER 32	11	33	40
228.032.011.500	ER 32	11,5	33	40
228.032.012.000	ER 32	12	33	40
228.032.012.500	ER 32	12,5	33	40
228.032.013.000	ER 32	13	33	40
228.032.013.500	ER 32	13,5	33	40
228.032.014.000	ER 32	14	33	40
228.032.014.500	ER 32	14,5	33	40
228.032.015.000	ER 32	15	33	40
228.032.015.500	ER 32	15,5	33	40
228.032.016.000	ER 32	16	33	40
228.032.016.500	ER 32	16,5	33	40
228.032.017.000	ER 32	17	33	40
228.032.017.500	ER 32	17,5	33	40
228.032.018.000	ER 32	18	33	40
228.032.018.500	ER 32	18,5	33	40
228.032.019.000	ER 32	19	33	40
228.032.019.500	ER 32	19,5	33	40
228.032.020.000	ER 32	20	33	40

Präzisionszangen ≤ 0,005
auf Anfrage lieferbar
Precision collets ≤ 0,005



Spannzangen DIN 6499 B (ISO 15488 B) System ER

Collets DIN 6499 B (ISO 15488 B) ER system



Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 40				
228.040.003.000	ER 40	3	41	46
228.040.004.000	ER 40	4	41	46
228.040.005.000	ER 40	5	41	46
228.040.006.000	ER 40	6	41	46
228.040.007.000	ER 40	7	41	46
228.040.008.000	ER 40	8	41	46
228.040.009.000	ER 40	9	41	46
228.040.010.000	ER 40	10	41	46
228.040.011.000	ER 40	11	41	46
228.040.012.000	ER 40	12	41	46
228.040.013.000	ER 40	13	41	46
228.040.014.000	ER 40	14	41	46

Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 40				
228.040.015.000	ER 40	15	41	46
228.040.016.000	ER 40	16	41	46
228.040.017.000	ER 40	17	41	46
228.040.018.000	ER 40	18	41	46
228.040.019.000	ER 40	19	41	46
228.040.020.000	ER 40	20	41	46
228.040.021.000	ER 40	21	41	46
228.040.022.000	ER 40	22	41	46
228.040.023.000	ER 40	23	41	46
228.040.024.000	ER 40	24	41	46
228.040.025.000	ER 40	25	41	46
228.040.026.000	ER 40	26	41	46

Spannzangensätze DIN 6499 B (ISO 15488 B) System ER

Collets sets DIN 6499 B (ISO 15488 B) ER system



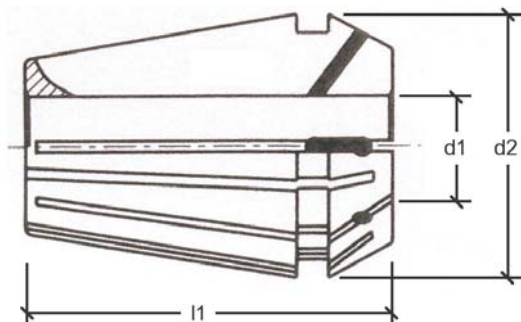
Bestell Nr. Code No.	Größe Size	Stück Qty	Abmessungen Size
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228.008.001.005	ER8	9	1-1,5-2-2,5-3-3,5-4-4,5-5
228.011.001.007	ER 11	13	1-1,5-2-2,5-3-3,5-4-4,5-5-5,5-6-6,5-7
228.016.001.010	ER 16	10	1-2-3-4-5-6-7-8-9-10
228.020.002.013	ER 20	12	2-3-4-5-6-7-8-9-10-11-12-13
228.025.002.016	ER 25	15	2-3-4-5-6-7-8-9-10-11-12-13-14-15-16
228.032.003.020	ER 32	18	3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20
228.040.004.026	ER 40	23	4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26



Spannzangen mit Abdichtung für IK DIN 6499 B (ISO 15488 B) System ER

Collets sealed with seal for IC DIN 6499 B (ISO 15488 B) ER system



Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 16				
228.016.003.A00	ER 16	3	17	27,5
228.016.004.A00	ER 16	4	17	27,5
228.016.005.A00	ER 16	5	17	27,5
228.016.006.A00	ER 16	6	17	27,5
228.016.007.A00	ER 16	7	17	27,5
228.016.008.A00	ER 16	8	17	27,5
228.016.009.A00	ER 16	9	17	27,5
228.016.010.A00	ER 16	10	17	27,5
ER20				
228.020.003.A00	ER 20	3	21	31,5
228.020.004.A00	ER 20	4	21	31,5
228.020.005.A00	ER 20	5	21	31,5
228.020.006.A00	ER 20	6	21	31,5
228.020.007.A00	ER 20	7	21	31,5
228.020.008.A00	ER 20	8	21	31,5
228.020.009.A00	ER 20	9	21	31,5
228.020.010.A00	ER 20	10	21	31,5
228.020.011.A00	ER 20	11	21	31,5
228.020.012.A00	ER 20	12	21	31,5
228.020.013.A00	ER 20	13	21	31,5
ER 25				
228.025.003.A00	ER 25	3	26	34
228.025.004.A00	ER 25	4	26	34
228.025.005.A00	ER 25	5	26	34
228.025.006.A00	ER 25	6	26	34
228.025.007.A00	ER 25	7	26	34
228.025.008.A00	ER 25	8	26	34
228.025.009.A00	ER 25	9	26	34
228.025.010.A00	ER 25	10	26	34
228.025.011.A00	ER 25	11	26	34
228.025.012.A00	ER 25	12	26	34
228.025.013.A00	ER 25	13	26	34
228.025.014.A00	ER 25	14	26	34
228.025.015.A00	ER 25	15	26	34
228.025.016.A00	ER 25	16	26	34

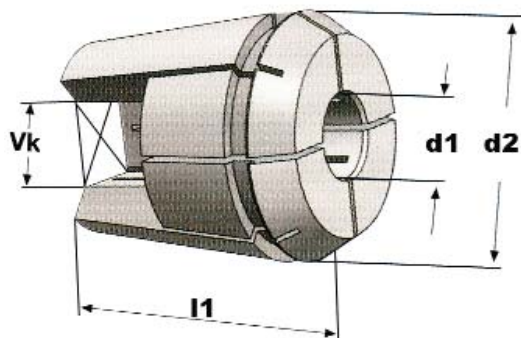
Bestell Nr. Code No.	Größe Size	d1 mm	d2 mm	l1 mm
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ER 32				
228.032.003.A00	ER 32	3	33	40
228.032.004.A00	ER 32	4	33	40
228.032.005.A00	ER 32	5	33	40
228.032.006.A00	ER 32	6	33	40
228.032.007.A00	ER 32	7	33	40
228.032.008.A00	ER 32	8	33	40
228.032.009.A00	ER 32	9	33	40
228.032.010.A00	ER 32	10	33	40
228.032.011.A00	ER 32	11	33	40
228.032.012.A00	ER 32	12	33	40
228.032.013.A00	ER 32	13	33	40
228.032.014.A00	ER 32	14	33	40
228.032.015.A00	ER 32	15	33	40
228.032.016.A00	ER 32	16	33	40
228.032.017.A00	ER 32	17	33	40
228.032.018.A00	ER 32	18	33	40
228.032.019.A00	ER 32	19	33	40
228.032.020.A00	ER 32	20	33	40
ER 40				
228.040.003.A00	ER 40	3	41	46
228.040.004.A00	ER 40	4	41	46
228.040.005.A00	ER 40	5	41	46
228.040.006.A00	ER 40	6	41	46
228.040.007.A00	ER 40	7	41	46
228.040.008.A00	ER 40	8	41	46
228.040.009.A00	ER 40	9	41	46
228.040.010.A00	ER 40	10	41	46
228.040.011.A00	ER 40	11	41	46
228.040.012.A00	ER 40	12	41	46
228.040.013.A00	ER 40	13	41	46
228.040.014.A00	ER 40	14	41	46
228.040.015.A00	ER 40	15	41	46
228.040.016.A00	ER 40	16	41	46
228.040.017.A00	ER 40	17	41	46
228.040.018.A00	ER 40	18	41	46
228.040.019.A00	ER 40	19	41	46
228.040.020.A00	ER 40	20	41	46
228.040.021.A00	ER 40	21	41	46
228.040.022.A00	ER 40	22	41	46
228.040.023.A00	ER 40	23	41	46
228.040.024.A00	ER 40	24	41	46
228.040.025.A00	ER 40	25	41	46
228.040.026.A00	ER 40	26	41	46



Spannzangen mit Innenvierkant DIN 6499 A (ISO 15488 A) System ER für Gewindebohrer

Collets with square locking drive DIN 6499 A (ISO 15488 A) ER system for taps



Bestell Nr. Code No.	Größe Size	d1 mm	VK mm	d2 mm	l1 mm
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ER 16					
228.G16.035.027	ER 16	3,5	2,7	17	27,5
228.G16.040.030	ER 16	4	3	17	27,5
228.G16.045.034	ER 16	4,5	3,4	17	27,5
228.G16.050.040	ER 16	5	4	17	27,5
228.G16.055.043	ER 16	5,5	4,3	17	27,5
228.G16.060.049	ER 16	6	4,9	17	27,5
228.G16.070.055	ER 16	7	5,5	17	27,5
228.G16.090.070	ER 16	9	7	17	27,5
228.G16.100.080	ER 16	10	8	17	27,5

ER20					
228.G20.035.027	ER 20	3,5	2,7	21	31,5
228.G20.040.030	ER 20	4	3	21	31,5
228.G20.045.034	ER 20	4,5	3,4	21	31,5
228.G20.055.043	ER 20	5,5	4,3	21	31,5
228.G20.060.049	ER 20	6	4,9	21	31,5
228.G20.070.055	ER 20	7	5,5	21	31,5
228.G20.080.062	ER 20	8	6,2	21	31,5
228.G20.090.070	ER 20	9	7	21	31,5
228.G20.100.080	ER 20	1	8	21	31,5
228.G20.110.090	ER 20	11	9	21	31,5
228.G20.120.090	ER 20	12	9	21	31,5

ER 25					
228.G25.035.027	ER 25	3,5	2,7	26	34
228.G25.040.030	ER 25	4	3	26	34
228.G25.045.034	ER 25	4,5	3,4	26	34
228.G25.050.040	ER 25	5	4	26	34
228.G25.055.043	ER 25	5,5	4,3	26	34
228.G25.060.049	ER 25	6	4,9	26	34
228.G25.070.055	ER 25	7	5,5	26	34
228.G25.080.062	ER 25	8	6,2	26	34
228.G25.090.070	ER 25	9	7	26	34
228.G25.100.080	ER 25	10	8	26	34
228.G25.110.090	ER 25	11	9	26	34
228.G25.120.090	ER 25	12	9	26	34
228.G25.140.110	ER 25	14	11	26	34
228.G25.160.120	ER 25	16	12	26	34

Bestell Nr. Code No.	Größe Size	d1 mm	VK mm	d2 mm	l1 mm
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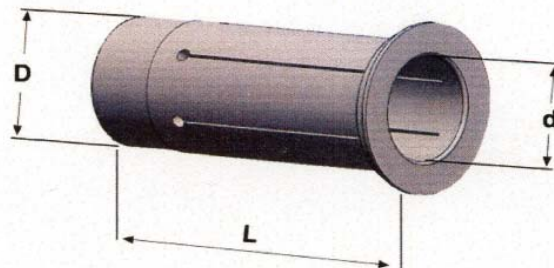
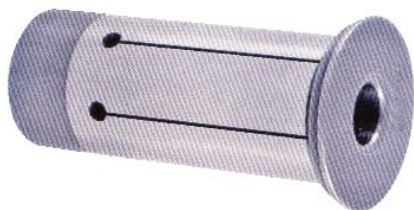
ER 32					
228.G32.040.030	ER 32	4	3	33	40
228.G32.045.034	ER 32	4,5	3,4	33	40
228.G32.050.040	ER 32	5	4	33	40
228.G32.055.043	ER 32	5,5	4,3	33	40
228.G32.060.049	ER 32	6	4,9	33	40
228.G32.070.055	ER 32	7	5,5	33	40
228.G32.080.062	ER 32	8	6,2	33	40
228.G32.090.070	ER 32	9	7	33	40
228.G32.100.080	ER 32	10	8	33	40
228.G32.110.090	ER 32	11	9	33	40
228.G32.120.090	ER 32	12	9	33	40
228.G32.140.110	ER 32	14	11	33	40
228.G32.160.125	ER 32	16	12	33	40
228.G32.180.145	ER 32	18	14,5	33	40
228.G32.200.160	ER 32	20	16	33	40

ER 40					
228.G40.060.049	ER 40	6	4,9	41	46
228.G40.070.055	ER 40	7	5,5	41	46
228.G40.080.062	ER 40	8	6,2	41	46
228.G40.090.070	ER 40	9	7	41	46
228.G40.100.080	ER 40	10	8	41	46
228.G40.110.090	ER 40	11	9	41	46
228.G40.120.090	ER 40	12	9	41	46
228.G40.140.110	ER 40	14	11	41	46
228.G40.160.125	ER 40	16	12	41	46
228.G40.180.145	ER 40	18	14,5	41	46
228.G40.200.160	ER 40	20	16	41	46
228.G40.220.180	ER 40	22	18	41	46
228.G40.250.200	ER 40	25	20	41	46



Reduzierbüchsen für Hydrodehnspannfutter

Reducing arbor for hydraulic chucks



Bestell Nr. Code No.	D mm	d mm	L mm
231.012.003.046	12	3	46
231.012.004.046	12	4	46
231.012.005.046	12	5	46
231.012.006.046	12	6	46
231.012.008.046	12	8	46
231.020.003.052	20	3	52,5
231.020.004.052	20	4	52,5
231.020.005.052	20	5	52,5
231.020.006.052	20	6	52,5
231.020.008.052	20	8	52,5
231.020.010.052	20	10	52,5
231.020.012.052	20	12	52,5
231.020.014.052	20	14	52,5
231.020.016.052	20	16	52,5
231.032.006.063	32	6	63
231.032.008.063	32	8	63
231.032.010.063	32	10	63
231.032.012.063	32	12	63
231.032.014.063	32	14	63
231.032.016.063	32	16	63
231.032.020.063	32	20	63
231.032.025.063	32	25	63



Spannmutter DIN 6499 (ISO 15488) System ER

Clamping nuts DIN 6499 (ISO 15488) ER system

Standardausführung mit Exenterring, gewuchtet
standard type with eccentric ring, balanced



Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
456.016.032.018	ER16	32	18	~	M22x1,5
456.020.035.019	ER20	35	19	~	M25x1,5
456.025.042.020	ER25	42	20	~	M32x1,5
456.032.050.022	ER32	50	22	~	M40x1,5
456.040.063.025	ER40	63	25	~	M50x1,5

gleitgelagerte Ausführung
sleeve-bearing version



Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
456.016.032.G18	ER16	32	18	~	M22x1,5
456.025.042.G20	ER25	42	20	~	M32x1,5
456.032.050.G22	ER32	50	22	~	M40x1,5
456.040.063.G25	ER40	63	25	~	M50x1,5

Standardausführung mit Exenterring, gewuchtet
standard type with eccentric ring, balanced



Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
456.611.019.012	ER11	19	12	17	M14x,075
456.616.028.018	ER16	28	18	25	M22x1,5
456.620.034.019	ER20	42	19	30	M25x1,5

gleitgelagerte Ausführung
sleeve-bearing version



Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
456.616.028.G18	ER16	30	18	27	M22x1,5

Standardausführung mit Exenterring, gewuchtet TYP MINI
standard type with eccentric ring, balanced TYP MINI



Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
456.M08.012.011	ER8	12	11	~	M10x0,75
456.M11.016.012	ER11	16	12	~	M13x0,75
456.M16.022.018	ER16	22	18	~	M19x1

Spannmutter Typ: OZ DIN 6388 D
kugelgelagerte Ausführung
Clamping nuts type: OZ DIN 6388 D
ball-bearing version

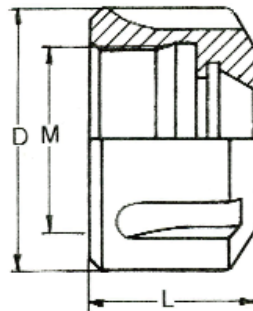
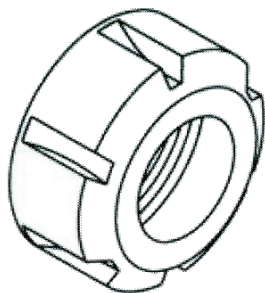


Bestell Nr. Code No.	Größe Size	D mm	L mm	SW mm	M
484.016.043.024	OZ16	43	24	~	M33x1,5
484.025.060.030	OZ25	60	30	~	M48x2
484.032.072.033	OZ32	72	33,5	~	M60x2,5



Spannmutter DIN 6499 (ISO 15488) System ER für Dichtscheiben

Clamping nuts DIN 6499 (ISO 15488) ER system for sealing discs



Bestell Nr. Code No.	Größe Size	D mm	L mm	M	Ausführung model
458.016.032.018	ER 16	32	18	M25x1,5	Standard
458.025.042.020	ER 25	42	20	M32x1,5	Standard
458.032.050.022	ER 32	50	22	M40x1,5	Standard
458.040.063.025	ER 40	63	25	M50x1,5	Standard

Dichtscheiben für ER Spannmutter

Sealing discs for ER clamping nuts



Bestell Nr. Code No.	Größe Size	d von -bis d from -to	Steigung step
457.016.XXX.XXX	ER 16	3,0-10,0mm	0,5mm
457.025.XXX.XXX	ER 25	3,0-16,0mm	0,5mm
457.032.XXX.XXX	ER 32	3,0-20,0mm	0,5mm
457.040.XXX.XXX	ER 40	3,0-26,0mm	0,5mm

Bestellbeispiel für A) ER16 4,0mm und B) ER32 11,5mm

Code für A= 457.016.004.000

Code für B= 457.032.011.500

Ordering example for A) ER16 4,0mm and B) ER32 11,5mm

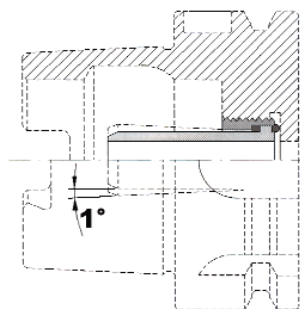
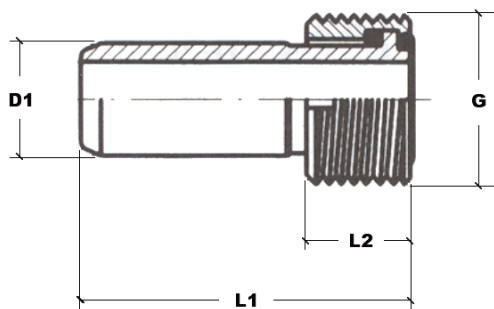
Code for A= 457.016.004.000

Code for B= 457.032.011.500



Kühlmittelübergabesatz

Coolant sleeve

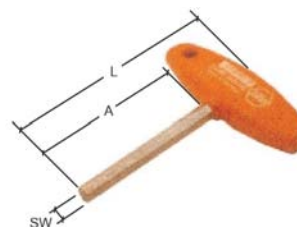


Bestell Nr. Code No.	HSK	D1 mm	G mm	L2 mm	L1 mm	
K32.M10.006	HSK32A	6	M10x1	5,5	26	S32.009
K40.M12.008	HSK40A	8	M12x1	7,5	29,1	S40.011
K50.M16.010	HSK50A	10	M16x1	9,5	32,7	S50.015
K63.M18.012	HSK63A	12	M18x1	11,5	36	S63.017
K80.M20.014	HSK80A	14	M20x1.5	13,5	39,6	S80.018
K10.M24.016	HSK100A	16	M24x1.5	15,5	43,6	S10.022

Inbusschlüssel

Wrench

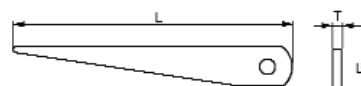
Bestell Nr. Code No.	SW	A mm	L mm
920.000.SW4.100	4	70	100
920.000.SW5.100	5	90	100
920.000.SW6.100	6	90	100



Austreiber

Drill drifts

Bestell Nr. Code No.	MK	T mm	B mm	L mm
940.012.140	MK1+2	5	20	140
940.003.190	MK3	7	25	190
940.004.225	MK4	10	30	225

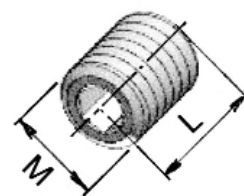




Spannschrauben für Weldon Spannfutter DIN 1835 B

Clamping screw for weldon chucks DIN 1835 B

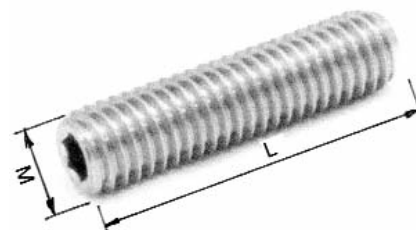
Bestell Nr. Code No.	M	L mm	für Ø for Ø
432.006.M06.010	M6x1	10	6
432.008.M08.010	M8x1,25	10	8
432.010.M10.012	M10x1,5	12	10
432.012.M12.016	M12x1,75	16	12
432.014.M12.016	M12x1,75	16	14
432.016.M14.016	M14x2	16	16
432.018.M14.016	M14x2	16	18
432.020.M16.016	M16x2	16	20
432.025.M18.020	M18x2	20	25
432.032.M20.020	M20x2	20	32
432.040.M20.020	M20x2	20	40



Anschlagschraube

Stop screw

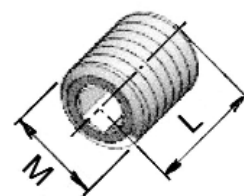
Bestell Nr. Code No.	M	L mm	für Ø for Ø
433.006.M05.016	M5	16	6
433.008.M06.016	M6	16	8
433.010.M08.020	M8	20	10
433.012.M10.025	M10	25	12
433.014.M10.025	M10	25	14
433.016.M12.025	M12	25	16
433.018.M12.025	M12	25	18
433.020.M16.025	M16	25	20
433.025.M20.030	M20	30	25
433.032.M20.030	M20	30	32
433.040.M20.030	M20	30	40



Längeneinstellschraube für Schruppfutter (durchbohrt)

Length adjustment screw for Shrink fit holder (through hole)

Bestell Nr. Code No.	M	L mm	für Ø for Ø
434.006.M05.006	M5	6	6
434.008.M06.006	M6	6	8
434.010.M08.010	M8x1	10	10
434.012.M10.010	M10x1	10	12
434.014.M10.010	M10x1	10	14
434.016.M12.010	M12x1	10	16
434.018.M12.010	M12x1	10	18
434.020.M16.008	M16x1	8	20
434.025.M16.016	M16x1	16	25
434.032.M16.010	M16x1	10	32

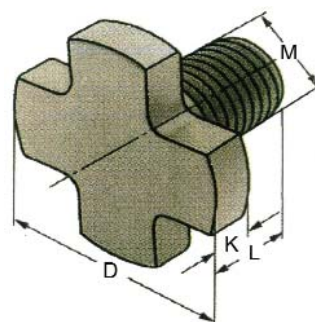




Fräseranzugsschraube DIN 6367

Drawn in bolt DIN 6367

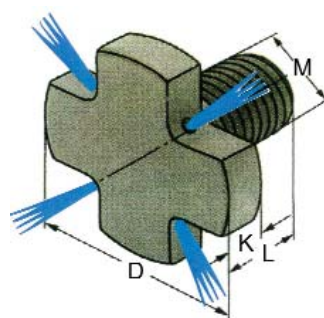
Bestell Nr. Code No.	für Ø for Ø	M	D mm	K mm	L mm
422.016.M08.016	16	M8	20	6	16
422.022.M10.018	22	M10	28	7	18
422.027.M12.022	27	M12	35	8	22
422.032.M16.026	32	M16	42	9	26
422.040.M20.030	40	M20	52	10	30
422.050.M24.036	50	M24	63	12	36
422.060.M30.045	60	M30	75	14	45



Fräseranzugsschraube DIN 6367 mit Kühlmittelzufuhr

Drawn in bolt DIN 6367 with coolant

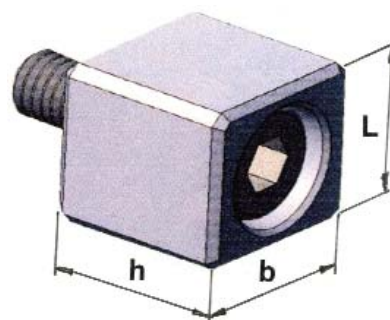
Bestell Nr. Code No.	für Ø for Ø	M	D mm	K mm	L mm
421.016.M08.016	16	M8	20	9	16
421.022.M10.018	22	M10	28	7	18
421.027.M12.022	27	M12	35	8	22
421.032.M16.026	32	M16	42	9	26
421.040.M20.030	40	M20	52	10	30
421.050.M24.036	50	M24	63	12	36
421.060.M30.045	60	M30	75	14	45



Mitnehmersteine

Drive key

Bestell Nr. Code No.	für Ø for Ø	h mm	b mm	L mm	Schraube DIN 912
426.016.008.010	16	8	10	9,8	M3x12
426.022.010.011	22	10	11	11,2	M4x12
426.027.012.014	27	12	14	12,6	M4x16
426.032.014.022	32	14	22	14	M5x16
426.040.016.023	40	16	23	16	M5x20
426.050.018.032	50	18	32	18	M6x20
426.060.254.265	60	25,4	26,5	25	M12x25

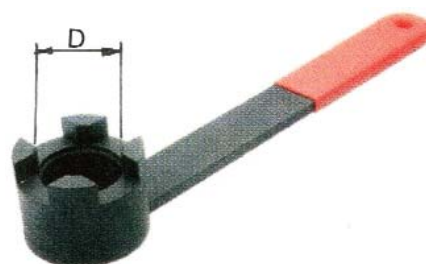




Spannschlüssel DIN 6368

Wrench DIN 6368

Bestell Nr. Code No.	D mm	für for
423.016.M08.000	16	M8
423.022.M10.000	22	M10
423.027.M12.000	27	M12
423.032.M16.000	32	M16
423.040.M20.000	40	M20
423.050.M24.000	50	M24
423.060.M30.000	60	M30



Spannschlüssel DIN 6368

Wrench DIN 6368

Bestell Nr. Code No.	Abmessung Size	D mm	SW mm
939.000.011.000	1-7 (ER11)	19	17
939.000.016.0SW	1-10 (ER16)	28	25
939.000.016.000	1-10 (ER16)	32	~
939.000.020.000	2-13 (ER20)	35	~
939.000.020.0SW	2-13 (ER20)	34	30
939.000.025.000	2-16 (ER25)	42	~
939.000.032.000	2-20 (ER32)	50	~
939.000.040.000	2-26 (ER40)	63	~



Spannschlüssel DIN 6368

Wrench DIN 6368

Bestell Nr. Code No.	Abmessung Size	D mm
938.000.008.000	1-5 (ER8)	12
938.000.011.000	1-7 (ER11)	16
938.000.016.000	1-10 (ER16)	22



Spannschlüssel DIN 6368

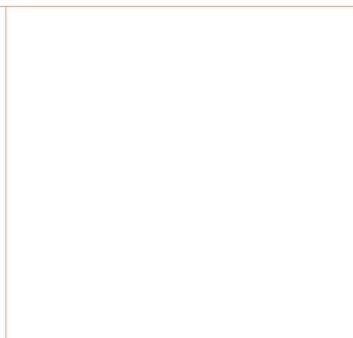
Wrench DIN 6368

Bestell Nr. Code No.	Abmessung Size	D mm
925.000.040.042	2-16 (OZ16)	40-42
925.000.058.062	2-25 (OZ25)	58-62
925.000.068.075	3-32 (OZ32)	68-75





Schrumpfmaschinen
(auf Anfrage)



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