

ИНСТРУМЕНТАЛЬНАЯ ОСНАСТКА

СОДЕРЖАНИЕ

BT Tool Holder MAS BT 403

1

SK Tool Holder DIN 69871

2

NT Tool Holder DIN 2080

3

ISO Tool Holder GOST 25827-93

4

BT Tool Holder DIN 228

5

Collet chucks for collets DIN 6499 (ISO 15488) ER-system

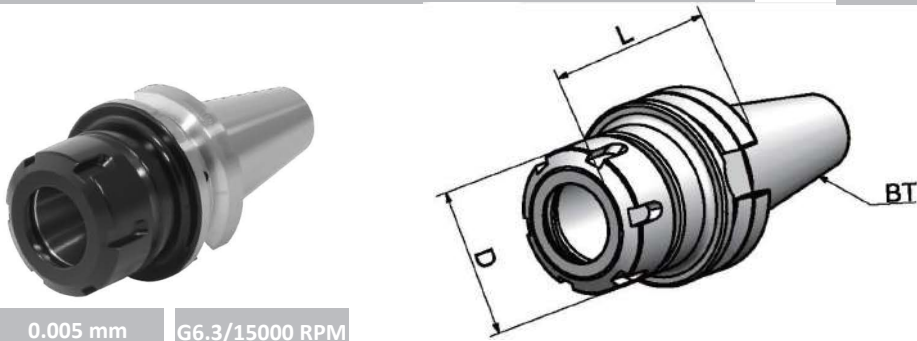
6

ACCESSORIES

7

PRECISION VISE SERIES

8

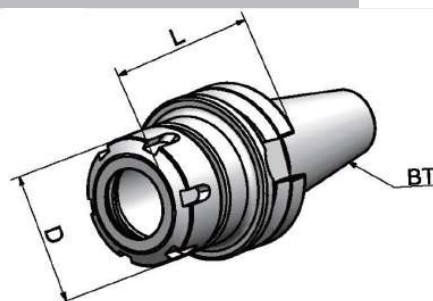


From AD; AD/B

0.005 mm

G6.3/15000 RPM

Model	Capacity	D	L		
BT30-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
BT30-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
BT30-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
BT30-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
BT30-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
BT30-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
BT30-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
BT30-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
BT30-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
BT40-ER11-70	1-10 (ER 16)	28	70	ER 11A	ER 16A
BT40-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
BT40-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
BT40-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
BT40-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
BT40-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
BT40-ER11-100	1-10 (ER 16)	28	100	ER 11A	ER 16A
BT40-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
BT40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
BT40-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
BT40-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
BT40-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
BT40-ER11-150	1-10 (ER 16)	28	150	ER 11A	ER 16A
BT40-ER16-150	1-10 (ER 16)	28	150	ER 16A	ER 16A
BT40-ER20-150	1-13 (ER 20)	35	150	ER 20A	ER 20A
BT40-ER25-150	2-16 (ER 25)	42	150	ER 25UM	ER 25UM
BT40-ER32-150	2-20 (ER 32)	50	150	ER 32UM	ER 32UM
BT40-ER40-150	3-26 (ER 40)	63	150	ER 40UM	ER 40UM
BT40-ER16-200	1-10 (ER 16)	28	200	ER 16A	ER 16A
BT40-ER20-200	1-13 (ER 20)	35	200	ER 20A	ER 20A
BT40-ER25-200	2-16 (ER 25)	42	200	ER 25UM	ER 25UM
BT40-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
BT40-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
BT50-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
BT50-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
BT50-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
BT50-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
BT50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
BT50-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
BT50-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
BT50-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
BT50-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
BT50-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM



From AD; AD/B

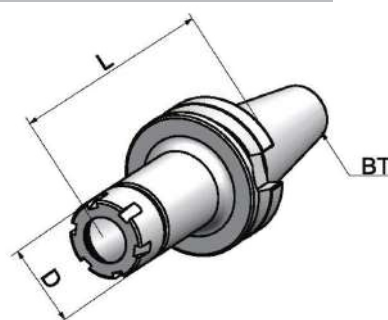
0.005 mm

G6.3/15000 RPM

Model	Capacity	D	L		
BT50-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
BT50-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
BT50-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
BT50-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
BT50-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
BT50-ER25-200	1-13 (ER 25)	42	200	ER 25UM	ER 25UM
BT50-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
BT50-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
BT50-ER32-300	2-20 (ER 32)	50	300	ER 32UM	ER 32UM
BT50-ER40-300	3-26 (ER 40)	63	300	ER 40UM	ER 40UM

ER Collet Chuck with Mini Nut DIN6499

MAS BT 403



From AD; AD/B

0.003 mm

G6.3/12000 RPM

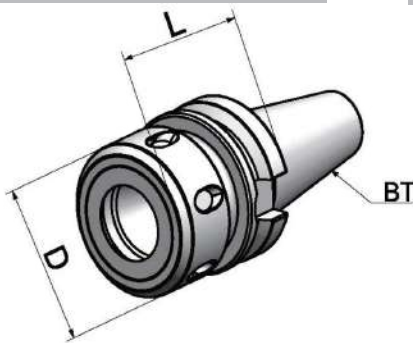
Model	Capacity	D	L	
BT30-ER16M-60	1-10 (ER 16)	28	60	ER 16M
BT30-ER20M-60	1-13 (ER 20)	35	60	ER 20M
BT30-ER25M-60	2-16 (ER 25)	42	60	ER 25M
BT30-ER32M-60	2-20 (ER 32)	50	60	ER 32M
BT30-ER40M-70	3-26 (ER 40)	63	70	ER 40M
BT40-ER11M-70	1-7 (ER 11)	16	70	ER 11M
BT40-ER16M-70	1-10 (ER 16)	22	70	ER 16M
BT40-ER20M-70	1-13 (ER 20)	28	70	ER 20M
BT40-ER25M-70	2-16 (ER 25)	35	70	ER 25M
BT40-ER11M-100	1-7 (ER 11)	16	100	ER 11M
BT40-ER16M-100	1-10 (ER 16)	22	100	ER 16M
BT40-ER20M-100	1-13 (ER 20)	28	100	ER 20M
BT40-ER25M-100	2-16 (ER 25)	35	100	ER 25M
BT40-ER11M-150	1-7 (ER 11)	16	150	ER 11M
BT40-ER16M-150	1-10 (ER 16)	22	150	ER 16M
BT40-ER20M-150	1-13 (ER 20)	28	150	ER 20M
BT40-ER25M-150	2-16 (ER 25)	35	150	ER 25M
BT50-ER16M-100	1-10 (ER 16)	22	100	ER 16M
BT50-ER20M-100	1-13 (ER 20)	28	100	ER 20M
BT50-ER25M-100	2-16 (ER 25)	35	100	ER 25M
BT50-ER16M-150	1-10 (ER 16)	22	150	ER 16M
BT50-ER20M-150	1-13 (ER 20)	28	150	ER 20M
BT50-ER25M-150	2-16 (ER 25)	35	150	ER 25M
BT50-ER16M-200	1-10 (ER 16)	22	200	ER 16M
BT50-ER20M-200	1-13 (ER 20)	28	200	ER 20M
BT50-ER25M-200	2-16 (ER 25)	35	200	ER 25M



From AD 0.01 mm G6.3/12000 RPM

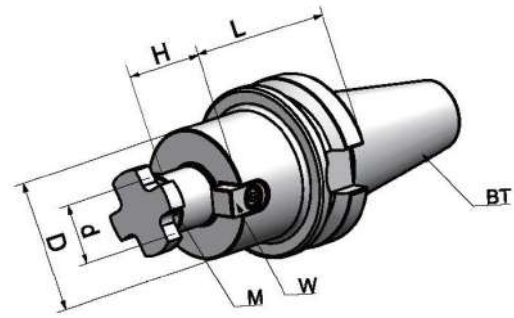
Model	Capacity	d	D	L	
BT40-SC20-90	3-16 (SC 20)	20	50	90	SC 20UM
BT40-SC25-100	3-20 (SC 25)	25	59	105	SC 25UM
BT40-SC32-105	3-25 (SC 32)	32	70	105	SC 32UM
BT40-SC42-105	3-32 (SC 42)	42	99	105	SC 42UM
BT50-SC20-105	3-16 (SC 20)	20	50	105	SC 20UM
BT50-SC25-105	3-20 (SC 25)	25	59	105	SC 25UM
BT50-SC32-110	3-25 (SC 32)	32	70	110	SC 32UM
BT50-SC42-105	3-32 (SC 42)	42	99	105	SC 42UM

OZ Collect Chuck DIN6391



From AD; AD/B 0.005 mm G6.3/12000 RPM

Model	Capacity	D	L		
BT30-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
BT30-OZ25-80	3-25 (OZ 25)	60	80	OZ 25UM	OZ 25UM
BT40-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
BT40-OZ25-70	3-25 (OZ 25)	60	70	OZ 25UM	OZ 25UM
BT40-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM
BT50-OZ25-85	3-25 (OZ 25)	60	85	OZ 25UM	OZ 25UM
BT50-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM

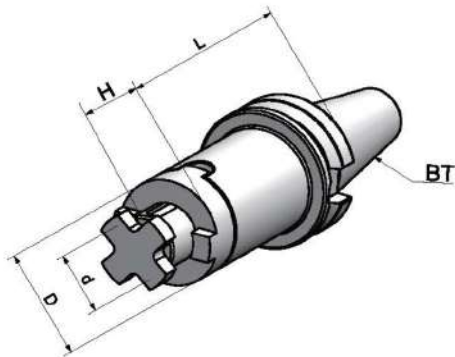


From AD; AD/B

0.005 mm

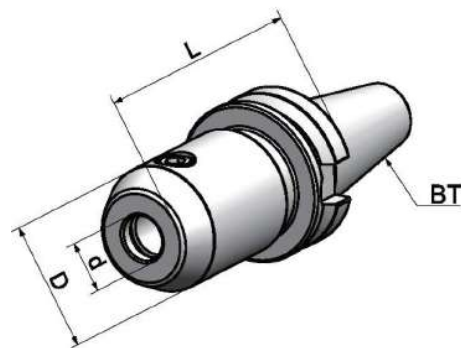
G6.3/12000 RPM

Model	d	L	D	H	M	
BT30-FMB16-40	16	40	38	17	M8	KL-16
BT30-FMB22-40	22	40	48	19	M10	KL-22
BT30-FMB27-40	27	40	58	21	M12	KL-27
BT30-FMB32-50	32	50	78	24	M12	KL-32
BT40-FMB16-40	16	40	38	17	M8	KL-16
BT40-FMB22-40	22	40	48	19	M10	KL-22
BT40-FMB27-40	27	40	58	21	M12	KL-27
BT40-FMB32-50	32	50	78	24	M16	KL-32
BT40-FMB40-50	40	50	88	27	M20	KL-40
BT40-FMB16-100	16	100	38	17	M8	KL-16
BT40-FMB22-100	22	100	48	19	M10	KL-22
BT40-FMB27-100	27	100	58	21	M12	KL-27
BT40-FMB32-100	32	100	78	24	M16	KL-32
BT40-FMB40-100	40	100	88	27	M20	KL-40
BT40-FMB16-150	16	150	38	17	M8	KL-16
BT40-FMB22-150	22	150	48	19	M10	KL-22
BT40-FMB27-150	27	150	58	21	M12	KL-27
BT40-FMB32-150	32	150	78	24	M16	KL-32
BT50-FMB16-40	16	40	38	17	M8	KL-16
BT50-FMB22-40	22	40	48	19	M10	KL-22
BT50-FMB27-40	27	40	58	21	M12	KL-27
BT50-FMB32-50	32	50	78	24	M16	KL-32
BT50-FMB40-50	40	50	88	27	M20	KL-40
BT50-FMB60-75	60	75	138	25	M30	KL-60
BT50-FMB16-100	16	100	38	17	M8	KL-16
BT50-FMB22-100	22	100	48	19	M10	KL-22
BT50-FMB27-100	27	100	58	21	M12	KL-27
BT50-FMB32-100	32	100	78	24	M16	KL-32
BT50-FMB22-150	22	150	48	19	M10	KL-22
BT50-FMB27-150	27	150	58	21	M12	KL-27
BT50-FMB32-150	32	150	78	24	M16	KL-32



From AD; AD/B 0.005 mm G6.3/12000 RPM

Model	d	D	H	L	
BT30-SEMC16-45	16	32	17	45	KL-16
BT30-SEMC22-47	22	40	19	47	KL-22
BT30-SEMC27-49	27	48	21	49	KL-27
BT40-SEMC16-55	16	32	17	55	KL-16
BT40-SEMC22-55	22	40	19	55	KL-22
BT40-SEMC27-55	27	48	21	55	KL-27
BT40-SEMC32-55	32	58	24	60	KL-32
BT40-SEMC40-55	40	70	27	60	KL-40
BT40-SEMC16-100	16	32	17	100	KL-16
BT40-SEMC22-100	22	40	19	100	KL-22
BT40-SEMC27-100	27	48	21	100	KL-27
BT40-SEMC32-100	32	8	24	100	KL-32
BT40-SEMC40-100	40	70	27	100	KL-40
BT40-SEMC16-150	16	32	17	150	KL-16
BT40-SEMC22-150	22	40	19	150	KL-22
BT40-SEMC27-150	27	48	21	150	KL-27
BT40-SEMC32-150	32	58	24	150	KL-32
BT40-SEMC40-150	40	70	27	150	KL-40
BT50-SEMC16-70	16	32	17	70	KL-16
BT50-SEMC22-70	22	40	19	70	KL-22
BT50-SEMC27-70	27	48	21	70	KL-27
BT50-SEMC32-70	32	58	24	70	KL-32
BT50-SEMC40-70	40	70	27	70	KL-40
BT50-SEMC16-100	16	32	17	100	KL-16
BT50-SEMC22-100	22	40	19	100	KL-22
BT50-SEMC27-100	27	48	21	100	KL-27
BT50-SEMC32-100	32	58	24	100	KL-32
BT50-SEMC40-100	40	70	27	100	KL-40
BT50-SEMC16-150	16	32	17	150	KL-16
BT50-SEMC22-150	22	40	19	150	KL-22
BT50-SEMC27-150	27	48	21	150	KL-27
BT50-SEMC32-150	32	58	24	150	KL-32
BT50-SEMC40-150	40	70	27	150	KL-40

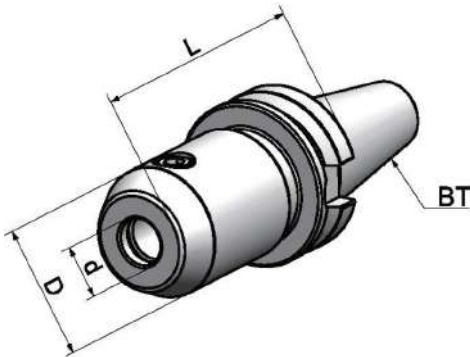


From AD; AD/B

0.003 mm

G6.3/12000 RPM

Model	d	D	L
BT30-SLA6-50	6	25	50
BT30-SLA8-50	8	28	50
BT30-SLA10-50	10	35	50
BT30-SLA12-50	12	42	50
BT30-SLA14-50	14	44	50
BT30-SLA16-63	16	48	63
BT30-SLA18-63	18	50	63
BT30-SLA20-63	20	52	63
BT40-SLA6-50	6	25	50
BT40-SLA8-50	8	28	50
BT40-SLA10-63	10	35	63
BT40-SLA12-63	12	42	63
BT40-SLA14-63	14	44	63
BT40-SLA16-63	16	48	63
BT40-SLA16-75	16	48	75
BT40-SLA18-63	18	50	63
BT40-SLA20-63	20	52	63
BT40-SLA25-90	25	65	90
BT40-SLA32-100	32	72	100
BT40-SLA40-120	40	80	120
BT40-SLA6-100	6	25	100
BT40-SLA8-100	8	28	100
BT40-SLA10-100	10	35	100
BT40-SLA12-100	12	42	100
BT40-SLA14-100	14	44	100
BT40-SLA16-100	16	48	100
BT40-SLA18-100	18	50	100
BT40-SLA20-100	20	52	100
BT40-SLA6-160	6	25	160
BT40-SLA8-160	8	28	160
BT40-SLA10-160	10	35	160
BT40-SLA12-160	12	42	160
BT40-SLA14-160	14	44	160
BT40-SLA16-160	16	48	160
BT40-SLA18-160	18	50	160
BT40-SLA20-160	20	52	160
BT40-SLA25-160	25	65	160
BT40-SLA32-160	32	72	160
BT40-SLA40-160	40	80	160
BT50-SLA6-63	6	25	63
BT50-SLA8-63	8	28	63
BT50-SLA10-63	10	35	63
BT50-SLA12-80	12	42	80
BT50-SLA14-80	14	44	80
BT50-SLA16-80	16	48	80
BT50-SLA18-80	18	50	80
BT50-SLA20-80	20	52	80
BT50-SLA25-100	25	65	100
BT50-SLA32-105	32	72	105
BT50-SLA40-110	40	80	110



From AD; AD/B

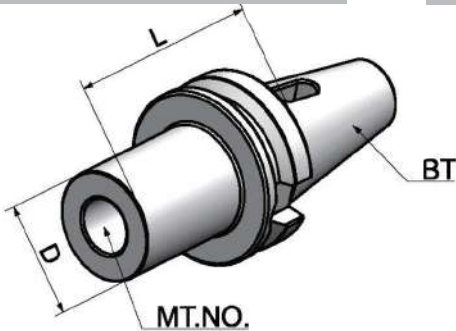
0.003 mm

G6.3/12000 RPM

Model	d	D	L
BT40-SLA06-50K	6	25	50
BT40-SLA08-50K	8	28	50
BT40-SLA10-63K	10	35	63
BT40-SLA12-63K	12	42	63
BT40-SLA14-63K	14	44	63
BT40-SLA16-63K	16	48	63
BT40-SLA18-63K	18	50	63
BT40-SLA20-63K	20	52	63
BT40-SLA25-90K	25	65	90
BT40-SLA32-100K	32	72	100
BT40-SLA40-120K	40	80	120
BT50-SLA6-63K	6	25	63
BT50-SLA8-63K	8	28	63
BT50-SLA10-63K	10	35	63
BT50-SLA12-80K	12	42	80
BT50-SLA14-80K	14	44	80
BT50-SLA16-80K	16	48	80
BT50-SLA18-80K	18	50	80
BT50-SLA20-80K	20	52	80
BT50-SLA25-100K	25	65	100
BT50-SLA32-105K	32	72	105
BT50-SLA40-110K	40	80	110

Morse Taper Adapter with Tang DIN6383

MAS BT 403

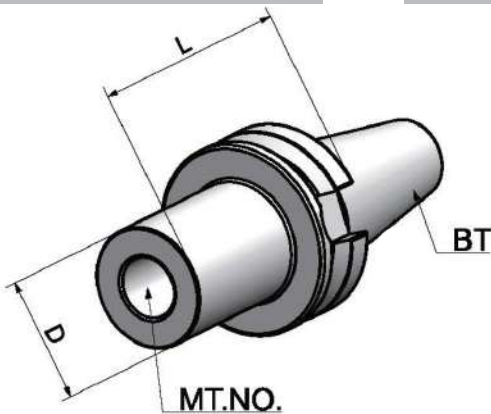


From AD/B

0.005 mm

G6.3/15000 RPM

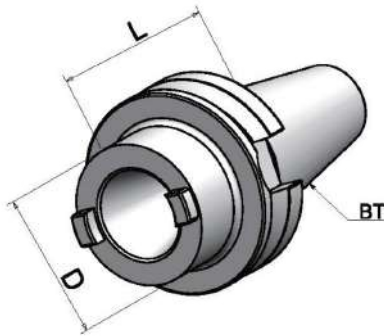
Model	MT. NO.	D	L
BT30-MTA1-45	1	25	45
BT30-MTA2-60	2	32	60
BT30-MTA3-75	3	40	75
BT40-MTA1-50	1	25	50
BT40-MTA2-50	2	32	50
BT40-MTA3-70	3	40	70
BT40-MTA4-95	4	48	95
BT50-MTA1-45	1	25	45
BT50-MTA2-60	2	32	60
BT50-MTA3-65	3	40	65
BT50-MTA4-95	4	48	95
BT50-MTA5-120	5	63	120



From A	0.005 mm	G6.3/15000 RPM
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Model	MT. NO.	D	L
BT40-MTB1-50	1	25	50
BT40-MTB2-50	2	32	50
BT40-MTB3-70	3	40	70
BT40-MTB4-95	4	48	95
BT50-MTB1-45	1	25	45
BT50-MTB2-60	2	32	60
BT50-MTB3-65	3	40	65
BT50-MTB4-70	4	48	70
BT50-MTB5-120	5	63	120

Tool Holder Adapter Sleeve

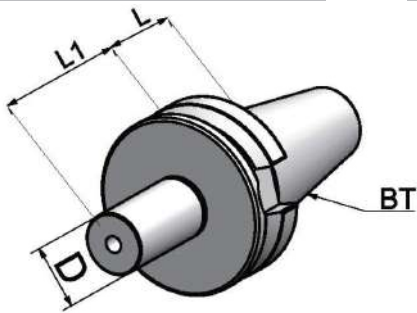


From A	0.005 mm	G6.3/15000 RPM
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Model	D	L
BT40-BT30-60	63	60
BT40-BT40-100	63	100
BT50-BT40-70	70	70
BT50-BT50-120	97	120

Drill Chuck Adapter DIN238

MAS BT 403

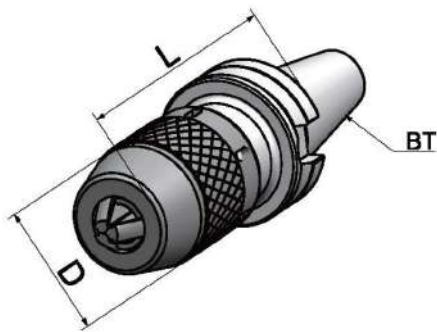


From A	0.005 mm	G6.3/15000 RPM
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Model	D	L	L1
BT30-B12	B12	25	18.5
BT30-B16	B16	25	24
BT40-B12	B12	32	18.5
BT40-B16	B16	32	24
BT40-B18	B18	32	32
BT40-B22	B22	32	40.5
BT50-B16	B16	45	24
BT50-B18	B18	45	32
BT50-B22	B22	45	40.5

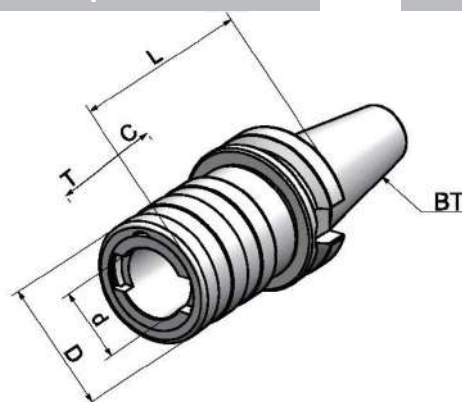
APU Drill Chuck Holder

MAS BT 403



From A	0.08 mm
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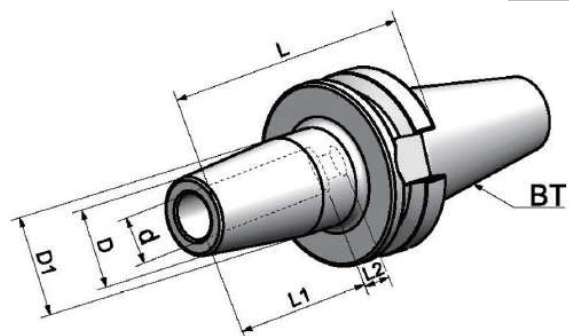
Model	Capacity	D	L
BT30-APU08-80	1-8 (APU 08)	36	80
BT30-APU13-110	1-13 (APU 13)	48	110
BT40-APU08-85	1-8 (APU 08)	36	85
BT40-APU13-105	1-13 (APU 13)	48	105
BT40-APU16-110	3-16 (APU 16)	53	110
BT50-APU08-80	1-8 (APU 08)	36	90
BT50-APU13-105	1-13 (APU 13)	48	105
BT50-APU16-115	3-16 (APU 16)	53	115



Model	Collet Size	d	D	L	T	C
BT30-GR1-70	1	19	38	70	7.5	7.5
BT30-GR2-95	2	31	54	95	12.5	12.5
BT30-GR1-65	1	19	38	65	7.5	7.5
BT30-GR2-93	2	31	53	93	12.5	12.5
BT30-GR3-166	3	48	78	166	22	22
BT50-GR1-100	1	19	38	100	7.5	7.5
BT50-GR2-100	2	31	53	100	12.5	12.5
BT50-GR3-142	3	48	78	142	22	22

Shrink Fit Chuck

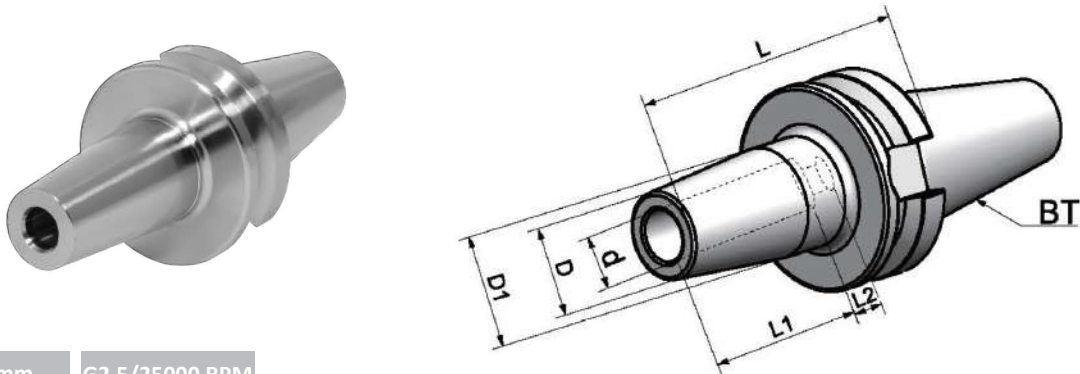
MAS BT 403



0.003 mm

G2.5/25000 RPM

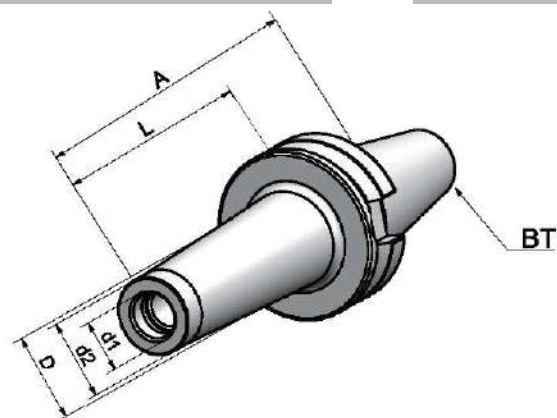
Model	d	D	D1	L	L1	I2
BT30-SF3-80	3	15	20	80	10	-
BT30-SF4-80	4	15	20	80	20	5
BT30-SF5-80	5	15	20	80	20	5
BT30-SF6-80	6	20	27	80	36	10
BT30-SF8-80	8	20	27	80	36	10
BT30-SF10-90	10	24	32	90	41	10
BT30-SF12-90	12	24	32	90	41	10
BT30-SF14-90	14	27	34	90	47	10
BT30-SF16-90	16	27	34	90	50	10
BT30-SF18-90	18	33	42	90	50	10
BT30-SF20-90	20	33	42	90	52	10
BT40-SF3-80	3	15	20	80	10	-
BT40-SF4-80	4	15	20	80	20	5
BT40-SF5-80	5	15	20	80	20	5
BT40-SF6-90	6	20	27	90	36	10
BT40-SF8-90	8	20	27	90	36	10
BT40-SF10-90	10	24	32	90	41	10
BT40-SF12-90	12	24	32	90	47	10
BT40-SF14-90	14	27	34	90	47	10
BT40-SF16-90	16	27	34	90	50	10
BT40-SF18-90	18	33	42	90	50	10
BT40-SF20-90	20	33	42	90	52	10
BT40-SF25-100	25	44	53	100	58	10
BT40-SF32-100	32	44	53	100	62	10



0.003 mm

G2.5/25000 RPM

Model	d	D	D1	L	I1	I2
BT40-SF6-120	6	20	27	120	36	10
BT40-SF8-120	8	20	27	120	36	10
BT40-SF10-120	10	24	32	120	41	10
BT40-SF12-120	12	24	32	120	47	10
BT40-SF14-120	14	27	34	120	47	10
BT40-SF16-120	16	27	34	120	50	10
BT40-SF18-120	18	33	42	120	50	10
BT40-SF20-120	20	33	42	120	52	10
BT40-SF25-120	25	44	53	120	58	10
BT40-SF6-160	6	20	27	160	36	10
BT40-SF8-160	8	20	27	160	36	10
BT40-SF10-160	10	24	32	160	41	10
BT40-SF12-160	12	24	32	160	47	10
BT40-SF14-160	14	27	34	160	47	10
BT40-SF16-160	16	27	34	160	50	10
BT40-SF18-160	18	33	42	160	50	10
BT40-SF20-160	20	33	42	160	52	10
BT40-SF25-160	25	44	53	160	58	10
BT40-SF32-160	32	44	53	160	62	10
BT50-SF4-100	4	15	20	100	20	5
BT50-SF5-100	5	15	20	100	20	5
BT50-SF6-100	6	20	27	100	36	10
BT50-SF8-100	8	20	27	100	36	10
BT50-SF10-100	10	24	32	100	41	10
BT50-SF12-100	12	24	32	100	47	10
BT50-SF14-100	14	27	34	100	47	10
BT50-SF16-100	16	27	34	100	50	10
BT50-SF18-150	18	33	42	150	50	10
BT50-SF20-150	20	33	42	150	52	10
BT50-SF25-120	25	44	53	120	58	10
BT50-SF32-120	32	44	53	120	62	10
BT50-SF6-160	6	20	27	160	36	10
BT50-SF8-160	8	20	27	160	36	10
BT50-SF10-160	10	24	32	160	41	10
BT50-SF12-160	12	24	32	160	47	10
BT50-SF14-160	14	27	34	160	47	10
BT50-SF16-160	16	27	34	160	50	10
BT50-SF18-160	18	33	42	160	50	10
BT50-SF20-160	20	33	42	160	52	10
BT50-SF25-160	25	44	53	160	58	10
BT50-SF32-160	32	44	53	160	62	10

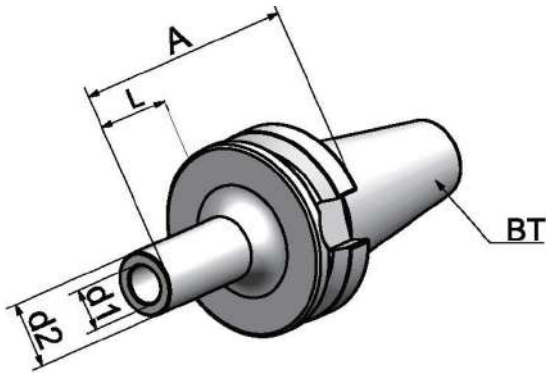


From AD; AD/B

0.005 mm

G6.3/15000 RPM

Model	M	d1	d2	A	L	D
BT40-SOM08-52	M8	8.5	13	52	25	15
BT40-SOM08-77	M8	8.5	13	77	50	23
BT40-SOM08-102	M8	8.5	13	102	75	23
BT40-SOM08-127	M8	8.5	13	127	100	25
BT40-SOM10-32	M10	10.5	18	32	5	18
BT40-SOM10-52	M10	10.5	18	52	25	20
BT40-SOM10-77	M10	10.5	18	77	50	23
BT40-SOM10-102	M10	10.5	18	102	75	28
BT40-SOM10-127	M10	10.5	18	127	100	32
BT40-SOM10-177	M10	10.5	18	177	150	36.5
BT40-SOM12-32	M12	12.5	21	32	5	21
BT40-SOM12-52	M12	12.5	21	52	25	24
BT40-SOM12-77	M12	12.5	21	77	50	24
BT40-SOM12-102	M12	12.5	21	102	75	31
BT40-SOM12-127	M12	12.5	21	127	100	31
BT40-SOM12-152	M12	12.5	21	152	125	36
BT40-SOM12-177	M12	12.5	21	177	150	38
BT40-SOM16-32	M16	17	29	32	5	29
BT40-SOM16-52	M16	17	29	52	25	29
BT40-SOM16-77	M16	17	29	77	50	34
BT40-SOM16-102	M16	17	29	102	75	34
BT40-SOM16-127	M16	17	29	127	100	36
BT40-SOM16-152	M16	17	29	152	125	40
BT40-SOM16-177	M16	17	29	177	150	42.5
BT50-SOM08-88	M8	8.5	13	88	50	23
BT50-SOM08-138	M8	8.5	13	138	100	25
BT50-SOM08-188	M8	8.5	13	188	150	30
BT50-SOM10-88	M10	10.5	18	88	50	23
BT50-SOM10-138	M10	10.5	18	138	100	32
BT50-SOM10-188	M10	10.5	18	188	150	36.5
BT50-SOM12-88	M12	12.5	21	88	50	24
BT50-SOM12-138	M12	12.5	21	138	100	33
BT50-SOM12-188	M12	12.5	21	188	150	40
BT50-SOM16-88	M16	17	29	88	55	34
BT50-SOM16-138	M16	17	29	138	100	36
BT50-SOM16-188	M16	17	29	188	150	42.5

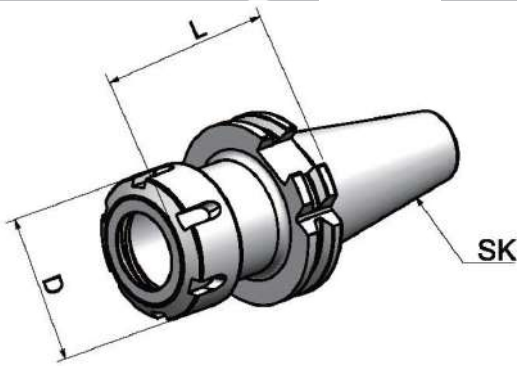


From AD; AD/B

0.005 mm

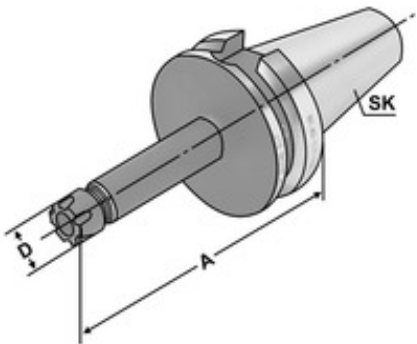
G6.3/15000 RPM

Model	M	d1	d2	A	L
BT40-M10-102	M10	10.5	18	102	75
BT40-M10-127	M10	10.5	18	127	100
BT40-M10-177	M10	10.5	18	177	150
BT40-M12-108	M12	12.5	21	108	75
BT40-M12-127	M12	12.5	21	127	100
BT40-M12-152	M12	12.5	21	152	125
BT40-M12-177	M12	12.5	21	177	150
BT40-M16-102	M16	17	29	102	75
BT40-M16-127	M16	17	29	127	100
BT40-M16-152	M16	17	29	152	125
BT40-M16-177	M16	17	29	177	150
BT50-M10-138	M10	10.5	18	138	100
BT50-M10-188	M10	10.5	18	188	150
BT50-M21-138	M12	12.5	21	138	100
BT50-M21-188	M12	12.5	21	188	150
BT50-M17-138	M16	17	29	138	100
BT50-M17-188	M16	17	29	188	150



From AD; AD/B 0.003 mm G6.3/15000 RPM

Model	Capacity	D	L		
SK30-ER16-60	1-10 (ER 16)	28	60	ER 16A	ER 16A
SK30-ER20-60	1-13 (ER 20)	35	60	ER 20A	ER 20A
SK30-ER25-60	2-16 (ER 25)	42	60	ER 25UM	ER 25UM
SK30-ER32-60	2-20 (ER 32)	50	60	ER 32UM	ER 32UM
SK30-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
SK30-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
SK30-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
SK30-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
SK30-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
SK40-ER16-63	1-10 (ER 16)	28	63	ER 16A	ER 16A
SK40-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
SK40-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
SK40-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
SK40-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
SK40-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
SK40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
SK40-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
SK40-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
SK40-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
SK40-ER16-150	1-10 (ER 16)	28	150	ER 16A	ER 16A
SK40-ER20-150	1-13 (ER 20)	35	150	ER 20A	ER 20A
SK40-ER25-150	2-16 (ER 25)	42	150	ER 25UM	ER 25UM
SK40-ER32-150	2-20 (ER 32)	50	150	ER 32UM	ER 32UM
SK40-ER40-150	3-26 (ER 40)	63	150	ER 40UM	ER 40UM
SK40-ER16-200	1-10 (ER 16)	28	200	ER 16A	ER 16A
SK40-ER20-200	1-13 (ER 20)	35	200	ER 20A	ER 20A
SK40-ER25-200	2-16 (ER 25)	42	200	ER 25UM	ER 25UM
SK40-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
SK40-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
SK50-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
SK50-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
SK50-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
SK50-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
SK50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
SK50-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
SK40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
SK50-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
SK50-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
SK50-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
SK50-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
SK40-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
SK50-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
SK50-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
SK50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
SK50-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
SK50-ER25-200	1-13 (ER 25)	42	200	ER 25UM	ER 25UM
SK50-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
SK50-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
SK50-ER32-300	2-20 (ER 32)	50	300	ER 32UM	ER 32UM
SK50-ER40-300	3-26 (ER 40)	63	300	ER 40UM	ER 40UM



From AD; AD/B 0.003 mm G6.3/15000 RPM

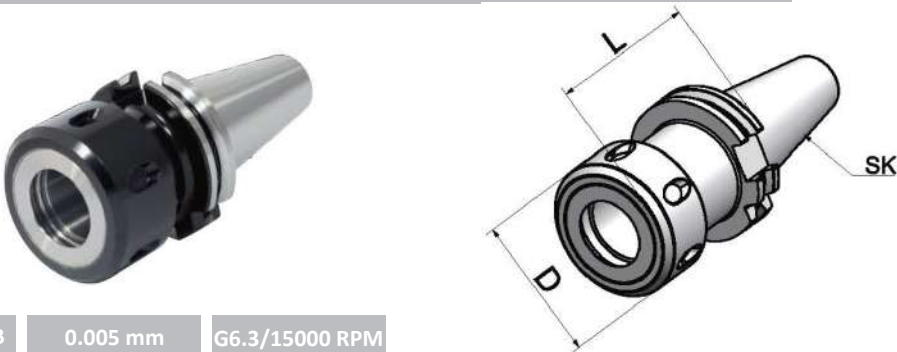
Model	Capacity	D	L	
SK30-ER16M-60	1-10 (ER 16)	28	60	ER 16M
SK30-ER20M-60	1-13 (ER 20)	35	60	ER 20M
SK30-ER25M-60	2-16 (ER 25)	42	60	ER 25M
SK30-ER32M-60	2-20 (ER 32)	50	60	ER 32M
SK30-ER40M-70	3-26 (ER 40)	63	70	ER 40M
SK40-ER11M-70	1-7 (ER 11)	16	70	ER 11M
SK40-ER16M-70	1-10 (ER 16)	22	70	ER 16M
SK40-ER20M-70	1-13 (ER 20)	28	70	ER 20M
SK40-ER25M-70	2-16 (ER 25)	35	70	ER 25M
SK40-ER11M-100	1-7 (ER 11)	16	100	ER 11M
SK40-ER16M-100	1-10 (ER 16)	22	100	ER 16M
SK40-ER20M-100	1-13 (ER 20)	28	100	ER 20M
SK40-ER25M-100	2-16 (ER 25)	35	100	ER 25M
SK40-ER11M-150	1-7 (ER 11)	16	150	ER 11M
SK40-ER16M-150	1-10 (ER 16)	22	150	ER 16M
SK40-ER20M-150	1-13 (ER 20)	28	150	ER 20M
SK40-ER25M-150	2-16 (ER 25)	35	150	ER 25M
SK50-ER16M-100	1-10 (ER 16)	22	100	ER 16M
SK50-ER20M-100	1-13 (ER 20)	28	100	ER 20M
SK50-ER25M-100	2-16 (ER 25)	35	100	ER 25M
SK50-ER16M-150	1-10 (ER 16)	22	150	ER 16M
SK50-ER20M-150	1-13 (ER 20)	28	150	ER 20M
SK50-ER25M-150	2-16 (ER 25)	35	150	ER 25M
SK50-ER16M-200	1-10 (ER 16)	22	200	ER 16M
SK50-ER20M-200	1-13 (ER 20)	28	200	ER 20M
SK50-ER25M-200	2-16 (ER 25)	35	200	ER 25M



From AD

0.01 mm

Model	Capacity	d	D	L	
SK40-SC20-90	3-16 (SC 20)	20	50	90	SC 20UM
SK40-SC25-100	3-20 (SC 25)	25	59	105	SC 25UM
SK40-SC32-105	3-25 (SC 32)	32	70	105	SC 32UM
SK40-SC42-105	3-25 (SC 42)	42	99	105	SC 42UM
SK50-SC20-105	3-16 (SC 20)	20	50	105	SC 20UM
SK50-SC25-105	3-20 (SC 25)	25	59	105	SC 25UM
SK50-SC32-110	3-25 (SC 32)	32	70	110	SC 32UM
SK50-SC42-105	3-25 (SC 42)	42	99	105	SC 42UM

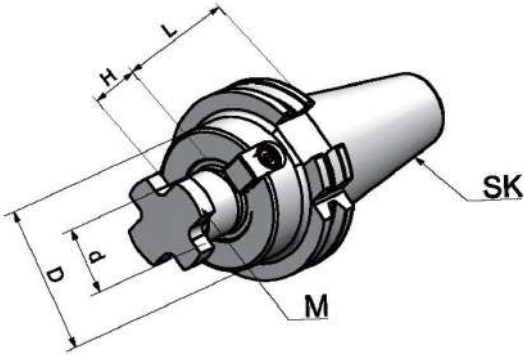


From AD; AD/B

0.005 mm

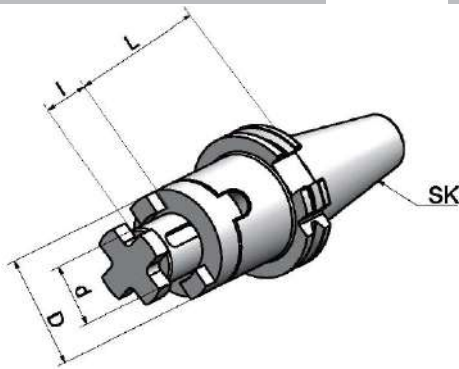
G6.3/15000 RPM

Model	Capacity	D	L		
SK30-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
SK30-OZ25-80	3-25 (OZ 25)	60	80	OZ 25UM	OZ 25UM
SK40-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
SK40-OZ25-70	3-25 (OZ 25)	60	70	OZ 25UM	OZ 25UM
SK40-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM
SK50-OZ25-85	3-25 (OZ 25)	60	85	OZ 25UM	OZ 25UM
SK50-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM



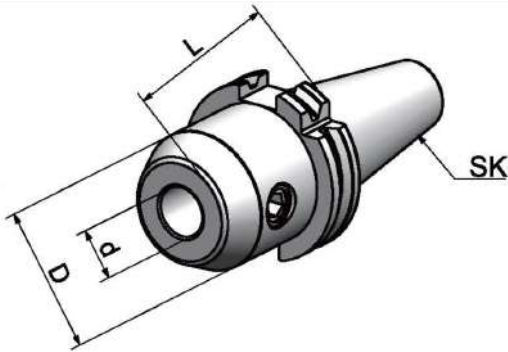
From AD; AD/B 0.005 mm G6.3/15000 RPM

Model	d	L	D	H	M	
SK30-FMB16-40	16	40	38	17	M8	KL-16
SK30-FMB22-40	22	40	48	19	M10	KL-22
SK30-FMB27-40	27	40	58	21	M12	KL-27
SK30-FMB32-50	32	50	78	24	M12	KL-32
SK40-FMB16-40	16	40	38	17	M8	KL-16
SK40-FMB22-40	22	40	48	19	M10	KL-22
SK40-FMB27-40	27	40	58	21	M12	KL-27
SK40-FMB32-50	32	50	78	24	M16	KL-32
SK40-FMB40-50	40	50	88	27	M20	KL-40
SK40-FMB16-100	16	100	38	17	M8	KL-16
SK40-FMB22-100	22	100	48	19	M10	KL-22
SK40-FMB27-100	27	100	58	21	M12	KL-27
SK40-FMB32-100	32	100	78	24	M16	KL-32
SK40-FMB40-100	40	100	88	27	M20	KL-40
SK40-FMB16-150	16	150	38	17	M8	KL-16
SK40-FMB22-150	22	150	48	19	M10	KL-22
SK40-FMB27-150	27	150	58	21	M12	KL-27
SK40-FMB32-150	32	150	78	24	M16	KL-32
SK50-FMB16-40	16	40	38	17	M8	KL-16
SK50-FMB22-40	22	40	48	19	M10	KL-22
SK50-FMB27-40	27	40	58	21	M12	KL-27
SK50-FMB32-50	32	50	78	24	M16	KL-32
SK50-FMB40-50	40	50	88	27	M20	KL-40
SK50-FMB60-75	60	75	138	25	M30	KL-60
SK50-FMB16-100	16	100	38	17	M8	KL-16
SK50-FMB22-100	22	100	48	19	M10	KL-22
SK50-FMB27-100	27	100	58	21	M12	KL-27
SK50-FMB32-100	32	100	78	24	M16	KL-32
SK50-FMB22-150	22	150	48	19	M10	KL-22
SK50-FMB27-150	27	150	58	21	M12	KL-27
SK50-FMB32-150	32	150	78	24	M16	KL-32



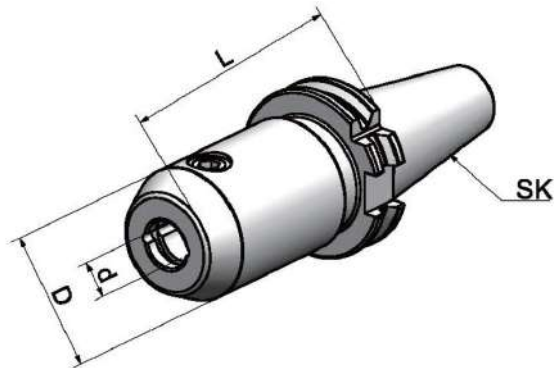
From AD/B 0.005 mm G6.3/15000 RPM

Model	d	D	H	L	
SK30-SEMC16-45	16	32	17	45	KL-16
SK30-SEMC22-47	22	40	19	47	KL-22
SK30-SEMC27-49	27	48	21	49	KL-27
SK40-SEMC16-55	16	32	17	55	KL-16
SK40-SEMC22-55	22	40	19	55	KL-22
SK40-SEMC27-55	27	48	21	55	KL-27
SK40-SEMC32-55	32	58	24	60	KL-32
SK40-SEMC40-55	40	70	27	60	KL-40
SK40-SEMC16-100	16	32	17	100	KL-16
SK40-SEMC22-100	22	40	19	100	KL-22
SK40-SEMC27-100	27	48	21	100	KL-27
SK40-SEMC32-100	32	8	24	100	KL-32
SK40-SEMC40-100	40	70	27	100	KL-40
SK40-SEMC16-150	16	32	17	150	KL-16
SK40-SEMC22-150	22	40	19	150	KL-22
SK40-SEMC27-150	27	48	21	150	KL-27
SK40-SEMC32-150	32	58	24	150	KL-32
SK40-SEMC40-150	40	70	27	150	KL-40
SK50-SEMC16-70	16	32	17	70	KL-16
SK50-SEMC22-55	22	40	19	55	KL-22
SK50-SEMC27-70	27	48	21	70	KL-27
SK50-SEMC32-70	32	58	24	70	KL-32
SK50-SEMC40-70	40	70	27	70	KL-40
SK50-SEMC16-100	16	32	17	100	KL-16
SK50-SEMC22-100	22	40	19	100	KL-22
SK50-SEMC27-100	27	48	21	100	KL-27
SK50-SEMC32-100	32	58	24	100	KL-32
SK50-SEMC40-100	40	70	27	100	KL-40
SK50-SEMC16-150	16	32	17	150	KL-16
SK50-SEMC22-150	22	40	19	150	KL-22
SK50-SEMC27-150	27	48	21	150	KL-27
SK50-SEMC32-150	32	58	24	150	KL-32
SK50-SEMC40-150	40	70	27	150	KL-40



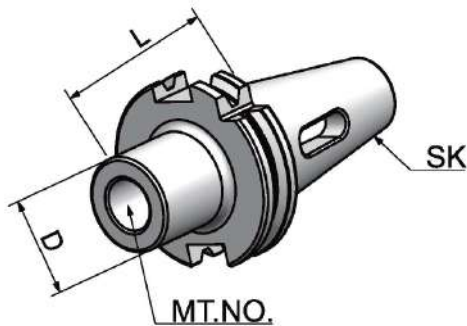
From AD; AD/B 0.005 mm G6.3/15000 RPM

Model	d	D	L
SK30-SLA6-50	6	25	50
SK30-SLA8-50	8	28	50
SK30-SLA10-50	10	35	50
SK30-SLA12-50	12	42	50
SK30-SLA14-50	14	44	50
SK30-SLA16-63	16	48	63
SK30-SLA18-63	18	50	63
SK30-SLA20-63	20	52	63
SK40-SLA6-50	6	25	50
SK40-SLA8-50	8	28	50
SK40-SLA10-63	10	35	63
SK40-SLA12-63	12	42	63
SK40-SLA14-63	14	44	63
SK40-SLA16-63	16	48	63
SK40-SLA18-63	18	50	63
SK40-SLA20-63	20	52	63
SK40-SLA25-90	25	65	90
SK40-SLA32-100	32	72	100
SK40-SLA40-120	40	80	120
SK40-SLA6-100	6	25	100
SK40-SLA8-100	8	28	100
SK40-SLA10-100	10	35	100
SK40-SLA12-100	12	42	100
SK40-SLA14-100	14	44	100
SK40-SLA16-100	16	48	100
SK40-SLA18-100	18	50	100
SK40-SLA20-100	20	52	100
SK40-SLA6-160	6	25	160
SK40-SLA8-160	8	28	160
SK40-SLA10-160	10	35	160
SK40-SLA12-160	12	42	160
SK40-SLA14-160	14	44	160
SK40-SLA16-160	16	48	160
SK40-SLA18-160	18	50	160
SK40-SLA20-160	20	52	160
SK40-SLA25-160	25	65	160
SK40-SLA25-100	25	65	100
SK40-SLA32-160	32	72	160
SK40-SLA40-160	40	80	160
SK50-SLA6-63	6	25	63
SK50-SLA8-63	8	28	63
SK50-SLA10-63	10	35	63
SK50-SLA12-80	12	42	80
SK50-SLA14-80	14	44	80
SK50-SLA16-80	16	48	80
SK50-SLA18-80	18	50	80
SK50-SLA20-80	20	52	80
SK50-SLA25-80	25	65	80
SK50-SLA25-100	25	65	100
SK50-SLA32-105	32	72	105
SK50-SLA40-110	40	80	110



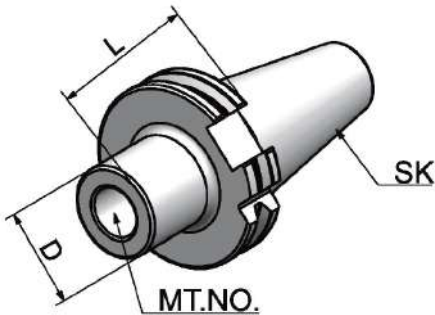
From AD; AD/B 0.005 mm G6.3/15000 RPM

Model	d	D	L
SK40-SLA06-50K	6	25	50
SK40-SLA08-50K	8	28	50
SK40-SLA10-63K	10	35	63
SK40-SLA12-63K	12	42	63
SK40-SLA14-63K	14	44	63
SK40-SLA16-63K	16	48	63
SK40-SLA18-63K	18	50	63
SK40-SLA20-63K	20	52	63
SK40-SLA25-90K	25	65	90
SK40-SLA32-100K	32	72	100
SK40-SLA40-120K	40	80	120
SK50-SLA6-63K	6	25	63
SK50-SLA8-63K	8	28	63
SK50-SLA10-63K	10	35	63
SK50-SLA12-80K	12	42	80
SK50-SLA14-80K	14	44	80
SK50-SLA16-80K	16	48	80
SK50-SLA18-80K	18	50	80
SK50-SLA20-80K	20	52	80
SK50-SLA25-100K	25	65	100
SK50-SLA32-105K	32	72	105
SK50-SLA40-110K	40	80	110



From AD; AD/B 0.005 mm G6.3/15000 RPM

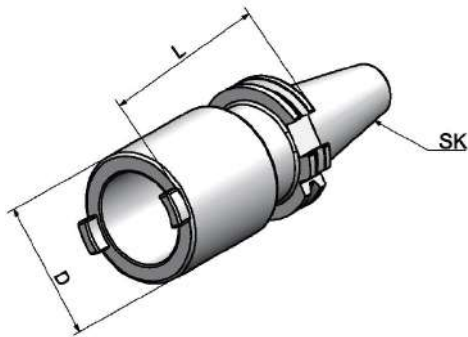
Model	MT. NO.	D	L
SK30-MTA1-45	1	25	45
SK30-MTA2-60	2	32	60
SK30-MTA3-75	3	40	75
SK40-MTA1-50	1	25	50
SK40-MTA2-50	2	32	50
SK40-MTA3-70	3	40	70
SK40-MTA4-95	4	48	95
SK50-MTA1-45	1	25	45
SK50-MTA2-60	2	32	60
SK50-MTA3-65	3	40	65
SK50-MTA4-95	4	48	95
SK50-MTA5-120	5	63	120



From A	0.005 mm	G6.3/15000 RPM
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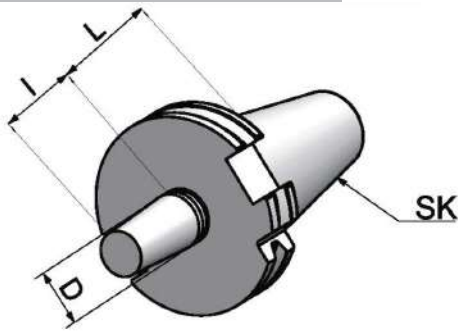
Model	MT. NO.	D	L
SK40-MTB1-50	1	25	50
SK40-MTB2-50	2	32	50
SK40-MTB3-70	3	40	70
SK40-MTB4-95	4	48	95
SK50-MTB1-45	1	25	45
SK50-MTB2-60	2	32	60
SK50-MTB3-65	3	40	65
SK50-MTB4-70	4	48	70
SK50-MTB5-120	5	63	120

Tool Holder Adatper Sleeve



From A	0.005 mm	G6.3/15000 RPM
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Model	D	L
SK40-BT30-60	63	60
SK40-BT40-100	63	100
SK50-BT40-70	70	70
SK50-BT50-120	97	120



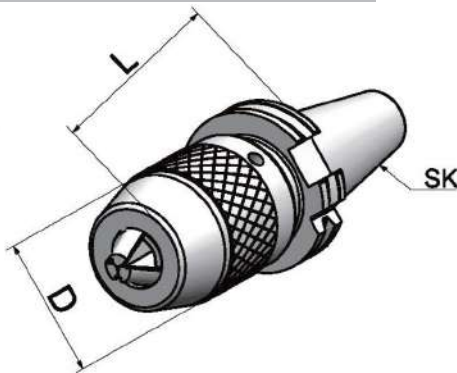
From A

0.005 mm

G6.3/15000 RPM

Model	D	L	L1
SK30-B12	B12	25	18.5
SK30-B16	B16	25	24
SK40-B12	B12	32	18.5
SK40-B16	B16	32	24
SK40-B18	B18	32	32
SK40-B22	B22	32	40.5
SK50-B16	B16	45	24
SK50-B18	B18	45	32
SK50-B22	B22	45	40.5

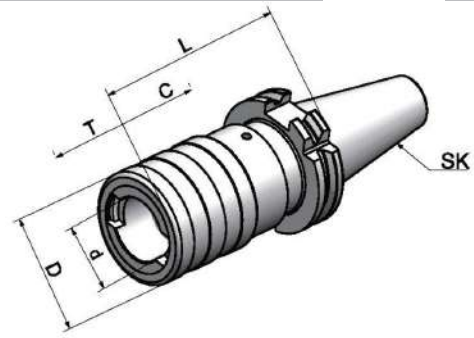
APU Drill Chuck Holder



From A

0.08 mm

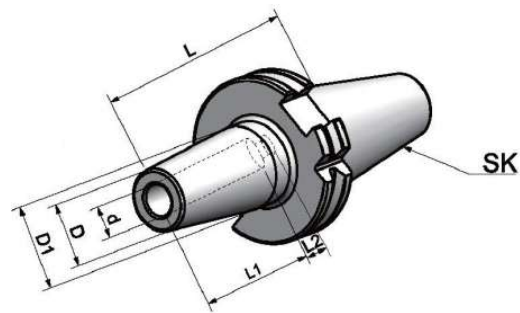
Model	Capacity	D	L	I
SK30-APU08-80	1-8	38	80	85
SK30-APU13-120	1-13	48	130	130
SK30-APU16-130	1-16	53	140.6	140.6
SK40-APU08-75	1-8	38	75	80
SK40-APU13-100	1-13	48	100	110
SK40-APU16-110	3-16	53	110	120.6
SK50-APU08-75	1-8	38	75	80
SK50-APU13-100	1-13	48	100	110
SK50-APU16-105	3-16	53	105	115.6



Model	Collet Size	d	D	L	T	C
SK30-GR1-70	1	19	38	70	7.5	7.5
SK30-GR2-95	2	31	54	95	12.5	12.5
SK30-GR1-65	1	19	38	65	7.5	7.5
SK30-GR2-93	2	31	53	93	12.5	12.5
SK30-GR3-166	3	48	78	166	22	22
SK50-GR1-100	1	19	38	100	7.5	7.5
SK50-GR2-100	2	31	53	100	12.5	12.5
SK50-GR3-142	3	48	78	142	22	22

Shrink Fit Chuck

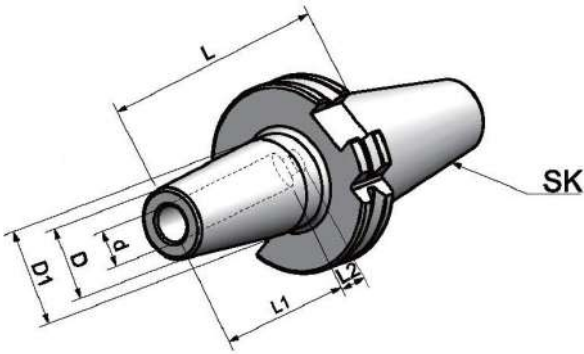
DIN 69871



0.003 mm

G6.3/25000 RPM

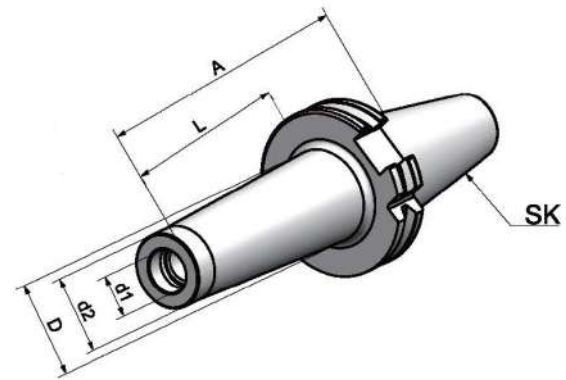
Model	d	D	D1	L	L1	L2
SK30-SF3-80	3	15	20	80	10	-
SK30-SF4-80	4	15	20	80	20	5
SK30-SF5-80	5	15	20	80	20	5
SK30-SF6-80	6	20	27	80	36	10
SK30-SF8-80	8	20	27	80	36	10
SK30-SF10-90	10	24	32	90	41	10
SK30-SF12-90	12	24	32	90	41	10
SK30-SF14-90	14	27	34	90	47	10
SK30-SF16-90	16	27	34	90	50	10
SK30-SF18-90	18	33	42	90	50	10
SK30-SF20-90	20	33	42	90	52	10
SK40-SF3-80	3	15	20	80	10	-
SK40-SF4-80	4	15	20	80	20	5
SK40-SF5-80	5	15	20	80	20	5
SK40-SF6-90	6	20	27	90	36	10
SK40-SF8-90	8	20	27	90	36	10
SK40-SF10-90	10	24	32	90	41	10
SK40-SF12-90	12	24	32	90	47	10
SK40-SF14-90	14	27	34	90	47	10
SK40-SF16-90	16	27	34	90	50	10
SK40-SF18-90	18	33	42	90	50	10
SK40-SF20-90	20	33	42	90	52	10
SK40-SF25-100	25	44	53	100	58	10
SK40-SF32-100	32	44	53	100	62	10



0.003 mm

G6.3/25000 RPM

Size	d	L	D	D1	L1	L2
SK50-SF3-80	3	80	15	20	10	-
SK50-SF4-80	4	80	15	20	20	5
SK50-SF5-80	5	80	15	20	20	5
SK50-SF6-80	6	80	20	27	36	10
SK50-SF8-80	8	80	20	27	36	10
SK50-SF10-80	10	80	24	32	41	10
SK50-SF12-80	12	80	24	32	47	10
SK50-SF14-80	14	80	27	34	47	10
SK50-SF16-80	16	80	27	34	50	10
SK50-SF18-80	18	80	33	42	50	10
SK50-SF20-80	20	80	33	42	52	10
SK50-SF25-100	25	100	44	53	58	10
SK50-SF32-100	32	100	44	53	62	10

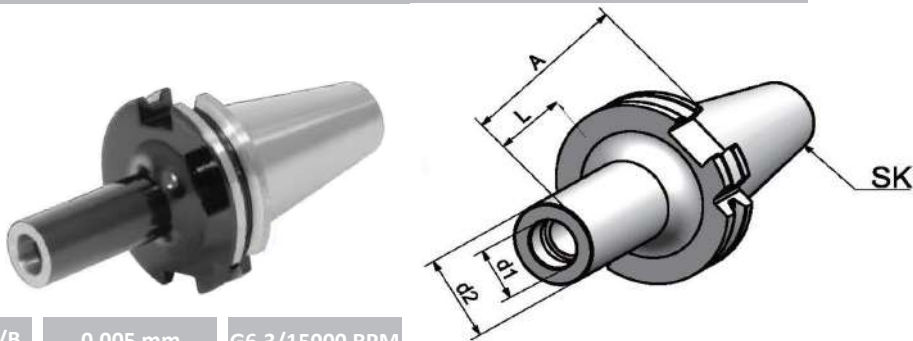


From AD; AD/B

0.005 mm

G6.3/15000 RPM

Size	M	d1	d2	A	L	D
SK40-SOM044	M08	8.5	13	44	25	15
SK40-SOM08-69	M08	8.5	13	69	50	23
SK40-SOM08-94	M08	8.5	13	94	75	23
SK40-SOM08-119	M08	8.5	13	119	100	25
SK40-SOM10-24	M10	10.5	18	24	5	18
SK40-SOM10-44	M10	10.5	18	44	25	20
SK40-SOM10-69	M10	10.5	18	69	50	23
SK40-SOM10-94	M10	10.5	18	94	75	28
SK40-SOM10-119	M10	10.5	18	119	100	32
SK40-SOM10-169	M10	10.5	18	169	150	36.5
SK40-SOM12-24	M12	12.5	21	24	5	21
SK40-SOM12-44	M12	12.5	21	44	25	21
SK40-SOM12-69	M12	12.5	21	69	50	24
SK40-SOM12-94	M12	12.5	21	94	75	31
SK40-SOM12-119	M12	12.5	21	119	100	33
SK40-SOM12-144	M12	12.5	21	144	125	36
SK40-SOM12-169	M12	12.5	21	169	150	40
SK40-SOM16-24	M16	17	29	24	5	29
SK40-SOM16-44	M16	17	29	44	25	29
SK40-SOM16-69	M16	17	29	69	50	34
SK40-SOM16-94	M16	17	29	94	75	34
SK40-SOM16-119	M16	17	29	119	100	36
SK40-SOM16-144	M16	17	29	144	125	40
SK40-SOM16-169	M16	17	29	169	150	42.5
SK50-SOM08-69	M08	8.5	13	69	50	23
SK50-SOM08-119	M08	8.5	13	119	100	25
SK50-SOM08-169	M08	8.5	13	169	150	30
SK50-SOM10-69	M10	10.5	18	69	50	23
SK50-SOM10-119	M10	10.5	18	119	100	32
SK50-SOM10-169	M10	10.5	18	169	150	36.5
SK50-SOM12-69	M12	12.5	21	69	50	24
SK50-SOM12-119	M12	12.5	21	119	100	33
SK50-SOM12-169	M12	12.5	21	169	150	40
SK50-SOM16-69	M16	17	29	69	50	34
SK50-SOM16-119	M16	17	29	119	100	36
SK50-SOM16-169	M16	17	29	169	150	42.5

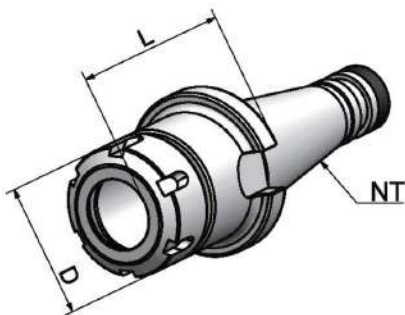


From AD; AD/B

0.005 mm

G6.3/15000 RPM

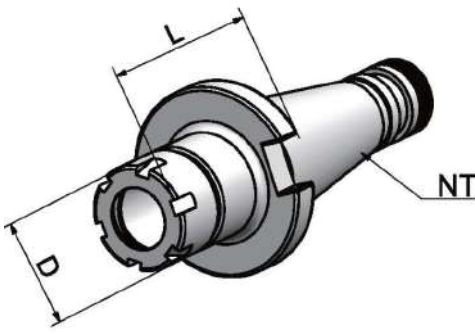
Size	M	d1	d2	A	L
SK40-M10-102	M10	10.5	18	102	75
SK40-M10-127	M10	10.5	18	127	100
SK40-M10-177	M10	10.5	18	177	150
SK40-M12-108	M12	12.5	21	108	75
SK40-M12-127	M12	12.5	21	127	100
SK40-M12-152	M12	12.5	21	152	125
SK40-M12-177	M12	12.5	21	177	150
SK40-M16-102	M16	17	29	102	75
SK40-M16-127	M16	17	29	127	100
SK40-M16-152	M16	17	29	152	125
SK40-M16-177	M16	17	29	177	150
SK50-M10-138	M10	10.5	18	138	100
SK50-M10-188	M10	10.5	18	188	150
SK50-M21-138	M12	12.5	21	138	100
SK50-M21-188	M12	12.5	21	188	150
SK50-M17-138	M16	17	29	138	100
SK50-M17-188	M16	17	29	188	150



From AD 0.003 mm

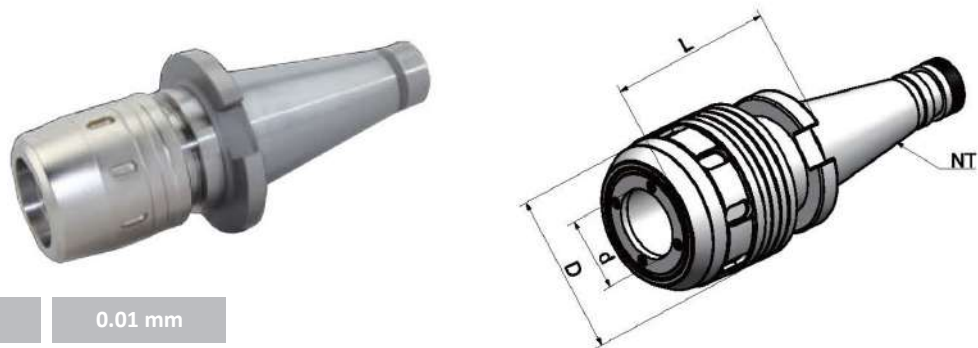
3

Size	Capacity	D	L		
NT30-ER16-60	1-10 (ER 16)	28	60	ER 16A	ER 16A
NT30-ER20-60	1-13 (ER 20)	35	60	ER 20A	ER 20A
NT30-ER25-60	2-16 (ER 25)	42	60	ER 25UM	ER 25UM
NT30-ER32-60	2-20 (ER 32)	50	60	ER 32UM	ER 32UM
NT30-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
NT30-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
NT30-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
NT30-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
NT30-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
NT40-ER16-63	1-10 (ER 16)	28	63	ER 16A	ER 16A
NT40-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
NT40-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
NT40-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
NT40-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
NT40-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
NT40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
NT40-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
NT40-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
NT40-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
NT40-ER16-150	1-10 (ER 16)	28	150	ER 16A	ER 16A
NT40-ER20-150	1-13 (ER 20)	35	150	ER 20A	ER 20A
NT40-ER25-150	2-16 (ER 25)	42	150	ER 25UM	ER 25UM
NT40-ER32-150	2-20 (ER 32)	50	150	ER 32UM	ER 32UM
NT40-ER40-150	3-26 (ER 40)	63	150	ER 40UM	ER 40UM
NT40-ER16-200	1-10 (ER 16)	28	200	ER 16A	ER 16A
NT40-ER20-200	1-13 (ER 20)	35	200	ER 20A	ER 20A
NT40-ER25-200	2-16 (ER 25)	42	200	ER 25UM	ER 25UM
NT40-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
NT40-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
NT50-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
NT50-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
NT50-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
NT50-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
NT50-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
NT50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
NT50-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
NT50-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
NT50-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
NT50-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
NT50-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
NT50-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
NT50-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
NT50-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
NT50-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
NT50-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
NT50-ER25-200	1-13 (ER 25)	42	200	ER 25UM	ER 25UM
NT50-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
NT50-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
NT50-ER32-300	2-20 (ER 32)	50	300	ER 32UM	ER 32UM
NT50-ER40-300	3-26 (ER 40)	63	300	ER 40UM	ER 40UM



From AD 0.003 mm

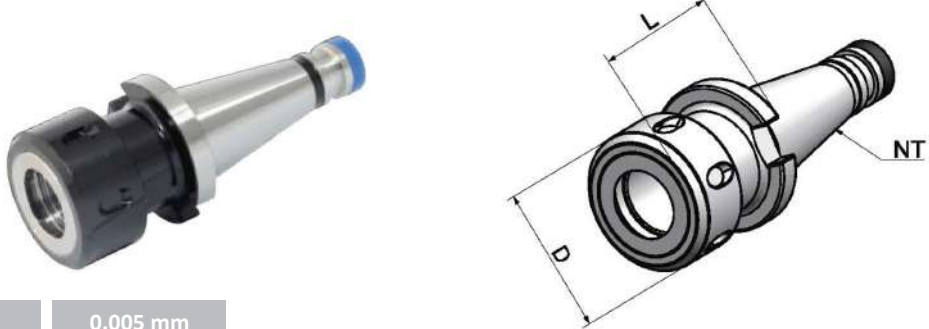
Size	Capacity	D	L	
NT30-ER16M-60	1-10 (ER 16)	28	60	ER 16M
NT30-ER20M-60	1-13 (ER 20)	35	60	ER 20M
NT30-ER25M-60	2-16 (ER 25)	42	60	ER 25M
NT30-ER32M-60	2-20 (ER 32)	50	60	ER 32M
NT30-ER40M-70	3-26 (ER 40)	63	70	ER 40M
NT40-ER11M-70	1-7 (ER 11)	16	70	ER 11M
NT40-ER16M-70	1-10 (ER 16)	22	70	ER 16M
NT40-ER20M-70	1-13 (ER 20)	28	70	ER 20M
NT40-ER25M-70	2-16 (ER 25)	35	70	ER 25M
NT40-ER11M-100	1-7 (ER 11)	16	100	ER 11M
NT40-ER16M-100	1-10 (ER 16)	22	100	ER 16M
NT40-ER20M-100	1-13 (ER 20)	28	100	ER 20M
NT40-ER25M-100	2-16 (ER 25)	35	100	ER 25M
NT40-ER11M-150	1-7 (ER 11)	16	150	ER 11M
NT40-ER16M-150	1-10 (ER 16)	22	150	ER 16M
NT40-ER20M-150	1-13 (ER 20)	28	150	ER 20M
NT40-ER25M-150	2-16 (ER 25)	35	150	ER 25M
NT50-ER16M-100	1-10 (ER 16)	22	100	ER 16M
NT50-ER20M-100	1-13 (ER 20)	28	100	ER 20M
NT50-ER25M-100	2-16 (ER 25)	35	100	ER 25M
NT50-ER16M-150	1-10 (ER 16)	22	150	ER 16M
NT50-ER20M-150	1-13 (ER 20)	28	150	ER 20M
NT50-ER25M-150	2-16 (ER 25)	35	150	ER 25M
NT50-ER16M-200	1-10 (ER 16)	22	200	ER 16M
NT50-ER20M-200	1-13 (ER 20)	28	200	ER 20M
NT50-ER25M-200	2-16 (ER 25)	35	200	ER 25M



From AD

0.01 mm

Model	Capacity	M	d	D	L	
NT40-SC25-90	3-25 (SC 25)	M16	25	50	90	SC 25UM
NT40-SC32-90	3-32 (SC 32)	M16	32	59	90	SC 32UM
NT40-SC32-105	3-32 (SC 32)	M16	32	70	105	SC 32UM
NT50-SC25-85	3-25 (SC 25)	M24	25	59	85	SC 25UM
NT50-SC32-90	3-32 (SC 32)	M24	32	70	90	SC 32UM
NT50-SC42-95	3-42 (SC 42)	M24	42	99	85	SC 42UM
NT50-SC25-150	3-25 (SC 25)	M24	25	59	150	SC 25UM
NT50-SC32-150	3-32 (SC 32)	M24	32	70	150	SC 32UM
NT50-SC42-150	3-42 (SC 42)	M24	42	99	150	SC 42UM



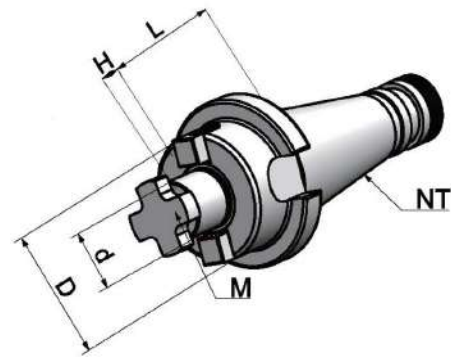
From AD

0.005 mm

Size	Capacity	D	L		
NT30-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
NT30-OZ25-80	3-25 (OZ 25)	60	80	OZ 25UM	OZ 25UM
NT40-OZ16-70	3-16 (OZ 16)	43	70	OZ 16A	OZ 16A
NT40-OZ25-70	3-25 (OZ 25)	60	70	OZ 25UM	OZ 25UM
NT40-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM
NT50-OZ25-85	3-25 (OZ 25)	60	85	OZ 25UM	OZ 25UM
NT50-OZ32-90	6-32 (OZ 32)	72	90	OZ 32UM	OZ 32UM

Face Mill Holder Inch

DIN 2080



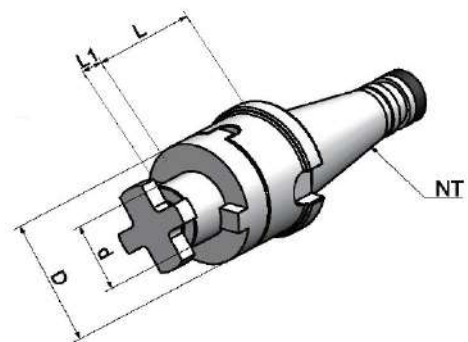
From AD; AD/B

0.005 mm

Model	d	L	D	H	M	
NT30-FMB16-30	16	30	38	17	M8	KL-16
NT30-FMB22-30	22	30	48	19	M10	KL-22
NT30-FMB27-45	27	45	58	21	M12	KL-27
NT30-FMB32-50	32	50	78	24	M16	KL-32
NT40-FMB16-30	16	30	38	17	M8	KL-16
NT40-FMB22-30	22	30	48	19	M10	KL-22
NT40-FMB27-30	27	30	58	21	M12	KL-27
NT40-FMB32-30	32	30	78	24	M16	KL-32
NT40-FMB40-30	40	30	88	27	M16	KL-40
NT50-FMB16-30	16	30	38	17	M8	KL-16
NT50-FMB22-35	22	35	48	19	M10	KL-22
NT50-FMB27-35	27	35	58	21	M12	KL-27
NT50-FMB32-40	32	40	78	24	M16	KL-32
NT50-FMB40-40	40	40	88	27	M16	KL-40

Face Mill Holder DIN6357

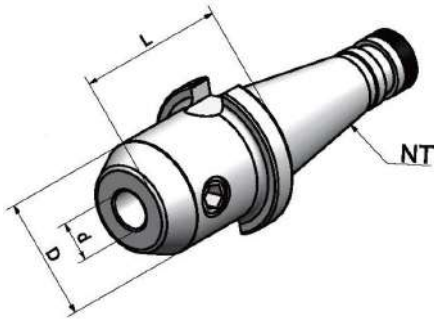
DIN 2080



From AD/B

0.005 mm

Model	d	D	L	L1	
NT30-SEMC16-35	16	32	35	17	KL-16
NT30-SEMC22-35	22	40	35	19	KL-22
NT30-SEMC27-35	27	48	35	21	KL-27
NT30-SEMC32-50	32	58	50	24	KL-27
NT40-SEMC16-52	16	32	52	17	KL-16
NT40-SEMC22-52	22	40	52	19	KL-22
NT40-SEMC27-52	27	48	52	21	KL-27
NT40-SEMC32-52	32	58	52	24	KL-32
NT40-SEMC40-52	40	70	52	27	KL-40
NT50-SEMC16-55	16	32	55	17	KL-16
NT50-SEMC22-55	22	40	55	19	KL-22
NT50-SEMC27-55	27	48	55	21	KL-27
NT50-SEMC32-55	32	58	55	24	KL-32
NT50-SEMC40-55	40	70	55	27	KL-40



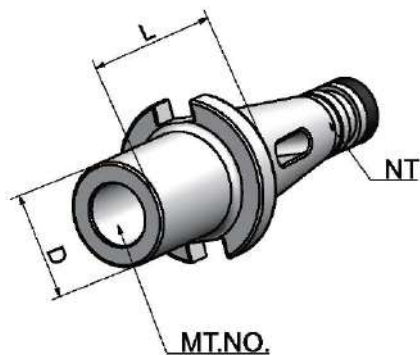
From AD

0.005 mm

Size	d	D	L
NT30-SLA06-40	6	25	40
NT30-SLA08-40	8	28	40
NT30-SLA10-63	10	35	63
NT30-SLA12-63	12	42	63
NT30-SLA16-63	16	48	63
NT30-SLA18-63	18	50	63
NT30-SLA20-63	20	52	63
NT40-SLA06-50	6	25	50
NT40-SLA08-50	8	28	50
NT40-SLA10-50	10	35	50
NT40-SLA12-50	12	42	50
NT40-SLA14-50	14	44	50
NT40-SLA16-63	16	48	63
NT40-SLA18-63	18	50	63
NT40-SLA20-63	20	52	63
NT40-SLA25-90	25	65	90
NT40-SLA32-100	32	72	100
NT40-SLA40-120	42	80	120
NT50-SLA6-63	6	25	63
NT50-SLA8-63	8	28	63
NT50-SLA10-63	10	35	63
NT50-SLA12-63	12	42	63
NT50-SLA14-63	14	44	63
NT50-SLA16-63	16	48	63
NT50-SLA18-63	18	50	63
NT50-SLA20-63	20	52	63
NT50-SLA25-80	25	65	80
NT50-SLA32-80	32	72	80
NT50-SLA40-90	40	80	90

Morse Taper Adapter with Tang DIN6383

DIN 2080



From AD

0.005 mm

Size	MT. NO.	D	L
NT30-MTA1-45	1	25	45
NT30-MTA2-60	2	32	60
NT30-MTA3-75	3	40	75
NT40-MTA1-50	1	25	50
NT40-MTA2-50	2	32	50
NT40-MTA3-70	3	40	70
NT40-MTA4-95	4	48	95
NT50-MTA1-45	1	25	45
NT50-MTA2-60	2	32	60
NT50-MTA3-65	3	40	65
NT50-MTA4-95	4	48	95
NT50-MTA5-120	5	63	120

Morse Taper Adapter with Drawbar DIN6364

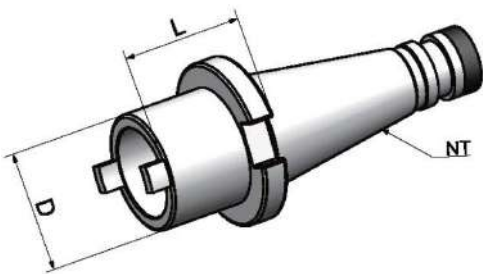
DIN 2080



From A

0.005 mm

Size	MT. NO.	D	L	M
NT30-MTB1-45	1	25	45	M6
NT30-MTB2-60	2	32	60	M10
NT30-MTB3-70	3	40	70	M12
NT40-MTB1-45	1	25	45	M6
NT40-MTB2-60	2	32	60	M10
NT40-MTB3-70	3	40	70	M12
NT40-MTB4-95	4	48	95	M16
NT50-MTB1-45	1	25	45	M6
NT50-MTB2-60	2	32	60	M10
NT50-MTB3-65	3	40	65	M12
NT50-MTB4-70	4	48	70	M16
NT50-MTB5-120	5	63	120	M20



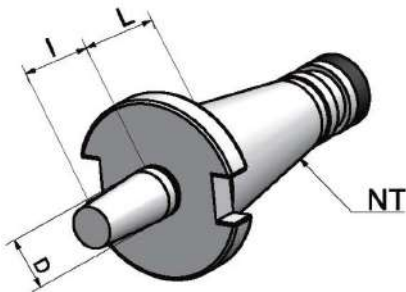
From A

0.005 mm

3

Size	D	L
NT40-BT30-50	51	50
NT40-BT40-100	63	100
NT50-BT40-50	63	50
NT50-BT50-125	97	125

Drill Chuck Adapter DIN238



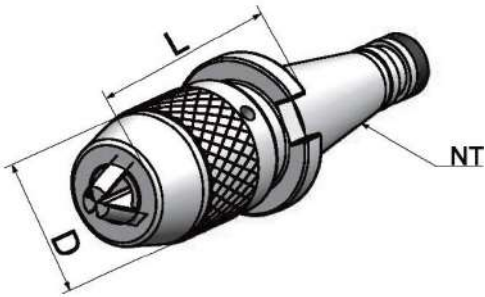
From A

0.005 mm

Size	D	L	I
NT30-B12	B12	15	18.5
NT30-B16	B16	17	24
NT40-B12	B12	18	18.5
NT40-B16	B16	18	24
NT40-B18	B18	18	32
NT50-B16	B16	20	24
NT50-B18	B18	20	32

APU Drill Chuck Holder

DIN 2080



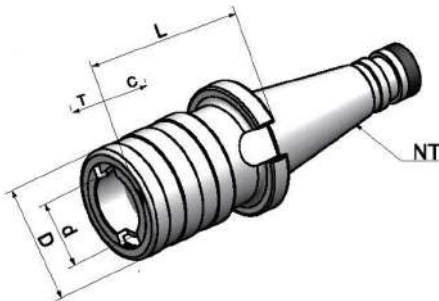
From A

0.08 mm

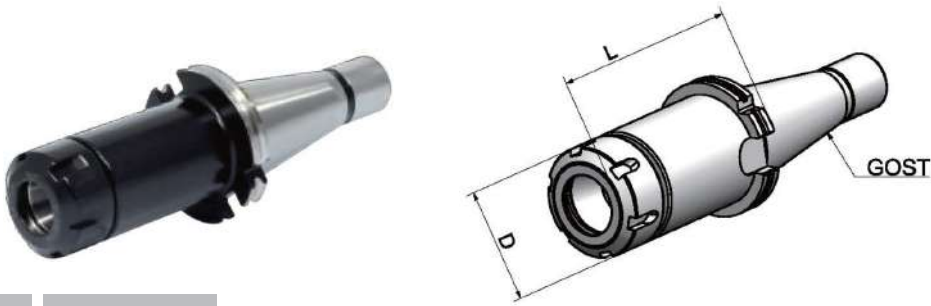
Size	Capacity	D	L	
NT30-APU08-80	1-8	38	80	90
NT30-APU13-100	1-13	48	100	110
NT40-APU08-85	1-8	38	85	95
NT40-APU13-110	1-13	48	110	120
NT40-APU16-130	3-16	53	130	141
NT50-APU08-95	1-8	38	90	105
NT50-APU13-120	1-13	48	120	130
NT50-APU16-130	3-16	53	130	141

Quick Change Chuck with Length Compensation

DIN 2080



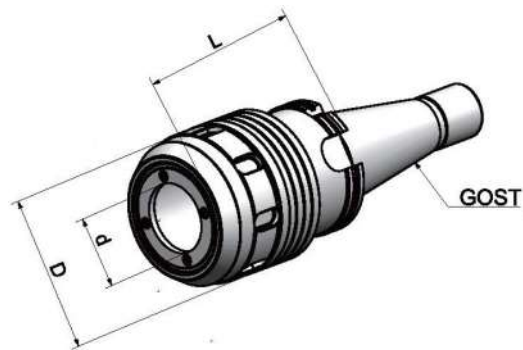
Size	Collet Size	d	D	L	T	C
NT30-GR1-55	1	19	36	55	7.5	7.5
NT30-GR2-86	2	31	53	86	12.5	12.5
NT30-GR1-55	1	19	36	55	7.5	7.5
NT30-GR2-86	2	31	53	86	12.5	12.5
NT40-GR3-132	3	48	78	132	22	22
NT50-GR1-62	1	19	36	62	7.5	7.5
NT50-GR2-90	2	31	53	90	12.5	12.5
NT50-GR3-117	3	48	78	117	22	22



From AD

0.003 mm

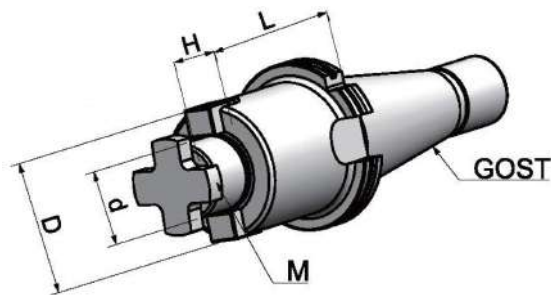
Size	Capacity	D	L		
ISO40-ER16-63	1-10 (ER 16)	28	63	ER 16A	ER 16A
ISO40-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
ISO40-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
ISO40-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
ISO40-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
ISO40-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
ISO40-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
ISO40-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
ISO40-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
ISO40-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
ISO40-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
ISO40-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
ISO40-ER16-200	1-10 (ER 16)	28	200	ER 16A	ER 16A
ISO40-ER20-200	1-13 (ER 20)	35	200	ER 20A	ER 20A
ISO40-ER25-200	2-16 (ER 25)	42	200	ER 25UM	ER 25UM
ISO40-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
ISO40-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
ISO50-ER16-80	1-10 (ER 16)	28	80	ER 16A	ER 16A
ISO50-ER25-80	2-16 (ER 25)	42	80	ER 25UM	ER 25UM
ISO50-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
ISO50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
ISO50-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
ISO40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
ISO50-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
ISO50-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
ISO50-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
ISO50-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
ISO40-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
ISO50-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
ISO50-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
ISO50-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
ISO50-ER25-200	1-13 (ER 25)	42	200	ER 25UM	ER 25UM
ISO50-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
ISO50-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
ISO50-ER32-300	2-20 (ER 32)	50	300	ER 32UM	ER 32UM
ISO50-ER40-300	3-26 (ER 40)	63	300	ER 40UM	ER 40UM



From AD	0.01 mm	G6.3/12000 RPM
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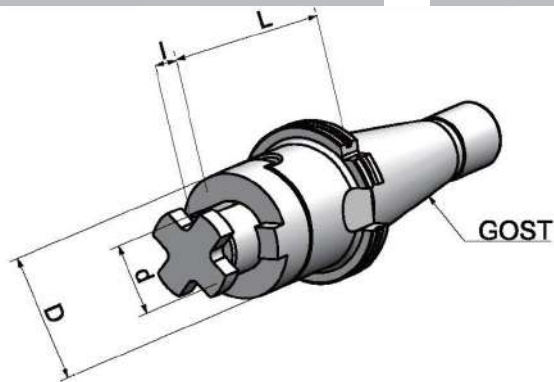
Size	Capacity	d	D	L		
ISO40-SC20-85	3-16 (SC 20)	20	50	85	HC 20UM	HC 20UM
ISO40-SC25-100	3-20 (SC 25)	25	59	100	HC 25UM	HC 25UM
ISO40-SC32-105	3-25 (SC 32)	32	70	105	HC 32UM	HC 32UM
ISO50-SC20-105	3-16 (SC 20)	20	50	105	HC 20UM	HC 20UM
ISO50-SC25-105	3-20 (SC 25)	25	59	105	HC 25UM	HC 25UM
ISO50-SC32-110	3-25 (SC 32)	32	70	110	HC 32UM	HC 32UM
ISO50-SC42-105	3-32 (SC 42)	42	99	105	HC 42UM	HC 42UM

Face Mill Holder DIN6357



From AD	0.005 mm	G6.3/12000 RPM
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Size	d	L	D	H	M	
ISO40-FMB16-45	16	45	38	17	M8	KL-16
ISO40-FMB22-45	22	45	48	19	M10	KL-22
ISO40-FMB27-40	27	40	58	21	M12	KL-27
ISO40-FMB32-55	32	55	78	24	M16	KL-32
ISO40-FMB40-55	40	55	88	27	M20	KL-40
ISO50-FMB16-40	16	40	38	17	M8	KL-16
ISO50-FMB22-45	22	45	48	19	M10	KL-22
ISO50-FMB27-45	27	45	58	21	M12	KL-27
ISO50-FMB32-50	32	50	78	24	M16	KL-32
ISO50-FMB40-55	40	55	88	27	M20	KL-40

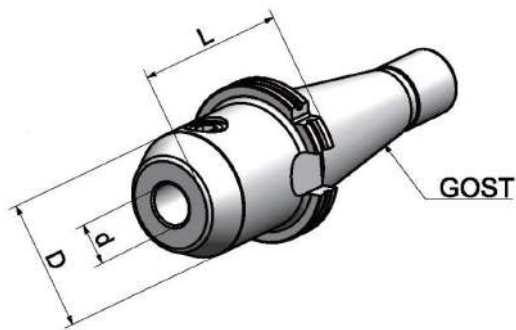


From AD

0.005 mm

G6.3/12000 RPM

Model	d	D	H	L	
ISO40-SEMC16-55	16	32	17	55	KL-16
ISO40-SEMC22-55	22	40	19	55	KL-22
ISO40-SEMC27-55	27	48	21	55	KL-27
ISO40-SEMC32-55	32	58	24	55	KL-32
ISO40-SEMC40-55	40	70	27	55	KL-40
ISO50-SEMC16-55	16	32	17	55	KL-16
ISO50-SEMC22-55	22	40	19	55	KL-22
ISO50-SEMC27-55	27	48	21	55	KL-27
ISO50-SEMC32-55	32	58	24	55	KL-32
ISO50-SEMC40-55	40	70	27	55	KL-40

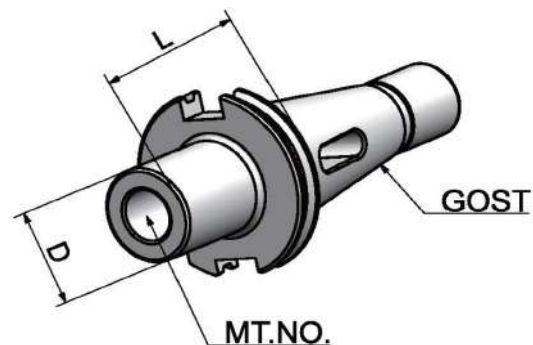


From AD

0.005 mm

G6.3/12000 RPM

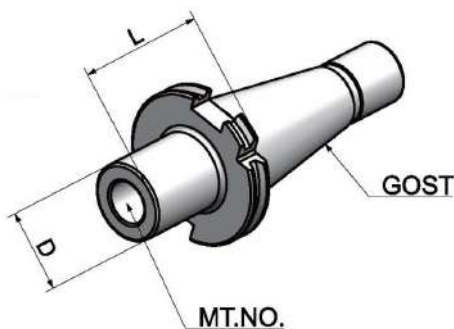
Size	d	D	L
ISO40-SLA06-50	6	25	50
ISO40-SLA08-50	8	28	50
ISO40-SLA10-50	10	35	50
ISO40-SLA12-50	12	42	50
ISO40-SLA14-50	14	44	50
ISO40-SLA16-63	16	48	63
ISO40-SLA18-63	18	50	63
ISO40-SLA20-63	20	52	63
ISO40-SLA25-90	25	65	90
ISO40-SLA32-100	32	72	100
ISO40-SLA40-120	40	80	120
ISO50-SLA6-63	6	25	63
ISO50-SLA8-63	8	28	63
ISO50-SLA10-63	10	35	63
ISO50-SLA12-63	12	42	80
ISO50-SLA14-63	14	44	80
ISO50-SLA16-63	16	48	80
ISO50-SLA18-63	18	50	80
ISO50-SLA20-63	20	52	80
ISO50-SLA25-80	25	65	100
ISO50-SLA32-100	32	72	100
ISO50-SLA40-100	40	80	100



From AD; AD/B 0.003 mm G6.3/12000 RPM

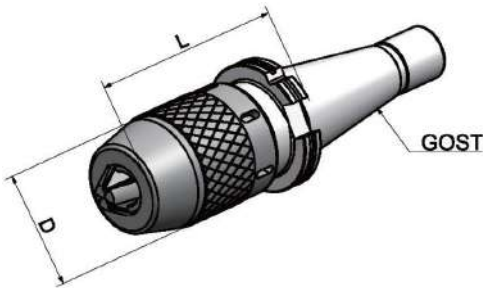
Size	MT. NO.	D	L
ISO40-MTA1-50	1	25	50
ISO40-MTA2-50	2	32	50
ISO40-MTA3-70	3	40	70
ISO40-MTA4-95	4	48	95
ISO50-MTA1-45	1	25	45
ISO50-MTA2-60	2	32	60
ISO50-MTA3-65	3	40	65
ISO50-MTA4-95	4	48	95
ISO50-MTA5-105	5	63	105

Morse Taper Adapter with Drawbar DIN6364



From A 0.005 mm G6.3/12000 RPM

Size	MT. NO.	D	L
ISO40-MTB1-50	1	28	50
ISO40-MTB2-50	2	32	50
ISO40-MTB3-70	3	40	70
ISO40-MTB4-95	4	48	95
ISO50-MTB1-45	1	25	45
ISO50-MTB2-60	2	32	60
ISO50-MTB3-65	3	40	65
ISO50-MTB4-95	4	48	95
ISO50-MTB5-105	5	63	105

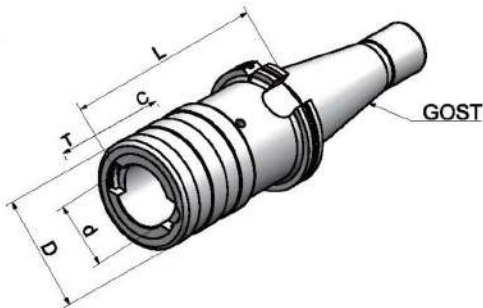


From AD

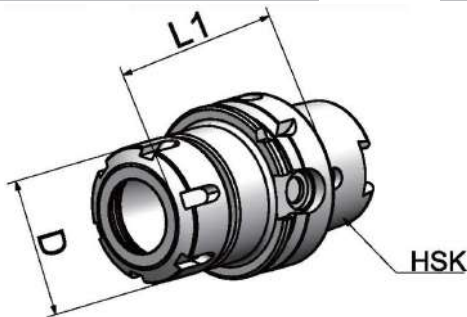
0.08 mm

Size	Capacity	D	L	I
ISO40-APU08-75	1-8 (APU 08)	36	75	85
ISO40-APU13-100	1-13 (APU 13)	48	100	110
ISO40-APU16-110	3-19 (APU 16)	53	110	120
ISO50-APU08-75	1-8 (APU 08)	38	75	85
ISO50-APU13-100	1-13 (APU 13)	48	100	110
ISO50-APU16-105	3-16 (APU 16)	53	105	115

Quick Change Tapping Chuck with Lenght Compensation



Size	Collet Size	d	D	L	T	C
ISO40-GR1-59	1	19	36	59	7.5	7.5
ISO40-GR2-97	2	31	53	97	12.5	12.5
ISO40-GR1-156	3	48	78	156	22	22
ISO50-GR1-63	1	19	38	63	7.5	7.5
ISO50-GR2-97	2	31	54	97	12.5	12.5
ISO50-GR3-140	3	48	78	140	22	22

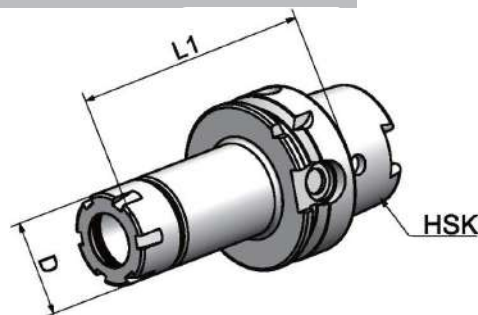


From AD; AD/B

0.003 mm

G2.5/25000 RPM

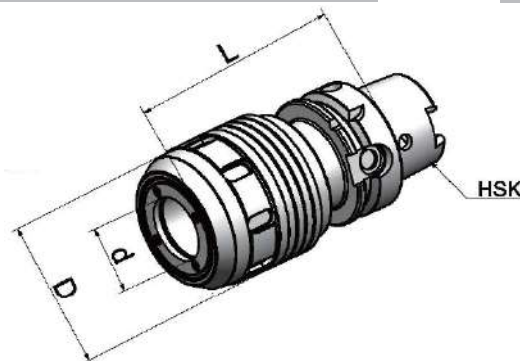
Model	Capacity	D	L		
HSK30-ER16-60	1-10 (ER 16)	28	60	ER 16A	ER 16A
HSK30-ER20-60	1-13 (ER 20)	35	60	ER 20A	ER 20A
HSK30-ER25-60	2-16 (ER 25)	42	60	ER 25UM	ER 25UM
HSK30-ER40-70	3-26 (ER 40)	63	70	ER 40UM	ER 40UM
HSK30-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
HSK30-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
HSK30-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
HSK30-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
HSK40-ER16-63	1-10 (ER 16)	28	63	ER 16A	ER 16A
HSK40-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
HSK40-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
HSK40-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
HSK40-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
HSK40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
HSK40-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
HSK40-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
HSK40-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
HSK40-ER16-150	1-10 (ER 16)	28	150	ER 16A	ER 16A
HSK40-ER20-150	1-13 (ER 20)	35	150	ER 20A	ER 20A
HSK40-ER25-150	2-16 (ER 25)	42	150	ER 25UM	ER 25UM
HSK40-ER32-150	2-20 (ER 32)	50	150	ER 32UM	ER 32UM
HSK40-ER40-150	3-26 (ER 40)	63	150	ER 40UM	ER 40UM
HSK40-ER16-200	1-10 (ER 16)	28	200	ER 16A	ER 16A
HSK40-ER20-200	1-13 (ER 20)	35	200	ER 20A	ER 20A
HSK40-ER25-200	2-16 (ER 25)	42	200	ER 25UM	ER 25UM
HSK40-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
HSK40-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
HSK50-ER16-70	1-10 (ER 16)	28	70	ER 16A	ER 16A
HSK50-ER20-70	1-13 (ER 20)	35	70	ER 20A	ER 20A
HSK50-ER25-70	2-16 (ER 25)	42	70	ER 25UM	ER 25UM
HSK50-ER32-70	2-20 (ER 32)	50	70	ER 32UM	ER 32UM
HSK50-ER40-80	3-26 (ER 40)	63	80	ER 40UM	ER 40UM
HSK50-ER16-100	1-10 (ER 16)	28	100	ER 16A	ER 16A
HSK40-ER20-100	1-13 (ER 20)	35	100	ER 20A	ER 20A
HSK50-ER25-100	2-16 (ER 25)	42	100	ER 25UM	ER 25UM
HSK50-ER32-100	2-20 (ER 32)	50	100	ER 32UM	ER 32UM
HSK50-ER40-100	3-26 (ER 40)	63	100	ER 40UM	ER 40UM
HSK50-ER16-160	1-10 (ER 16)	28	160	ER 16A	ER 16A
HSK40-ER20-160	1-13 (ER 20)	35	160	ER 20A	ER 20A
HSK50-ER25-160	2-16 (ER 25)	42	160	ER 25UM	ER 25UM
HSK50-ER32-160	2-20 (ER 32)	50	160	ER 32UM	ER 32UM
HSK50-ER40-160	3-26 (ER 40)	63	160	ER 40UM	ER 40UM
HSK50-ER25-200	1-13 (ER 25)	42	200	ER 25UM	ER 25UM
HSK50-ER32-200	2-20 (ER 32)	50	200	ER 32UM	ER 32UM
HSK50-ER40-200	3-26 (ER 40)	63	200	ER 40UM	ER 40UM
HSK50-ER32-300	2-20 (ER 32)	50	300	ER 32UM	ER 32UM
HSK50-ER40-300	3-26 (ER 40)	63	300	ER 40UM	ER 40UM



From AD/B	0.003 mm	G2.5/25000 RPM	CAD
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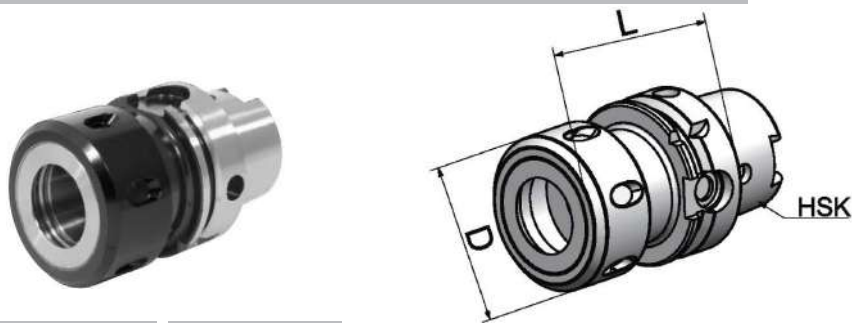
Model	Capacity	D	L1	
HSK32A-ER11M-50	1-7	16	50	ER 16M
HSK32A-ER16M-50	1-10	22	50	ER 20M
HSK40A-ER11M-40	1-7	16	40	ER 25M
HSK40A-ER16M-80	1-10	22	80	ER 32M
HSK50A-ER11M-60	1-7	16	60	ER 40M
HSK50A-ER16M-60	1-10	22	60	
				ER 11M
HSK63A-ER11M-100	1-7	16	100	ER 16M
HSK63A-ER16M-100	1-10	22	100	ER 20M
HSK63A-ER25M-100	2-16	35	100	ER 25M
HSK63A-ER11M-160	1-7	16	160	ER 11M
HSK63A-ER16M-160	1-10	22	160	ER 16M
HSK63A-ER25M-160	2-16	35	160	ER 20M
				ER 25M
HSK100A-ER16M-100	1-10	22	100	ER 11M
HSK100A-ER25M-100	2-16	35	100	ER 16M
HSK100A-ER16M-160	1-10	22	160	ER 20M
HSK100A-ER25M-160	2-16	35	160	ER 25M

Power Milling Chuck



From AD; AD/B	0.01 mm	G6.3/12000 RPM
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Size	Capacity	d	D	L		
HSK40-SC20-90	3-16 (SC 20)	20	50	90	HC 20UM	HC 20UM
HSK40-SC25-100	3-20 (SC 25)	25	59	100	HC 25UM	HC 25UM
HSK40-SC32-105	3-25 (SC 32)	32	70	105	HC 32UM	HC 32UM
HSK40-SC42-105	3-25 (SC 42)	42	99	105	HC 42UM	HC 42UM
HSK50-SC20-105	3-16 (SC 20)	20	50	105	HC 20UM	HC 20UM
HSK50-SC25-105	3-20 (SC 25)	25	59	105	HC 25UM	HC 25UM
HSK50-SC32-110	3-25 (SC 32)	32	70	110	HC 32UM	HC 32UM
HSK50-SC42-105	3-32 (SC 42)	42	99	105	HC 42UM	HC 42UM

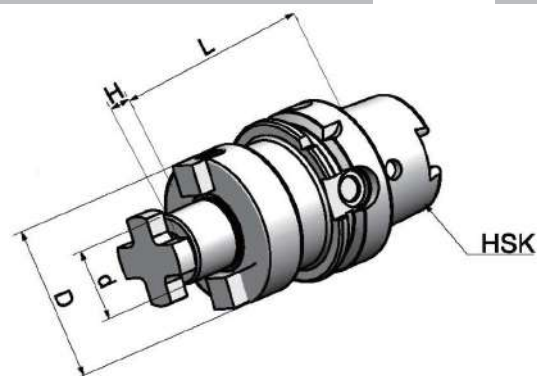


From AD; AD/B

0.005 mm

G6.3/12000 RPM

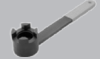
Size	Capacity	D	L		
HSK30-OZ16-90	2-16 (OZ 16)	43	90	OZ 16A	OZ 16A
HSK30-OZ25-110	2-25 (OZ 25)	60	110	OZ 25UM	OZ 25UM
HSK40-OZ16-100	2-16 (OZ 16)	43	100	OZ 16A	OZ 16A
HSK40-OZ25-100	2-25 (OZ 25)	60	100	OZ 25UM	OZ 25UM
HSK40-OZ32-120	3-32 (OZ 32)	72	120	OZ 32UM	OZ 32UM
HSK50-OZ25-110	2-16 (OZ 25)	43	110	OZ 16A	OZ 25UM
HSK50-OZ32-120	2-25 (OZ 25)	60	120	OZ 25UM	OZ 32UM
HSK50-OZ32-130	3-32 (OZ 32)	72	130	OZ 32UM	

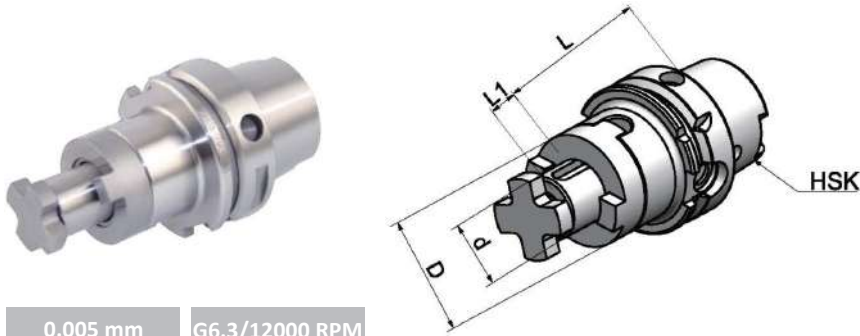


From AD; AD/B

0.005 mm

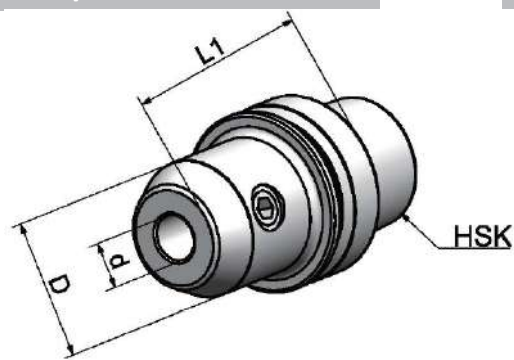
G6.3/12000 RPM

Size	d	D	H	L	
HSK32A-FMB16-45	16	38	17	45	KL-16
HSK32A-FMB22-50	22	48	19	50	KL-22
HSK40A-FMB22-50	22	48	19	50	KL-22
HSK40A-FMB27-55	27	58	21	55	KL-27
HSK40A-FMB32-60	32	78	24	60	KL-32
HSK50A-FMB16-50	16	38	17	50	KL-16
HSK50A-FMB22-60	22	48	19	60	KL-22
HSK50A-FMB27-60	27	58	21	60	KL-27
HSK50A-FMB32-60	32	78	24	60	KL-32
HSK63A-FMB16-50	16	38	17	50	KL-16
HSK63A-FMB22-50	22	48	19	50	KL-22
HSK63A-FMB27-60	27	58	21	60	KL-27
HSK63A-FMB32-60	32	78	24	60	KL-32
HSK63A-FMB40-60	40	88	27	60	KL-40
HSK63A-FMB16-100	16	38	17	100	KL-16
HSK63A-FMB22-100	22	48	19	100	KL-22
HSK63A-FMB27-100	27	58	21	100	KL-27
HSK63A-FMB32-100	32	78	24	100	KL-32
HSK63A-FMB40-100	40	88	27	100	KL-40
HSK80A-FMB22-50	22	48	19	50	KL-22
HSK80A-FMB27-50	27	58	21	50	KL-27
HSK80A-FMB32-60	32	78	24	60	KL-32
HSK80A-FMB40-60	40	88	27	60	KL-40
HSK100A-FMB22-50	22	48	19	50	KL-22
HSK100A-FMB27-50	27	58	21	50	KL-27
HSK100A-FMB32-60	32	78	24	60	KL-32
HSK100A-FMB40-60	40	88	27	60	KL-40
HSK100A-FMB60-70	60	138	25	70	KL-60



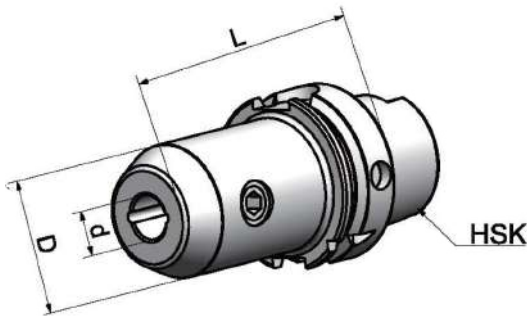
From AD/B 0.005 mm G6.3/12000 RPM

Model	d	D	H	L	
HSK32A-SEMC16-55	16	32	55	17	KL-16
HSK32A-SEMC22-55	22	40	55	19	KL-22
HSK32A-SEMC27-55	27	48	65	21	KL-27
HSK32A-SEMC32-55	32	58	65	24	KL-32
HSK40A-SEMC16-50	16	32	50	17	KL-16
HSK40A-SEMC22-50	22	40	50	19	KL-22
HSK40A-SEMC27-50	27	48	65	21	KL-27
HSK40A-SEMC32-50	32	58	65	24	KL-32
HSK50A-SEMC16-50	16	32	50	17	KL-16
HSK50A-SEMC22-50	22	40	50	19	KL-22
HSK50A-SEMC27-65	27	48	65	21	KL-27
HSK50A-SEMC32-65	32	58	65	24	KL-32
HSK63A-SEMC16-60	16	32	60	17	KL-16
HSK63A-SEMC22-60	22	40	60	19	KL-22
HSK63A-SEMC27-60	27	48	60	21	KL-27
HSK63A-SEMC32-60	32	58	60	24	KL-32
HSK63A-SEMC40-70	40	70	70	27	KL-40
HSK63A-SEMC16-100	16	32	100	17	KL-16
HSK63A-SEMC22-100	22	40	100	19	KL-22
HSK63A-SEMC27-100	27	48	100	21	KL-27
HSK63A-SEMC32-100	32	58	100	24	KL-32
HSK80A-SEMC16-60	16	32	60	17	KL-16
HSK80A-SEMC22-60	22	40	60	19	KL-22
HSK80A-SEMC27-60	27	48	60	21	KL-27
HSK80A-SEMC32-60	32	58	60	24	KL-32
HSK80A-SEMC40-70	40	70	70	27	KL-40
HSK100A-SEMC16-60	16	32	60	17	KL-16
HSK100A-SEMC22-60	22	40	60	19	KL-22
HSK100A-SEMC27-60	27	48	60	21	KL-27
HSK100A-SEMC32-60	32	58	60	24	KL-32
HSK100A-SEMC40-70	40	70	70	27	KL-40



From AD; AD/B 0.005 mm G6.3/12000 RPM

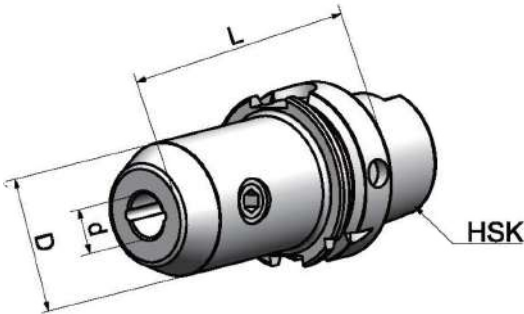
Size	d	D	L
HSK32A-SLA06-60	6	25	60
HSK32A-SLA08-60	8	28	60
HSK32A-SLA10-65	10	35	65
HSK32A-SLA12-70	12	42	70
HSK32A-SLA14-75	14	44	75
HSK32A-SLA16-75	16	48	75
HSK32A-SLA20-90	20	52	90
HSK40A-SLA06-60	6	25	60
HSK40A-SLA08-60	8	28	60
HSK40A-SLA10-60	10	35	60
HSK40A-SLA12-70	12	42	70
HSK40A-SLA14-75	14	44	75
HSK40A-SLA16-75	16	48	75
HSK40A-SLA18-85	18	50	85
HSK40A-SLA20-85	20	52	85
HSK40A-SLA25-95	25	60	95
HSK40A-SLA32-105	32	60	105
HSK50A-SLA06-65	6	25	65
HSK50A-SLA08-65	8	28	65
HSK50A-SLA10-65	10	35	65
HSK50A-SLA12-80	12	42	80
HSK50A-SLA14-80	14	44	80
HSK50A-SLA16-80	16	48	90
HSK50A-SLA18-80	18	50	80
HSK50A-SLA20-80	20	52	80
HSK50A-SLA25-110	25	60	110
HSK50A-SLA32-110	32	60	110



0.005 mm

G6.3/15000 RPM

Size	d	D	L
HSK63A-SLA06-65	6	25	65
HSK63A-SLA06-80	6	25	80
HSK63A-SLA06-65	8	28	65
HSK63A-SLA06-80	8	28	80
HSK63A-SLA06-65	10	35	65
HSK63A-SLA06-80	10	35	80
HSK63A-SLA06-80	12	42	80
HSK63A-SLA06-80	14	44	80
HSK63A-SLA06-100	14	44	100
HSK63A-SLA06-80	16	48	80
HSK63A-SLA06-100	16	48	100
HSK63A-SLA06-100	18	50	100
HSK63A-SLA06-80	20	52	80
HSK63A-SLA06-100	20	52	100
HSK63A-SLA06-110	25	65	110
HSK63A-SLA06-110	32	72	110
HSK63A-SLA06-125	40		125
HSK63A-SLA06-160	6	25	160
HSK63A-SLA08-160	8	28	160
HSK63A-SLA10-160	10	35	160
HSK63A-SLA12-160	12	42	160
HSK63A-SLA14-160	14	44	160
HSK63A-SLA16-160	16	48	160
HSK63A-SLA20-160	20	52	160
HSK63A-SLA20-160	20	52	160
HSK80A-SLA06-80	6	25	80
HSK80A-SLA08-80	8	28	80
HSK80A-SLA10-80	10	35	80
HSK80A-SLA12-80	12	42	80
HSK80A-SLA14-80	14	44	80
HSK80A-SLA16-80	16	48	100
HSK80A-SLA18-80	18	50	100
HSK80A-SLA20-80	20	52	100
HSK80A-SLA25-80	25	60	100
HSK80A-SLA32-80	32	60	110
HSK80A-SLA40-80	40	80	120
HSK100A-SLA08-80	8	28	80
HSK100A-SLA10-80	10	35	80
HSK100A-SLA12-80	12	42	80
HSK100A-SLA14-80	14	44	80
HSK100A-SLA16-80	14	44	80
HSK100A-SLA18-100	16	48	100
HSK100A-SLA20-100	20	52	100
HSK100A-SLA25-100	25	60	100
HSK100A-SLA32-100	32	60	100
HSK100A-SLA40-105	40	80	105

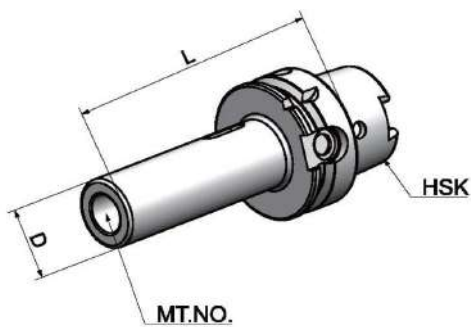


0.005 mm G6.3/15000 RPM

Size	d	D	L
HSK63A-SLA06-65K	6	25	65
HSK63A-SLA08-65K	8	28	65
HSK63A-SLA10-65K	10	35	65
HSK63A-SLA12-80K	12	42	80
HSK63A-SLA14-80K	14	44	80
HSK63A-SLA16-80K	16	48	80
HSK63A-SLA18-80K	18	50	80
HSK63A-SLA20-80K	20	52	80
HSK63A-SLA25-110K	25	65	110
HSK63A-SLA32-110K	32	75	110
HSK63A-SLA40-125K	40	80	125
HSK100A-SLA06-80K	6	25	80
HSK100A-SLA08-80K	8	28	80
HSK100A-SLA10-80K	10	35	80
HSK100A-SLA12-80K	12	42	80
HSK100A-SLA14-80K	14	44	80
HSK100A-SLA16-100K	16	48	100
HSK100A-SLA18-100K	18	50	100
HSK100A-SLA20-100K	20	52	100
HSK100A-SLA25-100K	25	65	100
HSK100A-SLA32-100K	32	72	100
HSK100A-SLA40-105K	40	80	105

Morse Taper Adapter with Tang DIN6383

DIN 69893

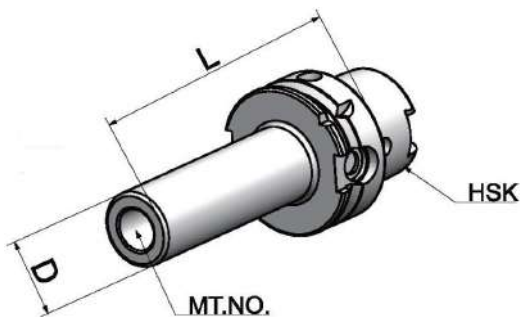


From AD; AD/B 0.003 mm G6.3/15000 RPM

Size	MT. NO.	D	L
HSK50A-MTA1-100	1	25	100
HSK50A-MTA2-120	2	32	120
HSK50A-MTA3-140	3	40	140
HSK63A-MTA1-100	1	25	100
HSK63A-MTA2-120	2	32	120
HSK63A-MTA3-140	3	40	140
HSK63A-MTA4-160	4	48	160
HSK80A-MTA1-100	1	25	100
HSK80A-MTA2-120	2	32	120
HSK80A-MTA3-140	3	40	140
HSK80A-MTA4-160	4	48	160
HSK100A-MTA1-110	1	25	110
HSK100A-MTA2-120	2	32	120
HSK100A-MTA3-150	3	40	150
HSK100A-MTA4-170	4	48	170
HSK100A-MTA5-200	5	63	200

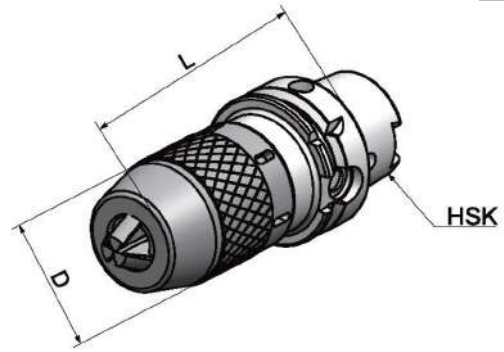
Morse Taper Adapter with Drawbar DIN6364

DIN 69893



From AD; AD/B 0.005 mm G6.3/12000 RPM

Size	MT. NO.	D	L
HSK50A-MTB1-100	1	25	100
HSK50A-MTB2-120	2	32	120
HSK50A-MTB3-140	3	40	140
HSK63A-MTB1-100	1	25	100
HSK63A-MTB2-120	2	32	120
HSK63A-MTB3-140	3	40	140
HSK63A-MTB4-160	4	48	160
HSK80A-MTB1-110	1	25	110
HSK80A-MTB1-120	2	32	120
HSK80A-MTB1-150	3	40	150
HSK80A-MTB1-170	4	48	170
HSK100A-MTB1-110	1	25	110
HSK100A-MTB1-120	2	32	120
HSK100A-MTB1-150	3	40	150
HSK100A-MTB1-170	4	48	170
HSK100A-MTB1-200	5	63	200

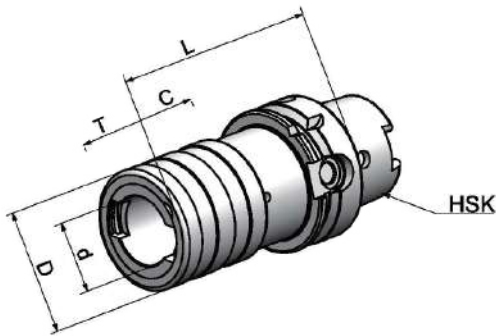


From AD; AD/B

0.003 mm

G6.3/12000 RPM

Size	Capacity	D	L	
HSK50A-APU08-90	1-8	38	90	95
HSK50A-APU08-120	1-8	38	120	130
HSK50A-APU13-116	1-13	48	116	126
HSK50A-APU16-116	3-16	53	116	126
HSK63A-APU08-85	1-8	38	85	95
HSK63A-APU08-120	1-8	38	120	130
HSK63A-APU13-150	1-13	48	150	160
HSK63A-APU13-104	1-13	48	104	114
HSK63A-APU16-106	3-16	53	106	116
HSK63A-APU16-155	3-16	53	155	165
HSK80A-APU13-109	1-13	48	109	119
HSK80A-APU16-114	3-16	53	114	124
HSK100A-APU13-155	1-13	48	155	165
HSK100A-APU16-160	3-16	53	160	170
HSK100A-APU13-107	1-13	48	107	117
HSK100A-APU16-112	3-16	53	112	122

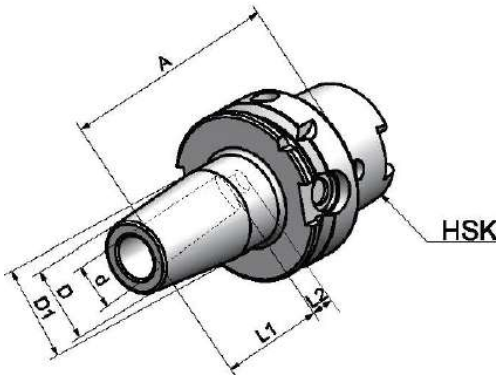


From AD; AD/B

0.003 mm

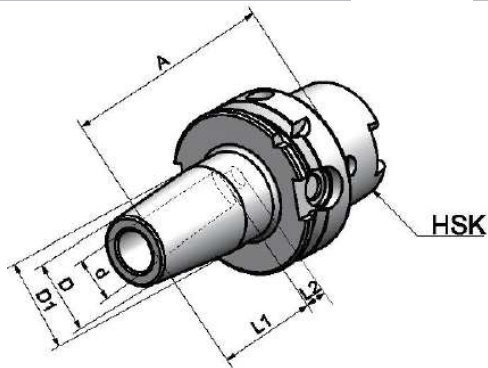
G6.3/12000 RPM

Model	Collet Size	d	D	L	T	C
HSK32A-TC312-80	1	19	36	80	7.5	7.5
HSK40A-TC312-80	1	19	36	80	7.5	7.5
HSK40A-TC820-103	2	31	53	103	12.5	12.5
HSK50-TC312-72	1	19	36	72	7.5	7.5
HSK50-TC820-110	2	31	53	110	12.5	12.5
HSK63-TC312-102	1	19	36	102	7.5	7.5
HSK63-TC820-102	2	31	53	140	12.5	12.5
HSK63A-TC1433-141	3	48	78	141	22	22
HSK80A-TC312-72	1	19	36	72	7.5	7.5
HSK80A-TC820-72	2	31	53	95	12.5	12.5
HSK80A-TC1433-141	3	48	78	141	22	22
HSK100-TC312-112	1	19	36	112	7.5	7.5
HSK100-TC820-148	2	31	53	148	12.5	12.5
HSK100A-TC1433-144	3	48	78	144	22	22



0.003 mm G6.3/12000 RPM

Model	d	A	D	D1	L1	L2
HSK32A-SF3-65	3	65	15	20	20	-
HSK32A-SF4-65	4	65	15	20	20	5
HSK32A-SF5-65	5	65	15	20	20	5
HSK32A-SF6-75	6	75	20	27	36	10
HSK32A-SF8-75	8	75	20	27	36	10
HSK32A-SF10-75	10	75	24	29	42	10
HSK32A-SF12-80	12	80	24	29	47	10
HSK40A-SF3-60	3	60	15	20	20	-
HSK40A-SF4-60	4	60	15	20	20	5
HSK40A-SF5-60	5	60	15	20	25	5
HSK40A-SF6-80	6	80	20	27	36	10
HSK40A-SF8-80	8	80	20	27	36	10
HSK40A-SF10-80	10	80	24	32	42	10
HSK40A-SF12-90	12	90	24	32	47	10
HSK40A-SF14-90	14	90	27	34	47	10
HSK40A-SF16-90	16	90	27	34	50	10
HSK50A-SF3-80	3	80	15	20	20	-
HSK50A-SF4-80	4	80	15	20	20	5
HSK50A-SF5-80	5	80	15	20	25	5
HSK50A-SF6-80	6	80	20	27	36	10
HSK50A-SF8-80	8	80	20	27	36	10
HSK50A-SF10-90	10	85	24	32	42	10
HSK50A-SF12-90	12	90	24	32	47	10
HSK50A-SF14-95	14	90	27	34	47	10
HSK50A-SF16-95	16	95	27	34	50	10
HSK50A-SF18-100	18	95	33	42	50	10
HSK50A-SF20-115	20	100	33	42	52	10
HSK63A-SF3-90	3	90	15	20	20	-
HSK63A-SF4-90	4	90	15	20	20	5
HSK63A-SF5-90	5	90	15	25	25	5
HSK63A-SF6-80	6	80	20	27	36	10
HSK63A-SF8-80	8	80	20	27	36	10
HSK63A-SF10-85	10	85	24	32	42	10
HSK63A-SF12-90	12	90	24	32	47	10
HSK63A-SF14-90	14	90	27	34	47	10
HSK63A-SF16-95	16	95	27	34	50	10
HSK63A-SF18-95	18	95	33	42	50	10
HSK63A-SF20-100	20	100	33	42	52	10
HSK63A-SF25-115	25	115	44	53	58	10
HSK63A-SF32-120	32	120	44	53	62	10

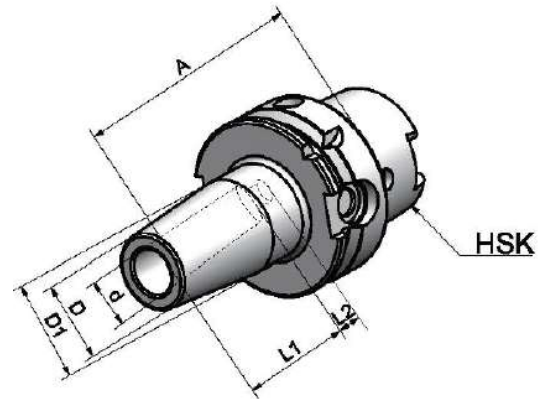


From AD; AD/B

0.003 mm

G6.3/12000 RPM

Model	d	A	D	D1	l1	l2
HSK80A-SF6-85	6	85	20	27	36	10
HSK80A-SF8-85	8	85	20	27	36	10
HSK80A-SF10-90	10	90	24	32	42	10
HSK80A-SF12-95	12	95	24	32	47	10
HSK80A-SF14-95	14	95	27	34	47	10
HSK80A-SF16-100	16	100	27	34	50	10
HSK80A-SF18-100	18	100	33	42	50	10
HSK80A-SF20-105	20	105	33	42	52	10
HSK80A-SF25-115	25	115	44	53	58	10
HSK80A-SF32-120	32	120	44	53	62	10
HSK100A-SF6-85	6	85	20	27	36	10
HSK100A-SF8-85	8	85	20	27	36	10
HSK100A-SF10-90	10	90	24	32	42	10
HSK100A-SF12-95	12	95	24	32	47	10
HSK100A-SF14-95	14	95	27	34	47	10
HSK100A-SF16-100	16	100	27	34	50	10
HSK100A-SF18-100	18	100	33	42	50	10
HSK100A-SF20-105	20	105	33	42	52	10
HSK100A-SF25-115	25	115	44	53	58	10
HSK100A-SF32-120	32	120	44	53	62	10

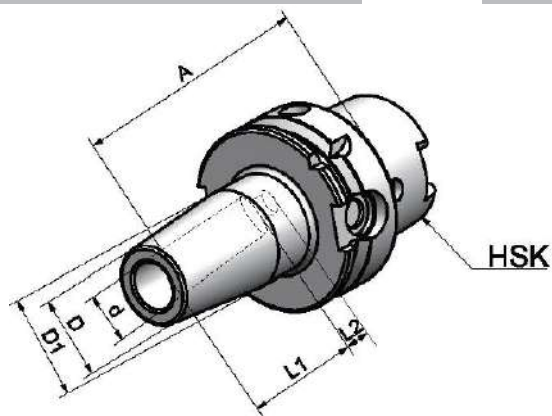


From AD; AD/B

0.003 mm

G6.3/12000 RPM

Model	d	D	D1	L	L1	L2
HSK25E-SF06-50	6	15	19	50	36	10
HSK32E-SF03-60	3	15	20	60	20	-
HSK32E-SF04-60	4	15	20	60	20	5
HSK32E-SF05-60	5	15	20	60	25	5
HSK32E-SF06-70	6	20	26	70	36	10
HSK32E-SF08-70	8	20	26	70	36	10
HSK32E-SF10-70	10	24	29	70	42	10
HSK32E-SF12-70	12	24	29	70	47	10
HSK40E-SF03-80	3	15	20	80	20	-
HSK40E-SF04-80	4	15	20	80	20	5
HSK40E-SF05-80	5	15	20	80	25	5
HSK40E-SF06-80	6	20	27	80	36	10
HSK40E-SF08-80	8	20	27	80	36	10
HSK40E-SF10-80	10	24	32	80	42	10
HSK40E-SF12-90	12	24	32	90	47	10
HSK40E-SF16-90	16	27	34	90	50	10
HSK50E-SF03-80	3	15	20	80	20	-
HSK50E-SF04-80	4	15	20	80	20	5
HSK50E-SF05-80	5	15	20	80	20	5
HSK50E-SF06-80	6	20	27	80	36	10
HSK50E-SF08-80	8	20	27	80	36	10
HSK50E-SF10-85	10	24	32	85	42	10
HSK50E-SF12-90	12	24	32	90	47	10
HSK50E-SF14-90	14	27	34	90	47	10
HSK50E-SF16-95	16	27	34	95	50	10
HSK50E-SF18-95	18	33	42	95	50	10
HSK50E-SF20-100	20	33	42	100	52	10
HSK63E-SF06-90	6	20	27	90	36	10
HSK63E-SF08-90	8	20	27	90	36	10
HSK63E-SF10-90	10	24	32	90	41	10
HSK63E-SF12-90	12	24	32	90	47	10
HSK63E-SF14-90	14	27	34	90	47	10
HSK63E-SF16-95	16	27	34	95	50	10
HSK63E-SF18-95	18	33	42	95	50	10
HSK63E-SF20-100	20	33	42	100	52	10



From AD; AD/B

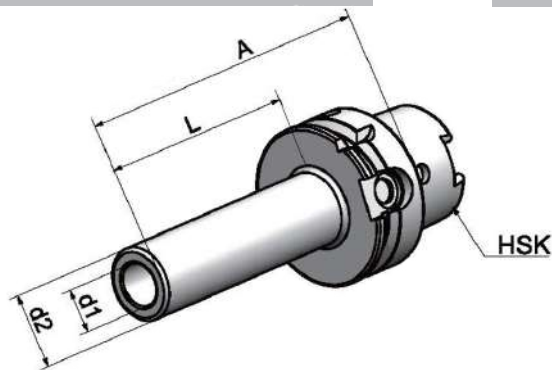
0.003 mm

G6.3/12000 RPM

Model	d	D	D1	L	L1	L2
HSK63F-SF03-90	3	15	20	90	20	-
HSK63F-SF04-90	4	15	20	90	20	5
HSK63F-SF05-90	5	15	20	90	25	5
HSK63F-SF06-90	6	20	27	90	36	10
HSK63F-SF08-90	8	20	27	90	36	10
HSK63F-SF10-90	10	24	32	85	42	10
HSK63F-SF12-90	12	24	32	90	47	10
HSK63F-SF14-95	14	27	34	95	47	10
HSK63F-SF16-95	16	27	34	95	50	10
HSK63F-SF18-95	18	33	42	95	50	10
HSK63F-SF20-100	20	33	42	100	52	10
HSK63F-SF25-115	25	36	42	115	58	10

Screw-in Milling Cutter Holder

DIN 69893

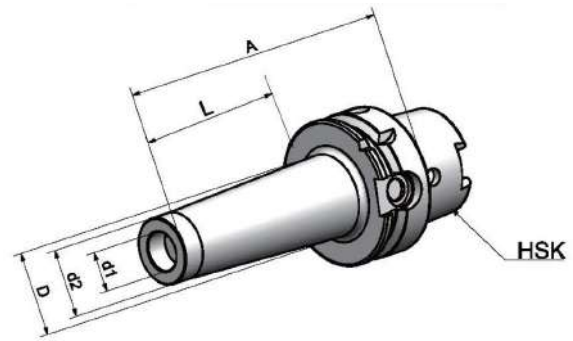


From AD; AD/B

0.003 mm

G6.3/12000 RPM

Size	M	d1	d2	A	L
HSK63A-M10-126	M10	10.5	18	126	100
HSK63A-M10-176	M10	10.5	18	176	150
HSK63A-M12-101	M12	12.5	21	101	75
HSK63A-M12-126	M12	12.5	21	126	100
HSK63A-M12-176	M12	12.5	21	176	150
HSK63A-M16-101	M16	17	29	101	75
HSK63A-M16-126	M16	17	29	126	100
HSK63A-M16-176	M16	17	29	176	150
HSK100A-M10-129	M10	10.5	18	129	100
HSK100A-M10-179	M10	10.5	18	179	150
HSK100A-M12-126	M12	12.5	21	126	100
HSK100A-M12-179	M12	12.5	21	179	150
HSK100A-M16-129	M16	17	29	129	100
HSK100A-M16-179	M16	17	29	179	150

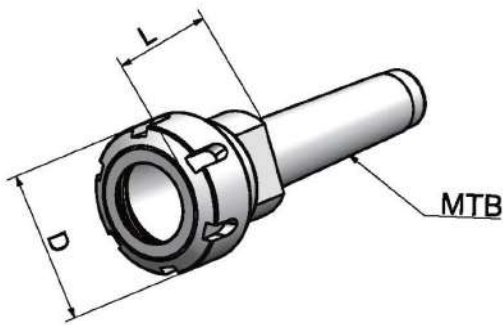


From AD; AD/B

0.003 mm

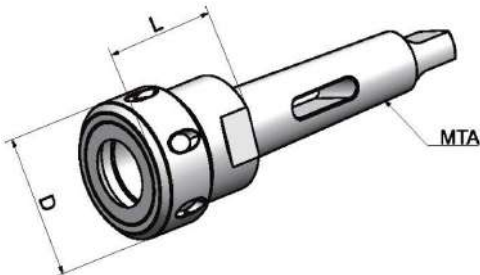
G6.3/12000 RPM

Model	M	d1	d2	A	L	D
HSK63A-SOM08-51	M08	8.5	13	51	25	15
HSK63A-SOM08-76	M08	8.5	13	76	50	23
HSK63A-SOM08-101	M08	8.5	13	101	75	23
HSK63A-SOM10-51	M10	10.5	18	51	25	20
HSK63A-SOM10-76	M10	10.5	18	76	50	23
HSK63A-SOM10-126	M10	10.5	18	126	100	32
HSK63A-SOM10-176	M10	10.5	18	176	150	36.5
HSK63A-SOM12-51	M12	12.5	21	51	25	24
HSK63A-SOM12-76	M12	12.5	21	76	50	34
HSK63A-SOM12-101	M12	12.5	21	101	75	31
HSK63A-SOM12-126	M12	12.5	21	126	100	33
HSK63A-SOM12-176	M12	12.5	21	176	150	40
HSK63A-SOM12-176	M16	17	29	51	25	29
HSK63A-SOM12-176	M16	17	29	76	50	34
HSK63A-SOM12-176	M16	17	29	101	75	34
HSK63A-SOM12-176	M16	17	29	126	100	36
HSK63A-SOM12-176	M16	17	29	176	150	42.5
HSK100A-SOM08-79	M08	8.5	13	79	50	23
HSK100A-SOM10-79	M10	10.5	18	79	50	23
HSK100A-SOM10-129	M10	10.5	18	129	10	32
HSK100A-SOM10-179	M10	10.5	18	179	150	36.5
HSK100A-SOM12-79	M12	12.5	21	79	50	24
HSK100A-SOM12-129	M12	12.5	21	129	100	33
HSK100A-SOM12-179	M12	12.5	21	179	150	40
HSK100A-SOM16-79	M16	17	29	79	50	34
HSK100A-SOM16-129	M16	17	29	129	100	36
HSK100A-SOM16-179	M16	17	29	179	150	42.5

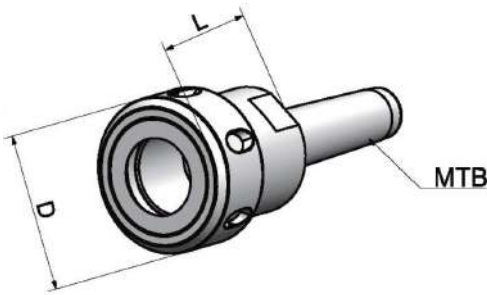


From AD	0.008 mm	CAD
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Model	Capacity	D	L
MTB1-ER11A-30	1-7 (ER 11A)	19	30
MTB1-ER11A-40	1-10 (ER 11A)	28	40
MTB2-ER16M-50	1-10 (ER 16M)	22	50
MTB2-ER20M-50	1-13 (ER 20M)	28	50
MTB2-ER11A-30	1-7 (ER 11M)	19	30
MTB2-ER16A-50	1-10 (ER 16M)	28	50
MTB2-ER20A-50	1-13 (ER 20M)	34	50
MTB2-ER25-47	2-16 (ER 25)	42	47
MTB2-ER32-60	2-20 (ER 32)	50	60
MTB2-ER32-75	2-20 (ER 32)	50	75
MTB2-ER40-80	3-26 (ER 40)	63	80
MTB3-ER16M-60	1-10 (ER 16M)	22	60
MTB3-ER20M-50	1-13 (ER 20M)	28	50
MTB3-ER16A-50	1-10 (ER 16M)	28	50
MTB3-ER20A-50	1-13 (ER 20A)	36	50
MTB3-ER25-56	2-16 (ER 25)	42	56
MTB3-ER32-60	2-20 (ER 32)	50	60
MTB3-ER40-80	3-26 (ER 40)	63	80
MTB4-ER25-60	2-16 (ER)	42	60
MTB4-ER32-60	2-20 (ER)	50	60
MTB4-ER40-80	3-26 (ER)	63	80
MTB4-ER50-80	6-34 (ER)	78	80
MTB5-ER40-80	3-26 (ER)	63	80
MTB5-ER50-80	6-34 (ER)	78	80

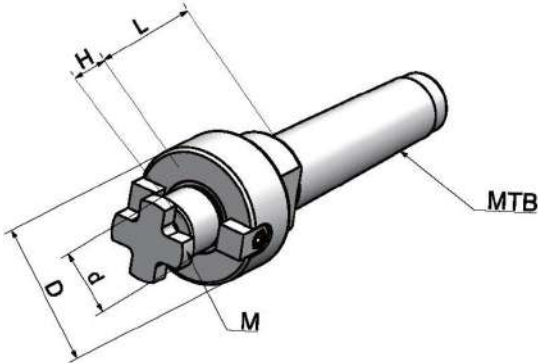


Model	Capacity	D	L
MTA2-OZ25-70	3-25 (OZ 25)	60	70
MTA3-OZ25-70	3-25 (OZ 25)	60	70
MTA4-OZ25-70	3-25 (OZ 25)	60	70

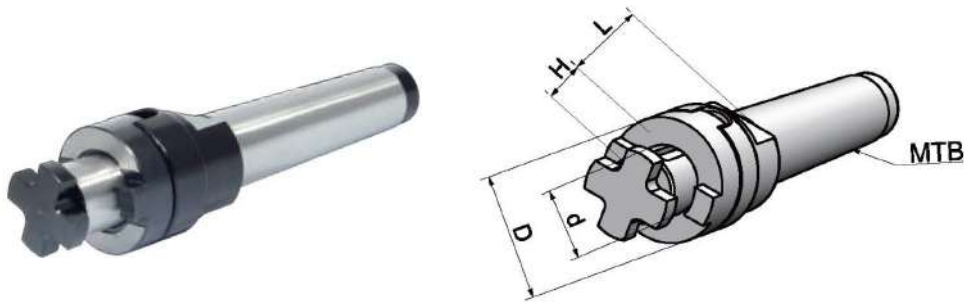


Model	Capacity	D	L
MTB2-OZ25-70	3-25 (OZ 25)	60	70
MTB3-OZ25-70	3-25 (OZ 25)	60	70
MTB4-OZ25-70	3-25 (OZ 25)	60	70
MTB4-OZ32-80	6-32 (OZ 32)	72	80
MTB5-OZ25-75	3-25 (OZ 25)	60	75
MTB5-OZ32-80	6-32 (OZ 32)	72	80

Face Mill Holder DIN6357

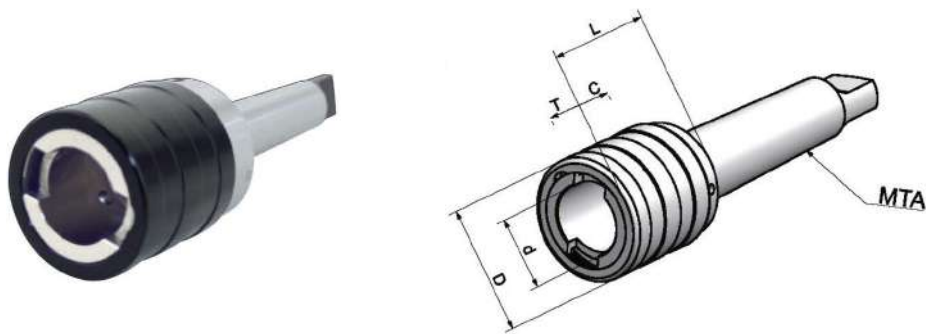


Model	d	D	L	H	M
MTB3-FMB16-48	16	38	48	17	M8
MTB3-FMB22-48	22	48	48	19	M10
MTB3-FMB27-48	27	58	48	21	M12
MTB3-FMB32-48	32	78	48	24	M16
MTB3-FMB40-48	40	88	48	27	M20
MTB4-FMB22-55	55	48	55	19	M10
MTB4-FMB27-55	27	58	55	21	M12
MTB4-FMB32-55	32	78	55	24	M16
MTB4-FMB40-55	40	88	55	27	M20

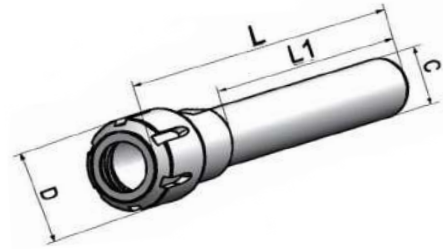


Model	d	D	L	H
MTB3-SEMC16-48	16	32	17	48
MTB3-SEMC22-48	22	40	19	48
MTB3-SEMC27-48	27	48	21	48
MTB3-SEMC32-48	32	58	24	48
MTB4-SEMC16-55	16	32	17	55
MTB4-SEMC22-55	22	40	19	55
MTB4-SEMC27-55	27	48	21	55
MTB4-SEMC32-55	32	58	24	55

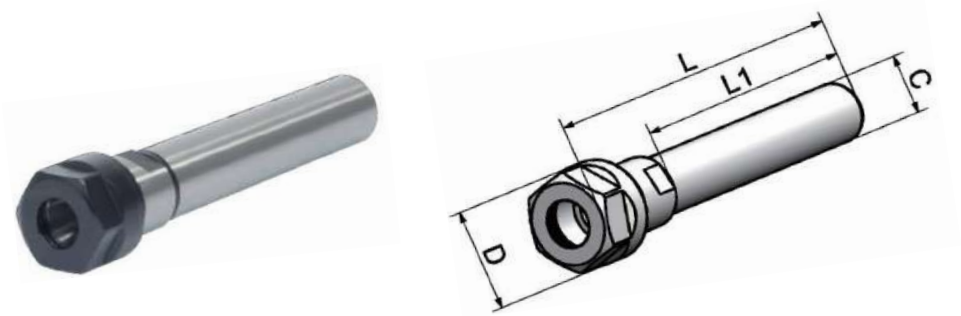
Quick Change Tapping Chuck with Length Compensation



Model	d	D	L	H	G	R
MTA2-GR1-46	1	36	19	46	7.5	7.5
MTA3-GR1-46	1	36	19	46	7.5	7.5
MTA3-GR2-68	2	53	31	68	12.5	12.5
MTA4-GR2-70	2	35	31	70	12.5	12.5
MTA4-GR3-108	3	78	48	108	22	22
MTA5-GR3-103	3	78	48	103	22	22

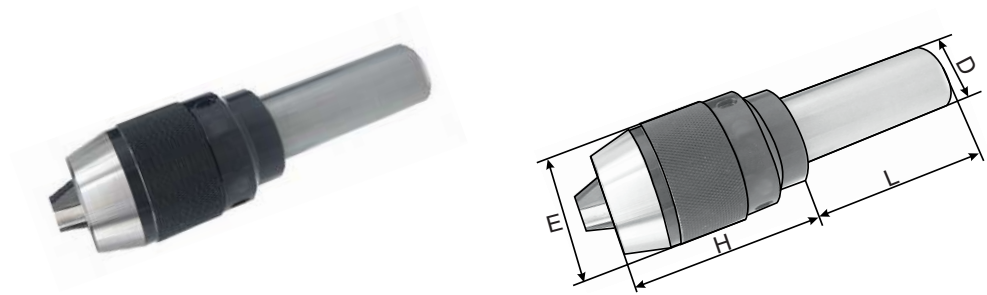


Model	C	D	L1	L
C8-ER8M-100	8	12	100	124.5
C10-ER8M-100	10	12	100	124.5
C10-ER8M-150	10	12	150	174.5
C12-ER11M-50	12	16	50	75
C12-ER11M-100	12	16	100	125
C12-ER11M-150	12	16	150	125
C16-ER11M-50	16	16	50	75
C16-ER11M-100	16	16	100	125
C16-ER11M-150	16	16	150	175
C16-ER11M-200	16	16	200	225
C16-ER16M-50	16	22	50	81
C16-ER16M-100	16	22	100	131
C16-ER16M-150	16	22	150	181
C16-ER16M-200	16	22	200	231
C20-ER16M-50	20	22	50	81
C20-ER16M-100	20	22	100	131
C20-ER16M-150	20	22	150	181
C20-ER16M-200	20	22	200	231
C20-ER20M-50	20	28	50	87
C20-ER20M-100	20	28	100	137
C20-ER20M-150	20	28	150	187
C20-ER20M-200	20	28	200	237
C25-ER16M-50	16	22	50	81
C25-ER16M-100	16	22	100	131
C25-ER16M-150	16	22	150	181
C25-ER16M-200	16	22	200	231
C25-ER20M-50	20	28	50	87
C25-ER20M-100	20	28	100	137
C25-ER20M-150	20	28	150	187
C25-ER20M-200	20	28	200	237

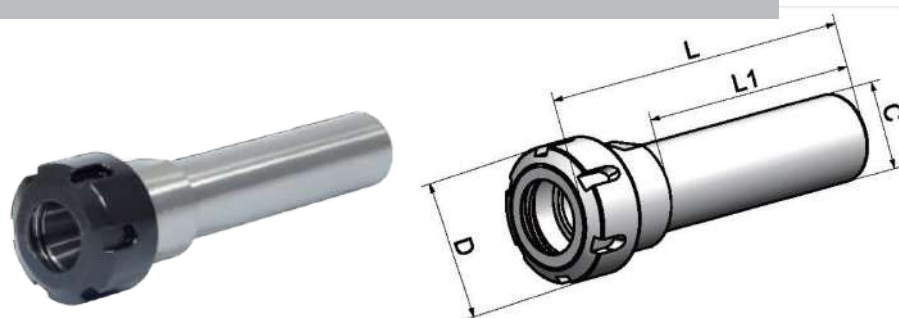


Model	C	D	L1	L
C10-ER8A-100	10	13.3	100	124.5
C10-ER11A-100	10	19	100	124
C12-ER8A-100	12	13.3	100	124.5
C12-ER11A-100	12	19	100	124
C16-ER11A-50	16	19	50	74
C16-ER11A-100	16	19	100	124
C16-ER11A-150	16	19	150	174
C16-ER16A-50	16	28	50	81
C16-ER16A-100	16	28	100	131
C16-ER16A-150	16	28	150	181
C20-ER16A-100	20	28	100	131
C20-ER16A-150	20	28	150	181
C20-ER20A-100	20	34	100	136.5
C20-ER20A-150	20	34	150	186.5
C20-ER25A-100	25	34	100	136,5
C20-ER25A-150	25	34	150	186.5
C25-ER16A-100	25	28	100	136.5
C25-ER16A-150	25	28	150	186.5
C25-ER20A-100	25	34	100	136.5
C25-ER20A-150	25	34	150	186.5
C25-ER25M-100	25	34	100	136.5

Collet chucks with straight shank for collets DIN 6499 (ISO 15488) ER-system

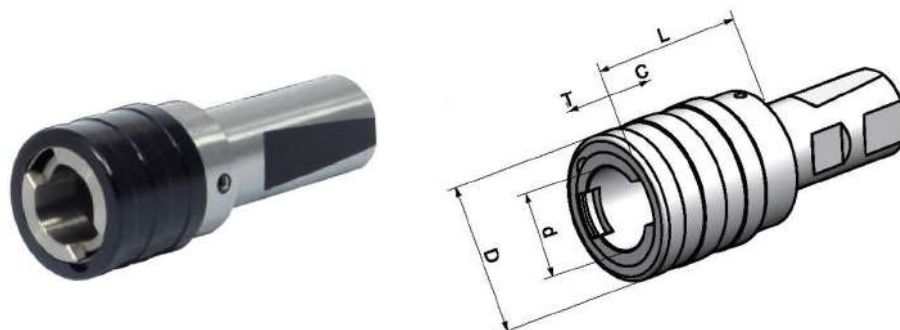


Model	Capacity	H	E	L
C20-APU13-90	1-13	81	50	90
C25-APU13-90	1-13	81	50	90
C32-APU13-90	1-13	81	50	90
C40-APU13-90	1-13	81	50	90
C40-APU16-90	3-16	85	57	90

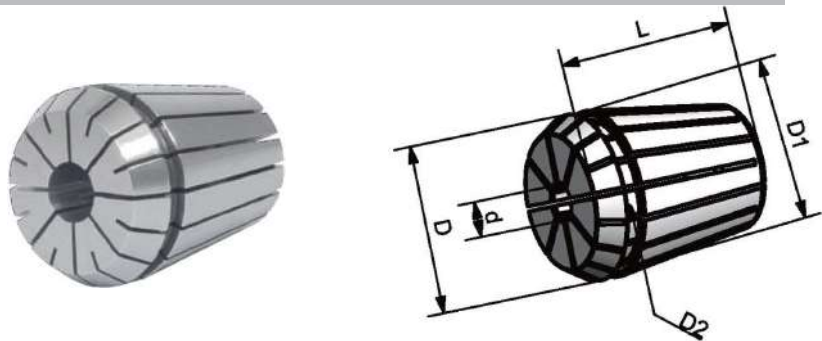


Model	C	D	L1	L
C20-ER25UM-100	20	42	100	144
C25-ER25UM-100	25	42	100	144
C25-ER25UM-150	25	42	150	194
C25-ER25UM-200	25	42	200	244
C25-ER32UM-100	25	50	80	148
C32-ER25UM-100	32	42	100	144
C32-ER25UM-150	32	42	150	194
C32-ER25UM-200	32	34	200	236.5
C32-ER32UM-100	32	50	100	148
C32-ER32UM-150	32	50	150	198
C32-ER32UM-200	32	50	200	248
C32-ER40UM-100	32	63	100	151
C40-ER32UM-100	40	50	100	148
C40-ER32UM-150	40	34	150	186.5
C40-ER40UM-100	40	63	100	151
C40-ER40UM-150	40	63	150	201

Quick Change Tapping Chuck with Length Compensation



Model	Collet Size	L	D	d	T	C
C20-GR1-41	1	41	36	19	7.5	7.5
C20-GR1-41	1	41	36	19	7.5	7.5
C20-GR1-41	1	41	36	19	7.5	7.5
C20-GR1-63	2	63	53	31	12.5	12.5
C20-GR1-63	2	63	53	31	12.5	12.5
C20-GR1-97	3	97	78	48	22	22

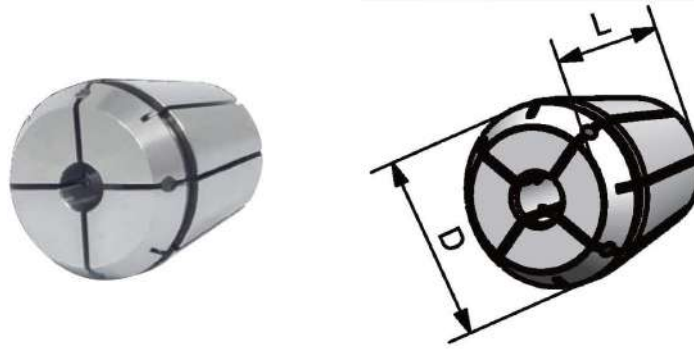


Model	d	D1	D	D2	L
ER8	1-5	8	8.45	6.5	13.5
ER11	1-7	11	11.5	9.5	18
ER16	1-10	16	17	13.8	27.5
ER20	1-13	20	21	17.4	31.5
ER25	2-16	25	26	22	34
ER32	2-20	32	33	29.2	40
ER40	3-26	40	41	36.2	46

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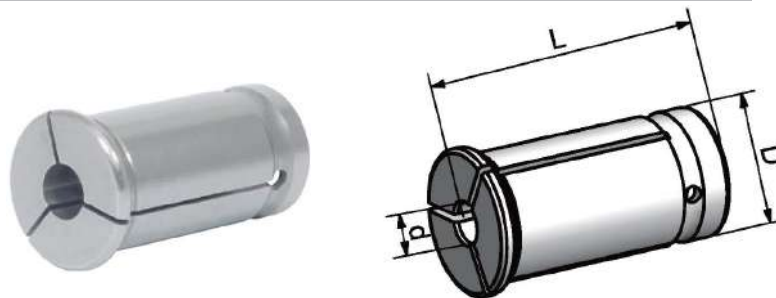


Model	Collet Diameter	PCS/SET
ER8-9 PCS	1-5	9
ER8-5 PCS	1-5	5
ER11-7 PCS	1-7	7
ER11-13 PCS	1-7	13
ER16-10 PCS	1-10	10
ER20-13 PCS	1-13	13
ER25-15 PCS	2-16	15
ER32-18 PCS	2-20	18
ER40-23 PCS	4-26	23



Model	D	L	Diameter
ER16	17	27.5	3-10
ER20	21	31.5	3-13
ER25	26	34	3-16
ER32	33	40	3-20
ER40	41	46	3-26

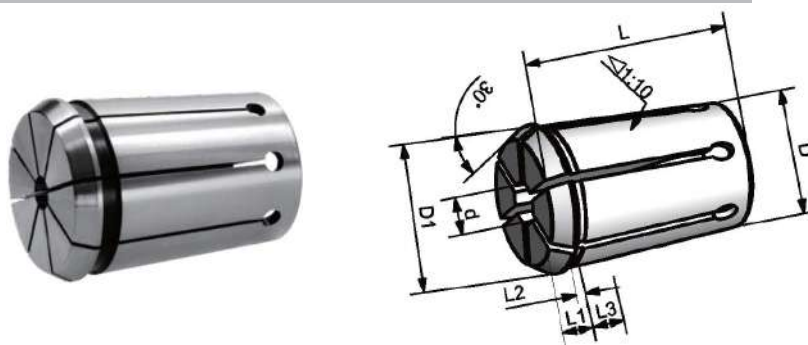
Straight Shank Collet



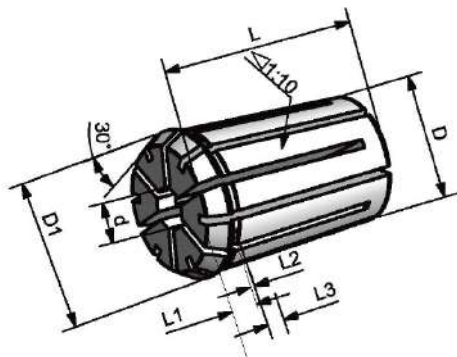
Model	D	L	Diameter
SC16	3,4,5,6,8,10,12	16	45
SC20	3,4,5,6,8,10,12,14,16	20	50
SC22	3,4,5,6,8,10,12,14,16	22	54
SC25	3,4,5,6,8,10,12,14,16,18,20	25	60
SC32	3,4,5,6,8,10,12,14,16,18,20,25	32	64
SC40	6,8,10,12,14,16,18,20,25,28,30,32	40	80
SC42	3,4,5,6,8,10,12,14,16,18,20,22,24,25,28,30,32	42	80

OZ Collet

DIN 6388A



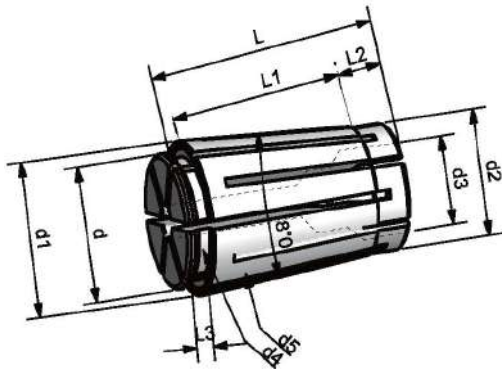
Model	d	D	D1	L	L1	L2	L3
OZ06A	1-6	10	11.5	21	3.5	0.5	4
OZ08A	1-8	12.65	14.5	26	4	0.8	4.5
OZ10A	1-10	15.15	17.2	30	4.5	0.8	4.5
OZ12A	1-12	17.75	19.8	34	5	1.1	4.5
OZ16A	2-16	22.65	25.5	40	5.5	1.2	5.5
OZ20A	2-20	27.4	29.8	45	6	1.35	6
OZ25A	2-25	32.9	35.05	52	6	1.4	6
OZ32A	4-32	41.3	43.7	60	6	1.45	7
OZ40A	6-40	49.7	52.2	68	6	1.45	8
OZ50A	8-50	61.1	63.8	80	7	1.45	9



Model	d	D	D1	L	L1	L2	L3
OZ16B	2-16	22.65	25.5	40	5.5	1.2	9.5
OZ20B	2-20	27.4	29.8	45	6	1.35	10
OZ25B	2-25	32.9	35.05	52	6	1.4	10
OZ32B	4-32	41.3	43.7	60	6	1.45	11
OZ40B	6-40	49.7	52.3	68	6	1.45	12
OZ50B	8-50	61.1	61.1	80	7	1.55	13

6

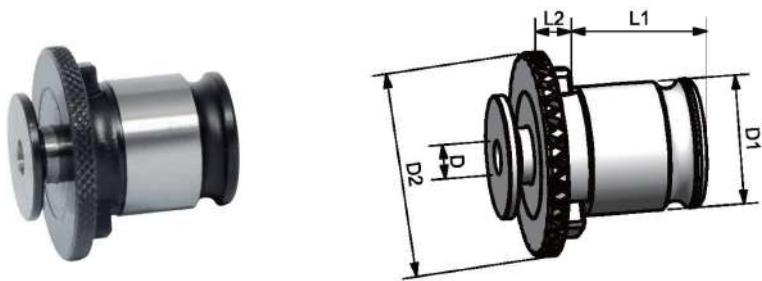
SKS Collet



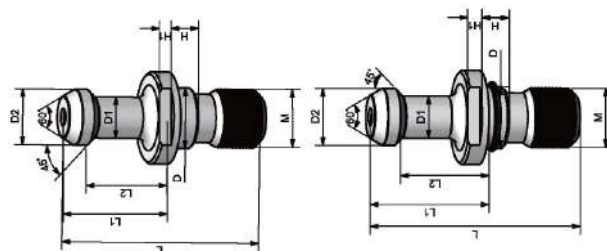
Model	L	L1	L2	L3	d	d1	d2	d3	d4	d5
SK06	25	17.4	3.8	2.4	9	10.4	7.5	6	7.8	9.964
SK10	30.5	21.3	5	3	14	15.5	11.8	10	12	14.981
SK16	45	32	8	3.8	21	24.5	18.8	16	19	23.939
SK25	57	43	8.5	4.1	30	35.6	28.9	25	28.2	35.029



Model	M	D	□	D1	D2	L1	L2
GR1-M2(2.80x2.1)	M2	2.8	2.1	19	33	21.5	25
GR1-M3(3.5x2.7)	M3	3.5	2.7	19	33	21.5	25
GR1-M3.5(4x3)	M3.5	4	3	19	33	21.5	25
GR1-M4(5x4)	M4	5	4	19	33	21.5	25
GR1-M4(4.5x3.4)	M4	4.5	3.4	19	33	21.5	25
GR1-M5(6x4.9)	M5	6	4.9	19	33	21.5	25
GR1-M6(6.3x5)	M6	6.3	5	19	33	21.5	25
GR1-M6(6x4.9)	M6	6	4.9	19	33	21.5	25
GR1-M8(8x6.3)	M8	8	6.3	19	33	21.5	25
GR1-M10(10x8)	M10	10	8	19	33	21.5	25
GR1-M10(7x5.5)	M10	7	5.5	19	33	21.5	25
GR1-M12(9x7.1)	M12	9	7.1	19	33	21.5	25
GR1-M14(11x9)	M14	11	9	19	33	21.5	25
GR2-M5(6x4.9)	M5	6	4.9	31	51	35	35
GR2-M6(6.3x5)	M6	6.3	5	31	51	35	35
GR2-M6(6x4.9)	M6	6	4.9	31	51	35	35
GR2-M8(8x6.3)	M8	8	6.3	31	51	35	35
GR2-M10(10x8)	M10	10	8	31	51	35	35
GR2-M10(7x5.5)	M10	7	5.5	31	51	35	35
GR2-M12(9x7.1)	M12	9	7.1	31	51	35	35
GR2-M12(9x7)	M12	9	7	31	51	35	35
GR2-M14(11x9)	M14	11	9	31	51	35	35
GR2-M16(12.5x10)	M16	12.5	10	31	51	35	35
GR2-M16(12x9)	M16	12	9	31	51	35	35
GR2-M18(14x11)	M18	14	11	31	51	35	35
GR2-M20(16x12)	M20	16	12	31	51	35	35
GR2-M22(18x14.5)	M22	18	14.5	31	51	35	35
GR2-M24(18x14.5)	M24	18	14.5	31	51	35	35
GR2-M24(24x12.5)	M24	16	12.5	31	51	35	35
GR3-M14(11x9)	M14	11	9	48	73	55.5	45
GR3-M16(12x9)	M16	12	9	48	73	55.5	45
GR3-M18(14x11)	M18	14	11	48	73	55.5	45
GR3-M20(16x12)	M20	16	12	48	73	55.5	45
GR3-M22(18x14.5)	M22	18	14.5	48	73	55.5	45
GR3-M24(18x14.5)	M24	18	14.5	48	73	55.5	45
GR3-M27(20x16)	M27	20	16	48	73	55.5	45
GR3-M30(22x18)	M30	22	18	48	73	55.5	45
GR3-M33(25x20)	M33	25	20	48	73	55.5	45
GR3-M36(28x22)	M36	28	22	48	73	55.5	45



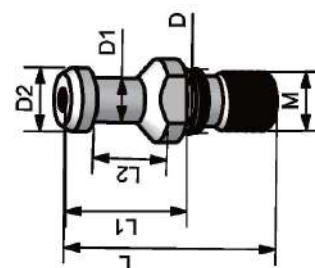
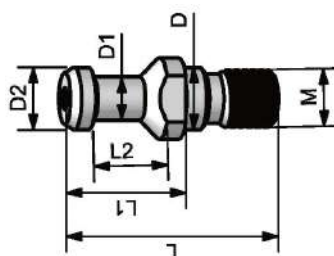
Model	M	D		D1	D2	L1	L2
GRS1-M2(2.8x2.1)	M2	2.8	2.1	19	30	21.5	7
GRS1-M3(3.5x2.7)	M3	3.5	2.7	19	30	21.5	7
GRS1-M4(5x4)	M4	5	4	19	30	21.5	7
GRS1-M4(4.5x3.4)	M4	4.5	3.4	19	30	21.5	7
GRS1-M6(6x4.9)	M6	6	4.9	19	30	21.5	7
GRS1-M8(8x6.2)	M8	8	6.2	19	30	21.5	7
GRS1-M10(10x8)	M10	10	8	19	30	21.5	7
GRS1-M10(7x5.5)	M10	10	5.5	19	30	21.5	7
GRS1-M12(9x7)	M12	12	7	19	30	21.5	7
GRS2-M8(6x4.9)	M8	6	-	31	48	35	11
GRS2-M8(8x6.2)	M8	8	6.2	31	48	35	11
GRS2-M10(10x8)	M10	10	8	31	48	35	11
GRS2-M10(7x5.5)	M10	7	5.5	31	48	35	11
GRS2-M12(9x7.1)	M12	9	7.1	31	48	35	11
GRS2-M14(11x9)	M14	11	9	31	48	35	11
GRS2-M16(12x9)	M16	12	9	31	48	35	11
GRS2-M18(14x11)	M18	14	11	31	48	35	11
GRS2-M20(16x12)	M20	16	12	31	48	35	11
GRS3-M14(11x9)	M14	11	9	48	70	55.5	13.5
GRS3-M16(12x9)	M16	12	9	48	70	55.5	13.5
GRS3-M18(14x11)	M18	14	11	48	70	55.5	13.5
GRS3-M20(16x12)	M20	16	12	48	70	55.5	13.5
GRS3-M24(18x14.5)	M24	18	14.5	48	70	55.5	13.5
GRS3-M27(20x16)	M27	20	16	48	70	55.5	13.5
GRS3-M30(22x18)	M30	22	18	48	70	55.5	13.5
GRS3-M33(25x20)	M33	25	20	48	70	55.5	13.5
GRS3-M36(28x22)	M36	28	22	48	70	55.5	13.5



Model	D	D1	D2	M	L	L1	L2	H	H1	Ø
BT30-45	12.5	7	11	M12	43	23	18	4	3.5	45
BT40-45	17	10	15	M16	60	35	28	5	4	45
BT50-45	25	17	23	M24	85	45	35	8	8	45
BT30C-45	12.5	7	11	M12	43	23	18	4	3.5	45
BT40C-45	17	10	15	M16	60	35	28	5	4	45
BT50C-45	25	17	23	M24	85	45	35	8	8	45
BT30CO-45	12.5	7	11	M12	43	23	18	4	4	45
BT40CO-45	17	10	15	M16	60	35	28	5	5	45
BT50CO-45	25	17	23	M24	85	45	35	8	8	45

SK Pull Stud

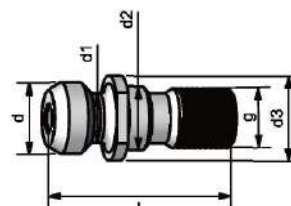
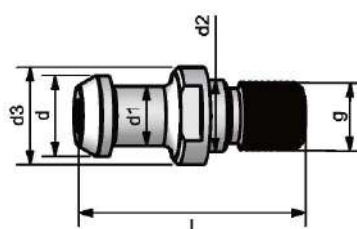
DIN 69872



Model	D	D1	D2	M	L	L1	L2
SK-30A	13	9	13	M12	44	24	19
SK-40A	17	14	19	M16	54	26	20
SK-50A	25	21	28	M24	74	34	25
SK-30B	13	9	13	M12	44	24	19
SK-40B	17	14	19	M16	54	26	20
SK-50B	25	21	28	M24	74	34	25

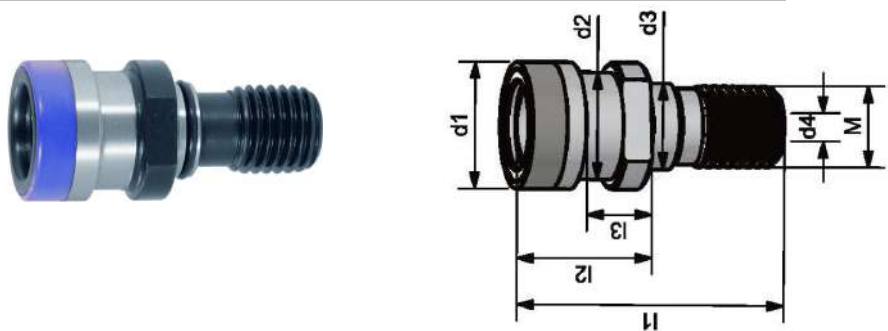
ISO07388 Pull Stud

ISO 7388



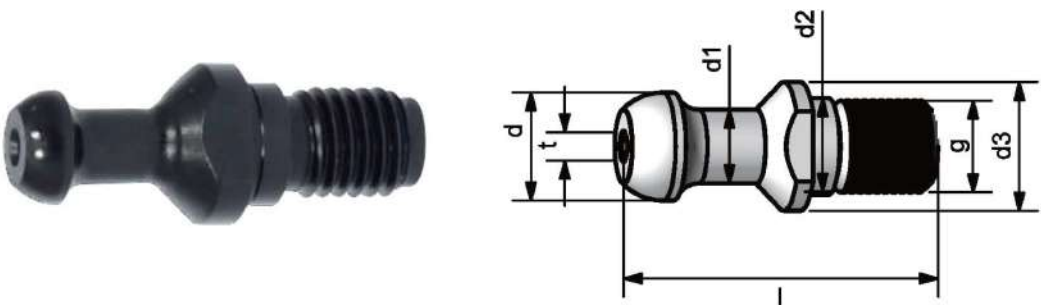
Model	d3	d2	d1	d	g	l	t
DIN7388-40A	23	17	14	19	M16	54	7
DIN7388-50A	38	25	21	28	M24	74	10
DIN7388-40B	22.5	17	12.59	18.95	M16	44.4	7.35
DIN7388-50B	37	25	19.6	29.1	M24	66.55	11.55

OTT Pull Stud



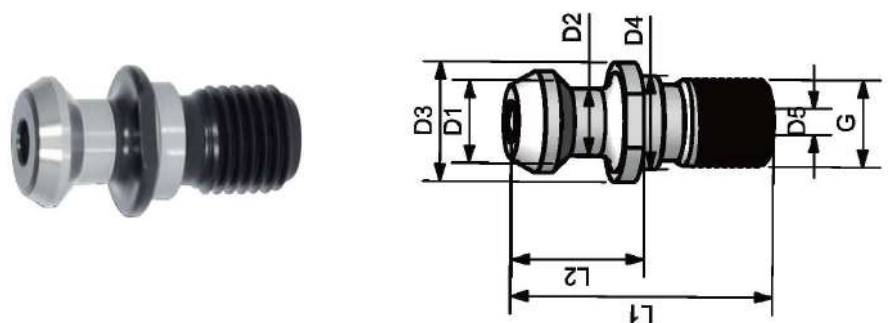
Model	M	d1	d2	d3	d4	l3	l2	l1
NT40	M16	25	21.1	17	7	13.6	25	53
NT40	M24	39.29	32	25	7	13.3	25.1	65

ISO Pull Stud



Model	L1	L2	L3	D1	D2	D3	D4	D5
ISO20	26	12	9	12	9	6	8.5	M8
ISO25	28	12	9	13	11	7	8.5	M8
ISO30	44	24	19	17	13	9	13	M12

Mazak Pull Stud



Model	L1	L2	D1	D2	D3	D4	D5	W	G
Marzak-BT40	44.1	19.1	18.8	12.45	22	17	7	19	M16
Marzak-BT50	65.2	25.2	29	20.83	37	25	10	30	M24

Model	D	D1	D2	D3	L	L1	L2	M
Marzak-CAT40	22	17	18.79	12.5	41.25	16.25	11.17	M16
Marzak-CAT50	35.6	25	28.95	20.82	65.4	25.4	17.78	M24



UM

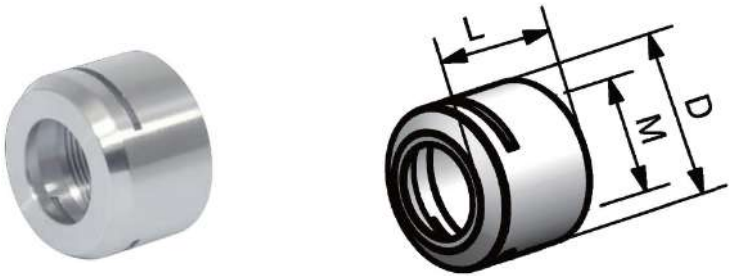
Model	D	d	L	M
ER16UM	32	26	17	M22x1.5
ER20UM	35	29	19	M25x1.5
ER25UM	42	36	20	M32x1.5
ER32UM	50	44	22.5	M40x1.5
ER40UM	63	57	25.5	M50x1.5
ER50UM	78	71	35.5	M64x2

Hex

Model	D	d	L	M
ER11A	19	17	11.3	M14x0.75
ER16A	28	25	17.5	M22x1.5
ER20A	34	30	19	M25x1.5

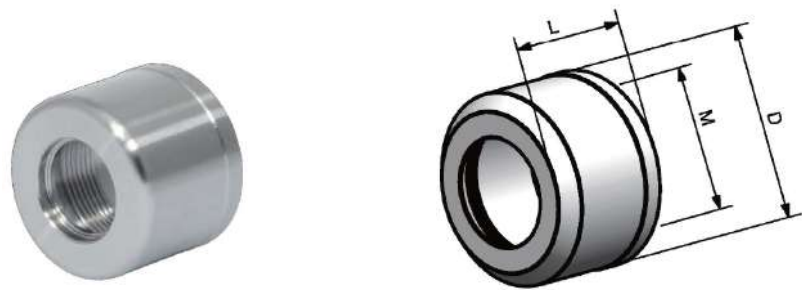
Mini

Model	D	d	L	M
ER8M	12	10	10	M10x0.75
ER11M	16	12	12	M13x0.75
ER16M	22	17.2	18	M19x1
ER20M	28	22.5	19	M24x1
ER25M	35	28.6	20	M30x1



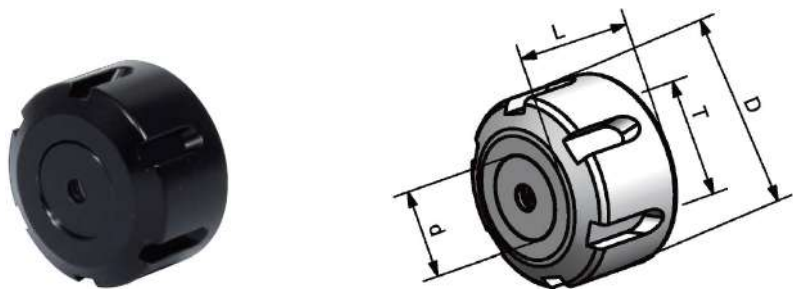
MS

Model	D	L	M
ER11MS	16	12	M13x0.75
ER16MS	22	17	M19x1.0
ER20MS	28	19	M24x1.0
ER25MS	35	20	M30x1.0



GER

Model	D	L	M
GER16	30	24.7	TM22x1.5
GER20	35	25.5	TM26x1.5
GER25	40	25.9	TM32x1.5
GER32	48	30	TM40x1.5

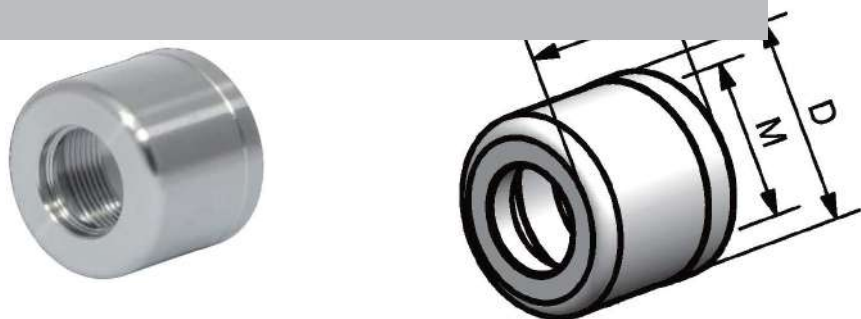


Sealed Nut

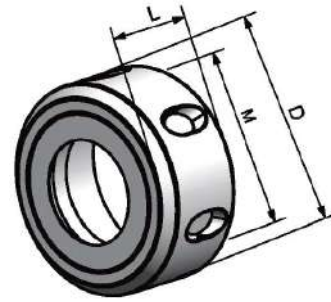
Model	D	d	L	T
ERS16	28	11	22.5	M22x1.5
ERS20	34	14	24	M25x1.5
ERS25	42	19	25	M32x1.5
ERS32	50	24	27.5	M40x1.5
ERS40	63	30	30.5	M50x1.5

Sealing Disc

Model	d	D
ERS16-d	1-10	13
ERS20-d	1-13	16
ERS25-d	2-16	20.7
ERS32-d	2-20	27
ERS40-d	3-26	33.5



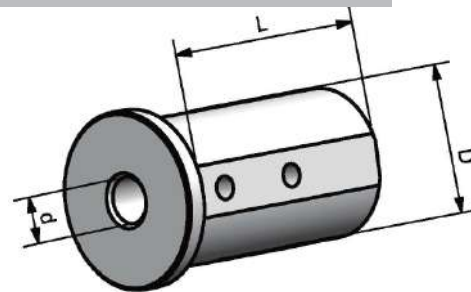
Model	D	L	M
GSK06	19.5	21	M15.5x1.0
GSK10	27.1	24	M21.5x1.0
GSK16	40	31	M32x1.5
GSK25	55	37	M45x1.5



Model	D	d	L
OZ6	18	14	M14x1.0
OZ8	26	19	M20x1.5
OZ10	30	19	M22x1.5
OZ12	35	20	M27x1.5
OZ16	43	24	M33x1.5
OZ20	50	28	M42x2.0
OZ25	60	30	M48x2.0
OZ32	72	33.5	M60x2.5
OZ40	85	37	M68x2.5
OZ50	100	43	M80x2.5

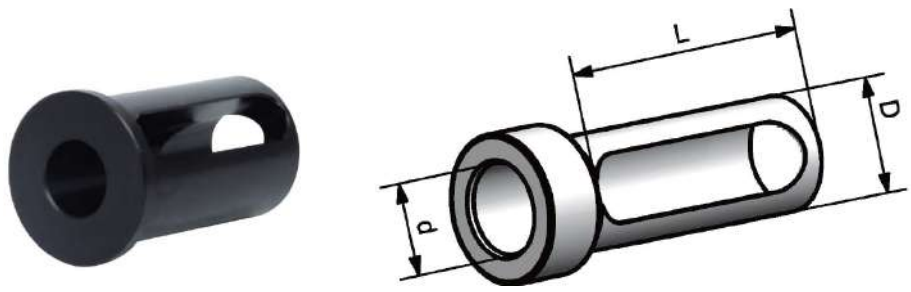
Boring Bar Sleeve

DIN 6388



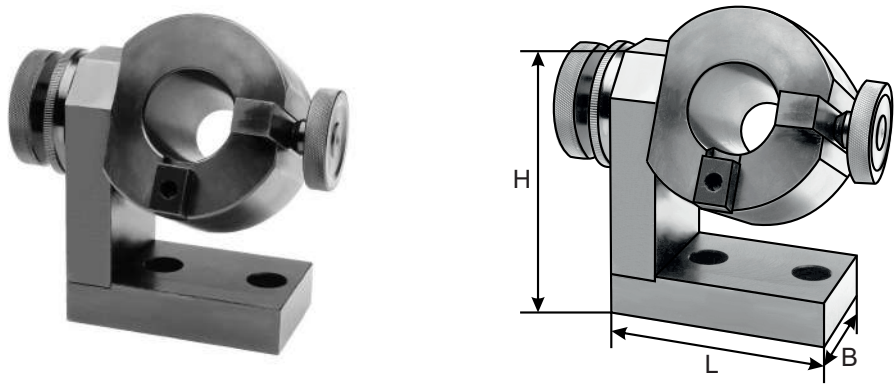
Model	d	D	L
SL25-06	6	25	46
SL25-08	8	25	46
SL25-10	10	25	46
SL25-12	12	25	46
SL32-06	6	32	56
SL32-08	8	32	56
SL32-10	10	32	56
SL32-12	12	32	56
SL40-06	6	40	71
SL40-08	8	40	71
SL40-10	10	40	71
SL40-12	12	40	71

Boring Bar Sleeve



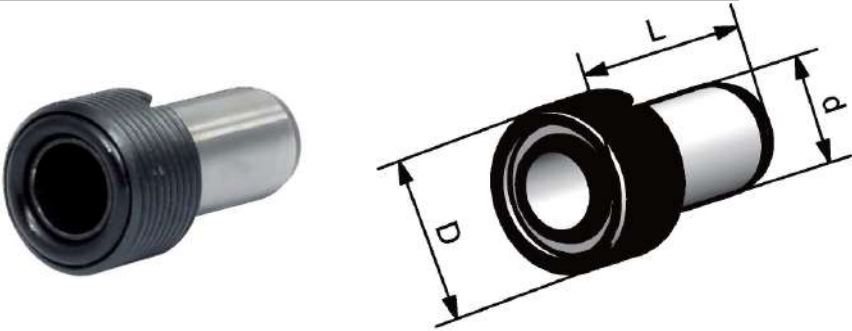
Model	d	D	L
SL25-16	16	25	46
SL25-20	20	25	46
SL32-16	16	32	56
SL32-20	20	32	56
SL32-25	25	32	56
SL40-14	14	40	70
SL40-16	16	40	70
SL40-20	20	40	70
SL40-25	25	40	70
SL40-32	32	40	70

Universal assembly block made of steel, pivoted



Model	Size	L	B	H
DFT30	SK 30, BT 30	111	65	134
DFT40	SK 40, BT 40	111	65	132
DFT50	SK 50, BT 50	111	65	175
DFH32	HSK 32	111	65	132
DFH40	HSK 40	111	65	132
DFH50	HSK 50	111	65	132
DFH63	HSK 63	111	65	132
DFH80	HSK 80	111	65	132
DFH100	HSK 100	111	65	132
DFV16	VDI 16	100	48	97
DFV20	VDI 20	100	48	97
DFV30	VDI 30	111	65	132
DFV40	VDI 40	111	65	132
DFV50	VDI 50	111	65	132

HSK Coolant Tube

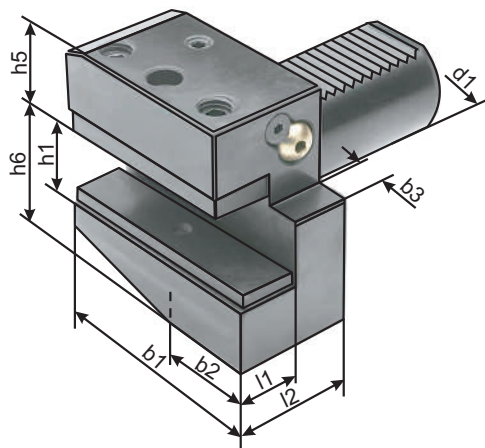


Model	Tool Holder Size	d	D	L
CT32	HSK32	6	M10x1	26.0
CT40	HSK40	8	M12x1	29.5
CT50	HSK50	10	M16x1	33.0
CT63	HSK63	12	M18x1	34.5
CT80	HSK80	14	M20x1.5	40.0
CT100	HSK100	16	M24x1.5	44.0

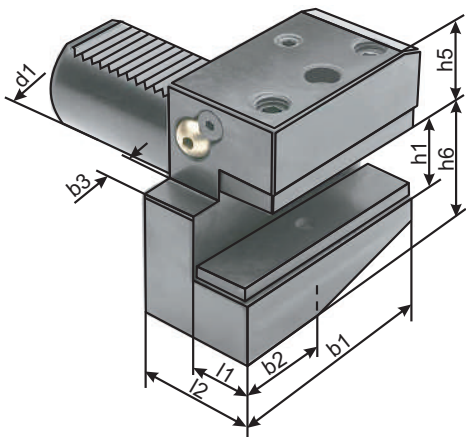
Clamping Kits 58 PCS



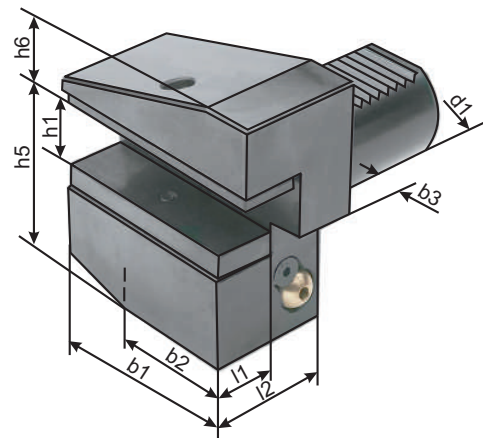
Model	Wt (kg)	Packing (cm)
SCK-081058	6.5kg	33x11x20
SCK-101258	7kg	33x11x20
SCK-121458	9.5kg	37x11x22
SCK-121658	10kg	37x11x22
SCK-141658	12kg	39x11x22
SCK-141858	12.5kg	39x11x22
SCK-161858	16kg	39x13x23
SCK-162058	16.5kg	39x13x23
SCK-182058	23kg	38x16x29
SCK-202258	28kg	38x16x29
SCK-222658	40kg	47x25x29



Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B1-16x12x24	16	42	23	5	12	20	22	13	24
B1-16x12x34	16	42	23	5	12	20	22	23	34
B1-20x16x30	20	55	30	7	16	25	30	16	30
B1-20x16x40	20	55	30	7	16	25	30	26	40
B1-25x16x30	25	55	30	7	16	25	30	16	30
B1-25x16x40	25	55	30	7	16	25	30	26	40
B1-30x20x40	30	70	35	10	20	28	38	22	40
B1-30x20x60	30	70	35	10	20	28	38	42	60
B1-40x25x44	40	85	42.5	12.5	25	32.5	48	22	44
B1-50x32x55	50	100	50	16	32	35	60	30	55
B1-60x32x60	60	125	62.5	16	32	42.5	62.5	30	60
B1-80x40x75	80	160	80	20	40	40/32	80	40	75



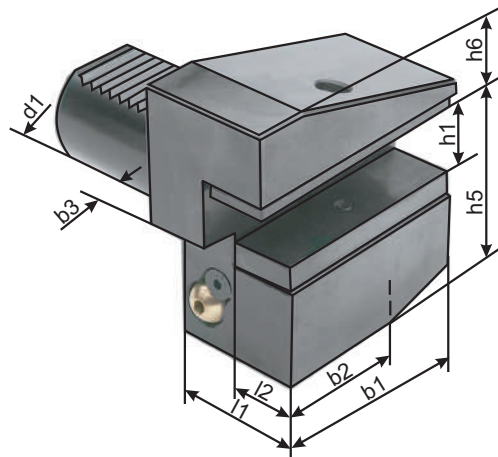
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B2-16x12x24	16	42	23	5	12	20	22	13	24
B2-16x12x34	16	42	23	5	12	20	22	23	34
B2-20x16x30	20	55	30	7	16	25	30	16	30
B2-20x16x40	20	55	30	7	16	25	30	26	40
B2-25x16x30	25	55	30	7	16	25	30	16	30
B2-25x16x40	25	55	30	7	16	25	30	26	40
B2-30x20x40	30	70	35	10	20	28	38	22	40
B2-30x20x60	30	70	35	10	20	28	38	42	60
B2-40x25x44	40	85	42.5	12.5	25	32.5	48	22	44
B2-50x32x55	50	100	50	16	32	35	60	30	55
B2-60x32x60	60	125	62.5	16	32	42.5	62.5	30	60
B2-80x40x75	80	160	80	20	40	55	80	40	75



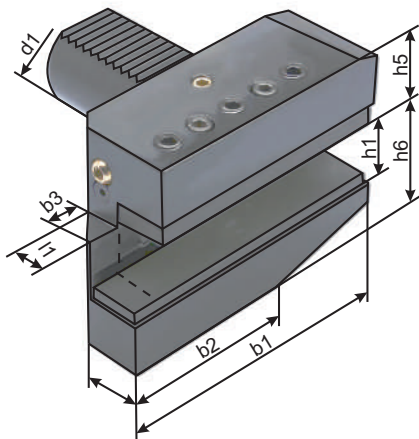
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B3-16x12x24	16	42	23	5	12	20	22	13	24
B3-16x12x34	16	42	23	5	12	20	22	23	34
B3-20x16x30	20	55	30	7	16	25	30	16	30
B3-20x16x40	20	55	30	7	16	25	30	26	40
B3-25x16x30	25	55	30	7	16	25	30	16	30
B3-25x16x40	25	55	30	7	16	25	30	26	40
B3-30x20x40	30	70	35	10	20	35	38	22	40
B3-30x20x60	30	70	35	10	20	35	38	42	60
B3-40x25x44	40	85	42.5	12.5	25	42.5	48	22	44
B3-50x32x55	50	100	50	16	32	50	60	30	55
B3-60x32x60	60	125	32.5	16	32	62.5	62.5	30	60
B3-80x40x75	80	160	80	20	40	80	80	40	75

Radial toolholders form B4 overhead left, short

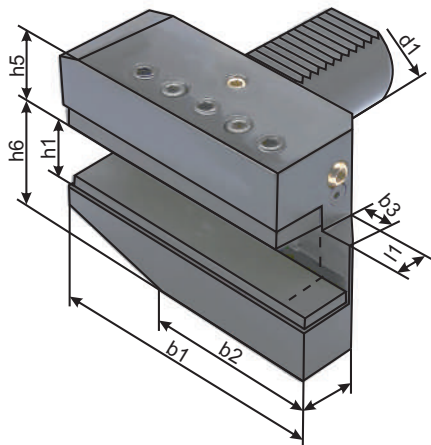
DIN 69880



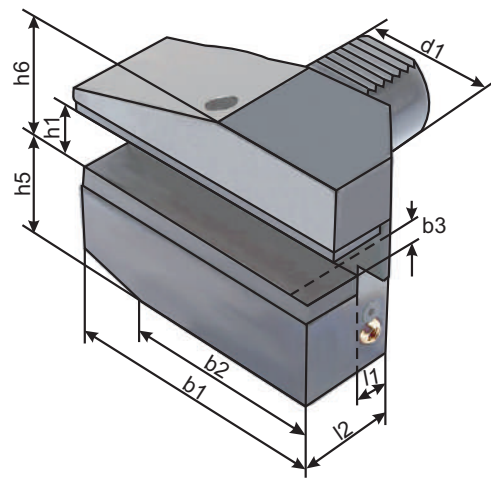
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B4-16x12x24	16	42	23	5	12	20	22	13	24
B4-16x12x34	16	42	23	5	12	20	22	23	34
B4-20x16x30	20	55	30	7	16	25	30	16	30
B4-20x16x40	20	55	30	7	16	25	30	26	40
B4-25x16x30	25	55	30	7	16	25	30	16	30
B4-25x16x40	25	55	30	7	16	25	30	26	40
B4-30x20x40	30	70	35	10	20	35	38	22	40
B4-30x20x60	30	70	35	10	20	35	38	42	60
B4-40x25x44	40	85	42.5	12.5	25	42.5	48	22	44
B4-50x32x55	50	100	50	16	32	50	60	30	55
B4-60x32x60	60	125	32.5	16	32	62.5	62.5	30	60
B4-80x40x75	80	160	80	20	40	80	80	40	75



Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B5-16x12x24	16	58	39	5	12	20	22	13	24
B5-16x12x34	16	58	39	5	12	20	22	23	34
B5-20x16x30	20	75	50	7	16	25	30	16	30
B5-20x16x40	20	75	50	7	16	25	30	26	40
B5-25x16x30	25	75	50	7	16	25	30	16	30
B5-25x16x40	25	75	50	7	16	25	30	26	40
B5-30x20x40	30	100	65	10	20	28	38	22	40
B5-30x20x60	30	100	65	10	20	28	38	42	60
B5-40x25x44	40	118	75.5	12.5	25	32.5	48	22	44
B5-50x32x55	50	130	80	16	32	35	60	30	55
B5-60x32x60	60	145	82.5	16	32	42.5	62.5	30	60
B5-80x40x75	80	190	110	20	40	55	80	40	75



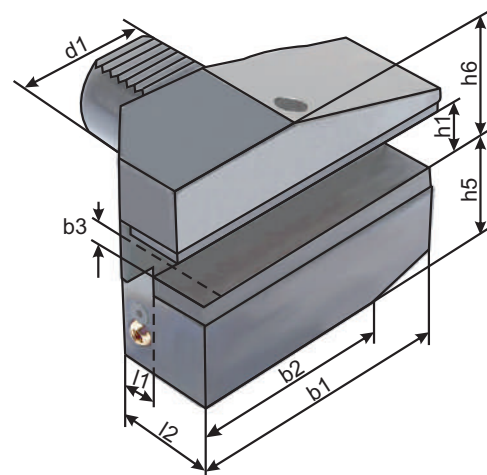
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B6-16x12x24	16	58	39	5	12	20	22	13	24
B6-16x12x34	16	58	39	5	12	20	22	23	34
B6-20x16x30	20	75	50	7	16	25	30	16	30
B6-20x16x40	20	75	50	7	16	25	30	26	40
B6-25x16x30	25	75	50	7	16	25	30	16	30
B6-25x16x40	25	75	50	7	16	25	30	26	40
B6-30x20x40	30	100	65	10	20	28	38	22	40
B6-30x20x60	30	100	65	10	20	28	38	42	60
B6-40x25x44	40	118	75.5	12.5	25	32.5	48	22	44
B6-50x32x55	50	130	80	16	32	35	60	30	55
B6-60x32x60	60	145	82.5	16	32	42.5	62.5	30	60
B6-80x40x75	80	190	110	20	40	55	80	40	75



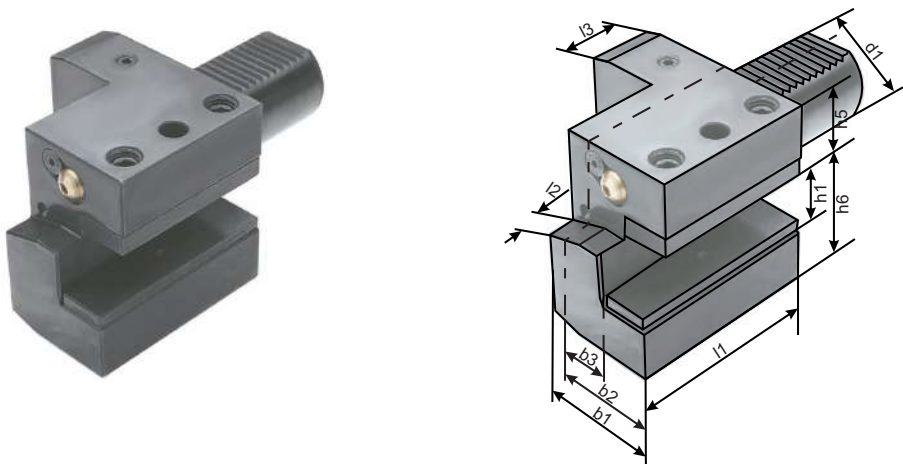
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B7-16x12x24	16	58	39	5	12	20	22	13	24
B7-16x12x34	16	58	39	5	12	20	22	23	34
B7-20x16x30	20	75	50	7	16	25	30	16	30
B7-20x16x40	20	75	50	7	16	25	30	26	40
B7-25x16x30	25	75	50	7	16	25	30	16	30
B7-25x16x40	25	75	50	7	16	25	30	26	40
B7-30x20x40	30	100	65	10	20	35	38	22	40
B7-30x20x60	30	100	65	10	20	35	38	42	60
B7-40x25x44	40	118	75.5	12.5	25	42.5	48	22	44
B7-50x32x55	50	130	80	16	32	50	60	30	55
B7-60x32x60	60	145	82.5	16	32	62.5	62.5	30	60
B7-80x40x75	80	190	110	20	40	80	80	40	75

Radial toolholders form B8 overhead left, long

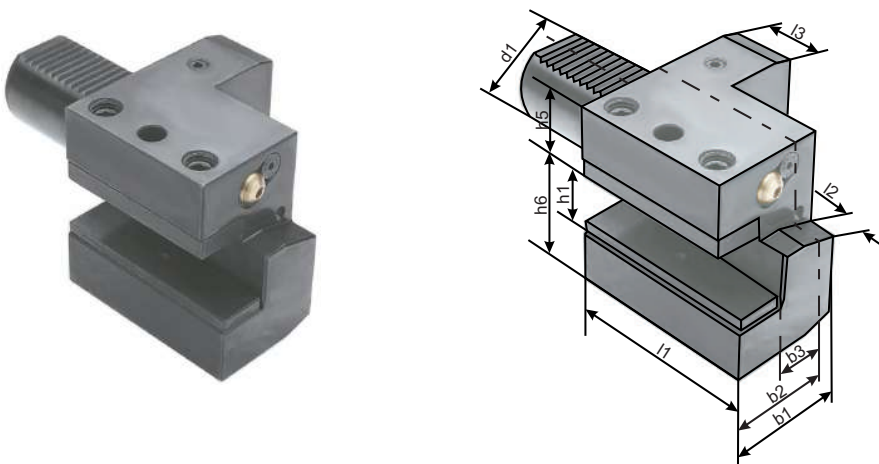
DIN 69880



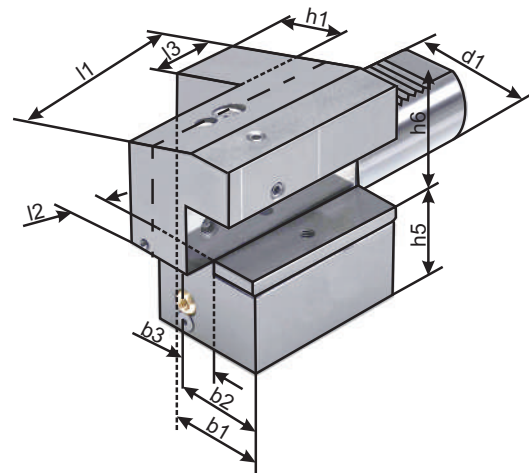
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2
B8-16x12x24	16	58	39	5	12	20	22	13	24
B8-16x12x34	16	58	39	5	12	20	22	23	34
B8-20x16x30	20	75	50	7	16	25	30	16	30
B8-20x16x40	20	75	50	7	16	25	30	26	40
B8-25x16x30	25	75	50	7	16	25	30	16	30
B8-25x16x40	25	75	50	7	16	25	30	26	40
B8-30x20x40	30	100	65	10	20	35	38	22	40
B8-30x20x60	30	100	65	10	20	35	38	42	60
B8-40x25x44	40	118	75.5	12.5	25	42.5	48	22	44
B8-50x32x55	50	130	80	16	32	50	60	30	55
B8-60x32x60	60	145	82.5	16	32	62.5	62.5	30	60
B8-80x40x75	80	190	110	20	40	80	80	40	75



Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C1-16x12x44	16	43	24	13	12	20	22	44	5	20
C1-20x16x50	20	65	40	26	16	25	30	50	-	30
C1-20x16x55	20	52	27	13	16	25	30	55	7	30
C1-25x16x55	25	58	33	19	16	25	30	55	7	20
C1-30x20x70	30	70	35	17	20	28	38	70	10	30
C1-40x25x85	40	85	42.5	21	25	32.5	48	85	12.5	30
C1-50x32x100	50	100	50	26	32	35	60	100	16	40
C1-60x32x125	60	125	62.5	33	32	42.5	62.5	125	16	40
C1-80x40x160	80	160	80	42	40	55	80	160	20	40



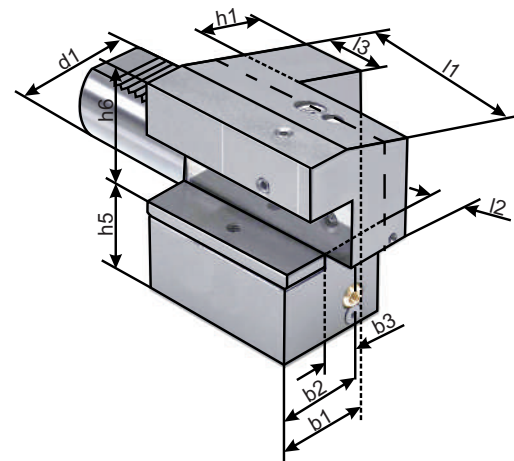
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C2-16	16	43	24	13	12	20	22	44	5	20
C2-20	20	65	40	26	16	25	30	50	-	30
C2-25	25	58	33	19	16	25	30	55	7	20
C2-30	30	76	41	23	20	28	38	70	10	30
C2-40	40	90	47.5	25.5	25	32.5	48	85	12.5	30
C2-50	50	105	55	30.5	32	35	60	100	16	40
C2-60	60	125	62.5	33	32	42.5	62.5	125	16	40
C2-80	80	160	78	42	40	55	80	160	20	40



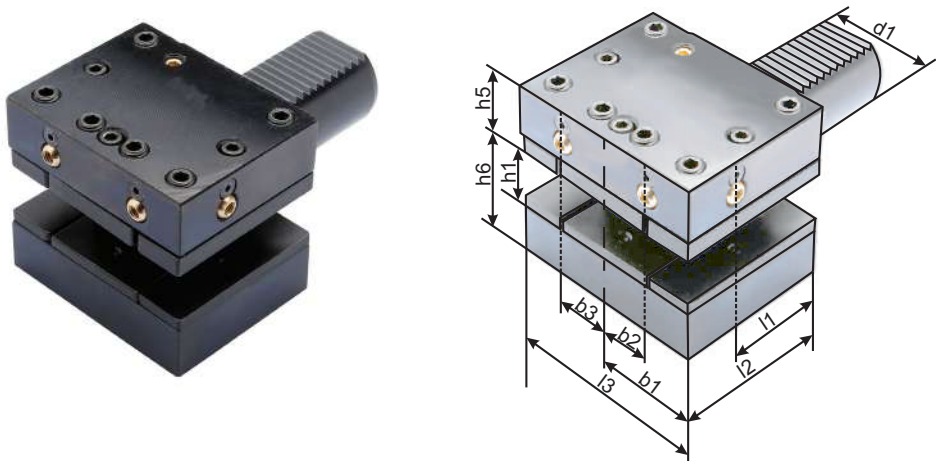
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C3-16x12x44	16	43	24	13	12	20	22	44	5	20
C3-20x16x50	20	65	40	26	16	25	30	50	-	30
C3-20x16x55	20	52	27	13	16	25	30	55	7	30
C3-25x16x55	25	58	33	19	16	25	30	55	7	20
C3-30x20x70	30	70	35	17	20	35	38	70	10	30
C3-40x25x85	40	85	42.5	21	25	42.5	48	85	12.5	30
C3-50x32x100	50	100	50	26	32	50	60	100	16	40
C3-60x32x125	60	125	62.5	33	32	62.5	62.5	125	16	40
C3-80x40x160	80	160	80	42	40	80	80	160	20	40

Axial toolholders form C4 overhead left, short

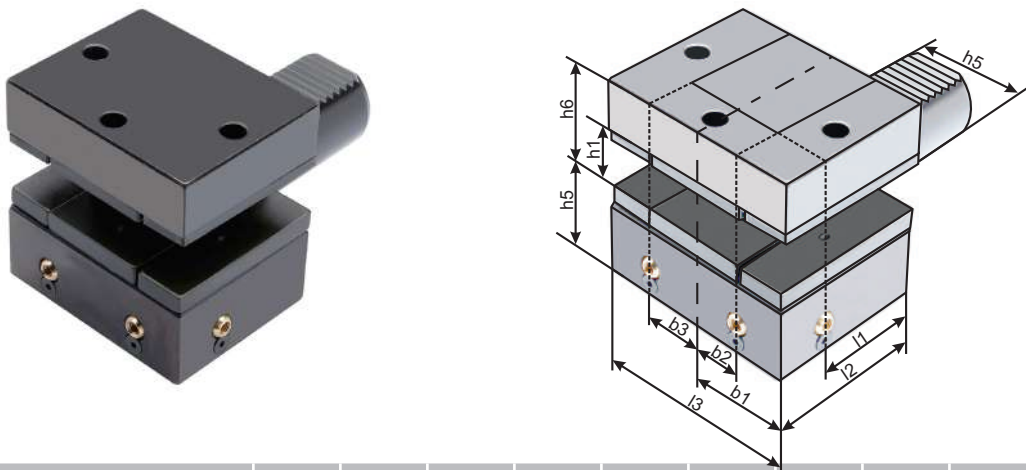
DIN 69880



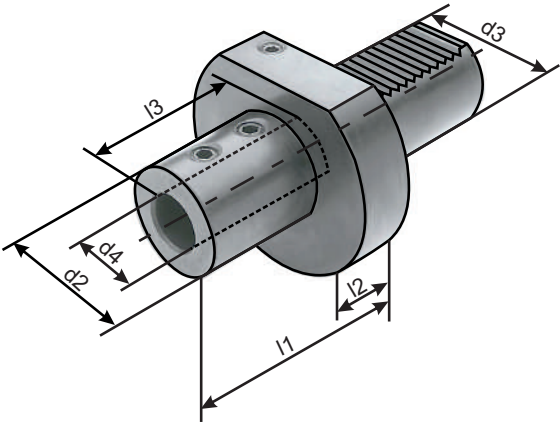
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C4-16x12x44	16	43	24	13	12	20	22	44	5	20
C4-20x16x50	20	65	40	26	16	25	30	50	-	30
C4-25x16x55	25	58	33	19	16	25	30	55	7	20
C4-30x20x70	30	76	42	23	20	35	38	70	10	30
C4-40x25x85	40	90	47.5	25.5	25	42.5	48	85	12.5	30
C4-50x32x100	50	105	55	30.5	32	50	60	100	16	40
C4-60x32x125	60	125	62.5	33	32	62.5	62.5	125	16	40
C4-80x40x160	80	160	78	42	40	80	80	160	20	40



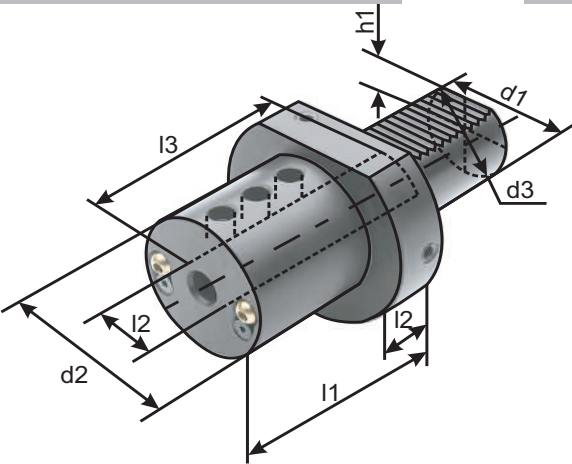
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
D1-25x16x48	25	33	19	19	16	25	30	24	48	66
D1-30x20x60	30	35	17	23	20	28	38	42	60	76
D1-40x25x72	40	42.5	21	25.5	25	32.5	48	50	72	90
D1-50x32x85	50	50	26	30.5	32	35	60	60	85	105
D1-60x32x110	60	57.5	33	33	32	42.5	62.5	85	110	115
D1-80x40x140	80	76	42	42	40	55	80	105	140	152



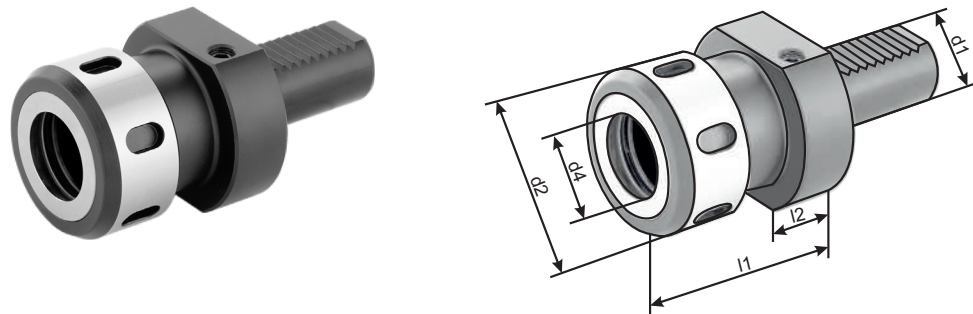
Model	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
D2-25x16x48	25	33	19	19	16	25	30	24	48	66
D2-30x20x60	30	35	17	23	20	28	38	42	60	76
D2-40x25x72	40	42.5	21	25.5	25	32.5	48	50	72	90
D2-50x32x85	50	50	26	30.5	32	35	60	60	85	105
D2-60x32x110	60	57.5	33	33	32	42.5	62.5	85	110	115
D2-80x40x140	80	76	42	42	40	55	80	105	140	152



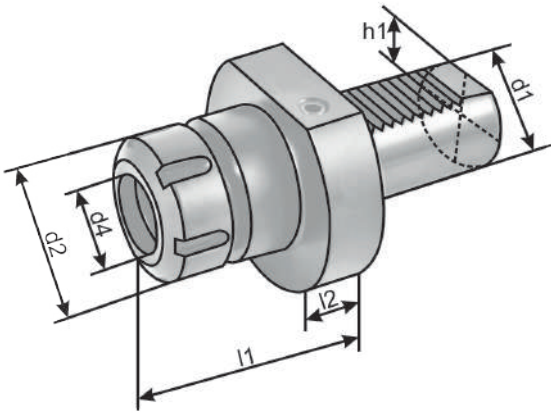
Model	d1	d2	d3	d4	h1	l1	l2
E1-20x16	20	36	50	16	-	66	54
E1-20x20	20	40	50	20	-	67	54
E1-20x25	20	45	50	25	-	71	58
E1-30x16	30	36	68	16	28	66	54
E1-30x20	30	40	68	20	28	67	54
E1-30x25	30	45	68	25	28	71	58
E1-30x32	30	52	68	32	28	75	61
E1-30x40	30	65	68	40	28	90	72
E1-40x16	40	36	83	16	32.5	66	54
E1-40x20	40	40	83	20	32.5	67	54
E1-40x25	40	45	83	25	32.5	75	59
E1-40x32	40	52	83	32	32.5	75	61
E1-40x40	40	65	83	40	32.5	90	73
E1-40x50	40	70	83	50	32.5	100	83
E1-50x16	50	36	98	16	35	67	54
E1-50x20	50	40	98	20	35	67	54
E1-50x25	50	45	98	25	35	80	59
E1-50x32	50	52	98	32	35	80	63
E1-50x40	50	65	98	40	35	90	73
E1-50x50	50	75	98	50	35	100	83



Model	d1	d2	d3	d4	h1	l1	l2	l3	T
E2-30x6	30	55	68	6	28	60	22	43	A
E2-30x8	30	55	68	8	28	60	22	43	A
E2-30x10	30	55	68	10	28	60	22	43	A
E2-30x12	30	55	68	12	28	60	22	43	A
E2-30x16	30	55	68	16	28	60	22	55	A
E2-30x20	30	55	68	20	28	60	22	54	B
E2-30x25	30	55	68	25	28	60	22	54	B
E2-30x30	30	67	68	30	28	75	22	61	B
E2-30x32	30	67	68	32	28	75	22	61	B
E2-40x8	40	55	83	8	32.5	75	22	43	A
E2-40x10	40	55	83	10	32.5	75	22	43	A
E2-40x12	40	55	83	12	32.5	75	22	58	A
E2-40x16	40	55	83	16	32.5	75	22	61	A
E2-40x20	40	55	83	20	32.5	75	22	61	A
E2-40x25	40	55	83	25	32.5	75	22	61	B
E2-40x30	40	82	83	30	32.5	75	22	61	B
E2-40x32	40	82	83	32	32.5	75	22	61	B
E2-40x40	40	82	83	40	32.5	90	22	76	B
E2-50x12	50	68	98	12	35	90	30	71	A
E2-50x16	50	68	98	16	35	90	30	76	A
E2-50x20	50	68	98	20	35	90	30	76	A
E2-50x25	50	68	98	25	35	90	30	76	A
E2-50x30	50	69	98	30	35	90	30	76	B
E2-50x32	50	69	98	32	35	90	30	76	B
E2-50x40	50	98	98	40	35	90	-	76	B
E2-50x50	50	98	98	50	35	100	-	86	B



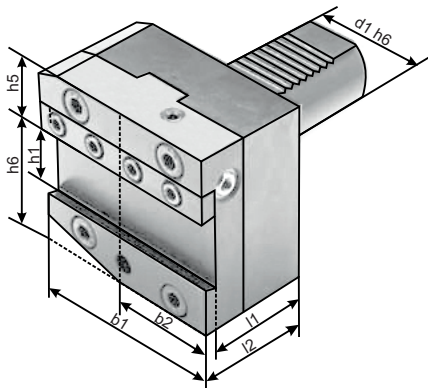
Model	d1	d2	d3	d4	h1	l1	l2
E3-16x16	16	43	40	2-16	-	65	13
E3-20x16	20	43	50	2-16	-	57	18
E3-20x20	20	52	50	2-20	-	62	18
E3-25x16	25	43	58	2-16	25	57	18
E3-25x20	25	52	58	2-20	25	62	18
E3-30x16	30	43	68	2-16	28	57	22
E3-30x20	30	52	68	2-20	28	62	22
E3-30x25	30	60	68	2-25	28	75	22
E3-30x32	30	72	68	2-32	28	90	22
E3-40x16	40	43	83	2-16	32.5	57	22
E3-40x20	40	52	83	2-20	32.5	62	22
E3-40x25	40	60	83	2-25	32.5	75	22
E3-40x32	40	72	83	4-32	32.5	90	22
E3-50x20	50	52	98	2-20	35	70	30
E3-50x25	50	60	98	2-25	35	75	30
E3-50x32	50	72	98	4-32	35	90	30
E3-60x23	60	60	123	2-25	42.5	75	30
E3-60x32	60	72	123	4-32	42.5	90	30
E3-80x23	80	60	158	2-25	55	85	40
E3-80x32	80	72	158	4-32	55	95	40



Model	d1	d2	d3	d4	h1	l1	l2
E4-16x16	16	32	40	1-10	18	40	13
E4-16x20	16	35	40	1-13	18	44	13
E4-20x16	20	32	32	1-10	-	40	18
E4-20x20	20	35	35	1-13	-	59	18
E4-20x25	20	42	42	2-16	-	54	18
E4-20x32	20	50	50	2-20	-	67	18
E4-25x16	25	32	32	1-10	25	44	18
E4-25x25	25	42	42	2-16	25	57	18
E4-25x32	25	50	50	2-20	25	62	18
E4-30x16	30	32	32	1-10	28	48	22
E4-30x20	30	35	35	1-13	28	59	22
E4-30x25	30	42	42	2-16	28	57	22
E4-30x32	30	50	50	2-20	28	62	22
E4-30x40	30	63	63	3-30	28	70	22
E4-40x20	40	35	35	1-13	32.5	59	22
E4-40x25	40	42	42	2-16	32.5	70	22
E4-40x32	40	50	50	2-20	32.5	84	22
E4-40x40	40	63	63	3-30	32.5	75	22
E4-50x25	50	42	42	2-16	35	67	30
E4-50x32	50	50	50	2-20	35	84	30
E4-50x40	50	63	63	3-30	35	90	30
E4-60x32	60	50	50	2-20	42.5	75	30
E4-60x40	60	63	63	3-30	42.5	75	30
E4-80x40	80	63	63	3-30	55	100	40

Parting-off toolholders right height adjustable

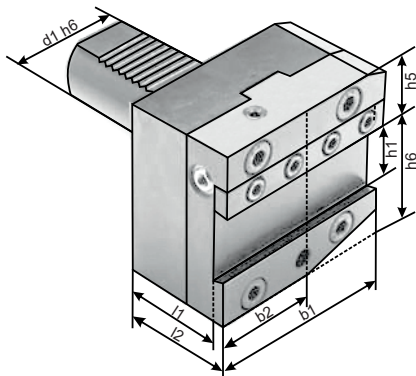
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Model	d1	b1	b2	h1	h5	h6	l1	l2
AR2026	20	60	30	26	28	36	44	50
AR2526	25	60	30	26	28	36	44	50
AR3026	30	70	35	26	32	39	44	50
AR4026	40	85	42.5	26	43	41.5	44	50
AR4032	40	85	42.5	32	43	41.5	44	50
AR5026	50	100	50	26	43	45	44	50
AR5032	50	100	50	32	43	45	44	50
AR6032	60	125	62.5	26	48	55	44	50

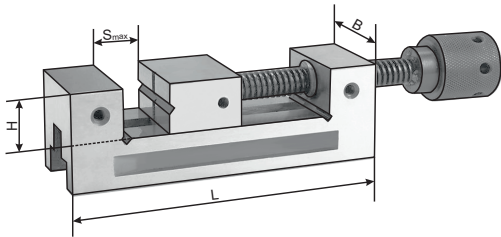
Parting-off toolholders left height adjustable

DIN 69880



Model	d1	b1	b2	h1	h5	h6	l1	l2
AL2026	20	60	30	26	28	36	44	50
AL2526	25	60	30	26	28	36	44	50
AL3026	30	70	35	26	32	39	44	50
AL4026	40	85	42.5	26	43	41.5	44	50
AL4032	40	85	42.5	32	43	41.5	44	50
AL5026	50	100	50	26	43	45	44	50
AL5032	50	100	50	32	43	45	44	50
AL6032	60	125	62.5	26	48	55	44	50

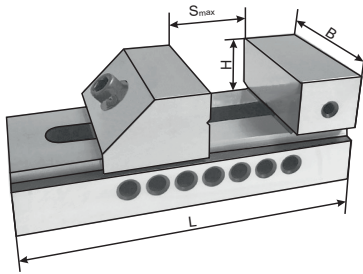
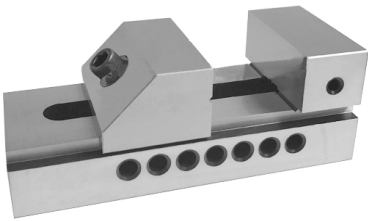
Grinding and inspection vices with theaded spindle series PGH



- Made of heat treated alloy
- Steel hardening to 58 HRC, polished;
 - Suitable for grinding and milling machines;
 - Parallelism: 0,005mm / 100mm;
 - Perpendicularity: 0,005mm / 100mm

Model	B	H	Smax	L	Wt (kg)
PGH50	50	25	65	155	3.0
PGH60	60	25	55	110	2.4
PGH63	63	32	85	190	3.8
PGH73	73	35	100	210	5.0
PGH80	80	40	100	220	6.5
PGH88	88	40	125	250	11.0
PGH100	100	45	125	260	13.0
PGH125	125	50	160	300	19.0
PGH125A	125	50	210	350	23.0
PGH150	150	50	175	315	23.8

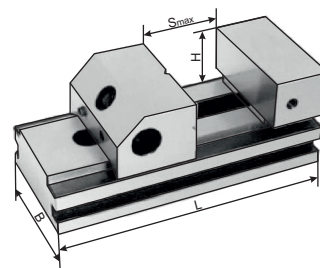
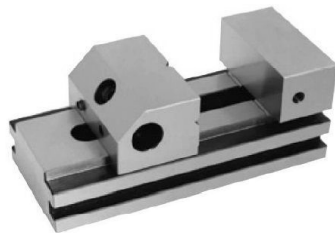
Vise precision quick-tightening series MGH



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
 - Suitable for grinding and milling machines;
 - Parallelism: 0,005mm / 100mm;
 - Perpendicularity: 0,005mm / 100mm

Model	B	H	Smax	L	Wt (kg)
MGH26	26	9.15	22	65.4	0.5
MGH36	36	20	40	100	1.2
MGH38	38	20	44	105	1.3
MGH50	50	25	65	140	2.0
MGH63	63	32	85	175	3.0
QKG73	73	35	100	190	4.1
QKG80	80	40	100	200	5.5
QKG88	88	40	125	235	7.3
QKG100	100	45	125	245	10.0
QKG125	125	50	160	285	18.0
QKG150	150	50	200	330	21.5
QKG150A	150	50	250	380	23.0
QKG150B	150	50	300	430	24.0

Grinding and inspection vices with quick adjustment series MGS

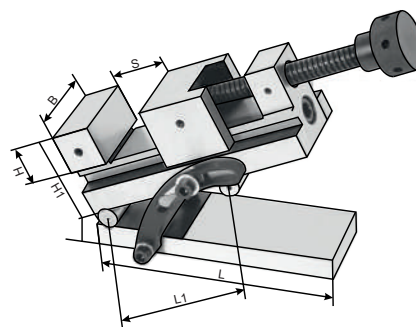


Made of heat treated alloy

- Steel hardening to 58-63 HRC, polished;
- Parallelism of the guide vise to the mounting surface 0.002mm;

Model	B	H	S	L
MGS34	34	15	25	75
MGS45	45	20	50	110
MGS70	70	30	80	160
MGS90	90	40	120	210
MGS120	120	40	150	280

Precision sine vice, screw type series MGSS

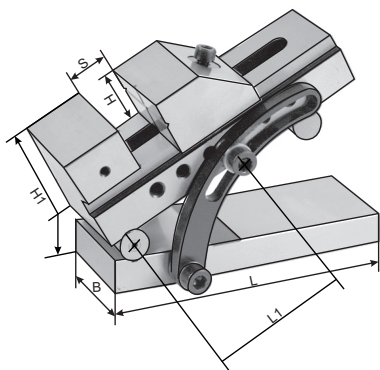
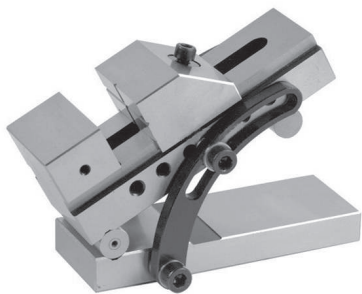


Made of heat treated alloy

- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm / 100mm;

Model	B	H	H1	Smax	L	L1		Adjustable angle range
						mm	in	
MGSS50	50	25	86.6	60	140	100	4	0~45°
MGSS63	63	32	94.6	85	175			
ZXQGG73	73	35	111	90	190			
ZXQGG80	80	40	121	95	200			
ZXQGG88	88	40	125	120	235			
ZXQGG100	100	45	139.2	125	245	200	10	
ZXQGG125	125	50	154.2	160	385			
ZXQGG150	150	50	160.9	190	330			

High precision sinus vice series MGS

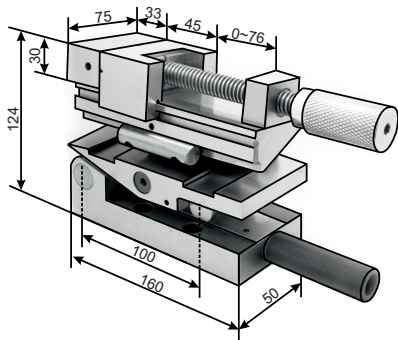


- Fine tune the angle using calibrated bars;
- Safe fastening in any angular position;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm / 100mm;

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Model	B	H	H1	Smax	L	L1		Adjustable angle range
						mm	in	
MGS50	50	25	79.36	65	140	100	4	0~45°
ZXQKG63	63	32	92.36	85	175		5	
ZXQKG73	73	35	104	100	190			
ZXQKG80	80	40	117	100	200			
ZXQKG88	88	40	122	125	235			
ZXQKG100	100	45	134.08	125	245	200	10	
ZXQKG125	125	50	144.08	160	285			
ZXQKG150	150	50	150.9	200	330			

High precision sinus longitudinal-transverse vice series SFT



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;

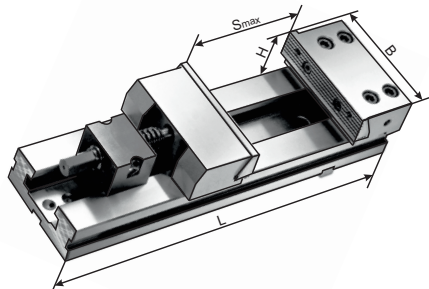
Model	B	H	Smax	L	Wt (kg)
SFT26	26	9.15	22	65.4	0.5

Universal sinus vise on hinge base series



Model	Jaw Width	Jaw Depth	Max. Opening	Outside Size
SGH70	70	30	85	195x110x137
SGH120	120	40	155	400x180x210

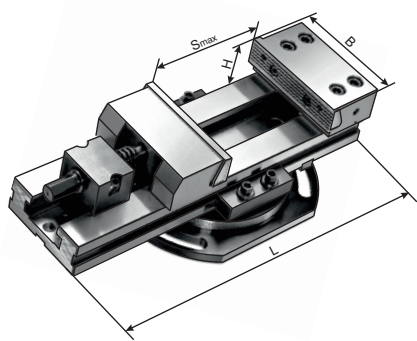
High precision machine vise series TJB



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- The parts are clamped in a vise with an accuracy of ± 0.02 mm;

Model	B	H	Smax	L	Clamping force
TJB100	100	30	100	270	3000
TJB125	125	40	150	345	3000
TJB150	150	50	200	420	5000
TJB150	150	50	300	520	5000
TJB150	150	50	400	620	5000
TJB175	175	60	200	455	6000
TJB175	175	60	300	555	6000
TJB175	175	60	400	655	6000
TJB175	175	60	500	755	6000
TJB175	175	60	600	855	6000
TJB200	200	60	200	495	10000
TJB200	200	65	300	595	10000
TJB200	200	65	400	696	10000
TJB200	200	65	500	795	10000
TJB200	200	65	600	895	10000
TJB300	300	65	200	535	12000
TJB300	300	80	300	635	12000
TJB300	300	80	400	735	12000
TJB300	300	80	500	835	12000
TJB300	300	80	600	935	12000
TJB300	300	80	700	1035	12000
TJB300	300	80	800	1135	12000

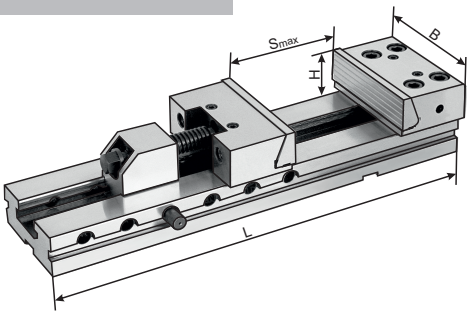
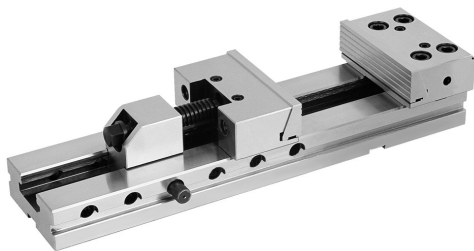
Precision swivel machine vise series TJC



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- The parts are clamped in a vice with an accuracy of ± 0.02 mm;
- With swivel base.

Model	B	H	Smax	L	Clamping force
TJC100	100	30	100	270	3000
TJC125	125	40	150	345	3000
TJC150	150	50	200	420	5000
TJC150	150	50	300	520	5000
TJC150	150	50	400	620	5000
TJC175	175	60	200	455	6000
TJC175	175	60	300	555	6000
TJC175	175	60	400	655	6000
TJC175	175	60	500	755	6000
TJC175	175	60	600	855	6000
TJC200	200	65	200	495	10000
TJC200	200	65	300	595	10000
TJC200	200	65	400	695	10000
TJC200	200	65	500	795	10000
TJC200	200	65	600	895	10000
TJC300	300	80	200	535	12000
TJC300	300	80	300	635	12000
TJC300	300	80	400	735	12000
TJC300	300	80	500	835	12000
TJC300	300	80	600	935	12000
TJC300	300	80	700	1035	12000
TJC300	300	80	800	1135	12000

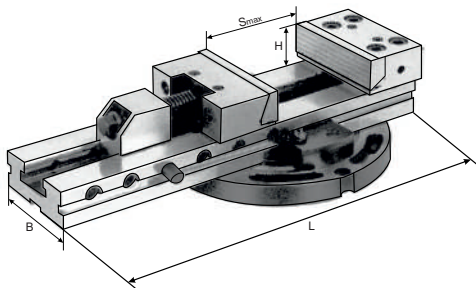
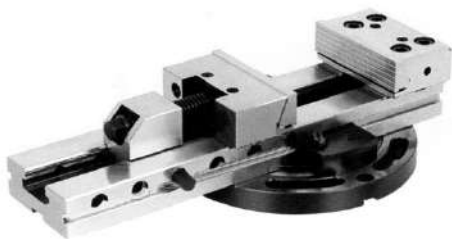
Precision clamping vice series TJD



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Quick-release locking mechanism;
- It is applied on the processing centers, on the high-precision equipment.

Model	B	H	Smax	L	Clamping force
TJD125	125	40	150	345	3000
TJD150A	150	50	200	420	5000
TJD150B	150	50	300	520	5000
TJD175C	175	60	400	655	6000

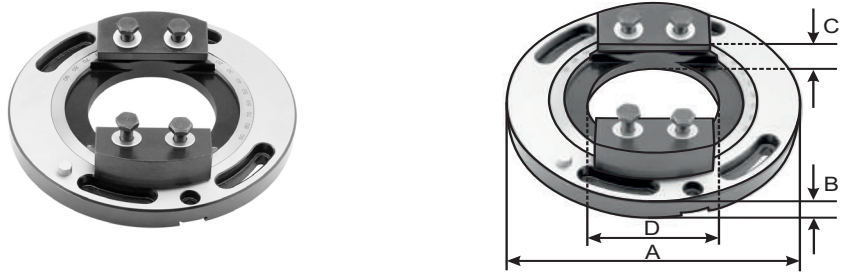
Precision swivel keyless vice series TJF



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Quick-release locking mechanism;
- It is applied on the processing centers, on the high-precision equipment;
- With swivel base.

Model	B	H	Smax	L	Clamping force
TJF125	125	40	150	345	3000
TJF150A	150	50	200	420	5000
TJF150B	150	50	300	520	5000
TJF175C	175	60	400	655	6000

Swivel base



Model	A	B	C	D	Suitable Vises
SB100	180	20	43.5	75	TJC100
SB125	226	23	47	95	TJC125, TJD125
SB150	290	28	58	125	GT150A(B, C)-I GT150(B)-III
SB175	320	28	58	145	GT175A(B, C, D, E)-I GT175C-III
SB200	370	34	74	170	GT200A(B, C, D, E) -I
SB300	400	38	78	195	GT300A(B, C, D, E, F, G) -I

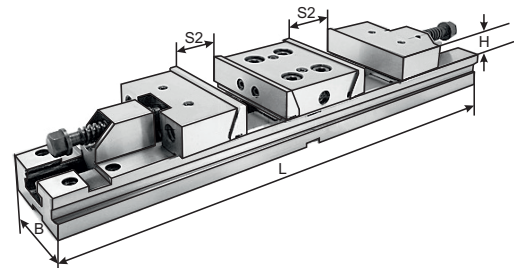
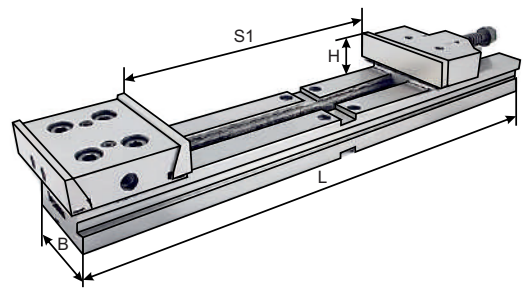
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Versatile Precision vise series



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Possibility of use in vertical or horizontal position;
- Widely used on machining centers and other precision vise.

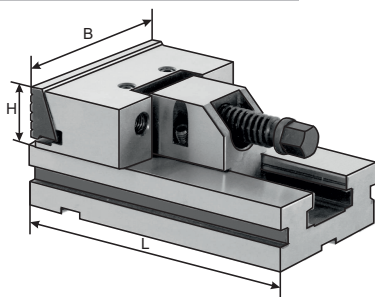
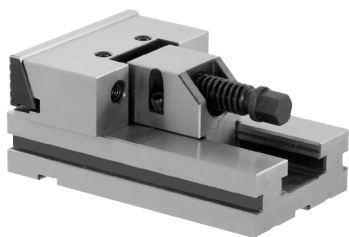
Model	B	H	Smax	L
VPV100	100	30	100	270
VPV125	125	40	150	345
VPV150	150	50	200	420
VPV150A	150	50	300	520
VPV175	175	60	200	455
VPV175A	175	60	300	555
VPV175B	175	60	400	655
VPV175C	175	60	500	755
VPV200	200	65	200	495
VPV200A	200	65	300	595
VPV200B	200	65	400	695
VPV200C	200	65	500	795
VPV200D	200	65	600	895



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Precision of the clamp +/- 0.02 mm;
- Exclusive clamp repeatability;
- Reversible fixed sponge;
- Movable sponge, fast swiveling, self-aligning

Model	S1	S2	B	H	L
VDC100	290	2x90	100	30	460
VDC125	320	2x100	125	40	520
VDC3150	360	2x110	150	50	580
VDC150A	460	2x160	150	50	680
VDC175	400	2x120	175	60	666
VDC175A	500	2x170	175	60	766
VDC175B	600	2x220	175	60	866
VDC175C	700	2x270	175	60	966
VDC200	500	2x150	200	65	805
VDC200A	600	2x200	200	65	905
VDC200B	700	2x250	200	65	1005
VDC200C	800	2x300	200	65	1105
VDC200D	900	2x350	200	65	1205

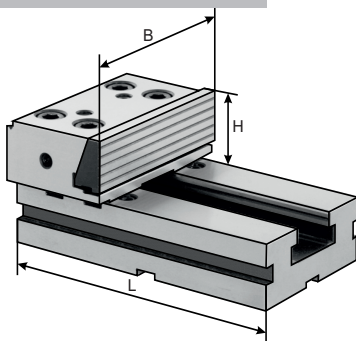
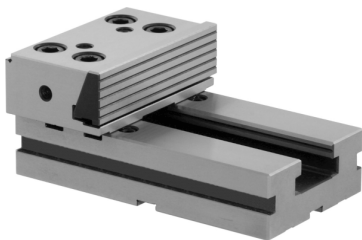
Module with moving sponge series



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Suitable for long, large workpieces.

Model	L	B	H
MMS100	140	100	30
MMS125	160	125	40
MMS150	230	150	50
MMS175	240	175	60
MMS200	300	200	65

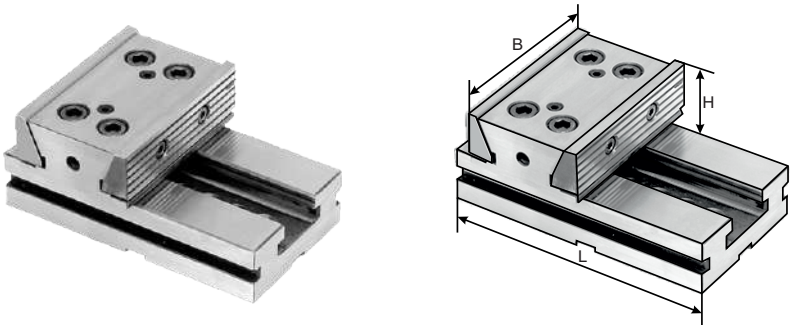
Module with fixed sponge series



- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Suitable for long, large workpieces.

Model	L	B	H
MFS100	140	100	30
MFS125	160	125	40
MFS150	230	150	50
MFS175	240	175	60
MFS200	300	200	65

Module with fixed sponge series

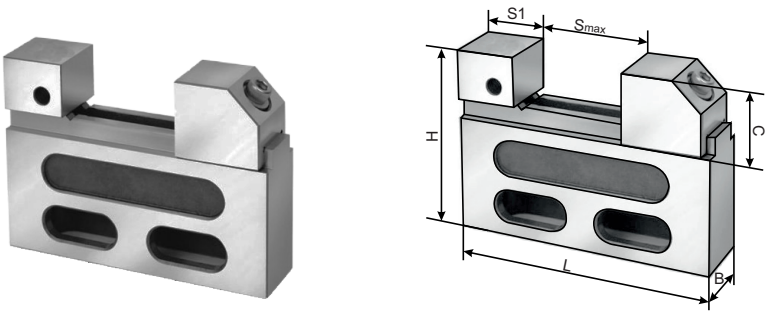


- Made of heat treated alloy
- Steel hardening to 58-63 HRC, polished;
- Parallelism: 0,005mm / 100mm;
- Perpendicularity: 0,005mm;
- Suitable for long, large workpieces.

Model	L	B	H
MDS100	140	100	30
MDS125	160	125	40
MDS150	230	150	50
MDS175	240	175	60
MDS200	300	200	65

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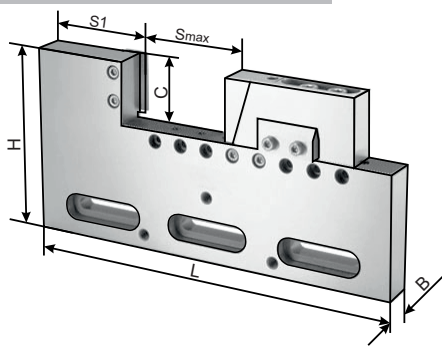
Adjustable clamping device series



- Designed for EDM machines;
- Precision control on X, Y, Z axes;
- Convenient and quick clamp for side processing.

Model	H	B	S1	Smax	L	C
ACA140	140	28	30	0-50	120	25

Adjustable clamping device series

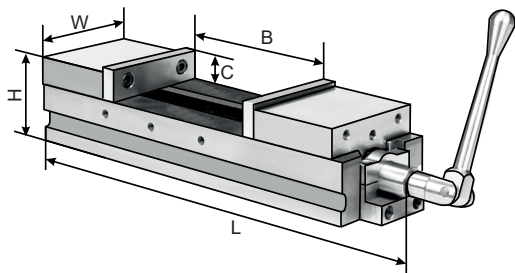


- Designed for EDM machines;
- Precision control on X, Y, Z axes;
- Convenient and quick clamp for side processing.

Model	H	B	S1	Smax	L	C
ACB130	130	22	-	100	270	45
ACB135	135	22	-	150	320	50
ACB170	170	24	80	160	350	60

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Precision vises mechanical series



- Vice is made of nodular cast iron;
- Housing protection from chip approach;
- Used on machining centers;
- Same height for multiple use in production line, confirmed clamping forc;
- Quides made of hardened HRC45 steel.

Model	B	C		
PVM100	100	48	125	430
PVM130	130	55	240	495
PVM160	160	58	240	585
PVM200	200	63	280	670

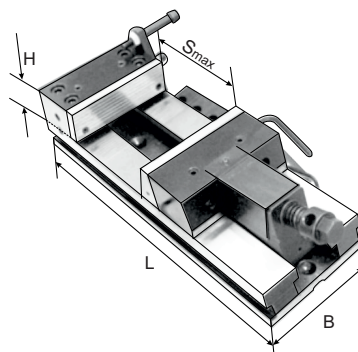
Universal power vise



- Made of high-quality steel;
- Parallelism of 0.025 mm/100 mm, squareness of 0.025 mm;
- Used on machining centers;
- Same height for multiple use in production line, confirmed clamping forc.

Model	Jaw Width	Jaw Depth	Max. Opening	Over length	Clamping Force
UPV100	100	48.5	125	532	2500
UPV130	130	53	180	580	3500
UPV160	160	63	240	680	5500
UPV200	200	63	280	732	5500

Precision machine vise



Model	B	H	Smax	L
HMV125	124	40	140	323
HMV150	149	52	210	423
HMV175	174	58	240	470
HMV200	199	66	270	520
HMV250	249	74	340	600

Hydraulic machine vise



- Robust construction with high pressure spindle, mechanical drive and wide clamping range;
- High accuracy;
- Quick adjustment of the re-clamping with the help of the adjusting pin;
- All wear parts are hardened, the vise is suitable for heavy and easy handling

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
HMV152	152	52	320	55/48	66x29x21

Universal tilting vises



- Adjustment in three positions;
- Rotation angle 360°;
- Vertical adjustment 0-90°;
- Hardened sponge.

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
UTV105	105	40	105	31/26	51x34x25
UTV125	125	40	125	35/30	56x34x26

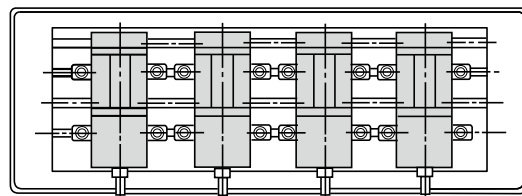
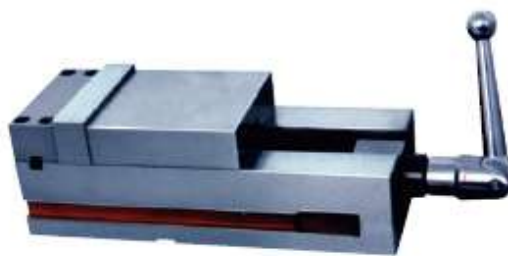
Precision vices mechanical



- Used on grinding and milling machines
- Parallelism: 0,025mm / 100mm;
- Squareness: 0,025mm;
- Longitudinal and horizontal force compression, eliminates the problem of raising the workpiece;
- Moothness of the course of the screw;
- Turntable with scale.

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
PVH100	100	32	100	17/16	38x25x18
PVH160	160	45	140	40/38	49x32x23
PVH200	200	50	190	75/69	62.5x41x25.5

Precision vise



- Made of cast iron for tight and secure clamping;
- Hardened guides HRC45;
- Use the semi-sphere segment principle;
- When operate several vises (in a row) put on one machine bed, the operating situation is as shown.

Model	Width of Jaw	Height of Jaw	Max. Opening	Over length
PVA80N	80	24	75	256
PVA100N	100	32	100	305
PVA160N	160	45	140	438
PVA200N	200	50	190	517
PVA250N	250	70	250	656

Precision vices mechanical



- Used on milling drilling machines;
- Parallelism: 0,025mm / 100mm;
- Squareness: 0,025mm;
- Turntable with scale.

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
PVB80	80	30	65	30/28 (4 pcs)	48x29x13
PVB100	100	35	80	42/40 (4 pcs)	56x31x14
PVB125	125	40	100	18/17	33x19x17
PVB160	160	52	125	43/41	45x25x23
PVB200	200	63	160	58/56	48x27x24

Declinable machine vise



- Made of high quality cast iron
- Parallelism: 0,025mm / 100mm;
- Perpendicularity: 0,025mm;
- The vice can be rotated 90 degrees in the vertical plane, and 360 degrees in the horizontal bar relative to the base;
- Widely used on machines when machining ends, grooves, holes.

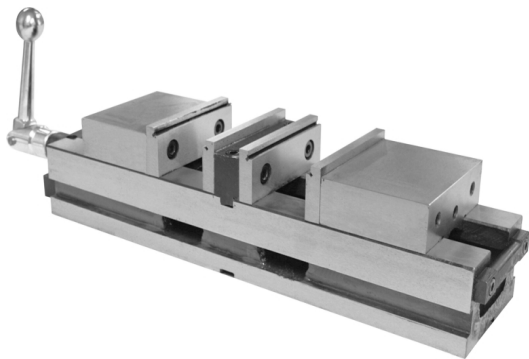
Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
DMA100	100	41	80	20/19	36x22x20
DMA125	125	46	100	31/29	46x26x21.5
DMA125L	125	46	140	31/29	46x26x21.5
DMA160	160	50	125	45/43	46.5x29x24.5

Drilling machine vise



- The body is made of high quality cast iron;
- Recommended for drilling and light milling

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
DMB65	65	16	45	11.5/10 (10 pcs)	26x23x20
DMB80	80	20	50	22/20 (10 pcs)	30x28x25
DMB100	100	23	75	34/31 (10 pcs)	37x34x30
DMB125	125	26	100	39/37 (8 pcs)	41x30.5x33
DMB150	150	30	125	37/35 (5 pcs)	39x24x38
DMB200	200	35	175	49/46 (4 pcs)	41x38x30



- Hardness of working surfaces reaches HRC50-60;
- Made of cast iron with spheroidal graphite;
- Parallelism: 0,025mm / 100mm;
- Perpendicularity: 0,025mm / 100mm;
- It is possible to use both individually and install several pieces in a row on the machine table;
- Fastening a vice with angular locking prevents the working surface from being lifted during operation.

Model	Width of Jaw	Height of Jaw	Max. Opening	GW./NW.	LxWxH
TVM100	100	35	75	19/17	58x18x16.5
TVM160	160	50	100	54/47	73x28x20

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