

Workholding Systems





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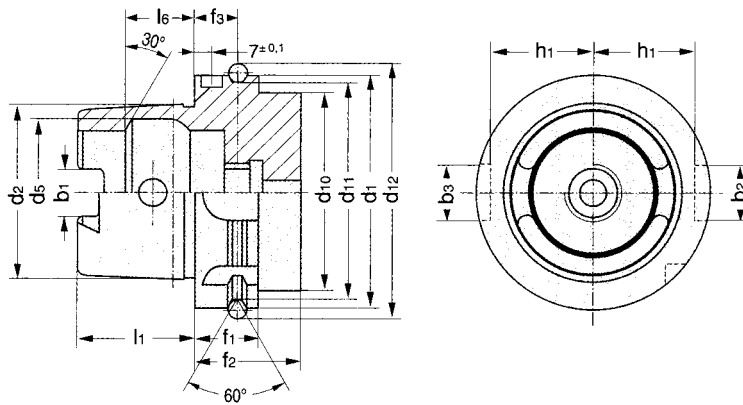
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HSK-Tool holders



HSK

Technical Information



HSK – A+C ISO 12164 for automatic and manual tool change

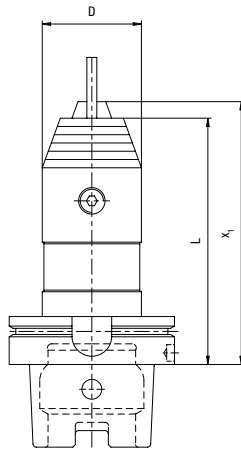
HSK-d ₁	b ₁	b ₂	b ₃	d ₂	d ₅	d ₁₀	d ₁₁	d ₁₂	f ₁	f ₂	f ₃	l ₁	l ₆	h ₁
50	10,54	12	14	38,009	32,0	42	43,0	59,30	26	42	18	25	14,13	21,0
63	12,54	16	18	48,010	40,0	53	55,0	72,30	26	42	18	32	18,13	26,5
100	20,02	20	22	75,013	63,0	88	92,0	109,75	29	45	20	50	28,56	44,0

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

Execution: Case hardened HRc 58±2, depth of case 0,6 - 0,8 mm, browned

Accuracy: Run out between cone and holding part < 5 μ

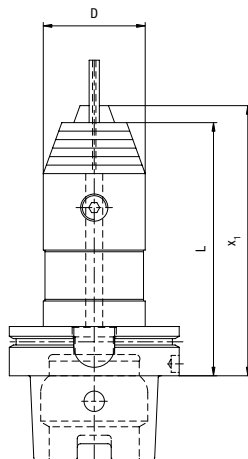
For RH and LH drilling, without internal cooling system



HSK-A	Clamping range	D	L	x ₁	Order-no. Form A+C
50	0,5 - 13	50	116	122	773.01613120
50	2,5 - 16	57	116	127	773.01616125
63	0,5 - 13	50	104	110	771.01613110
63	2,5 - 16	57	104	115	771.01616110
100	0,5 - 13	50	111	117	772.01613110
100	2,5 - 16	57	111	122	772.01616110

Description:
 Integral drill chucks with high clamping force
 Difference to concentric running: max. 0,03 mm
 Short design
 Without internal cooling system
 Range up to 13 and 16 mm
 Unbalanced, for use up to 7000 r.p.m.

For RH and LH drilling, with internal cooling system



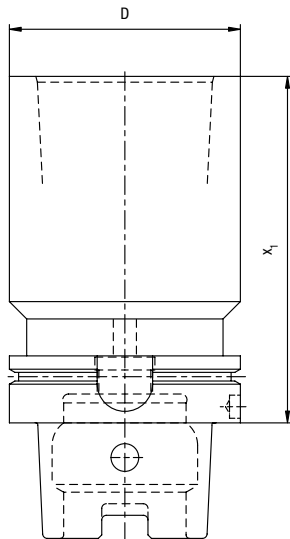
HSK-A	Clamping range	D	L	x ₁	Order-no. Form A+C
50	0,5 - 13	50	116	122	710.01613120
50	2,5 - 16	57	116	127	710.01616125
63	0,5 - 13	50	104	110	711.01613110
63	2,5 - 16	57	104	115	711.01616110
100	0,5 - 13	50	111	117	713.01613110
100	2,5 - 16	57	111	122	713.01616110

Description:
 Integral drill chucks with high clamping force
 Difference to concentric running: max. 0,03 mm
 Short design
 With internal cooling system
 Range up to 13 and 16 mm
 Unbalanced, for use up to 7000 r.p.m.

HSK - Extensions

50 63 100

ISO 12164 - Form A+C



HSK-A	Female Taper HSK-A	x_1	D	Order-no. Form A+C
50	50	80	50	710.0380580
63	63	80	63	711.0380680
63	63	100	63	711.03806100
100	100	140	100	713.03810140

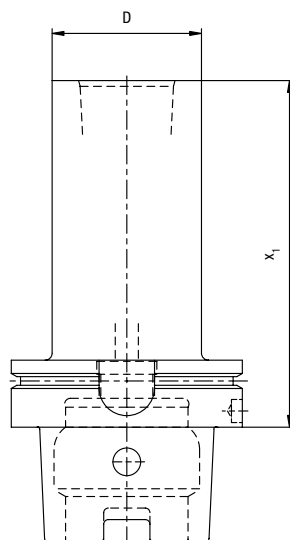
Application: To hold tools with HSK shank for manual clamping

Delivery content: With built-in clamping element

HSK - Reductions

63 100

ISO 12164 - Form A+C



HSK-A	Female Taper HSK-A	x_1	D	Order-no. Form A+C
63	50	80	50	711.0380580
100	50	80	50	713.0380580
100	63	100	63	713.03806100

Application: To hold tools with HSK shank for manual clamping

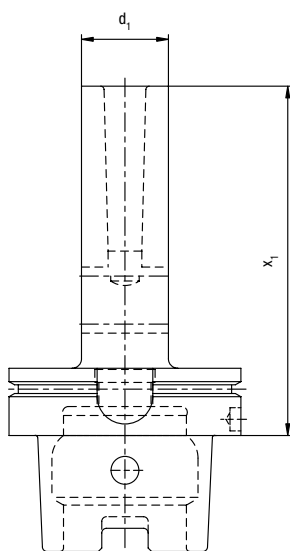
Delivery content: With built-in clamping element

Adapter sleeves for morse taper shanks

Related to DIN 6383, to hold tools with morse taper and flat tang DIN 228B

50 63 100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: To hold tools with morse taper and flat tang DIN 228 B

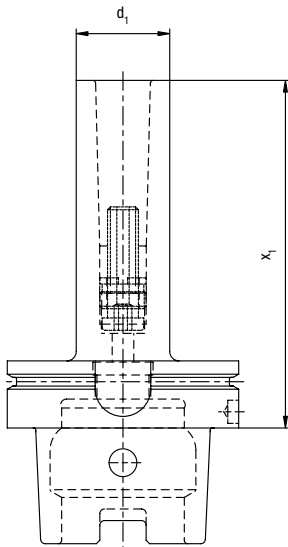
HSK-A	MK	x_1	d_1	Order-no. Form A+C
50	1	100	25	710.0611100
50	2	120	32	710.0612120
50	3	140	40	710.0613140
63	1	100	25	711.0611100
63	2	120	32	711.0612120
63	3	140	40	711.0613140
63	4	160	48	711.0614160
100	1	110	25	713.0611110
100	2	120	32	713.0612120
100	3	150	40	713.0613150
100	4	170	48	713.0614170
100	5	200	63	713.0615200

Adapter sleeves for morse taper shanks

Related to DIN 6364, to hold tools with morse taper
DIN 228 A with draw thread

50 63 100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: To hold tools with morse taper DIN 228A draw thread

Delivery content: With built-in draw screw

HSK-A	MK	x_1	d_1	Order-no. Form A+C
50	1	100	25	710.0641100
50	2	120	32	710.0642120
50	3	140	40	710.0643140
63	1	100	25	711.0641100
63	2	120	32	711.0642120
63	3	140	40	711.0643140
63	4	165	48	711.0644165
63	4*	180	63	711.0644165M
100	1	100	25	713.0641100
100	2	120	32	713.0642120
100	3	150	40	713.0643150
100	4	170	48	713.0644170
100	4*	185	63	713.0644170M
100	5	200	64	713.0645200
100	5*	218	78	713.0645200M

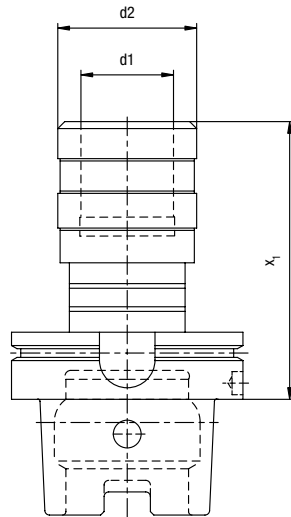
Note: The versions marked with * are provided with drive flats to DIN 2201.

Tapping head quick-change

With lenght compensation in compression and tension,
without internal cooling system

50 63 100

ISO 12164 - Form A+C



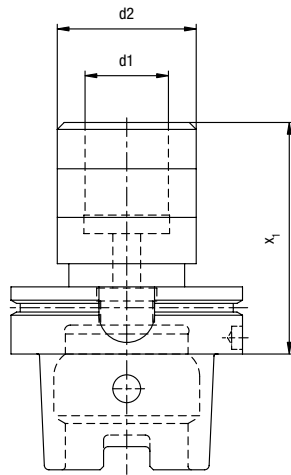
HSK-A	Screw tap	Linear compensation		d ₁	d ₂	x ₁	Order-no. Form A+C
		Compression	Tension				
50	M3 - M12	7,5	7,5	19	41	72	773.0651972
50	M6 - M20	10,0	10,0	31	60	110	773.06531110
63	M3 - M12	7,5	7,5	19	41	72	771.0651972
63	M6 - M20	10,0	10,0	31	60	110	771.06531110
63	M14 - M33	17,5	17,5	48	86	141	771.06548141
100	M3 - M12	7,5	7,5	19	41	80	772.0651980
100	M6 - M20	10,0	10,0	31	60	100	772.06531100
100	M14 - M33	17,5	17,5	48	86	144	772.06548144

Tapping head quick-change

Without lenght compensation in compression and tension,
with internal cooling system

50 63 100

ISO 12164 - Form A+C



HSK-A	Screw tap	Linear compensation		d_1	d_2	x_1	Order-no. Form A+C
		Compression	Tension				
50	M3 - M12	0,0	0,0	19	33	63	710.0951963
50	M6 - M20	0,0	0,0	31	50	98	710.0953198
63	M3 - M12	0,0	0,0	19	33	63	711.0951963
63	M6 - M20	0,0	0,0	31	50	89	711.0953189
63	M14 - M33	0,0	0,0	48	72	129	711.09548129
100	M3 - M12	0,0	0,0	19	33	66	713.0951966
100	M6 - M20	0,0	0,0	31	50	92	713.0953192
100	M14 - M33	0,0	0,0	48	72	132	713.09548132

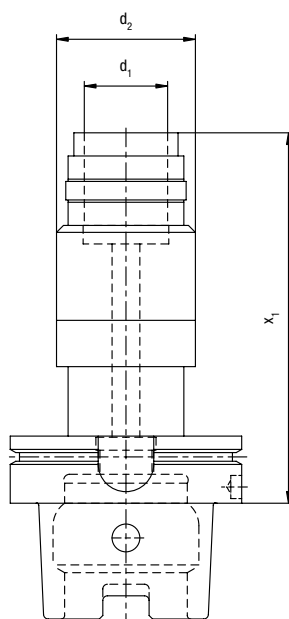
Tapping head quick-change

With lenght compensation in compression and tension,
with internal cooling system

50

63

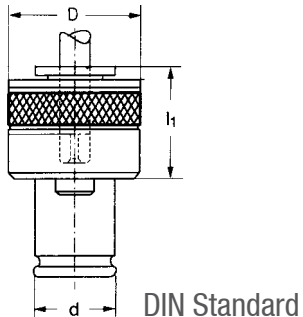
ISO 12164 - Form A+C



HSK-A	Screw tap	Linear compensation		d_1	d_2	x_1	Order-no. Form A+C
		Compression	Tension				
50	M3 - M12	7,5	7,5	19	39	105	710.06519105
50	M6 - M20	10,0	10,0	31	53	140	710.06531140
63	M3 - M12	7,5	7,5	19	39	105	711.06519105
63	M6 - M20	10,0	10,0	31	53	140	711.06531140

Quick-change inserts SES

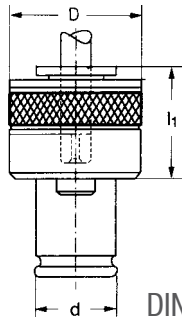
With safety coupling



Size	Screw tap	D	d	l ₁	Shank Ø	□	Order-no.
1	M 3	32	19	25	3,5	2,7	B029-02035002703
	M 3,5				4,0	3,0	B029-020400030035
	M 4				4,5	3,4	B029-02045003404
	M 5				6,0	4,9	B029-02060004905
	M 6				6,0	4,9	B029-02060004906
	M 8				6,0	4,9	B029-02060004908
	M 10				7,0	5,5	B029-020700055010
	M 8				8,0	6,2	B029-02080006208
	M 12				9,0	7,0	B029-020900070012
	M 10				10,0	8,0	B029-021000080010
	M 14				11,0	9,0	B029-021100090014
2	M 10	50	31	34	7,0	5,5	B029-030700055010
	M 8				8,0	6,2	B029-03080006208
	M 12				9,0	7,0	B029-030900070012
	M 10				10,0	8,0	B029-031000080010
	M 14				11,0	9,0	B029-031100090014
	M 16				12,0	9,0	B029-031200090016
	M 18				14,0	11,0	B029-031400110018
	M 20				16,0	12,0	B029-031600120020
	M 22				18,0	14,5	B029-031800145022
	M 24				18,0	14,5	B029-031800145024

Quick-change inserts SES

With safety coupling

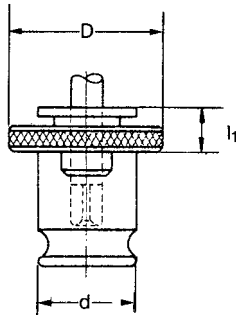


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M 14	72	48	45	11,0	9,0	B029-041100090014
	M 16				12,0	9,0	B029-041200090016
	M 18				14,0	11,0	B029-041400110018
	M 20				16,0	12,0	B029-041600120020
	M 22				18,0	14,5	B029-041800145022
	M 27				20,0	16,0	B029-042000160027
	M 30				22,0	18,0	B029-042200180030
	M 33				25,0	20,0	B029-042500200033
	M 36				28,0	22,0	B029-042800220036
4	M 24	95	60	68	18,0	14,5	B029-051800145024
	M 27				20,0	16,0	B029-052000160027
	M 30				22,0	18,0	B029-052200180030
	M 33				25,0	20,0	B029-052500200033
	M 36				28,0	22,0	B029-052800220036
	M 42				32,0	24,0	B029-053200240042
	M 45				36,0	29,0	B029-053600290045

Quick-change inserts SE

Without safety coupling

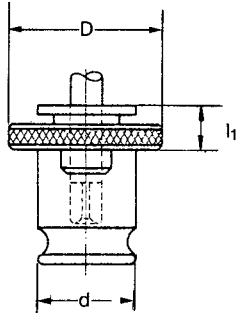


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
1	M3 - M14	30	19	7	3,5	2,7	B027-0203500270
					4,0	3,0	B027-0204000300
					4,5	3,4	B027-0204500340
					6,0	4,9	B027-0206000490
					7,0	5,5	B027-0207000550
					8,0	6,2	B027-0208000620
					9,0	7,0	B027-0209000700
					10,0	8,0	B027-0210000800
					11,0	9,0	B027-0211000900
2	M8 - M20	46	31	11	7,0	5,5	B027-0307000550
					8,0	6,2	B027-0308000620
					9,0	7,0	B027-0309000700
					10,0	8,0	B027-0310000800
					11,0	9,0	B027-0311000900
					12,0	9,0	B027-0312000900
					14,0	11,0	B027-0314001100
					16,0	12,0	B027-0316001200
					18,0	14,5	B027-0318001450

Quick-change inserts SE

Without safety coupling



DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M14 - M33	68	48	14	11,0	9,0	B027-0411000900
					12,0	9,0	B027-0412000900
					14,0	11,0	B027-0414001100
					16,0	12,0	B027-0416001200
					18,0	14,5	B027-0418001450
					20,0	16,0	B027-0420001600
					22,0	18,0	B027-0422001800
					25,0	20,0	B027-0425002000
4	M22 - M48	83	60	42	28,0	22,0	B027-0428002200
					18,0	14,5	B027-0518001450
					20,0	16,0	B027-0520001600
					22,0	18,0	B027-0522001800
					25,0	20,0	B027-0525002000
					28,0	22,0	B027-0528002200
					32,0	24,0	B027-0532002400
					36,0	29,0	B027-0536002900

Synchro-Tapping chuck

63 100

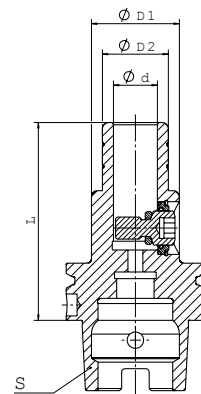
ISO 12164 - Form A+C

Increase of tool life with modern tapping chuck

Modern CNC machining centres increasingly use rigid chucks for tapping operations. The continuous-path control shows slight synchronisation errors which results in a higher wear of thread flutes. The new synchro-tapping chuck, developed by BENZ, compensates these pitch errors and increases the tapping tool life significantly

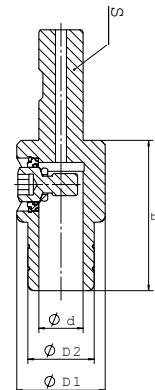
HSK DIN 69893-A

HSK-A	Screw tap	L	D ₁	D ₂	d	Order-no.
63	M3 - M12	90	40	30	20	711.0772090
63	M12 - M20	110	48	35	25	711.07725110
100	M3 - M12	95	40	30	20	713.0772095
100	M12 - M20	115	48	35	25	713.07725115



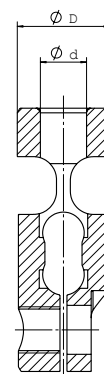
Weldon / Whistle-Notch-Shank

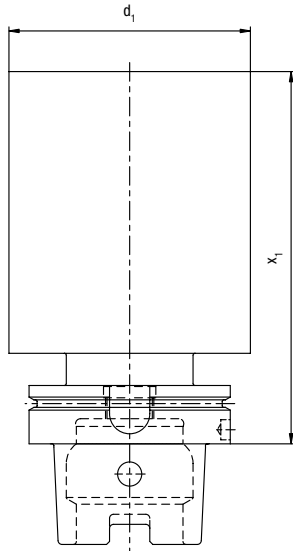
Weldon	Screw tap	L	D ₁	D ₂	d	Order-no.
20	M3 - M12	68	40	30	20	176.0772068
20	M12 - M20	90	48	35	25	177.0772590



Insert for taps

L	D	d	□	Order-no.
27	20	3,5	2,7	067Y020035027V
27	20	4,5	3,4	067Y020045034V
27	20	6,0	4,9	067Y020060049V
27	20	7,0	5,5	067Y020070055V
27	20	8,0	6,2	067Y020080062V
27	20	9,0	7,0	067Y020090070V
27	20	10,0	8,0	067Y020100080V
40	25	11,0	9,0	067Y025110090V
40	25	12,0	9,0	067Y025120090V
40	25	14,0	11,0	067Y025140110V
40	25	16,0	12,0	067Y025160120V





Application: For making special tools

Execution: Taper and collar hardened and ground. Shank d_1 unhardened, turned for further machining

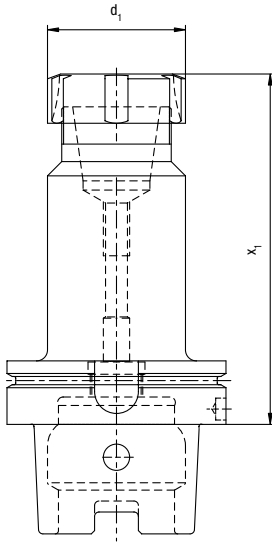
HSK-A	d_1	x_1	Order-no. Form A+C
50	63	160	710.10263160
50	63	200	710.10263200
50	63	250	710.10263250
63	80	160	711.10280160
63	80	200	711.10280200
63	80	250	711.10280250
100	95	160	713.10295160
100	95	200	713.10295200
100	95	250	713.10295250

Collet chucks 8° type ER

For collets DIN 6499

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: To hold tools with parallel shank in collets DIN 6499
Delivery content: Collet chuck with collet nut and adjusting screw

HSK-A	Type	Clamping Range	d ₁	x ₁	Order-no. Form A+C
50	ER16	0,5 - 10	28	100	710.130E3100
50	ER16	0,5 - 10	28	160	710.130E3160
50	ER16	0,5 - 10	28	200	710.130E3200
50	ER25	1,0 - 16	42	100	710.130E5100
50	ER25	1,0 - 16	42	160	710.130E5160
50	ER25	1,0 - 16	42	200	710.130E5200
50	ER32	2,0 - 20	50	100	710.130E6100
50	ER32	2,0 - 20	50	160	710.130E6160
50	ER32	2,0 - 20	50	200	710.130E6200
50	ER40	3,0 - 26	63	120	710.130E7120
50	ER40	3,0 - 26	63	160	710.130E7160
50	ER40	3,0 - 26	63	200	710.130E7200

Collet chucks 8° type ER

For collets DIN 6499

63 100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

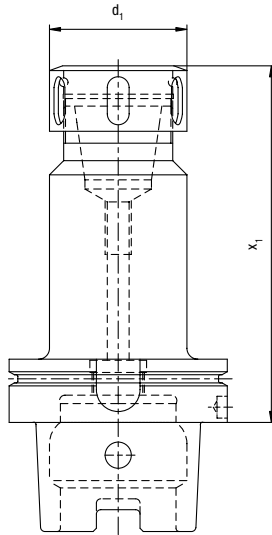
HSK-A	Type	Clamping Range	d ₁	x ₁	Order-no. Form A+C
63	ER16	0,5 - 10	28	80	711.130E380
63	ER16	0,5 - 10	28	100	711.130E3100
63	ER16	0,5 - 10	28	160	711.130E3160
63	ER16	0,5 - 10	28	200	711.130E3200
63	ER25	1,0 - 16	42	80	711.130E580
63	ER25	1,0 - 16	42	100	711.130E5100
63	ER25	1,0 - 16	42	160	711.130E5160
63	ER25	1,0 - 16	42	200	711.130E5200
63	ER32	2,0 - 20	50	100	711.130E6100
63	ER32	2,0 - 20	50	160	711.130E6160
63	ER32	2,0 - 20	50	200	711.130E6200
63	ER40	3,0 - 26	63	120	711.130E7120
63	ER40	3,0 - 26	63	160	711.130E7160
63	ER40	3,0 - 26	63	200	711.130E7200
100	ER16	0,5 - 10	28	100	713.130E3100
100	ER16	0,5 - 10	28	160	713.130E3160
100	ER16	0,5 - 10	28	200	713.130E3200
100	ER25	1,0 - 16	42	100	713.130E5100
100	ER25	1,0 - 16	42	160	713.130E5160
100	ER25	1,0 - 16	42	200	713.130E5200
100	ER32	2,0 - 20	50	100	713.130E6100
100	ER32	2,0 - 20	50	160	713.130E6160
100	ER32	2,0 - 20	50	200	713.130E6200
100	ER40	3,0 - 26	63	120	713.130E7120
100	ER40	3,0 - 26	63	160	713.130E7160
100	ER40	3,0 - 26	63	200	713.130E7200

Collet chucks 1:10

For collets DIN 6388

50 63 100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: To hold tools with parallel shank in collets DIN 6388

Delivery content: Collet chuck with collet nut and adjusting screw

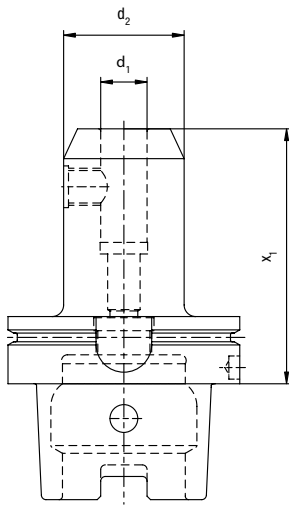
HSK-A	Type	Clamping range	d_1	x_1	Order-no. Form A+C
50	OZ16	1,5 - 16	43	110	710.13016110
50	OZ25	2,0 - 25	60	120	710.13025120
63	OZ16	1,5 - 16	43	110	711.13016110
63	OZ25	2,0 - 25	60	120	711.13025120
63	OZ32	4,0 - 32	72	130	711.13032130
100	OZ16	1,5 - 16	43	110	713.13016110
100	OZ25	2,0 - 25	60	120	713.13025120
100	OZ32	4,0 - 32	72	130	713.13032130

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B
Delivery content: Weldon end mill adapter incl. locking screw

HSK-A	d_1	d_2	x_1	Order-no. Form A+C
50	6	25	65	710.1400665
50	6	25	100	710.14006100
50	6	25	160	710.14006160
50	6	25	200	710.14006200
50	8	28	65	710.1400865
50	8	28	100	710.14008100
50	8	28	160	710.14008160
50	8	28	200	710.14008200
50	10	35	65	710.1401065
50	10	35	100	710.14010100
50	10	35	160	710.14010160
50	10	35	200	710.14010200
50	12	42	80	710.1401280
50	12	42	100	710.14012100
50	12	42	160	710.14012160
50	12	42	200	710.14012200
50	14	44	80	710.1401480
50	14	44	100	710.14014100
50	14	44	160	710.14014160
50	14	44	200	710.14014200
50	16	48	80	710.1401680
50	16	48	100	710.14016100
50	16	48	160	710.14016160
50	16	48	200	710.14016200

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

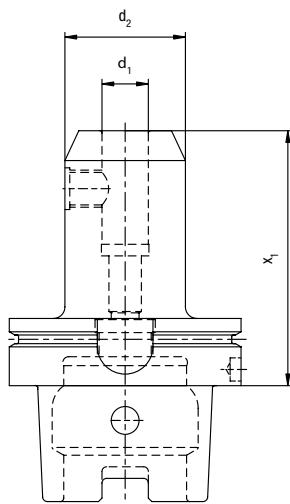
HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
50	18	50	80	710.1401880
50	18	50	100	710.14018100
50	18	50	160	710.14018160
50	18	50	200	710.14018200
50	20	52	80	710.1402080
50	20	52	100	710.14020100
50	20	52	160	710.14020160
50	20	52	200	710.14020200
50	25	65	105	710.14025105
50	32	72	110	710.14032110

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B
Delivery content: Weldon end mill adapter incl. locking screw

HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
63	6	25	65	711.1400665
63	6	25	100	711.14006100
63	6	25	160	711.14006160
63	6	25	200	711.14006200

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

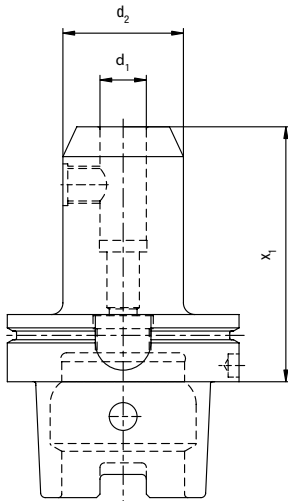
HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
63	8	28	65	711.1400865
63	8	28	100	711.14008100
63	8	28	160	711.14008160
63	8	28	200	711.14008200
63	10	35	65	711.1401065
63	10	35	100	711.14010100
63	10	35	160	711.14010160
63	10	35	200	711.14010200
63	12	42	80	711.1401280
63	12	42	100	711.14012100
63	12	42	160	711.14012160
63	12	42	200	711.14012200
63	14	44	80	711.1401480
63	14	44	100	711.14014100
63	14	44	160	711.14014160
63	14	44	200	711.14014200
63	16	48	80	711.1401680
63	16	48	100	711.14016100
63	16	48	160	711.14016160
63	16	48	200	711.14016200
63	18	50	80	711.1401880
63	18	50	100	711.14018100
63	18	50	160	711.14018160
63	18	50	200	711.14018200
63	20	52	80	711.1402080
63	20	52	100	711.14020100
63	20	52	160	711.14020160
63	20	52	200	711.14020200
63	25	25	110	711.140.25110
63	25	25	160	711.140.25160
63	25	25	200	711.140.25200
63	32	72	110	711.140.32110
63	32	72	160	711.140.32160
63	32	72	200	711.140.32200
63	40	72	120	711.140.40120

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B

Delivery content: Weldon end mill adapter incl. locking screw

HSK-A	d_1	d_2	x_1	Order-no. Form A+C
100	6	25	80	713.1400680
100	6	25	100	713.14006100
100	6	25	160	713.14006160
100	6	25	200	713.14006200
100	8	28	80	713.1400880
100	8	28	100	713.14008100
100	8	28	160	713.14008160
100	8	28	200	713.14008200
100	10	35	80	713.1401080
100	10	35	100	713.14010100
100	10	35	160	713.14010160
100	10	35	200	713.14010200

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

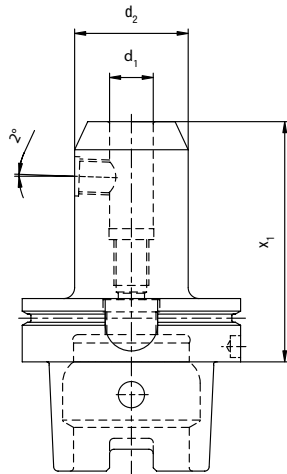
HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
100	12	42	80	713.1401280
100	12	42	100	713.14012100
100	12	42	160	713.14012160
100	12	42	200	713.14012200
100	14	44	80	713.1401480
100	14	44	100	713.14014100
100	14	44	160	713.14014160
100	14	44	200	713.14014200
100	16	48	100	713.14016100
100	16	48	160	713.14016160
100	16	48	200	713.14016200
100	18	50	100	713.14018100
100	18	50	160	713.14018160
100	18	50	200	713.14018200
100	20	52	100	713.14020100
100	20	52	160	713.14020160
100	20	52	200	713.14020200
100	25	65	100	713.14025100
100	25	65	160	713.14025160
100	25	65	200	713.14025200
100	32	72	100	713.14032100
100	32	72	160	713.14032160
100	32	72	200	713.14032200
100	40	72	110	713.14040110
100	40	72	160	713.14040160
100	40	72	200	713.14040200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form E

Delivery content: Whistle-Notch end mill adapter incl. locking screw and adjusting screw

HSK-A	d_1	d_2	x_1	Order-no. Form A+C
50	6	25	80	710.1410680
50	6	25	100	710.1416100
50	6	25	160	710.14106160
50	6	25	200	710.14106200
50	8	28	80	710.1410880
50	8	28	100	710.14108100
50	8	28	160	710.14108160
50	8	28	200	710.14108200
50	10	35	80	710.1411080
50	10	35	100	710.14110100
50	10	35	160	710.14110160
50	10	35	200	710.14110200
50	12	42	90	710.1411290
50	12	42	100	710.14112100
50	12	42	160	710.14112160
50	12	42	200	710.14112200
50	14	44	90	710.1411490
50	14	44	100	710.14114100
50	14	44	160	710.14114160
50	14	44	200	710.14114200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
50	16	48	90	710.1411690
50	16	48	100	710.14116100
50	16	48	160	710.14116160
50	16	48	200	710.14116200
50	18	50	90	710.1411890
50	18	50	100	710.14118100
50	18	50	160	710.14118160
50	18	50	200	710.14118200
50	20	52	100	710.14120100
50	20	52	160	710.14120160
50	20	52	200	710.14120200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

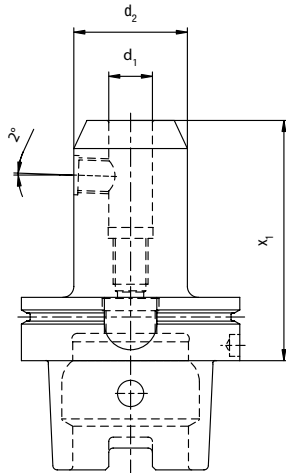
HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
63	6	25	80	711.1410680
63	6	25	100	711.14106100
63	6	25	160	711.14106160
63	6	25	200	711.14006200
63	8	28	80	711.1410880
63	8	28	100	711.14108100
63	8	28	160	711.14108160
63	8	28	200	711.14108200
63	10	35	80	711.1411080
63	10	35	100	711.14110100
63	10	35	160	711.14110160
63	10	35	200	711.14110200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form E

Delivery content: Whistle-Notch end mill adapter incl. locking screw and adjusting screw

HSK-A	d_1	d_2	x_1	Order-no. Form A+C
63	12	42	90	711.1411290
63	12	42	100	711.14112100
63	12	42	160	711.14112160
63	12	42	200	711.14112200
63	14	44	90	711.1411490
63	14	44	100	711.14114100
63	14	44	160	711.14114160
63	14	44	200	711.14114200
63	16	48	100	711.14116100
63	16	48	160	711.14116160
63	16	48	200	711.14116200
63	18	50	100	711.14118100
63	18	50	160	711.14118160
63	18	50	200	711.14118200
63	20	52	100	711.14120100
63	20	52	160	711.14120160
63	20	52	200	711.14120200
63	25	65	110	711.14125110
63	25	65	160	711.14125160
63	25	65	200	711.14125200
63	32	72	110	711.14132110
63	32	72	160	711.14132160
63	32	72	200	711.14132200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

HSK-A	d ₁	d ₂	x ₁	Order-no. Form A+C
100	6	25	90	713.1410690
100	6	25	100	713.14106100
100	6	25	160	713.14106160
100	6	25	200	713.14106200
100	8	28	90	713.1410890
100	8	28	100	713.14108100
100	8	28	160	713.14108160
100	8	28	200	713.14108200
100	10	35	90	713.1411090
100	10	35	100	713.14110100
100	10	35	160	713.14110160
100	10	35	200	713.14110200
100	12	42	100	713.14112100
100	12	42	160	713.14112160
100	12	42	200	713.14112200
100	14	44	100	713.14114100
100	14	44	160	713.14114160
100	14	44	200	713.14114200
100	16	48	100	713.14116100
100	16	48	160	713.14116160
100	16	48	200	713.14116200
100	18	50	100	713.14118100
100	18	50	160	713.14118160
100	18	50	200	713.14118200
100	20	52	110	713.14120110
100	20	52	160	713.14120160
100	20	52	200	713.14120200
100	25	65	120	713.14125120
100	25	65	160	713.14125160
100	25	65	200	713.14125200
100	32	72	120	713.14132120
100	32	72	160	713.14132160
100	32	72	200	713.14132200

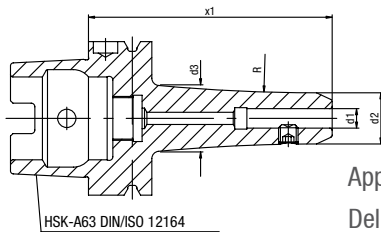
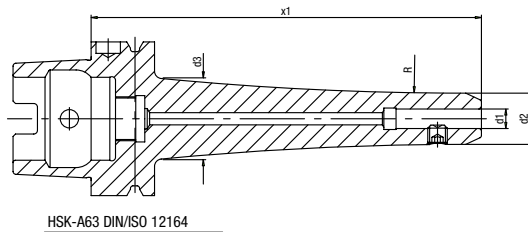
Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 18,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B
Delivery content: Weldon end mill adapter incl. locking screw

HSK-A	d_1	x_1	d_2	d_3	Order-no. Form A+C
63	6	65	17	17	711.1490665
63	6	100	17	23	711.14906100
63	6	130	17	28	711.14906130
63	6	160	17	29	711.14906160
63	8	65	21	21	711.1490865
63	8	100	21	27	711.14908100
63	8	130	21	32	711.14908130
63	8	160	21	33	711.14908160
63	10	65	24	24	711.1491065
63	10	100	24	30	711.14910100
63	10	130	24	35	711.14910130
63	10	160	24	36	711.14910160
63	12	80	27	27	711.1491280
63	12	100	27	33	711.14912100
63	12	130	27	38	711.14912130
63	12	160	27	39	711.14912160

Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

63

ISO 12164 - Form A+C
Pre-balanced G6,3 - 18,000 r.p.m.

HSK-A	d ₁	x ₁	d ₂	d ₃	Order-no. Form A+C
63	14	80	29	29	711.1491480
63	14	100	29	35	711.14914100
63	14	130	29	40	711.14914130
63	14	160	29	41	711.14914160
63	16	80	33	33	711.1491680
63	16	100	33	39	711.14916100
63	16	130	33	44	711.14916130
63	16	160	33	45	711.14916160
63	18	80	35	35	711.1491880
63	18	100	35	41	711.14918100
63	18	130	35	46	711.14918130
63	18	160	35	47	711.14918160
63	20	80	39	39	711.1492080
63	20	100	39	45	711.14920100
63	20	130	39	50	711.14920130
63	20	160	39	51	711.14920160
63	25	100	47	47	711.14925100
63	25	130	47	47	711.14925130
63	25	160	47	47	711.14925160
63	32	110	57	57	711.14932110
63	32	160	57	57	711.14932160

Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

100

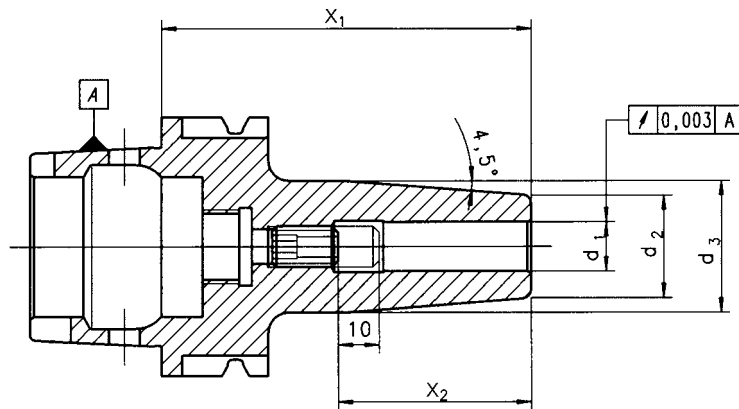
ISO 12164 - Form A+C
Pre-balanced G6,3 - 18,000 r.p.m.

HSK-A	d ₁	x ₁	d ₂	d ₃	Order-no. Form A+C
100	6	130	17	26	713.14906130
100	6	160	17	27	713.14906160
100	6	200	17	37	713.14906200
100	8	130	21	30	713.14908130
100	8	160	21	32	713.14908160
100	8	200	21	41	713.14908200
100	10	130	24	33	713.14910130
100	10	160	24	35	713.14910160
100	10	200	24	44	713.14910200
100	12	130	27	37	713.14912130
100	12	160	27	38	713.14912160
100	12	200	27	47	713.14912200
100	14	130	29	39	713.14914130
100	14	160	29	40	713.14914160
100	14	200	29	49	713.14914200
100	16	130	33	43	713.14916130
100	16	160	33	44	713.14916160
100	16	200	33	53	713.14916200
100	18	130	35	45	713.14918130
100	18	160	35	46	713.14918160
100	18	200	35	55	713.14918200
100	20	130	39	49	713.14920130
100	20	160	39	50	713.14920160
100	20	200	39	59	713.14920200
100	25	130	47	57	713.14925130
100	25	160	47	58	713.14925160
100	25	200	47	67	713.14925200
100	32	130	57	67	713.14932130
100	32	160	57	68	713.14932160
100	32	200	57	70	713.14932200

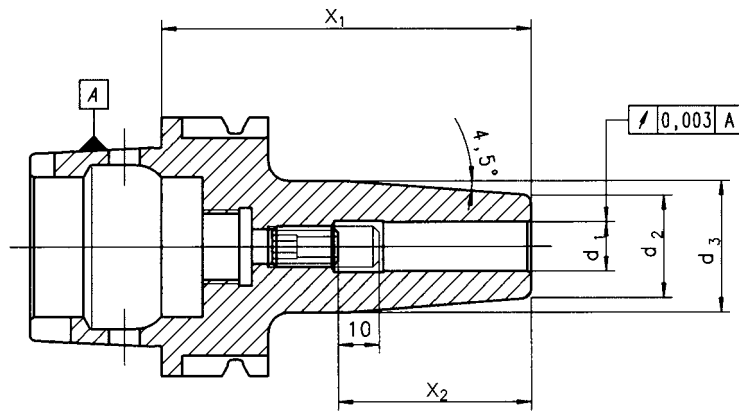
Shrink fit chucks

50

ISO 12164 - Form A+C
Pre-balanced G2,5 - 15,000 r.p.m.



HSK-A	d_1	d_2	d_3	x_1	x_2	Order-no. Form A+C
50	3	15	20	60	20	710.1520360
50	4	15	20	60	20	710.1520460
50	5	15	20	60	25	710.1520560
50	6	21	27	80	36	710.1520680
50	6	21	27	130	36	710.15206130
50	6	21	27	160	36	710.15206160
50	8	21	27	80	36	710.1520880
50	8	21	27	130	36	710.15208130
50	8	21	27	160	36	710.15208160
50	10	24	32	85	42	710.1521085
50	10	24	32	130	42	710.15210130
50	10	24	32	160	42	710.15210160
50	12	24	32	90	47	710.1521290
50	12	24	32	130	47	710.15212130
50	12	24	32	160	47	710.15212160
50	14	27	34	90	47	710.1521490
50	14	27	34	130	47	710.15214130
50	14	27	34	160	47	710.15214160
50	16	27	34	95	50	710.1521695
50	16	27	34	130	50	710.15216130
50	16	27	34	160	50	710.15216160



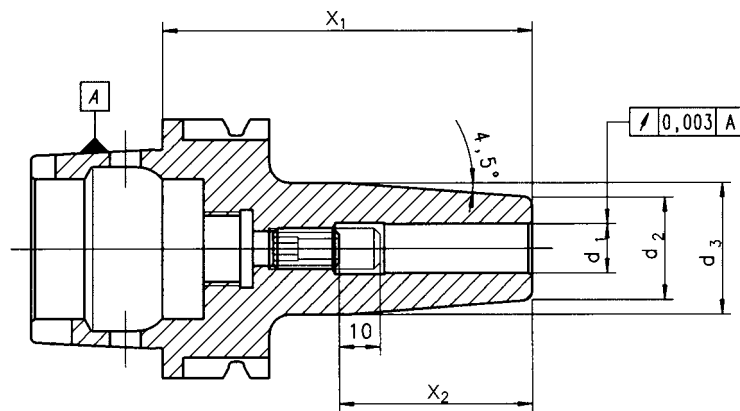
HSK-A	d_1	d_2	d_3	x_1	x_2	Order-no. Form A+C
63	3	15	20	80	20	711.1520380
63	4	15	20	80	20	711.1520480
63	5	15	20	80	25	711.1520580
63	6	21	27	80	36	711.1520680
63	6	21	27	120	36	711.15206120
63	6	21	27	160	36	711.15206160
63	6	21	27	200	36	711.15206200
63	8	21	27	80	36	711.1520880
63	8	21	27	120	36	711.15208120
63	8	21	27	160	36	711.15208160
63	8	21	27	200	36	711.15208200
63	10	24	32	85	42	711.1521085
63	10	24	32	120	42	711.15210120
63	10	24	32	160	42	711.15210160
63	10	24	32	200	42	711.15210200
63	12	24	32	90	47	711.1521290
63	12	24	32	120	47	711.15212120
63	12	24	32	160	47	711.15212160
63	12	24	32	200	47	711.15212200

HSK-A	d ₁	d ₂	d ₃	x ₁	x ₂	Order-no. Form A+C
63	14	27	34	90	47	711.1521490
63	14	27	34	120	47	711.15214120
63	14	27	34	160	47	711.15214160
63	14	27	34	200	47	711.15214200
63	16	27	34	95	50	711.1521695
63	16	27	34	120	50	711.15216120
63	16	27	34	160	50	711.15216160
63	16	27	34	200	50	711.15216200
63	18	33	42	95	50	711.1521895
63	18	33	42	120	50	711.15218120
63	18	33	42	160	50	711.15218160
63	18	33	42	200	50	711.15218200
63	20	33	42	100	52	711.15220100
63	20	33	42	130	52	711.15220130
63	20	33	42	160	52	711.15220160
63	20	33	42	200	52	711.15220200
63	25	44	53	115	58	711.15225115
63	25	44	53	160	58	711.15225160
63	25	44	53	200	58	711.15225200
63	32	44	53	120	58	711.15232120
63	32	44	53	160	58	711.15232160
63	32	44	53	200	58	711.15232200

Shrink fit chucks

100

ISO 12164 - Form A+C
Pre-balanced G2,5 - 15,000 r.p.m.



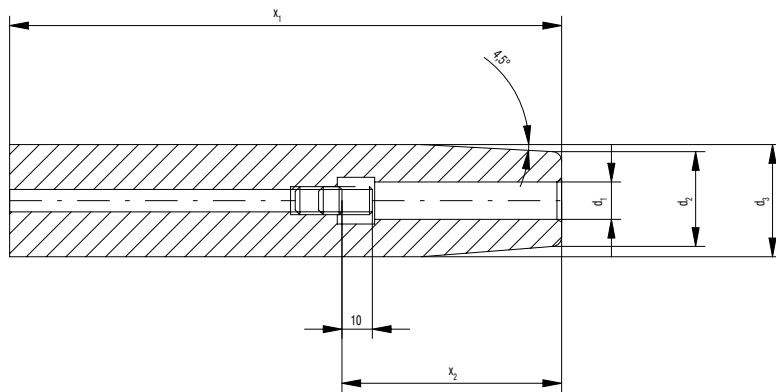
HSK-A	d_1	d_2	d_3	x_1	x_2	Order-no. Form A+C
100	6	21	27	85	36	713.1520685
100	6	21	27	130	36	713.15206130
100	6	21	27	160	36	713.15206160
100	6	21	27	200	36	713.15206200
100	8	21	27	85	36	713.1520885
100	8	21	27	130	36	713.15208130
100	8	21	27	160	36	713.15208160
100	8	21	27	200	36	713.15208200
100	10	24	32	90	42	713.1521090
100	10	24	32	130	42	713.15210130
100	10	24	32	160	42	713.15210160
100	10	24	32	200	42	713.15210200
100	12	24	32	95	47	713.1521295
100	12	24	32	130	47	713.15212130
100	12	24	32	160	47	713.15212160
100	12	24	32	200	47	713.15212200

Shrink fit chucks

100

ISO 12164 - Form A+C
Pre-balanced G2,5 - 15,000 r.p.m.

HSK-A	d ₁	d ₂	d ₃	x ₁	x ₂	Order-no. Form A+C
100	14	27	34	95	47	713.1521495
100	14	27	34	130	47	713.15214130
100	14	27	34	160	47	713.15214160
100	14	27	34	200	47	713.15214200
100	16	27	34	100	50	713.15216100
100	16	27	34	130	50	713.15216130
100	16	27	34	160	50	713.15216160
100	16	27	34	200	50	713.15216200
100	18	33	42	100	50	713.15218100
100	18	33	42	130	50	713.15218130
100	18	33	42	160	50	713.15218160
100	18	33	42	200	50	713.15218200
100	20	33	42	105	52	713.15220105
100	20	33	42	130	52	713.15220130
100	20	33	42	160	52	713.15220160
100	20	33	42	200	52	713.15220200
100	25	44	53	115	58	713.15225115
100	25	44	53	160	58	713.15225160
100	25	44	53	200	58	713.15225200
100	32	44	53	120	58	713.15232120
100	32	44	53	160	58	713.15232160
100	32	44	53	200	58	713.15232200



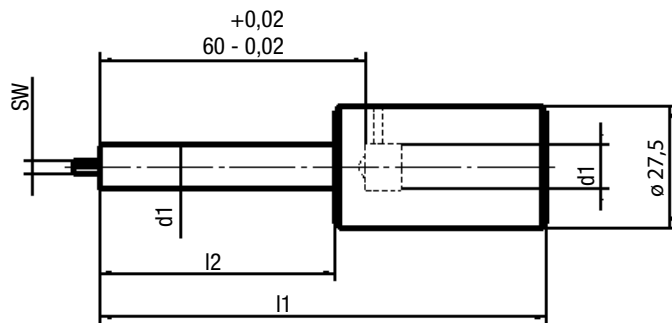
Application: To extend and reduce to minor diameters

Delivery content: At $\varnothing d_1$ from 3 to 5 mm without adjusting screw and at $\varnothing d_1$ ex 6 mm with adjusting screw

d_3	d_2	d_1	x_1	x_2	Order-no.
12	8	3	160	9	Z12.15203160
12	8	4	160	12	Z12.15204160
16	10	3	160	9	Z16.15203160
16	10	4	160	12	Z16.15204160
16	10	5	160	15	Z16.15205160
16	10	6	160	28	Z16.15206160
20	14	5	160	15	Z20.15205160
20	14	6	160	28	Z20.15206160
20	14	8	160	34	Z20.15208160
25	19	8	160	34	Z25.15208160
25	20	10	160	42	Z25.15210160
25	20	12	160	47	Z25.15212160
25	20	14	160	47	Z25.15214160
25	22	16	160	50	Z25.15216160
32	27	10	160	42	Z32.15210160
32	27	12	160	47	Z32.15212160
32	27	14	160	47	Z32.15214160
32	27	16	160	50	Z32.15216160
32	27	18	160	50	Z32.15218160
32	27	20	160	52	Z32.15220160

Presetting adapter for shrink fit chucks

With the presetting adapter you can easily preset the tool length before starting the shrinking process. They are suitable for all shrink fit chucks equipped with an adjustment screw with a Hexagon socket on the side where the tool is inserted. Working carefully you will achieve a precision of $\pm 0,03$ mm after the shrinking process.



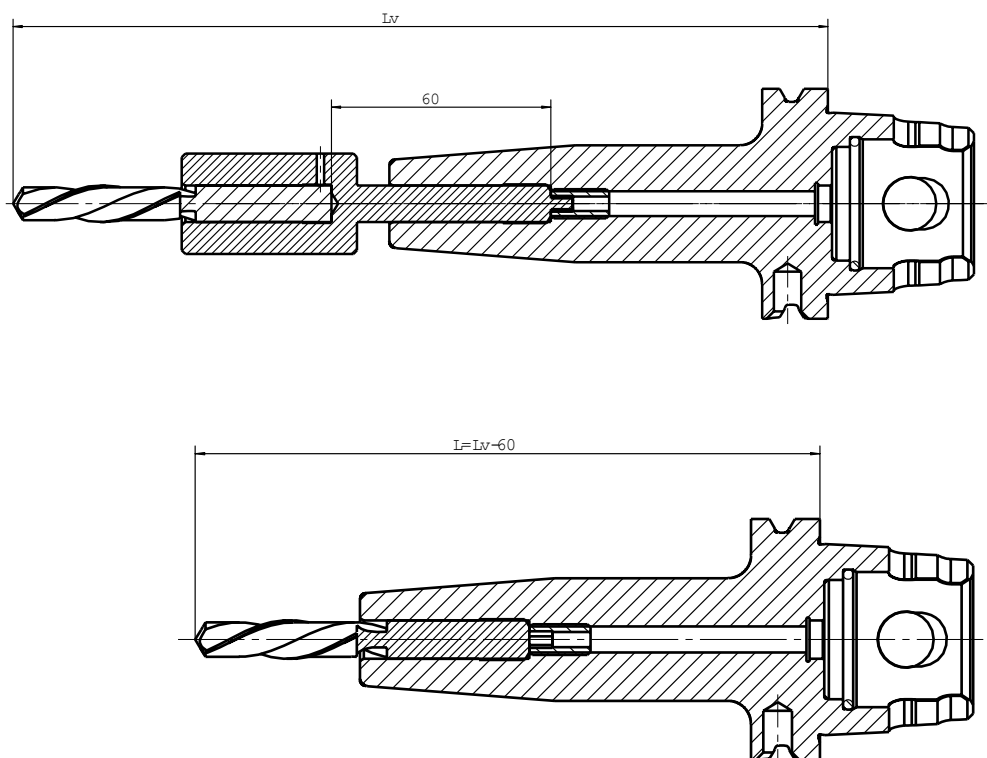
For	d ₁	l ₁	l ₂	SW	Order-no.
HSK/SK/BT	6	96	53	2,5	B152-L060025
HSK/SK/BT	8	96	53	3	B152-L080030
HSK/SK/BT	10	101	53	3	B152-L100030
HSK40	12	107	53	3	B152-L120030
HSK40	14	107	53	3	L152-L140030
HSK40	16	110	53	3	B152-L160030
HSK50+63+80+100/ SK/BT	12	107	53	5	B152-L120050
HSK50+63+80+100/ SK/BT	14	107	53	5	B152-L140050
HSK50+63+80+100/ SK/BT	16	110	53	5	B152-L160050
HSK50/HSK63/SK30	18	110	53	5	B152-L180050
HSK50/HSK63/SK30	20	112	53	5	B152-L200050
HSK80+100/ SK40+50/BT	18	110	53	8	B152-L180080
HSK80+100/ SK40+50/BT	20	112	53	8	B152-L200080

Manual for presetting adapter

Before you start the shrinking process please insert tool (4) into the presetting adapter (3) and fit it together with the shrink fit chuck (1) with the stop screw (2).

Now you can regulate the length by turning the adapter which will set the stop screw to the requested length. The requested length (L) after the shrinking process results of the presetting lengths (L_v) as follows $L = L_v - 60\text{mm}$.

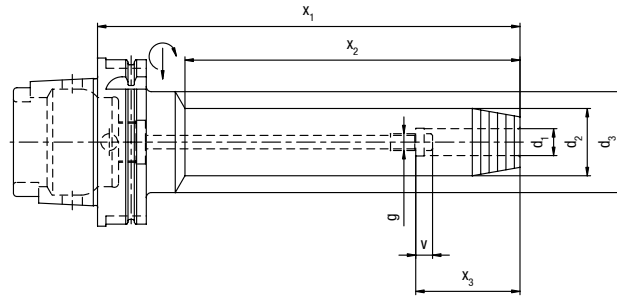
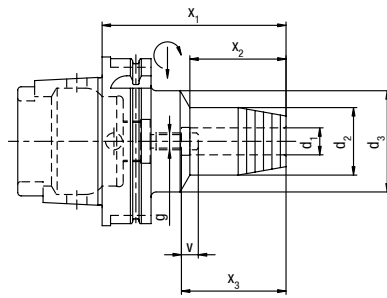
Please take out the adapter and shrink in the tool. The tool has to be placed upon the stop screw.



Hydraulic expansion chuck

IKZ 50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 15,000 r.p.m.



Delivery content: Allen- „T“-Wrench

HSK-A	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. Form A+C
50	6	26	40	70	24	37	10	M5	710.1580670
50	8	28	40	70	24	37	10	M6	710.1580870
50	10	30	40	75	34	41	10	M8x1	710.1581075
50	12	32	40	85	40	46	10	M10x1	710.1581285
50	14	34	40	85	40	46	10	M10x1	710.1581485
50	16	38	53	90	30	49	10	M12x1	710.1581690
50	18	40	53	90	30	49	10	M12x1	710.1581890
50	20	42	57	90	29	51	10	M12x1	710.1582090

Hydraulic expansion chuck

IKZ 63 100

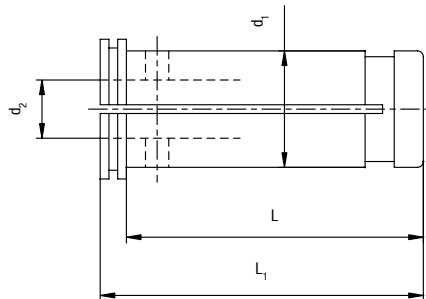
ISO 12164 - Form A+C

Pre-balanced G6,3 - 15,000 r.p.m.

Delivery content: Allen- „T“-Wrench

HSK-A	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. Form A+C
63	6	26	50	70	24	37	10	M5	711.1580670
63	6	30	50	150	105	37	10	M5	711.15806150
63	6	30	50	200	155	37	10	M5	711.15806200
63	8	28	50	70	24	37	10	M6	711.1580870
63	8	32	50	150	105	37	10	M5	711.15808150
63	8	32	50	200	155	37	10	M5	711.15808200
63	10	30	50	80	32	41	10	M8x1	711.1581080
63	10	34	50	150	105	41	10	M6	711.15810150
63	10	34	50	200	155	41	10	M6	711.15810200
63	12	32	50	85	40	46	10	M10x1	711.1581285
63	12	34	50	150	105	46	10	M6	711.15812150
63	12	34	50	200	155	46	10	M6	711.15812200
63	14	34	50	85	40	46	10	M10x1	711.1581485
63	14	34	50	150	105	46	10	M6	711.15814150
63	14	34	50	200	155	46	10	M8x1	711.15814200
63	16	38	50	90	46	49	10	M12x1	711.1581690
63	16	38	50	150	105	49	10	M8x1	711.15816150
63	16	38	50	200	155	49	10	M8x1	711.15816200
63	18	40	50	90	46	49	10	M12x1	711.1581890
63	18	40	50	150	105	49	10	M8x1	711.15818150
63	18	40	50	200	155	49	10	M8x1	711.15818200
63	20	42	50	90	48	51	10	M16x1	711.1582090
63	20	42	50	150	105	51	10	M8x1	711.15820150
63	20	42	50	200	155	51	10	M8x1	711.15820200
63	25	57	50	120	63	57	10	M16x1	711.15825120
63	32	63	50	125	61	61	10	M16x1	711.15832125
100	6	26	50	75	24	37	10	M5	713.1580675
100	8	28	50	75	24	37	10	M6	713.1580875
100	10	30	50	90	32	41	10	M8x1	713.1581090
100	12	32	50	95	40	46	10	M10x1	713.1581295
100	14	34	50	95	40	46	10	M10x1	713.1581495
100	16	38	50	100	45	49	10	M12x1	713.15816100
100	18	40	50	100	46	49	10	M12x1	713.15818100
100	20	42	50	105	48	51	10	M16x1	713.15820105
100	25	57	63	110	62	57	10	M16x1	713.15825115
100	32	63	67	110	60	61	10	M16x1	713.15832120

Reducing collets sealed



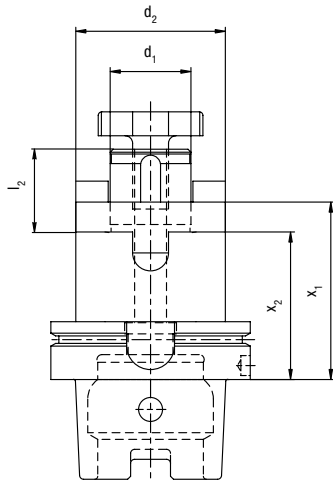
d_1	d_2	L	L_1	Order-no.
12	3	40	44	068Y012003440
12	4	40	44	068Y012004440
12	5	40	44	068Y012005440
12	6	40	44	068Y012006440
12	8	40	44	068Y012008440
12	10	40	44	068Y012010440
20	3	51	55,5	068Y020003555
20	4	51	55,5	068Y020004555
20	5	51	55,5	068Y020005555
20	6	51	55,5	068Y020006555
20	8	51	55,5	068Y020008555
20	10	51	55,5	068Y020010555
20	12	51	55,5	068Y020012555
20	14	51	55,5	068Y020014555
20	16	51	55,5	068Y020016555
32	6	62	66,5	068Y032006665
32	8	62	66,5	068Y032008665
32	10	62	66,5	068Y032010665
32	12	62	66,5	068Y032012665
32	14	62	66,5	068Y032014665
32	16	62	66,5	068Y032016665
32	18	62	66,5	068Y032018665
32	20	62	66,5	068Y032020665
32	25	62	66,5	068Y032025665

Combination face mill adapters DIN 6358

For milling cutters with longitudinal or transverse drive

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For mounting milling cutters with tenon drive or clutch drive

Delivery content: Form A with arbor screw, key and driving ring

HSK-A	d_1	d_2	x_1	x_2	l_2	Order-no. Form A+C
50	16	32	50	40	27	710.2311650
50	16	32	100	90	27	710.23116100
50	16	32	160	150	27	710.23116160
50	22	40	50	38	31	710.2312250
50	22	40	100	88	31	710.23122100
50	22	40	160	148	31	710.23122160
50	27	48	55	43	33	710.2312755
50	27	48	100	88	33	710.23127100
50	27	48	160	148	33	710.23127160
50	32	58	65	51	38	710.2313265
50	32	58	100	86	38	710.23132100
50	32	58	160	146	38	710.23132160

Combination face mill adapters

DIN 6358

For milling cutters with longitudinal or transverse drive

63 100

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

HSK-A	d ₁	d ₂	x ₁	x ₂	l ₂	Order-no. Form A+C
63	16	32	60	50	27	711.2311660
63	16	32	100	90	27	711.23116100
63	16	32	160	150	27	711.23116160
63	22	40	60	48	31	711.2312260
63	22	40	100	88	31	711.23122100
63	22	40	160	148	31	711.23122160
63	27	48	60	48	33	711.2312760
63	27	48	100	88	33	711.23127100
63	27	48	160	148	33	711.23127160
63	32	58	60	46	38	711.2313260
63	32	58	100	86	38	711.23132100
63	32	58	160	146	38	711.23132160
63	40	70	70	56	41	711.2314070
63	40	70	100	86	41	711.23140100
63	40	70	160	146	41	711.23140160
100	16	32	60	50	27	713.2311660
100	16	32	100	90	27	713.23116100
100	16	32	160	150	27	713.23116160
100	22	40	60	48	31	713.2312260
100	22	40	100	88	31	713.23122100
100	22	40	160	148	31	713.23122160
100	27	48	60	48	33	713.2312760
100	27	48	100	88	33	713.23127100
100	27	48	160	148	33	713.23127160
100	32	58	60	46	38	713.2313260
100	32	58	100	86	38	713.23132100
100	32	58	160	146	38	713.23132160
100	40	70	70	56	41	713.2314070
100	40	70	100	86	41	713.23140100
100	40	70	160	146	41	713.23140160

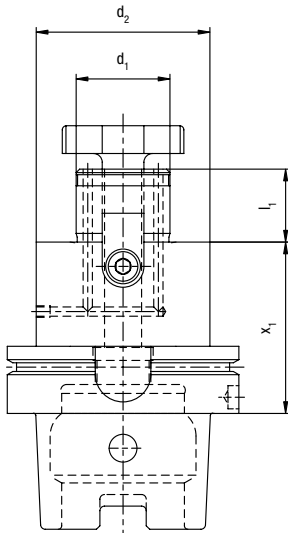
Milling machine arbors

DIN 6357

For milling cutters

50

ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For mounting milling cutters with key drive
Delivery content: With driver and arbor screw

HSK-A	d_1	d_1	x_1	l_1	Order-no. Form A+C
50	16	38	45	17	710.242163845
50	16	38	100	17	710.2421638100
50	16	38	160	17	710.2421638160
50	22	50	60	19	710.242225060
50	22	50	100	19	710.2422250100
50	22	50	160	19	710.2422250160
50	27	60	60	21	710.242276060
50	27	60	100	21	710.2422760100
50	27	60	160	21	710.2422760160

Milling machine arbors

DIN 6357

For milling cutters

63 100

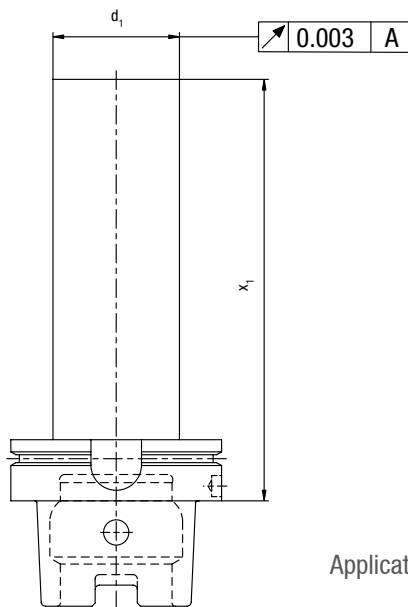
ISO 12164 - Form A+C
Pre-balanced G6,3 - 8,000 r.p.m.

HSK-A	d ₁	d ₁	x ₁	l ₁	Order-no. Form A+C
63	16	40	45	17	711.242163845
63	16	40	100	17	711.2421638100
63	16	40	160	17	711.2421638160
63	22	50	50	19	711.242225050
63	22	50	100	19	711.2422250100
63	22	50	160	19	711.2422250160
63	27	60	60	21	711.242276060
63	27	60	100	21	711.2422760100
63	27	60	160	21	711.2422760160
63	32	78	60	24	711.242327860
63	32	78	100	24	711.2423278100
63	32	78	160	24	711.2423278160
63	40	89	60	27	711.242408960
63	40	89	100	27	711.2424089100
63	40	89	160	27	711.2424089160
100	16	38	45	17	713.242163845
100	16	38	100	17	713.2421638100
100	16	38	160	17	713.2421638160
100	22	50	50	19	713.242225050
100	22	50	100	19	713.2422250100
100	22	50	160	19	713.2422250160
100	27	60	50	21	713.242276050
100	27	60	100	21	713.2422760100
100	27	60	160	21	713.2422760160
100	32	80	50	24	713.242327850
100	32	80	100	24	713.2423278100
100	32	80	160	24	713.2423278160
100	40	90	60	27	713.242408960
100	40	90	100	27	713.2424089100
100	40	90	160	27	713.2424089160
100	60	129	80	40	713.2426012980

Test arbors in wooden box with inspection report

50 63 100

ISO 12164 - Form A+C



Application:

For machine tools according to ISO recommendations R230 or for testing the tool spindle

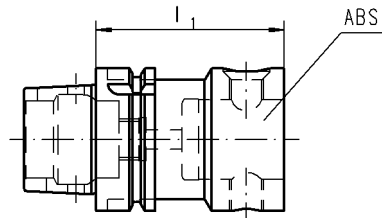
HSK-A	d_1	x_1	Order-no. Form A+C
50	32	150	710.24632150
63	40	200	711.24640200
100	40	300	713.24640300

ABS® - Adapters

License Komet

50 63 100

ISO 12164 - Form A+C



Application: To hold tools with ABS shank
Delivery content: With built-in clamping element

HSK-A	ABS	l_1	Order-no. Form A+C
50	25	50	710.ABS2550
50	32	50	710.ABS3250
50	40	60	710.ABS4060
50	50	70	710.ABS5070
63	25	50	711.ABS2550
63	32	50	711.ABS3250
63	40	60	711.ABS4060
63	50	70	711.ABS5070
63	63	80	711.ABS6380
63	80	100	711.ABS80100
100	25	60	713.ABS2560
100	32	60	713.ABS3260
100	40	80	713.ABS4080
100	50	80	713.ABS5080
100	63	80	713.ABS6380
100	80	90	713.ABS8090



Content

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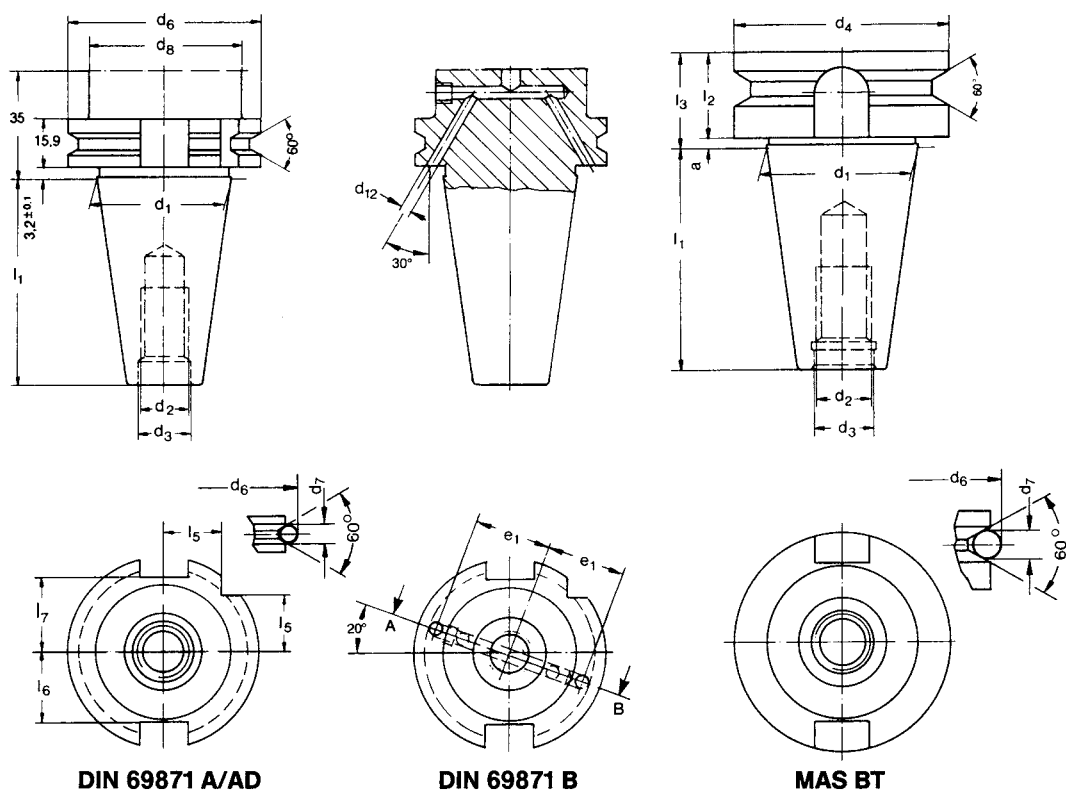
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SK DIN 69871



SK

Technical Information



Size	40	50	Size	40	50	Size	40	50	Size	40	50
d1	44,45	69,85	l1	68,4	101,75	d1	44,45	69,85	l1	65,4	101,8
d2	M16	M24	l5	18,5	30	d2	M16	M24	l2	25	35
d3	17	25	l6	22,8	35,5	d3	17	25	l3	27	38
d6	63,55	97,5	l7	25	37,7	d4	63	100			
d7	7	7	l8	18,5	30	a12	2	3			
d8	50 max.	80 max.	e12	27	42						
d12	4	4									

Execution: Case hardened, HRC 58 ± 2
 depth of case min. 0,5mm
 Beveled angle – tolerance quality AT3

Boring tolerance from $\emptyset 18 d_1 0 + 0,005$
 to $\emptyset 18 d_1 0 + 0,007$

Material:
 Alloyed case hardened steel, tensile strenght in the core
 min. 980 N/mm²

Tool holders in taper sizes SK30 or other are available
 upon request.

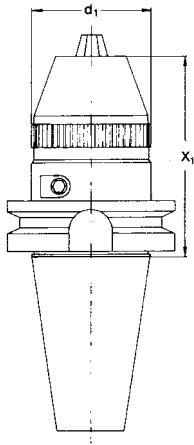
NC-Drill chucks

for cw and ccw rotation

40

50

DIN 69871



DIN 69871

Note: High precision and true running. Left-right operation (for machines with braking motors). Simple operation, clamping and releasing by hexagon socket head wrench. High chucking power through multiplication and automatic locking against release.

SK	Clamping range	D	L	X ₁	Order-no.
DIN 69871 A					
40	1,0 - 13	50	90	96	040.0161390
40	1,5 - 16	57	90	101	040.0161690
50	1,0 - 13	50	106	112	042.01613110
50	1,5 - 16	57	106	117	042.01616110

SK	Clamping range	D	L	X ₁	Order-no.
DIN 69871 AD/B*					
40	1,0 - 13	50	90	96	240.0161390
40	1,5 - 16	57	90	101	240.0161690
50	1,0 - 13	50	106	112	242.01613110
50	1,5 - 16	57	106	117	242.01616110

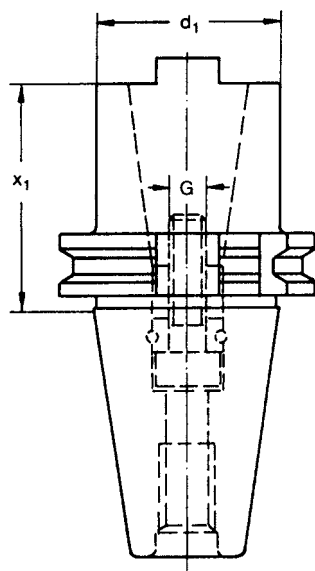
* Standard Form AD, in case form B is requested, please let us know when ordering.

Reduction arbors

For 7/24/24 ISO taper shanks

40 50

DIN 69871 - Form A



DIN 69871 A

Application: To hold taper holders DIN 2080/DIN 69871-MAS BT

Delivery content: With inserted socket-head screw DIN 912

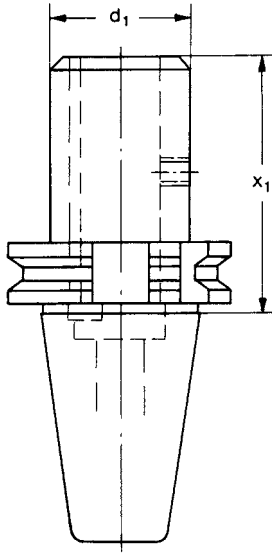
SK	Inside taper size		x_1	d_1	G	Order-no. 69871 A
40	40	DIN 69871	100	70	M 16	040.05840100
40	40	DIN 2080	125	70	M 16	040.06840125
50	40	DIN 69871	70	70	M 16	042.0584070
50	50	DIN 69871	120	97	M 24	042.05850120
50	40	DIN 2080	70	70	M 16	042.0684070
50	50	DIN 2080	120	97	M 24	042.06850120

Master shanks

For adjustable adapters DIN 6327

40 50

DIN 69871 - Form AD



DIN 69871

Application: To hold tools with shank DIN 6327

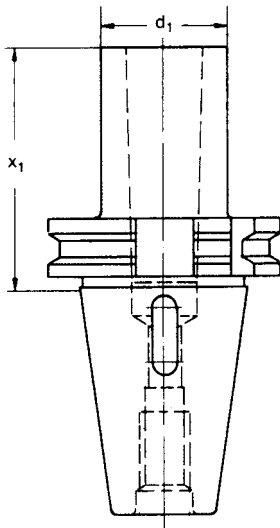
SK	Tr.	X_1	d_2	Order-no. 69871 AD
40	28	70	55	040.0602870
40	36	120	63	040.06036120
50	28	100	55	042.06028100
50	36	100	63	042.06036100
50	48	100	90	042.06048100

Adapter sleeves DIN 6383

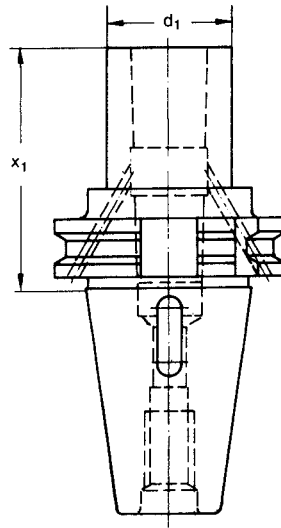
For morse taper shanks and flat tang DIN 228 B

40 50

DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
To hold tools with morse taper and
flat tang DIN 228 B

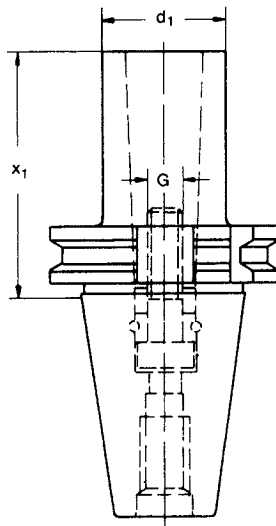
SK	MK	x_1	d_2	Order-no. 69871 AD	Order-no. 69871 AD/B
40	1	50	25	040.061150	240.061150
40	1	100	25	040.0611100	-
40	2	50	32	040.061250	240.061250
40	2	116	32	040.0612116	-
40	3	70	40	040.061370	240.061370
40	3	136	40	040.0613136	-
40	4	95	48	040.061495	240.061495
50	1	45	25	042.061145	242.061145
50	2	60	32	042.061260	242.061260
50	2	117	32	042.0612117	-
50	3	65	40	042.061365	242.061365
50	3	137	40	042.0613137	-
50	4	95	48	042.061495	242.061495
50	4	167	48	042.0614167	-
50	5	105	63	042.0615105	242.0615105

Adapter sleeves DIN 6364

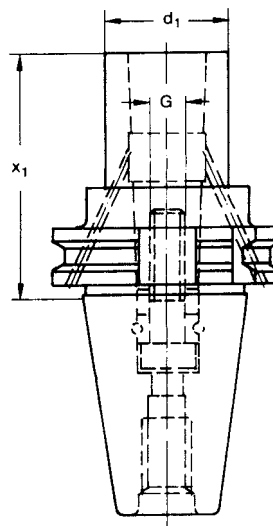
For morse taper shanks DIN 228 A with draw thread

40 50

DIN 69871 - Form A / B



DIN 69871 A



DIN 69871 B

Application:
To hold with morse taper shanks
DIN 228 A with draw thread

Delivery content:
With built-in draw screw

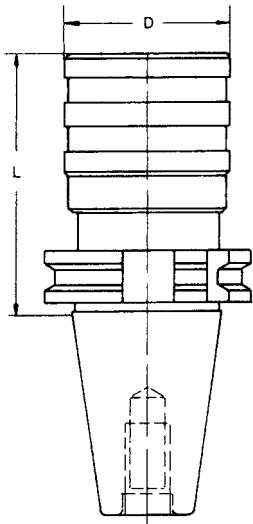
SK	MK	x_1	d_2	Order-no. 69871 AD	Order-no. 69871 B
40	1	50	25	040.064150	240.064150
40	2	50	32	040.064250	240.064250
40	2	100	32	040.0642100	-
40	3	70	40	040.064370	240.064370
40	4	95	48	040.064495	240.064495
50	1	45	25	042.064145	242.064145
50	2	60	32	042.064260	242.064260
50	2	150	32	042.0642150	-
50	3	65	40	042.064365	242.064365
50	3	150	40	042.0643150	-
50	4	70	48	042.064470	242.064470
50	4	170	48	042.0644170	-
50	5	100	63	042.0645100	242.0645100

Tapping head quick change

With length compensation in compression and tension

40 50

DIN 69871 - Form A



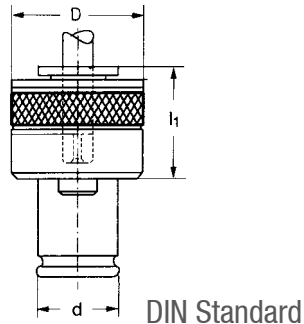
DIN 69871 A

Adapter according to DIN 69871A, ISO 7388.1

SK	Screw tap	Linear compensation		L	D	Standard fastchange inserts	Order-no. Form A+C
		Compression	Tension				
40	M3 - M12	9	9	60	36	Gr. 1	040.0651960
40	M8 - M20	15	15	92	53	Gr. 2	040.06531100
40	M14 - M33	24	24	138	78	Gr. 3	040.06548138
40	M22 - M48	26	26	153	96	Gr. 4	040.06560165
50	M3 - M12	9	9	62	36	Gr. 1	042.0651962
50	M8 - M20	15	15	83	53	Gr. 2	042.0653183
50	M14 - M33	24	24	133	78	Gr. 3	042.06548133
50	M22 - M48	26	26	147	96	Gr. 4	042.0650152

Quick-change inserts SES

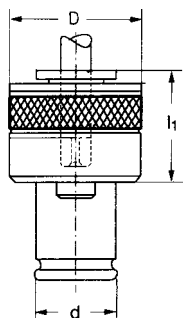
With safety coupling



Size	Screw tap	D	d	l ₁	Shank Ø	□	Order-no.
1	M 3	32	19	25	3,5	2,7	B029-02035002703
	M 3,5				4,0	3,0	B029-020400030035
	M 4				4,5	3,4	B029-02045003404
	M 5				6,0	4,9	B029-02060004905
	M 6				6,0	4,9	B029-02060004906
	M 8				6,0	4,9	B029-02060004908
	M 10				7,0	5,5	B029-020700055010
	M 8				8,0	6,2	B029-02080006208
	M 12				9,0	7,0	B029-020900070012
	M 10				10,0	8,0	B029-021000080010
	M 14				11,0	9,0	B029-021100090014
2	M 10	50	31	34	7,0	5,5	B029-030700055010
	M 8				8,0	6,2	B029-03080006208
	M 12				9,0	7,0	B029-030900070012
	M 10				10,0	8,0	B029-031000080010
	M 14				11,0	9,0	B029-031100090014
	M 16				12,0	9,0	B029-031200090016
	M 18				14,0	11,0	B029-031400110018
	M 20				16,0	12,0	B029-031600120020
	M 22				18,0	14,5	B029-031800145022
	M 24				18,0	14,5	B029-031800145024

Quick-change inserts SES

With safety coupling

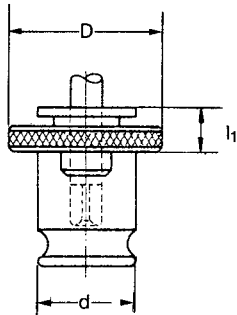


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M 14	72	48	45	11,0	9,0	B029-041100090014
	M 16				12,0	9,0	B029-041200090016
	M 18				14,0	11,0	B029-041400110018
	M 20				16,0	12,0	B029-041600120020
	M 22				18,0	14,5	B029-041800145022
	M 27				20,0	16,0	B029-042000160027
	M 30				22,0	18,0	B029-042200180030
	M 33				25,0	20,0	B029-042500200033
	M 36				28,0	22,0	B029-042800220036
4	M 24	95	60	68	18,0	14,5	B029-051800145024
	M 27				20,0	16,0	B029-052000160027
	M 30				22,0	18,0	B029-052200180030
	M 33				25,0	20,0	B029-052500200033
	M 36				28,0	22,0	B029-052800220036
	M 42				32,0	24,0	B029-053200240042
	M 45				36,0	29,0	B029-053600290045

Quick-change inserts SE

Without safety coupling

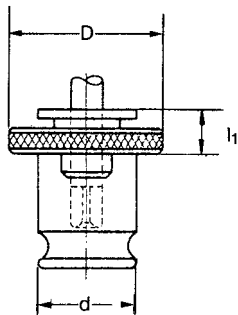


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
1	M3 - M14	30	19	7	3,5	2,7	B027-0203500270
					4,0	3,0	B027-0204000300
					4,5	3,4	B027-0204500340
					6,0	4,9	B027-0206000490
					7,0	5,5	B027-0207000550
					8,0	6,2	B027-0208000620
					9,0	7,0	B027-0209000700
					10,0	8,0	B027-0210000800
2	M8 - M20	46	31	11	11,0	9,0	B027-0211000900
					7,0	5,5	B027-0307000550
					8,0	6,2	B027-0308000620
					9,0	7,0	B027-0309000700
					10,0	8,0	B027-0310000800
					11,0	9,0	B027-0311000900
					12,0	9,0	B027-0312000900
					14,0	11,0	B027-0314001100
					16,0	12,0	B027-0316001200
					18,0	14,5	B027-0318001450

Quick-change inserts SE

Without safety coupling



DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M14 - M33	68	48	14	11,0	9,0	B027-0411000900
					12,0	9,0	B027-0412000900
					14,0	11,0	B027-0414001100
					16,0	12,0	B027-0416001200
					18,0	14,5	B027-0418001450
					20,0	16,0	B027-0420001600
					22,0	18,0	B027-0422001800
					25,0	20,0	B027-0425002000
4	M22 - M48	83	60	42	28,0	22,0	B027-0428002200
					18,0	14,5	B027-0518001450
					20,0	16,0	B027-0520001600
					22,0	18,0	B027-0522001800
					25,0	20,0	B027-0525002000
					28,0	22,0	B027-0528002200
					32,0	24,0	B027-0532002400
					36,0	29,0	B027-0536002900

Screw taps-shaft size

Please quote shaft diameter Ø or tap norm DIN 371 / 374 / 376 when ordering.

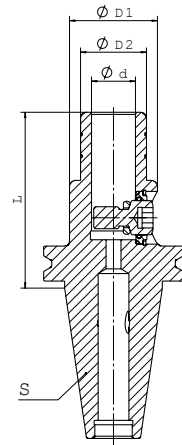
Shaft size			DIN 352	DIN 5157	DIN 371	DIN 374	DIN 376
Ø	x	o					
2,5	x	2,1	M 1		M 1	M 3	M 3,5
2,5	x	2,1	M 1,1		M 1,1	M 3,5	
2,5	x	2,1	M 1,2		M 1,2		
2,5	x	2,1	M 1,4		M 1,4		
2,5	x	2,1	M 1,6		M 1,6		
2,5	x	2,1	M 1,8		M 1,8		
2,8	x	2,1	M 2		M 2	M 4	M 4
2,8	x	2,1	M 2,2		M 2,2		
2,8	x	2,1	M 2,5		M 2,5		
3,5	x	2,7	M 3		M 3	M 5	M 5
4,0	x	3,0	M 3,5		M 3,5		
4,5	x	3,4	M 4		M 4	M 6	M 6
6,0	x	4,9	M 5		M 5		
6,0	x	4,9	M 6		M 6		
6,0	x	4,9	M 8			M 8	M 8
7,0	x	5,5	M 10	G1/8"		M10	M10
8,0	x	6,2			M8		
9,0	x	7,0	M12			M12	M12
10,0	x	8,0			M10		
11,0	x	9,0	M14	G1/4"		M14	M14
12,0	x	9,0	M16	G3/8"		M16	M16
14,0	x	11,0	M18			M18	M18
16,0	x	12,0	M20	G1/2"		M20	M20
18,0	x	14,5	M22	G5/8"		M22	M22
18,0	x	14,5	M24			M24	M24
20,0	x	16,0	M27	G3/4"		M27	M27
22,0	x	18,0	M30	G7/8"		M30	M30
25,0	x	20,0	M33	G1		M33	M33
28,0	x	22,0	M36	G1 1/8"		M36	M36
32,0	x	34,0	M39	G1 1/4"		M39	M39
32,0	x	24,0	M42			M42	M42
36,0	x	29,0	M45	G1 3/8"		M45	M45
36,0	x	29,0	M48	G1 1/2"		M48	M48
36,0	x	29,0		G1 3/4"			
36,0	x	29,0		G2"			

Increase of tool life with modern tapping chuck

Modern CNC machining centres increasingly use rigid chucks for tapping operations. The continuous-path control shows slight synchronisation errors which results in a higher wear of thread flutes. The new Synchro-Tapping chuck by BENZ compensates these errors and increases the tapping tool life significantly.

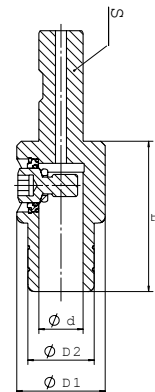
Chuck with taper shank DIN 69871 AD/B

SK	Screw tap	L	D ₁	D ₂	d	Order-no.
40	M3 - M12	80	40	30	20	240.0772080
40	M12 - M20	105	48	35	25	240.07725105
40	M3 - M12	80	40	30	20	242.0772080
40	M12 - M20	105	48	35	25	242.07725105



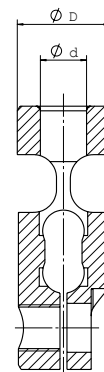
Weldon / Whistle-Notch-Shank

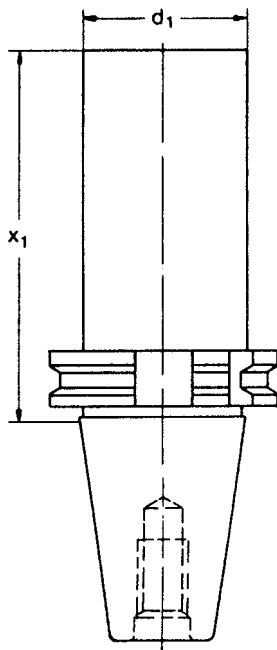
Weldon	Screw tap	L	D ₁	D ₂	d	Order-no.
20	M3 - M12	68	40	30	20	176.0772068
20	M12 - M20	90	48	35	25	177.0772590



Insert for Taps

L	D	d	□	Order-no.
27	20	3,5	2,7	067Y020035027V
27	20	4,5	3,4	067Y020045034V
27	20	6,0	4,9	067Y020060049V
27	20	7,0	5,5	067Y020070055V
27	20	8,0	6,2	067Y020080062V
27	20	9,0	7,0	067Y020090070V
27	20	10,0	8,0	067Y020100080V
40	25	11,0	9,0	067Y025110090V
40	25	12,0	9,0	067Y025120090V
40	25	14,0	11,0	067Y025140110V
40	25	16,0	12,0	067Y025160120V





DIN 69871 A

Application: For making special tools

Execution: Taper and collar hardened and ground. Shank d_1 unhardened, turned for further machining

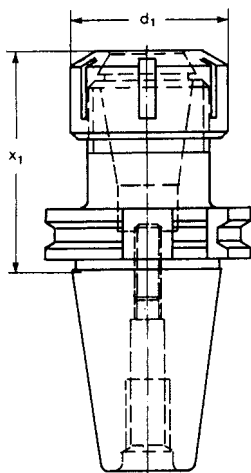
SK	d_1	x_1	Order-no. 69871 A
40	60,5	160	040.10260160
40	60,5	250	040.10260250
50	95,5	160	042.10295160
50	95,5	250	042.10295250

Collet chucks 8° type ER

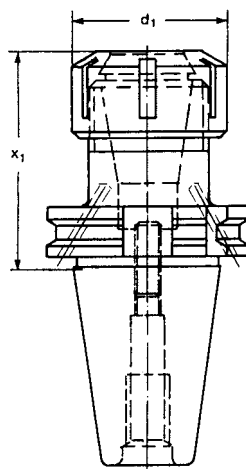
For collets DIN 6499

40 50

DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
To hold tools with parallel shank in collets
DIN 6499

Delivery content:
Collet chuck with collet nut and adjusting
screw

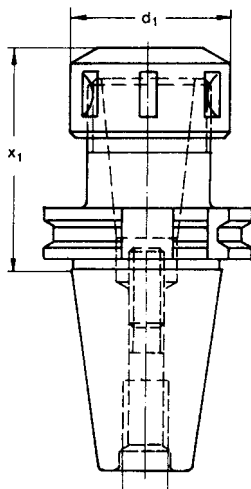
SK	Type	Clamping range	x ₁	d ₁	Order-no. 69871 AD	Order-no. 69871 AD/B
40	ER16	0,5 - 10	63	28	040.130E363	240.130E363
40	ER16	0,5 - 10	100	28	040.130E3100	240.130E3100
40	ER16	0,5 - 10	160	28	040.130E3160	240.130E3160
40	ER25	1,0 - 16	60	42	040.130E560	240.130E560
40	ER25	1,0 - 16	100	42	040.130E5100	240.130E5100
40	ER25	1,0 - 16	160	42	040.130E5160	240.130E5160
40	ER32	2,0 - 20	70	50	040.130E670	240.130E670
40	ER32	2,0 - 20	100	50	040.130E6100	240.130E6100
40	ER32	2,0 - 20	160	50	040.130E6160	240.130E6160
40	ER40	3,0 - 26	80	63	040.130E780	240.130E780
40	ER40	3,0 - 26	100	63	040.130E7100	240.130E7100
40	ER40	3,0 - 26	160	63	040.130E7160	240.130E7160
50	ER16	0,5 - 10	100	28	042.130E3100	242.130E3100
50	ER16	0,5 - 10	160	28	042.130E3160	242.130E3160
50	ER25	1,0 - 16	100	42	042.130E5100	242.130E5100
50	ER25	1,0 - 16	160	42	042.130E5160	242.130E5160
50	ER32	2,0 - 20	70	50	042.130E670	242.130E670
50	ER32	2,0 - 20	100	50	042.130E6100	242.130E6100
50	ER32	2,0 - 20	160	50	042.130E6160	242.130E6160
50	ER40	3,0 - 26	80	63	042.130E780	242.130E780
50	ER40	3,0 - 26	160	63	042.130E7160	242.130E7160

Collet chucks 1:10

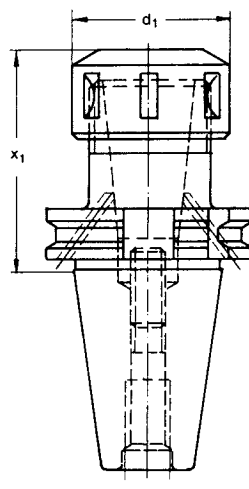
For collets DIN 6388

40 50

DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
To hold tools with parallel shank in collets
DIN 6388

Delivery content:
Collet chuck with collet nut and adjusting
screw

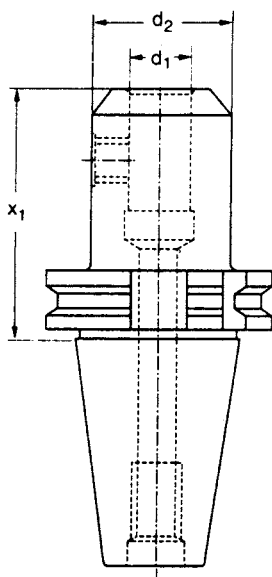
SK	Clamping range	x_1	d_1	Order-no. 69871 AD	Order-no. 69871 AD/B
40	1,5 - 16	70	43	040.1301670	240.1301670
40	1,5 - 16	100	43	040.13016100	240.13016100
40	1,5 - 16	160	43	040.13016160	240.13016160
40	2,0 - 25	70	60	040.1302570	240.1302570
40	2,0 - 25	100	60	040.13025100	240.13025100
40	2,0 - 25	160	60	040.13025160	240.13025160
40	4,0 - 32	90	72	040.1303290	240.1303290
40	4,0 - 32	140	72	040.13032140	240.13032140
50	1,5 - 16	70	43	042.1301670	242.1301670
50	1,5 - 16	100	43	042.13016100	242.13016100
50	1,5 - 16	160	43	042.13016160	242.13016160
50	2,0 - 25	70	60	042.1302570	242.1302570
50	2,0 - 25	100	60	042.13025100	242.13025100
50	2,0 - 25	160	60	042.13025160	242.13025160
50	4,0 - 32	80	72	042.1303280	242.1303280
50	4,0 - 32	140	72	042.13032140	242.13032140

Adapter sleeves DIN 6359

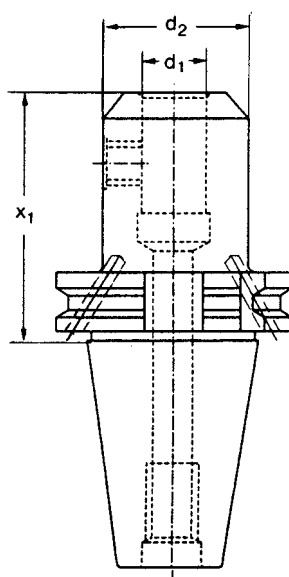
For parallel shank DIN 1835 B (Weldon)

40

DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
For clamping tools with parallel shank
DIN 1835 Form B

Delivery content:
Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
40	6	50	25	040.1400650	240.1400650
40	6	100	25	040.14006100	240.14006100
40	6	120	25	040.14006120	240.14006120
40	6	160	25	040.14006160	240.14006160
40	8	50	28	040.1400850	240.1400850
40	8	100	28	040.14008100	240.14008100
40	8	120	28	040.14008120	240.14008120
40	8	160	28	040.14008160	240.14008160
40	10	50	35	040.1401050	240.1401050
40	10	100	35	040.14010100	240.14010100
40	10	120	35	040.14010120	240.14010120
40	10	160	35	040.14010160	240.14010160
40	12	50	42	040.1401250	240.1401250
40	12	100	42	040.14012100	240.14012100
40	12	120	42	040.14012120	240.14012120
40	12	160	42	040.14012160	240.14012160

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B

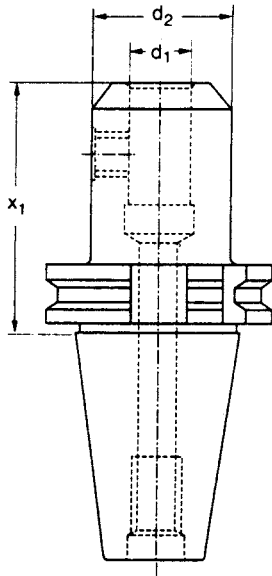
SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
40	14	50	44	040.1401450	240.1401450
40	14	100	44	040.14014100	240.14014100
40	14	120	44	040.14014120	240.14014120
40	14	160	44	040.14014160	240.14014160
40	16	63	48	040.1401663	240.1401663
40	16	100	48	040.14016100	240.14016100
40	16	120	48	040.14016120	240.14016120
40	16	160	48	040.14016160	240.14016160
40	18	63	50	040.1401863	240.1401863
40	18	100	50	040.14018100	240.14018100
40	18	120	50	040.14018120	240.14018120
40	18	160	50	040.14018160	240.14018160
40	20	35	52	040.1402035	240.1402035
40	20	63	52	040.1402063	240.1402063
40	20	100	52	040.14020100	240.14020100
40	20	120	52	040.14020120	240.14020120
40	20	160	52	040.14020160	240.14020160
40	25	35	50	040.1402535	240.1402535
40	25	60	50	040.1402560	240.1402560
40	25	100	65	040.14025100	240.14025100
40	25	160	65	040.14025160	240.14025160
40	32	63	72	040.1403263	240.1403263
40	32	100	72	040.14032100	240.14032100
40	32	160	72	040.14032160	240.14032160
40	40	120	90	040.14040120	240.14040120

Adapter sleeves DIN 6359

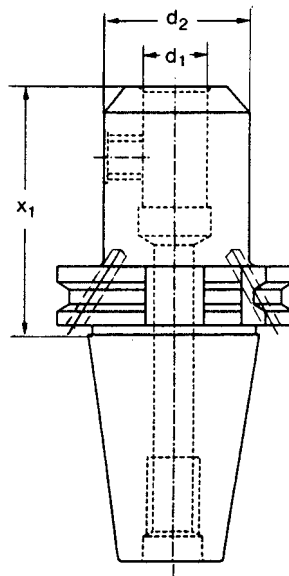
For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
For clamping tools with parallel shank
DIN 1835 Form B

Delivery content:
Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
50	6	63	25	042.1400663	242.1400663
50	6	100	25	042.14006100	242.14006100
50	6	120	25	042.14006120	242.14006120
50	6	160	25	042.14006160	242.14006160
50	6	200	25	042.14006200	242.14006200
50	8	63	28	042.1400863	242.1400863
50	8	100	28	042.14008100	242.14008100
50	8	120	28	042.14008120	242.14008120
50	8	160	28	042.14008160	242.14008160
50	8	200	28	042.14008200	242.14008200
50	10	63	32	042.1401063	242.1401063
50	10	100	32	042.14010100	242.14010100
50	10	120	32	042.14010120	242.14010120
50	10	160	32	042.14010160	242.14010160
50	10	200	32	042.14010200	242.14010200

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B

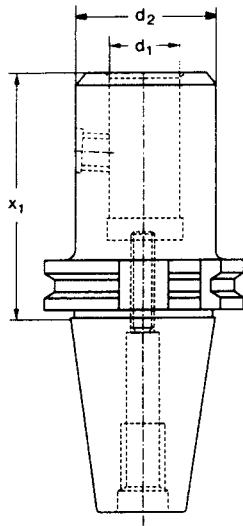
SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
50	12	63	42	042.1401263	242.1401263
50	12	100	42	042.14012100	242.14012100
50	12	120	42	042.14012120	242.14012120
50	12	160	42	042.14012160	242.14012160
50	12	200	42	042.14012200	242.14012200
50	14	63	44	042.1401463	242.1401463
50	14	100	44	042.14014100	242.14014100
50	14	120	44	042.14014120	242.14014120
50	14	160	44	042.14014160	242.14014160
50	14	200	44	042.14014200	242.14014200
50	16	63	48	042.1401663	242.1401663
50	16	100	48	042.14016100	242.14016100
50	16	120	48	042.14016120	242.14016120
50	16	160	48	042.14016160	242.14016160
50	16	200	48	042.14016200	242.14016200
50	18	63	50	042.1401863	242.1401863
50	18	100	50	042.14018100	242.14018100
50	18	120	50	042.14018120	242.14018120
50	18	160	50	042.14018160	242.14018160
50	18	200	50	042.14018200	242.14018200
50	20	63	52	042.1402063	242.1402063
50	20	100	52	042.14020100	242.14020100
50	20	120	52	042.14020120	242.14020120
50	20	160	52	042.14020160	242.14020160
50	20	200	52	042.14020200	242.14020200
50	25	80	65	042.1402580	242.1402580
50	25	100	65	042.14025100	242.14025100
50	25	120	65	042.14025120	242.14025120
50	25	160	65	042.14025160	242.14025160
50	25	200	65	042.14025200	242.14025200
50	32	100	72	042.14032100	242.14032100
50	32	120	72	042.14032120	242.14032120
50	32	160	72	042.14032160	242.14032160
50	32	200	72	042.14032200	242.14032200
50	40	100	90	042.14040100	242.14040100
50	50	125	90	042.14050125	242.14050125

Adapter sleeves DIN 6359

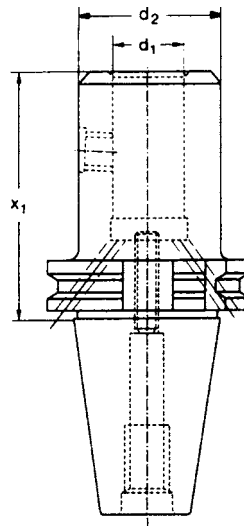
For parallel shanks DIN 1835 E (Whistle-Notch)

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DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:
For clamping tools with parallel shank
DIN 1835 Form E

Delivery content:
Whistle Notch end mill Adapter incl.
locking screw and adjusting screw

SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
40	6	50	25	040.1410650	240.1410650
40	6	100	25	040.14106100	240.14106100
40	6	120	25	040.14106120	240.14106120
40	6	160	25	040.14106160	240.14106160
40	8	50	28	040.1410850	240.1410850
40	8	100	28	040.14108100	240.14108100
40	8	120	28	040.14108120	240.14108120
40	8	160	28	040.14108160	240.14108160
40	10	50	35	040.1411050	240.1411050
40	10	100	35	040.14110100	240.14110100
40	10	120	35	040.14110120	240.14110120
40	10	160	35	040.14110160	240.14110160
40	12	50	42	040.1411250	240.1411250
40	12	100	42	040.14112100	240.14112100
40	12	120	42	040.14112120	240.14112120
40	12	160	42	040.14112160	240.14112160

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

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DIN 69871 - Form AD / B

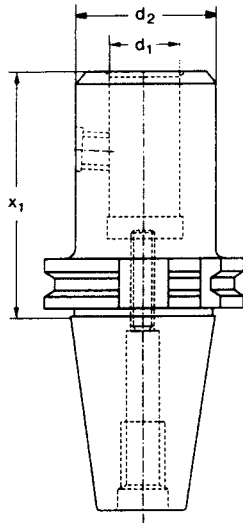
SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
40	14	50	44	040.1411450	240.1411450
40	14	100	44	040.14114100	240.14114100
40	14	120	44	040.14114120	240.14114120
40	14	160	44	040.14114160	240.14114160
40	16	63	48	040.1411663	240.1411663
40	16	100	48	040.14116100	240.14116100
40	16	120	48	040.14116120	240.14116120
40	16	160	48	040.14116160	240.14116160
40	18	63	50	040.1411863	240.1411863
40	18	100	50	040.14118100	240.14118100
40	18	120	50	040.14118120	240.14118120
40	18	160	50	040.14118160	240.14118160
40	20	63	52	040.1412063	240.1412063
40	20	100	52	040.14120100	240.14120100
40	20	120	52	040.14120120	240.14120120
40	20	160	52	040.14120160	240.14120160
40	25	100	65	040.14125100	240.14125100
40	25	160	65	040.14125160	240.14125160
40	32	100	72	040.14132100	240.14132100
40	32	160	72	040.14132160	240.14132160

Adapter sleeves DIN 6359

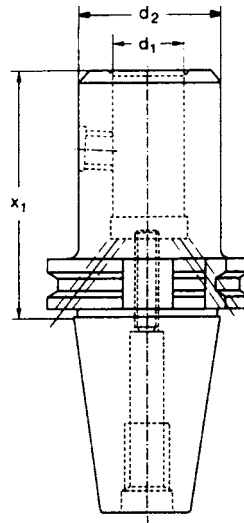
For parallel shanks DIN 1835 E (Whistle-Notch)

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DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application:

For clamping tools with parallel shank
DIN 1835 Form E

Delivery content:

Whistle Notch end mill Adapter incl.
locking screw and adjusting screw

SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
50	6	63	25	042.1410663	242.1410663
50	6	100	25	042.14106100	242.14106100
50	6	120	25	042.14106120	242.14106120
50	6	160	25	042.14106160	242.14106160
50	6	200	25	042.14106200	242.14106200
50	8	63	28	042.1410863	242.1410863
50	8	100	28	042.14108100	242.14108100
50	8	120	28	042.14108120	242.14108120
50	8	160	28	042.14108160	242.14108160
50	8	200	28	042.14108200	242.14108200
50	10	63	35	042.1411063	242.1411063
50	10	100	35	042.14110100	242.14110100
50	10	120	35	042.14110120	242.14110120
50	10	160	35	042.14110160	242.14110160
50	10	200	35	042.14110200	242.14110200

Adapter sleeves DIN 6359

For parallel shanks DIN 1835 E (Whistle-Notch)

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DIN 69871 - Form AD / B

SK	d ₁	x ₁	d ₂	Order-no. 69871 AD	Order-no. 69871 AD/B
50	12	63	42	042.1411263	242.1411263
50	12	100	42	042.14112100	242.14112100
50	12	120	42	042.14112120	242.14112120
50	12	160	42	042.14112160	242.14112160
50	12	200	42	042.14112200	242.14112200
50	14	63	44	042.1411463	242.1411463
50	14	100	44	042.14114100	242.14114100
50	14	120	44	042.14114120	242.14114120
50	14	160	44	042.14114160	242.14114160
50	14	200	44	042.14114200	242.14114200
50	16	63	48	042.1411663	242.1411663
50	16	100	48	042.14116100	242.14116100
50	16	120	48	042.14116120	242.14116120
50	16	160	48	042.14116160	242.14116160
50	16	200	48	042.14116200	242.14116200
50	18	63	50	042.1411863	242.1411863
50	18	100	50	042.14118100	242.14118100
50	18	120	50	042.14118120	242.14118120
50	18	160	50	042.14118160	242.14118160
50	18	200	50	042.14118200	242.14118200
50	20	63	52	042.1412063	242.1412063
50	20	100	52	042.14120100	242.14120100
50	20	120	52	042.14120120	242.14120120
50	20	160	52	042.14120160	242.14120160
50	20	200	52	042.14120200	242.14120200
50	25	80	65	042.1412580	242.1412580
50	25	100	65	042.14125100	242.14125100
50	25	120	65	042.14125120	242.14125120
50	25	160	65	042.14125160	242.14125160
50	25	200	65	042.14125200	242.14125200
50	32	100	72	042.14132100	242.14132100
50	32	120	72	042.14132120	242.14132120
50	32	160	72	042.14132160	242.14132160
50	32	200	72	042.14132200	242.14132200
50	40	100	90	042.14140100	242.14140100

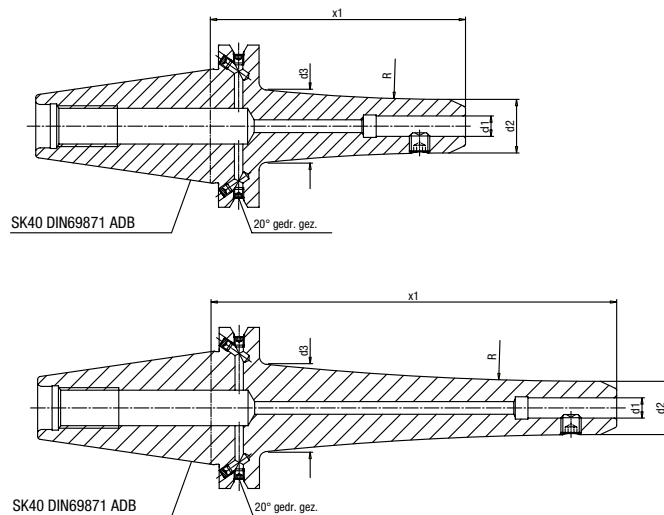
Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B
Delivery content: Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	d ₃	Order-no. 69871 AD/B
40	6	100	17	25	240.14906100
40	6	130	17	30	240.14906130
40	6	160	17	31	240.14906160
40	8	100	21	29	240.14908100
40	8	130	21	34	240.14908130
40	8	160	21	35	240.14908160
40	10	100	24	32	240.14910100
40	10	130	24	37	240.14910130
40	10	160	24	38	240.14910160
40	12	100	27	35	240.14912100
40	12	130	27	40	240.14912130
40	12	160	27	41	240.14912160

Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B
Pre-balanced G6,3 - 8,000 r.p.m.

SK	d ₁	x ₁	d ₂	d ₃	Order-no. 69871 AD/B
40	14	100	29	37	240.14914100
40	14	130	29	42	240.14914130
40	14	160	29	43	240.14914160
40	16	100	33	41	240.14916100
40	16	130	33	46	240.14916130
40	16	160	33	47	240.14916160
40	18	100	35	43	240.14918100
40	18	130	35	48	240.14918130
40	18	160	35	49	240.14918160
40	20	100	39	47	240.14920100
40	20	130	39	50	240.14920130
40	20	160	39	50	240.14920160
40	25	100	47	47	240.14925100
40	25	130	47	47	240.14925130
40	25	160	47	47	240.14925160
40	32	100	57	57	240.14932100
40	32	130	57	57	240.14932130
40	32	160	57	57	240.14932160

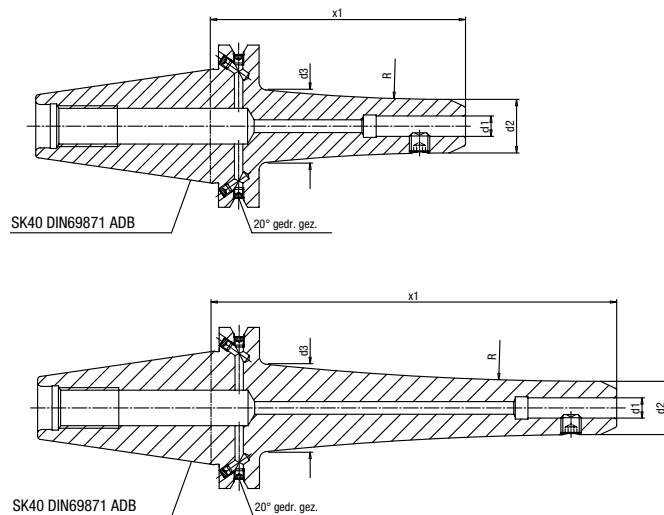
Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

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DIN 69871 - Form AD / B
Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B
Delivery content: Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	d ₃	Order-no. 69871 AD/B
50	6	100	17	25	242.14906100
50	6	130	17	30	242.14906130
50	6	160	17	31	242.14906160
50	6	200	17	40	242.14906200
50	8	100	21	29	242.14908100
50	8	130	21	34	242.14908130
50	8	160	21	35	242.14908160
50	8	200	21	44	242.14908200
50	10	100	24	32	242.14910100
50	10	130	24	37	242.14910130
50	10	160	24	38	242.14910160
50	10	200	24	47	242.14910200

Adapter sleeves DIN 6359

slim design

For parallel shank DIN 1835 B (Weldon)

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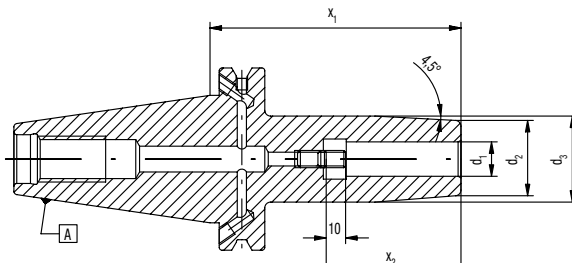
DIN 69871 - Form AD / B
Pre-balanced G6,3 - 8,000 r.p.m.

SK	d ₁	x ₁	d ₂	d ₃	Order-no. 69871 AD/B
50	12	100	27	35	242.14912100
50	12	130	27	40	242.14912130
50	12	160	27	41	242.14912160
50	12	200	27	50	242.14912200
50	14	100	29	37	242.14914100
50	14	130	29	42	242.14914130
50	14	160	29	43	242.14914160
50	14	200	29	52	242.14914200
50	16	100	33	41	242.14916100
50	16	130	33	46	242.14916130
50	16	160	33	47	242.14916160
50	16	200	33	56	242.14916200
50	18	100	35	43	242.14918100
50	18	130	35	48	242.14918130
50	18	160	35	49	242.14918160
50	18	200	35	58	242.14918200
50	20	100	39	47	242.14920100
50	20	130	39	52	242.14920130
50	20	160	39	53	242.14920160
50	20	200	39	62	242.14920200
50	25	100	47	55	242.14925100
50	25	130	47	60	242.14925130
50	25	160	47	61	242.14925160
50	25	200	47	70	242.14925200
50	32	130	57	70	242.14932130
50	32	160	57	71	242.14932160
50	32	200	57	72	242.14932200

Shrink fit chucks

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DIN 69871 - Form AD / B
Pre-balanced G2,5 - 15,000 r.p.m.



SK	d_1	d_2	d_3	x_1	x_2	Order-no. 69871 AD/B
40	3	15	20	80	20	240.1520380
40	4	15	20	80	20	240.1520480
40	5	15	20	80	25	240.1520580
40	6	21	27	80	36	240.1520680
40	6	21	27	120	36	240.15206120
40	6	21	27	160	36	240.15206160
40	6	21	27	200	36	240.15206200
40	8	21	27	80	36	240.1520880
40	8	21	27	120	36	240.15208120
40	8	21	27	160	36	240.15208160
40	8	21	27	200	36	240.15208200
40	10	24	32	80	42	240.1521080
40	10	24	32	120	42	240.15210120
40	10	24	32	160	42	240.15210160
40	10	24	32	200	42	240.15210200
40	12	24	32	80	47	240.1521280
40	12	24	32	120	47	240.15212120
40	12	24	32	160	47	240.15212160
40	12	24	32	200	47	240.15212200
40	14	27	34	80	47	240.1521480
40	14	27	34	120	47	240.15214120
40	14	27	34	160	47	240.15214160
40	14	27	34	200	47	240.15214200

Shrink fit chucks

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DIN 69871 - Form AD / B
Pre-balanced G2,5 - 15,000 r.p.m.

SK	d ₁	d ₂	d ₃	x ₁	x ₂	Order-no. 69871 AD/B
40	16	27	34	80	50	240.1521680
40	16	27	34	120	50	240.15216120
40	16	27	34	160	50	240.15216160
40	16	27	34	200	50	240.15216200
40	18	33	42	80	50	240.1521880
40	18	33	42	120	50	240.15218120
40	18	33	42	160	50	240.15218160
40	18	33	42	200	50	240.15218200
40	20	33	42	80	52	240.1522080
40	20	33	42	120	52	240.15220120
40	20	33	42	160	52	240.15220160
40	20	33	42	200	52	240.15220200
40	25	44	53	100	58	240.15225100
40	25	44	53	160	58	240.15225160
40	25	44	53	200	58	240.15225200

Shrink fit chucks

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DIN 69871 - Form AD / B
Pre-balanced G2,5 - 15,000 r.p.m.

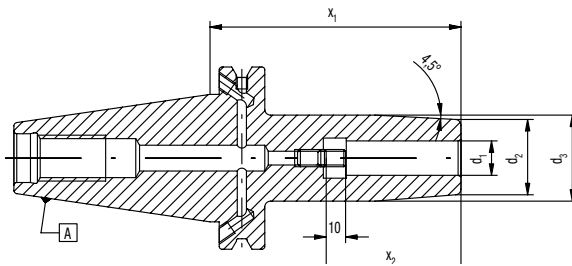
SK	d ₁	d ₂	d ₃	x ₁	x ₂	Order-no. 69871 AD/B
50	6	21	27	80	36	242.1520680
50	6	21	27	120	36	242.15206120
50	6	21	27	160	36	242.15206160
50	6	21	27	200	36	242.15206200
50	8	21	27	80	36	242.1520880
50	8	21	27	120	36	242.15208120
50	8	21	27	160	36	242.15208160
50	8	21	27	200	36	242.15208200

Shrink fit chucks

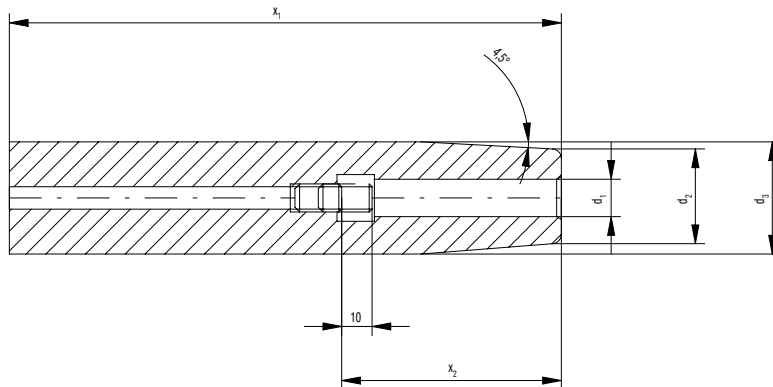
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DIN 69871 - Form AD / B

Pre-balanced G2,5 - 15,000 r.p.m.



SK	d_1	d_2	d_3	x_1	x_2	Order-no. 69871 AD/B
50	10	24	32	80	42	242.1521080
50	10	24	32	120	42	242.15210120
50	10	24	32	160	42	242.15210160
50	10	24	32	200	42	242.15210200
50	12	24	32	80	47	242.1521280
50	12	24	32	120	47	242.15212120
50	12	24	32	160	47	242.15212160
50	12	24	32	200	47	242.15212200
50	14	27	34	80	47	242.1521480
50	14	27	34	120	47	242.15214120
50	14	27	34	160	47	242.15214160
50	14	27	34	200	47	242.15214200
50	16	27	34	80	50	242.1521680
50	16	27	34	120	50	242.15216120
50	16	27	34	160	50	242.15216160
50	16	27	42	200	50	242.15216200
50	18	33	42	80	50	242.1521880
50	18	33	42	120	50	242.15218120
50	18	33	42	160	50	242.15218160
50	18	33	42	200	50	242.15218200
50	20	33	42	80	52	242.1522080
50	20	33	42	120	52	242.15220120
50	20	33	42	160	52	242.15220160
50	20	33	42	200	52	242.15220200
50	25	44	53	100	58	242.15225100
50	25	44	53	160	58	242.15225160
50	25	44	53	200	58	242.15225200
50	32	44	53	100	58	242.15232100
50	32	44	53	160	58	242.15232160
50	32	44	53	200	58	242.15232200



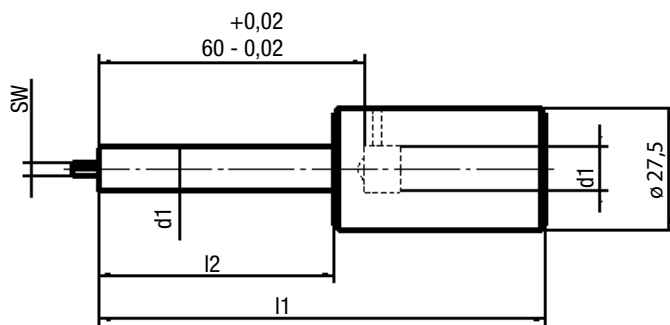
Application: To extend and reduce to minor diameters

Delivery content: At $\emptyset d_1$ from 3 to 5 mm without adjusting screw and at $\emptyset d_1$ ex 6 mm with adjusting screw

d_3	d_2	d_1	x_1	x_2	Order-no.
12	8	3	160	9	Z12.15203160
12	8	4	160	12	Z12.15204160
16	10	3	160	9	Z16.15203160
16	10	4	160	12	Z16.15204160
16	10	5	160	15	Z16.15205160
16	10	6	160	28	Z16.15206160
20	14	5	160	15	Z20.15205160
20	14	6	160	28	Z20.15206160
20	14	8	160	34	Z20.15208160
25	19	8	160	34	Z25.15208160
25	20	10	160	42	Z25.15210160
25	20	12	160	47	Z25.15212160
25	20	14	160	47	Z25.15214160
25	22	16	160	50	Z25.15216160
32	27	10	160	42	Z32.15210160
32	27	12	160	47	Z32.15212160
32	27	14	160	47	Z32.15214160
32	27	16	160	50	Z32.15216160
32	27	18	160	50	Z32.15218160
32	27	20	160	52	Z32.15220160

Extensions for shrink fit chucks

With the presetting adapter you can easily preset the tool length before starting the shrinking process. They are suitable for all shrink fit chucks equipped with an adjustment screw with a Hexagon socket on the side where the tool is inserted. Working carefully you will achieve a precision of $\pm 0,03$ mm after the shrinking process.



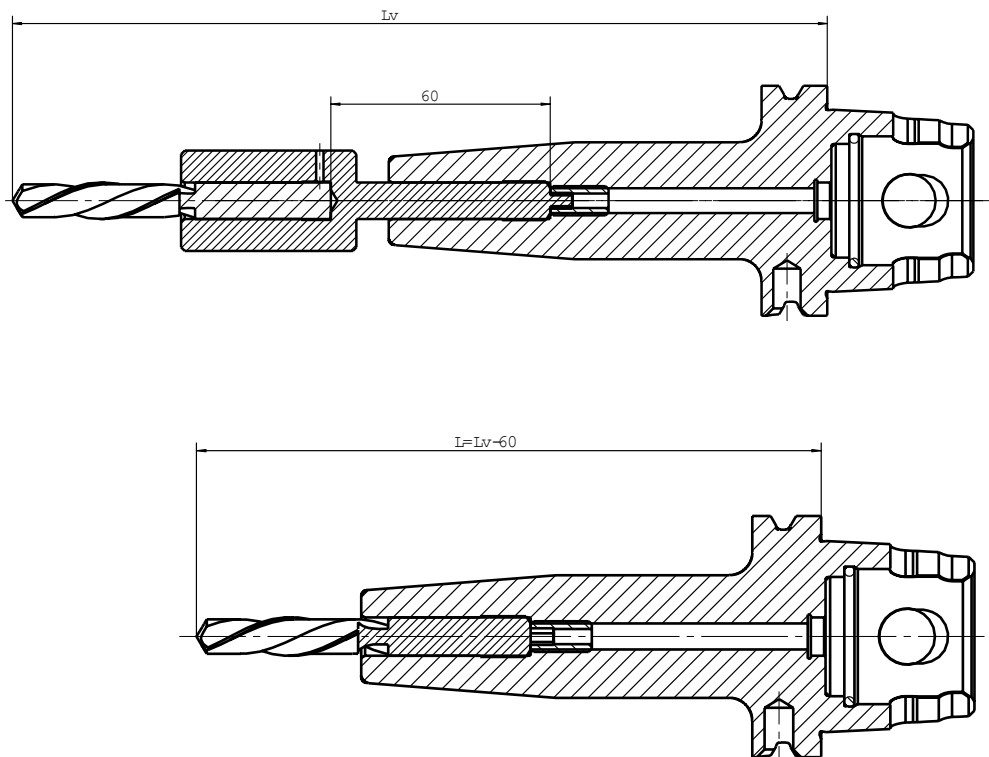
For	d ₁	l ₁	l ₂	SW	Order-no.
HSK/SK/BT	6	96	53	2,5	B152-L060025
HSK/SK/BT	8	96	53	3	B152-L080030
HSK/SK/BT	10	101	53	3	B152-L100030
HSK40	12	107	53	3	B152-L120030
HSK40	14	107	53	3	L152-L140030
HSK40	16	110	53	3	B152-L160030
HSK50+63+80+100/ SK/BT	12	107	53	5	B152-L120050
HSK50+63+80+100/ SK/BT	14	107	53	5	B152-L140050
HSK50+63+80+100/ SK/BT	16	110	53	5	B152-L160050
HSK50/HSK63/SK30	18	110	53	5	B152-L180050
HSK50/HSK63/SK30	20	112	53	5	B152-L200050
HSK80+100/ SK40+50/BT	18	110	53	8	B152-L180080
HSK80+100/ SK40+50/BT	20	112	53	8	B152-L200080

Manual for presetting adapter

Before you start the shrinking process please insert tool (4) into the presetting adapter (3) and fit it together with the shrink fit chuck (1) with the stop screw (2).

Now you can regulate the length by turning the adapter which will set the stop screw to the requested length. The requested length (L) after the shrinking process results of the presetting lengths (Lv) as follows $L = L_v - 60\text{mm}$.

Please take out the adapter and shrink in the tool. The tool has to be placed upon the stop screw.

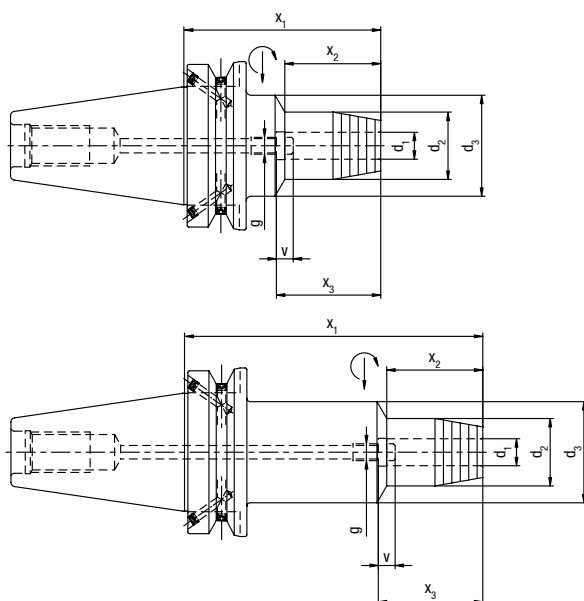


Hydraulic expansion chuck

IKZ 40

DIN 69871 - Form AD / B

Pre-balanced G6,3 - 15,000 r.p.m.



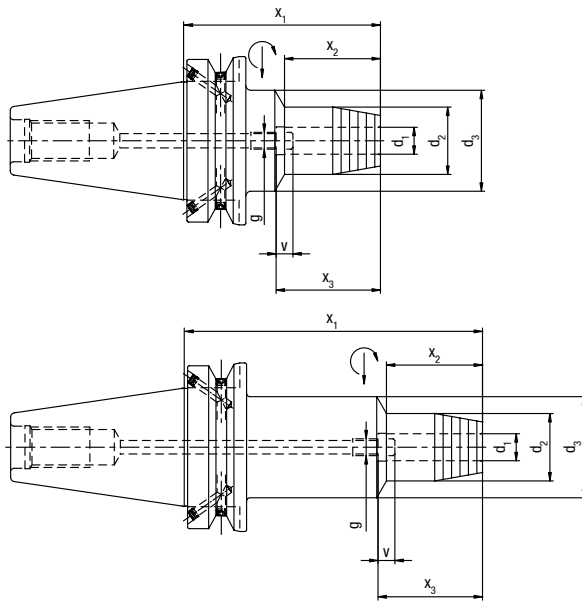
Delivery content: Allen-“T” Wrench

SK	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. AD	Order-no. 69871 B
40	6	26	49,5	80,5	29,5	37	10	M 5	040.1580680	240.1580680
40	6	26	49,5	110,0	29,5	37	10	M 5	040.15806110	240.15806110
40	8	28	49,5	80,5	30	37	10	M 6	040.1580880	240.1580880
40	8	28	49,5	110,0	30	37	10	M 6	040.15808110	240.15808110
40	10	30	49,5	80,5	35	41	10	M 8x1	040.1581080	20.1581080
40	10	30	49,5	110,0	35	41	10	M 8x1	040.15810110	240.15810110
40	12	32	49,5	80,5	40	46	10	M 10x1	040.1581280	240.1581280
40	12	32	49,5	110,0	40	46	10	M 10x1	040.15812110	240.15812110
40	14	34	49,5	80,5	40	46	10	M 10x1	040.1581480	240.1581480
40	14	34	49,5	110,0	40	46	10	M 10x1	040.15814110	240.15814110
40	16	38	49,5	80,5	45	49	10	M 12x1	040.1581680	240.1581680
40	16	38	49,5	110,0	45	49	10	M 12x1	040.15816110	240.15816110
40	18	40	49,5	80,5	46	49	10	M 12x1	040.1581880	240.1581880
40	18	40	49,5	110,0	46	49	10	M 12x1	040.15818110	240.15818110
40	20	42	49,5	80,5	47	51	10	M 16x1	040.1582080	240.1582080
40	20	42	49,5	110,0	47	51	10	M 16x1	040.15820110	240.15820110
40	25	55	63,0	80,5	28	57	10	M 16x1	040.1582580	240.1582580
40	25	55	63,0	110,0	55	57	10	M 16x1	040.15825110	240.15825110
40	32	63	70,0	80,5	25,5	61	10	M 16x1	040.1583280	240.1583280
40	32	63	59,0	110,0	48	61	10	M 16x1	040.15832110	240.15832110

Hydraulic expansion chuck

IKZ 50

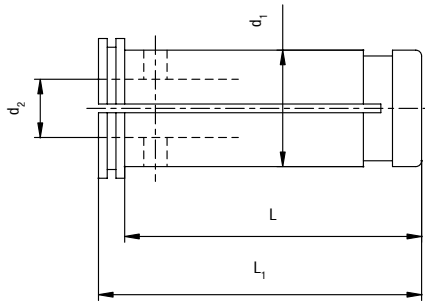
DIN 69871 - Form AD / B
Pre-balanced G6,3 - 15,000 r.p.m.



Delivery content: Allen-“T” Wrench

SK	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. 69871 AD	Order-no. 69871 B
50	6	26	49,5	80,5	29,5	37	10	M 5	042.1580680	242.1580680
50	6	26	49,5	110,0	29	37	10	M 5	042.15806110	242.15806110
50	8	28	49,5	80,5	30	37	10	M 6	042.1580880	242.1580880
50	8	28	49,5	110,0	30	37	10	M 6	042.15808110	242.15808110
50	10	30	49,5	80,5	35	41	10	M 8x1	042.1581080	242.1581080
50	10	30	49,5	110,0	35	41	10	M 8x1	042.15810110	242.15810110
50	12	32	49,5	80,5	40	46	10	M 10x1	042.1581280	242.1581280
50	12	32	49,5	110,0	40	46	10	M 10x1	042.15812110	242.15812110
50	14	34	49,5	80,5	40	46	10	M 10x1	042.1581480	242.1581480
50	14	34	49,5	110,0	40	46	10	M 10x1	042.15814110	242.15814110
50	16	38	49,5	80,5	45	49	10	M 12x1	042.1581680	242.1581680
50	16	38	49,5	110,0	45	49	10	M 12x1	042.15816110	242.15816110
50	18	40	49,5	80,5	46	49	10	M 12x1	042.1581880	242.1581880
50	18	40	49,5	110,0	46	49	10	M 12x1	042.15818110	242.15818110
50	20	42	49,5	80,5	42	51	10	M 16x1	042.1582080	242.1582080
50	20	42	49,5	110,0	42	51	10	M 16x1	042.15820110	242.15820110
50	25	55	63,0	100,0	48	57	10	M 16x1	042.15825100	242.15825100
50	25	55	63,0	110,0	48	57	10	M 16x1	042.15825110	242.15825110
50	32	63	70,0	100,0	50	61	10	M 16x1	042.15832100	242.15832100
50	32	63	70,0	110,0	50	61	10	M 16x1	042.15832110	242.15832110

Reducing collets sealed



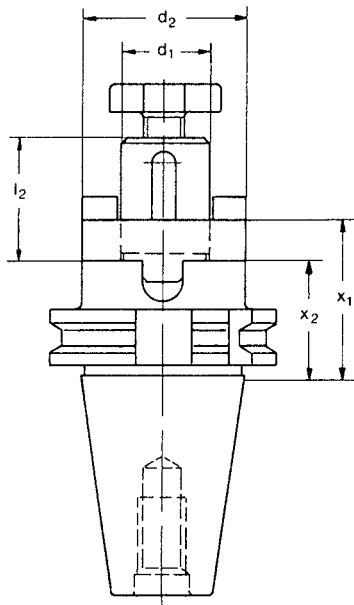
d_1	d_2	L	L_1	Order-no.
12	3	40	44	068Y012003440
12	4	40	44	068Y012004440
12	5	40	44	068Y012005440
12	6	40	44	068Y012006440
12	8	40	44	068Y012008440
12	10	40	44	068Y012010440
20	3	51	55,5	068Y020003555
20	4	51	55,5	068Y020004555
20	5	51	55,5	068Y020005555
20	6	51	55,5	068Y020006555
20	8	51	55,5	068Y020008555
20	10	51	55,5	068Y020010555
20	12	51	55,5	068Y020012555
20	14	51	55,5	068Y020014555
20	16	51	55,5	068Y020016555
32	6	62	66,5	068Y032006665
32	8	62	66,5	068Y032008665
32	10	62	66,5	068Y032010665
32	12	62	66,5	068Y032012665
32	14	62	66,5	068Y032014665
32	16	62	66,5	068Y032016665
32	18	62	66,5	068Y032018665
32	20	62	66,5	068Y032020665
32	25	62	66,5	068Y032025665

Combination face mill adapters DIN 6358

For milling cutters with longitudinal or transverse drive

40

DIN 69871 - Form A



DIN 69871 A

Application: For mounting milling cutters with tenon drive or clutch drive
Delivery content: Form A arbor screw, key and drive ring

SK	d_1	d_2	x_1	x_2	l_2	Order-no. 69871 A
40	16	32	55	45	27	040.2311655
40	16	32	100	90	27	040.23116100
40	16	32	150	140	27	040.23116150
40	22	40	55	43	31	040.2312255
40	22	40	100	88	31	040.23122100
40	22	40	150	138	31	040.23122150
40	27	48	55	43	33	040.2312755
40	27	48	100	88	33	040.23127100
40	27	48	150	138	33	040.23127150
40	32	58	60	46	38	040.2313260
40	32	58	100	86	38	040.23132100
40	32	58	150	136	38	040.23132150
40	40	70	60	46	41	040.2314060
40	40	70	100	86	41	040.23140100
40	40	70	150	136	41	040.23140150

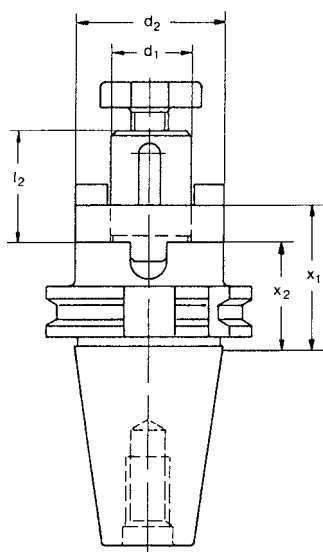
Combination face mill adapters

DIN 6358

For milling cutters with longitudinal or transverse drive

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DIN 69871 - Form A



DIN 69871 A

Application: For mounting milling cutters with tenon drive or clutch drive

Delivery content: Form A arbor screw, key and drive ring

SK	d_1	d_2	x_1	x_2	l_2	Order-no. 69871 A
50	16	32	55	45	27	042.2311655
50	16	32	100	90	27	042.23116100
50	16	32	150	140	27	042.23116150
50	22	40	55	43	31	042.2312255
50	22	40	100	88	31	042.23122100
50	22	40	150	138	31	042.23122150
50	22	40	200	188	31	042.23122200
50	27	48	55	43	33	042.2312755
50	27	48	100	88	33	042.23127100
50	27	48	150	138	33	042.23127150
50	27	48	200	188	33	042.23127200
50	32	58	55	41	38	042.2313255
50	32	58	100	86	38	042.23132100
50	32	58	150	136	38	042.23132150
50	32	58	200	186	38	042.23132200
50	40	70	55	41	41	042.2314055
50	40	70	100	86	41	042.23140100
50	40	70	150	136	41	042.23140150
50	40	70	200	186	41	042.23140200
50	50	90	70	54	46	042.2315070

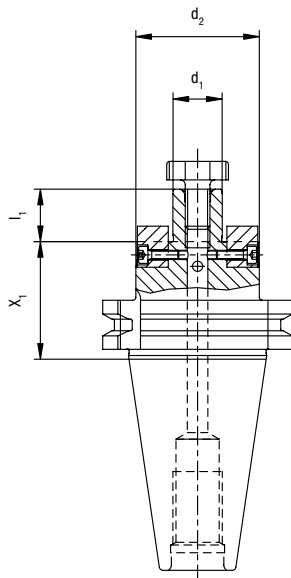
Milling machine arbors

DIN 6357

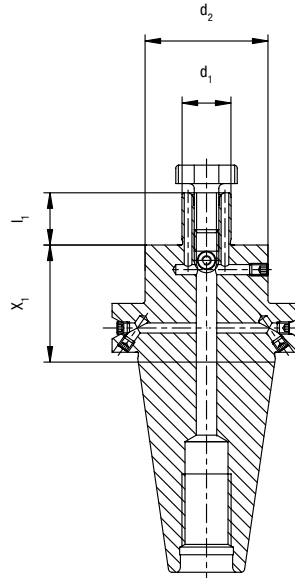
For milling cutters

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DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application: For mounting milling cutters with tenon drive or clutch drive

Delivery content: Form A arbor screw, key and drive ring

SK	d ₁	d ₁	x ₁	l ₁	Order-no. 69871 AD	Order-no. 69871 AD/B
40	16	35	38	17	040.242163835	240.242163835
40	22	35	50	19	040.242225035	240.242225035
40	22	100	50	19	040.2422250100	240.2422250100
40	27	35	50	21	040.242275035	240.242275035
40	27	100	50	21	040.2422750100	240.2422750100
40	32	50	78	24	040.242327850	240.242327850
40	32	100	78	24	040.2423278100	240.2423278100
40	40	50	89	27	040.242408950	240.242408950
40	40	100	89	27	040.2424089100	240.2424089100

IKZ-execution with 2 drillings at the front plane of d1 - □

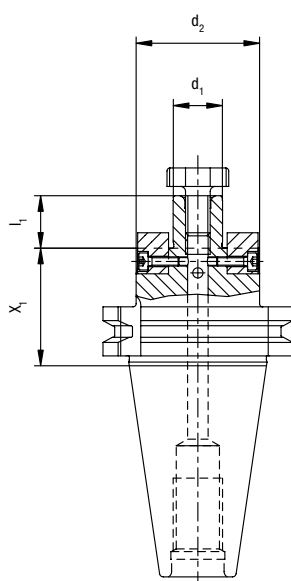
Milling machine arbors

DIN 6357

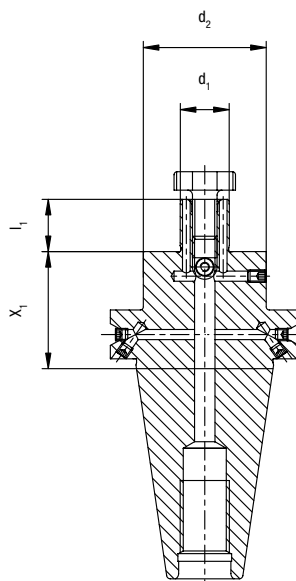
For milling cutters

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DIN 69871 - Form AD / B



DIN 69871 AD



DIN 69871 AD/B

Application: For cutters with key drive
Delivery content: With driver and arbor screw

SK	d ₁	d ₁	x ₁	l ₁	Order-no. 69871 AD	Order-no. 69871 AD/B
50	22	35	50	19	042.242225035	242.242225035
50	22	100	50	19	042.2422250100	242.2422250100
50	22	160	50	19	042.2422250160	242.2422250160
50	22	200	50	19	042.2422250200	242.2422250200
50	27	35	60	21	042.242276035	242.242276035
50	27	100	60	21	042.2422760100	242.2422760100
50	27	160	60	21	042.2422760160	242.2422760160
50	27	200	60	21	042.2422760200	242.2422760200
50	32	35	78	24	042.242327835	242.242327835
50	32	100	78	24	042.2423278100	242.2423278100
50	32	160	78	24	042.2423278160	242.2423278160
50	32	200	78	24	042.2423278200	242.2423278200
50	40	50	89	27	042.242408950	242.242408950
50	40	100	89	27	042.2424089100	242.2424089100
50	40	160	89	27	042.2424089160	242.2424089160
50	40	200	89	27	042.2424089200	242.2424089200
50	50	70	129	30	042.2425012070	242.2425012070

IKZ-execution with 2 drillings at the front plane of d₁ - □

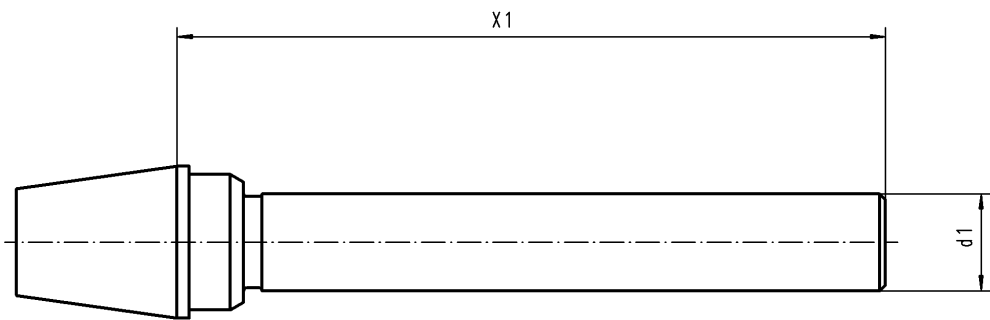
Test arbors in wooden box with inspection report

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DIN 69871 - Form A

Taper tool holder SK 50 DIN 69871 - A,
Test arbors in wooden box with inspection report



Application: For machine tools according to ISO recommendations R230
 For testing the tool spindle

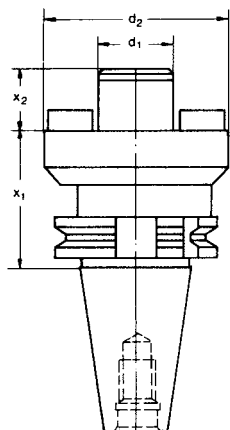
SK	d ₁	x ₁	Order-no. 69871 A
40	40	300	040.24740300
50	40	300	042.24740300

Holding arbors

For milling cutters with minor diameter fit

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DIN 69871 - Form A



DIN 69871 A

Application: To take milling cutters
Delivery content: With two inserted drive keys DIN 2079

SK	d_1	d_2	x_1	x_2	Order-no. 69871 A
50	40	56,3	70	30	042.241408970
50	60	129,1	70	40	042.2416012970

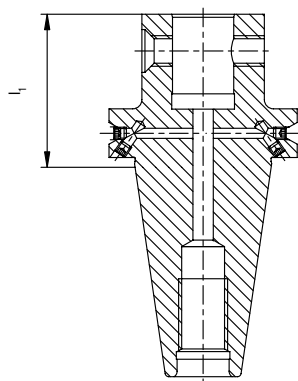
ABS® - Adapters

License Komet

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DIN 69871 - Form AD / B



DIN 69871 AD/B

Application: To hold tools with ABS shank
Delivery content: With built-in clamping element

SK	ABS	l_1	Order-no. 69871 A
40	32	50	240.ABS3250
40	40	50	240.ABS4050
40	50	50	240.ABS5050
40	63	90	240.ABS6390
40	80	100	240.ABS80100
50	32	60	242.ABS3260
50	40	60	242.ABS4060
50	50	60	242.ABS5060
50	63	60	242.ABS6360
50	80	70	242.ABS8070



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MAS BT 40 / 50



MAS BT

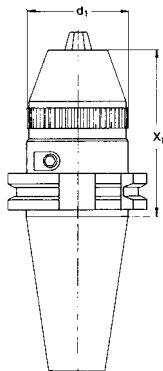
NC-Drill chucks

For cw and ccw rotation

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MAS BT



MAS BT

Note: High precision and true running. Left-right operation (for machines with braking motors). Simple operation, clamping and releasing by hexagon socket head wrench. High chucking power through multiplication and automatic locking against release.

SK	Clamping range	D	L	X ₁	Order-no. MAS BT
BT 40	1,0 - 13	50	96	102	039.0161398
BT 40	1,5 - 16	57	98	109	039.0161698
BT 50	1,0 - 13	50	110	116	011.01613110
BT 50	1,5 - 16	57	110	121	011.01616110

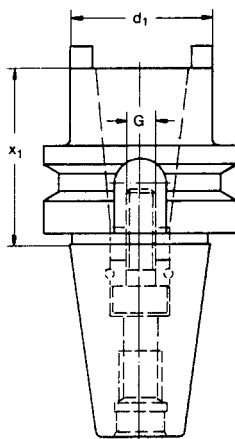
* Standard Form AD, in case form B is requested, please let us know when ordering.

Reduction arbors

For 7/24 ISO taper shanks

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MAS BT



SK	Inside taper size	x ₁	d ₁	G	Order-no. MAS BT
50	40	70	70	M 16	011.0584070

Application: To hold taper holders DIN 2080/ DIN 69871 - MAS BT
 Delivery content: With inserted socket-head screw DIN 912

Adapter sleeves

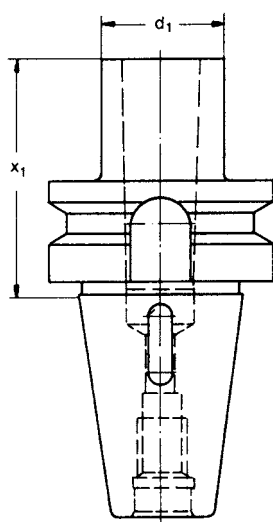
DIN 6383

For morse taper shanks and flat tang DIN 228 B

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MAS BT



MAS BT

Application: To hold tools with morse taper and flat tang DIN 228 B

SK	MK	x_1	d_1	Order-no. MAS BT
40	1	50	25	039.061150
40	2	50	32	039.061250
40	3	70	40	039.061370
40	4	95	48	039.061495
50	2	60	32	011.061260
50	3	65	40	011.061365
50	4	95	48	011.061495
50	5	100	63	011.0615100

Adapter sleeves

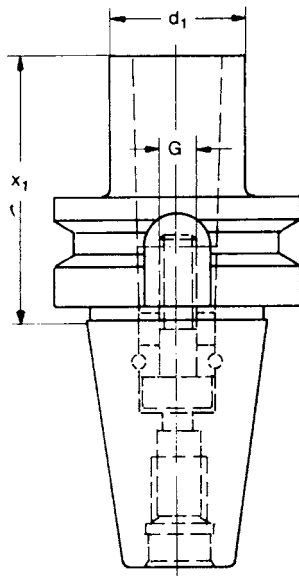
DIN 6364

For morse taper shanks and flat tang DIN 228 A

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MAS BT



MAS BT

Application: To hold tools with morse taper and flat tang DIN 228 A with draw thread

Delivery content: With built-in draw screw

SK	MK	x_1	d_1	Order-no. MAS BT
40	1	50	25	039.064150
40	2	50	32	039.064250
40	3	70	40	039.064370
40	4	95	48	039.064495
50	1	45	25	011.064145
50	2	60	32	011.064260
50	3	65	40	011.064365
50	4	70	48	011.064470

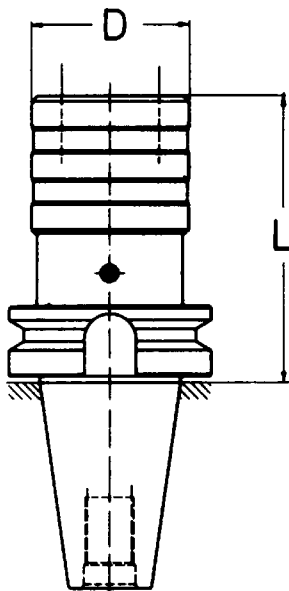
Tapping head quick change

With lenght compensation in compression and tension

40

50

MAS BT

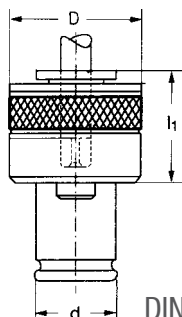


MAS BT Adapter according to MAS BT 403

SK	Screw tap-shaft	Linear compensation		L	D	Standard fastchange inserts	Order-no. MAS BT
		Compression	Tension				
40	M3 - M12	9	9	66,5	36	Gr. 1	039.0651967
40	M8 -M20	15	15	93,5	53	Gr. 2	039.0653194
40	M14 - M33	24	24	162,5	78	Gr. 3	039.06548163
40	M22 - M48	26	26	182,0	96	Gr. 4	039.06560182
50	M3 - M12	9	9	81,0	36	Gr. 1	011.0651980
50	M8 -M20	15	15	101,5	53	Gr. 2	011.06531102
50	M14 - M33	24	24	141,0	71	Gr. 3	011.06548141
50	M22 - M48	26	26	164,5	96	Gr. 4	011.06560165

Quick-change inserts SES

With safety coupling

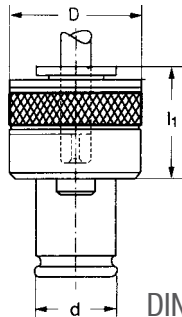


DIN Standard

Size	Screw tap	D	d	l ₁	Shank Ø	□	Order-no.
1	M 3	32	19	25	3,5	2,7	B029-02035002703
	M 3,5				4,0	3,0	B029-020400030035
	M 4				4,5	3,4	B029-02045003404
	M 5				6,0	4,9	B029-02060004905
	M 6				6,0	4,9	B029-02060004906
	M 8				6,0	4,9	B029-02060004908
	M 10				7,0	5,5	B029-020700055010
	M 8				8,0	6,2	B029-02080006208
	M 12				9,0	7,0	B029-020900070012
	M 10				10,0	8,0	B029-021000080010
	M 14				11,0	9,0	B029-021100090014
2	M 10	50	31	34	7,0	5,5	B029-030700055010
	M 8				8,0	6,2	B029-03080006208
	M 12				9,0	7,0	B029-030900070012
	M 10				10,0	8,0	B029-031000080010
	M 14				11,0	9,0	B029-031100090014
	M 16				12,0	9,0	B029-031200090016
	M 18				14,0	11,0	B029-031400110018
	M 20				16,0	12,0	B029-031600120020
	M 22				18,0	14,5	B029-031800145022
	M 24				18,0	14,5	B029-031800145024

Quick-change inserts SES

With safety coupling

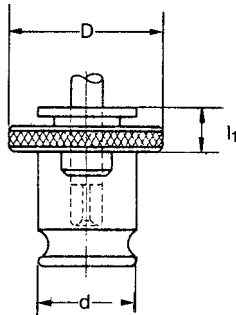


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M 14	72	48	45	11,0	9,0	B029-041100090014
	M 16				12,0	9,0	B029-041200090016
	M 18				14,0	11,0	B029-041400110018
	M 20				16,0	12,0	B029-041600120020
	M 22				18,0	14,5	B029-041800145022
	M 27				20,0	16,0	B029-042000160027
	M 30				22,0	18,0	B029-042200180030
	M 33				25,0	20,0	B029-042500200033
	M 36				28,0	22,0	B029-042800220036
4	M 24	95	60	68	18,0	14,5	B029-051800145024
	M 27				20,0	16,0	B029-052000160027
	M 30				22,0	18,0	B029-052200180030
	M 33				25,0	20,0	B029-052500200033
	M 36				28,0	22,0	B029-052800220036
	M 42				32,0	24,0	B029-053200240042
	M 45				36,0	29,0	B029-053600290045

Quick-change inserts SE

Without safety coupling

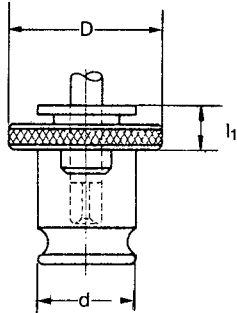


DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
1	M3 - M14	30	19	7	3,5	2,7	B027-0203500270
					4,0	3,0	B027-0204000300
					4,5	3,4	B027-0204500340
					6,0	4,9	B027-0206000490
					7,0	5,5	B027-0207000550
					8,0	6,2	B027-0208000620
					9,0	7,0	B027-0209000700
					10,0	8,0	B027-0210000800
					11,0	9,0	B027-0211000900
2	M8 - M20	46	31	11	7,0	5,5	B027-0307000550
					8,0	6,2	B027-0308000620
					9,0	7,0	B027-0309000700
					10,0	8,0	B027-0310000800
					11,0	9,0	B027-0311000900
					12,0	9,0	B027-0312000900
					14,0	11,0	B027-0314001100
					16,0	12,0	B027-0316001200
					18,0	14,5	B027-0318001450

Quick-change inserts SE

Without safety coupling



DIN Standard

Size	Screw tap	D	d	l_1	Shank Ø	□	Order-no.
3	M14 - M33	68	48	14	11,0	9,0	B027-0411000900
					12,0	9,0	B027-0412000900
					14,0	11,0	B027-0414001100
					16,0	12,0	B027-0416001200
					18,0	14,5	B027-0418001450
					20,0	16,0	B027-0420001600
					22,0	18,0	B027-0422001800
					25,0	20,0	B027-0425002000
4	M22 - M48	83	60	42	28,0	22,0	B027-0428002200
					18,0	14,5	B027-0518001450
					20,0	16,0	B027-0520001600
					22,0	18,0	B027-0522001800
					25,0	20,0	B027-0525002000
					28,0	22,0	B027-0528002200
					32,0	24,0	B027-0532002400
					36,0	29,0	B027-0536002900

Screw taps-shaft size

Please quote shaft diameter Ø or tap norm DIN 371 / 374 / 376 when ordering

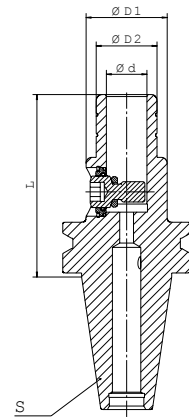
Shank Size			DIN 352	DIN 5157	DIN 371	DIN 374	DIN 376
Ø	x	o					
2,5	x	2,1	M 1		M 1	M 3	M 3,5
2,5	x	2,1	M 1,1		M 1,1	M 3,5	
2,5	x	2,1	M 1,2		M 1,2		
2,5	x	2,1	M 1,4		M 1,4		
2,5	x	2,1	M 1,6		M 1,6		
2,5	x	2,1	M 1,8		M 1,8		
2,8	x	2,1	M 2		M 2	M 4	M 4
2,8	x	2,1	M 2,2		M 2,2		
2,8	x	2,1	M 2,5		M 2,5		
3,5	x	2,7	M 3		M 3	M 5	M 5
4,0	x	3,0	M 3,5		M 3,5		
4,5	x	3,4	M 4		M 4	M 6	M 6
6,0	x	4,9	M 5		M 5		
6,0	x	4,9	M 6		M 6		
6,0	x	4,9	M 8			M 8	M 8
7,0	x	5,5	M 10	G1/8"		M10	M10
8,0	x	6,2			M8		
9,0	x	7,0	M12			M12	M12
10,0	x	8,0			M10		
11,0	x	9,0	M14	G1/4"		M14	M14
12,0	x	9,0	M16	G3/8"		M16	M16
14,0	x	11,0	M18			M18	M18
16,0	x	12,0	M20	G1/2"		M20	M20
18,0	x	14,5	M22	G5/8"		M22	M22
18,0	x	14,5	M24			M24	M24
20,0	x	16,0	M27	G3/4"		M27	M27
22,0	x	18,0	M30	G7/8"		M30	M30
25,0	x	20,0	M33	G1		M33	M33
28,0	x	22,0	M36	G1 1/8"		M36	M36
32,0	x	34,0	M39	G1 1/4"		M39	M39
32,0	x	24,0	M42			M42	M42
36,0	x	29,0	M45	G1 3/8"		M45	M45
36,0	x	29,0	M48	G1 1/2"		M48	M48
36,0	x	29,0		G1 3/4"			
36,0	x	29,0		G2"			

Increase of tool life with modern tapping chuck

Modern CNC machining centres increasingly use rigid chucks for tapping operations. The continuous-path control shows slight synchronisation errors which results in a higher wear of thread flutes. The new Synchro-Tapping chuck by BENZ compensates these errors and increases the tapping tool life significantly.

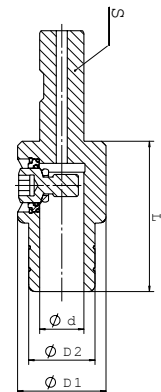
Chuck with taper shank MAS BT / IK

SK	screw tap	L	D ₁	D ₂	d	Order-no.
BT40	M3 - M12	90	40	30	20	339.0772090
BT40	M12 - M20	115	48	35	25	339.07725115
BT50	M3 - M12	100	40	30	20	341.07720100
BT50	M12 - M20	125	48	35	25	341.07725125



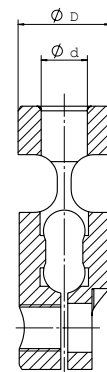
Weldon / Whistle-Notch-Shank

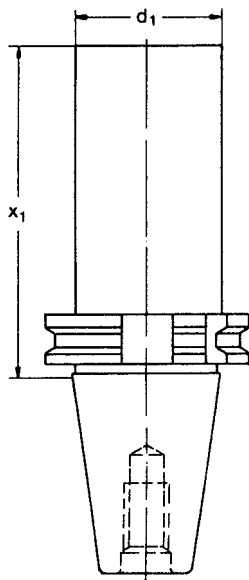
Weldon	screw tap	L	D ₁	D ₂	d	Order-no.
20	M3 - M12	68	40	30	20	176.0772068
20	M12 - M20	90	48	35	25	177.0772590



Insert for Taps

L	D	d	□	Order-no.
27	20	3,5	2,7	067Y020035027V
27	20	4,5	3,4	067Y020045034V
27	20	6,0	4,9	067Y020060049V
27	20	7,0	5,5	067Y020070055V
27	20	8,0	6,2	067Y020080062V
27	20	9,0	7,0	067Y020090070V
27	20	10,0	8,0	067Y020100080V
40	25	11,0	9,0	067Y025110090V
40	25	12,0	9,0	067Y025120090V
40	25	14,0	11,0	067Y025140110V
40	25	16,0	12,0	067Y025160120V





MAS BT

Application: For making special tools
Execution: Taper and collar hardened and ground Shank d_1 unhardened, turned for further machining

SK	d_1	x_1	Order-no. MAS BT
40	63,5	250	039.10263250
50	40,5	160	011.10240160

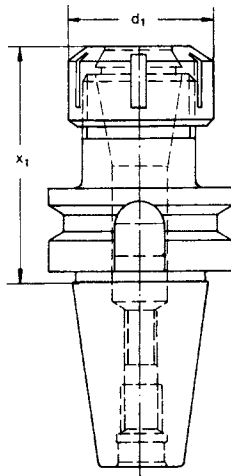
Collet chuck 8° type ER

For collets DIN 6499

40

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MAS BT



MAS BT

Application: To hold tools with parallel shank in collets DIN 6499

Delivery content: Collet chuck with collet nut and adjusting screw

SK	Typ	Clamping range	x_1	d_1	Order-no. MAS BT
40	ER 16	0,5 - 10,0	63	28	039.130E363
40	ER 16	0,5 - 10,0	100	28	039.130E3100
40	ER 16	0,5 - 10,0	160	28	039.130E3160
40	ER 25	1,0 - 16,0	60	42	039.130E560
40	ER 25	1,0 - 16,0	100	42	039.130E5100
40	ER 25	1,0 - 16,0	160	42	039.130E5160
40	ER 32	2,0 - 20,0	70	50	039.130E670
40	ER 32	2,0 - 20,0	100	50	039.130E6100
40	ER 32	2,0 - 20,0	160	50	039.130E6160
40	ER 40	3,0 - 26,0	80	63	039.130E780
40	ER 40	3,0 - 26,0	160	63	039.130E7160
50	ER 16	0,5 - 10,0	100	28	011.130E3100
50	ER 32	2,0 - 20,0	70	50	011.130E670
50	ER 40	3,0 - 26,0	80	63	011.130E780

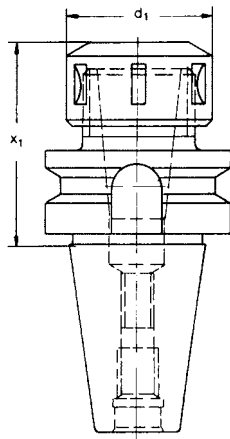
Collet chuck 1:10

For collets DIN 6388

40

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MAS BT



MAS BT

Application: To hold tools with parallel shank in collets DIN 6388

Delivery content: Collet chuck with collet nut and adjusting screw

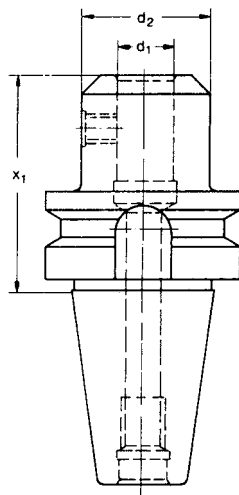
SK	Clamping range	x_1	d_1	Order-no. MAS BT
40	1,5 - 16,0	70	43	039.1301670
40	2,0 - 25,0	70	60	039.1302570
40	4,0 - 32,0	90	72	039.1303290
50	1,5 - 16,0	70	43	011.1301670
50	2,0 - 25,0	70	60	011.1302570
50	4,0 - 32,0	90	72	011.1303290

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

40

MAS BT



MAS BT

Application: For clamping tools with parallel shank DIN 1835 Form B

Delivery content: Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	Order-no. MAS BT
40	6	50	25	039.1400650
40	6	100	25	039.14006100
40	6	160	25	039.14006160
40	8	50	28	039.1400850
40	8	100	28	039.14008100
40	8	160	28	039.14008160
40	10	63	35	039.1401063
40	10	100	35	039.14010100
40	10	160	35	039.14010160
40	12	63	42	039.1401263
40	12	100	42	039.14012100
40	12	160	42	039.14012160
40	14	63	44	039.1401463
40	14	100	44	039.14014100
40	14	160	44	039.14014160
40	16	63	48	039.1401663
40	16	100	48	039.14016100
40	16	160	48	039.14016160
40	18	63	50	039.1401863
40	18	100	50	039.14018100
40	18	160	50	039.14018160

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

40

MAS BT

Adapters MAS BT Form B by ordering

SK	d ₁	x ₁	d ₂	Order-no. MAS BT
40	20	35	52	039.1402035
40	20	63	52	039.1402063
40	20	100	52	039.14020100
40	20	160	52	039.14020160
40	25	63	65	039.1402563
40	25	90	65	039.1402590
40	25	160	65	039.14025160
40	32	63	72	039.1403263
40	32	100	72	039.14032100
40	32	160	72	039.14032160

Adapter sleeves DIN 6359

For parallel shank DIN 1835 B (Weldon)

50

MAS BT

Adapters MAS BT Form B by ordering

SK	d ₁	x ₁	d ₂	Order-no. MAS BT
50	6	63	25	011.1400663
50	8	63	28	011.1400863
50	10	80	32	011.1401080
50	12	80	42	011.1401280
50	14	80	44	011.1401480
50	16	80	48	011.1401680
50	18	80	50	011.1401880
50	20	80	52	011.1402080
50	25	100	65	011.14025100
50	32	105	72	011.14032105
50	40	105	90	011.14040105

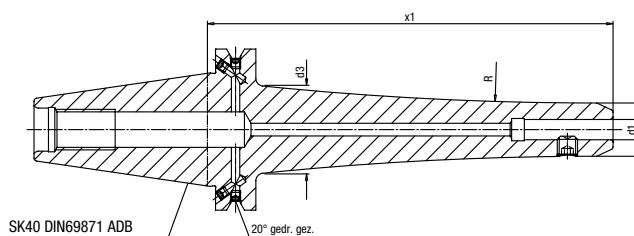
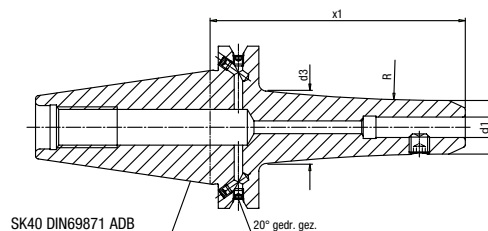
Adapter sleeves DIN 6359 slim design

For parallel shank DIN 1835 B (Weldon)

40

MAS BT

Pre-balanced G6,3 - 8,000 r.p.m.



Application: For clamping tools with parallel shank DIN 1835 Form B

Delivery content: Weldon end mill Adapter incl. locking screw

SK	d ₁	x ₁	d ₂	d ₃	Order-no. MAS BT
40	6	100	17	23	339.14906100
40	6	130	17	28	339.14906130
40	6	160	17	29	339.14906160
40	8	100	21	27	339.14908100
40	8	130	21	32	339.14908130
40	8	160	21	33	339.14908160
40	10	100	24	30	339.14910100
40	10	130	24	35	339.14910130
40	10	160	24	36	339.14910160
40	12	100	27	33	339.14912100
40	12	130	27	38	339.14912130
40	12	160	27	39	339.14912160

Adapter sleeves DIN 6359

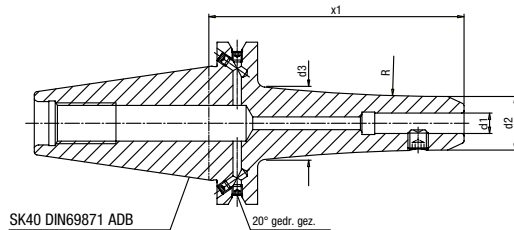
slim design

For parallel shank DIN 1835 B (Weldon)

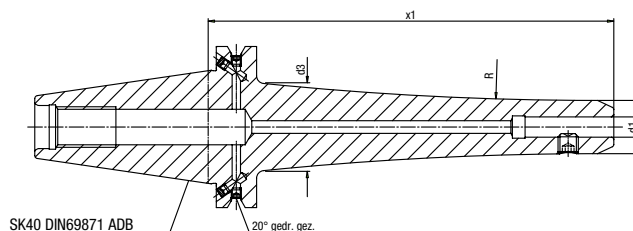
40

MAS BT

Pre-balanced G6,3 - 8,000 r.p.m.



SK40 DIN69871 ADB



SK40 DIN69871 ADB

Application: For clamping tools with parallel shank DIN 1835 Form B

Delivery content: Weldon end mill Adapter incl. locking screw

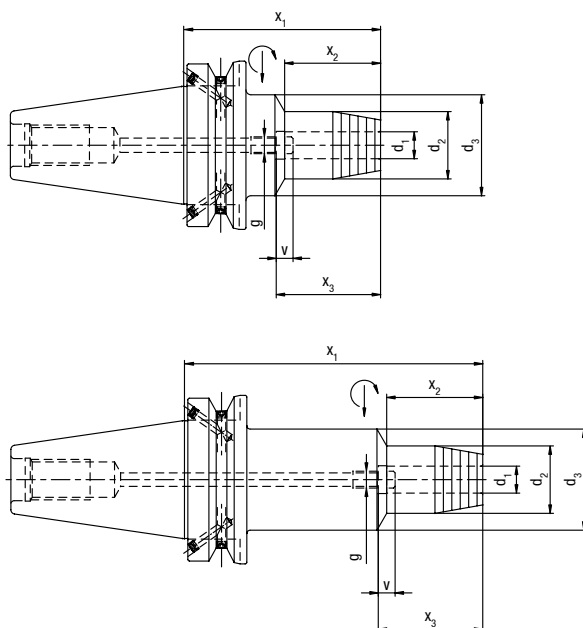
SK	d ₁	x ₁	d ₂	d ₃	Order-no. MAS BT
40	14	100	29	35	339.14914100
40	14	130	29	40	339.14914130
40	14	160	29	41	339.14914160
40	16	100	33	39	339.14916100
40	16	130	33	44	339.14916130
40	16	160	33	45	339.14916160
40	18	100	35	41	339.14918100
40	18	130	35	46	339.14918130
40	18	160	35	47	339.14918160
40	20	100	39	45	339.14920100
40	20	130	39	48	339.14920130
40	20	160	39	49	339.14920160
40	25	100	47	47	339.14925100
40	25	130	47	47	339.14925130
40	25	160	47	47	339.14925160
40	32	100	57	57	339.14932100
40	32	130	57	57	339.14932130
40	32	160	57	57	339.14932160

Hydraulic expansion chuck

IKZ 40

MAS BT

Pre-balanced G6,3 - 15,000 r.p.m.



Delivery content: Allen-„T“-Wrench

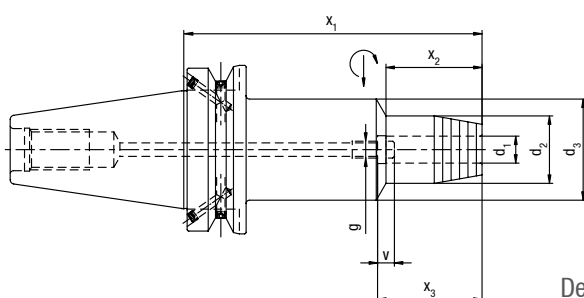
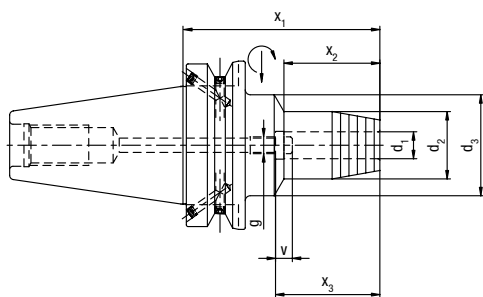
SK	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. MAS BT - AD	Order-no. MAS BT - B
40	6	26	49,5	90	29	37	10	M 5	039.1580690	339.1580690
40	6	26	49,5	140	29	37	10	M 5	039.15806140	339.15806140
40	8	28	49,5	90	30	37	10	M 6	039.1580890	039.1580890
40	8	28	49,5	140	30	37	10	M 6	039.15808140	339.15808140
40	10	30	49,5	90	35	41	10	M 8x1	039.1581090	339.1581090
40	10	30	49,5	140	35	41	10	M 8x1	039.15810140	339.15810140
40	12	32	49,5	90	40	46	10	M 10x1	039.1581290	339.1581290
40	12	32	49,5	140	36	46	10	M 10x1	039.15812140	339.15812140
40	14	34	49,5	90	40	46	10	M 10x1	039.1581490	339.1581490
40	14	34	49,5	140	37	46	10	M 10x1	039.15814140	339.15814140
40	16	38	49,5	90	45	49	10	M 12x1	039.1581690	339.1581690
40	16	38	49,5	140	40	49	10	M 12x1	039.15816140	339.15816140
40	18	40	49,5	90	46	49	10	M 12x1	039.1581890	339.1581890
40	18	40	49,5	140	41	49	10	M 12x1	039.15818140	339.15818140
40	20	42	49,5	90	47	51	10	M 16x1	039.1582090	339.1582090
40	20	42	49,5	140	42	51	10	M 16x1	039.15820140	339.15820140
40	25	55	52,0	90	50	57	10	M 16x1	039.1582590	339.1582590
40	25	55	60,0	140	48	57	10	M 16x1	039.15825140	339.15825140
40	32	63	70,0	90	48	61	10	M 16x1	039.1583290	339.1583290
40	32	63	70,0	140	61	61	10	M 16x1	039.15832140	339.15832140

Hydraulic expansion chuck

IKZ 50

MAS BT

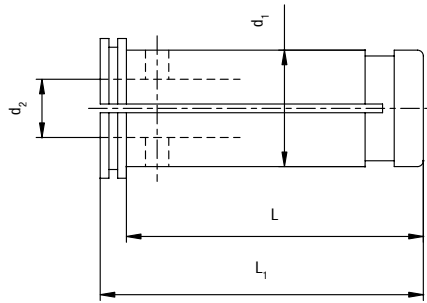
Pre-balanced G6,3 - 15,000 r.p.m.



Delivery content: Allen-, T"-Wrench

SK	d ₁	d ₂	d ₃	x ₁	x ₂	x ₃	v	g	Order-no. MAS BT	Order-no. MAS BT
50	6	26	49,5	110	29	37	10	M 5	011.15806110	341.15806110
50	6	26	49,5	140	29	37	10	M 5	011.15806140	341.15806140
50	8	28	49,5	110	30	37	10	M 6	011.15808110	341.15808110
50	8	28	49,5	140	30	37	10	M 6	011.15808140	341.15808140
50	10	30	49,5	110	34	41	10	M 8x1	011.15810110	341.15810110
50	10	30	49,5	140	35	41	10	M 8x1	011.15810140	341.15810140
50	12	32	49,5	110	34	46	10	M 10x1	011.15812110	341.15812110
50	12	32	49,5	140	36	46	10	M 10x1	011.15812140	341.15812140
50	14	34	49,5	110	34	46	10	M 10x1	011.15814110	341.15814110
50	14	34	49,5	140	37	46	10	M 10x1	011.15814140	341.15814140
50	16	38	49,5	110	35	49	10	M 12x1	011.15816110	341.15816110
50	16	38	49,5	140	40	49	10	M 12x1	011.15816140	341.15816140
50	18	40	49,5	110	35	49	10	M 12x1	011.15818110	341.15818110
50	18	40	49,5	140	41	49	10	M 16x1	011.15818140	341.15818140
50	20	42	49,5	110	35	51	10	M 16x1	011.15820110	341.15820110
50	20	42	49,5	140	42	51	10	M 16x1	011.15820140	341.15820140
50	25	55	63,0	110	48	57	10	M 16x1	011.15825110	341.15825110
50	25	55	63,0	140	48	57	10	M 16x1	011.15825140	341.15825140
50	32	63	70,0	115	50	61	10	M 16x1	011.15832115	341.15832115
50	32	63	70,0	140	61	61	10	M 16x1	011.15832140	341.15832140

Reducing collets sealed



d_1	d_2	L	L_1	Order-no.
12	3	40	44	068Y012003440
12	4	40	44	068Y012004440
12	5	40	44	068Y012005440
12	6	40	44	068Y012006440
12	8	40	44	068Y012008440
12	10	40	44	068Y012010440
20	3	51	55,5	068Y020003555
20	4	51	55,5	068Y020004555
20	5	51	55,5	068Y020005555
20	6	51	55,5	068Y020006555
20	8	51	55,5	068Y020008555
20	10	51	55,5	068Y020010555
20	12	51	55,5	068Y020012555
20	14	51	55,5	068Y020014555
20	16	51	55,5	068Y020016555
32	6	62	66,5	068Y032006665
32	8	62	66,5	068Y032008665
32	10	62	66,5	068Y032010665
32	12	62	66,5	068Y032012665
32	14	62	66,5	068Y032014665
32	16	62	66,5	068Y032016665
32	18	62	66,5	068Y032018665
32	20	62	66,5	068Y032020665
32	25	62	66,5	068Y032025665

Combination face mill adapters

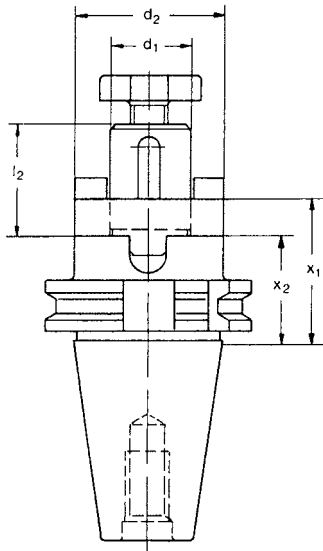
DIN 6358

For milling cutters with longitudinal or transverse drive

40

50

MAS BT



MAS BT

Application: For mounting milling cutters with tenon drive or clutch drive

Delivery content: Form A with arbor screw, key and drive ring

SK	d_1	d_2	x_1	x_2	l_2	Order-no. MAS BT
40	16	55	45	32	27	039.2311655
40	22	55	43	40	31	039.2312255
40	27	55	43	48	33	039.2312755
40	32	60	46	58	38	039.2313260
40	40	60	46	70	41	039.2314060
50	16	70	60	32	27	011.2311670
50	22	70	58	40	31	011.2312270
50	27	70	58	48	33	011.2312770
50	32	70	56	58	38	011.2313270
50	40	70	56	70	41	011.2314070

Milling machine arbors

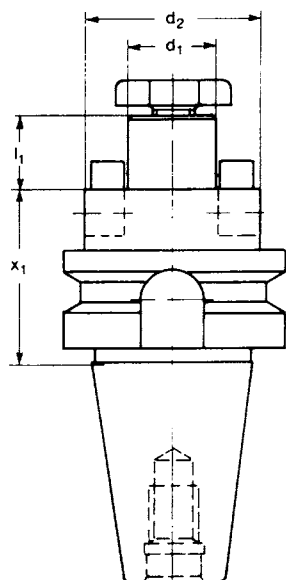
DIN 6357

For milling cutters

40

50

MAS BT



MAS BT

Application: For cutters with key drive
 Delivery content: With driver and arbor screw

SK	d_1	x_1	d_1	l_1	Order-no. MAS BT
40	22	35	50	19	039.242225035
40	27	35	50	21	039.242275035
40	32	50	78	24	039.242327850
40	40	50	89	27	039.242408950
50	22	55	50	19	011.242225055
50	27	55	50	21	011.242275055
50	32	55	78	24	011.242327855
50	40	55	89	27	011.242408955



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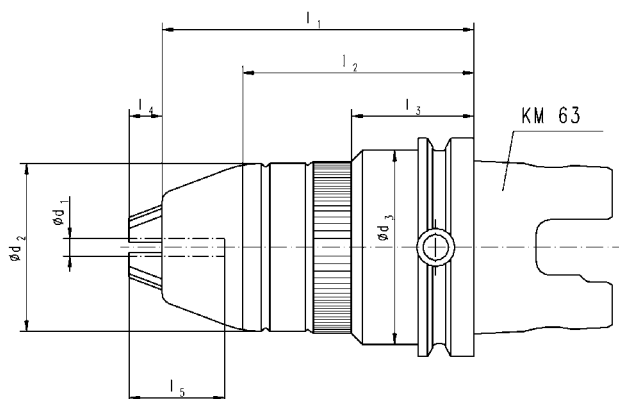
InteGrip[®] Tool holders

For MAZAK-Integrex 100 / 200 / 300 / 400 - (Y/SY)



NC-Drill chucks

InteGrip®

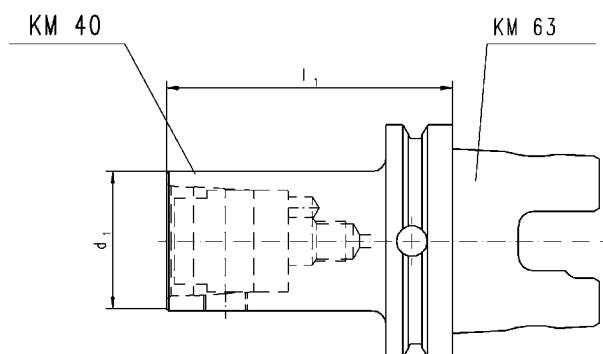


Runout-accuracy < 0,015mm - n max speed = 10.000 min⁻¹

d_1 Clamping range	d_2	d_3	l_1	l_2	l_3	l_4	l_5	Order-no.
1 - 13	48,5	56	90	67	39	9,6	29	618.0121390
3 - 16	51	56	90	69	38	9,6	29	618.0121690

Reducing Adapter

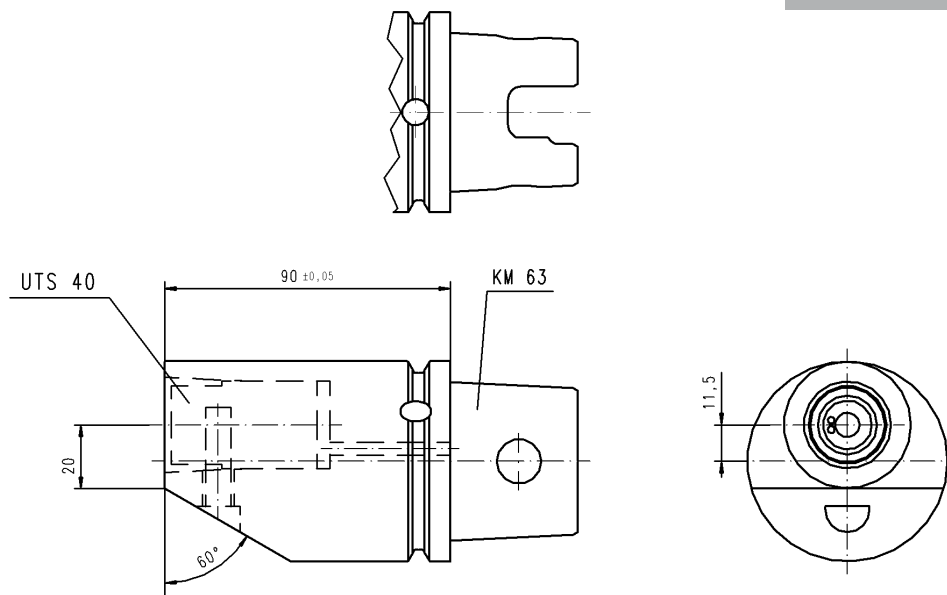
InteGrip®



d_1	l_1	kg	Order-no.
40	60	1,1	618.0590460

Reducing Adapter excentric

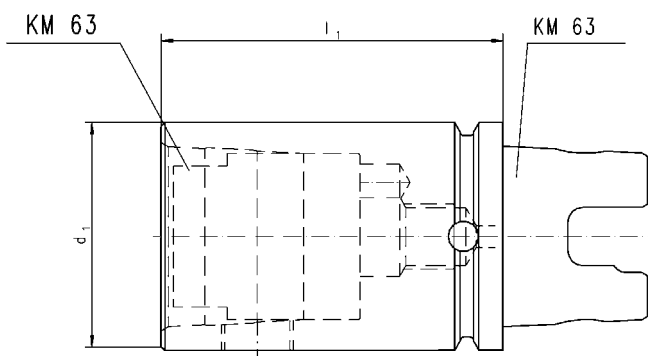
InteGrip®



Design	Picture	Order-no.
axial, left	as shown	618.0590490L
axial, right	mirror inverted	618.0590490R

Extension Adapter

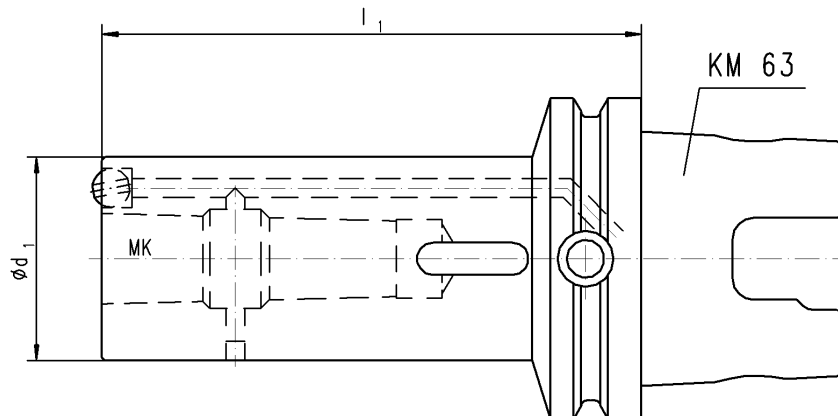
InteGrip®



d_1	l_1	kg	Order-no.
63	80	1,7	618.0590680

Morse taper Adapter

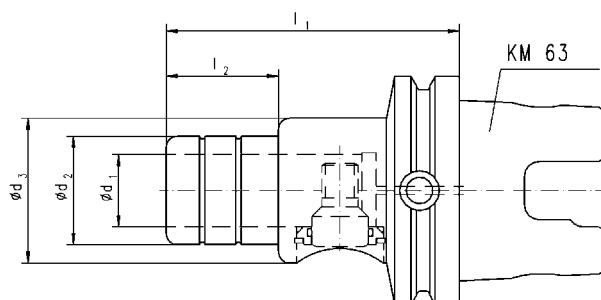
InteGrip®



MK	d ₁	l ₁	Order-no.
1	35	95	618.061195
2	40	107	618.0612107
3	50	125	618.0613125

Synchro-Tapping chuck

InteGrip®



Increase of tool life with modern tapping chuck

Modern CNC machining centres increasingly use rigid chucks for tapping operations. The continuous-path control shows slight synchronisation errors which results in a higher wear of thread flutes. The new Synchro-Tapping chuck by BENZ compensates these errors and increases the tapping tool life significantly.

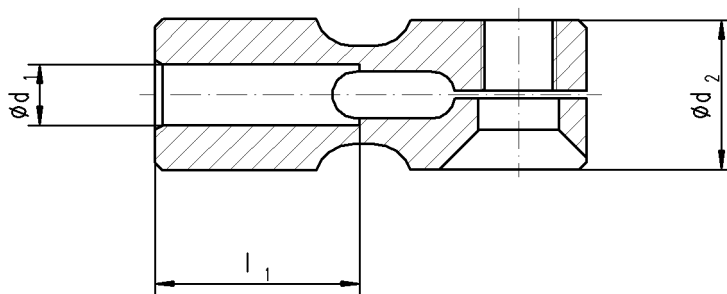
Synchro-Tapping chuck

InteGrip®

Tap	d ₁	d ₂	d ₃	l ₁	l ₂	Order-no.
M3 - M12	20	30	40	90	31	618.0772090
M12 - M20	25	35	48	110	47	618.07725110

Inserts for Synchro-Tapping chuck

InteGrip®

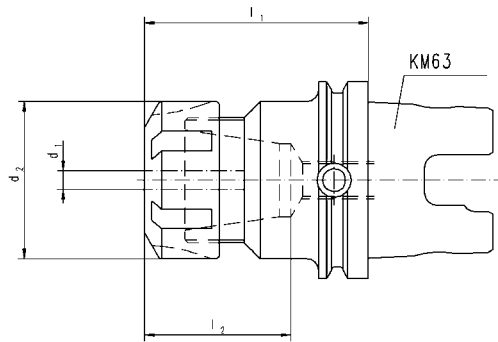


d ₁	d ₂	l ₁	Order-no.
3,5	20	27	067Y020035027V
4,5	20	27	067Y020045034V
6,0	20	27	067Y020060049V
7,0	20	27	067Y020070055V
8,0	20	27	067Y020080062V
9,0	20	27	067Y020090070V
10,0	20	27	067Y020100080V
11,0	25	40	067Y025110090V
12,0	25	40	067Y025120090V
14,0	25	40	067Y025140110V
16,0	25	40	067Y025160120V

Collet chucks

System Regofix ER16 - ER40 DIN 6499

InteGrip®



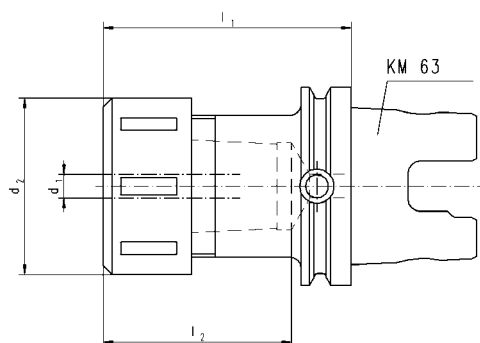
Collets and spanner not included

Chuck size	d ₁ Clamping range	d ₂	l ₁	l ₂	For collet	Order-no.
ER 16	0,5 - 10	28	80	50	426E	618.130E380
ER 16	0,5 - 10	28	120	50	426E	618.130E3120
ER 20	2,0 - 13	34	120	52	428E	618.130E4120
ER 25	2,0 - 16	42	80	55	430E	618.130E580
ER 32	3,0 - 20	50	80	47	470E	618.130E680
ER 32	3,0 - 20	50	150	47	470E	618.130E6150
ER 40	4,0 - 26	63	80	53	472E	618.130E780

Collet chucks

For collets DIN 6388

InteGrip®



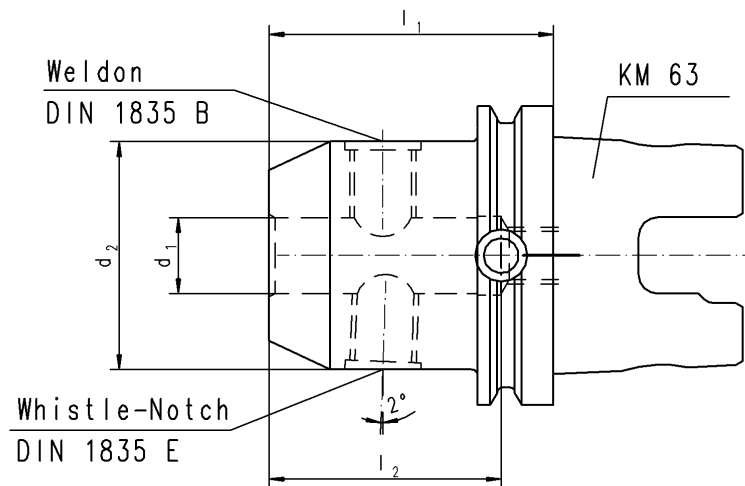
Collets and spanner not included

Chuck size	d ₁ Clamping range	d ₂	l ₁	l ₂	For collet	Order-no.
C25	2,0 - 25	60	80	64	462E	618.1302580

Combi-Adapter

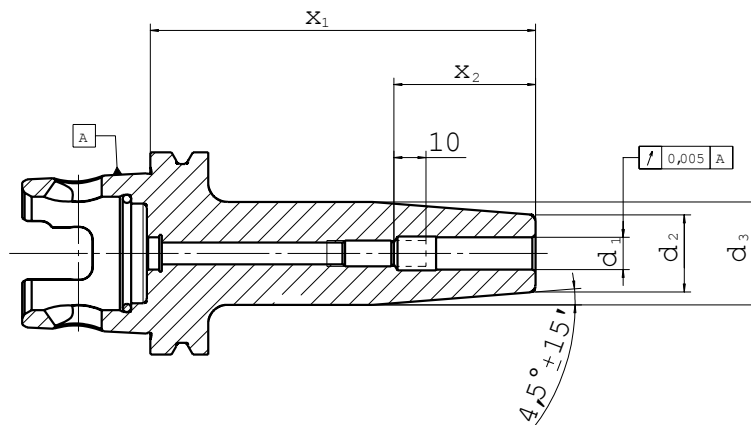
Weldon / Whistle-Notch

InteGrip®

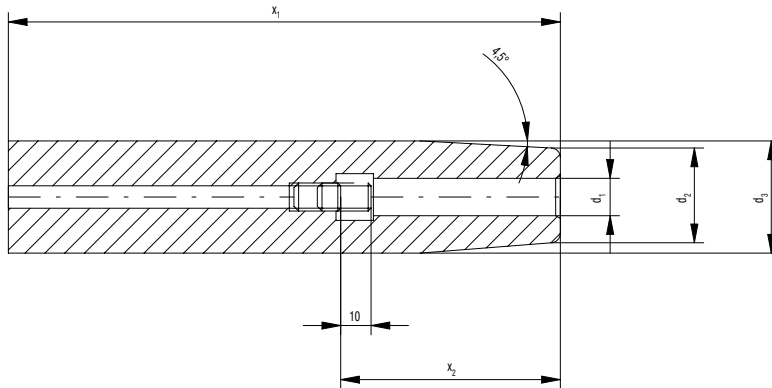


Runout-accuracy < 0,005 mm

d_1	d_2	l_1	l_2	Order-no.
6	25	80	36	618.1450680
6	25	120	37	618.14506120
8	28	80	36	618.1450880
8	28	120	37	618.14508120
10	35	80	40	618.1451080
12	42	80	45	618.1451280
14	44	80	45	618.1451480
16	48	80	48	618.1451680
18	50	80	48	618.1451880
20	52	80	50	618.1452080
25	65	80	56	618.1452580
32	72	80	60	618.1453280
40	80	95	70	618.1454095



KM 63	d_1	d_2	d_3	x_1	x_2	Order-no.
	6	21	27	120	37	618.15206120
	8	21	27	120	37	618.15208120
	10	24	32	120	43	618.15210120
	12	24	32	120	48	618.15212120
	14	27	34	120	48	618.15214120
	16	27	34	120	51	618.15216120
	18	33	42	120	51	618.15218120
	20	33	42	120	53	618.15220120
	25	44	53	120	59	618.15225120
	32	44	53	120	62	618.15232120



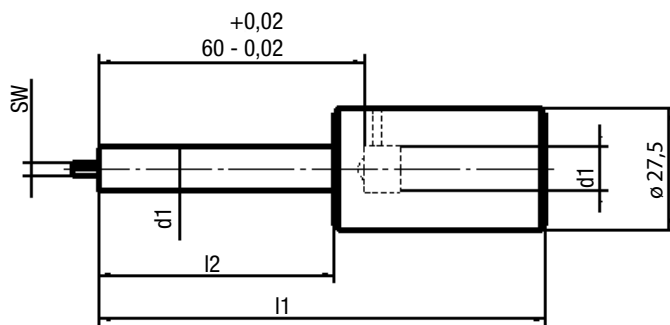
Application: To extend and reduce to minor diameters

Delivery content: At $\varnothing d_1$ from 3 bis 5 mm without adjusting screw and at $\varnothing d_1$ ab 6 mm with adjusting screw

d_3	d_2	d_1	x_1	x_2	Order-no.
12	8	3	160	9	Z12.15203160
12	8	4	160	12	Z12.15204160
16	10	3	160	9	Z16.15203160
16	10	4	160	12	Z16.15204160
16	10	5	160	15	Z16.15205160
16	10	6	160	28	Z16.15206160
20	14	5	160	15	Z20.15205160
20	14	6	160	28	Z20.15206160
20	14	8	160	34	Z20.15208160
25	19	8	160	34	Z25.15208160
25	20	10	160	42	Z25.15210160
25	20	12	160	47	Z25.15212160
25	20	14	160	47	Z25.15214160
25	22	16	160	50	Z25.15216160
32	27	10	160	42	Z32.15210160
32	27	12	160	47	Z32.15212160
32	27	14	160	47	Z32.15214160
32	27	16	160	50	Z32.15216160
32	27	18	160	50	Z32.15218160
32	27	20	160	52	Z32.15220160

Presetting adapter for shrink fit chucks

With the presetting adapter you can easily preset the tool length before starting the shrinking process. They are suitable for all shrink fit chucks equipped with an adjustment screw with a Hexagon socket on the side where the tool is inserted. Working carefully you will achieve a precision of $\pm 0,03$ mm after the shrinking process.



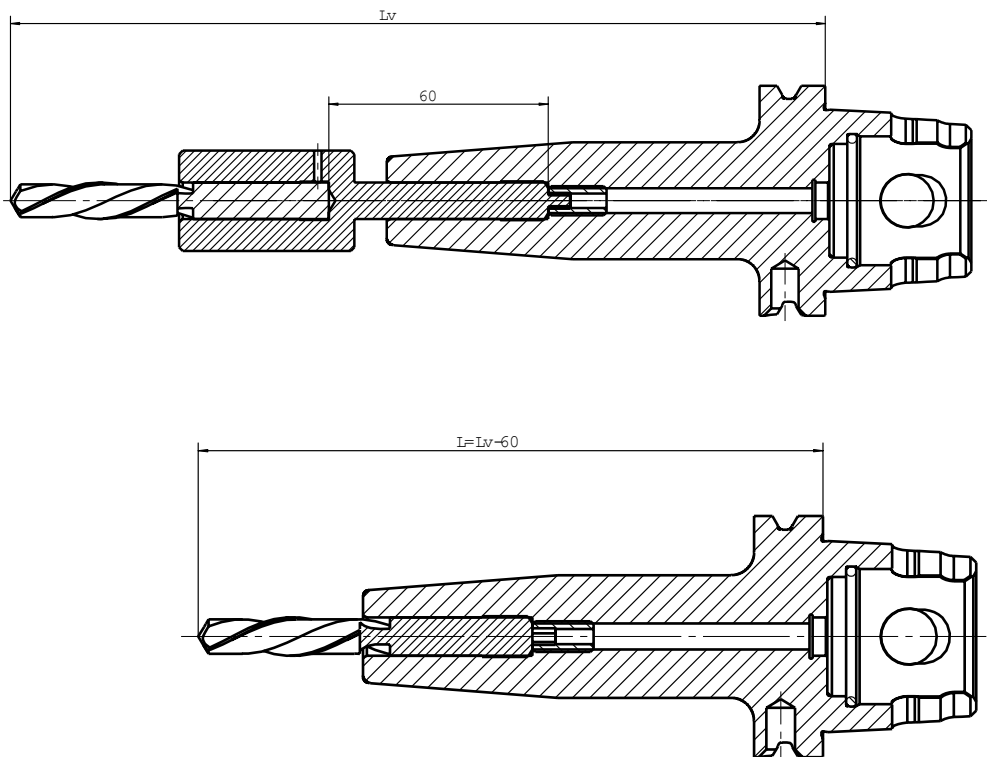
For	d ₁	l ₁	l ₂	SW	Order-no.
HSK/SK/BT	6	96	53	2,5	B152-L060025
HSK/SK/BT	8	96	53	3	B152-L080030
HSK/SK/BT	10	101	53	3	B152-L100030
HSK40	12	107	53	3	B152-L120030
HSK40	14	107	53	3	L152-L140030
HSK40	16	110	53	3	B152-L160030
HSK50+63+80+100/ SK/BT	12	107	53	5	B152-L120050
HSK50+63+80+100/ SK/BT	14	107	53	5	B152-L140050
HSK50+63+80+100/ SK/BT	16	110	53	5	B152-L160050
HSK50/HSK63/SK30	18	110	53	5	B152-L180050
HSK50/HSK63/SK30	20	112	53	5	B152-L200050
HSK80+100/ SK40+50/BT	18	110	53	8	B152-L180080
HSK80+100/ SK40+50/BT	20	112	53	8	B152-L200080

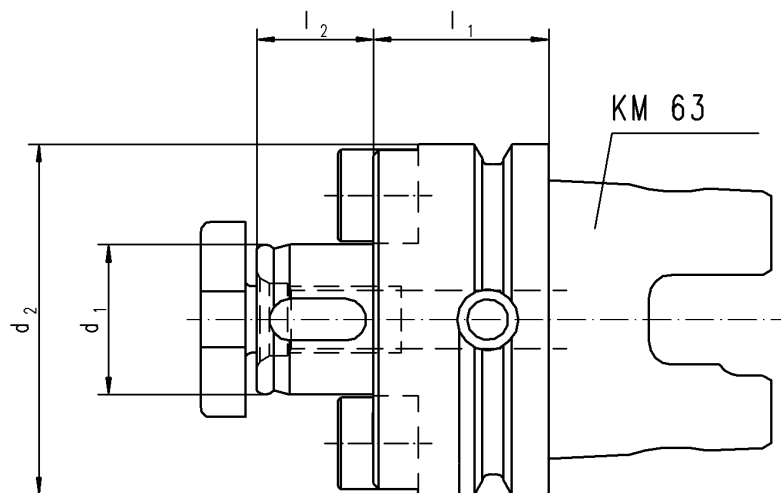
Manual for presetting adapter

Before you start the shrinking process please insert tool (4) into the presetting adapter (3) and fit it together with the shrink fit chuck (1) with the stop screw (2).

Now you can regulate the length by turning the adapter which will set the stop screw to the requested length. The requested length (L) after the shrinking process results of the presetting lengths (Lv) as follows $L = L_v - 60\text{mm}$.

Please take out the adapter and shrink in the tool. The tool has to be placed upon the stop screw.



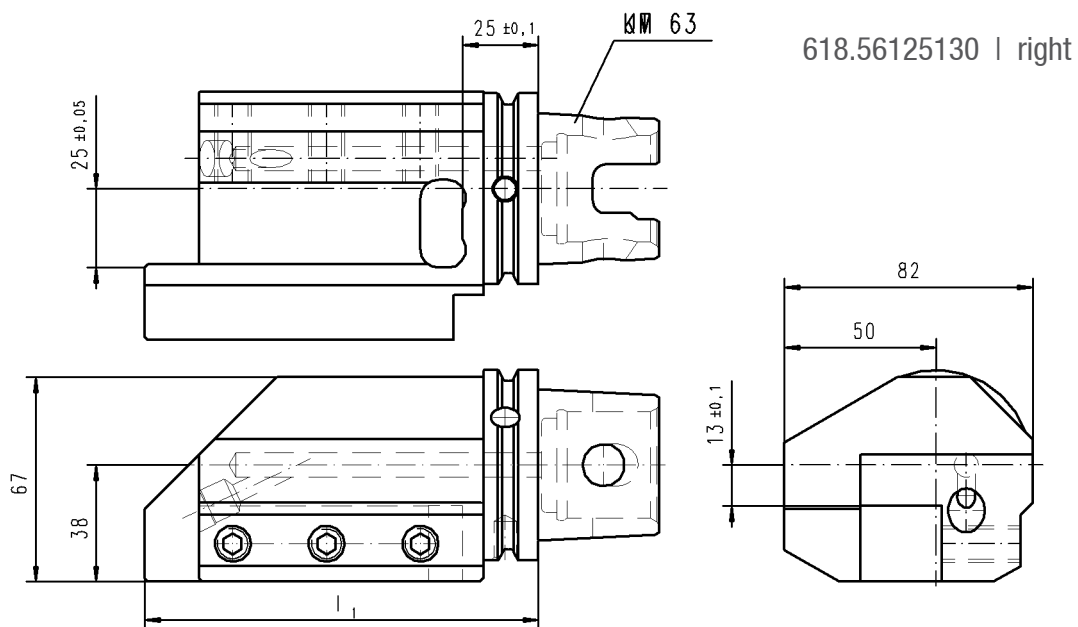
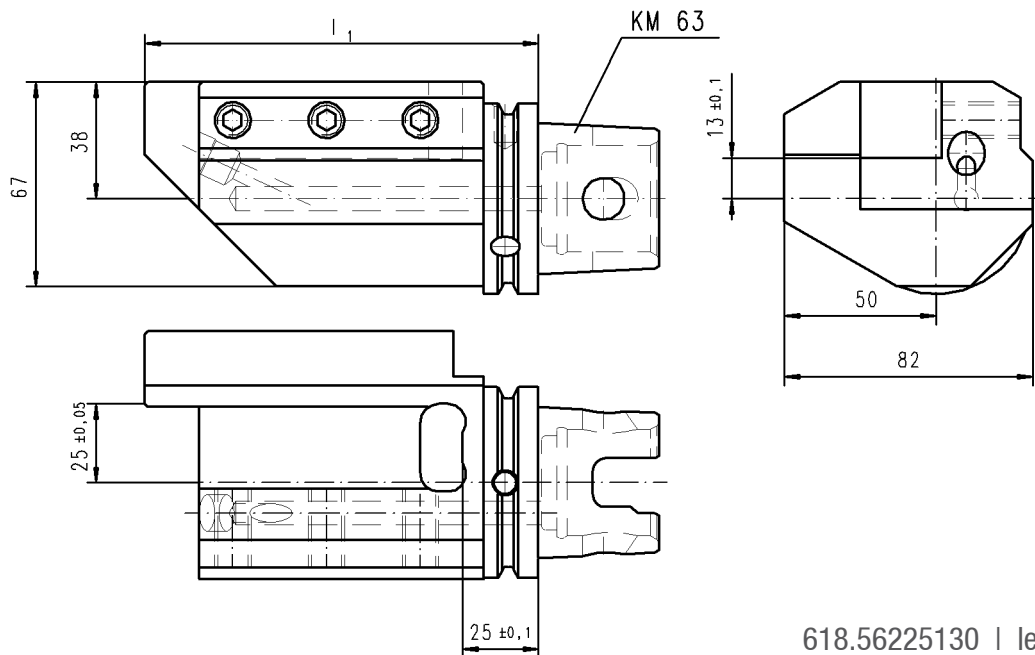


d_1	d_2	l_1	l_2	Order-no.
16	32	32	17	618.229163232
16	32	63	17	618.229163263
16	32	110	17	618.2291632110
22	50	28	19	618.229225028
22	50	63	19	618.229225063
22	50	110	19	618.2292250110
27	63	32	21	618.229276332
27	63	63	21	618.229276363
27	63	110	21	618.2292763110
32	78	40	24	618.229327840
32	78	63	24	618.229327863
32	78	110	24	618.2293278110

Turning tool holder

Not useable for INTEGRIX 100

InteGrip®



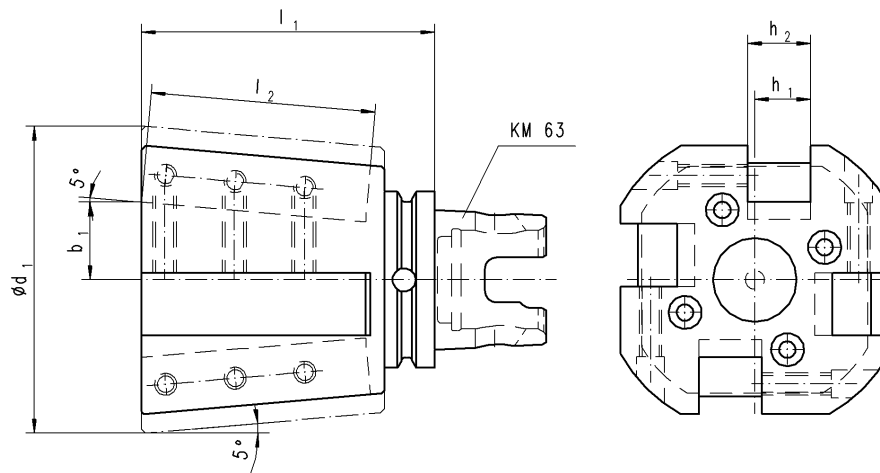
l_1	Design	kg	Order-no.
130	axial, left	3,5	618.56225130
130	axial, right	3,5	618.56125130

Quattro-holder

Not useable for INTEGREX 100

InteGrip®

By using this holder you can increase tool capacity up to 3 slots



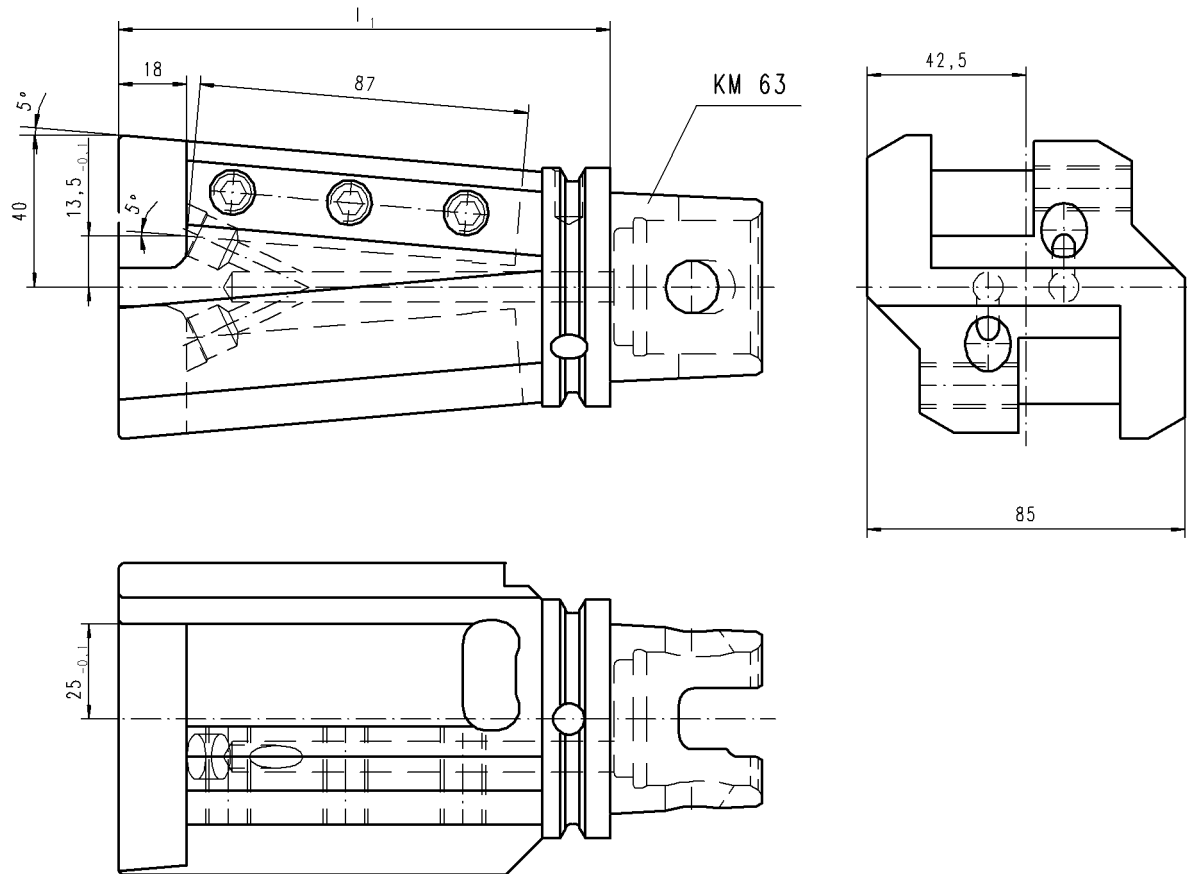
l_1	l_2	d_1	b_1	h_1	h_2	kg	Order-no.
110	80,5	110	27,75 _{-0,1}	20 _{-0,1}	22,5	4,0	618.565S0001

For use of this holder the CNC control must be ISO programmable (metric).
For using the holder please turn the B-axis an additional 5° .

Double-holder

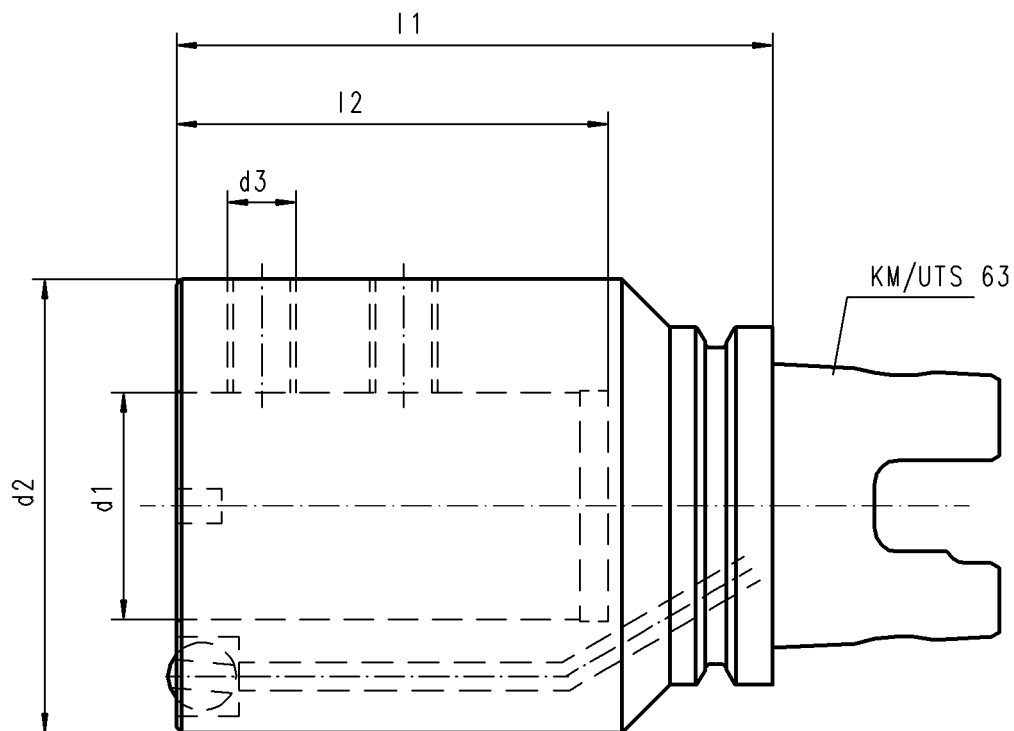
Not useable for INTEGRIX 100

InteGrip®



l_1	kg	Order-no.
130	3,4	618.565S0002

For use of this holder the CNC-control must be ISO-programmable (metric).
For using the holder please turn the B-axis an additional 5°.



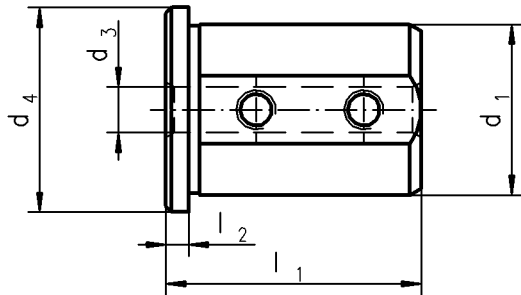
d_1	d_2	d_3	l_1	l_2	Order-no.
40	70	M 12x1	105	58	618.57140105

Reduction arbors

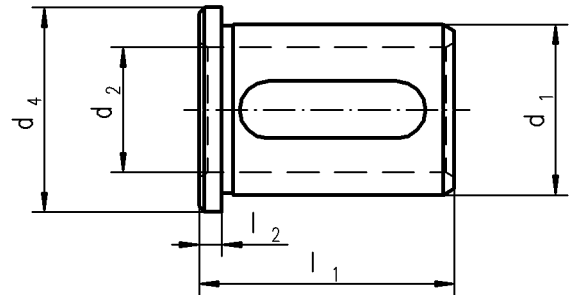
For boring bar holders

InteGrip®

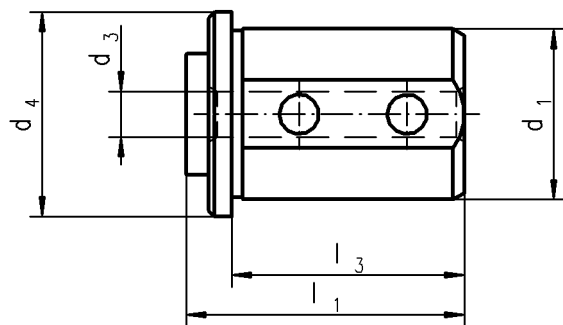
Type A



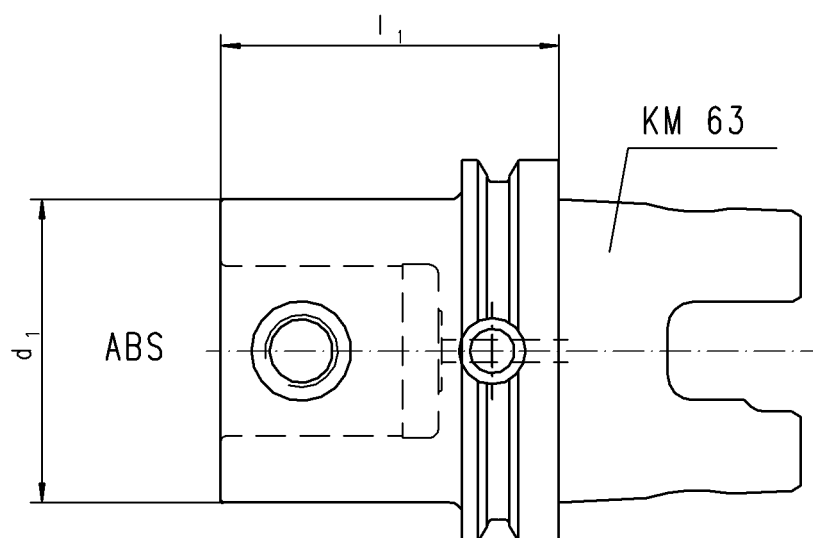
Type B



Type C



Type	d ₁	d ₂	d ₃	d ₄	l ₁	l ₂	l ₃	Order-no.	For holder page 1
A	40	-	8	44	58	5	-	Z40.1100820	618.5614075
A	40	-	10	44	58	5	-	Z40.1101020	
A	40	-	12	44	58	5	-	Z40.1101220	
B	40	16	-	44	58	5	-	Z40.1101620	
B	40	20	-	44	58	5	-	Z40.1102020	
B	40	25	-	44	58	5	-	Z40.1102520	
B	40	32	-	44	58	5	-	Z40.1103220	
C	40	-	8	58	105	-	75	Z40.11008105	618.56140105
C	40	-	10	58	105	-	75	Z40.11010105	
C	40	-	12	58	105	-	75	Z40.11012105	
C	40	-	16	58	105	-	75	Z40.11016105	
C	40	-	20	58	105	-	75	Z40.11020105	
C	40	-	25	58	105	-	75	Z40.11025105	
C	40	-	32	58	105	-	75	Z40.11032105	



ABS	d_1	d_2	Order-no.
50	50	50	618.ABS5050
63	63	60	618.ABS6360
80	80	75	618.ABS8075

Notes





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Tool holders DIN 69880 (VDI Holder)

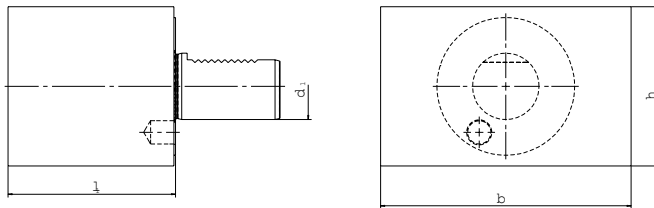


Tool holder

DIN 69880 Form A

Tool holder Blank, rectangular, Form A1

VDI Holder



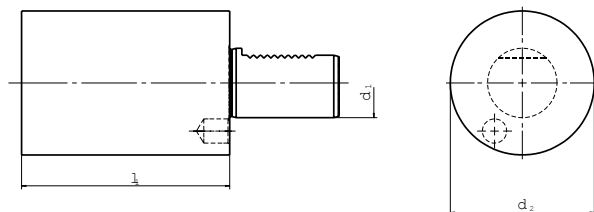
Size	d_1	l_1	b	h	kg	Order-no.
16 x 44	16	44	78	44	1,2	241.5507844
20 x 65	20	65	100	60	3,2	112.55010065
30 x 85	30	85	130	76	6,8	113.55013085
40 x 100	40	100	151	96	11,9	114.550151100
50 x 125	50	125	160	120	20,0	115.550160125
60 x 160	60	160	165	125	27,8	116.550165160

Tool holder

DIN 69880 Form A

Tool holder Blank, round, Form A2

VDI Holder



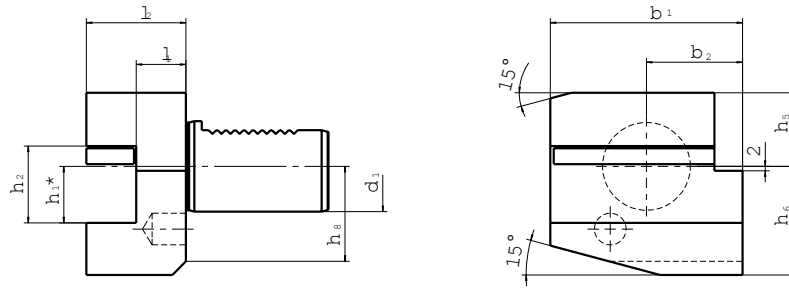
Size	d_1	d_2	l_1	kg	Order-no.
20 x 70	20	50	70	1,2	112.1025070
30 x 100	30	68	100	3,2	113.10268100
30 x 240	30	68	240	7,2	113.10268240
40 x 120	40	83	120	5,7	114.10283120
40 x 320	40	83	320	14,5	114.10283320
50 x 135	50	98	135	9,1	115.10298135
50 x 400	50	98	400	25,2	115.10298400
60 x 150	60	123	150	16,2	116.102123150
60 x 480	60	123	480	47,5	116.102123480

Tool holder

DIN 69880 Form B

With square locking drive, right hand, short, Form B1

VDI Holder



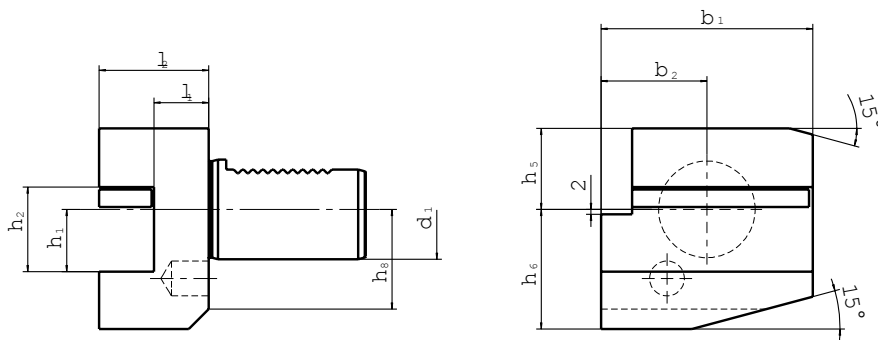
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ ^{+0.5}	l ₂	kg	Order-no.
20 x 16 x 30	20	55	30	16/12	22	25	30	23	16	30	0,6	112.5511616
20 x 16 x 40	20	55	30	16/12	22	25	30	23	26	40	0,8	112.5511626
30 x 20 x 40	30	70	35	20/16	29	28	38	30	22	40	1,3	113.5512022
30 x 20 x 60	30	70	35	20/16	29	28	38	30	42	60	1,9	113.5512042
40 x 25 x 44	40	85	42,5	25/20	34	32,5	48	42	22	44	2,3	114.5512522
50 x 32 x 55	50	100	50	32/25	41	35	60	-	30	55	4,1	115.5513230
60 x 32 x 60	60	125	62,5	32/25	41	42,5	62,5	-	30	60	6,3	116.5513230

Tool holder

DIN 69880 Form B

with square locking drive, left hand, short, Form B2

VDI Holder



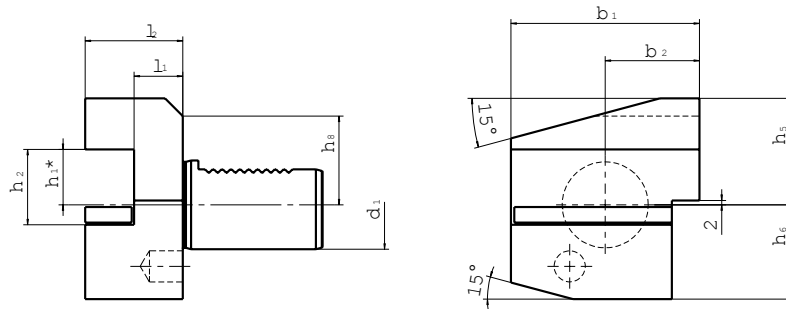
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ ^{+0.5}	l ₂	kg	Order-no.
20 x 16 x 30	20	55	30	16/12	22	25	30	23	16	30	0,6	112.5521616
20 x 16 x 40	20	55	30	16/12	22	25	30	23	26	40	0,8	112.5521626
30 x 20 x 40	30	70	35	20/16	29	28	38	30	22	40	1,3	113.5522022
30 x 20 x 60	30	70	35	20/16	29	28	38	30	42	60	1,9	113.5522042
40 x 25 x 44	40	85	42,5	25/20	34	32,5	48	-	22	44	2,3	114.5522522
50 x 32 x 55	50	100	50	32/25	41	35	60	-	30	55	4,1	115.5523230
60 x 32 x 60	60	125	62,5	32/25	41	42,5	62,5	-	30	60	6,3	116.5523230

Tool holder

DIN 69880 Form B

Square locking drive radial-overhead, right hand, short, Form B3

VDI Holder



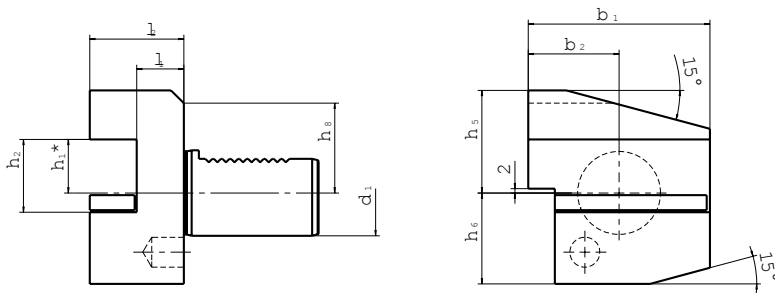
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ ^{+0,5}	l ₂	kg	Order-no.
20 x 16 x 30	20	55	30	16/12	22	30	25	23	16	30	0,6	112.5531616
20 x 16 x 40	20	55	30	16/12	22	30	25	23	26	40	0,8	112.5531626
30 x 20 x 40	30	70	35	20/16	29	38	35	28	22	40	1,4	113.5532022
30 x 20 x 60	30	70	35	10/16	29	38	35	28	42	60	2	113.5532042
40 x 25 x 44	40	85	42,5	25/20	34	48	42,5	42	22	44	2,4	114.5532522
50 x 32 x 55	50	100	50	32/25	41	60	50	-	30	55	4,3	115.5533230
60 x 32 x 60	60	125	62,5	32/25	41	62,5	62,5	-	30	60	7,7	116.5533230

Tool holder

DIN 69880 Form B

Square locking drive radial-overhead, left hand, short, Form B4

VDI Holder



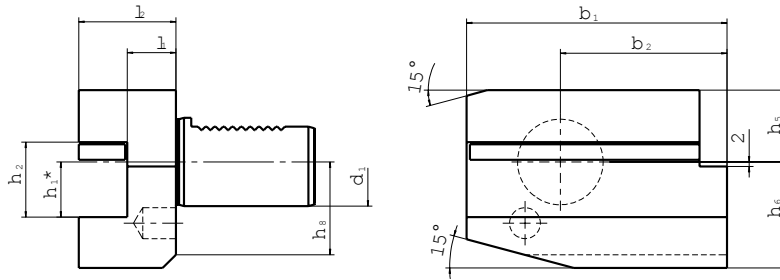
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ ^{+0,5}	l ₂	kg	Order-no.
20 x 16 x 30	20	55	30	16/12	22	30	25	23	16	30	0,6	112.5541616
20 x 16 x 40	20	55	30	16/12	22	30	25	23	26	40	0,8	112.5541626
30 x 20 x 40	30	70	35	20/16	29	38	35	28	22	40	1,4	113.5542022
40 x 25 x 44	40	85	42,5	25/20	34	48	42,5	-	22	44	2,4	114.5542522
50 x 32 x 55	50	100	50	32/25	41	60	50	-	30	55	4,3	115.5543230
60 x 32 x 60	60	125	62,5	32/25	41	62,5	62,5	-	30	60	7,7	116.5543230

Tool holder

DIN 69880 Form B

Square locking drive radial, right hand, long, Form B5

VDI Holder



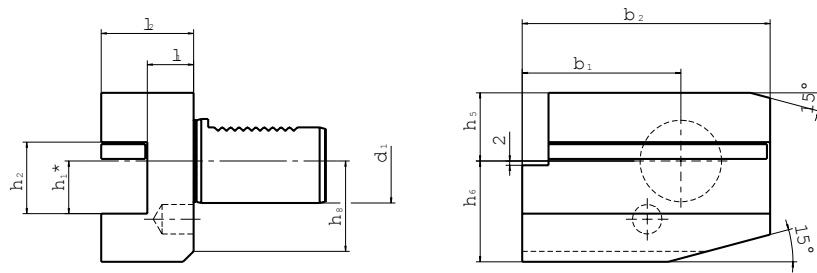
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ + 0,5	l ₂	kg	Order-no.
20 x 16 x 30	20	75	50	16/12	22	25	30	23	16	30	0,7	112.5551616
20 x 16 x 40	20	75	50	16/12	22	25	30	23	26	40	1,0	112.5551626
30 x 20 x 40	30	100	65	20/16	29	28	38	30	22	40	1,6	113.5552022
40 x 25 x 44	40	118	75,5	25/20	34	32,5	48	-	22	44	3,0	114.5552522
50 x 32 x 55	50	130	80	32/25	41	35	60	-	30	55	5,0	115.5553230
60 x 32 x 60	60	145	82,5	32/25	41	42,5	62,5	-	30	60	7,1	116.5553230

Tool holder

DIN 69880 Form B

Square locking drive radial, left hand, long, Form B6

VDI Holder



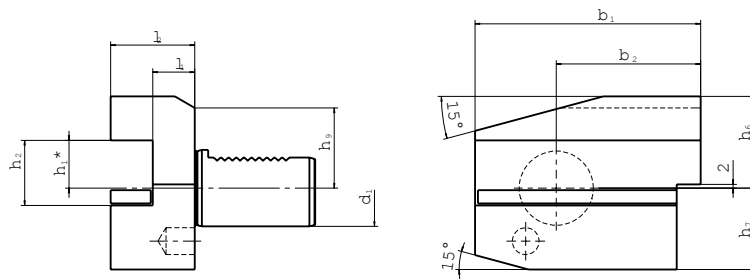
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ + 0,5	l ₂	kg	Order-no.
20 x 16 x 30	20	75	50	16/12	22	25	30	23	16	30	0,7	112.5561616
20 x 16 x 40	20	75	50	16/12	22	25	30	23	26	40	1	112.5561626
30 x 20 x 40	30	100	65	20/16	29	28	38	30	22	40	1,6	113.5562022
40 x 25 x 44	40	118	75,5	25/20	34	32,5	48	-	22	44	3	114.5562522
50 x 32 x 55	50	130	80	32/25	41	35	60	-	30	55	5	115.5563230
60 x 32 x 60	60	145	82,5	32/25	41	42,5	62,5	-	30	60	7,3	116.5563230

Tool holder

DIN 69880 Form B

Square locking drive radial-overhead, right hand, long, Form B7

VDI Holder



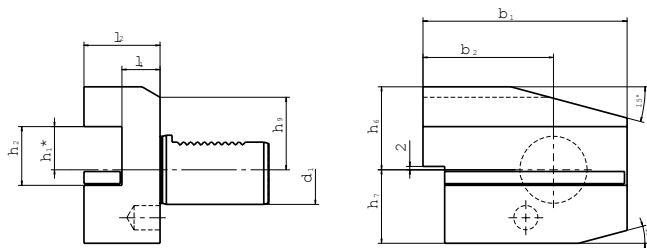
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ + 0,5	l ₂	kg	Order-no.
20 x 16 x 30	20	75	50	16/12	22	30	25	23	16	30	0,8	112.5571616
20 x 16 x 40	20	75	50	16/12	22	30	25	23	26	40	1	112.5571626
30 x 20 x 40	30	100	65	20/16	29	38	35	28	22	40	1,9	113.5572022
40 x 25 x 44	40	18	75,5	25/20	34	48	42,5	-	22	44	3,2	114.5572522
50 x 32 x 55	50	130	80	32/25	41	60	50	-	30	55	5,4	115.5573230
60 x 32 x 60	60	145	82,5	32/25	41	62,5	62,5	-	30	60	8,2	116.5573230

Tool holder

DIN 69880 Form B

Square locking drive radial-overhead, left hand, long, Form B8

VDI Holder



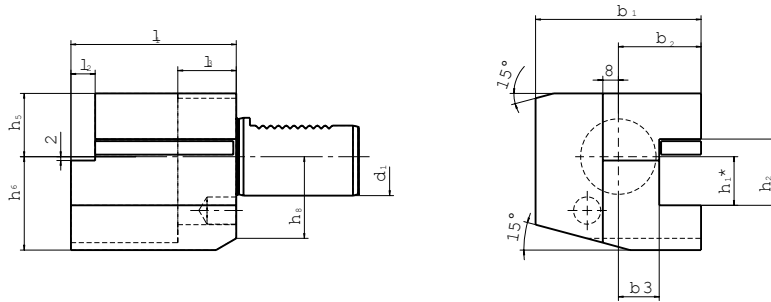
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₅	h ₆	h ₈	l ₁ + 0,5	l ₂	kg	Order-no.
20 x 16 x 30	20	75	50	16/12	22	30	25	23	16	30	0,8	112.5581616
20 x 16 x 40	20	75	50	16/12	22	30	25	23	26	40	1	112.5581626
30 x 20 x 40	30	100	65	20/16	29	38	35	28	22	40	1,9	113.5582022
30 x 20 x 60	30	100	65	20/16	29	38	35	28	42	60	2,8	113.5582042
40 x 25 x 44	40	118	75,5	25/20	34	48	42,5	-	22	44	3,2	114.5582522
50 x 32 x 55	50	130	80	32/25	41	60	50	-	30	55	5,4	115.5583230
60 x 32 x 60	60	145	82,5	32/25	41	62,5	62,5	-	30	60	8,2	116.5583230

Tool holder

DIN 69880 Form C

Turning Tool holder axial, right hand, Form C1

VDI Holder



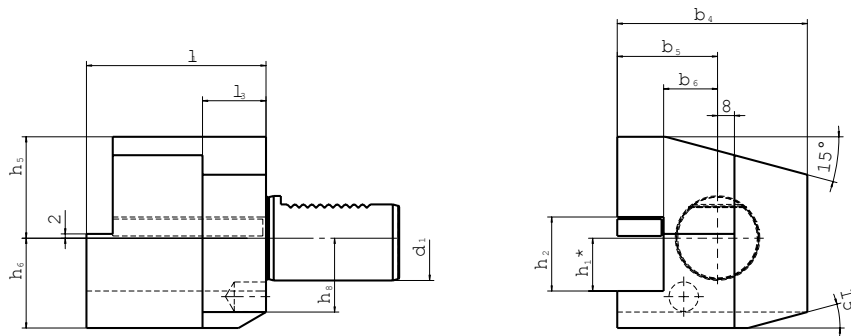
Size	d ₁	b ₁	b ₂	h ₁ [*]	h ₂	h ₅	h ₆	h ₈	l ₁	l ₂	l ₃	kg	Order-no.
20 x 16	20	52	27	16/12	22	25	30	23	55	7	30	0,9	112.5611655
20 x 16	20	65	40	16/12	22	25	30	23	50	-	30	0,9	112.5611650
30 x 20	30	70	35	20/16	29	28	38	30	70	10	30	1,8	113.5612070
40 x 25	40	85	42,5	25/20	34	32,5	48	-	85	12,5	30	3,2	114.5612585
50 x 32	50	100	50	32/25	41	35	60	-	100	16	40	5,5	115.56132100
60 x 32	60	125	62,5	32/25	41	42,5	62,5	-	125	16	40	9,5	116.56132125

Tool holder

DIN 69880 Form C

Turning Tool holder axial, left hand, Form C2

VDI Holder



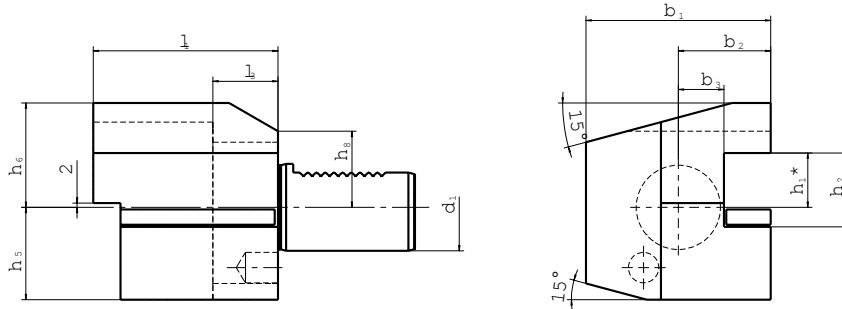
Size	d ₁	b ₄	b ₅	b ₆ ^{+0,5}	h ₁ [*]	h ₂	h ₅	h ₆	h ₈	l ₁	l ₂	l ₃	kg	Order-no.
20 x 16	20	65	40	26	16/12	22	25	30	23	50	-	30	0,9	112.5621650
30 x 20	30	76	41	23	20/16	29	28	38	30	70	10	30	1,8	113.5622070
40 x 25	40	90	47,5	25,5	25/20	34	32,5	48	-	85	12,5	30	3,2	114.5622585
50 x 32	50	105	55	30,5	32/25	41	35	60	-	100	16	40	5,5	115.56232100
60 x 32	60	125	62,5	32,5	32/25	41	42,5	62,5	-	125	16	40	9,5	116.56232125

Tool holder

DIN 69880 Form C

Turning Tool holder axial, overhead, right hand, Form C3

VDI Holder



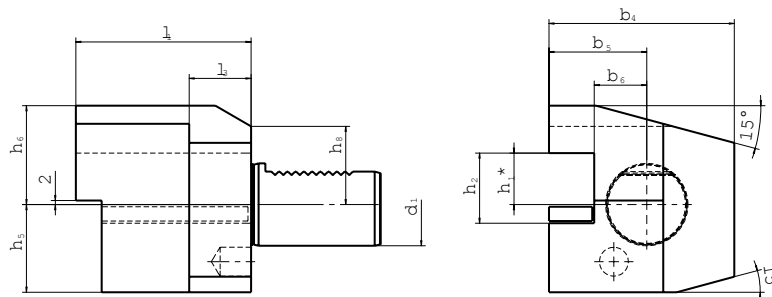
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₆	h ₇	h ₈	l ₁	l ₂	l ₃	kg	Order-no.
20 x 16	20	52	27	16/12	22	30	25	23	55	7	30	0,9	112.5631655
20 x 16	20	65	40	16/12	22	30	25	23	50	-	30	1,2	112.5631650
30 x 20	30	70	35	20/16	29	38	35	28	70	10	30	1,9	113.5632070
40 x 25	40	85	42,5	25/20	34	48	42,5	-	85	12,5	30	3,5	114.5632585
50 x 32	50	100	50	32/25	41	60	50	-	100	16	40	5,9	115.56332100
60 x 32	60	125	62,5	32/25	41	62,5	62,5	-	125	16	40	10,7	116.56332125

Tool holder

DIN 69880 Form C

Turning Tool holder axial, overhead, left hand, Form C4

VDI Holder



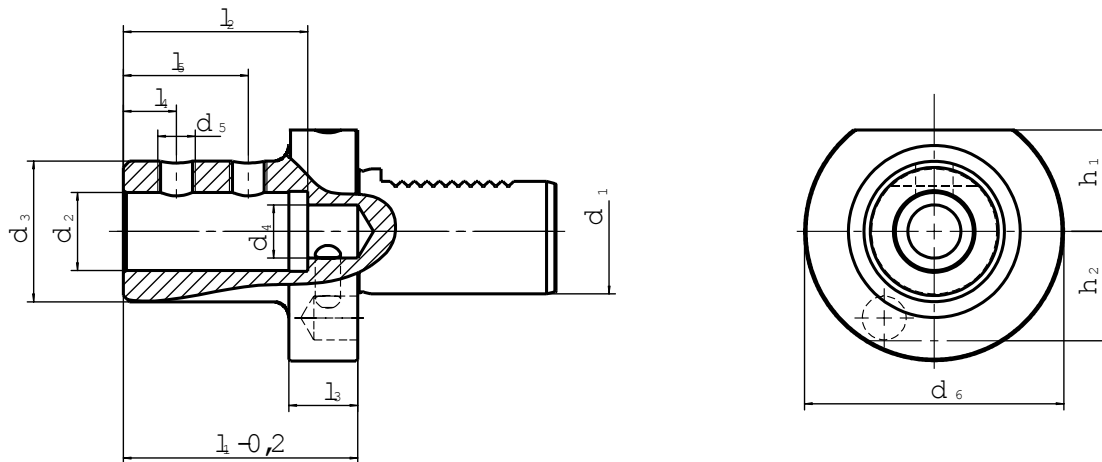
Size	d ₁	b ₁	b ₂	h ₁ *	h ₂	h ₆	h ₇	h ₈	l ₁	l ₂	l ₃	kg	Order-no.
20 x 16	20	65	40	16/12	22	30	25	23	50	-	30	1,2	112.5641650
30 x 20	30	76	41	20/16	29	38	35	28	70	10	30	1,9	113.5642070
40 x 25	40	90	47,5	25/20	34	48	42,5	-	85	12,5	30	3,5	114.5642585
50 x 32	50	105	55	32/25	41	60	50	-	100	16	40	5,9	115.56432100
60 x 32	60	125	62,5	32/25	41	62,5	62,5	-	125	16	40	10,7	116.56432125

Tool holder

DIN 69880 Form E

Tool holder with cylindrical shaft, Form E1

VDI Holder



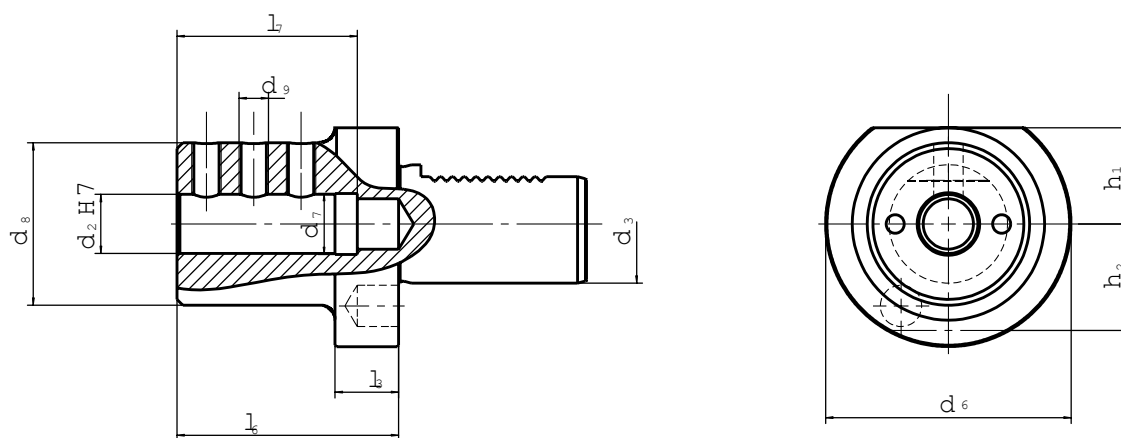
Size	d ₁	d ₂ H6	d ₃	d ₄	d ₅	d ₆	h ₁	h ₂	l ₁ 0-0,2	l ₂	l ₃	l ₄	l ₅	kg	Order-no.
20 x 16	20	16	36	12	M10x1	50	23	23	67	54	18	15	35	0,7	112.5701667
20 x 20	20	20	40	12	M10x1	50	23	23	67	54	18	15	35	0,7	112.5702067
20 x 25	20	25	45	17	M12x1	50	23	23	71	59	18	17	40	0,8	112.5702571
30 x 16	30	16	36	12	M10x1	68	28	30	67	54	22	15	35	1,2	113.5701667
30 x 20	30	20	40	12	M10x1	68	28	30	67	54	22	15	35	1,2	113.5702067
30 x 25	30	25	45	17	M12x1	68	28	30	71	59	22	17	40	1,2	113.5702571
30 x 32	30	32	52	24	M12x1	68	28	30	75	63	22	20	44	1,3	113.5703275
30 x 40	30	40	60	32	M16x1	68	28	30	90	73	22	22	50	1,6	113.5704090
40 x 16	40	16	36	12	M10x1	83	32,5	-	67	54	22	15	35	1,8	114.5701667
40 x 20	40	20	40	12	M10x1	83	32,5	-	67	54	22	15	35	1,8	114.5702067
40 x 25	40	25	45	17	M12x1	83	32,5	-	75	59	22	17	40	1,9	114.5702575
40 x 32	40	32	52	24	M12x1	83	32,5	-	75	63	22	20	44	2	114.5703275
40 x 40	40	40	60	32	M16x1	83	32,5	-	90	73	22	22	54	2,2	114.5704090
50 x 20	50	20	40	12	M10x1	98	35	-	67	54	30	15	35	2,9	115.5702067
50 x 25	50	25	45	17	M12x1	98	35	-	80	59	30	17	40	3,1	115.5702580
50 x 32	50	32	52	24	M12x1	98	35	-	80	63	30	20	44	3,1	115.5703280
50 x 40	50	40	60	32	M16x1	98	35	-	100	73	30	22	54	3,2	115.57040100
50 x 50	50	50	70	42	M16x1	98	35	-	100	83	30	24	60	3,5	115.57050100
60 x 20	60	20	40	12	M10x1	123	42,5	-	80	54	30	15	35	4,5	116.5702080
60 x 25	60	25	45	17	M12x1	123	42,5	-	80	59	30	17	40	4,6	116.5702580
60 x 32	60	32	52	24	M12x1	123	42,5	-	80	63	30	20	44	4,7	116.5703280
60 x 40	60	40	60	32	M16x1	123	42,5	-	100	73	30	22	54	4,9	116.57040100
60 x 50	60	50	70	42	M16x1	123	42,5	-	100	83	30	24	60	5	116.57050100

Tool holder

DIN 69880 Form E

Side Lock Adapter for turning-tools, Form E2

VDI Holder



Size	d ₁	d ₂	d ₆	d ₇	d ₈	d ₉	h ₁	h ₂	l ₃	l ₆	l ₇	G	kg	Order-no.
20 x 8	20	8	50	9	40	M6	23	23	18	50	41	M10x1	0,6	112.5710850
20 x 10	20	10	50	9	40	M6	23	23	18	50	41	M10x1	0,6	112.5711050
20 x 12	20	12	50	9	40	M8	23	23	18	50	41	M10x1	0,6	112.5711250
20 x 16	20	16	50	9	40	M8	23	23	18	50	41	M10x1	0,6	112.5711650
20 x 20	20	20	50	9	50	M8	23	23	-	50	41	M10x1	0,6	112.5712050
20 x 25	20	25	50	9	50	M8	-	23	-	60	51	M10x1	0,6	112.5712560
30 x 8	30	8	68	16,5	55	M6	28	30	22	60	51	M18x1,5	0,6	113.5710860
30 x 10	30	10	68	16,5	55	M6	28	30	22	60	51	M18x1,5	0,6	113.5711060
30 x 12	30	12	68	16,5	55	M8	28	30	22	60	51	M18x1,5	0,6	113.5711260
30 x 16	30	16	68	16,5	55	M8	28	30	22	60	51	M18x1,5	0,6	113.5711660
30 x 20	30	20	68	16,5	55	M8	28	30	22	60	51	M18x1,5	1,3	113.5712060
30 x 25	30	25	68	16,5	55	M8	28	30	22	60	51	M18x1,5	1,2	113.5712560
30 x 32	30	32	68	16,5	68	M8	28	30	-	75	61	M18x1,5	1,6	113.5713275
40 x 8	40	8	83	20,5	55	M8	32,5	-	22	75	61	M22x1,5	2,1	114.5710875
40 x 10	40	10	83	20,5	55	M8	32,5	-	22	75	61	M22x1,5	2,1	114.5711075
40 x 12	40	12	83	20,5	55	M8	32,5	-	22	75	61	M22x1,5	2,1	114.5711275
40 x 16	40	16	83	20,5	55	M10	32,5	-	22	75	61	M22x1,5	2,1	114.5711675
40 x 20	40	20	83	20,5	55	M10	32,5	-	22	75	61	M22x1,5	2	114.5712075
40 x 25	40	25	83	20,5	55	M10	32,5	-	22	75	61	M22x1,5	1,9	114.5712575
40 x 32	40	32	83	20,5	83	M10	32,5	-	-	75	61	M22x1,5	2,4	114.5713275
40 x 40	40	40	83	20,5	83	M10	32,5	-	-	90	76	M22x1,5	2,5	114.5714090
50 x 12	50	12	98	26,5	68	M10	35	-	30	90	76	M28x1,5	3,6	115.5711290
50 x 16	50	16	98	26,5	68	M10	35	-	30	90	76	M28x1,5	3,5	115.5711690
50 x 20	50	20	98	26,5	68	M12	35	-	30	90	76	M28x1,5	3,4	115.5712090

Tool holder

DIN 69880 Form E

Side Lock Adapter for turning-tools, Form E2

VDI Holder

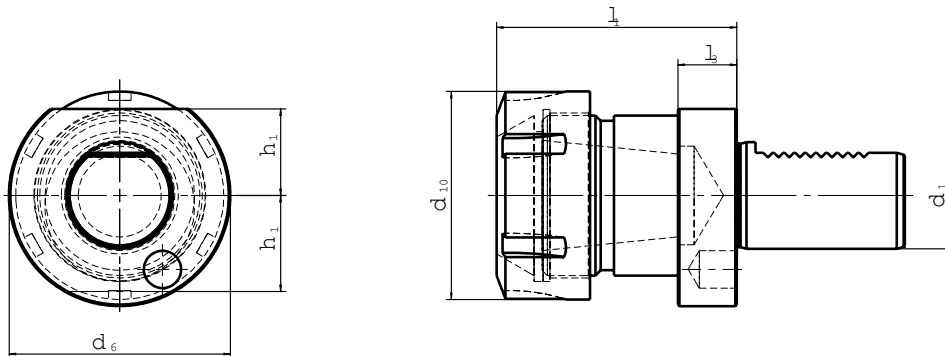
Size	d ₁	d ₂	d ₆	d ₇	d ₈	d ₉	h ₁	h ₂	l ₃	l ₆	l ₇	G	kg	Order-no.
50 x 25	50	25	98	26,5	68	M12	35	-	30	90	76	M28x1,5	3,3	115.5712590
50 x 32	50	32	98	26,5	68	M12	35	-	30	90	76	M28x1,5	3,2	115.5713290
50 x 40	50	40	98	26,5	98	M12	35	-	-	90	76	M28x1,5	3,8	115.5714090
50 x 50	50	50	98	26,5	98	M12	35	-	-	100	86	M28x1,5	3,6	115.57150100
60 x 16	60	16	123	40,5	68	M10	42,5	-	30	90	76	M42x1,5	5	116.5711690
60 x 20	60	20	123	40,5	68	M12	42,5	-	30	90	76	M42x1,5	4,8	116.5712090
60 x 25	60	25	123	40,5	68	M12	42,5	-	30	90	76	M42x1,5	4,8	116.5712590
60 x 32	60	32	123	40,5	68	M12	42,5	-	30	90	76	M42x1,5	4,6	116.5713290
60 x 40	60	40	123	40,5	98	M12	42,5	-	30	90	76	M42x1,5	6,1	116.5714090
60 x 50	60	50	123	40,5	98	M12	42,5	-	30	100	86	M42x1,5	6,1	116.57150100

Tool holder

DIN 69880 Form E

Collet Chuck - System Ortlieb, Form E3

VDI Holder



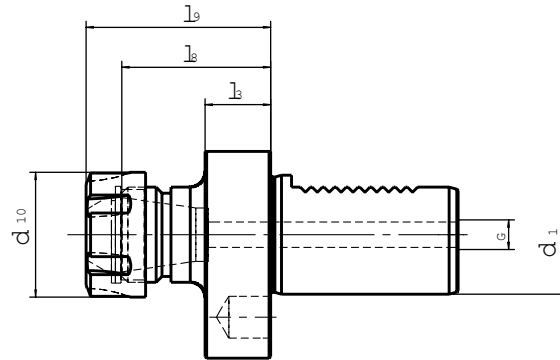
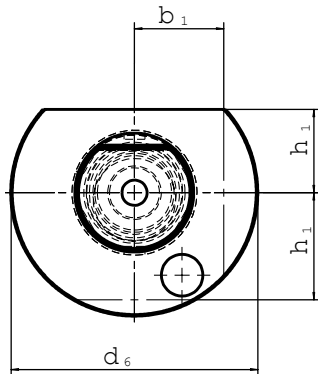
Clamping range	d ₁	d ₆	d ₁₀	l ₃	l ₁	h ₁	h ₂	G	kg	Order-no.
2-16	20	50	43	18	57	23	23	M10x1	0,6	112.1301657
2-25	30	68	60	22	75	28	30	M18x1,5	1,3	113.1302575
2-25	40	83	60	22	75	32,5	-	M22x1,5	1,8	114.1302575
4-32	40	83	72	2	90	32,5	-	M22x1,5	2,2	114.1303290
2-25	50	98	60	30	75	35	-	M28x1,5	2,8	115.1302575
4-32	50	98	72	30	90	35	-	M28x1,5	3,2	115.1303290
4-32	60	123	72	30	90	42,5	-	M42x1,5	4,3	116.1303290

Tool holder

DIN 69880 Form E

Collet Chuck - Regofix, Form E4

VDI Holder



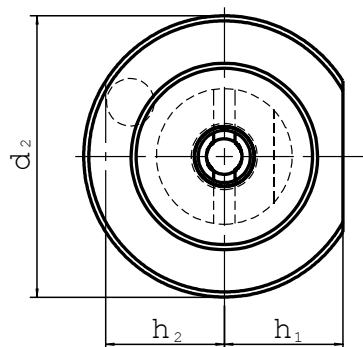
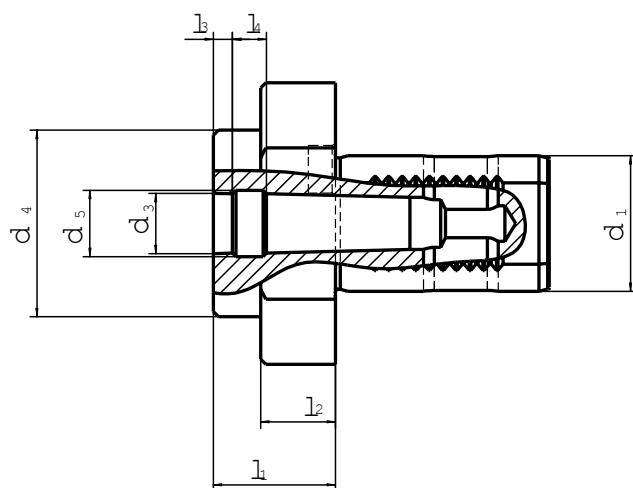
Chuck size	d_2 Clamping range	d_1	d_6	d_{10}	b_1	l_3	l_8	l_9	h_1	h_2	G	kg	Order-no.
ER16	0,5-10	20	50	28	-	18	30	40	23	23	M10x1	0,4	112.130E340
ER25	1,0-16	20	50	42	-	18	38	50	23	23	M10x1	0,6	112.130E550
ER25	1,0-16	30	68	42	30	22	63	57	28	30	M18x1,5	1	113.130E557
ER32	2,0-20	30	68	50	30	22	63	62	28	30	M18x1,5	1,1	113.130E662
ER40	3,0-26	30	68	63	30	22	61	75	28	30	M18x1,5	1,3	113.130E775
ER25	1,0-16	40	83	42	-	22	63	75	32,5	-	M22x1,5	1,5	114.130E575
ER32	2,0-20	40	83	50	-	22	63	75	32,5	-	M22x1,5	1,6	114.130E662
ER40	3,0-26	40	83	63	-	22	61	75	32,5	-	M22x1,5	1,8	114.130E775
ER40	3,0-26	50	98	63	-	30	61	75	35	-	M28x1,5	2,4	115.130E775
ER40	3,0-26	60	123	63	-	30	61	75	42,5	-	M42x1,5	4,2	116.130E775

Tool holder

DIN 69880 Form F

Morse Taper Adapter for shanks with Tang, Form F

VDI Holder



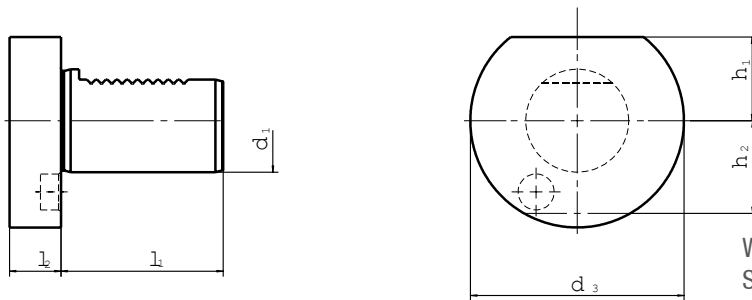
d_1	MK	d_2	d_3	d_4	d_5	h_1	h_2	l_1	l_2	l_3	l_4	kg	Order-no.
20	1	50	12,065	-	13,5	23,0	23	23	-	16	12	0,6	112.061123
30	1	68	12,065	-	13,5	28,0	30	27	-	16	12	0,8	113.061127
30	2	68	17,780	-	19,5	28,0	30	27	-	20	12	0,9	113.061227
30	3	68	23,825	-	24,5	28,0	30	50	-	30	12	1,2	113.061350
40	2	83	17,780	55	19,5	32,5	-	36	22	20	12	1,5	114.061236
40	3	83	23,825	58	24,5	32,5	-	36	22	30	12	1,4	114.061336
40	4	83	31,267	68	32,0	32,5	-	80	22	40	14	2,4	114.061480
50	2	98	17,780	55	19,5	35,0	-	36	30	20	12	2,7	115.061236
50	3	98	23,825	58	24,5	35,0	-	36	30	30	12	2,5	115.061336
50	4	98	31,267	68	32,0	35,0	-	50	30	40	14	2,7	115.061450
60	3	123	23,825	58	24,5	42,5	-	36	30	30	12	4,2	116.061336
60	4	123	31,267	68	32,0	42,5	-	50	30	40	14	4,3	116.061450
60	5	123	44,399	98	44,0	42,5	-	63	30	52	16	4,9	116.061563

Tool holder

DIN 69880 Form Z

Plug made either from steel or plastic, Form Z2

VDI Holder



When ordering:

Steel:

Order-no. + add. „S“

Plastic:

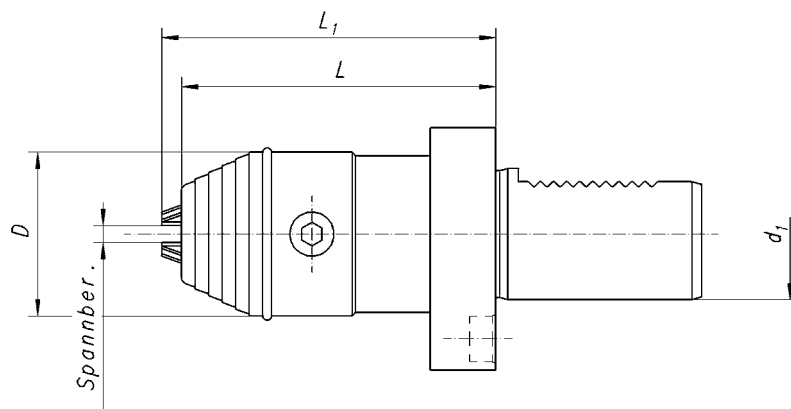
Order-no. + add. „K“

d_1	d_2	h_1	h_2	l_1	l_2	Steel kg	Plastic kg	Order-no.
20	50	23,0	23	40	16	0,3	0,1	112.581_
30	68	28,0	30	55	16	0,8	0,1	113.581_
40	83	32,5		63	20	1,3	0,1	114.581_
50	98	35,0		78	20	2,5	0,2	115.581_
60	123	42,5		94	20	4,1	0,3	116.581_

Tool holder

DIN 69880 NC-Drill chuck

VDI Holder

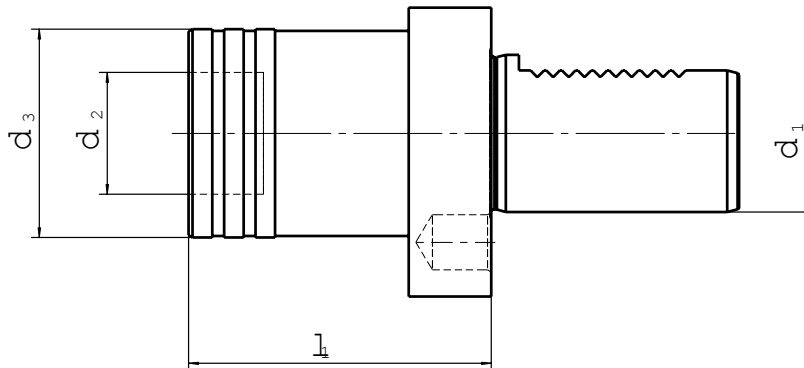


Shank/ Clamping range	d_1	D	L	$L_{1,max}$	kg	Order-no.
30 / 0,5-13	30	50	60	63	2,1	113.0161396
40 / 0,5-13	40	50	82	91	2,6	114.0161396
40 / 2,5-16	40	57	85	96	2,6	114.0161696
50 / 2,5-16	50	57	85	96	3,4	115.0161696

Tapping head quick-change

Without internal coolant

VDI Holder

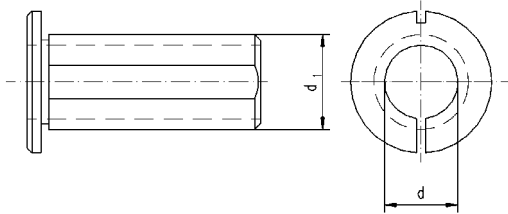


Shank d_1	For Screw tap	Linear compensation		d_2	d_3	l_1	Chuck size	kg	Order-no. Form A+C
		Compression	Tension						
30	M3 - M12	7,5	7,5	19	36	55	1	0,5	113.065 19 55
30	M8 - M20	12,5	12,5	31	53	76	2	1,0	113.065 31 76
40	M3 - M12	7,5	7,5	19	36	55	1	0,9	114.065 19 55
40	M8 - M20	12,5	12,5	31	53	76	2	1,0	114.065 31 76
40	M14 - M33	20,0	20,0	48	78	122	3	2,5	114.065 48 122
50	M3 - M12	7,5	7,5	19	36	55	1	1,5	115.065 19 55
50	M8 - M20	12,5	12,5	31	53	76	2	1,3	115.065 31 76
50	M14 - M33	20,0	20,0	48	78	108	3	3,1	115.065 48 108

Tool holder

DIN 69880 reducing sleeve

VDI Holder



d_1	d	kg	Order-no.
20	8	0,06	28.2008
20	10	0,04	28.2010
20	12	0,04	28.2012
20	14	0,02	28.2014
20	15	0,02	28.2015
20	16	0,02	28.2016
25	8	0,12	28.2508
25	10	0,12	28.2510
25	12	0,12	28.2512
25	14	0,10	28.2514
25	15	0,08	28.2515
25	16	0,08	28.2516
25	18	0,08	28.2518
25	20	0,06	28.2520
32	8	0,28	28.3208
32	10	0,26	28.3210
32	12	0,24	28.3212
32	14	0,24	28.3214
32	15	0,25	28.3215
32	16	0,22	28.3216
32	20	0,18	28.3220
32	25	0,12	28.3225

Tool holder

DIN 69880 reducing sleeve

VDI Holder

d ₁	d	kg	Order-no.
40	10	0,68	28.4010
40	12	0,66	28.4012
40	14	0,70	28.4014
40	15	0,66	28.4015
40	16	0,60	28.4016
40	18	0,62	28.4018
40	20	0,54	28.4020
40	25	0,44	28.4025
40	32	0,26	28.4032
50	20	1,10	28.5020
50	25	1,00	28.5025
50	32	0,80	28.5032
50	40	0,50	28.5040
60	25	1,70	28.6025
60	32	1,50	28.6032
60	40	1,10	28.6040
60	50	0,60	28.6050



Content

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Collets	160
Pull studs	170
Accessories	172

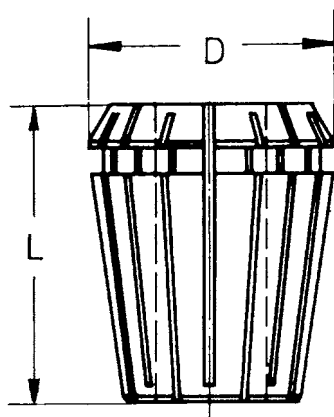
Collets, Pull studs, Accessories



Collets

System ER / ESX

ER11 ER16 ER20



	D	L
424E	11,5	18
426E	17	27
428E	21	31,5

ER11 (1 - 7) 424E

Ø	Order-no.
1,0	B134-424E-0100
1,5	B134-424E-0150
2,0	B134-424E-0200
2,5	B134-424E-0250
3,0	B134-424E-0300
3,5	B134-424E-0350
4,0	B134-424E-0400
4,5	B134-424E-0450
5,0	B134-424E-0500
5,5	B134-424E-0550
6,0	B134-424E-0600
6,5	B134-424E-0650
7,0	B134-424E-0700

ER16 (1 - 12) 426E

Ø	Order-no.
1,0	B134-426E-0100
1,5	B134-426E-0150
2,0	B134-426E-0200
2,5	B134-426E-0250
3,0	B134-426E-0300
3,5	B134-426E-0350
4,0	B134-426E-0400
4,5	B134-426E-0450
5,0	B134-426E-0500
5,5	B134-426E-0550
6,0	B134-426E-0600
6,5	B134-426E-0650
7,0	B134-426E-0700
7,5	B134-426E-0750
8,0	B134-426E-0800
8,5	B134-426E-0850
9,0	B134-426E-0900
9,5	B134-426E-0950
10,0	B134-426E-1000
10,5	B134-426E-1050*
11,0	B134-426E-1100*
11,5	B134-426E-1150*
12,0	B134-426E-1200*

ER20 (1 - 15) 428E

Ø	Order-no.
1,0	B134-428E-0100*
2,0	B134-428E-0200
3,0	B134-428E-0300
4,0	B134-428E-0400
5,0	B134-428E-0500
6,0	B134-428E-0600
7,0	B134-428E-0700
8,0	B134-428E-0800
9,0	B134-428E-0900
10,0	B134-428E-1000
11,0	B134-428E-1100
12,0	B134-428E-1200
13,0	B134-428E-1300
13,5	B134-428E-1350*
14,0	B134-428E-1400*
14,5	B134-428E-1450*
15,0	B134-428E-1500*

*Special size

Collets

System ER / ESX

ER25 ER32 ER40

	D	L
430E	26	34
470E	33	40
472E	41	46

ER25 (1 - 16) 430E

Ø	Order-no.
1,0	B134-430E-0100*
2,0	B134-430E-0200
3,0	B134-430E-0300
4,0	B134-430E-0400
5,0	B134-430E-0500
6,0	B134-430E-0600
7,0	B134-430E-0700
8,0	B134-430E-0800
9,0	B134-430E-0900
10,0	B134-430E-1000
11,0	B134-430E-1100
12,0	B134-430E-1200
13,0	B134-430E-1300
14,0	B134-430E-1400
15,0	B134-430E-1500
16,0	B134-430E-1600

ER32 (2 - 22) 470E

Ø	Order-no.
2,0	B134-470E-0200*
3,0	B134-470E-0300
4,0	B134-470E-0400
5,0	B134-470E-0500
6,0	B134-470E-0600
7,0	B134-470E-0700
8,0	B134-470E-0800
9,0	B134-470E-0900
10,0	B134-470E-1000
11,0	B134-470E-1100
12,0	B134-470E-1200
13,0	B134-470E-1300
14,0	B134-470E-1400
15,0	B134-470E-1500
16,0	B134-470E-1600
17,0	B134-470E-1700
18,0	B134-470E-1800
19,0	B134-470E-1900
20,0	B134-470E-2000
21,0	B134-470E-2100*
22,0	B134-470E-2200*

ER40 (3- 30) 472E

Ø	Order-no.
3,0	B134-472E-0300*
4,0	B134-472E-0400
5,0	B134-472E-0500
6,0	B134-472E-0600
7,0	B134-472E-0700
8,0	B134-472E-0800
9,0	B134-472E-0900
10,0	B134-472E-1000
11,0	B134-472E-1100
12,0	B134-472E-1200
13,0	B134-472E-1300
14,0	B134-472E-1400
15,0	B134-472E-1500
16,0	B134-472E-1600
17,0	B134-472E-1700
18,0	B134-472E-1800
19,0	B134-472E-1900
20,0	B134-472E-2000
21,0	B134-472E-2100
22,0	B134-472E-2200
23,0	B134-472E-2300
24,0	B134-472E-2400
25,0	B134-472E-2500
26,0	B134-472E-2600
27,0	B134-472E-2700*
28,0	B134-472E-2800*
29,0	B134-472E-2900*
30,0	B134-472E-3000*

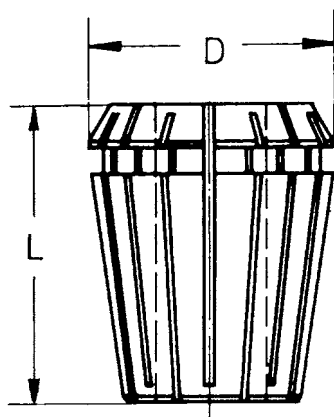
*Special size

Collet system

Extra Precision < 5 µ

System ER / ESX

Extra Precision
< 5 µ



	D	L
426E	17	27
430E	21	31,5
470E	26	34
470E	33	40
470E	41	46

ER16 (1 - 10) 426E

Ø	Order-no.
1,0	B134-426E-0100UP
1,5	B134-426E-0150UP
2,0	B134-426E-0200UP
2,5	B134-426E-0250UP
3,0	B134-426E-0300UP
3,5	B134-426E-0350UP
4,0	B134-426E-0400UP
4,5	B134-426E-0450UP
5,0	B134-426E-0500UP
5,5	B134-426E-0550UP
6,0	B134-426E-0600UP
6,5	B134-426E-0650UP
7,0	B134-426E-0700UP
7,5	B134-426E-0750UP
8,0	B134-426E-0800UP
8,5	B134-426E-0850UP
9,0	B134-426E-0900UP
9,5	B134-426E-0950UP
10,0	B134-426E-1000UP

ER20 (1 - 13) 428E

Ø	Order-no.
1,0	B134-428E-0100UP*
2,0	B134-428E-0200UP
3,0	B134-428E-0300UP
4,0	B134-428E-0400UP
5,0	B134-428E-0500UP
6,0	B134-428E-0600UP
7,0	B134-428E-0700UP
8,0	B134-428E-0800UP
9,0	B134-428E-0900UP
10,0	B134-428E-1000UP
11,0	B134-428E-1100UP
12,0	B134-428E-1200UP
13,0	B134-428E-1300UP

*Special size

Collet system

Extra Precision < 5 µ

System ER / ESX

Extra Precision
< 5 µ

ER25 (1 - 16) 430E

Ø	Order-no.
1,0	B134-430E-0100UP*
2,0	B134-430E-0200UP
3,0	B134-430E-0300UP
4,0	B134-430E-0400UP
5,0	B134-430E-0500UP
6,0	B134-430E-0600UP
7,0	B134-430E-0700UP
8,0	B134-430E-0800UP
9,0	B134-430E-0900UP
10,0	B134-430E-1000UP
11,0	B134-430E-1100UP
12,0	B134-430E-1200UP
13,0	B134-430E-1300UP
14,0	B134-430E-1400UP
15,0	B134-430E-1500UP
16,0	B134-430E-1600UP

ER32 (2 - 20) 470E

Ø	Order-no.
2,0	B134-470E-0200UP*
3,0	B134-470E-0300UP
4,0	B134-470E-0400UP
5,0	B134-470E-0500UP
6,0	B134-470E-0600UP
7,0	B134-470E-0700UP
8,0	B134-470E-0800UP
9,0	B134-470E-0900UP
10,0	B134-470E-1000UP
11,0	B134-470E-1100UP
12,0	B134-470E-1200UP
13,0	B134-470E-1300UP
14,0	B134-470E-1400UP
15,0	B134-470E-1500UP
16,0	B134-470E-1600UP
17,0	B134-470E-1700UP
18,0	B134-470E-1800UP
19,0	B134-470E-1900UP
20,0	B134-470E-2000UP

ER40 (3 - 26) 472E

Ø	Order-no.
3,0	B134-472E-0300UP*
4,0	B134-472E-0400UP
5,0	B134-472E-0500UP
6,0	B134-472E-0600UP
7,0	B134-472E-0700UP
8,0	B134-472E-0800UP
9,0	B134-472E-0900UP
10,0	B134-472E-1000UP
11,0	B134-472E-1100UP
12,0	B134-472E-1200UP
13,0	B134-472E-1300UP
14,0	B134-472E-1400UP
15,0	B134-472E-1500UP
16,0	B134-472E-1600UP
17,0	B134-472E-1700UP
18,0	B134-472E-1800UP
19,0	B134-472E-1900UP
20,0	B134-472E-2000UP
21,0	B134-472E-2100UP
22,0	B134-472E-2200UP
23,0	B134-472E-2300UP
24,0	B134-472E-2400UP
25,0	B134-472E-2500UP
26,0	B134-472E-2600UP

*Special size

Collet-sets with wooden base

System ER / ESX

	D	L
426E	17	27
430E	21	31,5
470E	26	34
470E	33	40
470E	41	46

ER 40 (3 - 26) 472 E
23 collets
4 - 26 mm Ø, 1 mm staged
Order-no. B134-472E

Additional (as pictured) for an
added cost
1 collet with 3 mm Ø
Order-no. B134-472E-0300

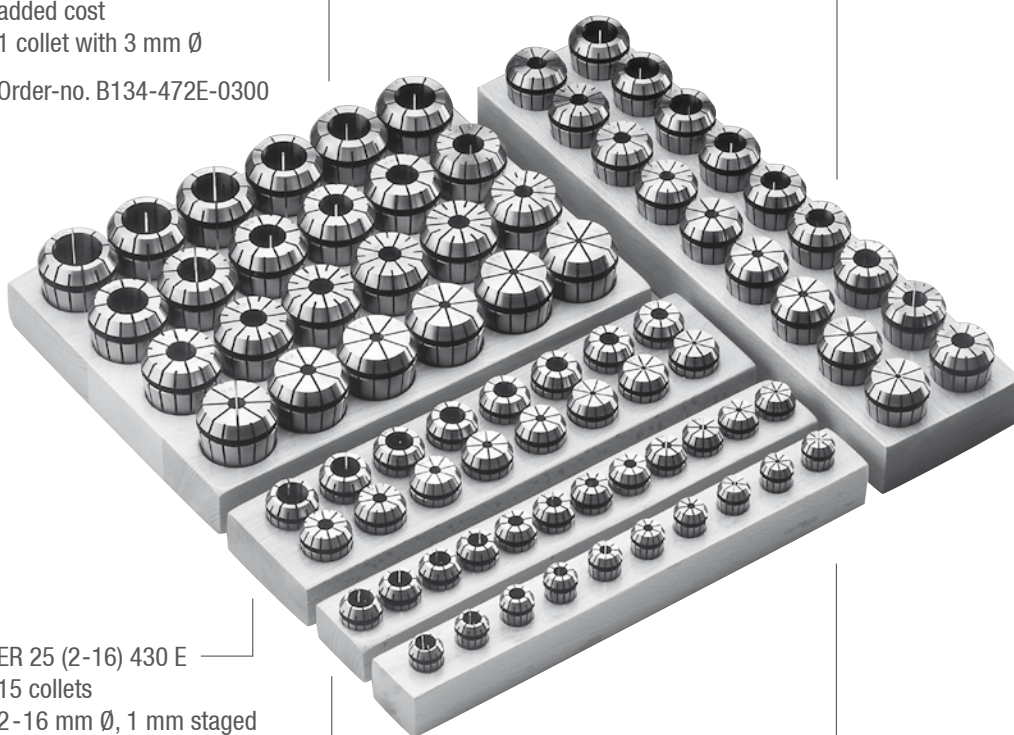
ER 32 (2 - 20) 470 E
18 collet
3 - 20 mm Ø, 1 mm staged
Order-no. B134-470E

ER 25 (2-16) 430 E
15 collets
2-16 mm Ø, 1 mm staged
Order-no. B134-430E

Additional (as pictured) for an
added cost
1 collet mit 1 mm Ø
Order-no. B134-430E-0100

ER 20 (2 -13) 428 E
12 collets
2 -13 mm Ø, 1 mm staged
Order-no. B134-428E

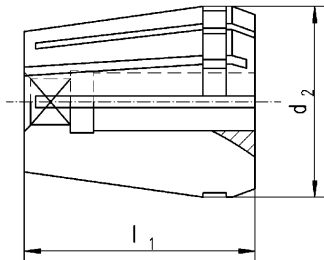
ER 16 (1 -10) 426 E
10 collets
1 -10 mm Ø, 1 mm staged
Order-no. B134-426E



Collets for thread tapping chucks

System ER / ESX, DIN 6499, 8°
with square locking drive, without length adjustment

ER16 ER20 ER25



	d ₁	L
ER16	17	27
ER20	21	31
ER25	26	35
ER32	33	40
ER40	41	46

ER16

Ø x □	Order-no.
3,5 x 2,7	B134-E3-035027
4,5 x 3,4	B134-E3-045034
5,5 x 4,2	B134-E3-055042
6,0 x 4,9	B134-E3-060049
6,3 x 5,0	B134-E3-063050
7,0 x 5,5	B134-E3-070055
8,0 x 6,2	B134-E3-080062
9,0 x 7,0	B134-E3-090070

ER20

Ø x □	Order-no.
4,5 x 3,4	B134-E4-045034
5,5 x 4,2	B134-E4-055042
6,0 x 4,9	B134-E4-060049
6,3 x 5,0	B134-E4-063050
7,0 x 5,5	B134-E4-070055
8,0 x 6,2	B134-E4-080062
9,0 x 7,0	B134-E4-090070
10,0 x 8,0	B134-E4-100080
11,0 x 9,0	B134-E4-110090

ER25

Ø x □	Order-no.
4,5 x 3,4	B134-E5-045034
6,0 x 4,9	B134-E5-060049
6,3 x 5,0	B134-E5-063050
7,0 x 5,5	B134-E5-070055
8,0 x 6,2	B134-E5-080062
9,0 x 7,0	B134-E5-090070
10,0 x 8,0	B134-E5-100080
11,0 x 9,0	B134-E5-110090
12,0 x 9,0	B134-E5-120090
14,0 x 11,0	B134-E5-140110
16,0 x 12,0	B134-E5-160120

Collets for thread tapping chucks

System ER / ESX, DIN 6499, 8°
with square locking drive, without length adjustment

ER32 ER40

ER32

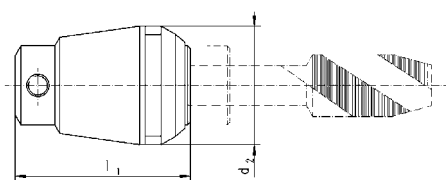
Ø x □	Order-no.
4,5 x 3,4	B134-E6-045034
6,0 x 4,9	B134-E6-060049
7,0 x 5,5	B134-E6-070055
8,0 x 6,2	B134-E6-080062
9,0 x 7,0	B134-E6-090070
10,0 x 8,0	B134-E6-100080
11,0 x 9,0	B134-E6-110090
12,0 x 9,0	B134-E6-120090
14,0 x 11,0	B134-E6-140110
16,0 x 12,0	B134-E6-160120
18,0 x 14,5	B134-E6-180145
20,0 x 16,0	B134-E6-200160

ER40

Ø x □	Order-no.
7,0 x 5,5	B134-E7-070055
8,0 x 6,2	B134-E7-080062
9,0 x 7,0	B134-E7-090070
10,0 x 8,0	B134-E7-100080
11,0 x 9,0	B134-E7-110090
12,0 x 9,0	B134-E7-120090
14,0 x 11,0	B134-E7-140110
16,0 x 12,0	B134-E7-160120
18,0 x 14,5	B134-E7-180145
20,0 x 16,0	B134-E7-200160
22,0 x 18,0	B134-E7-220180

Collets for thread tapping chucks

System ER / ESX, DIN 6499, 8°
with square locking drive, with length adjustment



	d ₁	L
ER16	17	27
ER20	21	31
ER25	26	32
ER32	33	40,5
ER40	41	54

Collets for thread tapping chucks

System ER / ESX, DIN 6499, 8°
with square locking drive, without length adjustment

ER16

ER20

ER25

ER32

ER40

ER16

Ø	Order-no.
2,5	B134-A3-0250
2,8	B134-A3-0280
3,5	B134-A3-0350
4,0	B134-A3-0400
4,5	B134-A3-0450
5,0	B134-A3-0500
6,0	B134-A3-0600

ER20

Ø	Order-no.
2,5	B134-A4-0250
2,8	B134-A4-0280
3,5	B134-A4-0350
4,0	B134-A4-0400
4,5	B134-A4-0450
5,0	B134-A4-0500
6,0	B134-A4-0600
7,0	B134-A4-0700

ER25

Ø	Order-no.
2,5	B134-A5-0250
2,8	B134-A5-0280
3,5	B134-A5-0350
4,0	B134-A5-0400
4,5	B134-A5-0540
5,0	B134-A5-0500
6,0	B134-A5-0600
7,0	B134-A5-0700
8,0	B134-A5-0800
9,0	B134-A5-0900
10,0	B134-A5-1000

ER32

Ø	Order-no.
4,5	B134-A6-0450
5,0	B134-A6-0500
6,0	B134-A6-0600
7,0	B134-A6-0700
8,0	B134-A6-0800
9,0	B134-A6-0900
10,0	B134-A6-1000
11,0	B134-A6-1100
12,0	B134-A6-1200

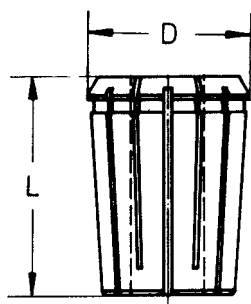
ER40

Ø	Order-no.
6,0	B134-A7-0600
7,0	B134-A7-0700
8,0	B134-A7-0800
9,0	B134-A7-0900
10,0	B134-A7-1000
11,0	B134-A7-1100
12,0	B134-A7-1200
14,0	B134-A7-1400
16,0	B134-A7-1600

Collets

DIN 6388, Form B

415 E 462 E



	D	L
415E	25,5	40
462E	30,05	52
567 E	43,7	60

(2 - 16) 415E

Ø	Order-no.
2,0	B134-415E-0200
2,5	B134-415E-0250
3,0	B134-415E-0300
3,5	B134-415E-0350
4,0	B134-415E-0400
4,5	B134-415E-0450
5,0	B134-415E-0500
5,5	B134-415E-0550
6,0	B134-415E-0600
6,5	B134-415E-0650
7,0	B134-415E-0700
7,5	B134-415E-0750
8,0	B134-415E-0800
8,5	B134-415E-0850
9,0	B134-415E-0900
9,5	B134-415E-0950
10,0	B134-415E-1000
10,5	B134-415E-1050
11,0	B134-415E-1100
11,5	B134-415E-1150
12,0	B134-415E-1200
12,5	B134-415E-1250
13,0	B134-415E-1300
13,5	B134-415E-1350
14,0	B134-415E-1400
14,5	B134-415E-1450
15,0	B134-415E-1500
15,5	B134-415E-1550
16,0	B134-415E-1600

(2 - 25) 462E

Ø	Order-no.
2,0	B134-462E-0200
2,5	B134-462E-0250
3,0	B134-462E-0300
3,5	B134-462E-0350
4,0	B134-462E-0400
4,5	B134-462E-0450
5,0	B134-462E-0500
5,5	B134-462E-0550
6,0	B134-462E-0600
6,5	B134-462E-0650
7,0	B134-462E-0700
7,5	B134-462E-0750
8,0	B134-462E-0800
8,5	B134-462E-0850
9,0	B134-462E-0900
9,5	B134-462E-0950
10,0	B134-462E-1000
10,5	B134-462E-1050
11,0	B134-462E-1100
11,5	B134-462E-1150
12,0	B134-462E-1200
12,5	B134-462E-1250
13,0	B134-462E-1300
13,5	B134-462E-1350
14,0	B134-462E-1400
14,5	B134-462E-1450
15,0	B134-462E-1500
15,5	B134-462E-1550
16,0	B134-462E-1600
16,5	B134-462E-1650
17,0	B134-462E-1700
17,5	B134-462E-1750

Collets

DIN 6388, Form B

462 E 467 E

(2 - 25) 462E

Ø	Order-no.
18,0	B134-462E-1800
18,5	B134-462E-1850
19,0	B134-462E-1900
19,5	B134-462E-1950
20,0	B134-462E-2000
20,5	B134-462E-2050
21,0	B134-462E-2100
21,5	B134-462E-2150
22,0	B134-462E-2200
22,5	B134-462E-2250
23,0	B134-462E-2300
23,5	B134-462E-2350
24,0	B134-462E-2400
24,5	B134-462E-2450
25,0	B134-462E-2500
16,5	B134-462E-1650
17,0	B134-462E-1700
17,5	B134-462E-1750
18,0	B134-462E-1800
18,5	B134-462E-1850
19,0	B134-462E-1900
19,5	B134-462E-1950
20,0	B134-462E-2000
20,5	B134-462E-2050
21,0	B134-462E-2100
21,5	B134-462E-2150
22,0	B134-462E-2200
22,5	B134-462E-2250
23,0	B134-462E-2300
23,5	B134-462E-2350
24,0	B134-462E-2400
24,5	B134-462E-2450
25,0	B134-462E-2500

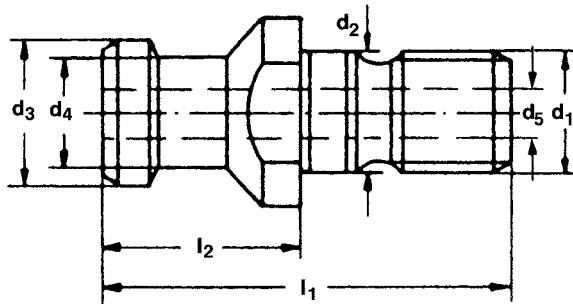
(4 - 32) 467E

Ø	Order-no.
4,0	B134-467E-0400
4,5	B134-467E-0450
5,0	B134-467E-0500
5,5	B134-467E-0550
6,0	B134-467E-0600
6,5	B134-467E-0650
7,0	B134-467E-0700
7,5	B134-467E-0750
8,0	B134-467E-0800
8,5	B134-467E-0850
9,0	B134-467E-0900
9,5	B134-467E-0950
10,0	B134-467E-1000
10,5	B134-467E-1050
11,0	B134-467E-1100
11,5	B134-467E-1150
12,0	B134-467E-1200
12,5	B134-467E-1250
13,0	B134-467E-1300
13,5	B134-467E-1350
14,0	B134-467E-1400
14,5	B134-467E-1450
15,0	B134-467E-1500
15,5	B134-467E-1550
16,0	B134-467E-1600
16,5	B134-467E-1650
17,0	B134-467E-1700
17,5	B134-467E-1750
18,0	B134-467E-1800

(4 - 32) 467E

Ø	Order-no.
19,0	B134-467E-1900
19,5	B134-467E-1950
20,0	B134-467E-2000
20,5	B134-467E-2050
21,0	B134-467E-2100
21,5	B134-467E-2150
22,0	B134-467E-2200
22,5	B134-467E-2250
23,0	B134-467E-2300
23,5	B134-467E-2350
24,0	B134-467E-2400
24,5	B134-467E-2450
25,0	B134-467E-2500
25,5	B134-467E-2550
26,0	B134-467E-2600
26,5	B134-467E-2650
27,0	B134-467E-2700
27,5	B134-467E-2750
28,0	B134-467E-2800
28,5	B134-467E-2850
29,0	B134-467E-2900
29,5	B134-467E-2950
30,0	B134-467E-3000
30,5	B134-467E-3050
31,0	B134-467E-3100
31,5	B134-467E-3150
32,0	B134-467E-3200

Pull studs



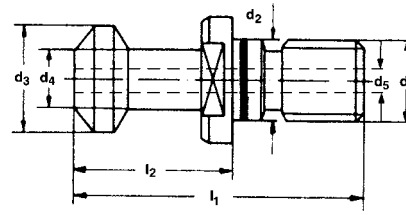
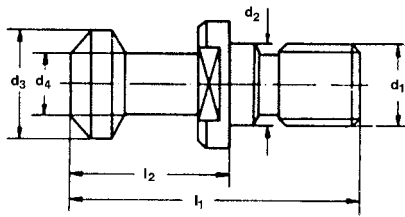
SK	Norm	d_1	d_2	d_3	d_4	d_5	l_1	l_2	Order-no.
30	DIN 69872A	M12	13	13	9	4	44	24	090.0791
40	DIN 69872A	M16	17	19	14	7	54	26	080.0791
50	DIN 69872A	M24	25	28	21	11,5	74	34	042.0792
40	DIN 69872B	M16	17	19	14		54	26	040.07934
50	DIN 69872B	M24	25	28	21		74	34	042.07926
40	ISO/DIS 7388 II B	M16	17	18,95	12,95	7,35	44,5	16,4	040.0792
50	ISO/DIS 7388 II B	M24	25	29,1	19,6	11,55	65,5	25,55	042.0794
40	DIN 2080*	M16	17	25	21	7	53	25	040.07922
50	DIN 2080*	M24	25	39,3	32	7	65	25	042.0797

*Thread inside

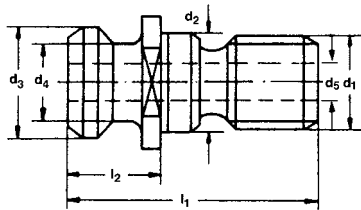
Material: Steel with 1000N/mm² consistency

Execution: Hardened 58 ± 2 HRC

Pull studs



SK	Norm	d ₁	d ₂	d ₃	d ₄	d ₅	l ₁	l ₂	Order-no.
40	MAS BT 45°	M16	17,0	15	10		60	35	039.0792
40	MAS BT 45°	M16	17,0	51	10	5	60	35	039.07933
50	MAS BT 45°	M24	25,0	23	17		85	45	011.079
50	MAS BT 45°	M24	25,0	23	17	6	85	45	011.07919
30	MAS BT 60°	M12	12,5	11	7		43	23	143.07904
40	MAS BT 60°	M16	17,0	15	10		60	35	039.0793
40	MAS BT 60°	M16	17,0	15	10	5	60	35	039.07939
50	MAS BT 60°	M24	25,0	23	17		85	45	011.0794
50	MAS BT 60°	M24	25,0	23	17	6	85	45	011.07922
40	MAS BT 90°	M16	17,0	15	10		60	35	039.0794
40	MAS BT 90°	M16	17,0	15	10	5	60	35	039.07954
50	MAS BT 90°	M24	25,0	23	17		85	45	011.0793
50	MAS BT 90°	M24	25,0	23	17	6	85	45	011.07921



SK	Norm	d ₁	d ₂	d ₃	d ₄	d ₅	l ₁	l ₂	Order-no.
40	JIS B 6339	M16	17	19	14	4	54	29	039.07953
40	JIS B 6339	M16	17	19	14	5,5	54	29	039.07952
40	JIS B 6339	M16	17	19	14	5,5/4,0	54	29	039.07960
40	JIS B 6339	M16	17	19	14	7	54	29	039.07957
40	CAT metr.*	M16	17	18,8	12,45	7	41,26	16,26	038.0796
40	CAT metr.*	M16	17	18,8	12,45	7	41,26	16,26	038.07973
50	CAT metr.*	M24	25	28,95	20,9	10	65,4	25,4	012.0793
40	Deckel S 20x2	M16	17	23	S 20x2		54	26	040.07937

Accessories

Retaining screws DIN 1835-B

d ₁	Order-no.
6	D01835-M060010
8	D01835-M080010
10	D01835-M100012
12	D01835-M120016
14	D01835-M120016
16	D01835-M140016
18	D01835-M140016
20	D01835-M160016
25	D01835-M180020M
32	D01835-M200020M
40	D01835-M200025M

Tightening nuts DIN 6499

Clamping range	Order-no.
1 - 10 (ER16)	B135-E3 M 22 x 1,5
1 - 13 (ER20)	B135-E4 M 25 x 1,5
1 - 16 (ER25)	B135-E5 M 32 x 1,5
2 - 20 (ER32)	B135-E6 M 40 x 1,5
3 - 26 (ER40)	B135-E7 M 50 x 1,5

Wrench ER/ESX

Clamping range	Order-no.
1 - 10 (ER16)	B135-E3 M 22 x 1,5
1 - 13 (ER20)	B135-E4 M 25 x 1,5
1 - 16 (ER25)	B135-E5 M 32 x 1,5
2 - 20 (ER32)	B135-E6 M 40 x 1,5
3 - 26 (ER40)	B135-E7 M 50 x 1,5

Tightening nuts DIN 6388

Clamping range	Order-no.
2 - 16	B135-16 M 33 x 1,5
2 - 25	B135-25 M48 x 2
3 - 32	B135-32 M 60 x 2,5

Hook wrench DIN 6388

Clamping range	Order-no.
2 - 16	D01810A040042
2 - 25	D01810A058062
4 - 32	D01810A068075

Cutter retaining screws DIN 6367

Clamping range	Tap	Order-no.
16	M8	D06367-M080
22	M10	D06367-M100
27	M12	D06367-M120
32	M16	D06367-M160
40	M20	D06367-M200
50	M24	D06367-M240

Clutch drive rings DIN 6366

Clamping range	Size	Order-no.
16	16 x 10	D06366-016010
22	22 x 12	D06366-022010
27	27 x 12	D06366-027012
32	32 x 14	D06366-032014
40	40 x 14	D06366-040014
50	50 x 16	D06366-050016

Accessories

Feathers

Clamping Range	Size	Order-no.
16	4 x 4 x 20	07.997.632
22	6 x 6 x 22	07.997.240
27	7 x 7 x 25	07.997.748
32	8 x 7 x 30	07.997.258
40	10 x 8 x 32	07.997.070
50	12 x 8 x 36	07.997.050

Wrenches DIN 6368

Clamping Range	Order-no.
16	D06368-080
22	D06368-100
27	D06368-120
32	D06368-160
40	D06368-200
50	D06368-240

Inserts DIN 2097

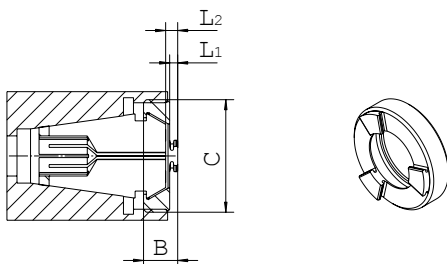
Spannbereich	Order-no.
22	08.999.250
27	08.999.760
32	08.999.278
40	08.999.089
50	08.999.120

Clutch drive rings DIN 6366

Spannbereich	Gewinde	Order-no.
6	M6 x 6	03.999.106AWS
8	M8 x 7,5	03.999.108AWS
10	M10 x 8	03.999.110AWS
12	M12 x 8	03.999.112AWS
14	M12 x 8,5	03.999.114AWS
16	M14 x 8,5	03.999.116AWS
18	M14 x 8,5	03.999.118AWS
20	M16 x 10	03.999.120AWS
25	M18 x 2 x 11,5	03.999.125AWS
32	M20 x 2 x 13	03.999.132AWS

Clamping nuts with external screw thread

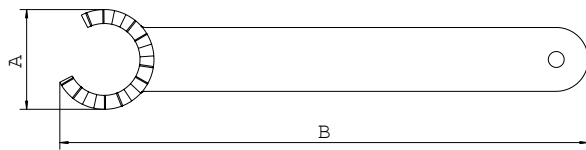
ER	Clamping Range	B	C	I ₁	I ₂	Order-no.
11	1-7	7,5	M18 x 1	1-3,2	3,9	B135-E1AX
16	1-10	7,6	M24 x 1	0-2,6	2,3	B135-E3AX
20	1-13	8,5	M28 x 1,5	0-2,5	2,3	B135-E4AX
25	2-16	8,8	M32 x 1,5	0-1,9	2,3	B135-E5AX
32	2-20	9,8	M40 x 1,5	0-1,1	2,5	B135-E6AX
40	4-26	11,7	M50 x 1,5	0-1,0	2,4	B135-E7AX



Accessories

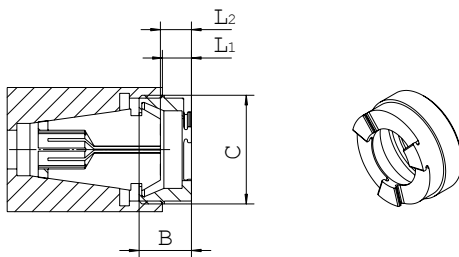
Compatible spanners

ER	A(mm)	B(mm)	Order-no.
11	16,5	108	B136-E1AX
16	22,5	131	B136-E3AX
20	26,0	148	B136-E4AX
25	29,5	162	B136-E5AX
32	37,5	196	B136-E6AX
40	47,5	220	B136-E7AX



Clamping nuts for tools with internal coolant DIN 6499 System Regofix

ER	Clamping Range	d ₁	l ₁	Order-no.
16	1 - 10	28	22,5	B135-H3A
20	1 - 13	34	24,0	B135-H4A
25	2 - 16	42	25,0	B135-H5A
32	2 - 20	50	27,5	B135-H6A
40	4 - 26	63	30,5	B135-H7A



With external screw thread

ER	Clamping Range	B	C	l ₁	l ₂	Order-no.
16	1-10	12,5	M24 x 1	3,1 - 7,5	7,2	B135-E3AXC
20	1-13	13,5	M28 x 1,5	3,1 - 7,5	7,3	B135-E4AXC
25	2-16	13,8	M32 x 1,5	2,5 - 6,9	7,3	B135-E5AXC
32	2-20	14,9	M40 x 1,5	1,8 - 6,2	7,6	B135-E6AXC
40	4-26	16,6	M50 x 1,5	1,5 - 5,9	7,3	B135-E7AXC

Accessories

Sealing discs

ER	Fitting for clamping range	Increasing by	Order-no.
16	1 - 10	0,5 mm	B137-E3-....
20	1 - 13	0,5 mm	B137-E4-....
25	2 - 16	0,5 mm	B137-E5-....
32	2 - 20	0,5 mm	B137-E6-....
40	4 - 26	0,5 mm	B137-E7-....

Order Example

Allowances: chucking diameter 6,9 mm
range ER25 (2-16 mm)

Result: Nut chosen as per table: B135-H5A
Sealing disc: B137-E5-0700

Note: Sealing disc diameter 7 mm
seals diameters 6,6 tru 7mm

Coolant supply unit

For HSK	Tap	Order-no.
32	M10 x 1,0	708.079011
40	M12 x 1,0	709.079011
50	M16 x 1,0	710.079011
63	M18 x 1,0	711.079011
80	M20 x 1,5	712.079011
100	M24 x 1,5	713.079011

Key for coolant supply unit

For HSK	Order-no.
32	708.079002
40	709.079002
50	710.079002
63	711.079002
80	712.079002
100	713.079002

Our additional product range:

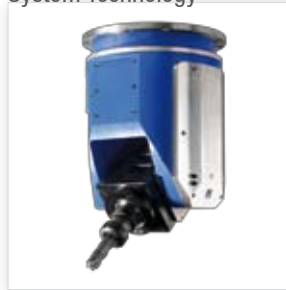
Live Tools



Exchangeable Units



System Technology

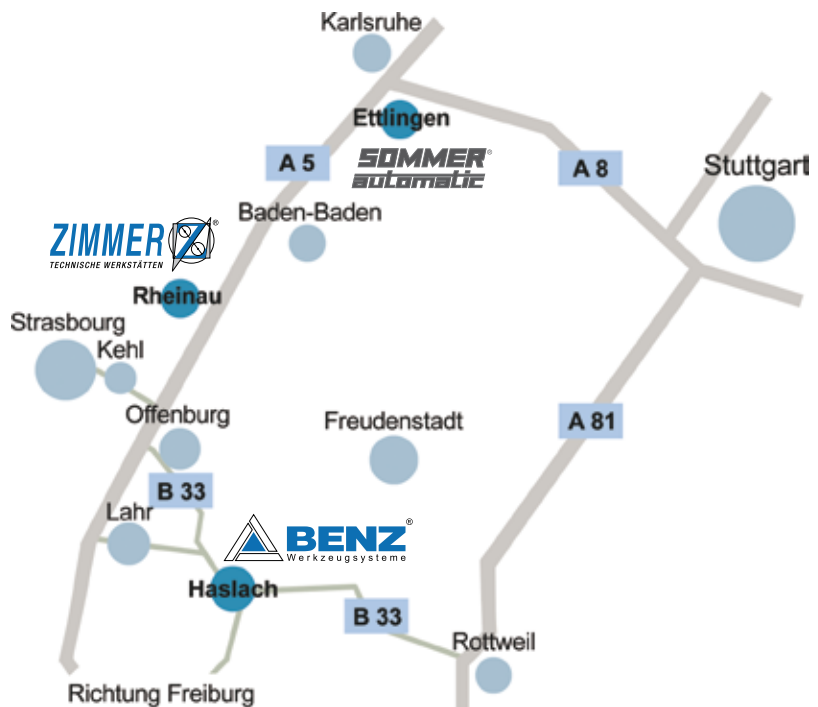


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