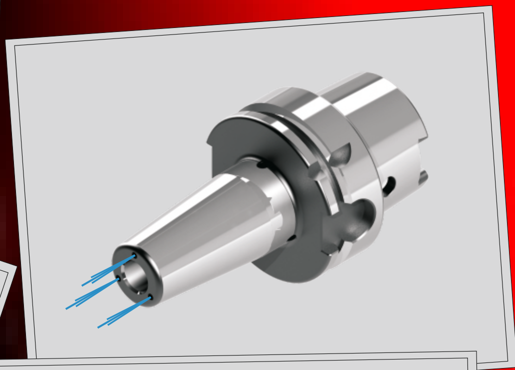
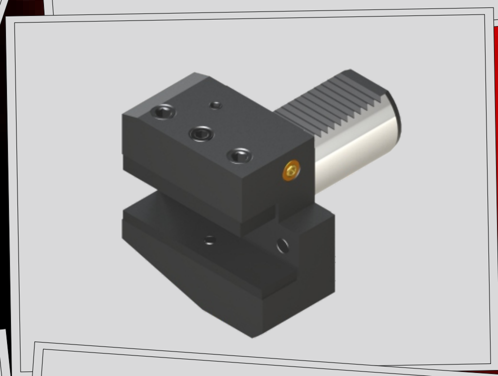
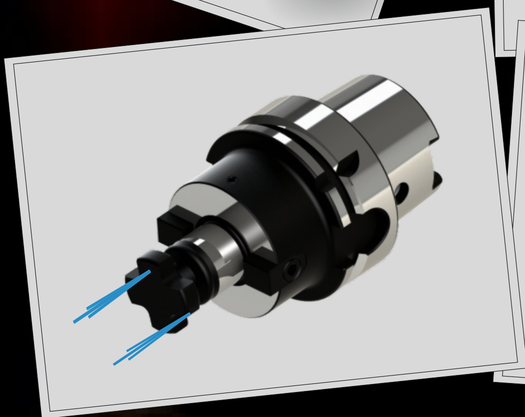
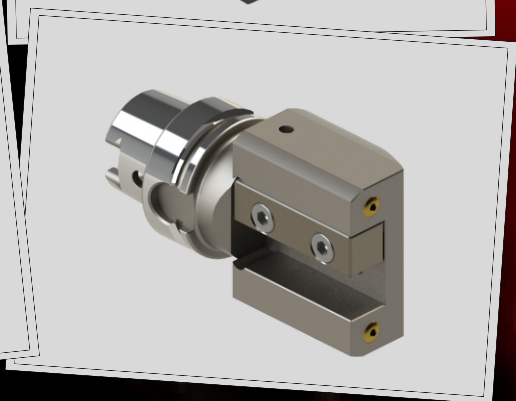
SAB









TOOLHOLDERS

Štovani kupci,

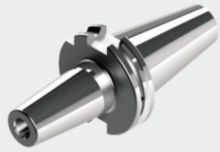
molimo da uvažite slijedeće :

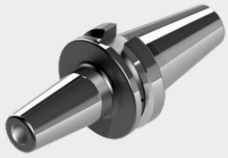
- Pridržavamo pravo na tehničke izmjene, kao i na izmjene cijena.
- Slike i ilustracije nisu obavezujuće.
- Ne odgovaramo za eventualne tiskarske pogreške.
- Važeći su naši uvjeti prodaje, kao i rokovi isporuke.

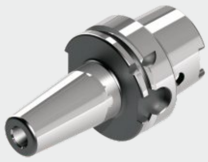
Dear customer,

please note following :

- We reserve right to make technical modifications and to change the prices.
- Pictorial illustrations are not binding.
- We accept not any liability for eventual print or type mistakes
- Only our terms and conditions are valid.





1

DIN 69871

MAS-BT 403

2

3

DIN 2080

4

HSK-ISO12164

HSK - ISO 12164

4

Form E

Form F

Form T

5

THERMO shrinking equipment

6

VDI - DIN69880

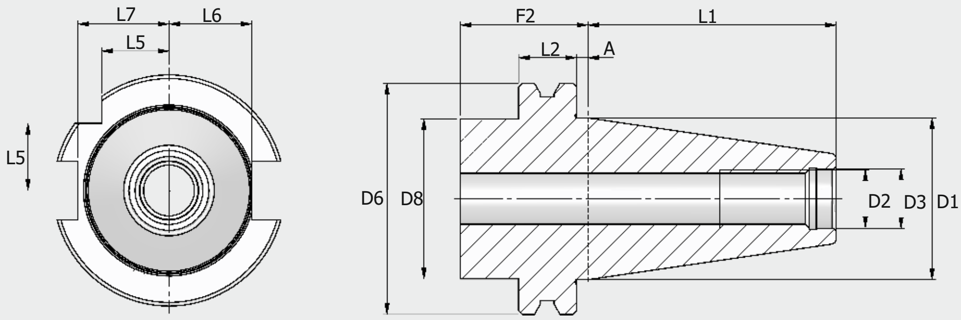
ACCESSORIES

7

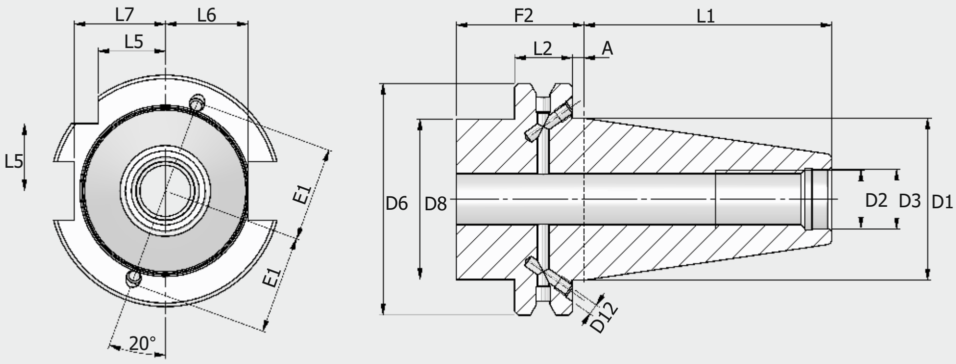
Notes

DIN ISO 7388-1 (DIN 69871)

Technical informations



DIN 69871 A/AD



DIN 69871 AD+B

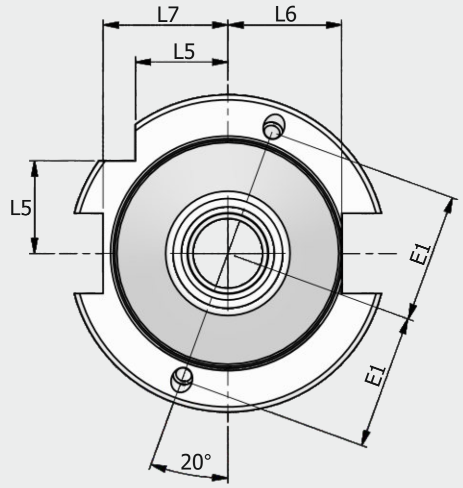
Cone	D1	D2	D3	D6	D8	D11	D12	L1	L2	L5	L6	L7	A	E1	F2
30	31,75	M12	13	50	<45	-	-	47,80	15,90	15,00	16,40	19,00	3,20	21	min.35
40	44,45	M16	17	63,55	<50	M4	M4	68,40	15,90	18,50	22,80	25,00	3,20	27	min.35
50	69,85	M24	25	97,50	<80	M4	M6	101,75	15,90	30,00	35,50	37,70	3,20	42	min.35

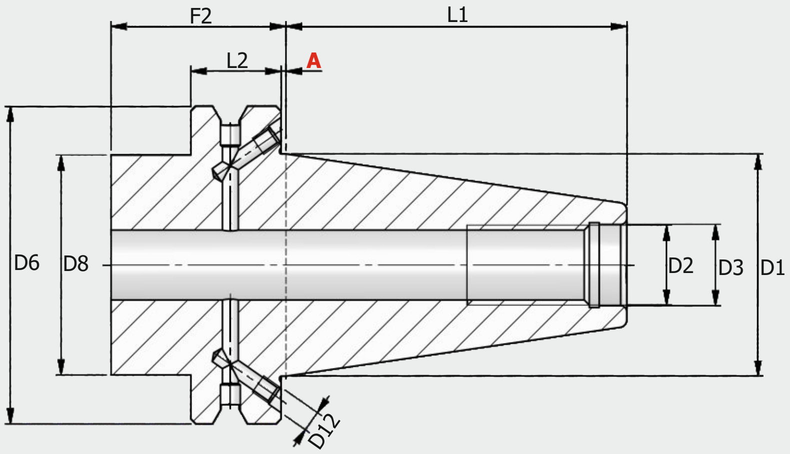
Material : Case hardened steel with min. 900 N/mm² tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided.

Accuracy : Taper angle AT3 quality class. Roughness Ra <0.2

Technical informations



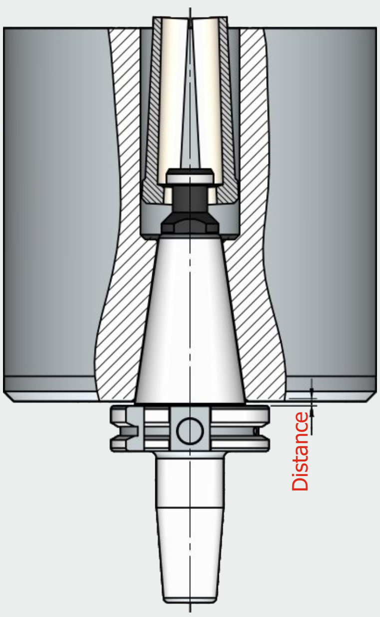


DIN 69871/ADB DoubleContact

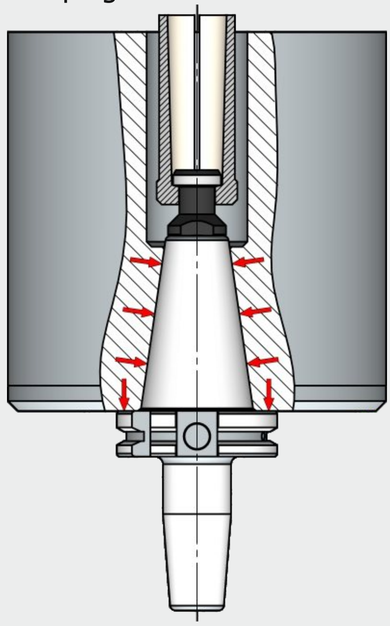
Cone	D1	D2	D3	D6	D8	D12	L1	L2	L5	L6	L7	A	E1	F2
30	31,75	M12	13	50	<45	-	47.80	18.10	15.00	16.40	19.00	1.00		min.35
40	44,45	M16	17	63.55	<50	M4	68.40	18.10	18.50	22.80	25.00	1.00	27	min.35
50	69,85	M24	25	97.50	<80	M6	101.75	17.60	30.00	35.50	37.70	1.50	42	min.35

The diference betwen standard contact and DoubleContact, is a contact with shank and flange face. This allows a higher radial rigidity

Before clamping



After clamping

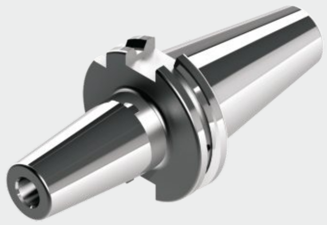


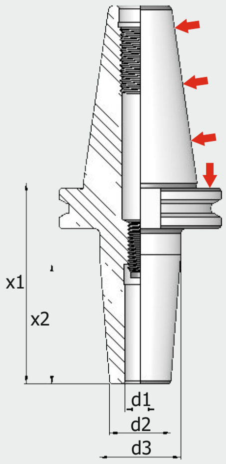
SAB

THERMO shrink-fit chucks

69871 AD | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
double 30 contact	3	15	20	80	-	**SF03.2D30.080**
	3	15	20	120	-	**SF03.2D30.120**
	3	15	20	160	-	**SF03.2D30.160**
	4	15	20	80	-	**SF04.2D30.080**
	4	15	20	120	-	**SF04.2D30.120**
	4	15	20	160	-	**SF04.2D30.160**
	5	15	20	80	-	**SF05.2D30.080**
	5	15	20	120	-	**SF05.2D30.120**
	5	15	20	160	-	**SF05.2D30.160**
	6	20	27	80	36	**SF06.2D30.080**
	6	20	27	120	36	**SF06.2D30.120**
	6	20	27	160	36	**SF06.2D30.160**
	8	20	27	80	36	**SF08.2D30.080**
	8	20	27	120	36	**SF08.2D30.120**
	8	20	27	160	36	**SF08.2D30.160**
	10	24	32	80	42	**SF10.2D30.080**
	10	24	32	120	42	**SF10.2D30.120**
	10	24	32	160	42	**SF10.2D30.160**
	12	24	32	80	47	**SF12.2D30.080**
	12	24	32	120	47	**SF12.2D30.120**
	12	24	32	160	47	**SF12.2D30.160**
	14	27	34	80	47	**SF14.2D30.080**
	14	27	34	120	47	**SF14.2D30.120**
	14	27	34	160	47	**SF14.2D30.160**
	16	27	34	80	50	**SF16.2D30.080**
	16	27	34	120	50	**SF16.2D30.120**
	16	27	34	160	50	**SF16.2D30.160**
	18	33	42	80	50	**SF18.2D30.080**
	18	33	42	120	50	**SF18.2D30.120**
	18	33	42	160	50	**SF18.2D30.160**
	20	33	42	80	52	**SF20.2D30.080**
	20	33	42	120	52	**SF20.2D30.120**
	20	33	42	160	52	**SF20.2D30.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

ER Collet chucks - DIN6499

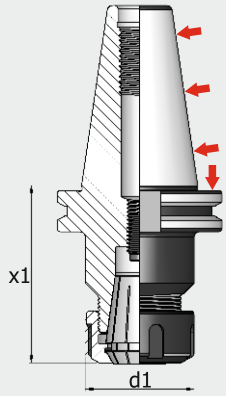
SAB

DIN 69871

69871 AD | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d2	code
double 30 contact	ER16	0.5-10	50	28	**ER16.2D30.050**
	ER20	1-13	50	35	**ER20.2D30.050**
	ER25	1-16	50	42	**ER25.2D30.050**
	ER32	2-20	60	50	**ER32.2D30.060**



Accessories 7.06

Accessories 7.07

Accessories 7.14

Accessories 7.03

Accessories 7.01

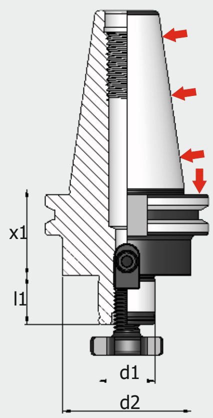
Shell mill holders for cutters with driving slot

SAB

69871 AD | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 30 contact	16	40	17	28	**AD16.2D30.040**
	22	40	19	35	**AD22.2D30.040**
	27	50	21	42	**AD27.2D30.050**



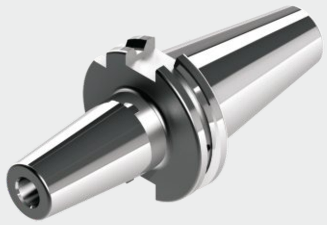
Accessories 7.15

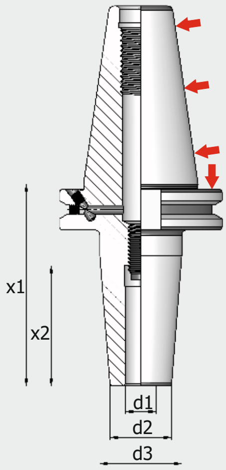
Accessories 7.14

Accessories 7.01

69871 AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
double 40 contact	3	15	20	80	-	**SF03.2D44.080**
	3	15	20	120	-	**SF03.2D44.120**
	3	15	20	160	-	**SF03.2D44.160**
	4	15	20	80	-	**SF04.2D44.080**
	4	15	20	120	-	**SF04.2D44.120**
	4	15	20	160	-	**SF04.2D44.160**
	5	15	20	80	-	**SF05.2D44.080**
	5	15	20	120	-	**SF05.2D44.120**
	5	15	20	160	-	**SF05.2D44.160**
	6	20	27	80	36	**SF06.2D44.080**
	6	20	27	120	36	**SF06.2D44.120**
	6	20	27	160	36	**SF06.2D44.160**
	8	20	27	80	36	**SF08.2D44.080**
	8	20	27	120	36	**SF08.2D44.120**
	8	20	27	160	36	**SF08.2D44.160**
	10	24	32	80	42	**SF10.2D44.080**
	10	24	32	120	42	**SF10.2D44.120**
	10	24	32	160	42	**SF10.2D44.160**
	12	24	32	80	47	**SF12.2D44.080**
	12	24	32	120	47	**SF12.2D44.120**
	12	24	32	160	47	**SF12.2D44.160**
	14	27	34	80	47	**SF14.2D44.080**
	14	27	34	120	47	**SF14.2D44.120**
	14	27	34	160	47	**SF14.2D44.160**
	16	27	34	80	50	**SF16.2D44.080**
	16	27	34	120	50	**SF16.2D44.120**
	16	27	34	160	50	**SF16.2D44.160**
	18	33	42	80	50	**SF18.2D44.080**
	18	33	42	120	50	**SF18.2D44.120**
	18	33	42	160	50	**SF18.2D44.160**
	20	33	42	80	52	**SF20.2D44.080**
	20	33	42	120	52	**SF20.2D44.120**
	20	33	42	160	52	**SF20.2D44.160**
	25	44	53	100	58	**SF25.2D44.100**
	25	44	53	160	58	**SF25.2D44.160**
	32	44	53	100	63	**SF32.2D44.100**
	32	44	53	160	63	**SF32.2D44.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

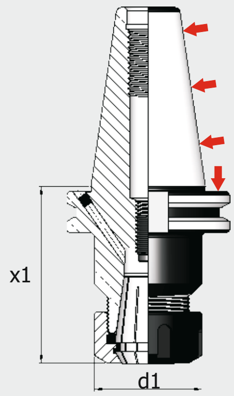
ER Collet chucks - DIN6499

SAB

69871 AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
double 40 contact	ER16	0.5-10	63	28	**ER16.2D44.063**
	ER16	0.5-10	100	28	**ER16.2D44.100**
	ER16	0.5-10	130	28	**ER16.2D44.130**
	ER16	0.5-10	160	28	**ER16.2D44.160**
	ER25	1-16	60	35	**ER25.2D44.060**
	ER25	1-16	100	35	**ER25.2D44.100**
	ER25	1-16	130	35	**ER25.2D44.130**
	ER25	1-16	160	35	**ER25.2D44.160**
	ER32	2-20	70	42	**ER32.2D44.070**
	ER32	2-20	100	42	**ER32.2D44.100**
	ER32	2-20	130	42	**ER32.2D44.130**
	ER32	2-20	160	42	**ER32.2D44.160**
	ER40	3-26	80	50	**ER40.2D44.080**
	ER40	3-26	100	50	**ER40.2D44.100**
	ER40	3-26	130	50	**ER40.2D44.130**
	ER40	3-26	160	50	**ER40.2D44.160**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

Shell mill holders for cutters with driving slot

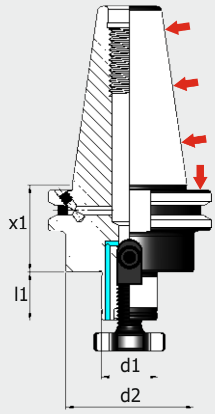
SAB

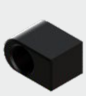
With internal/ face coolant suppy - IK

69871 AD+B | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 40 contact	16	35	17	38	**AD16.2D44.035**
	16	100	17	38	**AD16.2D44.100**
	22	35	19	50	**AD22.2D44.035**
	22	100	19	50	**AD22.2D44.100**
	22	160	19	50	**AD22.2D44.160**
	27	35	21	50	**AD27.2D44.035**
	27	100	21	50	**AD27.2D44.100**
	27	160	21	50	**AD27.2D44.160**
	32	50	24	78	**AD32.2D44.050**
	32	100	24	78	**AD32.2D44.100**
	32	160	24	78	**AD32.2D44.160**
	40	50	27	89	**AD40.2D44.050**
	40	100	27	89	**AD40.2D44.100**
	40	160	27	89	**AD40.2D44.160**



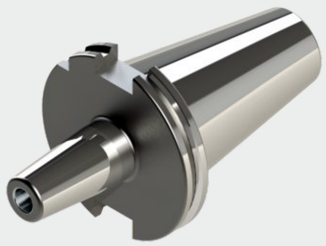

Accessories 7.15

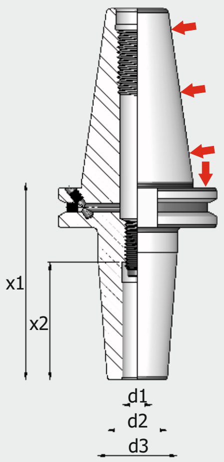

Accessories 7.14


Accessories 7.01

69871 AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
double 50 contact	3	15	20	80	-	SF03.2D55.080
	3	15	20	120	-	SF03.2D55.120
	3	15	20	160	-	SF03.2D55.160
	4	15	20	80	-	SF04.2D55.080
	4	15	20	120	-	SF04.2D55.120
	4	15	20	160	-	SF04.2D55.160
	5	15	20	80	-	SF05.2D55.080
	5	15	20	120	-	SF05.2D55.120
	5	15	20	160	-	SF05.2D55.160
	6	20	27	80	36	SF06.2D55.080
	6	20	27	120	36	SF06.2D55.120
	6	20	27	160	36	SF06.2D55.160
	8	20	27	80	36	SF08.2D55.080
	8	20	27	120	36	SF08.2D55.120
	8	20	27	160	36	SF08.2D55.160
	10	24	32	80	42	SF10.2D55.080
	10	24	32	120	42	SF10.2D55.120
	10	24	32	160	42	SF10.2D55.160
	12	24	32	80	47	SF12.2D55.080
	12	24	32	120	47	SF12.2D55.120
	12	24	32	160	47	SF12.2D55.160
	14	27	34	80	47	SF14.2D55.080
	14	27	34	120	47	SF14.2D55.120
	14	27	34	160	47	SF14.2D55.160
	16	27	34	80	50	SF16.2D55.080
	16	27	34	120	50	SF16.2D55.120
	16	27	34	160	50	SF16.2D55.160
	18	33	42	80	50	SF18.2D55.080
	18	33	42	120	50	SF18.2D55.120
	18	33	42	160	50	SF18.2D55.160
	20	33	42	80	52	SF20.2D55.080
	20	33	42	120	52	SF20.2D55.120
	20	33	42	160	52	SF20.2D55.160
	25	44	53	100	58	SF25.2D55.100
	25	44	53	160	58	SF25.2D55.160
	32	44	53	100	63	SF32.2D55.100
	32	44	53	160	63	SF32.2D55.160

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

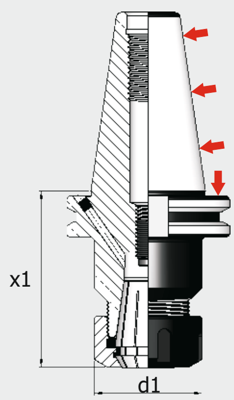
ER Collet chucks - DIN6499

SAB

69871 AD+B | ≤3µ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
double 50 contact	ER16	0.5-10	100	28	**ER16.2D55.100**
	ER16	0.5-10	160	28	**ER16.2D55.160**
	ER25	1-16	100	35	**ER25.2D55.100**
	ER25	1-16	160	35	**ER25.2D55.160**
	ER32	2-20	70	42	**ER32.2D55.070**
	ER32	2-20	100	42	**ER32.2D55.100**
	ER32	2-20	160	42	**ER32.2D55.160**
	ER40	3-26	100	50	**ER40.2D55.100**
	ER40	3-26	160	50	**ER40.2D55.160**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

Shell mill holders for cutters with driving slot

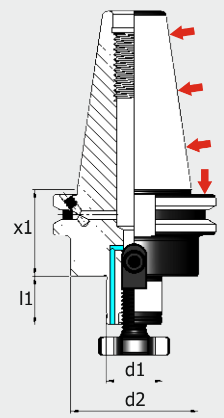
SAB

With internal/ face coolant suppy - IK

69871 AD+B | ≤3µ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 50 contact	16	35	17	38	**AD16.2D55.035**
	16	100	17	38	**AD16.2D55.100**
	22	35	19	50	**AD22.2D55.035**
	22	100	19	50	**AD22.2D55.100**
	22	160	19	50	**AD22.2D55.160**
	27	35	21	50	**AD27.2D55.035**
	27	100	21	50	**AD27.2D55.100**
	27	160	21	50	**AD27.2D55.160**
	32	50	24	78	**AD32.2D55.035**
	32	100	24	78	**AD32.2D55.100**
	32	160	24	78	**AD32.2D55.160**
	40	50	27	89	**AD40.2D55.050**
	40	100	27	89	**AD40.2D55.100**
	40	160	27	89	**AD40.2D55.160**




Accessories 7.15


Accessories 7.14

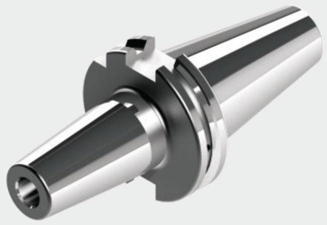

Accessories 7.01

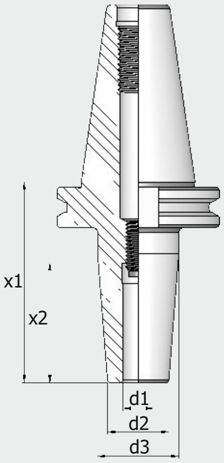
SAB

THERMO shrink-fit chucks

69871 AD | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
30	3	15	20	80	-	**SF03.D30.080**
	3	15	20	120	-	**SF03.D30.120**
	3	15	20	160	-	**SF03.D30.160**
	4	15	20	80	-	**SF04.D30.080**
	4	15	20	120	-	**SF04.D30.120**
	4	15	20	160	-	**SF04.D30.160**
	5	15	20	80	-	**SF05.D30.080**
	5	15	20	120	-	**SF05.D30.120**
	5	15	20	160	-	**SF05.D30.160**
	6	20	27	80	36	**SF06.D30.080**
	6	20	27	120	36	**SF06.D30.120**
	6	20	27	160	36	**SF06.D30.160**
	8	20	27	80	36	**SF08.D30.080**
	8	20	27	120	36	**SF08.D30.120**
	8	20	27	160	36	**SF08.D30.160**
	10	24	32	80	42	**SF10.D30.080**
	10	24	32	120	42	**SF10.D30.120**
	10	24	32	160	42	**SF10.D30.160**
	12	24	32	80	47	**SF12.D30.080**
	12	24	32	120	47	**SF12.D30.120**
	12	24	32	160	47	**SF12.D30.160**
	14	27	34	80	47	**SF14.D30.080**
	14	27	34	120	47	**SF14.D30.120**
	14	27	34	160	47	**SF14.D30.160**
	16	27	34	80	50	**SF16.D30.080**
	16	27	34	120	50	**SF16.D30.120**
	16	27	34	160	50	**SF16.D30.160**
	18	33	42	80	50	**SF18.D30.080**
	18	33	42	120	50	**SF18.D30.120**
	18	33	42	160	50	**SF18.D30.160**
	20	33	42	80	52	**SF20.D30.080**
	20	33	42	120	52	**SF20.D30.120**
	20	33	42	160	52	**SF20.D30.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

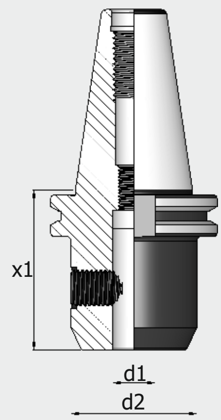
Accessories 7.01

End mill holders «WELDON»

69871 AD | ≤3μ | G6.3 25.000

Adaptor with built in locking screw

Cone	d1	x1	d2	code
30	6	50	25	**WE06.D30.050**
	8	50	28	**WE08.D30.050**
	10	50	35	**WE10.D30.050**
	12	50	42	**WE12.D30.050**
	14	50	44	**WE14.D30.050**
	16	63	48	**WE16.D30.063**
	18	63	50	**WE18.D30.063**
	20	63	52	**WE20.D30.063**



Accessories 7.14

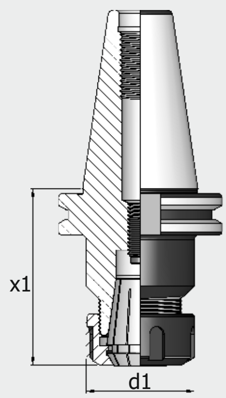
Accessories 7.01

ER Collet chucks - DIN6499

69871 AD | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d2	code
30	ER16	0.5-10	50	28	**ER16.D30.050**
	ER20	1-13	50	35	**ER20.D30.050**
	ER25	1-16	50	42	**ER25.D30.050**
	ER32	2-20	60	50	**ER32.D30.060**



Accessories 7.06

Accessories 7.07

Accessories 7.14

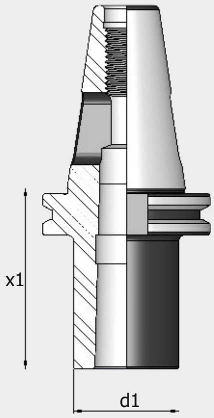
Accessories 7.03

Accessories 7.01

SAB

Morse taper holders for drills

69871 AD | ≤5μ | G6.3 25.000



Cone	MK	x1	d2	code
30	1	50	25	**MK1B.D30.050**
	2	65	32	**MK2B.D30.065**
	3	80	40	**MK3B.D30.080**

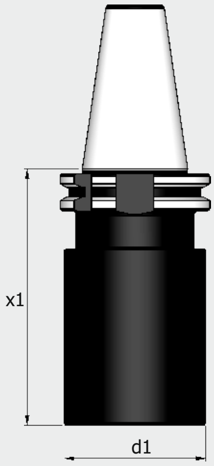
Accessories 7.01

SAB

Boring bar - blanks

69871 A

Application : for making special tools



Cone	d1	x1	code
30	50	120	**RL50.D30.120**
	50	200	**RL50.D30.200**

Accessories 7.01

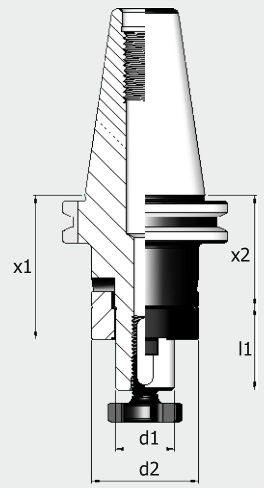
Combi shell mill holder for milling cutters

SAB

69871 AD | ≤3μ | G6.3 25.000

With driving key, driving ring and cross screw

Cone	d1	x1	x2	d2	l2	code
30	16	50	45	32	27	**KD16.D30.050**
	22	50	43	40	31	**KD22.D30.050**
	27	55	43	48	33	**KD27.D30.055**
	32	60	46	58	38	**KD32.D30.060**




Accessories 7.14


Accessories 7.14


Accessories 7.14


Accessories 7.01

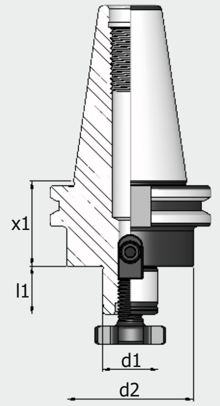
Shell mill holders for cutters with driving slot

SAB

69871 AD | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
30	16	40	17	28	**AD16.D30.040**
	22	40	19	35	**AD22.D30.040**
	27	50	21	42	**AD27.D30.050**
	32	50	24	50	**AD32.D30.050**




Accessories 7.15


Accessories 7.14

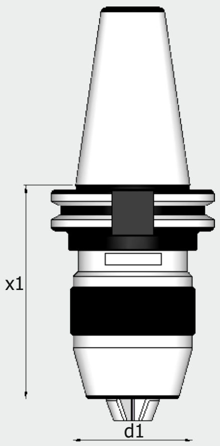

Accessories 7.01

SAB

NC drill chucks for RH rotation

69871 A | ≤30µ | G6.3 12.000

With special wrench for tightening



Cone	mm	x1	d1	code
30	0-8	74	37	**NC08.D30.074**
	0-10	87	43	**NC10.D30.087**
	1-13	100	48	**NC13.D30.100**

DESCRIPTION :
Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly unimpossible.
Slipping-off of the drill chuck unimpossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10 and 13 mm
Special wrench included.

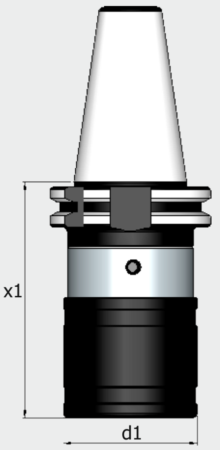
Accessories 7.01

SAB

Tapping head quick-change

69871 A

With length compensation in compression and tension



Cone	Tap size	Compensation	Inserts size	x1	d1	code
30	M3-M14	±7,5 mm	1	74	36	**GN12.D30.074**
	M5-M22	±12,5 mm	2	98	53	**GN20.D30.098**

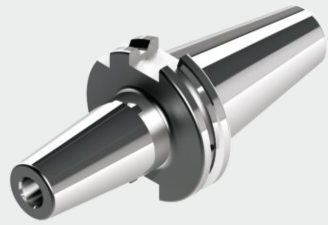
Accessories 7.10

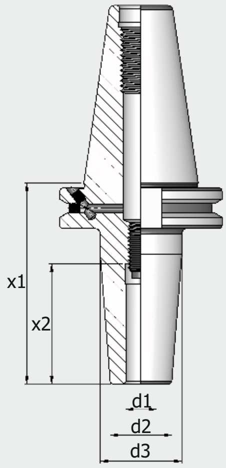
Accessories 7.11

Accessories 7.01

69871 AD+B | ≤3µ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
40	3	15	20	80	-	SF03.D44.080
	3	15	20	120	-	SF03.D44.120
	3	15	20	160	-	SF03.D44.160
	4	15	20	80	-	SF04.D44.080
	4	15	20	120	-	SF04.D44.120
	4	15	20	160	-	SF04.D44.160
	5	15	20	80	-	SF05.D44.080
	5	15	20	120	-	SF05.D44.120
	5	15	20	160	-	SF05.D44.160
	6	20	27	80	36	SF06.D44.080
	6	20	27	120	36	SF06.D44.120
	6	20	27	160	36	SF06.D44.160
	6	20	27	200	36	SF06.D44.200
	8	20	27	80	36	SF08.D44.080
	8	20	27	120	36	SF08.D44.120
	8	20	27	160	36	SF08.D44.160
	8	20	27	200	36	SF08.D44.200
	10	24	32	80	42	SF10.D44.080
	10	24	32	120	42	SF10.D44.120
	10	24	32	160	42	SF10.D44.160
	10	24	32	200	42	SF10.D44.200
	12	24	32	80	47	SF12.D44.080
	12	24	32	120	47	SF12.D44.120
	12	24	32	160	47	SF12.D44.160
	12	24	32	200	47	SF12.D44.200
	14	27	34	80	47	SF14.D44.080
	14	27	34	120	47	SF14.D44.120
	14	27	34	160	47	SF14.D44.160
	14	27	34	200	47	SF14.D44.200
	16	27	34	80	50	SF16.D44.080
	16	27	34	120	50	SF16.D44.120
	16	27	34	160	50	SF16.D44.160
	16	27	34	200	50	SF16.D44.200
	18	33	42	80	50	SF18.D44.080
	18	33	42	120	50	SF18.D44.120
	18	33	42	160	50	SF18.D44.160
	18	33	42	200	50	SF18.D44.200
	20	33	42	80	52	SF20.D44.080
	20	33	42	120	52	SF20.D44.120
	20	33	42	160	52	SF20.D44.160
	20	33	42	200	52	SF20.D44.200
	25	44	53	100	58	SF25.D44.100
	25	44	53	160	58	SF25.D44.160
	25	44	53	200	58	SF25.D44.200
	32	44	53	100	63	SF32.D44.100
	32	44	53	160	63	SF32.D44.160
	32	44	53	200	63	SF32.D44.200

Shrinking equipment 5.01

Extensions 7.12

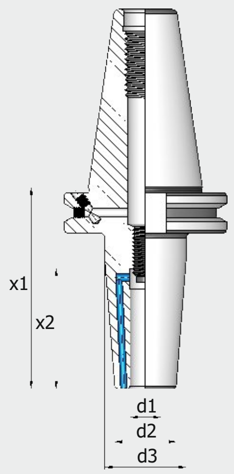
Accessories 7.14

Accessories 7.01

THERMO shrink-fit chucks

69871 AD+B | ≤3μ | G2.5 25.000

With internal/ face coolant suppy - IK



Cone	d1	d2	d3	x1	x2	code
40	6	20	27	80	36	SF06.D44.080.IK
	6	20	27	120	36	SF06.D44.120.IK
	6	20	27	160	36	SF06.D44.160.IK
	6	20	27	200	36	SF06.D44.200.IK
	8	20	27	80	36	SF08.D44.080.IK
	8	20	27	120	36	SF08.D44.120.IK
	8	20	27	160	36	SF08.D44.160.IK
	8	20	27	200	36	SF08.D44.200.IK
	10	24	32	80	42	SF10.D44.080.IK
	10	24	32	120	42	SF10.D44.120.IK
	10	24	32	160	42	SF10.D44.160.IK
	10	24	32	200	42	SF10.D44.200.IK
	12	24	32	90	47	SF12.D44.090.IK
	12	24	32	120	47	SF12.D44.120.IK
	12	24	32	160	47	SF12.D44.160.IK
	12	24	32	200	47	SF12.D44.200.IK
	14	27	34	90	47	SF14.D44.090.IK
	14	27	34	120	47	SF14.D44.120.IK
	14	27	34	160	47	SF14.D44.160.IK
	14	27	34	200	47	SF14.D44.200.IK
	16	27	34	90	50	SF16.D44.090.IK
	16	27	34	120	50	SF16.D44.120.IK
	16	27	34	160	50	SF16.D44.160.IK
	16	27	34	200	50	SF16.D44.200.IK
	18	33	42	90	50	SF18.D44.090.IK
	18	33	42	120	50	SF18.D44.120.IK
	18	33	42	160	50	SF18.D44.160.IK
	18	33	42	200	50	SF18.D44.200.IK
	20	33	42	90	52	SF20.D44.090.IK
	20	33	42	120	52	SF20.D44.120.IK
	20	33	42	160	52	SF20.D44.160.IK
	20	33	42	200	52	SF20.D44.200.IK
	25	44	53	100	58	SF25.D44.100.IK
	25	44	53	160	58	SF25.D44.160.IK
	25	44	53	200	58	SF25.D44.200.IK
	32	44	53	100	63	SF32.D44.100.IK
	32	44	53	160	63	SF32.D44.160.IK
	32	44	53	200	63	SF32.D44.200.IK

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

THERMO shrink-fit chucks

SAB

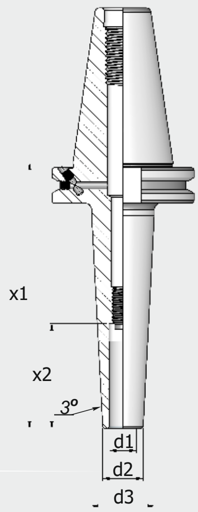
DIN 69871

Slim execution 3°

69871 AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
40	3	9	16	120	-	SF03.D44.120.3
	3	9	23	160	-	SF03.D44.160.3
	4	10	20	120	-	SF04.D44.120.3
	4	10	24	160	-	SF04.D44.160.3
	5	11	21	120	-	SF05.D44.120.3
	5	11	25	160	-	SF05.D44.160.3
	6	12	22	120	36	SF06.D44.120.3
	6	12	26	160	36	SF06.D44.160.3
	8	16	24	120	36	SF08.D44.120.3
	8	16	28	160	36	SF08.D44.160.3
	10	16	26	120	42	SF10.D44.120.3
	10	16	30	160	42	SF10.D44.160.3
	12	18	28	120	47	SF12.D44.120.3
	12	18	32	160	47	SF12.D44.160.3
	16	24	34	120	47	SF16.D44.120.3
	16	24	38	160	47	SF16.D44.160.3




Shrinking equipment 5.01


Extensions 7.12


Accessories 7.14


Accessories 7.01

THERMO shrink-fit chucks

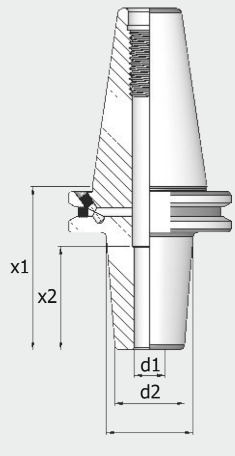
SAB

Short (compact) execution

69871 AD+B | ≤3μ | G6.3 25.000

Without length adjusting thread

Cone	d1	d2	x1	x2	code
40	6	20	65	36	SF06.D44.065
	8	20	65	36	SF08.D44.065
	10	24	65	42	SF10.D44.065
	12	27	65	47	SF12.D44.065
	14	33	70	47	SF14.D44.070
	16	33	70	50	SF16.D44.070
	18	44	70	50	SF18.D44.070
	20	44	70	50	SF20.D44.070
	25	46	75	56	SF25.D44.075
	32	47	75	58	SF32.D44.075




Shrinking equipment 5.01


Extensions 7.12

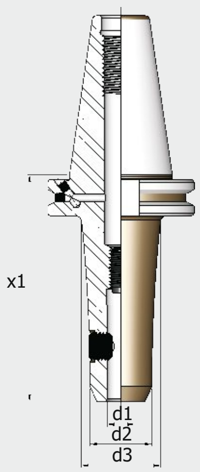

Accessories 7.14


Accessories 7.01

69871 AD+B | ≤3μ | G2.5 25.000 | Fe-Ni

Form - line

Adaptor with built in locking screw



Cone	d1	x1	d2	d3	code
40	6	100	17	25	**WE06.D44.100F**
	6	130	17	30	**WE06.D44.130F**
	6	160	17	31	**WE06.D44.160F**
	8	100	21	29	**WE08.D44.100F**
	8	130	21	35	**WE08.D44.130F**
	8	160	21	35	**WE08.D44.160F**
	10	100	24	32	**WE10.D44.100F**
	10	130	24	37	**WE10.D44.130F**
	10	160	24	38	**WE10.D44.160F**
	12	100	27	35	**WE12.D44.100F**
	12	130	27	40	**WE12.D44.130F**
	12	160	27	41	**WE12.D44.160F**
	14	100	29	37	**WE14.D44.100F**
	14	130	29	42	**WE14.D44.130F**
	14	160	29	43	**WE14.D44.160F**
	16	100	33	41	**WE16.D44.100F**
	16	130	33	46	**WE16.D44.130F**
	16	160	33	47	**WE16.D44.160F**
	18	100	35	43	**WE18.D44.100F**
	18	130	35	48	**WE18.D44.130F**
	18	160	35	49	**WE18.D44.160F**
	20	100	39	47	**WE20.D44.100F**
	20	130	39	50	**WE20.D44.130F**
	20	160	39	50	**WE20.D44.160F**
	25	100	47	47	**WE25.D44.100F**
	25	130	47	47	**WE25.D44.130F**
	25	160	47	47	**WE25.D44.160F**
	32	100	57	57	**WE32.D44.100F**
	32	130	57	57	**WE32.D44.130F**
	32	160	57	57	**WE32.D44.160F**

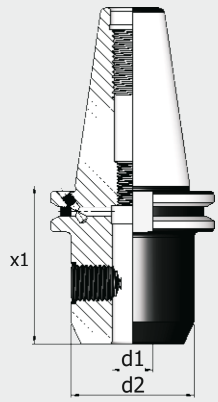
Accessories 7.14

Accessories 7.01

SAB

69871 AD+B | ≤3µ | G6.3 25.000

Adaptor with built in locking screw



Cone	d1	d2	x1	code
40	6	25	50	WE06.D44.050
	6	25	100	WE06.D44.100
	6	25	120	WE06.D44.120
	6	25	160	WE06.D44.160
	6	25	200	WE06.D44.200
	8	28	50	WE08.D44.050
	8	28	100	WE08.D44.100
	8	28	120	WE08.D44.120
	8	28	160	WE08.D44.160
	8	28	200	WE08.D44.200
	10	35	50	WE10.D44.050
	10	35	100	WE10.D44.100
	10	35	120	WE10.D44.120
	10	35	160	WE10.D44.160
	10	35	200	WE10.D44.200
	12	42	50	WE12.D44.050
	12	42	100	WE12.D44.100
	12	42	120	WE12.D44.120
	12	42	160	WE12.D44.160
	12	42	200	WE12.D44.200
	14	44	50	WE14.D44.050
	14	44	100	WE14.D44.100
	14	44	120	WE14.D44.120
	14	44	160	WE14.D44.160
	14	44	200	WE14.D44.200
	16	48	63	WE16.D44.063
	16	48	100	WE16.D44.100
	16	48	120	WE16.D44.120
	16	48	160	WE16.D44.160
	16	48	200	WE16.D44.200
	18	50	63	WE18.D44.063
	18	50	100	WE18.D44.100
	18	50	120	WE18.D44.120
	18	50	160	WE18.D44.160
	18	50	200	WE18.D44.200
	20	52	35	WE20.D44.035
	20	52	63	WE20.D44.063
	20	52	100	WE20.D44.100
	20	52	120	WE20.D44.120
	20	52	160	WE20.D44.160
	20	52	200	WE20.D44.200
	25	50	35	WE25.D44.035
	25	50	63	WE25.D44.063
	25	65	100	WE25.D44.100
	25	65	160	WE25.D44.160
	25	65	200	WE25.D44.200
	32	52	45	WE32.D44.045
	32	52	63	WE32.D44.063
	32	72	100	WE32.D44.100
	32	72	160	WE32.D44.160
	32	72	200	WE32.D44.200
	40	90	120	WE40.D44.120

Accessories 7.14

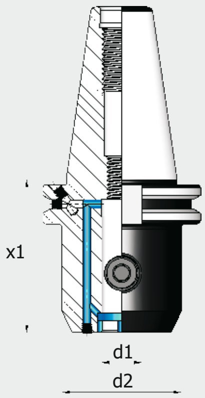
Accessories 7.01

End mill holders «WELDON»

69871 AD+B | ≤3μ | G6.3 25.000

With internal / face coolant suppy - IK

Adaptor with built in locking screw



Cone	d1	x1	d2	code
40	6	50	25	WE06.D44.050.IK
	6	100	25	WE06.D44.100.IK
	8	50	28	WE08.D44.050.IK
	8	100	28	WE08.D44.100.IK
	10	50	35	WE10.D44.050.IK
	10	100	35	WE10.D44.100.IK
	12	50	42	WE12.D44.050.IK
	12	100	42	WE12.D44.100.IK
	14	50	44	WE14.D44.050.IK
	14	100	44	WE14.D44.100.IK
	16	63	48	WE16.D44.063.IK
	16	100	48	WE16.D44.100.IK
	18	63	50	WE18.D44.063.IK
	18	100	50	WE18.D44.100.IK
	20	63	52	WE20.D44.063.IK
	20	100	52	WE20.D44.100.IK
	25	100	65	WE25.D44.100.IK
	32	100	72	WE32.D44.100.IK
	40	120	90	WE40.D44.120.IK

Accessories 7.14

Accessories 7.01

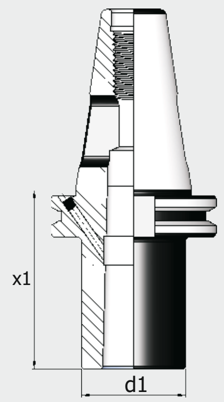
Morse taper holders for drills

SAB

69871 AD+B | ≤7μ | G6.3 25.000

DIN 69871

Cone	MK	x1	d1	code
40	1	50	25	**MK1B.D44.050**
	1	100	25	**MK1B.D40.100AD**
	2	50	32	**MK2B.D44.050**
	2	116	32	**MK2B.D40.116AD**
	3	70	40	**MK3B.D44.070**
	3	136	40	**MK3B.D40.136AD**
	4	95	48	**MK4B.D44.095**



Accessories 7.01

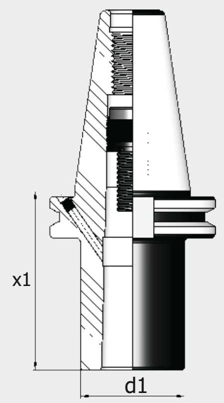
Morse taper holders for mills

SAB

69871 AD+B | ≤5μ | G6.3 25.000

With built in clamping screw

Cone	MK	x1	d1	code
40	1	50	25	**MK1A.D44.050**
	2	50	32	**MK2A.D44.050**
	3	70	40	**MK3A.D44.070**
	4	95	48	**MK4A.D44.095**



Accessories 7.01

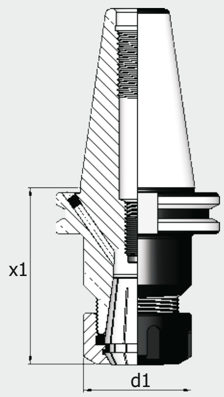
Accessories 7.15

Accessories 7.15

ER collet chucks DIN6499

69871 AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw



Cone	TIP	Range mm	x1	d1	code
40	ER16	0.5-10	63	28	**ER16.D44.063**
	ER16	0.5-10	100	28	**ER16.D44.100**
	ER16	0.5-10	130	28	**ER16.D44.130**
	ER16	0.5-10	160	28	**ER16.D44.160**
	ER16	0.5-10	200	28	**ER16.D44.200**
	ER20	1-13	60	35	**ER20.D44.060**
	ER20	1-13	100	35	**ER20.D44.100**
	ER20	1-13	130	35	**ER20.D44.130**
	ER20	1-13	160	35	**ER20.D44.160**
	ER20	1-13	200	35	**ER20.D44.200**
	ER25	1-16	60	42	**ER25.D44.060**
	ER25	1-16	100	42	**ER25.D44.100**
	ER25	1-16	130	42	**ER25.D44.130**
	ER25	1-16	160	42	**ER25.D44.160**
	ER25	1-16	200	42	**ER25.D44.200**
	ER32	2-20	70	50	**ER32.D44.070**
	ER32	2-20	100	50	**ER32.D44.100**
	ER32	2-20	130	50	**ER32.D44.130**
	ER32	2-20	160	50	**ER32.D44.160**
	ER32	2-20	200	50	**ER32.D44.200**
	ER40	3-26	80	63	**ER40.D44.080**
	ER40	3-26	100	63	**ER40.D44.100**
	ER40	3-26	130	63	**ER40.D44.130**
	ER40	3-26	160	63	**ER40.D44.160**
	ER40	3-26	200	63	**ER40.D44.200**


Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

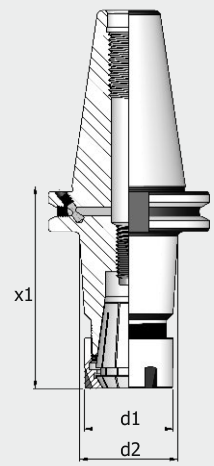
ER Collet chucks DIN6499 - MINI

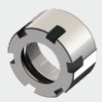
SAB

69871 AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	d2	code
40	ER11	0.5-7	70	16	20	**ER11.D44.070M**
	ER11	0.5-7	100	16	26	**ER11.D44.100M**
	ER11	0.5-7	160	16	28	**ER11.D44.160M**
	ER16	0.5-10	70	22	22	**ER16.D44.070M**
	ER16	0.5-10	100	22	28	**ER16.D44.100M**
	ER16	0.5-10	160	22	28	**ER16.D44.160M**
	ER20	1-13	70	28	28	**ER20.D44.070M**
	ER20	1-13	100	28	28	**ER20.D44.100M**
	ER20	1-13	160	28	28	**ER20.D44.160M**
	ER25	1-16	70	35	35	**ER25.D44.070M**
	ER25	1-16	100	35	35	**ER25.D44.100M**
	ER25	1-16	160	35	35	**ER25.D44.160M**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

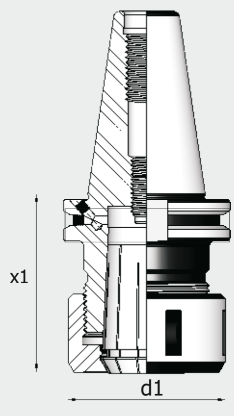
Collet chucks 1:10 for collets DIN6388

SAB

69871 AD+B | ≤3μ | G6.3 25.000

Delivery with clamping nut and adjusting screw

Cone	Range mm	x1	d1	code
40	1.5-16	70	43	**SP16.D44.070**
	1.5-16	100	43	**SP16.D44.100**
	1.5-16	160	43	**SP16.D44.160**
	2-25	70	60	**SP25.D44.070**
	2-25	100	60	**SP25.D44.100**
	2-25	160	60	**SP25.D44.160**
	4-32	80	72	**SP32.D44.080**
	4-32	140	72	**SP32.D44.140**




Accessories 7.06


Accessories 7.07


Accessories 7.14

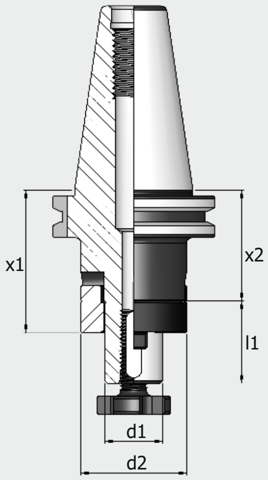

Accessories 7.05


Accessories 7.01

Combi shell mill holder for milling cutters

69871 AD | ≤3μ | G6.3 25.000

With driving key, driving ring and cross screw



Cone	d1	x1	x2	d2	l2	code
40	16	55	45	32	27	**KD16.D40.055**
	16	100	90	32	27	**KD16.D40.100**
	16	150	140	32	27	**KD16.D40.150**
	22	55	43	40	31	**KD22.D40.055**
	22	100	88	40	31	**KD22.D40.100**
	22	150	138	40	31	**KD22.D40.150**
	27	55	43	48	33	**KD27.D40.055**
	27	100	88	48	33	**KD27.D40.100**
	27	150	138	48	33	**KD27.D40.150**
	32	60	46	58	38	**KD32.D40.060**
	32	100	86	58	38	**KD32.D40.100**
	32	150	136	58	38	**KD32.D40.150**
	40	60	46	70	41	**KD40.D40.060**
	40	100	86	70	41	**KD40.D40.100**
	40	150	136	70	41	**KD40.D40.150**

Accessories 7.14

Accessories 7.14

Accessories 7.14

Accessories 7.01

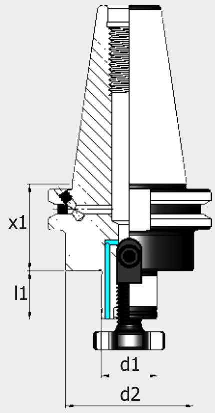
Shell mill holders for cutters with driving slot

With internal/ face coolant suppy - IK

69871 AD+B | ≤3µ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
40	16	35	17	38	**AD16.D44.035**
	16	100	17	38	**AD16.D44.100**
	22	35	19	50	**AD22.D44.035**
	22	100	19	50	**AD22.D44.100**
	22	160	19	50	**AD22.D44.160**
	27	35	21	50	**AD27.D44.035**
	27	100	21	50	**AD27.D44.100**
	27	160	21	50	**AD27.D44.160**
	32	50	24	78	**AD32.D44.050**
	32	100	24	78	**AD32.D44.100**
	32	160	24	78	**AD32.D44.160**
	40	50	27	89	**AD40.D44.050**
	40	100	27	89	**AD40.D44.100**
	40	160	27	89	**AD40.D44.160**



Accessories 7.15

Accessories 7.14

Accessories 7.01

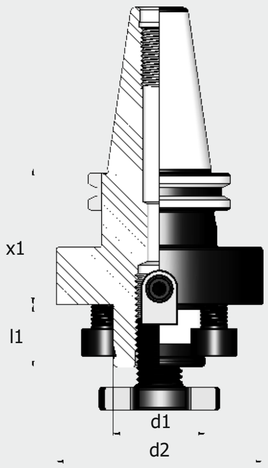
SAB

Holding arbors for milling cutters with minor diameter fit

69871 AD | ≤5μ | G6.3 15.000

With inserted driving keys DIN2079 and cross screw

Cone	d1	x1	l1	d2	code
40	40	60	30	89	**AF40.D40.060**



Accessories 7.15

Accessories 7.14

Accessories 7.01

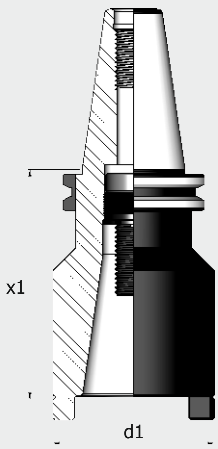
SAB

Reduction sleeves for 7:24 taper shanks

69871 AD | ≤5μ | G6.3 15.000

With inserted socket head screw DIN 912

Cone	Internal cone	d1	d1	code
40	DIN69871 - 40	70	100	**DN40.D40.100**
	DIN2080 - 40	70	125	**ISO40.D40.125**



Accessories 7.01

Accessories 7.15

Accessories 7.15

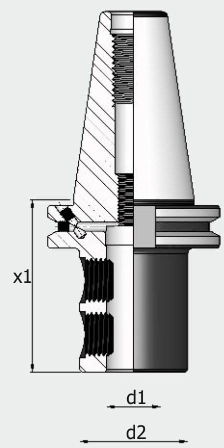
Holders for indexable inserts drills

SAB

69871 AD+B | ≤3μ | G6.3 25.000

With built in locking screw

Cone	d1	x1	d2	code
40	20	65	40	**VB20.D44.065**
	25	70	45	**VB25.D44.070**
	32	75	52	**VB32.D44.075**



Accessories 7.14

Accessories 7.01

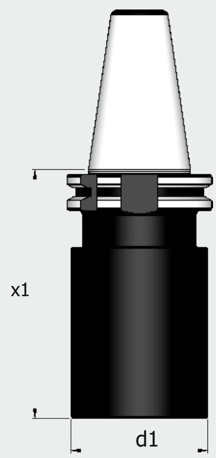
Boring bar - blanks

SAB

69871 A | pre balanced

Application : for making special tools

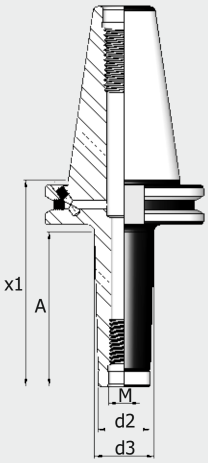
Cone	d1	x1	code
40	63,5	160	**RL63.D40.160**
	63,5	250	**RL63.D40.250**



Accessories 7.01

Holders for milling cutters with thread

69871 AD+B | ≤3μ | G2.5 25.000



Cone	M	A	x1	d2	d3	code
40	M6	25	52	10	10	**EF06.D44.052**
	M6	50	77	10	13	**EF06.D44.077**
	M6	75	102	10	20	**EF06.D44.102**
	M6	100	127	10	23	**EF06.D44.127**
	M8	25	52	13	15	**EF08.D44.052**
	M8	50	77	13	23	**EF08.D44.077**
	M8	75	102	13	23	**EF08.D44.102**
	M8	100	127	13	25	**EF08.D44.127**
	M10	25	52	18	18	**EF10.D44.052**
	M10	50	77	18	20	**EF10.D44.077**
	M10	75	102	18	23	**EF10.D44.102**
	M10	100	127	18	28	**EF10.D44.127**
	M10	125	152	18	32	**EF10.D44.152**
	M12	25	52	21	24	**EF12.D44.052**
	M12	50	77	21	24	**EF12.D44.077**
	M12	75	102	21	31	**EF12.D44.102**
	M12	100	127	21	33	**EF12.D44.127**
	M12	125	152	21	36	**EF12.D44.152**
	M12	150	177	21	40	**EF12.D44.177**
	M16	25	52	29	29	**EF16.D44.052**
	M16	50	77	29	34	**EF16.D44.077**
	M16	75	102	29	34	**EF16.D44.102**
	M16	100	127	29	36	**EF16.D44.127**
	M16	125	152	29	40	**EF16.D44.152**
	M16	150	177	29	42,5	**EF16.D44.177**

Accessories 7.01

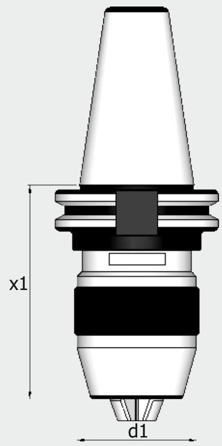
NC drill chucks for RH rotation

SAB

69871 A | ≤30µ | G6.3 12.000

With special wrench for tightening

Cone	mm	x1	d1	code
40	0-8	70	37	**NC08.D40.070**
	0-10	74	43	**NC10.D40.074**
	1-13	80	48	**NC13.D40.080**
	3-16	97	53	**NC16.D40.097**



DESCRIPTION :
Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly impossible.
Slipping-off of the drill chuck impossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10,13 and 16 mm
Special wrench included.

Accessories 7.01

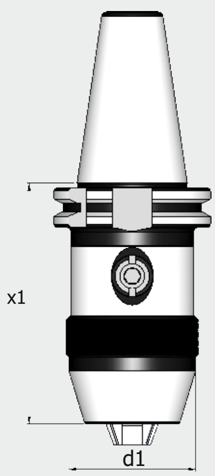
HX drill chucks for RH and LH rotation

SAB

69871 AD+B | ≤30µ | G6.3 12.000

With allen key for tightening

Cone	mm	x1	d1	code
40	1-13	91	54	**HX13.D44.091**
	3-16	96	57	**HX16.D44.096**



Precision drill chuck with integrated shank and hexagonal key lock
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm

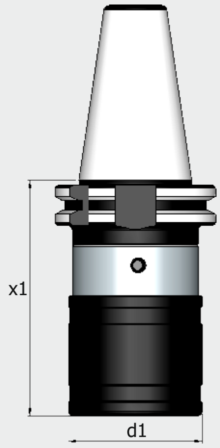
Accessories 7.01

SAB

Tapping head quick-change

69871
A

With length compensation in compression and tension



Cone	Tap size	Compensation	Inserts size	x1	d1	code
40	M3-M14	±7,5 mm	1	74	36	**GN12.D40.074**
	M5-M22	±12,5 mm	2	98	53	**GN20.D40.098**
	M14-M33	±20,0 mm	3	169	78	**GN33.D40.169**
	M22-M48	±22,5 mm	4	185	96	**GN48.D40.185**


Accessories 7.10

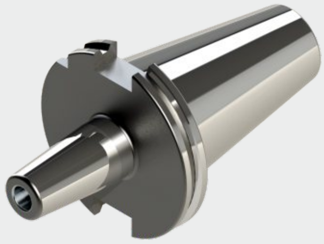

Accessories 7.11

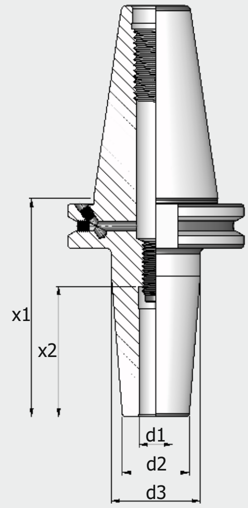

Accessories 7.01

69871 AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
50	3	15	20	80	-	SF03.D55.080
	3	15	20	120	-	SF03.D55.120
	3	15	20	160	-	SF03.D55.160
	4	15	20	80	-	SF04.D55.080
	4	15	20	120	-	SF04.D55.120
	4	15	20	160	-	SF04.D55.160
	5	15	20	80	-	SF05.D55.080
	5	15	20	120	-	SF05.D55.120
	5	15	20	160	-	SF05.D55.160
	6	20	27	80	36	SF06.D55.080
	6	20	27	120	36	SF06.D55.120
	6	20	27	160	36	SF06.D55.160
	6	20	27	200	36	SF06.D55.200
	8	20	27	80	36	SF08.D55.080
	8	20	27	120	36	SF08.D55.120
	8	20	27	160	36	SF08.D55.160
	8	20	27	200	36	SF08.D55.200
	10	24	32	80	42	SF10.D55.080
	10	24	32	120	42	SF10.D55.120
	10	24	32	160	42	SF10.D55.160
	10	24	32	200	42	SF10.D55.200
	12	24	32	80	47	SF12.D55.080
	12	24	32	120	47	SF12.D55.120
	12	24	32	160	47	SF12.D55.160
	12	24	32	200	47	SF12.D55.200
	14	27	34	80	47	SF14.D55.080
	14	27	34	120	47	SF14.D55.120
	14	27	34	160	47	SF14.D55.160
	14	27	34	200	47	SF14.D55.200
	16	27	34	80	50	SF16.D55.080
	16	27	34	120	50	SF16.D55.120
	16	27	34	160	50	SF16.D55.160
	16	27	34	200	50	SF16.D55.200
	18	33	42	80	50	SF18.D55.080
	18	33	42	120	50	SF18.D55.120
	18	33	42	160	50	SF18.D55.160
	18	33	42	200	50	SF18.D55.200
	20	33	42	80	52	SF20.D55.080
	20	33	42	120	52	SF20.D55.120
	20	33	42	160	52	SF20.D55.160
	20	33	42	200	52	SF20.D55.200
	25	44	53	100	58	SF25.D55.100
	25	44	53	160	58	SF25.D55.160
	25	44	53	200	58	SF25.D55.200
	32	44	53	100	63	SF32.D55.100
	32	44	53	160	63	SF32.D55.160
	32	44	53	200	63	SF32.D55.200





Shrinking equipment 5.01

Extensions 7.12

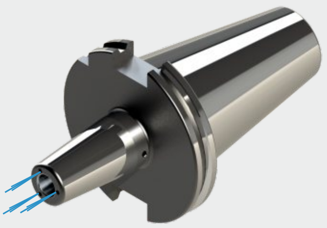
Accessories 7.14

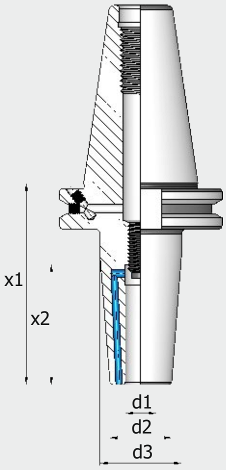
Accessories 7.01

THERMO shrink-fit chucks

69871 AD+B | ≤3μ | G2.5 25.000

With internal/ face coolant suppy - IK





Cone	d1	d2	d3	x1	x2	code
50	6	20	27	80	36	**SF06.D55.080.IK**
	6	20	27	120	36	**SF06.D55.120.IK**
	6	20	27	160	36	**SF06.D55.160.IK**
	6	20	27	200	36	**SF06.D55.200.IK**
	8	20	27	80	36	**SF08.D55.080.IK**
	8	20	27	120	36	**SF08.D55.120.IK**
	8	20	27	160	36	**SF08.D55.160.IK**
	8	20	27	200	36	**SF08.D55.200.IK**
	10	24	32	80	42	**SF10.D55.080.IK**
	10	24	32	120	42	**SF10.D55.120.IK**
	10	24	32	160	42	**SF10.D55.160.IK**
	10	24	32	200	42	**SF10.D55.200.IK**
	12	24	32	90	47	**SF12.D55.090.IK**
	12	24	32	120	47	**SF12.D55.120.IK**
	12	24	32	160	47	**SF12.D55.160.IK**
	12	24	32	200	47	**SF12.D55.200.IK**
	14	27	34	90	47	**SF14.D55.090.IK**
	14	27	34	120	47	**SF14.D55.120.IK**
	14	27	34	160	47	**SF14.D55.160.IK**
	14	27	34	200	47	**SF14.D55.200.IK**
	16	27	34	90	50	**SF16.D55.090.IK**
	16	27	34	120	50	**SF16.D55.120.IK**
	16	27	34	160	50	**SF16.D55.160.IK**
	16	27	34	200	50	**SF16.D55.200.IK**
	18	33	42	90	50	**SF18.D55.090.IK**
	18	33	42	120	50	**SF18.D55.120.IK**
	18	33	42	160	50	**SF18.D55.160.IK**
	18	33	42	200	50	**SF18.D55.200.IK**
	20	33	42	90	52	**SF20.D55.090.IK**
	20	33	42	120	52	**SF20.D55.120.IK**
	20	33	42	160	52	**SF20.D55.160.IK**
	20	33	42	200	52	**SF20.D55.200.IK**
	25	44	53	100	58	**SF25.D55.100.IK**
	25	44	53	160	58	**SF25.D55.160.IK**
	25	44	53	200	58	**SF25.D55.200.IK**
	32	44	53	100	63	**SF32.D55.100.IK**
	32	44	53	160	63	**SF32.D55.160.IK**
	32	44	53	200	63	**SF32.D55.200.IK**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

THERMO shrink-fit chucks

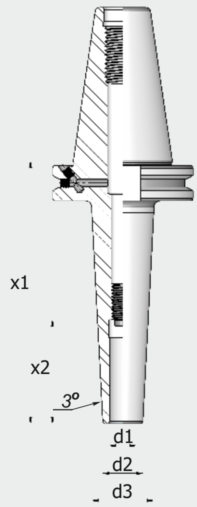
SAB

Slim execution 3°

69871 AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
50	3	9	16	120	-	SF03.D55.120.3
	3	9	23	160	-	SF03.D55.160.3
	4	10	20	120	-	SF04.D55.120.3
	4	10	24	160	-	SF04.D55.160.3
	5	11	21	120	-	SF05.D55.120.3
	5	11	25	160	-	SF05.D55.160.3
	6	12	22	120	36	SF06.D55.120.3
	6	12	26	160	36	SF06.D55.160.3
	8	16	24	120	36	SF08.D55.120.3
	8	16	28	160	36	SF08.D55.160.3
	10	16	26	120	42	SF10.D55.120.3
	10	16	30	160	42	SF10.D55.160.3
	12	18	28	120	47	SF12.D55.120.3
	12	18	32	160	47	SF12.D55.160.3
	16	24	34	120	47	SF16.D55.120.3
	16	24	38	160	47	SF16.D55.160.3




Shrinking equipment 5.01


Extensions 7.12


Accessories 7.14


Accessories 7.01

THERMO shrink-fit chucks

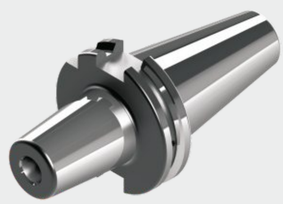
SAB

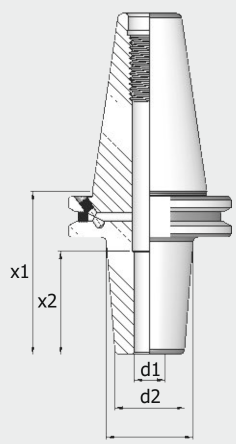
Short (compact) execution

69871 AD+B | ≤3μ | G2.5 25.000

Without length adjusting thread

Cone	d1	d2	x1	x2	code
50	6	20	65	36	SF06.D55.065
	8	20	65	36	SF08.D55.065
	10	24	65	42	SF10.D55.065
	12	27	65	47	SF12.D55.065
	14	33	70	47	SF14.D55.070
	16	33	70	50	SF16.D55.070
	18	44	70	50	SF18.D55.070
	20	44	70	50	SF20.D55.070
	25	46	75	56	SF25.D55.075
	32	47	75	58	SF32.D55.075






Shrinking equipment 5.01


Extensions 7.12


Accessories 7.14


Accessories 7.01

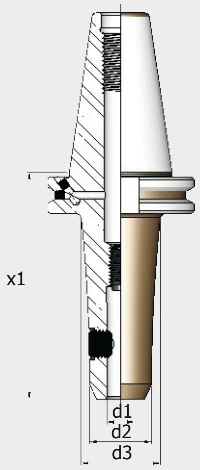
SAB

End mill holders «WELDON»

69871 AD+B | ≤3μ | G6.3 25.000 | Fe-Ni

Form - line

Adaptor with built in locking screw



Cone	d1	x1	d2	d3	code
50	6	100	17	25	WE06.D55.100F
	6	130	17	30	WE06.D55.130F
	6	160	17	31	WE06.D55.160F
	6	200	17	40	WE06.D55.200F
	8	100	21	29	WE08.D55.100F
	8	130	21	35	WE08.D55.130F
	8	160	21	35	WE08.D55.160F
	8	200	21	44	WE08.D55.200F
	10	100	24	32	WE10.D55.100F
	10	130	24	37	WE10.D55.130F
	10	160	24	38	WE10.D55.160F
	10	200	24	47	WE10.D55.200F
	12	100	27	35	WE12.D55.100F
	12	130	27	40	WE12.D55.130F
	12	160	27	41	WE12.D55.160F
	12	200	27	50	WE12.D55.200F
	14	100	29	37	WE14.D55.100F
	14	130	29	42	WE14.D55.130F
	14	160	29	43	WE14.D55.160F
	14	200	29	52	WE14.D55.200F
	16	100	33	41	WE16.D55.100F
	16	130	33	46	WE16.D55.130F
	16	160	33	47	WE16.D55.160F
	16	200	33	56	WE16.D55.200F
	18	100	35	43	WE18.D55.100F
	18	130	35	48	WE18.D55.130F
	18	160	35	49	WE18.D55.160F
	18	200	35	58	WE18.D55.200F
	20	100	39	47	WE20.D55.100F
	20	130	39	52	WE20.D55.130F
	20	160	39	53	WE20.D55.160F
	20	200	39	62	WE20.D55.200F
	25	100	47	55	WE25.D55.100F
	25	130	47	60	WE25.D55.130F
	25	160	47	61	WE25.D55.160F
	25	200	47	70	WE25.D55.200F
	32	130	57	70	WE32.D55.130F
	32	160	57	71	WE32.D55.160F
	32	200	57	72	WE32.D55.200F

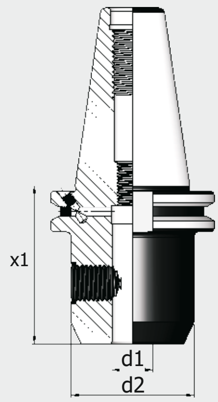
Accessories 7.14

Accessories 7.01

69871 AD+B | ≤3μ | G6.3 15.000

Adaptor with built in locking screw

Cone	d1	d2	x1	code
50	6	25	63	WE06.D55.063
	6	25	100	WE06.D55.100
	6	25	120	WE06.D55.120
	6	25	160	WE06.D55.160
	6	25	200	WE06.D55.200
	8	28	63	WE08.D55.063
	8	28	100	WE08.D55.100
	8	28	120	WE08.D55.120
	8	28	160	WE08.D55.160
	8	28	200	WE08.D55.200
	10	35	63	WE10.D55.063
	10	35	100	WE10.D55.100
	10	35	120	WE10.D55.120
	10	35	160	WE10.D55.160
	10	35	200	WE10.D55.200
	12	42	63	WE12.D55.063
	12	42	100	WE12.D55.100
	12	42	120	WE12.D55.120
	12	42	160	WE12.D55.160
	12	42	200	WE12.D55.200
	14	44	63	WE14.D55.063
	14	44	100	WE14.D55.100
	14	44	120	WE14.D55.120
	14	44	160	WE14.D55.160
	14	44	200	WE14.D55.200
	16	48	63	WE16.D55.063
	16	48	100	WE16.D55.100
	16	48	120	WE16.D55.120
	16	48	160	WE16.D55.160
	16	48	200	WE16.D55.200
	18	50	63	WE18.D55.063
	18	50	100	WE18.D55.100
	18	50	120	WE18.D55.120
	18	50	160	WE18.D55.160
	18	50	200	WE18.D55.200
	20	52	63	WE20.D55.063
	20	52	100	WE20.D55.100
	20	52	120	WE20.D55.120
	20	52	160	WE20.D55.160
	20	52	200	WE20.D55.200
	25	65	80	WE25.D55.080
	25	65	100	WE25.D55.100
	25	65	120	WE25.D55.120
	25	65	160	WE25.D55.160
	25	65	200	WE25.D55.200
	32	72	63	WE32.D55.063
	32	72	100	WE32.D55.100
	32	72	160	WE32.D55.160
	32	72	200	WE32.D55.200
	40	90	120	WE40.D55.120
	50	90	125	WE50.D55.125



Accessories 7.14

Accessories 7.01

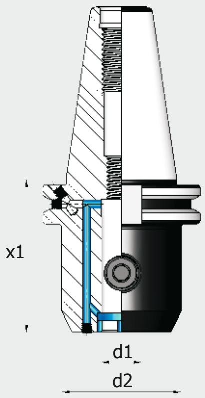
SAB

End mill holders «WELDON»

69871 AD+B | ≤3μ | G6.3 15.000

With internal/ face coolant suppy - IK

Adaptor with built in locking screw



Cone	d1	x1	d2	code
50	6	63	25	**WE06.D55.063.IK**
	8	63	28	**WE08.D55.063.IK**
	10	63	35	**WE10.D55.063.IK**
	12	63	42	**WE12.D55.063.IK**
	14	63	44	**WE14.D55.063.IK**
	16	63	48	**WE16.D55.063.IK**
	18	63	50	**WE18.D55.063.IK**
	20	63	52	**WE20.D55.063.IK**
	25	80	65	**WE25.D55.080.IK**
	32	100	72	**WE32.D55.100.IK**
	40	100	90	**WE40.D55.100.IK**

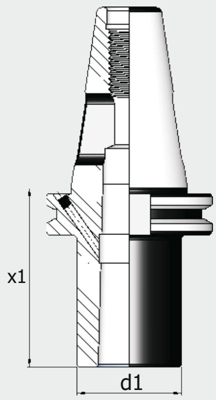
Accessories 7.14

Accessories 7.01

Morse taper holders for drills

69871 AD+B | ≤7μ | G6.3 15.000

Cone	MK	x1	d1	code
50	1	45	25	**MK1B.D55.045**
	2	60	32	**MK2B.D55.060**
	2	117	32	**MK2B.D50.117AD**
	3	65	40	**MK3B.D55.065**
	3	137	40	**MK3B.D50.137AD**
	4	95	48	**MK4B.D55.095**
	4	167	48	**MK4B.D50.167**
	5	105	63	**MK5B.D55.105**



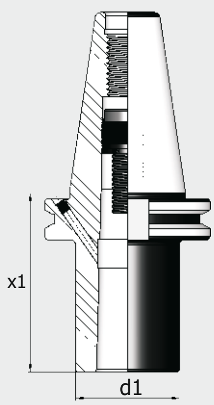
Accessories 7.01

Morse taper holders for mills

69871 AD+B | ≤5μ | G6.3 15.000

With built in clamping screw

Cone	MK	x1	d1	code
50	1	45	25	**MK1A.D55.045**
	2	60	32	**MK2A.D55.060**
	2	150	32	**MK2A.D50.150A**
	3	65	40	**MK3A.D55.065**
	3	150	40	**MK3A.D50.150A**
	4	70	48	**MK4A.D55.070**
	4	170	48	**MK4A.D50.170A**
	5	100	63	**MK5A.D55.100**



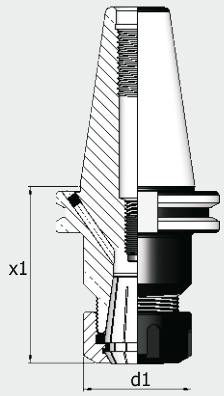
Accessories 7.01

Accessories 7.15

Accessories 7.15

69871 AD+B | ≤3μ | G6.3 15.000

With clamping nut and adjusting screw



Cone	TIP	Range mm	x1	d1	code
50	ER16	0.5-10	63	28	**ER16.D55.063**
	ER16	0.5-10	100	28	**ER16.D55.100**
	ER16	0.5-10	160	28	**ER16.D55.160**
	ER16	0.5-10	200	28	**ER16.D55.200**
	ER25	1-16	60	42	**ER25.D55.060**
	ER25	1-16	100	42	**ER25.D55.100**
	ER25	1-16	160	42	**ER25.D55.160**
	ER25	1-16	200	42	**ER25.D55.200**
	ER32	2-20	70	50	**ER32.D55.070**
	ER32	2-20	100	50	**ER32.D55.100**
	ER32	2-20	160	50	**ER32.D55.160**
	ER32	2-20	200	50	**ER32.D55.200**
	ER40	3-26	80	63	**ER40.D55.080**
	ER40	3-26	100	63	**ER40.D55.100**
	ER40	3-26	160	63	**ER40.D55.160**
	ER40	3-26	200	63	**ER40.D55.200**

Accessories 7.06

Accessories 7.07

Accessories 7.14

Accessories 7.03

Accessories 7.01

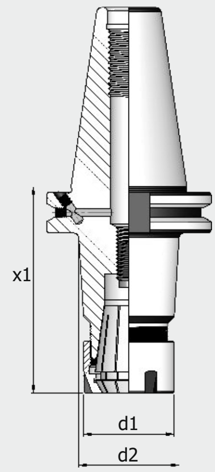
ER Collet chucks DIN6499 - MINI

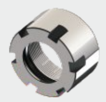
SAB

69871 AD+B | ≤3μ | G6.3 15.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	d2	code
50	ER11	0.5-7	100	16	26	**ER11.D55.100M**
	ER11	0.5-7	160	16	28	**ER11.D55.160M**
	ER16	0.5-10	100	22	28	**ER16.D55.100M**
	ER16	0.5-10	160	22	28	**ER16.D55.160M**
	ER20	1-13	100	28	28	**ER20.D55.100M**
	ER20	1-13	160	28	28	**ER20.D55.160M**
	ER25	1-16	100	35	35	**ER25.D55.100M**
	ER25	1-16	160	35	35	**ER25.D55.160M**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

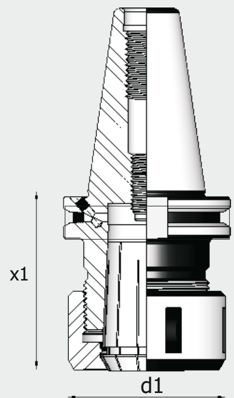
Collet chucks 1:10 for collets DIN6388

SAB

69871 AD+B | ≤3μ | G6.3 15.000

Delivery with clamping nut and adjusting screw

Cone	Range mm	x1	d1	code
50	1.5-16	70	43	**SP16.D55.070**
	1.5-16	100	43	**SP16.D55.100**
	1.5-16	160	43	**SP16.D55.160**
	2-25	70	60	**SP25.D55.070**
	2-25	100	60	**SP25.D55.100**
	2-25	160	60	**SP25.D55.160**
	4-32	80	72	**SP32.D55.080**
	4-32	140	72	**SP32.D55.140**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.05

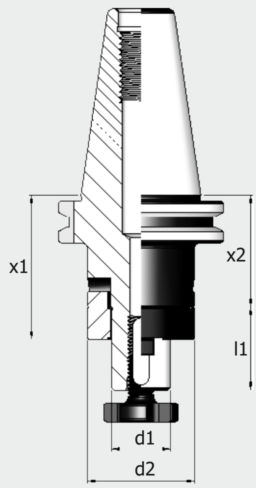

Accessories 7.01

SAB

Combi shell mill holder for milling cutters

69871 AD | ≤3µ | G6.3 15.000

With driving key, driving ring and cross screw



Cone	d1	x1	x2	d2	l2	code
50	16	55	45	32	27	**KD16.D50.055**
	16	100	90	32	27	**KD16.D50.100**
	16	150	140	32	27	**KD16.D50.150**
	22	55	43	40	31	**KD22.D50.055**
	22	100	88	40	31	**KD22.D50.100**
	22	150	138	40	31	**KD22.D50.150**
	22	200	188	40	31	**KD50.D50.200**
	27	55	43	48	33	**KD27.D50.055**
	27	100	88	48	33	**KD27.D50.100**
	27	150	138	48	33	**KD27.D50.150**
	27	200	188	48	33	**KD27.D50.200**
	32	60	46	58	38	**KD32.D50.060**
	32	100	86	58	38	**KD32.D50.100**
	32	150	136	58	38	**KD32.D50.150**
	32	200	186	58	38	**KD32.D50.200**
	40	60	46	70	41	**KD40.D50.060**
	40	100	86	70	41	**KD40.D50.100**
	40	150	136	70	41	**KD40.D50.150**
	40	200	186	70	41	**KD40.D50.200**
	50	70	54	90	46	**KD50.D50.070**

Accessories 7.14

Accessories 7.14

Accessories 7.14

Accessories 7.01

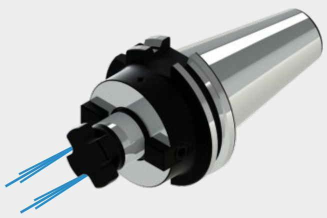
Shell mill holders for cutters with driving slot

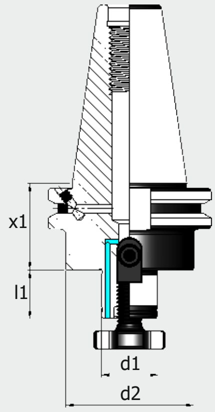
With internal/ face coolant suppy - IK

69871 AD+B | ≤3μ | G6.3 15.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
50	16	35	17	38	**AD16.D55.035**
	16	100	17	38	**AD16.D55.100**
	16	160	17	38	**AD16.D55.160**
	22	35	19	50	**AD22.D55.035**
	22	100	19	50	**AD22.D55.100**
	22	160	19	50	**AD22.D55.160**
	22	200	19	50	**AD22.D55.200**
	27	35	21	50	**AD27.D55.035**
	27	100	21	50	**AD27.D55.100**
	27	160	21	50	**AD27.D55.160**
	27	200	21	50	**AD27.D55.200**
	32	35	24	78	**AD32.D55.035**
	32	100	24	78	**AD32.D55.100**
	32	160	24	78	**AD32.D55.160**
	32	200	24	78	**AD32.D55.200**
	40	50	27	89	**AD40.D55.050**
	40	100	27	89	**AD40.D55.100**
	40	160	27	89	**AD40.D55.160**
	40	200	27	89	**AD40.D55.200**
	50	120	30	129	**AD50.D55.120**





Accessories 7.15

Accessories 7.14

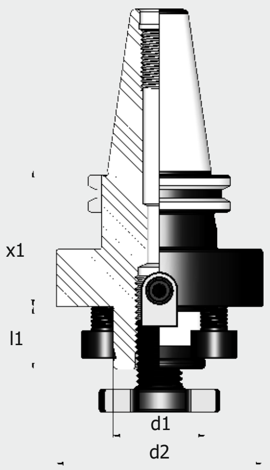
Accessories 7.01

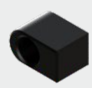
SAB Holding arbors for milling cutters with minor diameter fit

69871 AD | ≤5μ | G6.3 15.000

With inserted driving keys DIN2079 and cross screw

Cone	d1	x1	l1	d2	code
50	40	70	30	89	**AF40.D50.070**
	60	70	40	129	**AF60.D50.070**




Accessories 7.15


Accessories 7.14

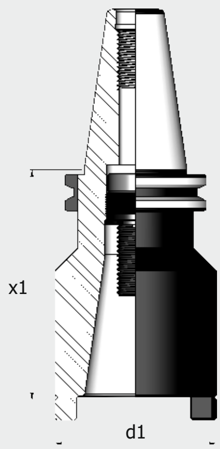

Accessories 7.01

SAB Reduction sleeves for 7:24 taper shanks

69871 AD | ≤5μ | G6.3 15.000

With inserted socket head screw DIN 912

Cone	Internal cone	d1	d1	code
50	DIN69871 - 40	70	70	**DN40.D50.070**
	DIN69871 - 50	97	120	**DN40.D50.120**
	DIN2080 - 40	70	70	**ISO40.D50.070**
	DIN2080 - 50	97	120	**ISO40.D50.120**




Accessories 7.01


Accessories 7.15


Accessories 7.15

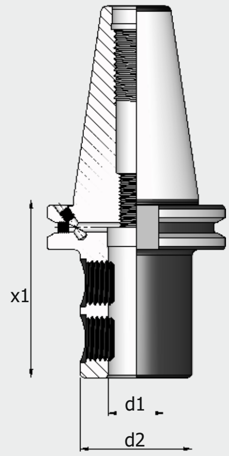
Holders for indexable inserts drills

69871 AD+B	≤3μ	G6.3 15.000

DIN 69871

With built in locking screw

Cone	d1	x1	d2	code
50	20	70	40	**VB20.D55.070**
	25	70	45	**VB25.D55.070**
	32	75	52	**VB32.D55.075**
	40	80	60	**VB40.D55.080**



Accessories 7.14

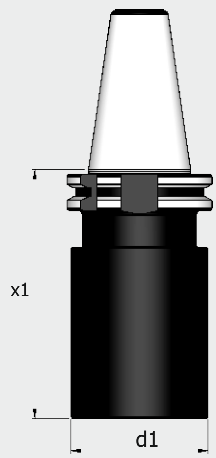
Accessories 7.01

Boring bar - blanks

69871 A	pre balanced

Application : for making special tools

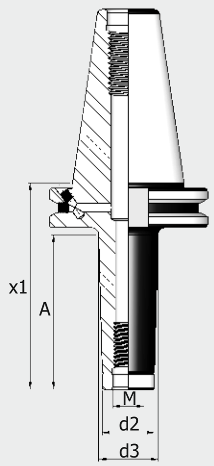
Cone	d1	x1	code
50	95,5	160	**RL95.D50.160**
	95,5	250	**RL95.D50.250**



Accessories 7.01

Holders for milling cutters with thread

69871 AD+B | ≤3μ | G6.3 25.000



Cone	M	A	x1	d2	d3	code
50	M8	50	77	13	20	**EF08.D55.077**
	M8	100	127	13	25	**EF08.D55.127**
	M8	150	177	13	30	**EF08.D55.177**
	M10	50	77	18	24	**EF10.D55.077**
	M10	100	127	18	32	**EF10.D55.127**
	M10	150	177	18	40	**EF10.D55.177**
	M12	50	77	21	23	**EF12.D55.077**
	M12	100	127	21	33	**EF12.D55.127**
	M12	150	177	21	47	**EF12.D55.177**
	M16	50	77	29	32	**EF16.D55.077**
	M16	100	127	29	42	**EF16.D55.127**
	M16	150	177	29	45	**EF16.D55.177**
	M16	200	227	29	55	**EF16.D55.227**

Accessories 7.01

NC drill chucks for RH rotation

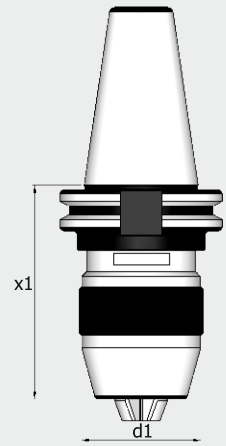
69871 A | ≤15μ | G6.3 12.000

With special wrench for tightening

Cone	mm	x1	d1	code
50	0-8	70	37	**NC08.D50.070**
	0-10	74	43	**NC10.D50.074**
	1-13	80	48	**NC13.D50.080**
	3-16	97	53	**NC16.D50.097**

DESCRIPTION :

Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly impossible.
Slipping-off of the drill chuck impossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10,13 and 16 mm
Special wrench included.



Accessories 7.01

HX drill chucks for RH and LH rotation

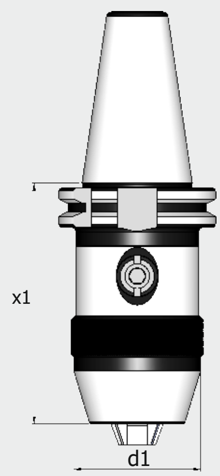
69871 AD+B | ≤15μ | G6.3 12.000

With allen key for tightening

Cone	mm	x1	d1	code
50	1-13	93	54	**HX13.D55.093**
	3-16	96	57	**HX16.D55.096**

Precision drill chuck with integrated shank and hexagonal key lock

For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm

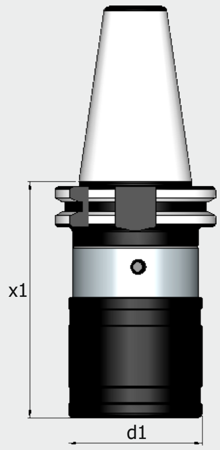


Accessories 7.01

Tapping head quick-change

69871
A

With length compensation in compression and tension

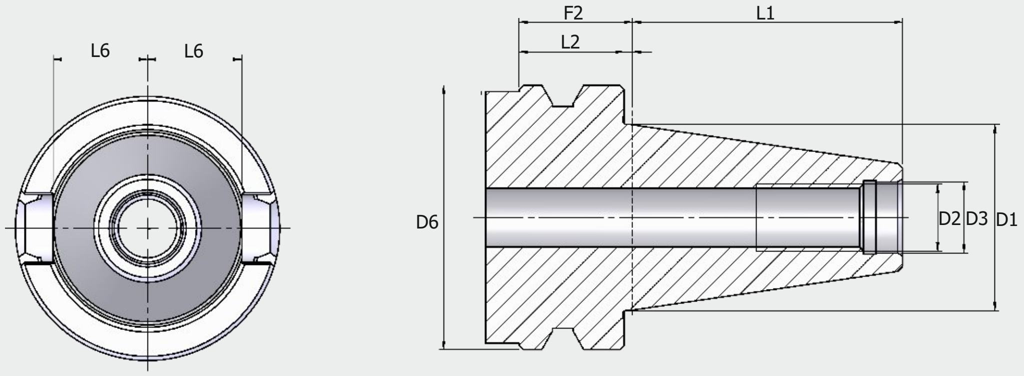


Cone	Tap size	Compensation	Inserts size	x1	d1	code
50	M3-M14	±7,5 mm	1	74	36	**GN12.D50.074**
	M5-M22	±12,5 mm	2	98	53	**GN20.D50.098**
	M14-M33	±20,0 mm	3	159	78	**GN33.D50.159**
	M22-M48	±22,5 mm	4	175	96	**GN48.D50.175**

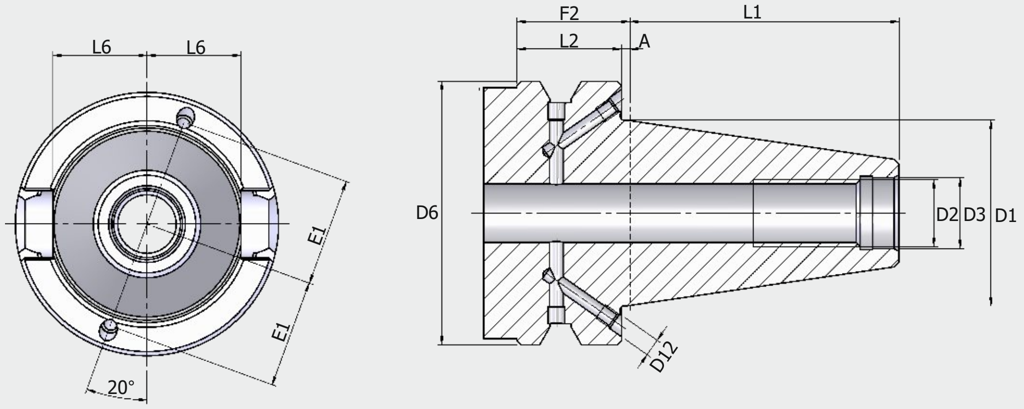

Accessories 7.10


Accessories 7.11


Accessories 7.01



MAS-BT 403 A/AD



MAS-BT 403 AD+B

Konus Kegel Taper Cone	D1	D2	D3	D6	D12	L1	L2	L6	A	E1	F2
30	31,75	M12	12,5	46	-	48,40	20	16,30	2	19,5	min.30
40	44,45	M16	17	63	M4	65,40	25	22,60	2	27	min.35
50	69,85	M24	25	100	M6	101,80	35	35,50	3	42	min.48

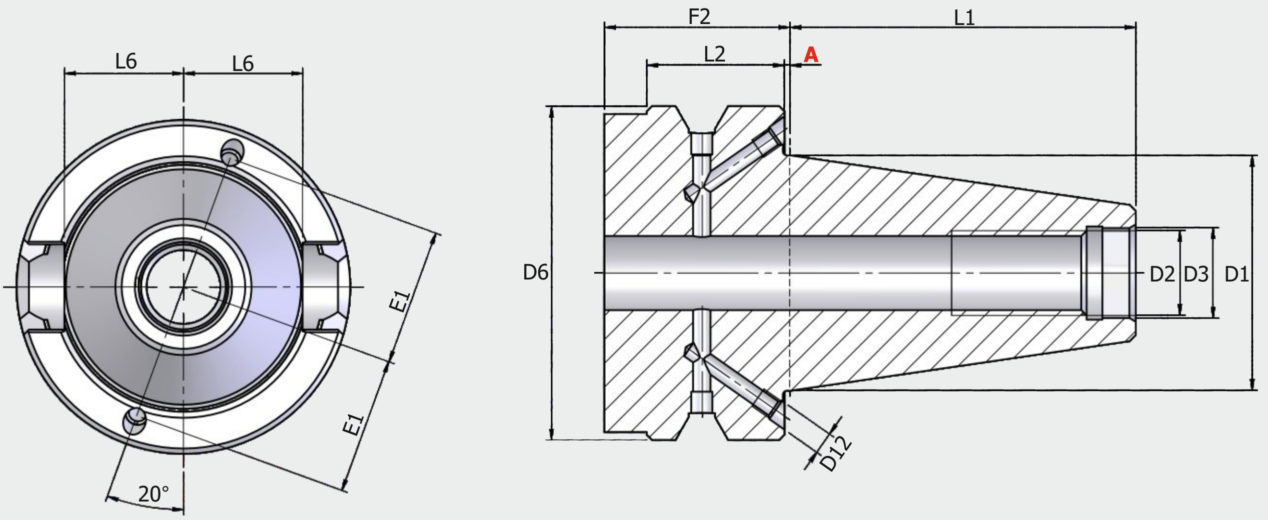
Material : Case hardened steel with min. 900 N/mm^2 tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided.

Accuracy : Taper angle AT3 quality class. Roughness Ra <0.2

SAB

Technical informations

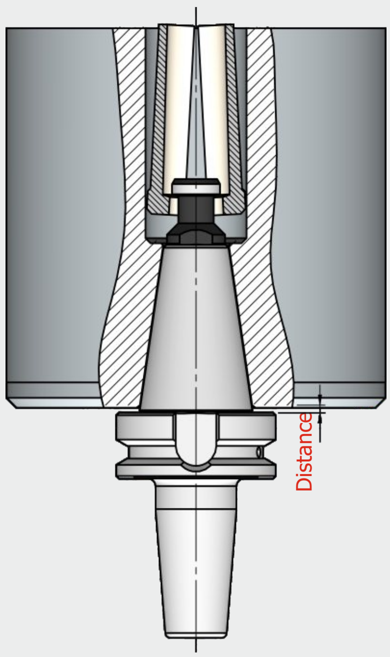


MAS-BT 403 AD+B DoubleContact

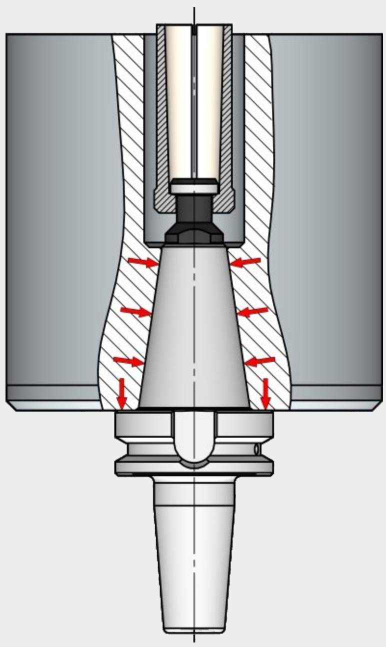
Cone	D1	D2	D3	D6	D12	L1	L2	L6	A	E1	F2
30	31,75	M12	12,5	46	-	48.40	21	16.30	1.00		min.22
40	44,45	M16	17	63	M4	65.40	26	22.60	1.00	27	min.35
50	69,85	M24	25	100	M6	101.80	36.5	35.40	1.50	42	min.49

The diference betwen standard contact and DoubleContact, is a contact with shank and flange face.
This allows a higher radial rigidity

Before clamping

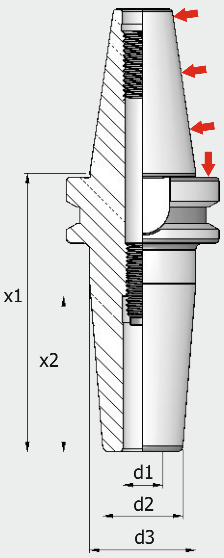


After clamping



MAS-BT AD | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread



Cone	d1	d2	d3	x1	x2	code
double 30 contact	3	9	15,5	65	-	**SF03.2B30.065**
	3	9	18	90	-	**SF03.2B30.090**
	3	9	18	160	-	**SF03.2B30.160**
	4	10	16,5	65	-	**SF04.2B30.065**
	4	10	19	90	-	**SF04.2B30.090**
	4	10	19	160	-	**SF04.2B30.160**
	5	11	17,5	65	-	**SF05.2B30.065**
	5	11	20	90	-	**SF05.2B30.090**
	5	17	20	160	-	**SF05.2B30.160**
	6	20	26,5	65	36	**SF06.2B30.065**
	6	20	27	90	36	**SF06.2B30.090**
	6	20	27	160	36	**SF06.2B30.160**
	8	20	26,5	65	36	**SF08.2B30.065**
	8	20	27	90	36	**SF08.2B30.090**
	8	20	27	160	36	**SF08.2B30.160**
	10	24	30,5	65	42	**SF10.2B30.065**
	10	24	32	90	42	**SF10.2B30.090**
	10	24	32	160	42	**SF10.2B30.160**
	12	24	30,5	65	47	**SF12.2B30.065**
	12	24	32	90	47	**SF12.2B30.090**
	12	24	32	160	47	**SF12.2B30.160**
	14	27	33,5	65	47	**SF14.2B30.065**
	14	27	34	90	47	**SF14.2B30.090**
	14	27	34	160	47	**SF14.2B30.160**
	16	27	33,5	65	50	**SF16.2B30.065**
	16	27	34	90	50	**SF16.2B30.090**
	16	27	34	160	50	**SF16.2B30.160**
	18	33	42	80	50	**SF18.2B30.080**
	18	33	42	160	50	**SF18.2B30.160**
	20	33	42	80	52	**SF20.2B30.080**
	20	33	42	160	52	**SF20.2B30.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

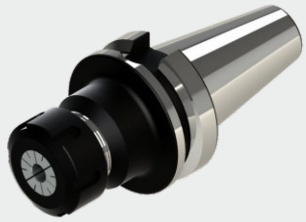
Accessories 7.01

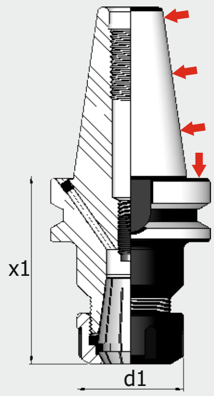
ER Collet chucks - DIN6499

MAS-BT AD | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d2	code
double 30 contact	ER16	0.5-10	70	28	**ER16.2B30.070**
	ER20	1-13	70	35	**ER20.2B30.070**
	ER25	1-16	70	42	**ER25.2B30.070**
	ER32	2-20	70	50	**ER32.2B30.070**





Accessories 7.06

Accessories 7.07

Accessories 7.14

Accessories 7.03

Accessories 7.01

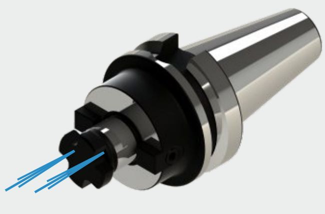
Shell mill holders for cutters with driving slot

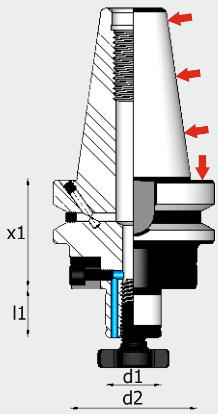
With internal/ face coolant suppy - IK

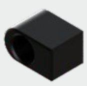
MAS-BT AD | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 30 contact	16	30	17	28	**AD16.2B30.030**
	22	35	19	35	**AD22.2B30.035**
	27	35	21	42	**AD27.2B30.035**







Accessories 7.15

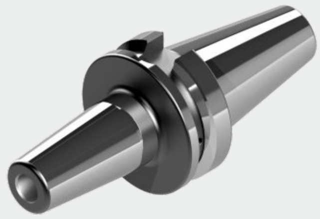
Accessories 7.14

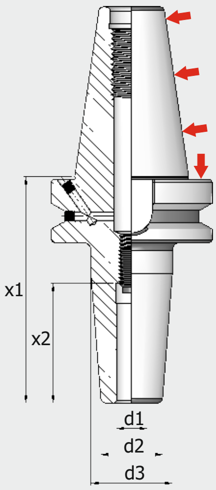
Accessories 7.01

MAS-BT 403

MAS-BT AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread





Cone	d1	d2	d3	x1	x2	code
double 40 contact	3	9	18	90	-	SF03.2B44.090
	3	9	18	120	-	SF03.2B44.120
	3	9	18	160	-	SF03.2B44.160
	4	10	19	90	-	SF04.2B44.090
	4	10	19	120	-	SF04.2B44.120
	4	10	19	160	-	SF04.2B44.160
	5	11	20	90	-	SF05.2B44.090
	5	11	20	120	-	SF05.2B44.120
	5	17	20	160	-	SF05.2B44.160
	6	20	27	90	36	SF06.2B44.090
	6	20	27	120	36	SF06.2B44.120
	6	20	27	160	36	SF06.2B44.160
	8	20	27	90	36	SF08.2B44.090
	8	20	27	120	36	SF08.2B44.120
	8	20	27	160	36	SF08.2B44.160
	10	24	32	90	42	SF10.2B44.090
	10	24	32	120	42	SF10.2B44.120
	10	24	32	160	42	SF10.2B44.160
	12	24	32	90	47	SF12.2B44.090
	12	24	32	120	47	SF12.2B44.120
	12	24	32	160	47	SF12.2B44.160
	14	27	34	90	47	SF14.2B44.090
	14	27	34	120	47	SF14.2B44.120
	14	27	34	160	47	SF14.2B44.160
	16	27	34	90	50	SF16.2B44.090
	16	27	34	120	50	SF16.2B44.120
	16	27	34	160	50	SF16.2B44.160
	18	33	42	90	50	SF18.2B44.090
	18	33	42	120	50	SF18.2B44.120
	18	33	42	160	50	SF18.2B44.160
	20	33	42	90	52	SF20.2B44.090
	20	33	42	120	52	SF20.2B44.120
	20	33	42	160	52	SF20.2B44.160
	25	44	53	100	58	SF25.2B44.100
	25	44	53	160	58	SF25.2B44.160
	32	44	53	100	63	SF32.2B44.100
	32	44	53	160	63	SF32.2B44.160

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

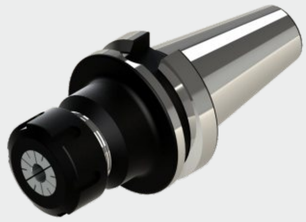
ER Collet chucks - DIN6499

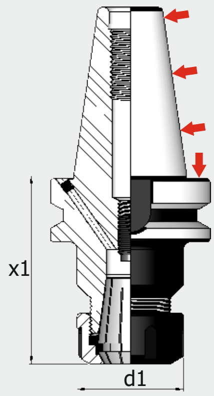
SAB

MAS-BT AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
double 40 contact	ER16	0.5-10	63	28	**ER16.2B44.063**
	ER16	0.5-10	100	28	**ER16.2B44.100**
	ER16	0.5-10	130	28	**ER16.2B44.130**
	ER16	0.5-10	160	28	**ER16.2B44.160**
	ER25	1-16	60	35	**ER25.2B44.060**
	ER25	1-16	100	35	**ER25.2B44.100**
	ER25	1-16	130	35	**ER25.2B44.130**
	ER25	1-16	160	35	**ER25.2B44.160**
	ER32	2-20	70	42	**ER32.2B44.070**
	ER32	2-20	100	42	**ER32.2B44.100**
	ER32	2-20	130	42	**ER32.2B44.130**
	ER32	2-20	160	42	**ER32.2B44.160**
	ER40	3-26	80	50	**ER40.2B44.080**
	ER40	3-26	100	50	**ER40.2B44.100**
	ER40	3-26	130	50	**ER40.2B44.130**
	ER40	3-26	160	50	**ER40.2B44.160**






Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

Shell mill holders for cutters with driving slot

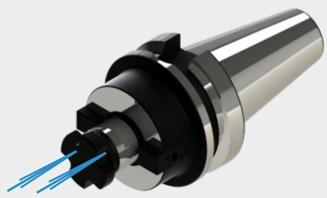
SAB

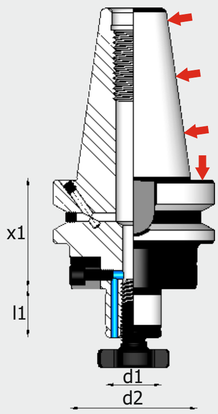
With internal/ face coolant suppy - IK

MAS-BT AD+B | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 40 contact	16	35	17	38	**AD16.2B44.035**
	16	100	17	38	**AD16.2B44.100**
	22	35	19	50	**AD22.2B44.035**
	22	100	19	50	**AD22.2B44.100**
	22	160	19	50	**AD22.2B44.160**
	27	35	21	50	**AD27.2B44.035**
	27	100	21	50	**AD27.2B44.100**
	27	160	21	50	**AD27.2B44.160**
	32	50	24	78	**AD32.2B44.050**
	32	100	24	78	**AD32.2B44.100**
	32	160	24	78	**AD32.2B44.160**
	40	50	27	89	**AD40.2B44.050**
	40	100	27	89	**AD40.2B44.100**
	40	160	27	89	**AD40.2B44.160**





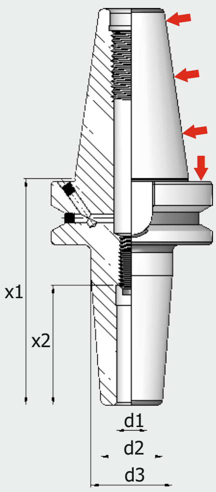

Accessories 7.15


Accessories 7.14


Accessories 7.01

MAS-BT AD+B | ≤3µ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread



Cone	d1	d2	d3	x1	x2	code
double 50 contact	3	9	16	100	-	**SF03.2B55.100**
	3	9	23	160	-	**SF03.2B55.160**
	4	10	20	100	-	**SF04.2B55.100**
	4	10	24	160	-	**SF04.2B55.160**
	5	11	21	100	-	**SF05.2B55.100**
	5	11	25	160	-	**SF05.2B55.160**
	6	20	27	100	36	**SF06.2B55.100**
	6	20	27	160	36	**SF06.2B55.160**
	8	20	27	100	36	**SF08.2B55.100**
	8	20	27	160	36	**SF08.2B55.160**
	10	24	32	100	42	**SF10.2B55.100**
	10	24	32	160	42	**SF10.2B55.160**
	12	24	32	100	47	**SF12.2B55.100**
	12	24	32	160	47	**SF12.2B55.160**
	14	27	34	100	47	**SF14.2B55.100**
	14	27	34	160	47	**SF14.2B55.160**
	16	27	34	100	50	**SF16.2B55.100**
	16	27	34	160	50	**SF16.2B55.160**
	18	33	42	100	50	**SF18.2B55.100**
	18	33	42	160	50	**SF18.2B55.160**
	20	33	42	100	52	**SF20.2B55.100**
	20	33	42	160	52	**SF20.2B55.160**
	25	44	53	100	58	**SF25.2B55.100**
	25	44	53	160	58	**SF25.2B55.160**
	32	44	53	100	63	**SF32.2B55.100**
	32	44	53	160	63	**SF32.2B55.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

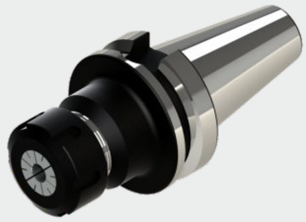
ER Collet chucks - DIN6499

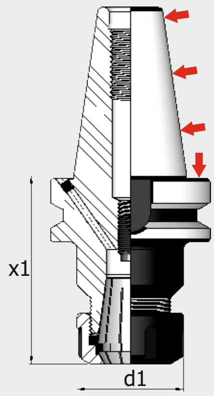
SAB

MAS-BT AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
double 50 contact	ER16	0.5-10	100	28	**ER16.2B55.100**
	ER16	0.5-10	160	28	**ER16.2B55.160**
	ER16	0.5-10	200	28	**ER16.2B55.200**
	ER25	1-16	100	35	**ER25.2B55.100**
	ER25	1-16	160	35	**ER25.2B55.160**
	ER25	1-16	200	35	**ER25.2B55.200**
	ER32	2-20	100	42	**ER32.2B55.100**
	ER32	2-20	160	42	**ER32.2B55.160**
	ER32	2-20	200	42	**ER32.2B55.200**
	ER40	3-26	100	50	**ER40.2B55.100**
	ER40	3-26	160	50	**ER40.2B55.160**
	ER40	3-26	200	50	**ER40.2B55.200**






Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

Shell mill holders for cutters with driving slot

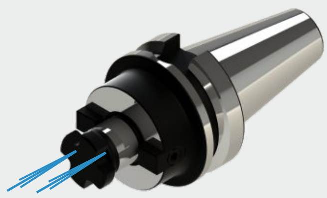
SAB

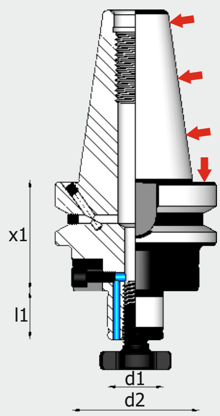
With internal/ face coolant suppy - IK

MAS-BT AD+B | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
double 50 contact	16	35	17	38	**AD16.2B55.050**
	16	100	17	38	**AD16.2B55.100**
	16	160	17	38	**AD16.2B55.160**
	22	35	19	50	**AD22.2B55.055**
	22	100	19	50	**AD22.2B55.100**
	22	160	19	50	**AD22.2B55.160**
	27	35	21	50	**AD27.2B55.055**
	27	100	21	50	**AD27.2B55.100**
	27	160	21	50	**AD27.2B55.160**
	32	50	24	78	**AD32.2B55.055**
	32	100	24	78	**AD32.2B55.100**
	32	160	24	78	**AD32.2B55.160**
	40	50	27	89	**AD40.2B55.055**
	40	100	27	89	**AD40.2B55.100**
	40	160	27	89	**AD40.2B44.160**





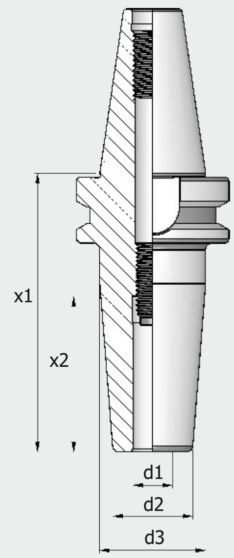

Accessories 7.15


Accessories 7.14


Accessories 7.01

MAS-BT AD | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread



Cone	d1	d2	d3	x1	x2	code
30	3	9	15,5	65	-	**SF03.B30.065**
	3	9	18	90	-	**SF03.B30.090**
	3	9	18	120	-	**SF03.B30.120**
	3	9	18	160	-	**SF03.B30.160**
	4	10	16,5	65	-	**SF04.B30.065**
	4	10	19	90	-	**SF04.B30.090**
	4	10	19	120	-	**SF04.B30.120**
	4	10	19	160	-	**SF04.B30.160**
	5	11	17,5	65	-	**SF05.B30.065**
	5	11	20	90	-	**SF05.B30.090**
	5	11	20	120	-	**SF05.B30.120**
	5	11	20	160	-	**SF05.B30.160**
	6	20	26,5	65	36	**SF06.B30.065**
	6	20	27	90	36	**SF06.B30.090**
	6	20	27	120	36	**SF06.B30.120**
	6	20	27	160	36	**SF06.B30.160**
	8	20	26,5	65	36	**SF08.B30.065**
	8	20	27	90	36	**SF08.B30.090**
	8	20	27	120	36	**SF08.B30.120**
	8	20	27	160	36	**SF08.B30.160**
	10	24	30,5	65	42	**SF10.B30.065**
	10	24	32	90	42	**SF10.B30.090**
	10	24	32	120	42	**SF10.B30.120**
	10	24	32	160	42	**SF10.B30.160**
	12	24	30,5	65	47	**SF12.B30.065**
	12	24	32	90	47	**SF12.B30.090**
	12	24	32	120	47	**SF12.B30.120**
	12	24	32	160	47	**SF12.B30.160**
	14	27	33,5	65	47	**SF14.B30.065**
	14	27	34	90	47	**SF14.B30.090**
	14	27	34	120	47	**SF14.B30.120**
	14	27	34	160	47	**SF14.B30.160**
	16	27	33,5	65	50	**SF16.B30.065**
	16	27	34	90	50	**SF16.B30.090**
	16	27	34	120	50	**SF16.B30.120**
	16	27	34	160	50	**SF16.B30.160**
	18	33	42	80	50	**SF18.B30.080**
	18	33	42	120	50	**SF18.B30.120**
	18	33	42	160	50	**SF18.B30.160**
	20	33	42	80	52	**SF20.B30.080**
	20	33	42	120	52	**SF20.B30.120**
	20	33	42	160	52	**SF20.B30.160**

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

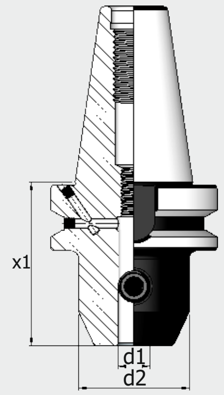
End mill holders «WELDON»

SAB

MAS-BT AD | ≤3μ | G6.3 25.000

Adaptor with built in locking screw

Cone	d1	x1	d2	code
30	6	50	25	**WE06.B30.050**
	8	50	28	**WE08.B30.050**
	10	50	35	**WE10.B30.050**
	12	50	42	**WE12.B30.050**
	14	50	44	**WE14.B30.050**
	16	63	48	**WE16.B30.063**
	18	63	50	**WE18.B30.063**
	20	63	52	**WE20.B30.063**



Accessories 7.14

Accessories 7.01

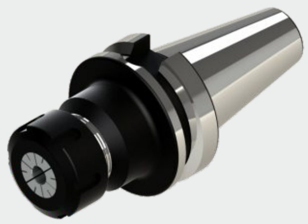
ER Collet chucks - DIN6499

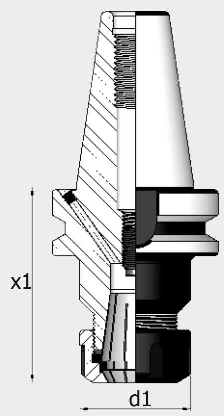
SAB

MAS-BT AD | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d2	code
30	ER16	0.5-10	50	28	**ER16.B30.070**
	ER20	1-13	50	35	**ER20.B30.070**
	ER25	1-16	50	42	**ER25.B30.070**
	ER32	2-20	60	50	**ER32.B30.070**





Accessories 7.06

Accessories 7.07

Accessories 7.14

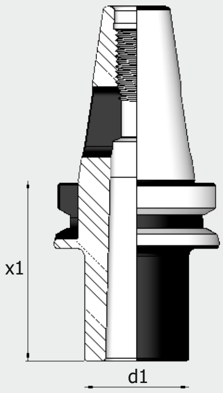
Accessories 7.03

Accessories 7.01

MAS-BT AD | ≤5μ | G6.3 25.000

Morse taper holders for drills

Cone	MK	x1	d2	code
30	1	45	25	**MK1B.B30.045**
	2	60	32	**MK2B.B30.060**
	3	75	40	**MK3B.B30.075**



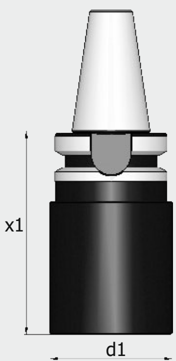
Accessories 7.01

Boring bar - blanks

MAS-BT A

With clamping nut and adjusting screw

Cone	d1	x1	code
30	50	120	**RL50.B30.120**
	50	200	**RL50.B30.200**



Accessories 7.01

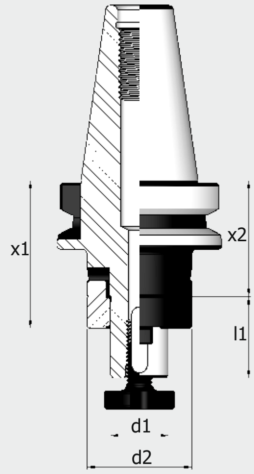
Combi shell mill holder for milling cutters

SAB

MAS-BT A | ≤3μ | G6.3 25.000

With driving key, driving ring and cross screw

Cone	d1	x1	x2	d2	l2	code
30	16	45	40	32	27	**KD16.B30.045**
	22	47	40	40	31	**KD22.B30.047**
	27	49	37	48	33	**KD27.B30.049**
	32	52	38	58	38	**KD32.B30.052**



Accessories 7.14

Accessories 7.14

Accessories 7.14

Accessories 7.01

Shell mill holders for cutters with driving slot

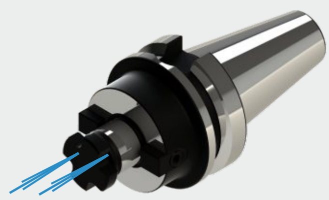
SAB

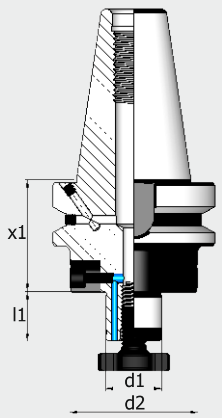
With internal/ face coolant suppy - IK

MAS-BT AD | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
30	16	40	17	28	**AD16.B30.040**
	22	40	19	35	**AD22.B30.040**
	27	50	21	42	**AD27.B30.050**
	32	50	24	50	**AD32.B30.050**





Accessories 7.15

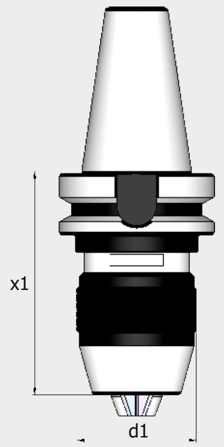
Accessories 7.14

Accessories 7.01

NC drill chucks for RH rotation

MAS-BT A | ≤30µ | G6.3 12.000

With special wrench for tightening



Cone	mm	x1	d1	code
30	0-8	80	37	**NC08.B30.077**
	0-10	90	43	**NC10.B30.090**

DESCRIPTION :
Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly unimpossible.
Slipping-off of the drill chuck unimpossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10 and 13 mm
Special wrench included.

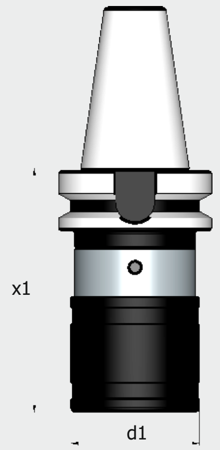
Accessories 7.01

SAB

Tapping head quick-change

MAS-BT A

With length compensation in compression and tension



Cone	Tap size	Compensation	Inserts size	x1	d1	code
30	M3-M14	±7,5 mm	1	77	36	**GN12.B30.077**
	M5-M22	±12,5 mm	2	101	53	**GN20.B30.101**

Accessories 7.10

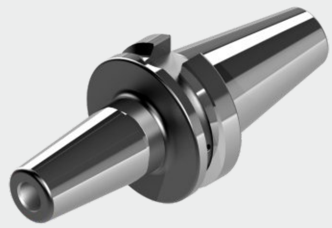
Accessories 7.11

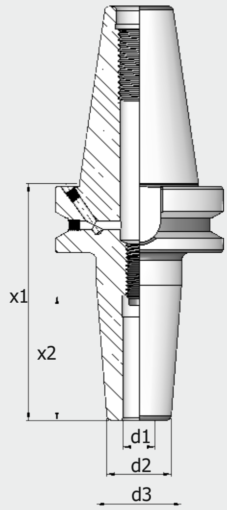
Accessories 7.01

MAS-BT AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
40	3	15	20	90	-	SF03.B44.090
	3	15	20	120	-	SF03.B44.120
	3	15	20	160	-	SF03.B44.160
	4	15	20	90	-	SF04.B44.090
	4	15	20	120	-	SF04.B44.120
	4	15	20	160	-	SF04.B44.160
	5	15	20	90	-	SF05.B44.090
	5	15	20	120	-	SF05.B44.120
	5	15	20	160	-	SF05.B44.160
	6	20	27	90	36	SF06.B44.090
	6	20	27	120	36	SF06.B44.120
	6	20	27	160	36	SF06.B44.160
	6	20	27	200	36	SF06.B44.200
	8	20	27	90	36	SF08.B44.090
	8	20	27	120	36	SF08.B44.120
	8	20	27	160	36	SF08.B44.160
	8	20	27	200	36	SF08.B44.200
	10	24	32	90	42	SF10.B44.090
	10	24	32	120	42	SF10.B44.120
	10	24	32	160	42	SF10.B44.160
	10	24	32	200	42	SF10.B44.200
	12	24	32	90	47	SF12.B44.090
	12	24	32	120	47	SF12.B44.120
	12	24	32	160	47	SF12.B44.160
	12	24	32	200	47	SF12.B44.200
	14	27	34	90	47	SF14.B44.090
	14	27	34	120	47	SF14.B44.120
	14	27	34	160	47	SF14.B44.160
	14	27	34	200	47	SF14.B44.200
	16	27	34	90	50	SF16.B44.090
	16	27	34	120	50	SF16.B44.120
	16	27	34	160	50	SF16.B44.160
	16	27	34	200	50	SF16.B44.200
	18	33	42	90	50	SF18.B44.090
	18	33	42	120	50	SF18.B44.120
	18	33	42	160	50	SF18.B44.160
	18	33	42	200	50	SF18.B44.200
	20	33	42	90	52	SF20.B44.090
	20	33	42	120	52	SF20.B44.120
	20	33	42	160	52	SF20.B44.160
	20	33	42	200	52	SF20.B44.200
	25	44	53	100	58	SF25.B44.100
	25	44	53	160	58	SF25.B44.160
	25	44	53	200	58	SF25.B44.200
	32	44	53	100	63	SF32.B44.100
	32	44	53	160	63	SF32.B44.160
	32	44	53	200	63	SF32.B44.200





Shrinking equipment 5.01

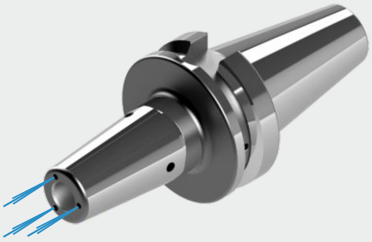
Extensions 7.12

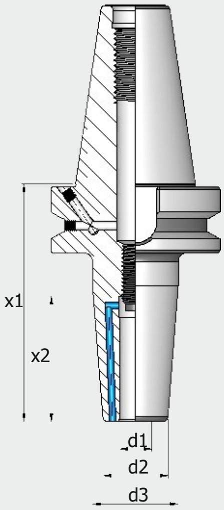
Accessories 7.14

Accessories 7.01

MAS-BT AD+B | ≤3μ | G2.5 25.000

With internal/ face coolant suppy - IK





Cone	d1	d2	d3	x1	x2	code
40	6	20	27	90	36	SF06.B44.090.IK
	6	20	27	120	36	SF06.B44.120.IK
	6	20	27	160	36	SF06.B44.160.IK
	6	20	27	200	36	SF06.B44.200.IK
	8	20	27	90	36	SF08.B44.090.IK
	8	20	27	120	36	SF08.B44.120.IK
	8	20	27	160	36	SF08.B44.160.IK
	8	20	27	200	36	SF08.B44.200.IK
	10	24	32	90	42	SF10.B44.090.IK
	10	24	32	120	42	SF10.B44.120.IK
	10	24	32	160	42	SF10.B44.160.IK
	10	24	32	200	42	SF10.B44.200.IK
	12	24	32	90	47	SF12.B44.090.IK
	12	24	32	120	47	SF12.B44.120.IK
	12	24	32	160	47	SF12.B44.160.IK
	12	24	32	200	47	SF12.B44.200.IK
	14	27	34	90	47	SF14.B44.090.IK
	14	27	34	120	47	SF14.B44.120.IK
	14	27	34	160	47	SF14.B44.160.IK
	14	27	34	200	47	SF14.B44.200.IK
	16	27	34	90	50	SF16.B44.090.IK
	16	27	34	120	50	SF16.B44.120.IK
	16	27	34	160	50	SF16.B44.160.IK
	16	27	34	200	50	SF16.B44.200.IK
	18	33	42	90	50	SF18.B44.090.IK
	18	33	42	120	50	SF18.B44.120.IK
	18	33	42	160	50	SF18.B44.160.IK
	18	33	42	200	50	SF18.B44.200.IK
	20	33	42	90	52	SF20.B44.090.IK
	20	33	42	120	52	SF20.B44.120.IK
	20	33	42	160	52	SF20.B44.160.IK
	20	33	42	200	52	SF20.B44.200.IK
	25	44	53	100	58	SF25.B44.100.IK
	25	44	53	160	58	SF25.B44.160.IK
	25	44	53	200	58	SF25.B44.200.IK
	32	44	53	100	63	SF32.B44.100.IK
	32	44	53	160	63	SF32.B44.160.IK
	32	44	53	200	63	SF32.B44.200.IK

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

THERMO shrink-fit chucks

SAB

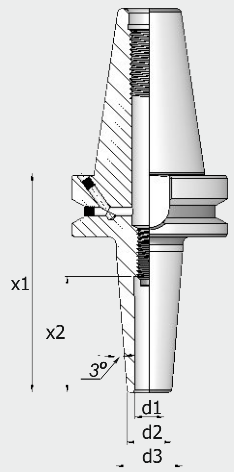
Slim execution 3°

MAS-BT AD+B | ≤3μ | G2.5 25.000

MAS-BT 403

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
40	3	9	16	120	-	**SF03.B44.120.3**
	3	9	23	160	-	**SF03.B44.160.3**
	4	10	20	120	-	**SF04.B44.120.3**
	4	10	24	160	-	**SF04.B44.160.3**
	5	11	21	120	-	**SF05.B44.120.3**
	5	11	25	160	-	**SF05.B44.160.3**
	6	12	22	120	36	**SF06.B44.120.3**
	6	12	26	160	36	**SF06.B44.160.3**
	8	16	24	120	36	**SF08.B44.120.3**
	8	16	28	160	36	**SF08.B44.160.3**
	10	16	26	120	42	**SF10.B44.120.3**
	10	16	30	160	42	**SF10.B44.160.3**
	12	18	28	120	47	**SF12.B44.120.3**
	12	18	32	160	47	**SF12.B44.160.3**
	16	24	34	120	47	**SF16.B44.120.3**
	16	24	38	160	47	**SF16.B44.160.3**



Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.01

THERMO shrink-fit chucks

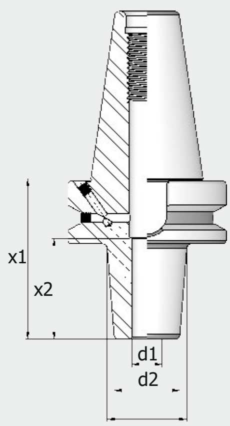
SAB

Short (compact) execution

MAS-BT AD+B | ≤3μ | G6.3 25.000

Without length adjusting thread

Cone	d1	d2	x1	x2	code
40	6	20	65	36	**SF06.B44.065**
	8	20	65	36	**SF08.B44.065**
	10	24	65	42	**SF10.B44.065**
	12	27	65	47	**SF12.B44.065**
	14	33	70	47	**SF14.B44.070**
	16	33	70	50	**SF16.B44.070**
	18	44	70	50	**SF18.B44.070**
	20	44	70	50	**SF20.B44.070**
	25	46	75	56	**SF25.B44.075**
	32	47	75	58	**SF32.B44.075**



Shrinking equipment 5.01

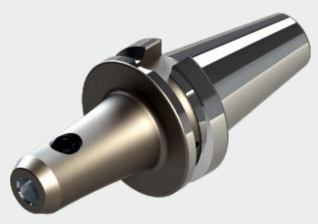
Extensions 7.12

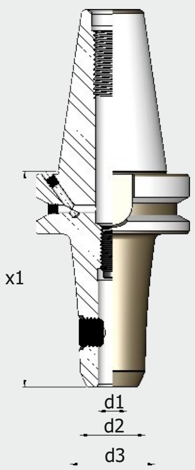
Accessories 7.01

MAS-BT AD+B | ≤3µ | G2.5 25.000 | Fe-Ni

Form - line

Adaptor with built in locking screw





Cone	d1	x1	d2	d3	code
40	6	100	17	23	**WE06.B44.100F**
	6	130	17	28	**WE06.B44.130F**
	6	160	17	29	**WE06.B44.160F**
	8	100	21	27	**WE08.B44.100F**
	8	130	21	32	**WE08.B44.130F**
	8	160	21	33	**WE08.B44.160F**
	10	100	24	30	**WE10.B44.100F**
	10	130	24	35	**WE10.B44.130F**
	10	160	24	36	**WE10.B44.160F**
	12	100	27	33	**WE12.B44.100F**
	12	130	27	38	**WE12.B44.130F**
	12	160	27	39	**WE12.B44.160F**
	14	100	29	35	**WE14.B44.100F**
	14	130	29	40	**WE14.B44.130F**
	14	160	29	41	**WE14.B44.160F**
	16	100	33	39	**WE16.B44.100F**
	16	130	33	44	**WE16.B44.130F**
	16	160	33	45	**WE16.B44.160F**
	18	100	35	41	**WE18.B44.100F**
	18	130	35	46	**WE18.B44.130F**
	18	160	35	47	**WE18.B44.160F**
	20	100	39	45	**WE20.B44.100F**
	20	130	39	48	**WE20.B44.130F**
	20	160	39	49	**WE20.B44.160F**
	25	100	47	47	**WE25.B44.100F**
	25	130	47	47	**WE25.B44.130F**
	25	160	47	47	**WE25.B44.160F**
	32	100	57	57	**WE32.B44.100F**
	32	130	57	57	**WE32.B44.130F**
	32	160	57	57	**WE32.B44.160F**

Accessories 7.14

Accessories 7.01

End mill holders «WELDON»

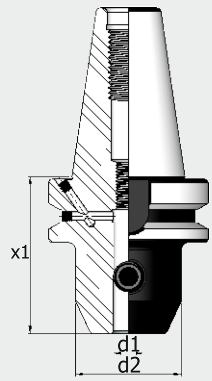
SAB

MAS-BT AD+B | ≤3μ | G6.3 25.000

Adaptor with built in locking screw

MAS-BT 403

Cone	d1	d2	x1	code
40	6	25	50	WE06.B44.050
	6	25	100	WE06.B44.100
	6	25	120	WE06.B44.120
	6	25	160	WE06.B44.160
	6	25	200	WE06.B44.200
	8	28	50	WE08.B44.050
	8	28	100	WE08.B44.100
	8	28	120	WE08.B44.120
	8	28	160	WE08.B44.160
	8	28	200	WE08.B44.200
	10	35	63	WE10.B44.063
	10	35	100	WE10.B44.100
	10	35	120	WE10.B44.120
	10	35	160	WE10.B44.160
	10	35	200	WE10.B44.200
	12	42	63	WE12.B44.063
	12	42	100	WE12.B44.100
	12	42	120	WE12.B44.120
	12	42	160	WE12.B44.160
	12	42	200	WE12.B44.200
	14	44	63	WE14.B44.063
	14	44	100	WE14.B44.100
	14	44	120	WE14.B44.120
	14	44	160	WE14.B44.160
	14	44	200	WE14.B44.200
	16	48	63	WE16.B44.063
	16	48	100	WE16.B44.100
	16	48	120	WE16.B44.120
	16	48	160	WE16.B44.160
	16	48	200	WE16.B44.200
	18	50	63	WE18.B44.063
	18	50	100	WE18.B44.100
	18	50	120	WE18.B44.120
	18	50	160	WE18.B44.160
	18	50	200	WE18.B44.200
	20	52	35	WE20.B44.035
	20	52	63	WE20.B44.063
	20	52	100	WE20.B44.100
	20	52	120	WE20.B44.120
	20	52	160	WE20.B44.160
	20	52	200	WE20.B44.200
	25	50	35	WE25.B44.035
	25	50	63	WE25.B44.063
	25	65	90	WE25.B44.100
	25	65	130	WE25.B44.130
	25	65	160	WE25.B44.160
	25	65	200	WE25.B44.200
	32	52	45	WE32.B44.045
	32	52	63	WE32.B44.063
	32	72	100	WE32.B44.100
	32	72	160	WE32.B44.160
	32	72	200	WE32.B44.200
	40	90	120	WE40.B44.120



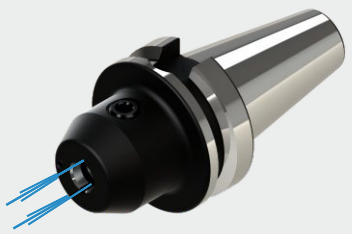
Accessories 7.14

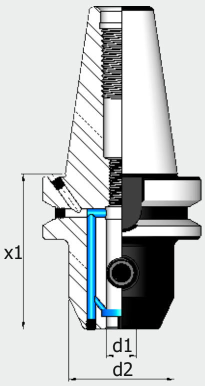
Accessories 7.01

MAS-BT AD+B | ≤3μ | G6.3 25.000

With internal/ face coolant suppy - IK

Adaptor with built in locking screw





Cone	d1	x1	d2	code
40	6	50	25	WE06.B44.050.IK
	6	100	25	WE06.B44.100.IK
	8	50	28	WE08.B44.050.IK
	8	100	28	WE08.B44.100.IK
	10	63	35	WE10.B44.063.IK
	10	100	35	WE10.B44.100.IK
	12	63	42	WE12.B44.050.IK
	12	100	42	WE12.B44.100.IK
	14	63	44	WE14.B44.063.IK
	14	100	44	WE14.B44.100.IK
	16	63	48	WE16.B44.063.IK
	16	100	48	WE16.B44.100.IK
	18	63	50	WE18.B44.063.IK
	18	100	50	WE18.B44.100.IK
	20	63	52	WE20.B44.063.IK
	20	100	52	WE20.B44.100.IK
	25	100	65	WE25.B44.100.IK
	32	100	72	WE32.B44.100.IK
	40	120	90	WE40.B44.120.IK

Accessories 7.14

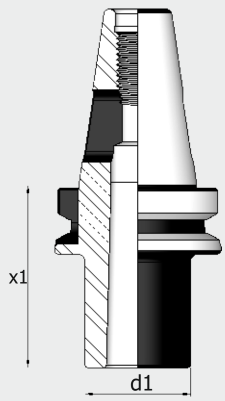
Accessories 7.01

Morse taper holders for drills

SAB

MAS-BT AD | ≤7µ | G6.3 25.000

Cone	MK	x1	d1	code
40	1	50	25	MK1B.B40.050
	2	50	32	MK2B.B40.050
	3	70	40	MK3B.B40.070
	4	95	48	MK4B.B40.095



Accessories 7.01

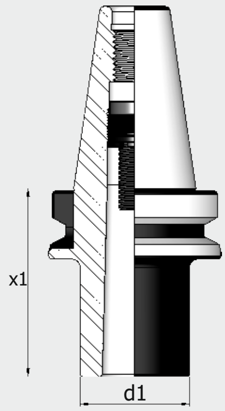
Morse taper holders for mills

SAB

MAS-BT AD | ≤5µ | G6.3 25.000

With built in clamping screw

Cone	MK	x1	d1	code
40	1	50	25	MK1A.B40.050
	2	50	32	MK2A.B40.050
	3	70	40	MK3A.B40.070
	4	95	48	MK4A.B40.095



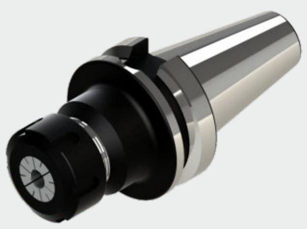
Accessories 7.01

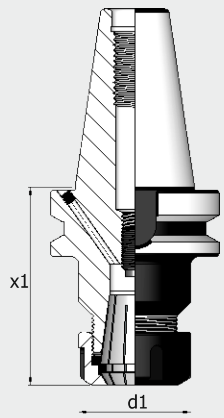
Accessories 7.15

Accessories 7.15

MAS-BT AD+B | ≤3μ | G6.3 25.000

With clamping nut and adjusting screw





Cone	TIP	Range mm	x1	d1	code
40	ER16	0.5-10	63	28	**ER16.B44.063**
	ER16	0.5-10	100	28	**ER16.B44.100**
	ER16	0.5-10	130	28	**ER16.B44.130**
	ER16	0.5-10	160	28	**ER16.B44.160**
	ER16	0.5-10	200	28	**ER16.B44.200**
	ER20	1-13	60	35	**ER20.B44.060**
	ER20	1-13	100	35	**ER20.B44.100**
	ER20	1-13	130	35	**ER20.B44.130**
	ER20	1-13	160	35	**ER20.B44.160**
	ER20	1-13	200	35	**ER20.B44.200**
	ER25	1-16	60	42	**ER25.B44.060**
	ER25	1-16	100	42	**ER25.B44.100**
	ER25	1-16	130	42	**ER25.B44.130**
	ER25	1-16	160	42	**ER25.B44.160**
	ER25	1-16	200	42	**ER25.B44.200**
	ER32	2-20	70	50	**ER32.B44.070**
	ER32	2-20	100	50	**ER32.B44.100**
	ER32	2-20	130	50	**ER32.B44.130**
	ER32	2-20	160	50	**ER32.B44.160**
	ER32	2-20	200	50	**ER32.B44.200**
	ER40	3-26	80	63	**ER40.B44.080**
	ER40	3-26	100	63	**ER40.B44.100**
	ER40	3-26	130	63	**ER40.B44.130**
	ER40	3-26	160	63	**ER40.B44.160**
	ER40	3-26	200	63	**ER40.B44.200**

Accessories 7.06

Accessories 7.07

Accessories 7.14

Accessories 7.03

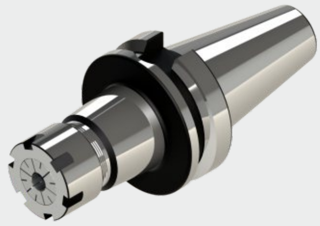
Accessories 7.01

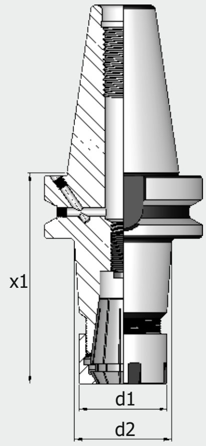
ER Collet chucks DIN6499 - MINI

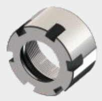
MAS-BT AD+B | ≤3µ | G6.3 25.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	d2	code
40	ER11	0.5-7	70	16	20	**ER11.B44.070M**
	ER11	0.5-7	100	16	26	**ER11.B44.100M**
	ER11	0.5-7	160	16	28	**ER11.B44.160M**
	ER16	0.5-10	70	22	22	**ER16.B44.070M**
	ER16	0.5-10	100	22	28	**ER16.B44.100M**
	ER16	0.5-10	160	22	28	**ER16.B44.160M**
	ER20	1-13	70	28	28	**ER20.B44.070M**
	ER20	1-13	100	28	28	**ER20.B44.100M**
	ER20	1-13	160	28	28	**ER20.B44.160M**
	ER25	1-16	70	35	35	**ER25.B44.070M**
	ER25	1-16	100	35	35	**ER25.B44.100M**
	ER25	1-16	160	35	35	**ER25.B44.160M**







Accessories 7.06

Accessories 7.07

Accessories 7.14

Accessories 7.03

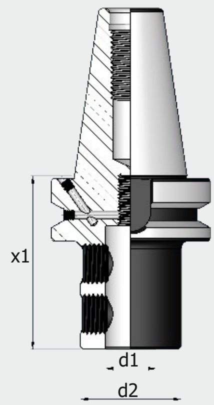
Accessories 7.01

Holders for indexable inserts drills

MAS-BT AD+B | ≤3µ | G6.3 25.000

With built in locking screw

Cone	d1	x1	d2	code
40	20	70	40	**VB20.B44.070**
	25	70	45	**VB25.B44.070**
	32	75	52	**VB32.B44.075**

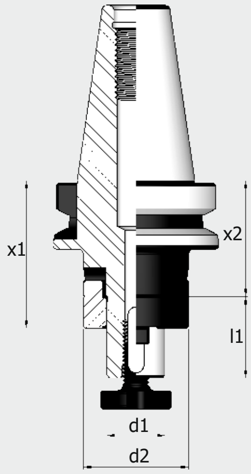


Accessories 7.14

Accessories 7.01

MAS-BT AD | ≤3μ | G6.3 25.000

With driving key, driving ring and cross screw



Cone	d1	x1	x2	d2	l2	code
40	16	55	45	32	27	**KD16.B40.055**
	16	100	90	32	27	**KD16.B40.100**
	16	150	140	32	27	**KD16.B40.150**
	22	55	43	40	31	**KD22.B40.055**
	22	100	88	40	31	**KD22.B40.100**
	22	150	138	40	31	**KD22.B40.150**
	27	55	43	48	33	**KD27.B40.055**
	27	100	88	48	33	**KD27.B40.100**
	27	150	138	48	33	**KD27.B40.150**
	32	60	46	58	38	**KD32.B40.060**
	32	100	86	58	38	**KD32.B40.100**
	32	150	136	58	38	**KD32.B40.150**
	40	60	46	70	41	**KD40.B40.060**
	40	100	86	70	41	**KD40.B40.100**
	40	150	136	70	41	**KD40.B40.150**


Accessories 7.14


Accessories 7.14


Accessories 7.14

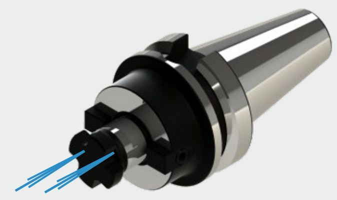

Accessories 7.01

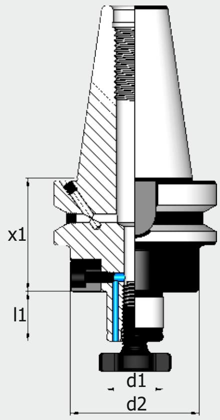
With internal/ face coolant suppy - IK

MAS-BT AD+B | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
40	16	35	17	38	**AD16.B44.035**
	16	100	17	38	**AD16.B44.100**
	22	35	19	50	**AD22.B44.035**
	22	100	19	50	**AD22.B44.100**
	22	160	19	50	**AD22.B44.160**
	27	35	21	50	**AD27.B44.035**
	27	100	21	50	**AD27.B44.100**
	27	160	21	50	**AD27.B44.160**
	32	50	24	78	**AD32.B44.050**
	32	100	24	78	**AD32.B44.100**
	32	160	24	78	**AD32.B44.160**
	40	50	27	89	**AD40.B44.050**
	40	100	27	89	**AD40.B44.100**
	40	160	27	89	**AD40.B44.160**



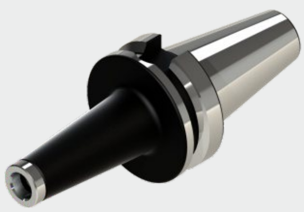


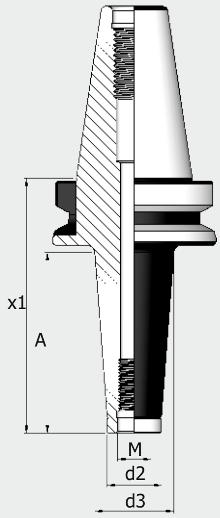
Accessories 7.15

Accessories 7.14

Accessories 7.01

MAS-BT AD+B | ≤3μ | G2.5 25.000





Cone	M	A	x1	d2	d3	code
40	M6	25	60	10	10	**EF06.B44.060**
	M6	50	85	10	13	**EF06.B44.085**
	M6	75	110	10	20	**EF06.B44.110**
	M6	100	135	10	23	**EF06.B44.135**
	M8	25	60	13	15	**EF08.B44.060**
	M8	50	85	13	23	**EF08.B44.085**
	M8	75	110	13	23	**EF08.B44.110**
	M8	100	135	13	25	**EF08.B44.135**
	M10	25	60	18	18	**EF10.B44.060**
	M10	50	85	18	20	**EF10.B44.085**
	M10	75	110	18	23	**EF10.B44.110**
	M10	100	135	18	28	**EF10.B44.135**
	M10	125	160	18	32	**EF10.B44.160**
	M12	25	60	21	24	**EF12.B44.060**
	M12	50	85	21	24	**EF12.B44.085**
	M12	75	110	21	31	**EF12.B44.110**
	M12	100	135	21	33	**EF12.B44.135**
	M12	125	160	21	36	**EF12.B44.160**
	M12	150	185	21	40	**EF12.B44.185**
	M16	25	60	29	29	**EF16.B44.060**
	M16	50	85	29	34	**EF16.B44.085**
	M16	75	110	29	34	**EF16.B44.110**
	M16	100	135	29	36	**EF16.B44.135**
	M16	125	160	29	40	**EF16.B44.160**
	M16	150	185	29	42,5	**EF16.B44.185**

Accessories 7.01

NC drill chucks for RH rotation

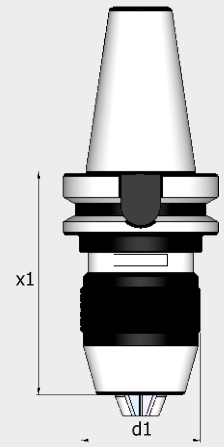
SAB

MAS-BT A | ≤15μ | G6.3 12.000

With special wrench for tightening

Cone	mm	x1	d1	code
40	0-8	78	37	**NC08.B40.078**
	0-10	82	43	**NC10.B40.082**
	1-13	86	48	**NC13.B40.086**
	3-16	105	53	**NC16.B40.105**

DESCRIPTION :
Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly impossible.
Slipping-off of the drill chuck impossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10,13 and 16 mm
Special wrench included.



Accessories 7.01

HX drill chucks for RH and LH rotation

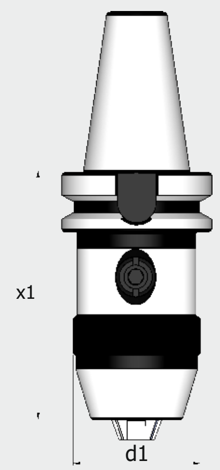
SAB

MAS-BT AD+B | ≤15μ | G6.3 12.000

With allen key for tightening

Cone	mm	x1	d1	code
40	1-13	96	54	**HX13.B44.096**
	3-16	99	57	**HX16.B44.099**

Precision drill chuck with integrated shank and hexagonal key lock
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm

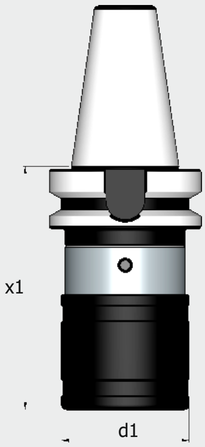


Accessories 7.01

MAS-BT
A

With length compensation in compression and tension

Cone	Tap size	Compensation	Inserts size	x1	d1	code
40	M3-M14	±7,5 mm	1	74	36	**GN12.B40.074**
	M5-M22	±12,5 mm	2	98	53	**GN20.B40.098**
	M14-M33	±20,0 mm	3	189	78	**GN33.B40.189**
	M22-M48	±22,5 mm	4	205	96	**GN48.B40.205**



Accessories 7.10

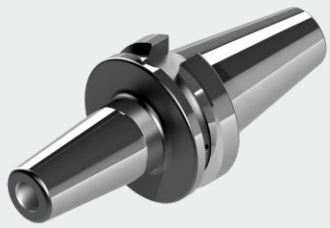
Accessories 7.11

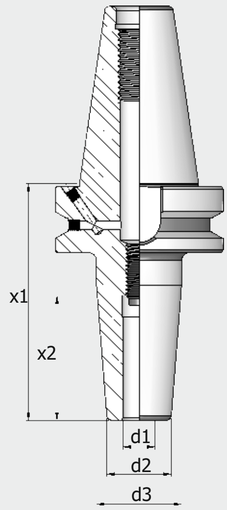
Accessories 7.01

MAS-BT AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
50	3	15	20	100	-	**SF03.B55.100**
	3	15	20	130	-	**SF03.B55.130**
	3	15	20	160	-	**SF03.B55.160**
	4	15	20	100	-	**SF04.B55.100**
	4	15	20	130	-	**SF04.B55.130**
	4	15	20	160	-	**SF04.B55.160**
	5	15	20	100	-	**SF05.B55.100**
	5	15	20	130	-	**SF05.B55.130**
	5	15	20	160	-	**SF05.B55.160**
	6	20	27	100	36	**SF06.B55.100**
	6	20	27	130	36	**SF06.B55.130**
	6	20	27	160	36	**SF06.B55.160**
	6	20	27	200	36	**SF06.B55.200**
	8	20	27	100	36	**SF08.B55.100**
	8	20	27	130	36	**SF08.B55.130**
	8	20	27	160	36	**SF08.B55.160**
	8	20	27	200	36	**SF08.B55.200**
	10	24	32	100	42	**SF10.B55.100**
	10	24	32	130	42	**SF10.B55.130**
	10	24	32	160	42	**SF10.B55.160**
	10	24	32	200	42	**SF10.B55.200**
	12	24	32	100	47	**SF12.B55.100**
	12	24	32	130	47	**SF12.B55.130**
	12	24	32	160	47	**SF12.B55.160**
	12	24	32	200	47	**SF12.B55.200**
	14	27	34	100	47	**SF14.B55.100**
	14	27	34	130	47	**SF14.B55.130**
	14	27	34	160	47	**SF14.B55.160**
	14	27	34	200	47	**SF14.B55.200**
	16	27	34	100	50	**SF16.B55.100**
	16	27	34	130	50	**SF16.B55.130**
	16	27	34	160	50	**SF16.B55.160**
	16	27	34	200	50	**SF16.B55.200**
	18	33	42	100	50	**SF18.B55.100**
	18	33	42	130	50	**SF18.B55.130**
	18	33	42	160	50	**SF18.B55.160**
	18	33	42	200	50	**SF18.B55.200**
	20	33	42	100	52	**SF20.B55.100**
	20	33	42	130	52	**SF20.B55.130**
	20	33	42	160	52	**SF20.B55.160**
	20	33	42	200	52	**SF20.B55.200**
	25	44	53	100	58	**SF25.B55.100**
	25	44	53	130	58	**SF25.B55.130**
	25	44	53	160	58	**SF25.B55.160**
	25	44	53	200	58	**SF25.B55.200**
	32	44	53	100	63	**SF32.B55.100**
	32	44	53	130	63	**SF32.B55.130**
	32	44	53	160	63	**SF32.B55.160**
	32	44	53	200	63	**SF32.B55.200**





Shrinking equipment 5.01

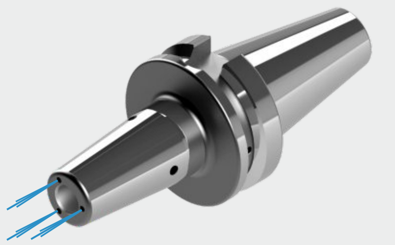
Extensions 7.12

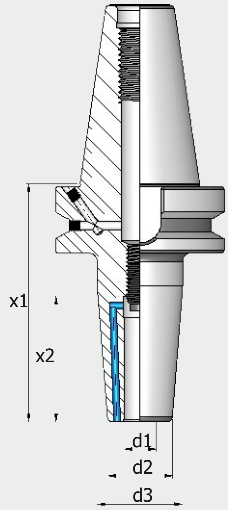
Accessories 7.14

Accessories 7.01

MAS-BT AD+B | ≤3μ | G2.5 25.000

With internal/ face coolant suppy - IK





Cone	d1	d2	d3	x1	x2	code
50	6	20	27	100	36	SF06.B55.100.IK
	6	20	27	130	36	SF06.B55.130.IK
	6	20	27	160	36	SF06.B55.160.IK
	6	20	27	200	36	SF06.B55.200.IK
	8	20	27	100	36	SF08.B55.100.IK
	8	20	27	130	36	SF08.B55.130.IK
	8	20	27	160	36	SF08.B55.160.IK
	8	20	27	200	36	SF08.B55.200.IK
	10	24	32	100	42	SF10.B55.100.IK
	10	24	32	130	42	SF10.B55.130.IK
	10	24	32	160	42	SF10.B55.160.IK
	10	24	32	200	42	SF10.B55.200.IK
	12	24	32	100	47	SF12.B55.100.IK
	12	24	32	130	47	SF12.B55.130.IK
	12	24	32	160	47	SF12.B55.160.IK
	12	24	32	200	47	SF12.B55.200.IK
	14	27	34	100	47	SF14.B55.100.IK
	14	27	34	130	47	SF14.B55.130.IK
	14	27	34	160	47	SF14.B55.160.IK
	14	27	34	200	47	SF14.B55.200.IK
	16	27	34	100	50	SF16.B55.100.IK
	16	27	34	130	50	SF16.B55.130.IK
	16	27	34	160	50	SF16.B55.160.IK
	16	27	34	200	50	SF16.B55.200.IK
	18	33	42	100	50	SF18.B55.100.IK
	18	33	42	130	50	SF18.B55.130.IK
	18	33	42	160	50	SF18.B55.160.IK
	18	33	42	200	50	SF18.B55.200.IK
	20	33	42	100	52	SF20.B55.100.IK
	20	33	42	130	52	SF20.B55.130.IK
	20	33	42	160	52	SF20.B55.160.IK
	20	33	42	200	52	SF20.B55.200.IK
	25	44	53	100	58	SF25.B55.100.IK
	25	44	53	130	58	SF25.B55.130.IK
	25	44	53	160	58	SF25.B55.160.IK
	25	44	53	200	58	SF25.B55.200.IK
	32	44	53	100	63	SF32.B55.100.IK
	32	44	53	130	63	SF32.B55.130.IK
	32	44	53	160	63	SF32.B55.160.IK
	32	44	53	200	63	SF32.B55.200.IK

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

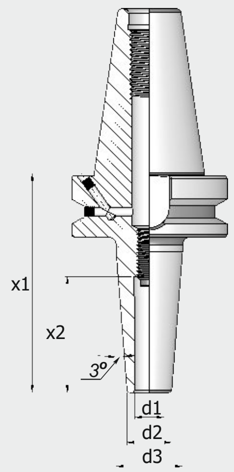
Accessories 7.01

Slim execution 3°

MAS-BT AD+B | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
50	3	9	16	120	-	SF03.B55.120.3
	3	9	23	160	-	SF03.B55.160.3
	4	10	20	120	-	SF04.B55.120.3
	4	10	24	160	-	SF04.B55.160.3
	5	11	21	120	-	SF05.B55.120.3
	5	11	25	160	-	SF05.B55.160.3
	6	12	22	120	36	SF06.B55.120.3
	6	12	26	160	36	SF06.B55.160.3
	8	16	24	120	36	SF08.B55.120.3
	8	16	28	160	36	SF08.B55.160.3
	10	16	26	120	42	SF10.B55.120.3
	10	16	30	160	42	SF10.B55.160.3
	12	18	28	120	47	SF12.B55.120.3
	12	18	32	160	47	SF12.B55.160.3
	16	24	34	120	47	SF16.B55.120.3
	16	24	38	160	47	SF16.B55.160.3



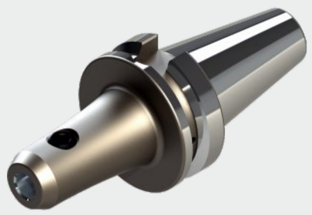

Shrinking equipment 5.01

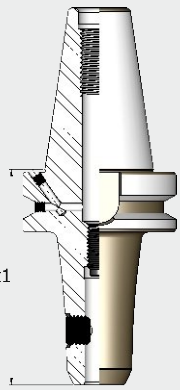

Extensions 7.12


Accessories 7.14


Accessories 7.01

Adaptor with built in locking screw





Cone	d1	x1	d2	d3	code
50	6	100	17	23	**WE06.B55.100F**
	6	130	17	28	**WE06.B55.130F**
	6	160	17	29	**WE06.B55.160F**
	6	200	17	38	**WE06.B55.200F**
	8	100	21	27	**WE08.B55.100F**
	8	130	21	32	**WE08.B55.130F**
	8	160	21	33	**WE08.B55.160F**
	8	200	21	42	**WE08.B55.160F**
	10	100	24	30	**WE10.B55.100F**
	10	130	24	35	**WE10.B55.130F**
	10	160	24	36	**WE10.B55.160F**
	10	200	24	45	**WE10.B55.200F**
	12	100	27	33	**WE12.B55.100F**
	12	130	27	38	**WE12.B55.130F**
	12	160	27	39	**WE12.B55.160F**
	12	200	27	48	**WE12.B55.200F**
	14	100	29	35	**WE14.B55.100F**
	14	130	29	40	**WE14.B55.130F**
	14	160	29	41	**WE14.B55.160F**
	14	200	29	50	**WE14.B55.200F**
	16	100	33	39	**WE16.B55.100F**
	16	130	33	44	**WE16.B55.130F**
	16	160	33	45	**WE16.B55.160F**
	16	200	33	54	**WE16.B55.200F**
	18	100	35	41	**WE18.B55.100F**
	18	130	35	46	**WE18.B55.130F**
	18	160	35	47	**WE18.B55.160F**
	18	200	35	56	**WE18.B55.200F**
	20	100	39	45	**WE20.B55.100F**
	20	130	39	48	**WE20.B55.130F**
	20	160	39	49	**WE20.B55.160F**
	20	200	39	58	**WE20.B55.200F**
	25	100	47	53	**WE25.B55.100F**
	25	130	47	58	**WE25.B55.130F**
	25	160	47	59	**WE25.B55.160F**
	25	200	47	68	**WE25.B55.200F**
	32	130	57	68	**WE32.B55.130F**
	32	160	57	69	**WE32.B55.160F**
	32	200	57	70	**WE32.B55.200F**

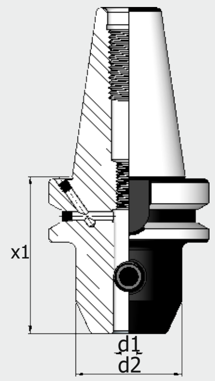
Accessories 7.14

Accessories 7.01

MAS-BT AD+B | ≤3μ | G6.3 15.000

Adaptor with built in locking screw

Cone	d1	d2	x1	code
50	6	25	63	WE06.B55.063
	6	25	100	WE06.B55.100
	6	25	130	WE06.B55.130
	6	25	160	WE06.B55.160
	6	25	200	WE06.B55.200
	8	28	63	WE08.B55.063
	8	28	100	WE08.B55.100
	8	28	130	WE08.B55.130
	8	28	160	WE08.B55.160
	8	28	200	WE08.B55.200
	10	35	80	WE10.B55.080
	10	35	100	WE10.B55.100
	10	35	130	WE10.B55.130
	10	35	160	WE10.B55.160
	10	35	200	WE10.B55.200
	12	42	80	WE12.B55.080
	12	42	100	WE12.B55.100
	12	42	130	WE12.B55.130
	12	42	160	WE12.B55.160
	12	42	200	WE12.B55.200
	14	44	80	WE14.B55.080
	14	44	100	WE14.B55.100
	14	44	130	WE14.B55.130
	14	44	160	WE14.B55.160
	14	44	200	WE14.B55.200
	16	48	80	WE16.B55.080
	16	48	100	WE16.B55.100
	16	48	130	WE16.B55.130
	16	48	160	WE16.B55.160
	16	48	200	WE16.B55.200
	18	50	80	WE18.B55.080
	18	50	100	WE18.B55.100
	18	50	130	WE18.B55.130
	18	50	160	WE18.B55.160
	18	50	200	WE18.B55.200
	20	52	80	WE20.B55.080
	20	52	100	WE20.B55.100
	20	52	120	WE20.B55.130
	20	52	160	WE20.B55.160
	20	52	200	WE20.B55.200
	25	65	100	WE25.B55.100
	25	65	130	WE25.B55.130
	25	65	160	WE25.B55.160
	25	65	200	WE25.B55.200
	32	72	105	WE32.B55.105
	32	72	130	WE32.B55.130
	32	72	160	WE32.B55.160
	32	72	200	WE32.B55.200
	40	90	105	WE40.B55.105
	50	90	125	WE50.B55.125



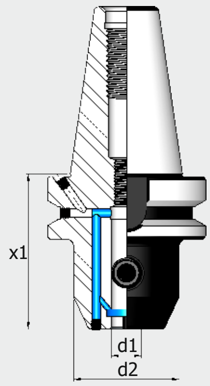
Accessories 7.14

Accessories 7.01

MAS-BT AD+B | ≤3μ | G6.3 25.000

With internal/ face coolant suppy - IK

Adaptor with built in locking screw



Cone	d1	x1	d2	code
50	6	63	25	**WE06.B55.063.IK**
	8	63	28	**WE08.B55.063.IK**
	10	80	35	**WE10.B55.080.IK**
	12	80	42	**WE12.B55.080.IK**
	14	80	44	**WE14.B55.080.IK**
	16	80	48	**WE16.B55.080.IK**
	18	80	50	**WE18.B55.080.IK**
	20	80	52	**WE20.B55.080.IK**
	25	100	65	**WE25.B55.100.IK**
	32	105	72	**WE32.B55.105.IK**
	40	105	90	**WE40.B55.105.IK**

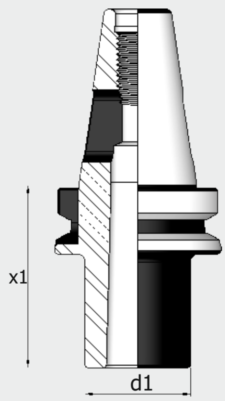

Accessories 7.14


Accessories 7.01

Morse taper holders for drills

MAS-BT AD | ≤5μ | G6.3 15.000

Cone	MK	x1	d1	code
50	1	45	25	MK1B.B50.045
	2	60	32	MK2B.B50.060
	3	65	40	MK3B.B50.065
	4	95	48	MK4B.B50.095
	5	105	63	MK5B.B50.105



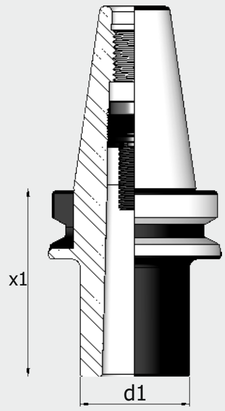
Accessories 7.01

Morse taper holders for mills

MAS-BT AD | ≤5μ | G6.3 15.000

With built in clamping screw

Cone	MK	x1	d1	code
50	1	45	25	MK1A.B50.045
	2	60	32	MK2A.B50.060
	3	65	40	MK3A.B50.065
	4	70	48	MK4A.B50.070



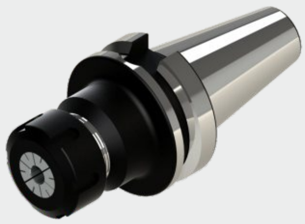
Accessories 7.01

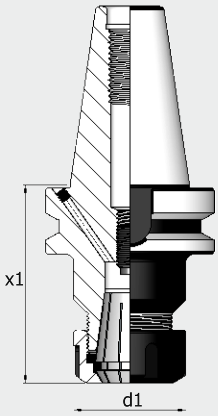
Accessories 7.15

Accessories 7.15

MAS-BT AD+B | ≤3μ | G6.3 15.000

With clamping nut and adjusting screw





Cone	TIP	Range mm	x1	d1	code
50	ER16	0.5-10	63	28	**ER16.B55.063**
	ER16	0.5-10	100	28	**ER16.B55.100**
	ER16	0.5-10	130	28	**ER16.B55.130**
	ER16	0.5-10	160	28	**ER16.B55.160**
	ER16	0.5-10	200	28	**ER16.B55.200**
	ER25	1-16	60	42	**ER25.B55.060**
	ER25	1-16	100	42	**ER25.B55.100**
	ER25	1-16	130	42	**ER25.B55.130**
	ER25	1-16	160	42	**ER25.B55.160**
	ER25	1-16	200	42	**ER25.B55.200**
	ER32	2-20	70	50	**ER32.B55.070**
	ER32	2-20	100	50	**ER32.B55.100**
	ER32	2-20	130	50	**ER32.B55.130**
	ER32	2-20	160	50	**ER32.B55.160**
	ER32	2-20	200	50	**ER32.B55.200**
	ER40	3-26	80	63	**ER40.B55.080**
	ER40	3-26	100	63	**ER40.B55.100**
	ER40	3-26	130	63	**ER40.B55.130**
	ER40	3-26	160	63	**ER40.B55.160**
	ER40	3-26	200	63	**ER40.B55.200**


Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.01

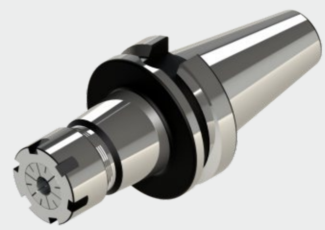
ER Collet chucks DIN6499 - MINI

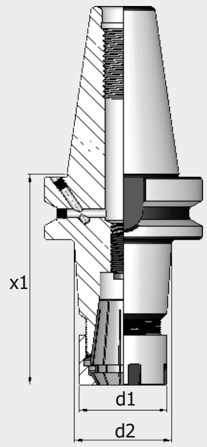
SAB

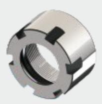
MAS-BT AD+B | ≤3μ | G6.3 15.000

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	d2	code
50	ER11	0.5-7	100	16	26	**ER11.B44.100M**
	ER11	0.5-7	160	16	28	**ER11.B44.160M**
	ER16	0.5-10	100	22	28	**ER16.B44.100M**
	ER16	0.5-10	160	22	28	**ER16.B44.160M**
	ER25	1-16	100	35	35	**ER25.B44.100M**
	ER25	1-16	160	35	35	**ER25.B44.160M**






Accessories 7.05


Accessories 7.06


Accessories 7.14


Accessories 7.03


Accessories 7.01

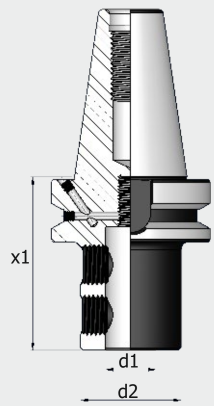
Holders for indexable inserts drills

SAB

MAS-BT AD+B | ≤3μ | G6.3 25.000

With built in locking screw

Cone	d1	x1	d2	code
50	20	65	40	**VB20.B55.065**
	25	70	45	**VB25.B55.070**
	32	75	52	**VB32.B55.075**
	40	80	60	**VB40.B55.080**

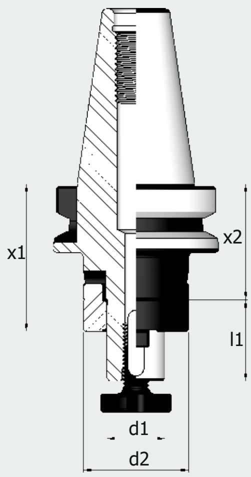



Accessories 7.14


Accessories 7.01

MAS-BT AD | ≤3μ | G6.3 15.000

With driving key, driving ring and cross screw



Cone	d1	x1	x2	d2	l2	code
50	16	70	45	32	27	**KD16.B50.070**
	16	100	90	32	27	**KD16.B50.100**
	16	150	140	32	27	**KD16.B50.150**
	22	70	43	40	31	**KD22.B50.070**
	22	100	88	40	31	**KD22.B50.100**
	22	150	138	40	31	**KD22.B50.150**
	22	200	188	40	31	**KD22.B50.200**
	27	70	43	48	33	**KD27.B50.070**
	27	100	88	48	33	**KD27.B50.100**
	27	150	138	48	33	**KD27.B50.150**
	27	200	188	48	33	**KD27.B50.200**
	32	70	46	58	38	**KD32.B50.070**
	32	100	86	58	38	**KD32.B50.100**
	32	150	136	58	38	**KD32.B50.150**
	32	200	186	58	38	**KD32.B50.200**
	40	70	46	70	41	**KD40.B50.070**
	40	100	86	70	41	**KD40.B50.100**
	40	150	136	70	41	**KD40.B50.150**
	40	200	186	70	41	**KD40.B50.200**
	50	70	49	90	46	**KD50.B50.070**

Accessories 7.14

Accessories 7.14

Accessories 7.14

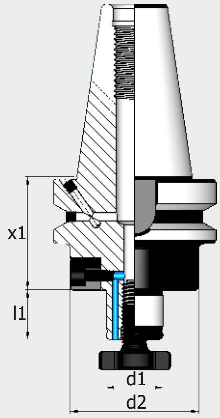
Accessories 7.01

With internal/ face coolant suppy - IK

MAS-BT AD+B | ≤3μ | G6.3 25.000

With driving keys and cross screw

Cone	d1	x1	l1	d2	code
50	16	50	17	38	**AD16.B55.050**
	16	100	17	38	**AD16.B55.100**
	16	160	17	38	**AD16.B55.160**
	22	55	19	50	**AD22.B55.055**
	22	100	19	50	**AD22.B55.100**
	22	160	19	50	**AD22.B55.160**
	22	200	19	50	**AD22.B55.200**
	27	55	21	50	**AD27.B55.055**
	27	100	21	50	**AD27.B55.100**
	27	160	21	50	**AD27.B55.160**
	27	200	21	50	**AD27.B55.200**
	32	55	24	78	**AD32.B55.055**
	32	100	24	78	**AD32.B55.100**
	32	160	24	78	**AD32.B55.160**
	32	200	24	78	**AD32.B55.200**
	40	55	27	89	**AD40.B55.055**
	40	100	27	89	**AD40.B55.100**
	40	160	27	89	**AD40.B55.160**
	40	200	27	89	**AD40.B55.200**
	60*	80	40	129	**AF60.B50.080**



Accessories 7.15

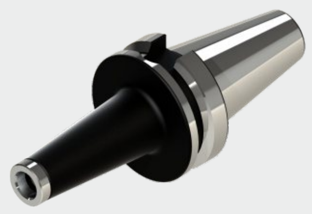
Accessories 7.14

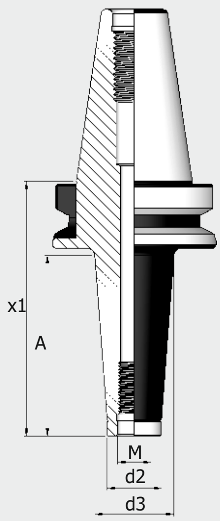
Accessories 7.01

MAS-BT AD+B

≤3μ

G6.3 15.000





Cone	M	A	x1	d2	d3	code
50	M8	50	96	13	20	**EF08.B55.096**
	M8	100	146	13	25	**EF08.B55.146**
	M8	150	196	13	30	**EF08.B55.196**
	M10	50	96	18	24	**EF10.B55.096**
	M10	100	146	18	32	**EF10.B55.146**
	M10	150	196	18	40	**EF10.B55.196**
	M12	50	96	21	23	**EF12.B55.096**
	M12	100	146	21	33	**EF12.B55.146**
	M12	150	196	21	47	**EF12.B55.196**
	M16	50	96	29	32	**EF16.B55.096**
	M16	100	146	29	42	**EF16.B55.146**
	M16	150	196	29	55	**EF16.B55.196**
	M16	200	246	29	55	**EF16.B55.246**

Accessories 7.01

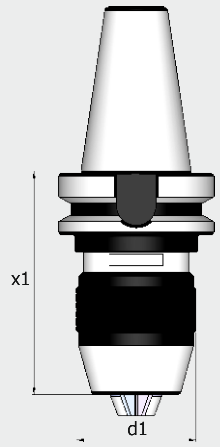
NC drill chucks for RH rotation

MAS-BT A | ≤15μ | G6.3 12.000

With special wrench for tightening

Cone	mm	x1	d1	code
50	0-8	88	37	**NC08.B50.088**
	0-10	92	43	**NC10.B50.092**
	1-13	96	48	**NC13.B50.096**
	3-16	115	53	**NC16.B50.115**

DESCRIPTION :
Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly impossible.
Slipping-off of the drill chuck impossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10,13 and 16 mm
Special wrench included.



Accessories 7.01

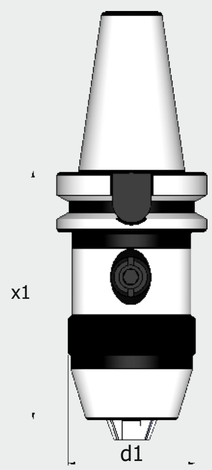
HX drill chucks for RH and LH rotation

MAS-BT AD+B | ≤15μ | G6.3 12.000

With allen key for tightening

Cone	mm	x1	d1	code
50	1-13	107	54	**HX13.B55.107**
	3-16	110	57	**HX16.B55.110**

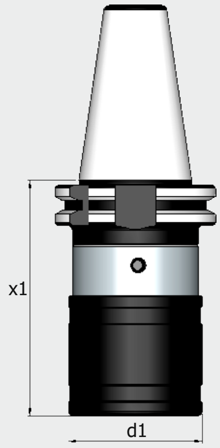
Precision drill chuck with integrated shank and hexagonal key lock
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm



Accessories 7.01

MAS-BT
A

With length compensation in compression and tension



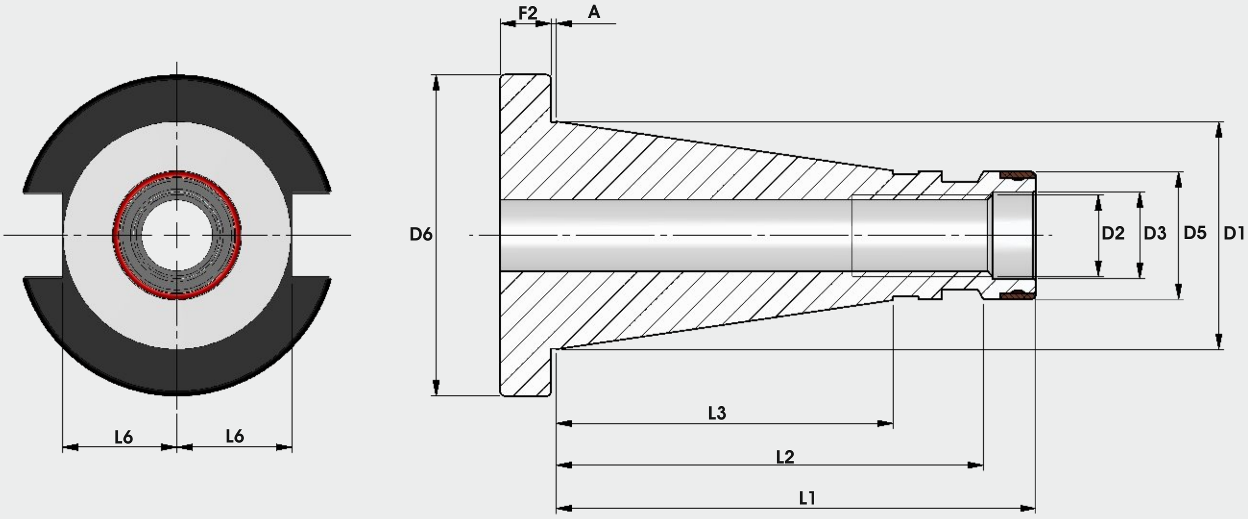
Cone	Tap size	Compensation	Inserts size	x1	d1	code
50	M3-M14	±7,5 mm	1	73	36	**GN12.B50.073**
	M5-M22	±12,5 mm	2	107	53	**GN20.B50.107**
	M14-M33	±20,0 mm	3	168	78	**GN33.B50.168**
	M22-M48	±22,5 mm	4	184	96	**GN48.B50.184**

Accessories 7.10

Accessories 7.11

Accessories 7.01

Technical informations



Konus Kegel Taper Cone	D1	D2	D3	D5	D6	L1	L2	L3	L6	A	F2
40	44,45	M16	17	25	63	93,40	65,4	82,00	22,50	1,60	10
50	69,85	M24	25	39,6	97,5	126,80	101,1	101,1	35,30	3,20	12

Material : Case hardened steel with min. 900 N/mm² tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided.

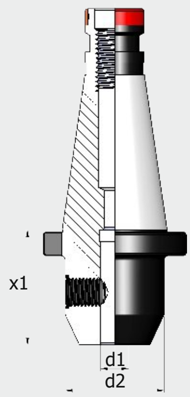
Accuracy : Taper angle AT3 quality class. Roughness Ra <0.2

End mill holders «WELDON»

DIN 2080 ≤5μ

Adaptor with built in locking screw

Cone	d1	d2	x1	code
40	6	25	50	**WE06.I40.050**
	8	28	50	**WE08.I40.050**
	10	35	50	**WE10.I40.050**
	12	42	50	**WE12.I40.050**
	14	44	50	**WE14.I40.050**
	16	48	63	**WE16.I40.063**
	18	50	63	**WE18.I40.063**
	20	52	63	**WE20.I40.063**
	25	65	90	**WE25.I40.090**
	32	72	100	**WE32.I40.100**



Accessories 7.14

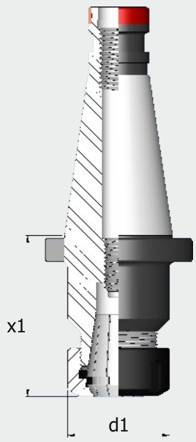
DIN 2080

ER collet chuck DIN6499

DIN 2080 ≤5μ

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
40	ER25	1-16	60	42	**ER25.I40.060**
	ER32	2-20	70	50	**ER32.I40.070**
	ER40	3-26	80	63	**ER40.I40.080**



Accessories 7.06

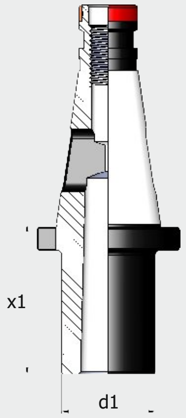
Accessories 7.07

Accessories 7.03

Accessories 7.14

Morse taper holders for drills

DIN 2080 | ≤7μ



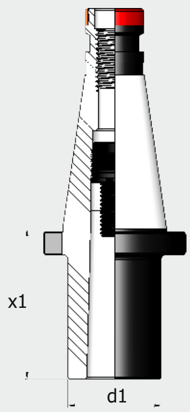
Cone	MK	x1	d1	code
40	1	50	25	**MK1B.I40.050**
	2	50	32	**MK2B.I40.050**
	3	65	40	**MK3B.I40.065**
	4	95	48	**MK4B.I40.095**

SAB

Morse taper holders for mills

DIN 2080 | ≤7μ

With built in clamping screw



Cone	MK	x1	d1	code
40	1	50	25	**MK1A.I40.050**
	2	50	32	**MK2A.I40.050**
	3	65	40	**MK3A.I40.065**
	4	95	48	**MK4A.I40.095**

Accessories 7.15

Accessories 7.15

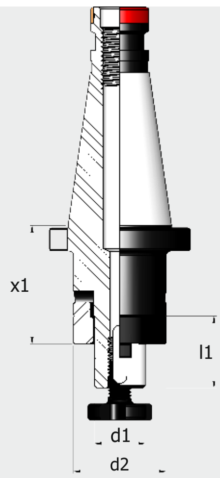
Combi shell mill holder for milling cutters

SAB

DIN 2080 | ≤5μ

With driving key, driving ring and cross screw

Cone	d1	x1	x2	d2	l2	code
40	16	52	42	32	27	**KD16.I40.052**
	22	52	40	40	31	**KD22.I40.052**
	27	52	40	48	33	**KD27.I40.052**
	32	52	38	58	38	**KD32.I40.052**
	40	56	42	70	41	**KD40.I40.056**



Accessories 7.14

Accessories 7.14

Accessories 7.14

DIN 2080

NC drill chucks for RH rotation

SAB

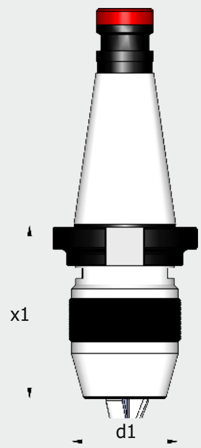
DIN 2080 | ±15μ

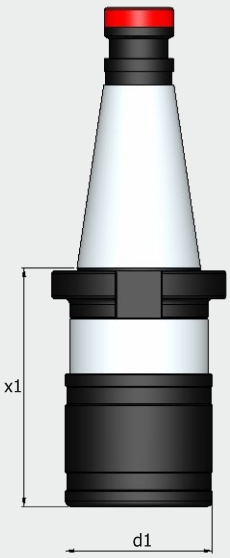
With special wrench for tightening

Cone	Range mm	x1	d1	code
40	1-13	70	48	**NC13.I40.070**
	3-16	79	53	**NC16.I40.079**

DESCRIPTION :

Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly unimpossible.
Slipping-off of the drill chuck unimpossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10 and 13 mm
Special wrench included.





Cone	Tap size	Compensation	Insert size	x1	d1	code
40	M3-M14	±7,5 mm	1	71	36	**GN12.I40.071**
	M5-M22	±12,5 mm	2	95	53	**GN20.I40.095**
	M14-M33	±20,0 mm	3	142	78	**GN33.I40.142**
	M22-M48	±22,5 mm	4	157	96	**GN48.I40.157**


Accessories 7.11


Accessories 7.10

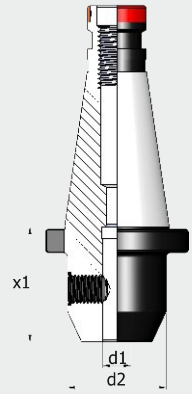
End mill holders «WELDON»

DIN 2080

≤5µ

Adaptor with built in locking screw

Cone	d1	d2	x1	code
50	6	25	63	**WE06.I50.063**
	8	28	63	**WE08.I50.063**
	10	35	63	**WE10.I50.063**
	12	42	63	**WE12.I50.063**
	14	44	63	**WE14.I50.063**
	16	48	63	**WE16.I50.063**
	18	50	63	**WE18.I50.063**
	20	52	63	**WE20.I50.063**
	25	65	80	**WE25.I50.080**
	32	72	80	**WE32.I50.080**
	40	90	90	**WE40.I50.090**



Accessories 7.14

SAB

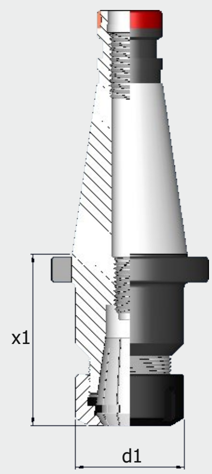
ER collet chuck DIN6499

DIN 2080

≤5µ

With clamping nut and adjusting screw

Cone	TIP	Range mm	x1	d1	code
50	ER32	2-20	70	50	**ER32.I50.070**
	ER40	3-26	80	63	**ER40.I50.080**



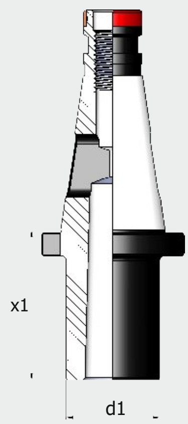
Accessories 7.06

Accessories 7.05

Accessories 7.03

Accessories 7.14

DIN 2080 | ≤7μ



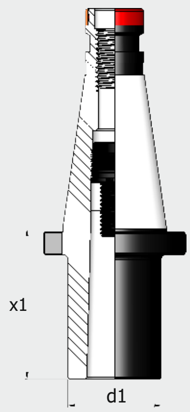
Cone	MK	x1	d1	code
50	1	45	25	**MK1B.I50.045**
	2	60	32	**MK2B.I50.060**
	3	65	40	**MK3B.I50.065**
	4	70	48	**MK4B.I50.070**
	5	105	63	**MK5B.I50.105**

SAB

Morse taper holders for mills

DIN 2080 | ≤7μ

With built in clamping screw



Cone	MK	x1	d1	code
50	1	60	25	**MK1A.I50.060**
	2	60	32	**MK2A.I50.060**
	3	65	40	**MK3A.I50.065**
	4	70	48	**MK4A.I50.070**

Accessories 7.15

Accessories 7.15

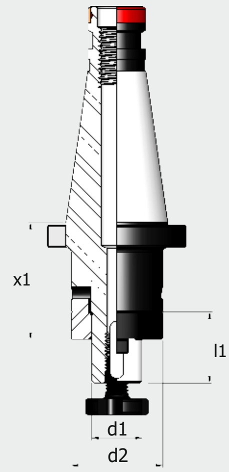
Combi shell mill holder for milling cutters

SAB

DIN 2080 ≤5μ

With driving key, driving ring and cross screw

Cone	d1	x1	x2	d2	l2	code
50	16	55	45	32	27	KD16.I50.055
	22	55	43	40	31	KD22.I50.055
	27	55	43	48	33	KD27.I50.055
	32	60	46	58	38	KD32.I50.060
	40	60	46	70	41	KD40.I50.060



Accessories 7.14

Accessories 7.14

Accessories 7.14

DIN 2080

NC drill chucks for RH rotation

SAB

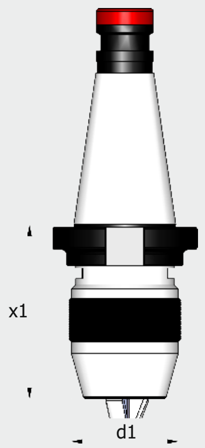
DIN 2080 ±15μ

With special wrench for tightening

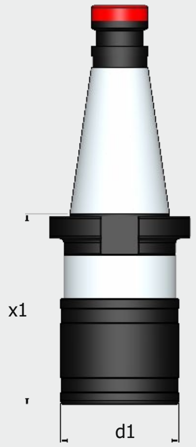
Cone	Range mm	x1	d1	code
50	1-13	74	48	NC13.I50.074
	3-16	83	53	NC16.I50.083

DESCRIPTION :

Integral drill chucks with high clamping force, through special wrench.
2 times chucking torque against hand tightening.
Slipping-off of the drill nearly unimpossible.
Slipping-off of the drill chuck unimpossible, as the chuck is screwed with the body.
Short design, external coolant supply.
Range up to 8, 10 and 13 mm
Special wrench included.



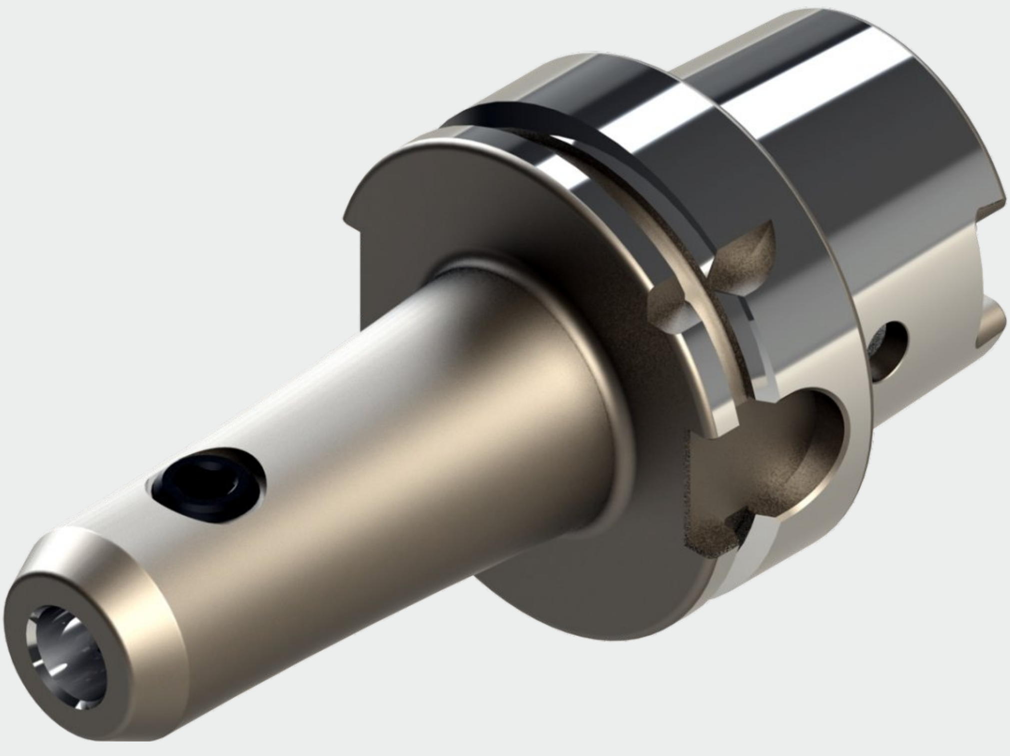
DIN 2080



Cone	Tap size	Compensation	Insert size	x1	d1	code
50	M3-M14	±7,5 mm	1	59	36	**GN12.I50.059**
	M5-M22	±12,5 mm	2	79	53	**GN20.I50.079**
	M14-M33	±20,0 mm	3	129	78	**GN33.I50.129**
	M22-M48	±22,5 mm	4	143	96	**GN48.I50.143**

Accessories 7.11

Accessories 7.10

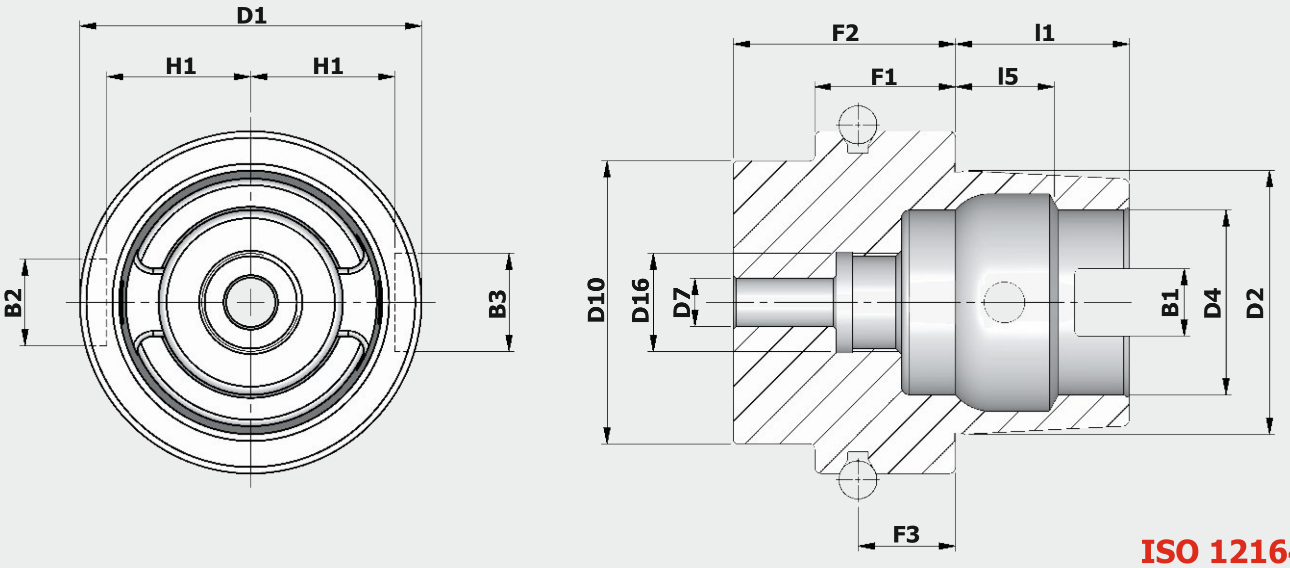


HSK - Form A+C

SAB

ISO 12164-1 (DIN 69893)

Technical informations



ISO 12164
HSK Form A+C

HSK (Form A+C)	D2	D4	D7 (max.)	D10 (max.)	D16	B1	B2	B3	F1	F2	F3	L1	L6	H1
32	24	17	4.2	26	M10*1	7.05	7	9	20	35	16	16	8.92	13
40	30	21	5	34	M12*1	8.05	9	11	20	35	16	20	11.42	17
50	38	26	6.8	42	M16*1	10.54	12	14	26	42	18	25	14.13	21
63	48	34	8.4	53	M18*1	12.54	16	18	26	42	18	32	18.13	26.5
80	60	42	10.2	68	M20*1.5	16.04	18	20	26	42	18	40	22.85	34
100	75	53	12	88	M24*1.5	20.02	20	22	29	45	20	50	28.56	44

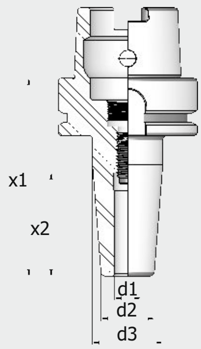
Material : Case hardened steel with min. 900 N/mm² tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided. Roughness Ra <0.2

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
32	3	9	-	70	-	**SF03.32A.070**
	4	10	-	70	-	**SF04.32A.070**
	5	11	-	70	-	**SF05.32A.070**
	6	20	27	70	36	**SF06.32A.070**
	8	20	27	75	36	**SF08.32A.075**
	10	27	32	75	40	**SF10.32A.075**




Shrinking equipment 8.01

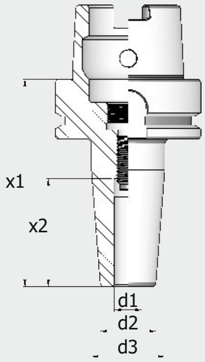

Extensions 7.12


Accessories 7.15


Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without lenght adjusting thread



HSK	d1	d2	d3	x1	x2	code
40	3	15	20	60	-	**SF03.40A.060**
	3	15	20	130	-	**SF03.40A.130**
	4	15	20	60	-	**SF04.40A.060**
	4	15	20	130	-	**SF04.40A.130**
	5	15	20	60	-	**SF05.40A.060**
	5	15	20	130	-	**SF05.40A.130**
	6	20	27	80	36	**SF06.40A.080**
	6	20	27	130	36	**SF06.40A.130**
	6	20	27	160	36	**SF06.40A.160**
	8	20	27	80	36	**SF08.40A.080**
	8	20	27	130	36	**SF08.40A.130**
	8	20	27	160	36	**SF08.40A.160**
	10	24	32	80	42	**SF10.40A.080**
	10	24	32	130	42	**SF10.40A.130**
	10	24	32	160	42	**SF10.40A.160**
	12	24	32	90	47	**SF12.40A.090**
	12	24	32	130	47	**SF12.40A.130**
	12	24	32	160	47	**SF12.40A.160**
	14	27	34	90	47	**SF14.40A.090**
	14	27	34	130	47	**SF14.40A.130**
	14	27	34	160	47	**SF14.40A.160**
	16	27	34	90	50	**SF16.40A.090**
	16	27	34	130	50	**SF16.40A.130**
	16	27	34	160	50	**SF16.40A.160**

Shrinking equipment 5.01

Extensions 7.12

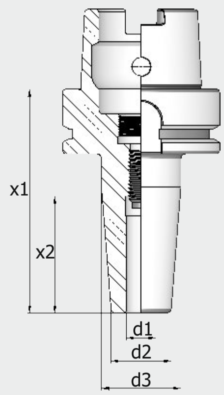
Accessories 7.14

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
50	3	15	20	80	-	SF03.50A.080
	3	15	20	120	-	SF03.50A.120
	3	15	20	160	-	SF03.50A.160
	4	15	20	80	-	SF04.50A.080
	4	15	20	120	-	SF04.50A.120
	4	15	20	160	-	SF04.50A.160
	5	15	20	80	-	SF05.50A.080
	5	15	20	120	-	SF05.50A.120
	5	15	20	160	-	SF05.50A.160
	6	20	27	80	36	SF06.50A.080
	6	20	27	120	36	SF06.50A.120
	6	20	27	160	36	SF06.50A.160
	8	20	27	80	36	SF08.50A.080
	8	20	27	120	36	SF08.50A.120
	8	20	27	160	36	SF08.50A.160
	10	24	32	85	42	SF10.50A.085
	10	24	32	120	42	SF10.50A.120
	10	24	32	160	42	SF10.50A.160
	12	24	32	90	47	SF12.50A.090
	12	24	32	120	47	SF12.50A.120
	12	24	32	160	47	SF12.50A.160
	14	27	34	90	47	SF14.50A.090
	14	27	34	120	47	SF14.50A.120
	14	27	34	160	47	SF14.50A.160
	16	27	34	95	50	SF16.50A.095
	16	27	34	120	50	SF16.50A.120
	16	27	34	160	50	SF16.50A.160
	18	33	42	95	50	SF18.50A.095
	18	33	42	120	50	SF18.50A.120
	18	33	42	160	50	SF18.50A.160
	20	33	42	100	52	SF20.50A.100
	20	33	42	120	52	SF20.50A.120
	20	33	42	160	52	SF20.50A.160




Shrinking equipment 5.01

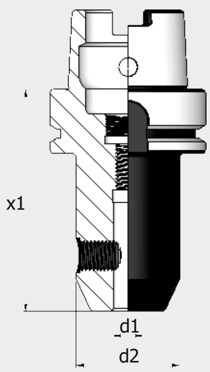

Extensions 7.12


Accessories 7.14


Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

Adaptor with built in locking screw



HSK	d1	d2	x1	code
50	6	25	65	**WE06.50A.065**
	6	25	100	**WE06.50A.100**
	6	25	160	**WE06.50A.160**
	6	25	200	**WE06.50A.200**
	8	28	65	**WE08.50A.065**
	8	28	100	**WE08.50A.100**
	8	28	160	**WE08.50A.160**
	8	28	200	**WE08.50A.200**
	10	35	65	**WE10.50A.065**
	10	35	100	**WE10.50A.100**
	10	35	160	**WE10.50A.160**
	10	35	200	**WE10.50A.200**
	12	42	80	**WE12.50A.080**
	12	42	100	**WE12.50A.100**
	12	42	160	**WE12.50A.160**
	12	42	200	**WE12.50A.200**
	14	44	80	**WE14.50A.080**
	14	44	100	**WE14.50A.100**
	14	44	160	**WE14.50A.160**
	14	44	200	**WE14.50A.200**
	16	48	80	**WE16.50A.080**
	16	48	100	**WE16.50A.100**
	16	48	160	**WE16.50A.160**
	16	48	200	**WE16.50A.200**
	18	50	80	**WE18.50A.080**
	18	50	100	**WE18.50A.100**
	18	50	160	**WE18.50A.160**
	18	50	200	**WE18.50A.200**
	20	52	80	**WE20.50A.080**
	20	52	100	**WE20.50A.100**
	20	52	160	**WE20.50A.160**
	20	52	200	**WE20.50A.200**
	25	65	105	**WE25.50A.105**
	32	72	110	**WE32.50A.110**

Accessories 7.15

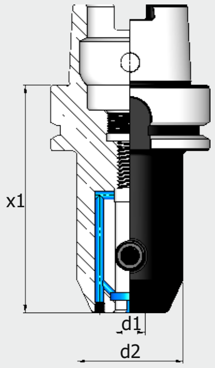
Accessories 7.14

With internal/ face coolant suppy - IK

Form A+C | ≤3μ | G2.5 25.000

Adaptor with built in locking screw

HSK	d1	d2	x1	code
50	6	25	65	WE06.50A.065.IK
	8	28	65	WE08.50A.065.IK
	10	35	65	WE10.50A.065.IK
	12	42	80	WE12.50A.080.IK
	14	44	80	WE14.50A.080.IK
	16	48	80	WE16.50A.080.IK
	18	50	80	WE18.50A.080.IK
	20	52	80	WE20.50A.080.IK
	25	65	105	WE25.50A.105.IK
	32	72	110	WE32.50A.110.IK



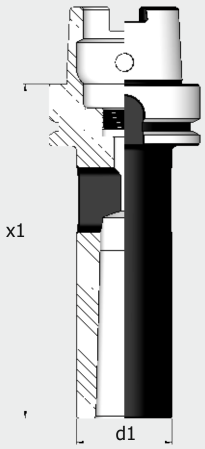
Accessories 7.14

Accessories 7.15

Morse taper holders for drills

Form A+C | ≤7μ | G2.5 25.000

HSK	MK	x1	d1	code
50	1	100	25	**MK1B.50A.100**
	2	120	32	**MK2B.50A.120**
	3	140	40	**MK3B.50A.140**



Accessories 7.15

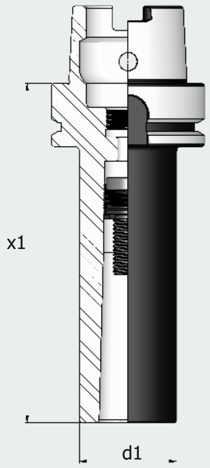
SAB

Morse taper holders for mills

Form A+C | ≤5μ | G2.5 25.000

With built in clamping screw

HSK	MK	x1	d1	code
50	1	100	25	**MK1A.50A.100**
	2	120	32	**MK2A.50A.120**
	3	140	40	**MK3A.50A.140**



Accessories 7.15

Accessories 7.15

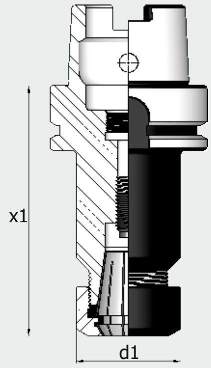
Accessories 7.15

ER Collet chucks DIN6499

Form A+C | ≤3µ | G2.5 25.000

With clamping nut and adjusting screw

HSK	TIP	Range mm	x1	d1	code
50	ER16	0.5-10	80	28	**ER16.50A.080**
	ER16	0.5-10	100	28	**ER16.50A.100**
	ER16	0.5-10	160	28	**ER16.50A.160**
	ER16	0.5-10	200	28	**ER16.50A.200**
	ER20	1-13	80	35	**ER20.50A.080**
	ER20	1-13	100	35	**ER20.50A.100**
	ER20	1-13	160	35	**ER20.50A.160**
	ER20	1-13	200	35	**ER20.50A.200**
	ER25	1-16	80	42	**ER25.50A.080**
	ER25	1-16	100	42	**ER25.50A.100**
	ER25	1-16	160	42	**ER25.50A.160**
	ER25	1-16	200	42	**ER25.50A.200**
	ER32	2-20	100	50	**ER32.50A.100**
	ER32	2-20	160	50	**ER32.50A.160**
	ER32	2-20	200	50	**ER32.50A.200**




Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03

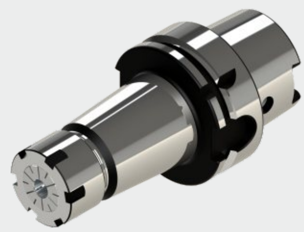

Accessories 7.15

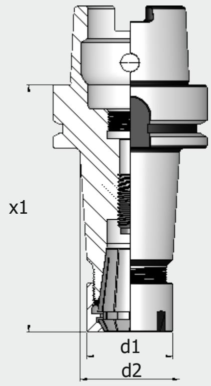
ER Collet chucks DIN6499-MINI

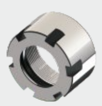
Form A+C | ≤3µ | G2.5 25.000

Delivery with clamping nut and adjusting screw

HSK	TIP	Range mm	x1	d1	d2	code
50	ER11	0.5-7	80	16	16	**ER11.50A.080M**
	ER11	0.5-7	100	16	20	**ER11.50A.100M**
	ER11	0.5-7	160	16	28	**ER11.50A.160M**
	ER16	0.5-10	80	22	22	**ER16.50A.080M**
	ER16	0.5-10	100	22	28	**ER16.50A.100M**
	ER16	0.5-10	160	22	28	**ER16.50A.160M**
	ER20	1-13	80	28	28	**ER20.50A.080M**
	ER20	1-13	100	28	28	**ER20.50A.100M**
	ER20	1-13	160	28	28	**ER20.50A.160M**
	ER25	1-16	80	35	35	**ER25.50A.080M**
	ER25	1-16	100	35	35	**ER25.50A.100M**
	ER25	1-16	160	35	35	**ER25.50A.160M**






Accessories 7.06


Accessories 7.07

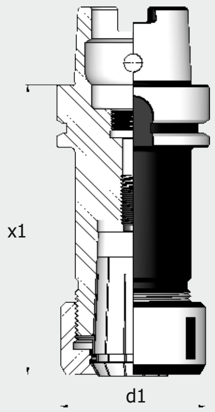

Accessories 7.14


Accessories 7.03


Accessories 7.15

Form A+C | ≤3µ | G2.5 25.000

With clamping nut and adjusting screw



HSK	Range mm	x1	d1	code
50	1.5-16	110	43	**SP16.50A.110**
	2-25	120	60	**SP25.50A.120**


Accessories 7.06


Accessories 7.07


Accessories 7.05

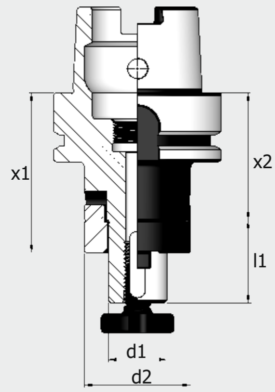

Accessories 7.15


Accessories 7.14

Form A+C | ≤5μ | G2.5 25.000

With driving key, driving ring and cross screw

HSK	d1	x1	x2	d2	l2	code
50	16	50	40	32	27	**KD16.50A.050**
	16	100	90	32	27	**KD16.50A.100**
	16	160	150	32	27	**KD16.50A.160**
	22	50	38	40	31	**KD22.50A.050**
	22	100	88	40	31	**KD22.50A.100**
	22	160	148	40	31	**KD22.50A.160**
	27	55	43	48	33	**KD27.50A.055**
	27	100	88	48	33	**KD27.50A.100**
	27	160	148	48	33	**KD27.50A.160**
	32	65	51	58	38	**KD32.50A.065**
	32	100	86	58	38	**KD32.50A.100**
	32	160	146	58	38	**KD32.50A.160**



Accessories 7.14

Accessories 7.14

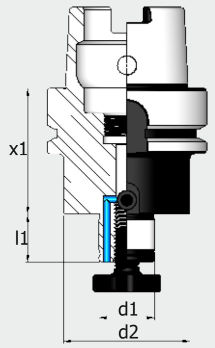
Accessories 7.14

Accessories 7.15

Form A+C | ≤5μ | G2.5 25.000

With internal/ face coolant suppy - IK

With driving keys and cross screw



HSK	d1	x1	d2	l2	code
50	16	45	38	17	**AD16.50A.045**
	16	100	38	17	**AD16.50A.100**
	16	160	38	17	**AD16.50A.160**
	22	60	50	19	**AD22.50A.060**
	22	100	50	19	**AD22.50A.100**
	22	160	50	19	**AD22.50A.160**
	27	60	60	21	**AD27.50A.060**
	27	100	60	21	**AD27.50A.100**
	27	160	60	21	**AD27.50A.160**


Accessories 7.15

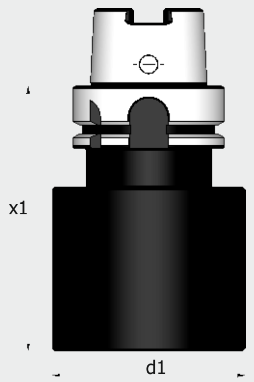

Accessories 7.14


Accessories 7.15

Form A+C | pre balanced

Application : for making special tools

HSK	d1	d1	code
50	63	160	RL63.50A.160
	63	200	RL63.50A.200
	63	250	RL63.50A.250



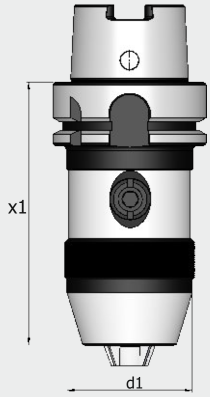
HX drill chucks for RH and LH rotation

Form A+C | ≤30μ | G6.3 12.000

With allen key for tightening

HSK	mm	d1	d1	code
50	1-13	112	54	HX13.50A.112
	3-16	115	57	HX16.50A.115
	1-13**	112	54	HX13.50A.112.IK
	3-16**	115	57	HX16.50A.115.IK

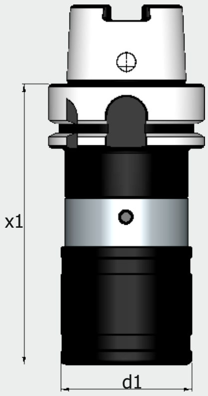
Precision drill chuck with integrated shank and hexagonal key lock
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm
***internal coolant*



Accessories 7.15

Form
A+C

With length compensation in compression and tension



HSK	Tap size	Compensation	Inserts size	x1	d1	code
50	M3-M14	±7,5 mm	1	72	36	**GN12.63A.074**
	M5-M22	±12,5 mm	2	110	53	**GN20.63A.110**

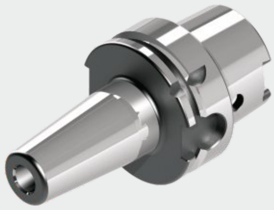
Accessories 7.11

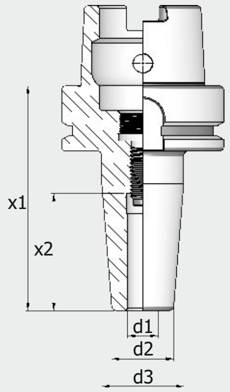
Accessories 7.10

Form A+C | ≤3µ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
63	3	15	20	80	-	SF03.63A.080
	3	15	20	120	-	SF03.63A.120
	3	15	20	160	-	SF03.63A.160
	4	15	20	80	-	SF04.63A.080
	4	15	20	120	-	SF04.63A.120
	4	15	20	160	-	SF04.63A.160
	5	15	20	80	-	SF05.63A.080
	5	15	20	120	-	SF05.63A.120
	5	15	20	160	-	SF05.63A.160
	6	20	27	80	36	SF06.63A.080
	6	20	27	120	36	SF06.63A.120
	6	20	27	160	36	SF06.63A.160
	6	20	27	200	36	SF06.63A.200
	8	20	27	80	36	SF08.63A.080
	8	20	27	120	36	SF08.63A.120
	8	20	27	160	36	SF08.63A.160
	8	20	27	200	36	SF08.63A.200
	10	24	32	85	42	SF10.63A.085
	10	24	32	120	42	SF10.63A.120
	10	24	32	160	42	SF10.63A.160
	10	24	32	200	42	SF10.63A.200
	12	24	32	90	47	SF12.63A.090
	12	24	32	120	47	SF12.63A.120
	12	24	32	160	47	SF12.63A.160
	12	24	32	200	47	SF12.63A.200
	14	27	34	90	47	SF14.63A.090
	14	27	34	120	47	SF14.63A.120
	14	27	34	160	47	SF14.63A.160
	14	27	34	200	47	SF14.63A.200
	16	27	34	95	50	SF16.63A.095
	16	27	34	120	50	SF16.63A.120
	16	27	34	160	50	SF16.63A.160
	16	27	34	200	50	SF16.63A.200
	18	33	42	95	50	SF18.63A.095
	18	33	42	120	50	SF18.63A.120
	18	33	42	160	50	SF18.63A.160
	18	33	42	200	50	SF18.63A.200
	20	33	42	100	52	SF20.63A.100
	20	33	42	120	52	SF20.63A.120
	20	33	42	160	52	SF20.63A.160
	20	33	42	200	52	SF20.63A.200
	25	44	53	115	58	SF25.63A.115
	25	44	53	160	58	SF25.63A.160
	25	44	53	200	58	SF25.63A.200
	32	44	53	100	63	SF32.63A.120
	32	44	53	160	63	SF32.63A.160
	32	44	53	200	63	SF32.63A.200






Shrinking equipment 5.01

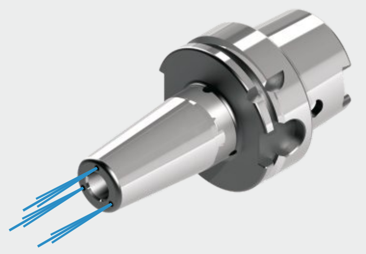

Extensions 7.12

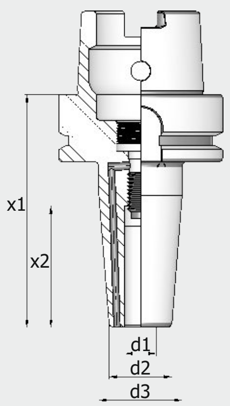

Accessories 7.14


Accessories 7.15

Form A+C | ≤3µ | G2.5 25.000

With internal/ face coolant suppy - IK





HSK	d1	d2	d3	x1	x2	code
63	6	20	27	80	36	SF06.63A.080.IK
	6	20	27	120	36	SF06.63A.120.IK
	6	20	27	160	36	SF06.63A.160.IK
	6	20	27	200	36	SF06.63A.200.IK
	8	20	27	80	36	SF08.63A.080.IK
	8	20	27	120	36	SF08.63A.120.IK
	8	20	27	160	36	SF08.63A.160.IK
	8	20	27	200	36	SF08.63A.200.IK
	10	24	32	85	42	SF10.63A.085.IK
	10	24	32	120	42	SF10.63A.120.IK
	10	24	32	160	42	SF10.63A.160.IK
	10	24	32	200	42	SF10.63A.200.IK
	12	24	32	90	47	SF12.63A.090.IK
	12	24	32	120	47	SF12.63A.120.IK
	12	24	32	160	47	SF12.63A.160.IK
	12	24	32	200	47	SF12.63A.200.IK
	14	27	34	90	47	SF14.63A.090.IK
	14	27	34	120	47	SF14.63A.120.IK
	14	27	34	160	47	SF14.63A.160.IK
	14	27	34	200	47	SF14.63A.200.IK
	16	27	34	95	50	SF16.63A.095.IK
	16	27	34	120	50	SF16.63A.120.IK
	16	27	34	160	50	SF16.63A.160.IK
	16	27	34	200	50	SF16.63A.200.IK
	18	33	42	95	50	SF18.63A.095.IK
	18	33	42	120	50	SF18.63A.120.IK
	18	33	42	160	50	SF18.63A.160.IK
	18	33	42	200	50	SF18.63A.200.IK
	20	33	42	100	52	SF20.63A.100.IK
	20	33	42	120	52	SF20.63A.120.IK
	20	33	42	160	52	SF20.63A.160.IK
	20	33	42	200	52	SF20.63A.200.IK
	25	44	53	115	58	SF25.63A.115.IK
	25	44	53	160	58	SF25.63A.160.IK
	25	44	53	200	58	SF25.63A.200.IK
	32	44	53	120	63	SF32.63A.120.IK
	32	44	53	160	63	SF32.63A.160.IK
	32	44	53	200	63	SF32.63A.200.IK

Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

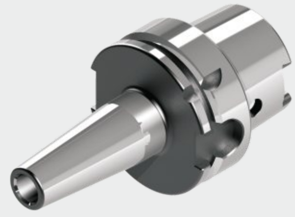
Accessories 7.15

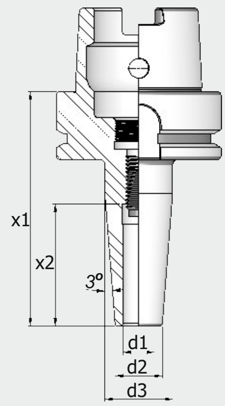
Slim execution 3°

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
63	3	9	14	80	-	SF03.63A.080.3
	3	9	22	160	-	SF03.63A.160.3
	4	10	15	80	-	SF04.63A.080.3
	4	10	23	160	-	SF04.63A.160.3
	5	11	16	80	-	SF05.63A.080.3
	5	11	24	160	-	SF05.63A.160.3
	6	12	17	80	36	SF06.63A.080.3
	6	12	25	160	36	SF06.63A.160.3
	8	16	21	80	36	SF08.63A.080.3
	8	16	29	160	36	SF08.63A.160.3
	10	16	21	85	42	SF10.63A.085.3
	10	16	29	160	42	SF10.63A.160.3
	12	18	24	90	47	SF12.63A.090.3
	12	18	31	160	47	SF12.63A.160.3
	16	24	30	95	47	SF16.63A.095.3
	16	24	37	160	47	SF16.63A.160.3





Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

Accessories 7.15

HSK - ISO12164

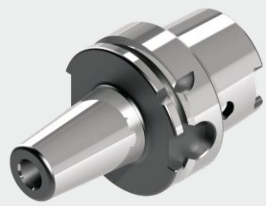
THERMO shrink-fit chucks SAB

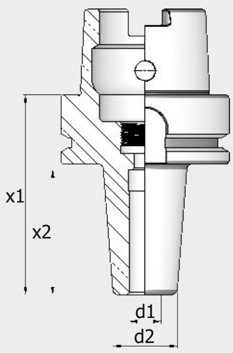
Short (compact) execution

Form A+C | ≤3μ | G6.3 25.000

Without length adjusting thread

HSK	d1	d2	x1	x2	code
63	6	20	65	36	SF06.63A.065
	8	20	65	36	SF08.63A.065
	10	24	65	42	SF10.63A.065
	12	27	75	47	SF12.63A.075
	14	33	75	47	SF14.63A.075
	16	33	75	50	SF16.63A.075
	18	44	75	50	SF18.63A.075
	20	44	75	50	SF20.63A.075
	25	46	85	56	SF25.63A.085
	32	47	85	58	SF32.63A.085





Shrinking equipment 5.01

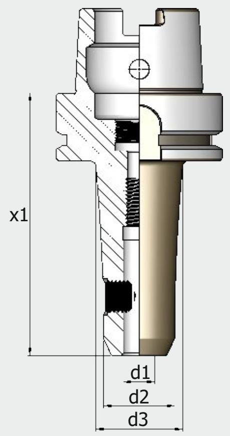
Extensions 7.12

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000 | Fe-Ni

Form - line

Adaptor with built in locking screw



HSK	d1	x1	d2	d3	code
63	6	100	17	23	WE06.63A.100F
	6	130	17	28	WE06.63A.130F
	6	160	17	29	WE06.63A.160F
	8	100	21	27	WE08.63A.100F
	8	130	21	32	WE08.63A.130F
	8	160	21	33	WE08.63A.160F
	10	100	24	30	WE10.63A.100F
	10	130	24	35	WE10.63A.130F
	10	160	24	36	WE10.63A.160F
	12	100	27	33	WE12.63A.100F
	12	130	27	38	WE12.63A.130F
	12	160	27	39	WE12.63A.160F
	14	100	29	35	WE14.63A.100F
	14	130	29	40	WE14.63A.130F
	14	160	29	41	WE14.63A.160F
	16	100	33	39	WE16.63A.100F
	16	130	33	44	WE16.63A.130F
	16	160	33	45	WE16.63A.160F
	18	100	35	41	WE18.63A.100F
	18	130	35	46	WE18.63A.130F
	18	160	35	47	WE18.63A.160F
	20	100	39	45	WE20.63A.100F
	20	130	39	48	WE20.63A.130F
	20	160	39	49	WE20.63A.160F
	25	100	47	47	WE25.63A.100F
	25	130	47	47	WE25.63A.130F
	25	160	47	47	WE25.63A.160F
	32	110	57	57	WE32.63A.110F
	32	160	57	57	WE32.63A.160F

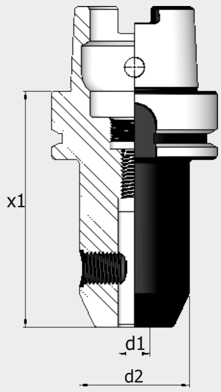

Accessories 7.15


Accessories 7.14

Form A+C | ≤3μ | G6.3 25.000

Adaptor with built in locking screw

HSK	d1	d2	x1	code
63	6	25	65	WE06.63A.065
	6	25	100	WE06.63A.100
	6	25	160	WE06.63A.160
	6	25	200	WE06.63A.200
	8	28	65	WE08.63A.065
	8	28	100	WE08.63A.100
	8	28	160	WE08.63A.160
	8	28	200	WE08.63A.200
	10	35	65	WE10.63A.065
	10	35	100	WE10.63A.100
	10	35	160	WE10.63A.160
	10	35	200	WE10.63A.200
	12	42	80	WE12.63A.080
	12	42	100	WE12.63A.100
	12	42	160	WE12.63A.160
	12	42	200	WE12.63A.200
	14	44	80	WE14.63A.080
	14	44	100	WE14.63A.100
	14	44	160	WE14.63A.160
	14	44	200	WE14.63A.200
	16	48	80	WE16.63A.080
	16	48	100	WE16.63A.100
	16	48	160	WE16.63A.160
	16	48	200	WE16.63A.200
	18	50	80	WE18.63A.080
	18	50	100	WE18.63A.100
	18	50	160	WE18.63A.160
	18	50	200	WE18.63A.200
	20	52	80	WE20.63A.080
	20	52	100	WE20.63A.100
	20	52	160	WE20.63A.160
	20	52	200	WE20.63A.200
	25	65	110	WE25.63A.110
	25	65	160	WE25.63A.160
	25	65	200	WE25.63A.200
	32	72	110	WE32.63A.110
	32	72	160	WE32.63A.160
	32	72	200	WE32.63A.200
	40	90	120	WE40.63A.120



Accessories 7.14

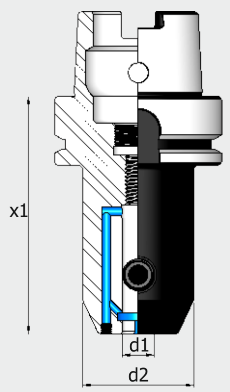
Accessories 7.15

Accessories 7.15

Form A+C | ≤3μ | G6.3 25.000

With internal/ face coolant suppy - IK

Adaptor with built in locking screw



HSK	d1	x1	d2	code
63	6	65	25	**WE06.63A.065.IK**
	6	120	25	**WE06.63A.120.IK**
	8	65	28	**WE08.63A.065.IK**
	8	120	28	**WE08.63A.120.IK**
	10	65	35	**WE10.63A.065.IK**
	10	120	35	**WE10.63A.120.IK**
	12	80	42	**WE12.63A.080.IK**
	12	120	42	**WE12.63A.120.IK**
	14	80	44	**WE14.63A.080.IK**
	14	120	44	**WE14.63A.120.IK**
	16	80	48	**WE16.63A.080.IK**
	16	120	48	**WE16.63A.120.IK**
	18	80	50	**WE18.63A.080.IK**
	18	120	50	**WE18.63A.120.IK**
	20	80	52	**WE20.63A.080.IK**
	20	120	52	**WE20.63A.120.IK**
	25	110	65	**WE25.63A.110.IK**
	32	110	72	**WE32.63A.110.IK**
	40	120	90	**WE40.63A.120.IK**

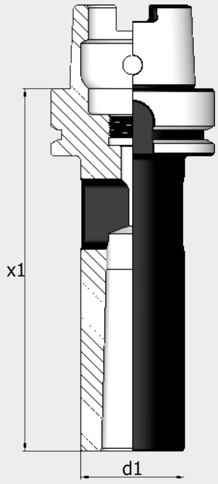
Accessories 7.15

Accessories 7.14

Morse taper holders for drills

Form A+C | ≤7μ | G2.5 25.000

HSK	MK	x1	d1	code
63	1	100	25	**MK1B.63A.100**
	2	120	32	**MK2B.63A.120**
	3	140	40	**MK3B.63A.140**
	4	165	48	**MK4B.63A.165**



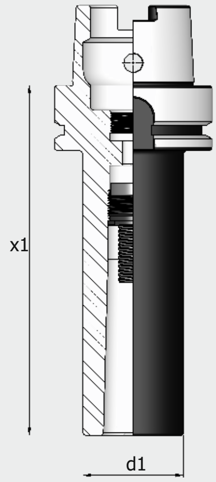
Accessories 7.15

Morse taper holders for mills

Form A+C | ≤5μ | G2.5 25.000

With built in clamping screw

HSK	MK	x1	d1	code
63	1	100	25	**MK1A.63A.100**
	2	120	32	**MK2A.63A.120**
	3	140	40	**MK3A.63A.140**
	4	165	48	**MK4A.63A.165**



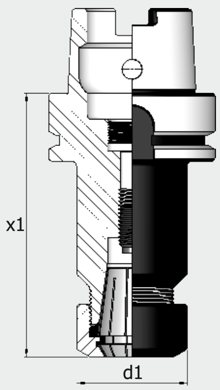
Accessories 7.15

Accessories 7.15

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

With clamping nut and adjusting screw



HSK	TIP	Range mm	x1	d1	code
63	ER16	0.5-10	80	28	**ER16.63A.080**
	ER16	0.5-10	100	28	**ER16.63A.100**
	ER16	0.5-10	160	28	**ER16.63A.160**
	ER16	0.5-10	200	28	**ER16.63A.200**
	ER20	1-13	80	35	**ER20.63A.080**
	ER20	1-13	100	35	**ER20.63A.100**
	ER20	1-13	160	35	**ER20.63A.160**
	ER20	1-13	200	35	**ER20.63A.200**
	ER25	1-16	80	42	**ER25.63A.080**
	ER25	1-16	100	42	**ER25.63A.100**
	ER25	1-16	160	42	**ER25.63A.160**
	ER25	1-16	200	42	**ER25.63A.200**
	ER32	2-20	80	50	**ER32.63A.080**
	ER32	2-20	100	50	**ER32.63A.100**
	ER32	2-20	160	50	**ER32.63A.160**
	ER32	2-20	200	50	**ER32.63A.200**
	ER40	3-26	80	63	**ER40.63A.080**
	ER40	3-26	100	63	**ER40.63A.100**
	ER40	3-26	160	63	**ER40.63A.160**
	ER40	3-26	200	63	**ER40.63A.200**


Accessories 7.06


Accessories 7.07


Accessories 7.03


Accessories 7.15


Accessories 7.14

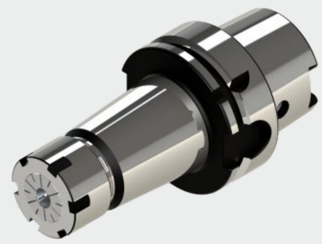
ER Collet chucks DIN6499 - MINI

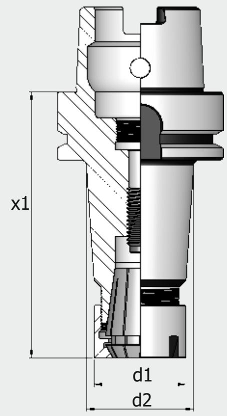
SAB

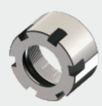
Form A+C | ≤3μ | G2.5 25.000

With clamping nut and adjusting screw

HSK	TIP	Range mm	x1	d1	d2	code
63	ER11	0.5-7	80	16	16	**ER11.63A.080M**
	ER11	0.5-7	100	16	20	**ER11.63A.100M**
	ER11	0.5-7	160	16	28	**ER11.63A.160M**
	ER16	0.5-10	80	22	22	**ER16.63A.080M**
	ER16	0.5-10	100	22	28	**ER16.63A.100M**
	ER16	0.5-10	160	22	28	**ER16.63A.160M**
	ER20	1-13	80	28	28	**ER20.63A.080M**
	ER20	1-13	100	28	28	**ER20.63A.100M**
	ER20	1-13	160	28	28	**ER20.63A.160M**
	ER25	1-16	80	35	35	**ER25.63A.080M**
	ER25	1-16	100	35	35	**ER25.63A.100M**
	ER25	1-16	160	35	35	**ER25.63A.160M**






Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.15

HSK - ISO12164

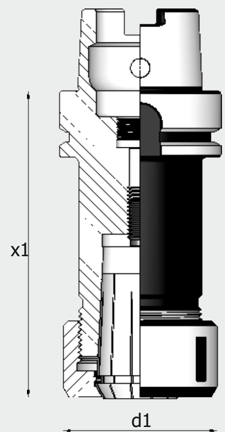
Collet chucks 1:10 for collets DIN6388

SAB

Form A+C | ≤3μ | G2.5 25.000

Delivery with clamping nut and adjusting screw

HSK	Range mm	x1	d1	code
63	1.5-16	110	43	**SP16.63A.110**
	2-25	120	60	**SP25.63A.120**
	4-32	130	72	**SP32.63A.130**




Accessories 7.06


Accessories 7.07

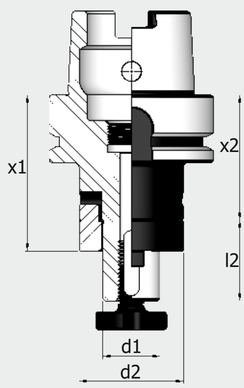

Accessories 7.14


Accessories 7.05


Accessories 7.15

Form A+C | ≤5μ | G2.5 25.000

With driving key, driving ring and cross screw



HSK	d1	x1	x2	d2	l2	code
63	16	60	50	32	27	**KD16.63A.060**
	16	100	90	32	27	**KD16.63A.100**
	16	160	150	32	27	**KD16.63A.160**
	22	60	48	40	31	**KD22.63A.060**
	22	100	88	40	31	**KD22.63A.100**
	22	160	148	40	31	**KD22.63A.160**
	27	60	48	48	33	**KD27.63A.060**
	27	100	88	48	33	**KD27.63A.100**
	27	160	148	48	33	**KD27.63A.160**
	32	60	46	58	38	**KD32.63A.060**
	32	100	86	58	38	**KD32.63A.100**
	32	160	436	58	38	**KD32.63A.160**
	40	70	56	70	41	**KD40.63A.070**
	40	100	86	70	41	**KD40.63A.100**
	40	160	146	70	41	**KD40.63A.160**


Accessories 7.14


Accessories 7.14


Accessories 7.14

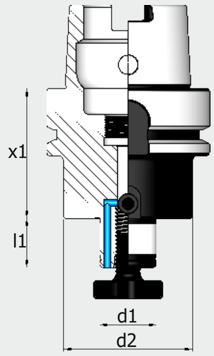

Accessories 7.15

With internal/ face coolant suppy - IK

Form A+C | ≤5μ | G2.5 25.000

With driving keys and cross screw

HSK	d1	x1	l1	d2	code
63	16	45	17	38	**AD16.63A.045**
	16	100	17	38	**AD16.63A.100**
	16	160	17	38	**AD16.63A.160**
	22	50	19	50	**AD22.63A.050**
	22	100	19	50	**AD22.63A.100**
	22	160	19	50	**AD22.63A.160**
	27	60	21	60	**AD27.63A.060**
	27	100	21	60	**AD27.63A.100**
	27	160	21	60	**AD27.63A.160**
	32	60	24	78	**AD32.63A.060**
	32	100	24	78	**AD32.63A.100**
	32	160	24	78	**AD32.63A.160**
	40	70	27	89	**AD40.63A.070**
	40	100	27	89	**AD40.63A.100**
	40	160	27	89	**AD40.63A.160**

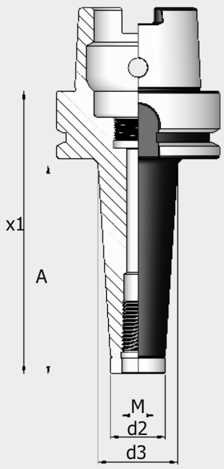


Accessories 7.15

Accessories 7.14

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000



HSK	M	A	x1	d2	d3	code
63	M6	25	59	10	11,5	**EF06.63A.059**
	M6	50	84	10	20	**EF06.63A.084**
	M6	75	109	10	23	**EF06.63A.109**
	M8	25	59	13	14,5	**EF08.63A.059**
	M8	50	84	13	20	**EF08.63A.084**
	M8	75	109	13	23	**EF08.63A.109**
	M8	100	134	13	25	**EF08.63A.134**
	M8	150	184	13	32	**EF08.63A.184**
	M10	25	59	18	19,5	**EF10.63A.059**
	M10	50	84	18	24	**EF10.63A.084**
	M10	75	109	18	28	**EF10.63A.109**
	M10	100	134	18	32	**EF10.63A.134**
	M10	150	184	18	36	**EF10.63A.184**
	M12	25	59	21	23,5	**EF12.63A.059**
	M12	50	84	21	24	**EF12.63A.084**
	M12	75	109	21	31	**EF12.63A.109**
	M12	100	134	21	36	**EF12.63A.134**
	M12	150	184	21	36	**EF12.63A.184**
	M16	25	59	29	29,5	**EF16.63A.059**
	M16	50	84	29	34	**EF16.63A.084**
	M16	75	109	29	37	**EF16.63A.109**
	M16	100	134	29	41	**EF16.63A.134**
	M16	150	184	29	41	**EF16.63A.184**

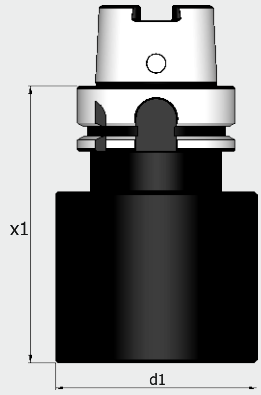
Accessories 7.15

Boring bar - blanks

Form A+C | pre balanced

Application : for making special tools

HSK	d1	d1	code
63	80	160	RL80.63A.160
	80	200	RL80.63A.200
	80	250	RL80.63A.250
	80	315	RL80.63A.315



HX drill chucks for RH and LH rotation

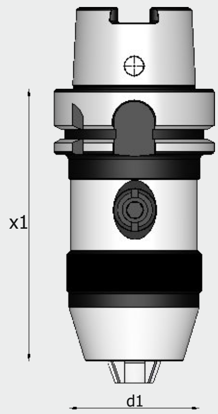
Form A+C | ≤30µ | G6.3 12.000

With allen key for tightening

HSK	mm	d1	d1	code
63	1-13	98	54	HX13.63A.098
	3-16	101	57	HX16.63A.101
	1-13**	103	54	HX13.63A.103.IK
	3-16**	106	57	HX16.63A.106.IK

Precision drill chuck with integrated shank and hexagonal key lock

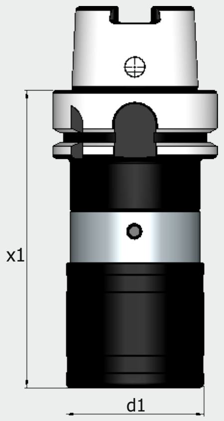
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm
***internal coolant*



Accessories 7.15

Form
A+C

With length compensation in compression and tension



HSK	Tap size	Compensation	Inserts size	x1	d1	code
63	M3-M14	±7,5 mm	1	74	36	**GN12.63A.074**
	M5-M22	±12,5 mm	2	110	53	**GN20.63A.110**
	M14-M33	±20,0 mm	3	141	78	**GN33.63A.141**

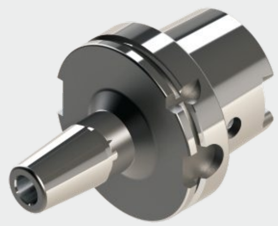

Accessories 7.11

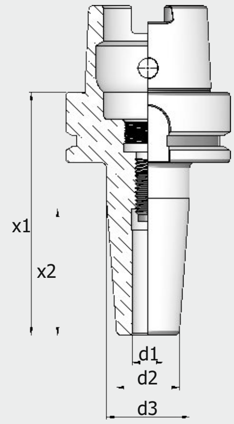

Accessories 7.10

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

Cone	d1	d2	d3	x1	x2	code
80	3	15	20	80	-	SF03.80A.080
	3	15	20	120	-	SF03.80A.120
	3	15	20	160	-	SF03.80A.160
	4	15	20	80	-	SF04.80A.080
	4	15	20	120	-	SF04.80A.120
	4	15	20	160	-	SF04.80A.160
	5	15	20	80	-	SF05.80A.080
	5	15	20	120	-	SF05.80A.120
	5	15	20	160	-	SF05.80A.160
	6	20	27	85	36	SF06.80A.085
	6	20	27	120	36	SF06.80A.120
	6	20	27	160	36	SF06.80A.160
	6	20	27	200	36	SF06.80A.200
	8	20	27	85	36	SF08.80A.085
	8	20	27	120	36	SF08.80A.120
	8	20	27	160	36	SF08.80A.160
	8	20	27	200	36	SF08.80A.200
	10	24	32	90	42	SF10.80A.090
	10	24	32	120	42	SF10.80A.120
	10	24	32	160	42	SF10.80A.160
	10	24	32	200	42	SF10.80A.200
	12	24	32	95	47	SF12.80A.095
	12	24	32	120	47	SF12.80A.120
	12	24	32	160	47	SF12.80A.160
	12	24	32	200	47	SF12.80A.200
	14	27	34	95	47	SF14.80A.095
	14	27	34	120	47	SF14.80A.120
	14	27	34	160	47	SF14.80A.160
	14	27	34	200	47	SF14.80A.200
	16	27	34	100	50	SF16.80A.100
	16	27	34	120	50	SF16.80A.120
	16	27	34	160	50	SF16.80A.160
	16	27	34	200	50	SF16.80A.200
	18	33	42	100	50	SF18.80A.100
	18	33	42	120	50	SF18.80A.120
	18	33	42	160	50	SF18.80A.160
	18	33	42	200	50	SF18.80A.200
	20	33	42	105	52	SF20.80A.105
	20	33	42	120	52	SF20.80A.120
	20	33	42	160	52	SF20.80A.160
	20	33	42	200	52	SF20.80A.200
	25	44	53	115	58	SF25.80A.115
	25	44	53	160	58	SF25.80A.160
	25	44	53	200	58	SF25.80A.200
	32	44	53	120	63	SF32.80A.120
	32	44	53	160	63	SF32.80A.160
	32	44	53	200	63	SF32.80A.200





Shrinking equipment 5.01

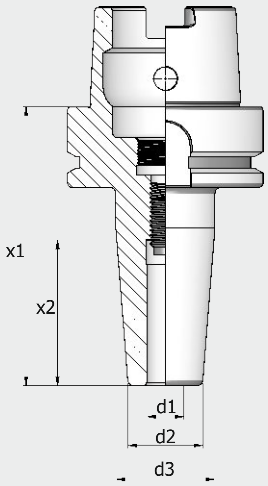
Extensions 7.12

Accessories 7.14

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread



HSK	d1	d2	d3	x1	x2	code
100	3	15	20	80	-	**SF03.100A.080**
	3	15	20	130	-	**SF03.100A.130**
	3	15	20	160	-	**SF03.100A.160**
	4	15	20	80	-	**SF04.100A.080**
	4	15	20	130	-	**SF04.100A.130**
	4	15	20	160	-	**SF04.100A.160**
	5	15	20	80	-	**SF05.100A.080**
	5	15	20	130	-	**SF05.100A.130**
	5	15	20	160	-	**SF05.100A.160**
	6	20	27	85	36	**SF06.100A.085**
	6	20	27	130	36	**SF06.100A.130**
	6	20	27	160	36	**SF06.100A.160**
	6	20	27	200	36	**SF06.100A.200**
	8	20	27	85	36	**SF08.100A.085**
	8	20	27	130	36	**SF08.100A.130**
	8	20	27	160	36	**SF08.100A.160**
	8	20	27	200	36	**SF08.100A.200**
	10	24	32	90	42	**SF10.100A.090**
	10	24	32	130	42	**SF10.100A.130**
	10	24	32	160	42	**SF10.100A.160**
	10	24	32	200	42	**SF10.100A.200**
	12	24	32	95	47	**SF12.100A.095**
	12	24	32	130	47	**SF12.100A.130**
	12	24	32	160	47	**SF12.100A.160**
	12	24	32	200	47	**SF12.100A.200**
	14	27	34	95	47	**SF14.100A.095**
	14	27	34	130	47	**SF14.100A.130**
	14	27	34	160	47	**SF14.100A.160**
	14	27	34	200	47	**SF14.100A.200**
	16	27	34	100	50	**SF16.100A.100**
	16	27	34	130	50	**SF16.100A.130**
	16	27	34	160	50	**SF16.100A.160**
	16	27	34	200	50	**SF16.100A.200**
	18	33	42	100	50	**SF18.100A.100**
	18	33	42	130	50	**SF18.100A.130**
	18	33	42	160	50	**SF18.100A.160**
	18	33	42	200	50	**SF18.100A.200**
	20	33	42	105	52	**SF20.100A.105**
	20	33	42	130	52	**SF20.100A.130**
	20	33	42	160	52	**SF20.100A.160**
	20	33	42	200	52	**SF20.100A.200**
	25	44	53	115	58	**SF25.100A.115**
	25	44	53	160	58	**SF25.100A.160**
	25	44	53	200	58	**SF25.100A.200**
	32	44	53	120	63	**SF32.100A.120**
	32	44	53	160	63	**SF32.100A.160**
	32	44	53	200	63	**SF32.100A.200**

Shrinking equipment 5.01

Extensions 7.12

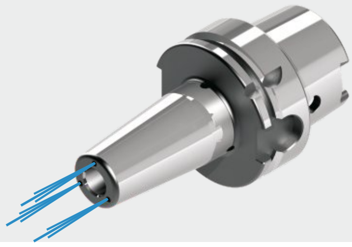
Accessories 7.14

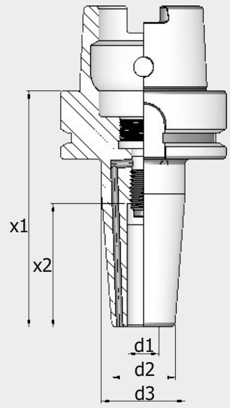
Accessories 7.15

With internal/ face coolant suppy - IK

Form A+C | ≤3μ | G2.5 25.000

HSK	d1	d2	d3	x1	x2	code
100	6	20	27	85	36	SF06.100A.085.IK
	6	20	27	160	36	SF06.100A.160.IK
	8	20	27	85	36	SF08.100A.085.IK
	8	20	27	160	36	SF08.100A.160.IK
	10	24	32	90	42	SF10.100A.090.IK
	10	24	32	160	42	SF10.100A.160.IK
	12	24	32	95	47	SF12.100A.095.IK
	12	24	32	160	47	SF12.100A.160.IK
	14	27	34	95	47	SF14.100A.095.IK
	14	27	34	160	47	SF14.100A.160.IK
	16	27	34	100	50	SF16.100A.100.IK
	16	27	34	160	50	SF16.100A.160.IK
	18	33	42	100	50	SF18.100A.100.IK
	18	33	42	160	50	SF18.100A.160.IK
	20	33	42	105	52	SF20.100A.105.IK
	20	33	42	160	52	SF20.100A.160.IK
	25	44	53	115	58	SF25.100A.115.IK
	25	44	53	160	58	SF25.100A.160.IK
	32	44	53	120	63	SF32.100A.120.IK
	32	44	53	160	63	SF32.100A.160.IK





Shrinking equipment 5.01

Extensions 7.12

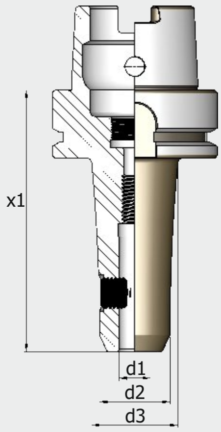
Accessories 7.14

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000 | Fe-Ni

Form - line

Adaptor with built in locking screw



HSK	d1	x1	d2	d3	code
100	6	130	17	26	WE06.100A.130F
	6	160	17	27	WE06.100A.160F
	6	200	17	37	WE06.100A.200F
	8	130	21	30	WE08.100A.130F
	8	160	21	32	WE08.100A.160F
	8	200	21	41	WE08.100A.200F
	10	130	24	33	WE10.100A.130F
	10	160	24	35	WE10.100A.160F
	10	200	24	44	WE10.100A.200F
	12	130	27	37	WE12.100A.130F
	12	160	27	38	WE12.100A.160F
	12	200	27	47	WE12.100A.200F
	14	130	29	39	WE14.100A.130F
	14	160	29	40	WE14.100A.160F
	14	200	29	49	WE14.100A.200F
	16	130	33	43	WE16.100A.130F
	16	160	33	44	WE16.100A.160F
	16	200	33	53	WE16.100A.200F
	18	130	35	45	WE18.100A.130F
	18	160	35	46	WE18.100A.160F
	18	200	35	55	WE18.100A.200F
	20	130	39	49	WE20.100A.130F
	20	160	39	50	WE20.100A.160F
	20	200	39	59	WE20.100A.200F
	25	130	47	57	WE25.100A.130F
	25	160	47	58	WE25.100A.160F
	25	200	47	67	WE25.100A.200F
	32	130	57	67	WE32.100A.130F
	32	160	57	68	WE32.100A.160F
	32	200	57	70	WE32.100A.200F

Accessories 7.15

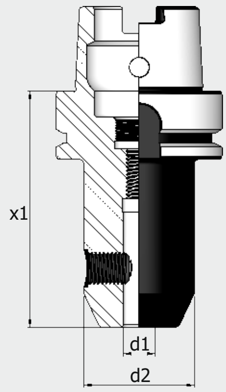
Accessories 7.14

End mill holders «WELDON»

Form A+C | ≤3μ | G2.5 25.000

Adaptor with built in locking screw

HSK	d1	d2	x1	code
100	6	25	80	WE06.100A.080
	6	25	100	WE06.100A.100
	6	25	160	WE06.100A.160
	6	25	200	WE06.100A.200
	8	28	80	WE08.100A.080
	8	28	100	WE08.100A.100
	8	28	160	WE08.100A.160
	8	28	200	WE08.100A.200
	10	35	80	WE10.100A.080
	10	35	100	WE10.100A.100
	10	35	160	WE10.100A.160
	10	35	200	WE10.100A.200
	12	42	80	WE12.100A.080
	12	42	100	WE12.100A.100
	12	42	160	WE12.100A.160
	12	42	200	WE12.100A.200
	14	44	80	WE14.100A.080
	14	44	100	WE14.100A.100
	14	44	160	WE14.100A.160
	14	44	200	WE14.100A.200
	16	48	100	WE16.100A.100
	16	48	160	WE16.100A.160
	16	48	200	WE16.100A.200
	18	50	100	WE18.100A.100
	18	50	160	WE18.100A.160
	18	50	200	WE18.100A.200
	20	52	100	WE20.100A.100
	20	52	160	WE20.100A.160
	20	52	200	WE20.100A.200
	25	65	100	WE25.100A.100
	25	65	160	WE25.100A.160
	25	65	200	WE25.100A.200
	32	72	100	WE32.100A.100
	32	72	160	WE32.100A.160
	32	72	200	WE32.100A.200
	40	72	110	WE40.100A.110
	40	72	160	WE40.100A.160
	40	72	200	WE40.100A.200



HSK - ISO12164

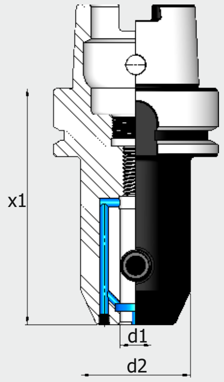
Accessories 7.14

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

With internal/ face coolant suppy - IK

Adaptor with built in locking screw



HSK	d1	x1	d2	code
100	6	80	25	WE06.100A.080.IK
	8	80	28	WE08.100A.080.IK
	10	80	35	WE10.100A.080.IK
	12	80	42	WE12.100A.080.IK
	14	80	44	WE14.100A.080.IK
	16	100	48	WE16.100A.100.IK
	18	100	50	WE18.100A.100.IK
	20	100	52	WE20.100A.100.IK
	25	100	65	WE25.100A.100.IK
	32	100	72	WE32.100A.100.IK
	40	110	72	WE40.100A.110.IK

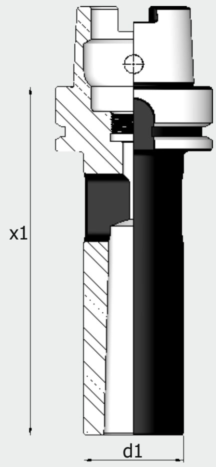
Accessories 7.15

Accessories 7.14

Morse taper holders for drills

Form A+C | ≤7μ | G2.5 25.000

HSK	MK	x1	d1	code
100	1	100	25	**MK1B.100A.100**
	2	120	32	**MK2B.100A.120**
	3	150	40	**MK3B.100A.150**
	4	170	48	**MK4B.100A.170**
	5	200	63	**MK5B.100A.200**



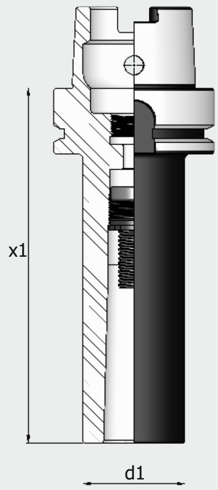
Accessories 7.15

Morse taper holders for mills

Form A+C | ≤5μ | G2.5 25.000

With built in clamping screw

HSK	MK	x1	d1	code
100	1	100	25	**MK1A.100A.100**
	2	120	32	**MK2A.100A.120**
	3	150	40	**MK3A.100A.150**
	4	175	48	**MK4A.100A.170**
	5	200	63	**MK5A.100A.200**



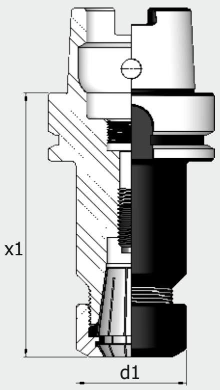
Accessories 7.15

Accessories 7.15

Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000

With clamping nut and adjusting screw



HSK	TIP	Range mm	x1	d1	code
100	ER16	0.5-10	100	28	**ER16.100A.100**
	ER16	0.5-10	160	28	**ER16.100A.160**
	ER16	0.5-10	200	28	**ER16.100A.200**
	ER20	1-13	100	35	**ER20.100A.100**
	ER20	1-13	160	35	**ER20.100A.160**
	ER20	1-13	200	35	**ER20.100A.200**
	ER25	1-16	100	42	**ER25.100A.100**
	ER25	1-16	160	42	**ER25.100A.160**
	ER25	1-16	200	42	**ER25.100A.200**
	ER32	2-20	100	50	**ER32.100A.100**
	ER32	2-20	160	50	**ER32.100A.160**
	ER32	2-20	200	50	**ER32.100A.200**
	ER40	3-26	100	63	**ER40.100A.100**
	ER40	3-26	160	63	**ER40.100A.160**
	ER40	3-26	200	63	**ER40.100A.200**


Accessories 7.06


Accessories 7.07


Accessories 7.03


Accessories 7.15


Accessories 7.14

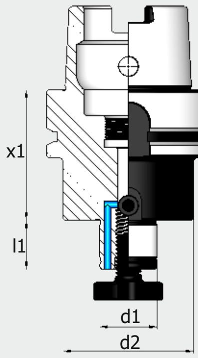
Shell mill holders for cutters with driving slot

With internal/ face coolant suppy - IK

Form A+C | ≤5μ | G2.5 25.000

With driving keys and cross screw

HSK	d1	x1	l1	d2	code
100	16	45	17	38	AD16.100A.045
	16	100	17	38	AD16.100A.100
	16	160	17	38	AD16.100A.160
	22	50	19	50	AD22.100A.050
	22	100	19	50	AD22.100A.100
	22	160	19	50	AD22.100A.160
	27	50	21	60	AD27.100A.050
	27	100	21	60	AD27.100A.100
	27	160	21	60	AD27.100A.160
	32	50	24	78	AD32.100A.050
	32	100	24	78	AD32.100A.100
	32	160	24	78	AD32.100A.160
	40	60	27	89	AD40.100A.060
	40	100	27	89	AD40.100A.100
	40	160	27	89	AD40.100A.160
	60	80	129	40	AD60.100A.080



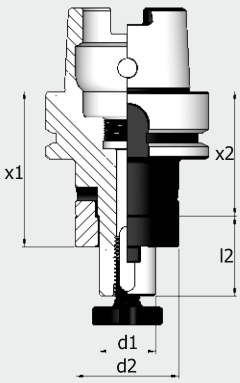
Accessories 7.15

Accessories 7.14

Accessories 7.15

Form A+C | ≤5μ | G2.5 25.000

With driving key, driving ring and cross screw



HSK	d1	x1	x2	d2	l2	code
100	16	60	50	32	27	**KD16.100A.060**
	16	100	90	32	27	**KD16.100A.100**
	16	160	150	32	27	**KD16.100A.160**
	22	60	48	40	31	**KD22.100A.060**
	22	100	88	40	31	**KD22.100A.100**
	22	160	148	40	31	**KD22.100A.160**
	27	60	48	48	33	**KD27.100A.060**
	27	100	88	48	33	**KD27.100A.100**
	27	160	148	48	33	**KD27.100A.160**
	32	60	46	58	38	**KD32.100A.060**
	32	100	86	58	38	**KD32.100A.100**
	32	160	136	58	38	**KD32.100A.160**
	40	70	56	70	41	**KD40.100A.070**
	40	100	86	70	41	**KD40.100A.100**
	40	160	146	70	41	**KD40.100A.160**


Accessories 7.14


Accessories 7.14


Accessories 7.14


Accessories 7.15

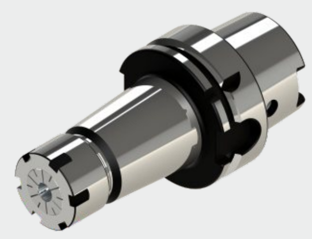
ER Collet chucks DIN6499 - MINI

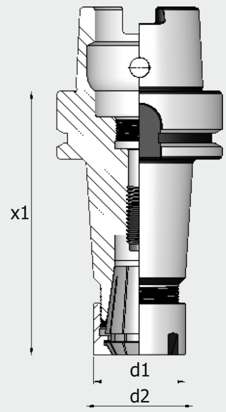
SAB

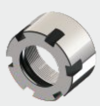
Form A+C | ≤3μ | G2.5 25.000

With clamping nut and adjusting screw

HSK	TIP	Range mm	x1	d1	d2	code
100	ER11	0.5-7	100	16	16	**ER11.100A.100M**
	ER11	0.5-7	160	16	28	**ER11.100A.160M**
	ER16	0.5-10	100	22	22	**ER16.100A.100M**
	ER16	0.5-10	160	22	28	**ER16.100A.160M**
	ER20	1-13	100	28	28	**ER20.100A.100M**
	ER20	1-13	160	28	28	**ER20.100A.160M**
	ER25	1-16	100	35	35	**ER25.100A.100M**
	ER25	1-16	160	35	35	**ER25.100A.160M**






Accessories 7.06


Accessories 7.07


Accessories 7.14


Accessories 7.03


Accessories 7.15

HSK - ISO12164

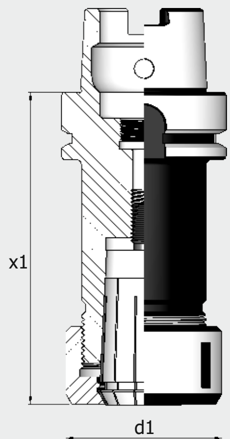
Collet chucks 1:10 for collets DIN6388

SAB

Form A+C | ≤3μ | G2.5 25.000

Delivery with clamping nut and adjusting screw

HSK	Range mm	x1	d1	code
100	1.5-16	110	43	**SP16.100A.110**
	2-25	120	60	**SP25.100A.120**
	4-32	130	72	**SP32.100A.130**




Accessories 7.06

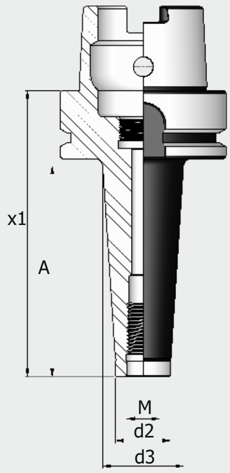

Accessories 7.07


Accessories 7.14


Accessories 7.05


Accessories 7.15

Form A+C | ≤3μ | G2.5 25.000



HSK	M	A	x1	d2	d3	code
100	M8	50	87	13	20	**EF08.100A.087**
	M8	100	137	13	23	**EF08.100A.137**
	M10	50	87	18	24	**EF10.100A.087**
	M10	100	137	18	32	**EF10.100A.137**
	M10	150	187	18	36	**EF10.100A.187**
	M12	50	87	21	23,5	**EF12.100A.087**
	M12	100	137	21	33,5	**EF12.100A.137**
	M12	150	187	21	47	**EF12.100A.187**
	M12	200	237	21	55	**EF12.100A.237**
	M12	250	287	21	64	**EF12.100A.287**
	M16	50	87	29	31,5	**EF16.100A.087**
	M16	100	137	29	41,5	**EF16.100A.137**
	M16	150	187	29	55	**EF16.100A.187**
	M16	200	237	29	55	**EF16.100A.237**
	M16	250	287	29	64	**EF16.100A.287**

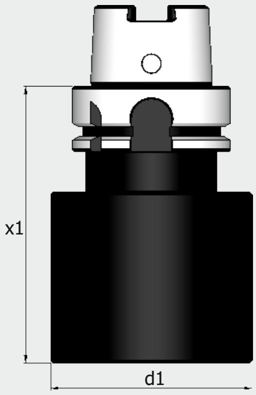
Accessories 7.15

Boring bar - blanks

Form A+C | pre balanced

Application : for making special tools

HSK	d1	d1	code
100	95	160	RL95.100A.160
	95	200	RL95.100A.200
	95	250	RL95.100A.250



HX drill chucks for RH and LH rotation

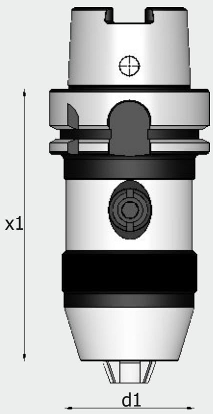
Form A+C | ≤30μ | G6.3 12.000

With allen key for tightening

HSK	mm	d1	d1	code
100	1-13	110	54	HX13.100A.110
	3-16	113	57	HX16.100A.113
	1-13**	98	54	HX13.100A.098.IK
	3-16**	101	57	HX16.100A.101.IK

Precision drill chuck with integrated shank and hexagonal key lock

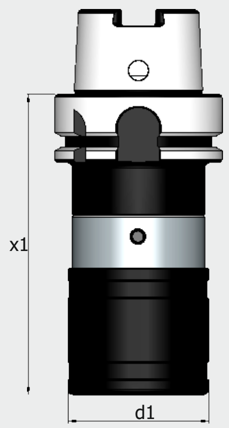
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm
***internal coolant*



Accessories 7.15

Form
A+C

With length compensation in compression and tension

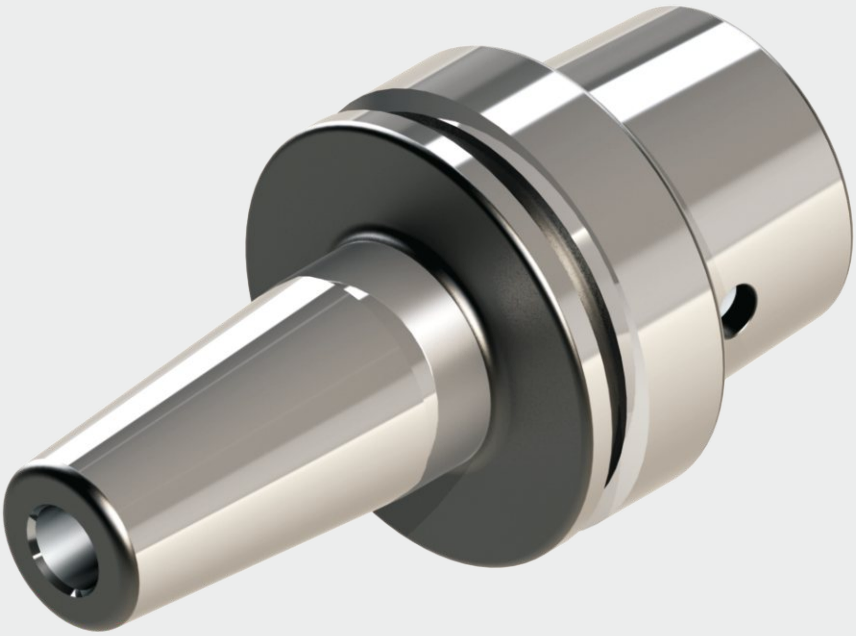


HSK	Tap size	Compensation	Inserts size	x1	d1	code
100	M3-M14	±7,5 mm	1	80	36	**GN12.100A.080**
	M5-M22	±12,5 mm	2	100	53	**GN20.100A.100**
	M14-M33	±20,0 mm	3	144	78	**GN33.100A.144**

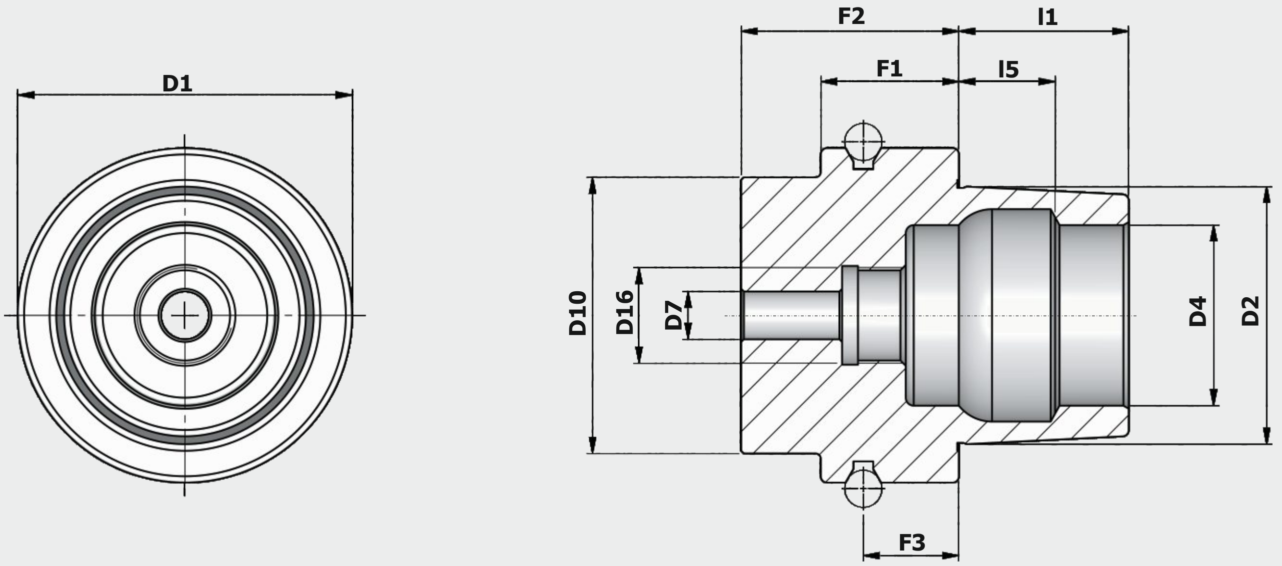
Accessories 7.11

Accessories 7.10

SAB



HSK - Form E



ISO 12164
HSK Form E

HSK D1	D2	D4	D7 (max.)	D10 (max.)	D16	F1	F2	F3	L1	L5
32	24	17	4.2	26	M10*1	20	35	16	16	8.92
40	30	21	5	34	M12*1	20	35	16	20	11.42
50	38	26	6.8	42	M16*1	26	42	18	25	14.13
63	48	34	8.4	53	M18*1	26	42	18	32	18.13

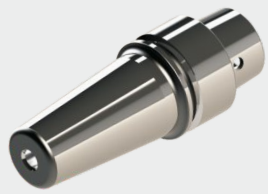
Material : Case hardened steel with min. 900 N/mm^2 tensile strength in core.

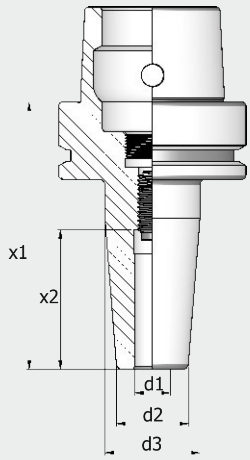
Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided. Roughness Ra <0.2

Form E | ≤3µ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
32	3	9	-	70	-	SF03.32E.070
	4	10	-	70	-	SF04.32E.070
	5	11	-	70	-	SF05.32E.070
	6	20	27	70	36	SF06.32E.070
	8	20	27	75	36	SF08.32E.075
	10	27	32	75	40	SF10.32E.075






Shrinking equipment 5.01

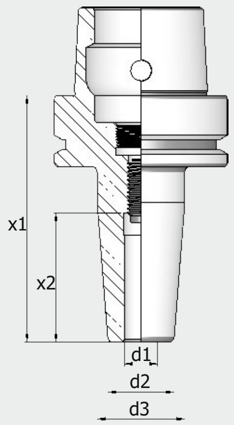

Extensions 7.12


Accessories 7.14


Accessories 7.15

Form E | ≤3µ | G2.5 25.000

From d1=3 to d1=5, without lenght adjusting thread



HSK	d1	d2	d3	x1	x2	code
40	3	15	20	60	-	**SF03.40E.060**
	3	15	20	130	-	**SF03.40E.130**
	4	15	20	60	-	**SF04.40E.060**
	4	15	20	130	-	**SF04.40E.130**
	5	15	20	60	-	**SF05.40E.060**
	5	15	20	130	-	**SF05.40E.130**
	6	20	27	80	36	**SF06.40E.080**
	6	20	27	160	36	**SF06.40E.160**
	8	20	27	80	36	**SF08.40E.080**
	8	20	27	160	36	**SF08.40E.160**
	10	24	32	80	42	**SF10.40E.080**
	10	24	32	160	42	**SF10.40E.160**
	12	24	32	90	47	**SF12.40E.090**
	12	24	32	160	47	**SF12.40E.160**
	14	27	34	90	47	**SF14.40E.090**
	14	27	34	160	47	**SF14.40E.160**
	16	27	34	90	50	**SF16.40E.090**
	16	27	34	160	50	**SF16.40E.160**

Shrinking equipment 5.01

Extensions 7.12

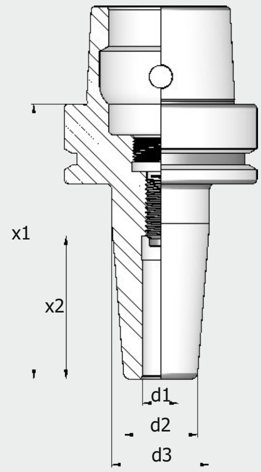
Accessories 7.14

Accessories 7.15

Form E | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
50	3	15	20	80	-	SF03.50E.080
	3	15	20	120	-	SF03.50E.120
	3	15	20	160	-	SF03.50E.160
	4	15	20	80	-	SF04.50E.080
	4	15	20	120	-	SF04.50E.120
	4	15	20	160	-	SF04.50E.160
	5	15	20	80	-	SF05.50E.080
	5	15	20	120	-	SF05.50E.120
	5	15	20	160	-	SF05.50E.160
	6	20	27	80	36	SF06.50E.080
	6	20	27	120	36	SF06.50E.120
	6	20	27	160	36	SF06.50E.160
	8	20	27	80	36	SF08.50E.080
	8	20	27	120	36	SF08.50E.120
	8	20	27	160	36	SF08.50E.160
	10	24	32	85	42	SF10.50E.085
	10	24	32	120	42	SF10.50E.120
	10	24	32	160	42	SF10.50E.160
	12	24	32	90	47	SF12.50E.090
	12	24	32	120	47	SF12.50E.120
	12	24	32	160	47	SF12.50E.160
	14	27	34	90	47	SF14.50E.090
	14	27	34	120	47	SF14.50E.120
	14	27	34	160	47	SF14.50E.160
	16	27	34	95	50	SF16.50E.095
	16	27	34	120	50	SF16.50E.120
	16	27	34	160	50	SF16.50E.160
	18	33	42	95	50	SF18.50E.095
	18	33	42	120	50	SF18.50E.120
	18	33	42	160	50	SF18.50E.160
	20	33	42	100	52	SF20.50E.100
	20	33	42	120	52	SF20.50E.120
	20	33	42	160	52	SF20.50E.160



HSK - ISO12164

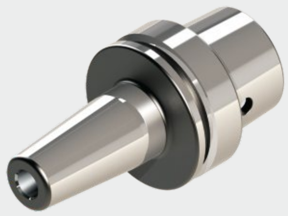

Shrinking equipment 5.01

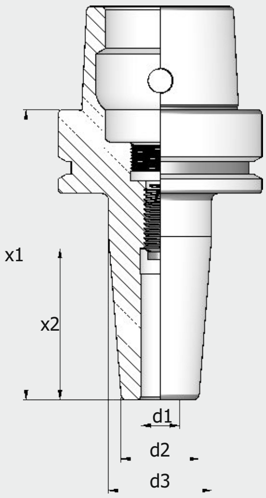

Extensions 7.12


Accessories 7.14


Accessories 7.15

Form E | ≤3μ | G2.5 25.000





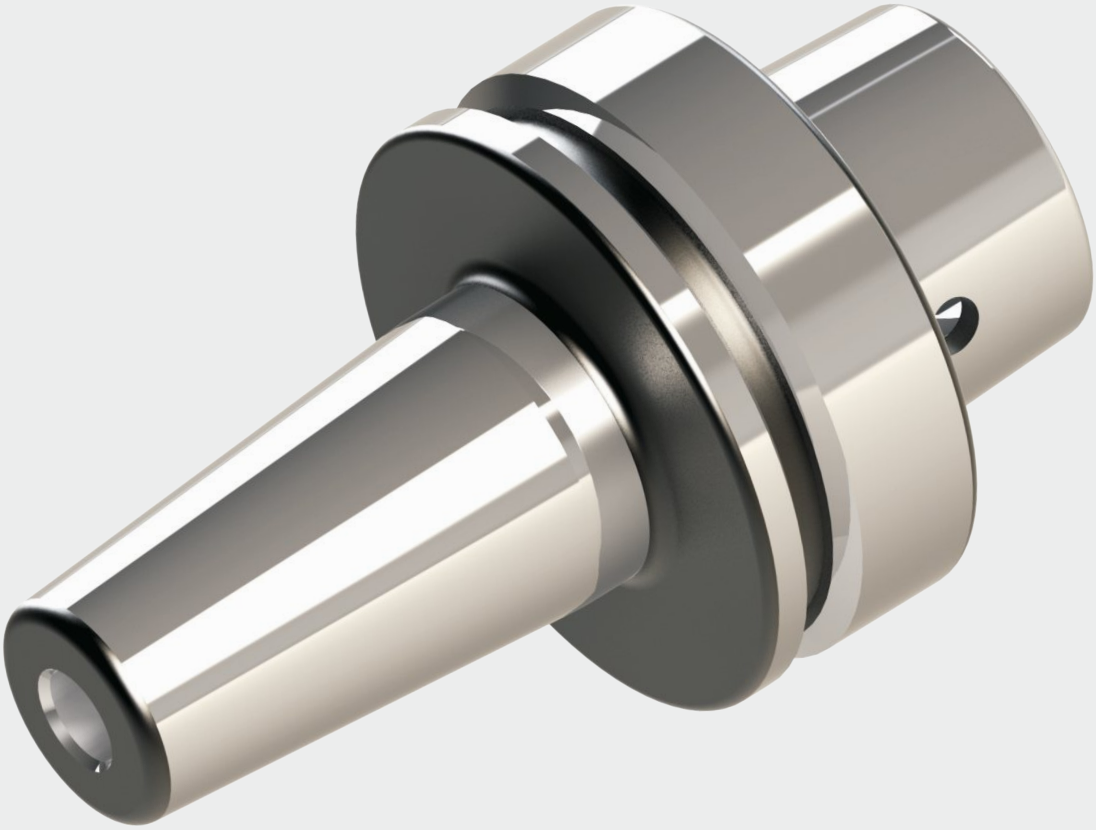
HSK	d1	d2	d3	x1	x2	code
63	3	15	20	80	-	SF03.63E.080
	3	15	20	120	-	SF03.63E.120
	3	15	20	160	-	SF03.63E.160
	4	15	20	80	-	SF04.63E.080
	4	15	20	120	-	SF04.63E.120
	4	15	20	160	-	SF04.63E.160
	5	15	20	80	-	SF05.63E.080
	5	15	20	120	-	SF05.63E.120
	5	15	20	160	-	SF05.63E.160
	6	20	27	80	36	SF06.63E.080
	6	20	27	120	36	SF06.63E.120
	6	20	27	160	36	SF06.63E.160
	6	20	27	200	36	SF06.63E.200
	8	20	27	80	36	SF08.63E.080
	8	20	27	120	36	SF08.63E.120
	8	20	27	160	36	SF08.63E.160
	8	20	27	200	36	SF08.63E.200
	10	24	32	85	42	SF10.63E.085
	10	24	32	120	42	SF10.63E.120
	10	24	32	160	42	SF10.63E.160
	10	24	32	200	42	SF10.63E.200
	12	24	32	90	47	SF12.63E.090
	12	24	32	120	47	SF12.63E.120
	12	24	32	160	47	SF12.63E.160
	12	24	32	200	47	SF12.63E.200
	14	27	34	90	47	SF14.63E.090
	14	27	34	120	47	SF14.63E.120
	14	27	34	160	47	SF14.63E.160
	14	27	34	200	47	SF14.63E.200
	16	27	34	95	50	SF16.63E.095
	16	27	34	120	50	SF16.63E.120
	16	27	34	160	50	SF16.63E.160
	16	27	34	200	50	SF16.63E.200
	18	33	42	95	50	SF18.63E.095
	18	33	42	120	50	SF18.63E.120
	18	33	42	160	50	SF18.63E.160
	18	33	42	200	50	SF18.63E.200
	20	33	42	100	52	SF20.63E.100
	20	33	42	120	52	SF20.63E.120
	20	33	42	160	52	SF20.63E.160
	20	33	42	200	52	SF20.63E.200
	25	44	53	115	58	SF25.63E.115
	25	44	53	160	58	SF25.63E.160
	25	44	53	200	58	SF25.63E.200
	32	44	53	120	63	SF32.63E.120
	32	44	53	160	63	SF32.63E.160
	32	44	53	200	63	SF32.63E.200

Shrinking equipment 5.01

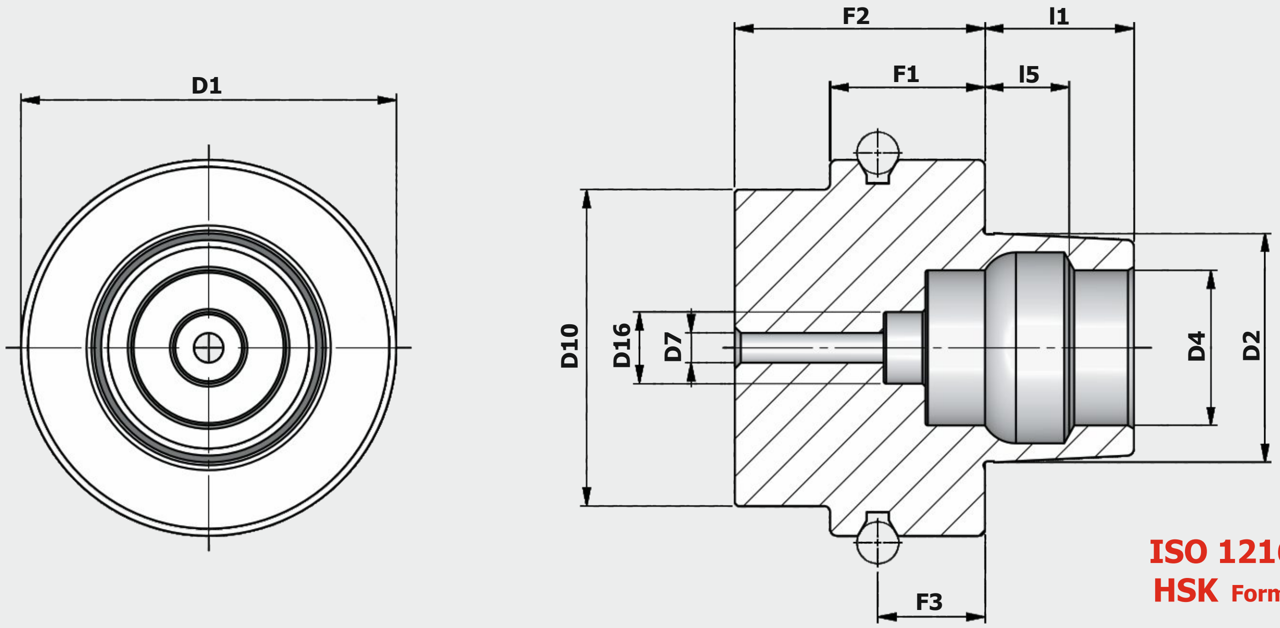
Extensions 7.12

Accessories 7.14

Accessories 7.15



HSK - Form F



ISO 12164
HSK Form F

HSK D1	D2	D4	D7	D10 (max.)	D16	F1	F2	F3	L1	L5
50	30	21	5	42	12	26	42	18	20	11.42
63	38	26	5	53	12	26	42	18	25	14.13
80	48	34	5	68	12	26	42	18	32	18.13

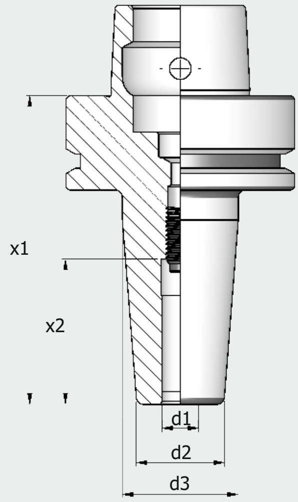
Material : Case hardened steel with min. 900 N/mm² tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided. Roughness Ra <0.2

Form F | ≤3μ | G2.5 25.000

From d1=3 to d1=5, without length adjusting thread

HSK	d1	d2	d3	x1	x2	code
63	3	15	20	80	-	SF03.63F.080
	3	15	20	120	-	SF03.63F.120
	3	15	20	160	-	SF03.63F.160
	4	15	20	80	-	SF04.63F.080
	4	15	20	120	-	SF04.63F.120
	4	15	20	160	-	SF04.63F.160
	5	15	20	80	-	SF05.63F.080
	5	15	20	120	-	SF05.63F.120
	5	15	20	160	-	SF05.63F.160
	6	20	27	80	36	SF06.63F.080
	6	20	27	120	36	SF06.63F.120
	6	20	27	160	36	SF06.63F.160
	8	20	27	80	36	SF08.63F.080
	8	20	27	120	36	SF08.63F.120
	8	20	27	160	36	SF08.63F.160
	10	24	32	85	42	SF10.63F.085
	10	24	32	120	42	SF10.63F.120
	10	24	32	160	42	SF10.63F.160
	12	24	32	90	47	SF12.63F.090
	12	24	32	120	47	SF12.63F.120
	12	24	32	160	47	SF12.63F.160
	14	27	34	90	47	SF14.63F.090
	14	27	34	120	47	SF14.63F.120
	14	27	34	160	47	SF14.63F.160
	16	27	34	95	50	SF16.63F.095
	16	27	34	120	50	SF16.63F.120
	16	27	34	160	50	SF16.63F.160
	18	33	42	95	50	SF18.63F.095
	18	33	42	120	50	SF18.63F.120
	18	33	42	160	50	SF18.63F.160
	20	33	42	100	52	SF20.63F.100
	20	33	42	120	52	SF20.63F.120
	20	33	42	160	52	SF20.63F.160
	25	44	53	115	58	SF25.63F.115
	25	44	53	160	58	SF25.63F.160
	25	44	53	200	58	SF25.63F.200



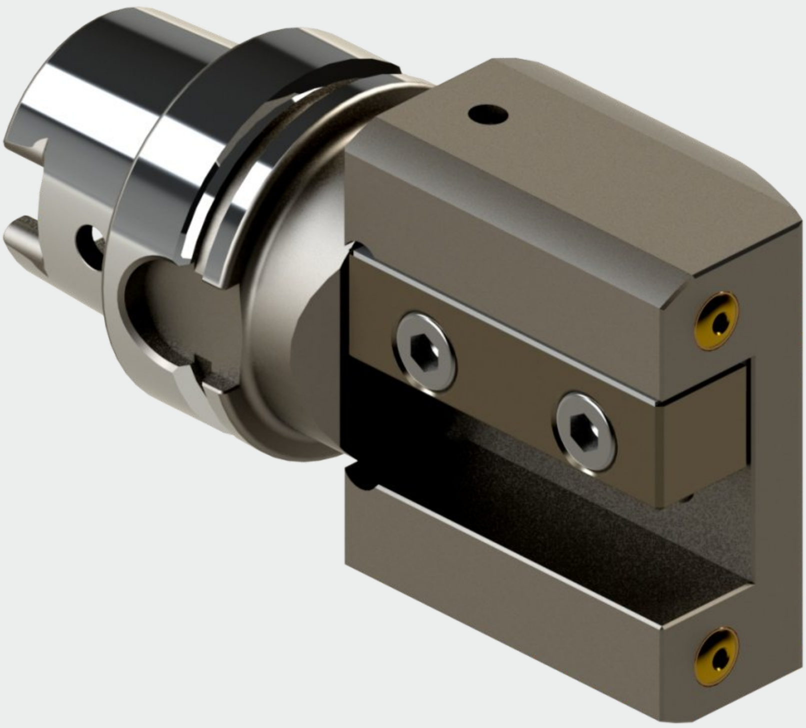
Shrinking equipment 5.01

Extensions 7.12

Accessories 7.14

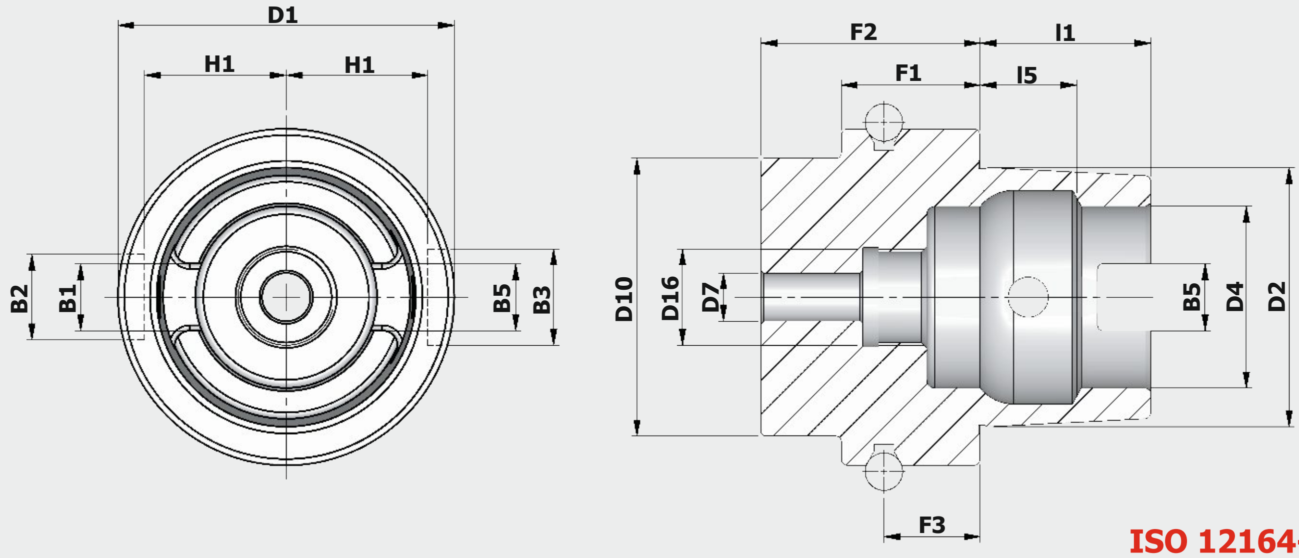
Notes

SAB



HSK - Form T

Technical informations



ISO 12164-3
HSK Form T

HSK D1	D2	D4	D7 (max.)	D10 (max.)	D16	B1	B2	B3	B5	F1	F2	F3	L1	L6	H1
32	24	17	4.2	31	M10*1	7.05	7	9	6.932	20	35	16	16	8.92	13
40	30	21	5	39	M12*1	8.05	9	11	7.932	20	35	16	20	11.42	17
50	38	26	6.8	49	M16*1	10.54	12	14	10.425	26	42	18	25	14.13	21
63	48	34	8.4	62	M18*1	12.54	16	18	12.425	26	42	18	32	18.13	26.5
80	60	42	10.2	79	M20*1.5	16.04	18	20	15.93	26	42	18	40	22.85	34
100	75	53	12	99	M24*1.5	20.02	20	22	19.91	29	45	20	50	28.56	44

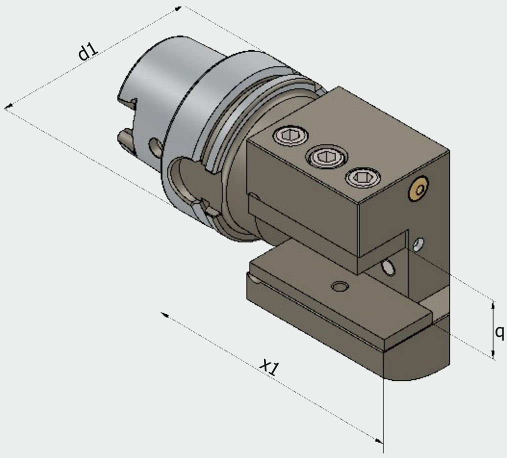
Material : Case hardened steel with min. 900 N/mm^2 tensile strength in core.

Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided. Roughness Ra <0.2

Axial turning toolholder

Form
T

HSK	d1	x1	^	q	code
63	63	110	RH	25	**63T.125.110.R**
	63	110	LH	25	**63T.125.110.L**



Accessories 7.15

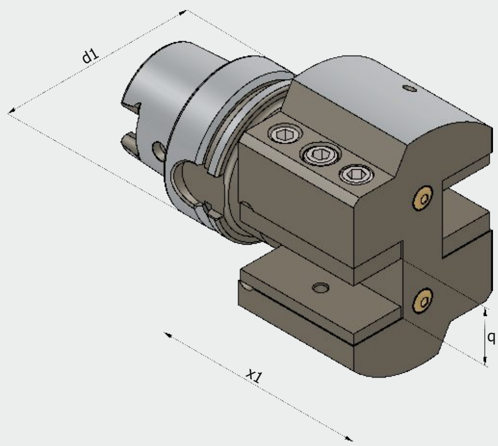
HSK - ISO12164

2/1 axial turning toolholder

Form
T

Delivery with clamping nut and adjusting screw

HSK	d1	x1	^	q	code
63	63	100	RH	25	**63T.225.100.R**
	63	100	LH	25	**63T.225.100.L**

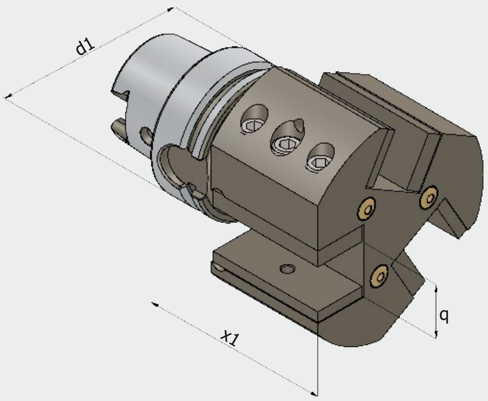


Accessories 7.15

3/1 axial turning toolholder

Form T

HSK	d1	x1	^	q	code
63	63	100	RH	25	63T.325.100.R
	63	100	LH	25	63T.325.100.L



Accessories 7.15

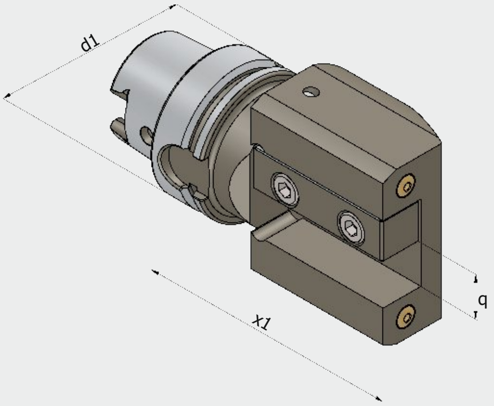
SAB

4/1 axial turning toolholder

Form T

left - right- upper side - lower side

HSK	d1	x1	q	code
63	63	112	20	63T.20.112

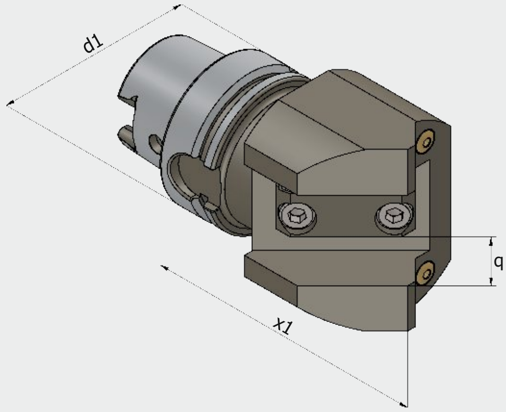


Accessories 7.15

Turning toolholder 45°

Form T

HSK	d1	x1	q	code
63	63	93	20	**63T.20.045**



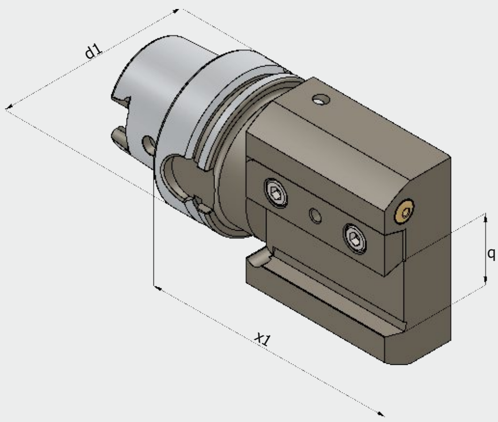
Accessories 7.15

Cut-off toolholder

Form T

Delivery with clamping nut and adjusting screw

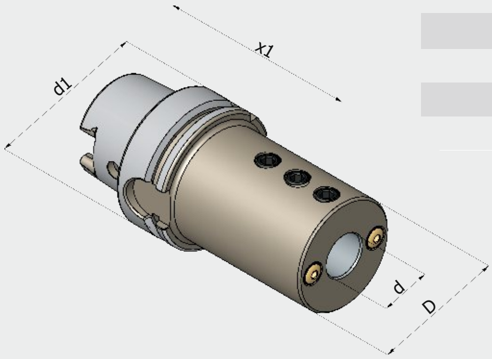
HSK	d1	x1	q	code
63	63	112	32	**63T.32.112**



Accessories 7.15

Boring bar toolholder

Form T



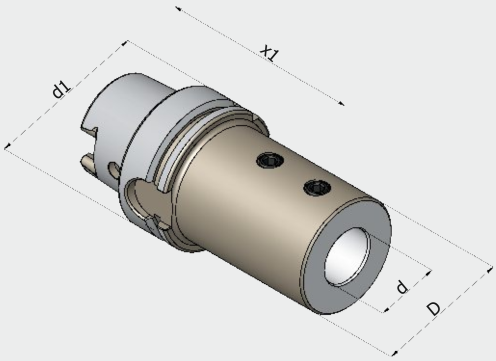
HSK	d1	d	D	x1	code
63	63	6	38	90	**63T.006.090**
	63	8	40	90	**63T.008.090**
	63	10	42	90	**63T.010.090**
	63	12	44	90	**63T.012.090**
	63	16	48	90	**63T.016.090**
	63	20	52	90	**63T.020.090**
	63	25	57	90	**63T.025.090**
	63	32	64	90	**63T.032.090**
	63	40	74	100	**63T.040.100**

Accessories 7.15

SAB

Indexable drills toolholders

Form T



HSK	d1	d	D	x1	code
63	63	16	34	80	**63T.116.080**
	63	20	40	80	**63T.120.080**
	63	25	45	85	**63T.125.085**
	63	32	52	90	**63T.132.090**
	63	40	60	100	**63T.140.100**

Accessories 7.15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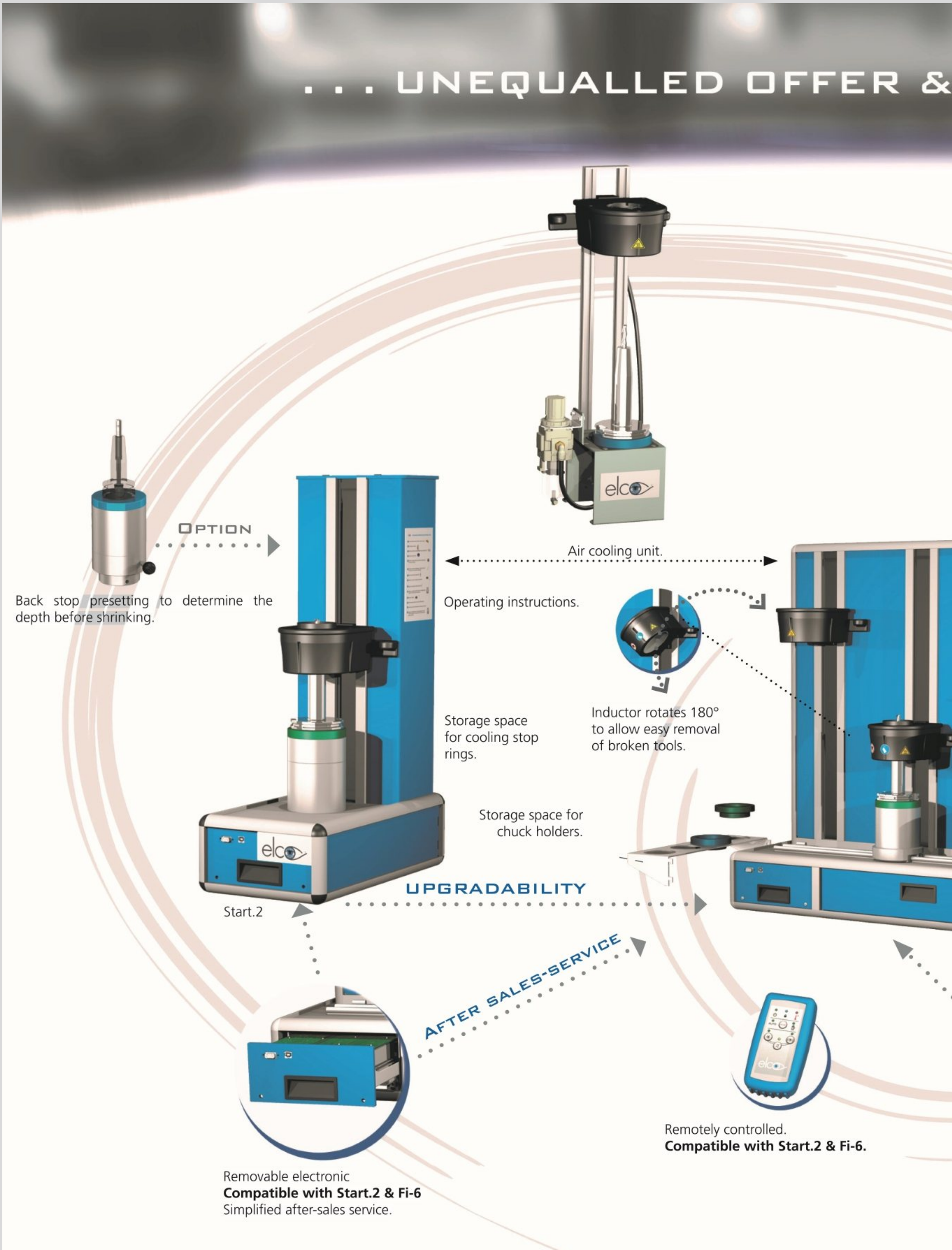
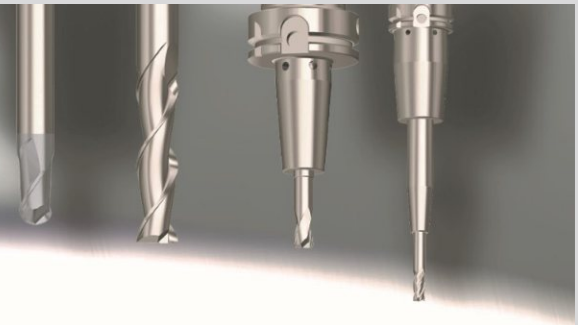


Registered models – Registered patents.
Subject to modifications of the design in the technical interest progress.

PERFORMANCES . . .



elco

SHRINKING ADAPTED TO YOUR NEED

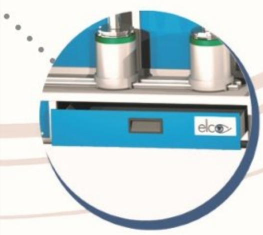
Shrinking system for reductions.

Cooling system compatible with any type of geometries to optimize cooling time cycle.

Fi-6

Storage space for induction and cooling stop rings.

Back stop presetting to determine the tool gauge before shrinking.



Storage compartment for accessories like induction and cooling stop rings.

- Shrinking and unshrinking of **any type of tools** : steel, HSS, carbide, tool-inserts, hard metals, denal, shrink fit extensions and reductions, tool shank h6.
- Shrinking **Ø 2 to Ø 40** with the **same** inductor, upper Ø on request :
  - from Ø 2 for carbide
  - from Ø 6 for HSS tools.
- Self-regulated power thanks to a microprocessor.
- Shrinking time cycle from **2 to 7 seconds**.
- Cooling time cycle from **1 minute 30 seconds to 3 minutes** (depending on the geometry).
- Air **cooling** unit compatible with **any type of external geometries** (3° slope, 4.5° slope, cylindrical...).
- Specially designed ergonomics with remote control.
- Removable electronic to allow easy, quick and economical after-sales service.

SHRINK FIT ADVANTAGES

- Longer tool life.
- Better roughness on machined workpiece.
- Very important clamping torque.
- High rigidity.
- Better run-out.
- Faster tool changes.

elco

START.2 Induktivni uređaj za brzu izmjenu alata
Jednostavan za upotrebu.
Promjer drški od Ø6 do Ø20 (ostali Ø kao opcija).
Montaža uređaja na radni stol ili na kolica.
Beskontaktno hlađenje upotrebom uređaja FG500.1150.
Moguća upotreba više uređaja za hlađenje.
Dimenzije :255*490*755 mm
Težina uređaja : 19 kg

START.2 Shrink fit unit
Easy to use
Provided with accesories for shrinking Ø6 to Ø20 (other Ø optional).
Unit to be placed on a workbench or fixed trolley.
Cooling without contact using cooling unit FG500.1150.
Possibility to use several cooling units.
*Dimensions :255*490*755 mm.*
Weight : 19 kg.

FG500.1150 uređaj za hlađenje zrakom
Promjer drški od Ø6 do Ø20 (ostali Ø kao opcija).
Radni tlak zraka 4-6 bara
Filter i regulatorom tlaka zraka sa manomentrom.
Montaža uređaja na radni stol ili na kolica.
Može se koristiti i kao dodatak uz uređaje Fi-6.
Dimenzije : 220*190*615 mm
Težina uređaja : 5 kg

FG500.1150 air cooling unit
with accesories for cooling Ø6 to Ø20 (other Ø opt.)
Working pressure : 4-6 bars.
Equipped with a filter and a pressure-reducing gauge.
Unit to be placed on a workbench or fixed trolley.
Can be used as a supplement with the Fi-6 units.
*Dimensions : 220*190*615 mm*
Weight : 5 kg

FJ160.0100
Za prednamještanje dužine.
Samo za Fi-6 uređaj.
Točnost : ± 0,050 mm.
Ponovljivost : ±0,020 mm.
Promjer drški od Ø6 do Ø32

FJ160.0100
Length presetting unit.
For Fi-6 shrink fit unit only.
Accuracy : ±0,050 mm.
Repeatability : ±0,020 mm.
Capability : Ø6 to Ø32

Fi-6 Induktivni uređaj za brzu izmjenu alata
Sa integriranim uređajem za hlađenje :

Hlađena elektronika uređaja omogućuje konstantnu upotrebu.
Promjer drški od Ø2-Ø32, za zagrijavanje i hlađenje (ostali Ø opcija).
Rukovanje bez dodirivanja držača tijekom cikusa grijanja i hlađenja.
Montaža uređaja na radni stol.
Dimenzije :785*510*875 mm
Težina uređaja : 65 kg

Fi-6 Shrink fit unit
With integrated colling :

The electronic board is cooled to allow high-speed shrinking.
Provided with accesories for shrinking and cooling from Ø2 to Ø32 (other Ø optional).
Handling without touching the tool-holders between shrinking and cooling time cycle.
To be placed an a workbench.
*Dimensions :785*510*875 mm*
Weight : 65 kg

Accessories

Chuck holders for shrink fit unit

Cone	code	Cone	code
HSK32	FP100.1032	HSK100	FP100.1100
HSK40	FP100.1040	ISO/BT30	FP100.2030
HSK50	FP100.1050	ISO/BT40	FP100.2040
HSK63	FP100.1063	ISO/BT50	FP100.2050
HSK80	FP100.1080		

Standard inductor stop rings for shrink fit unit

Diametar	code
Ø2 to Ø5	FE100.020.050
Ø6 to Ø12	FE100.060.120
Ø14 to Ø20	FE100.140.200
Ø25 to Ø32	FE100.250.320

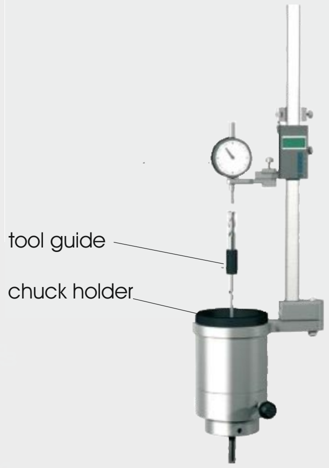
Cooling stop rings for cooling unit

Diametar	code
Ø2 to Ø5	FR500.050
Ø6 to Ø12	FR500.120
Ø14 to Ø20	FR500.200
Ø25 to Ø32	FR500.320

Tool guide and chuck holder for presetting unit FJ160.0100

code	code
Ø6	FJ150.6060
Ø8	FJ150.6080
Ø10	FJ150.6100
Ø12	FJ150.6120
Ø14	FJ150.6140
Ø16	FJ150.6160
Ø18	FJ150.6180
Ø20	FJ150.6200
Ø25	FJ150.6250
Ø32	FJ150.6320

Chuck holder	code
ISO/BT30	FJ150.2030
ISO/BT40	FJ150.2040
ISO/BT45	FJ150.2045
ISO/BT50	FJ150.2050

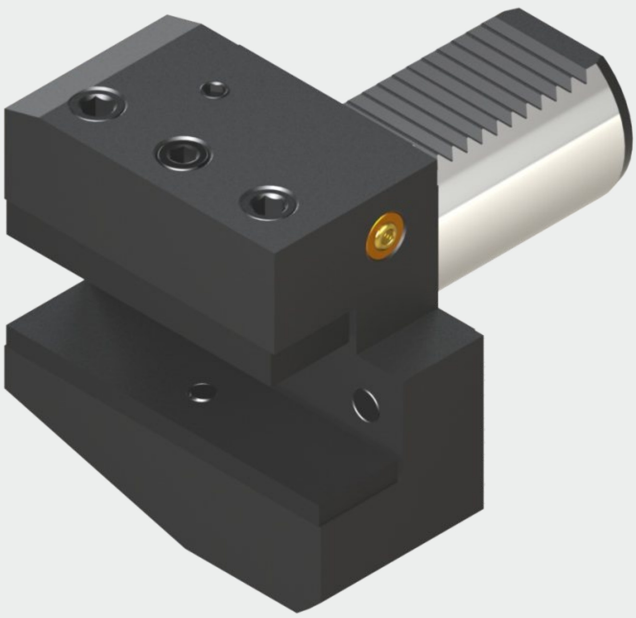


THERMO

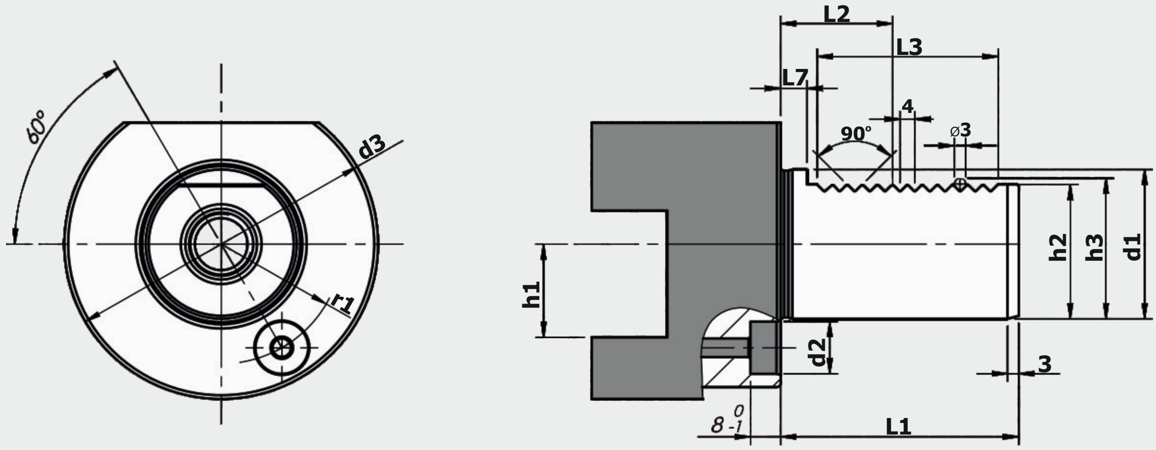
TEHNIČKI PODACI/ SPECIFICATIONS

	START.2	Fi-6
Samostalno regulirana snaga zahvaljujući mikroprocesoru : Detekcija promjera, automatsko određivanje snage i dužine ciklusa zagrijavanja Self regulated power thanks to a microprocessor : Detection of the diameter, automatic configuration of the heating power and heating cut-off.	■	■
Zagrijavanje usmjereno na držač alata. Ne oštećuje se alat niti držač alata. Heating located on the tool holder, no deterioration of the tool and the tool holder.	■	■
Automatski određen ciklus zagrijavanja, ovisno o očitanim parametrima. Self-regulated heating depending in parameters detected.	■	■
Izmjena alata ϕ2 do ϕ40 mm pomoću istog induktora. Shrinking and unshrinking ϕ2 to ϕ40 mm with the same inductor.	■	■
Automatsko ili manualno određivanje vremena ciklusa zagrijavanja. Automatic or manual shrinking cycle time	■	■
Ulazni promjer induktora : 64 mm Inductor entry diameter : 64 mm	■	■
Ergonomičan dizajn sa daljinskim upravljanjem. Designed ergonomics with remote control.	■	■
Napredni usmjerivači magnetnih polja omogućuju izmjenu alata koji sadrže čip za kodiranje. Advanced concentrators of magnetic fields allow shrinking of tools provided with a coding chip.		
Rotacija induktora za 180° bez rastavljanja. Inductor rotates 180° without disassembling.	■	■
Sustav hlađenja elektroničke ploče omogućuje konstantan rad uređaja. Cooling system for the electronic board to allow high-speed shrinking.		■
Napajanje/ Power supply 3x380/480V - 16A 50/60 Hz - 14 kW	■	■
Napajanje/ Power supply 3x200/240V - 32A 50/60 Hz - 14 kW	■	■
Dobava komprimiranog zraka : 4 - 6 bara Compressed air supply : 4 - 6 bars		

THERMO



DIN 69880 -VDI



DIN 69880

VDI	d1 (h6)	d2 (H6)	d3	L1	L2	L3	L7	h1	h2	h3	r1
30	30	14	68	56	29,7	40	7	20	27	28,92	25
40	40	14	83	63	29,7	40	7	25	36	37,92	32
50	50	16	98	78	35,7	48	8	32	45	46,92	37

Material : Case hardened steel with min. 900 N/mm² tensile strength in core.

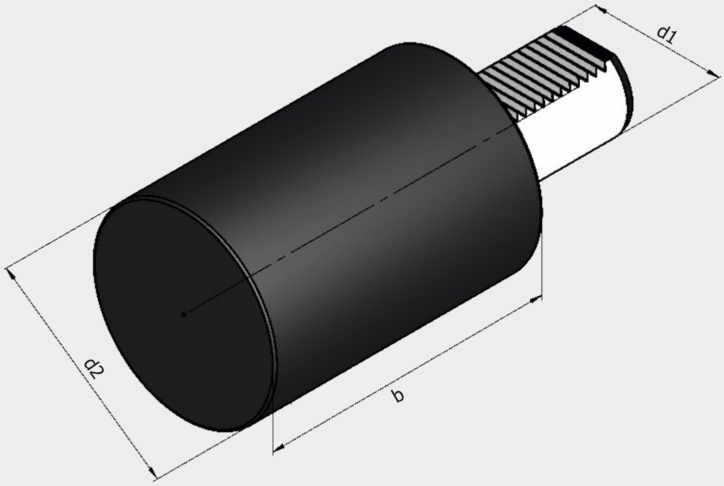
Execution : Case hardened 58±2 HRc. Depth of case 0,8-0,2 mm. Black oxided. Roughness Ra <0.2

Toolholder - blank

Form A2

VDI

d1	d2	b	code
30	68	100	**A2.030.068**
40	68	240	**A2.030.240**
40	83	120	**A2.040.083**
40	83	320	**A2.040.320**

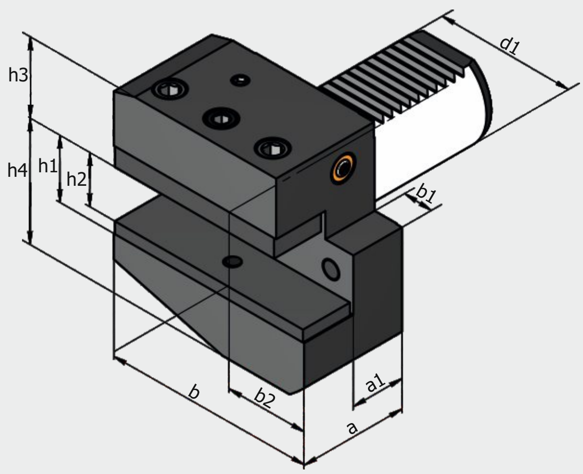


Toolholder - radial, right hand, short

Form B1

VDI

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	70	10	35	20	16	28	38	**B1.030.040**
40	44	22	85	12,5	42,5	25	20	32,5	48	**B1.040.044**



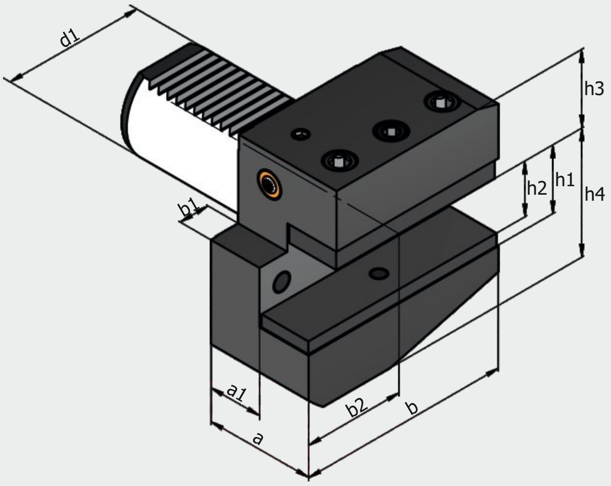
DIN 69880

Toolholder - radial, left hand,short

VDI

Form B2

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	70	10	35	20	16	28	38	**B2.030.040**
40	44	22	85	12,5	42,5	25	20	32,5	48	**B2.040.044**

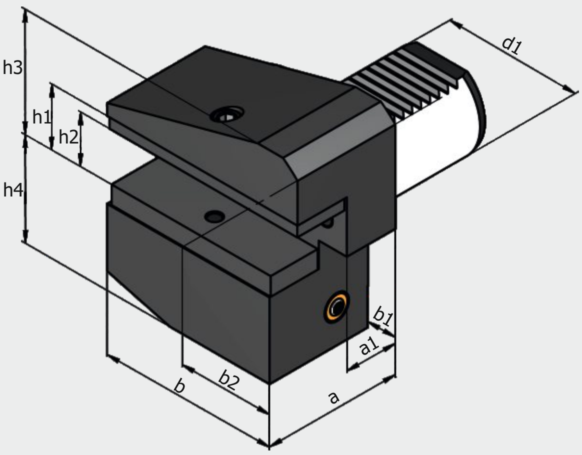


Toolholder - radial, right hand,short

VDI

Form B3

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	70	10	35	20	16	28	38	**B3.030.040**
40	44	22	85	12,5	42,5	25	20	32,5	48	**B3.040.044**

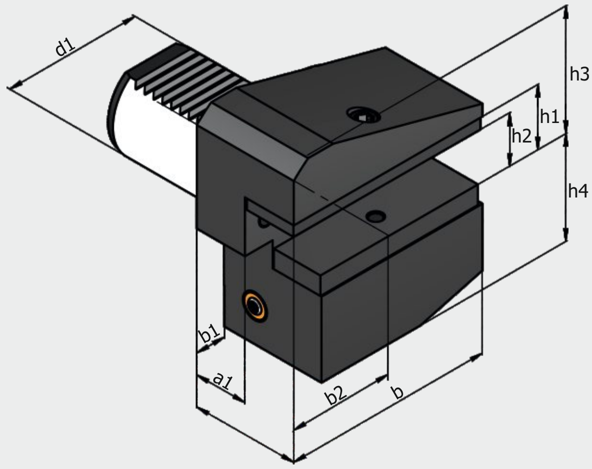


Toolholder - radial, left hand, short

Form B4

VDI

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	70	10	35	20	16	28	38	**B4.030.040**
40	44	22	85	12,5	42,5	25	20	32,5	48	**B4.040.044**

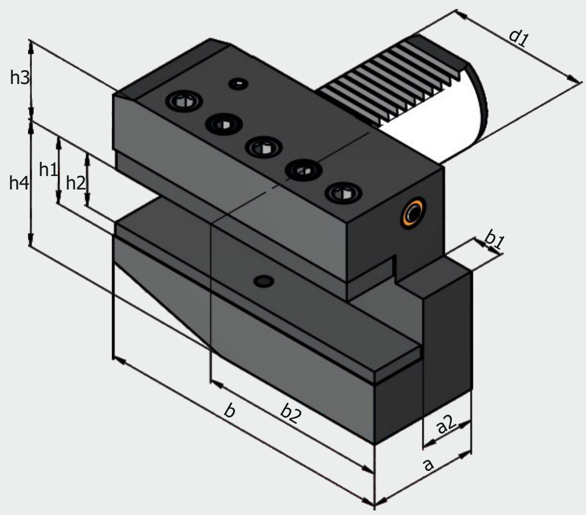


Toolholder - radial, right hand, long

Form B5

VDI

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	100	10	65	20	16	28	38	**B5.030.040**
40	44	22	118	12,5	75,5	25	20	32,5	48	**B5.040.044**



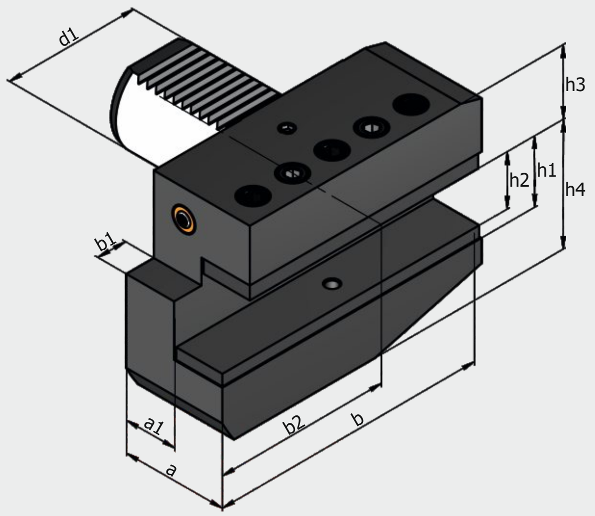
DIN 69880

Toolholder - radial, left hand,long

VDI

Form B6

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	100	10	65	20	16	28	38	**B6.030.040**
40	44	22	118	12,5	75,5	25	20	32,5	48	**B6.040.044**



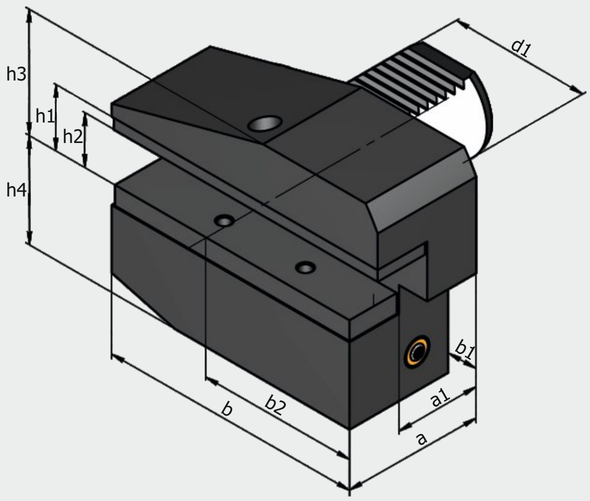
SAB

Toolholder - radial, right hand,long

VDI

Form B7

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	100	10	65	20	16	28	38	**B7.030.040**
40	44	22	118	12,5	75,5	25	20	32,5	48	**B7.040.044**

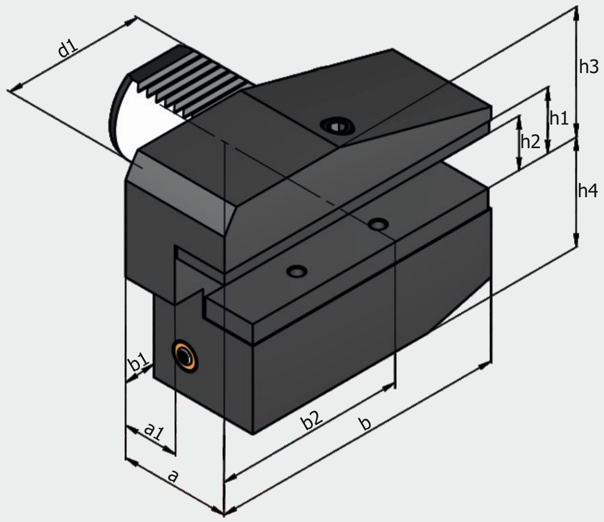


Toolholder - radial, left hand, long

Form B8

VDI

d1	a	a1	b	b1	b2	h1	h2	h3	h4	code
30	40	22	100	10	65	20	16	28	38	**B8.030.040**
40	44	22	118	12,5	75,5	25	20	32,5	48	**B8.040.044**

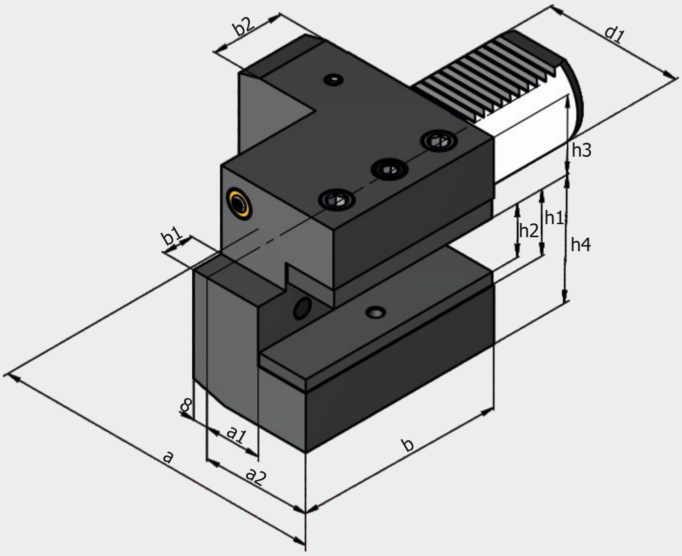


Toolholder - axial, right hand

Form C1

VDI

d1	a	a1	a2	b	b1	b2	h1	h2	h3	h4	code
30	70	17	35	70	10	30	20	16	28	38	**C1.030.100**
40	85	21	42,5	85	12,5	30	25	20	32,5	48	**C1.040.125**

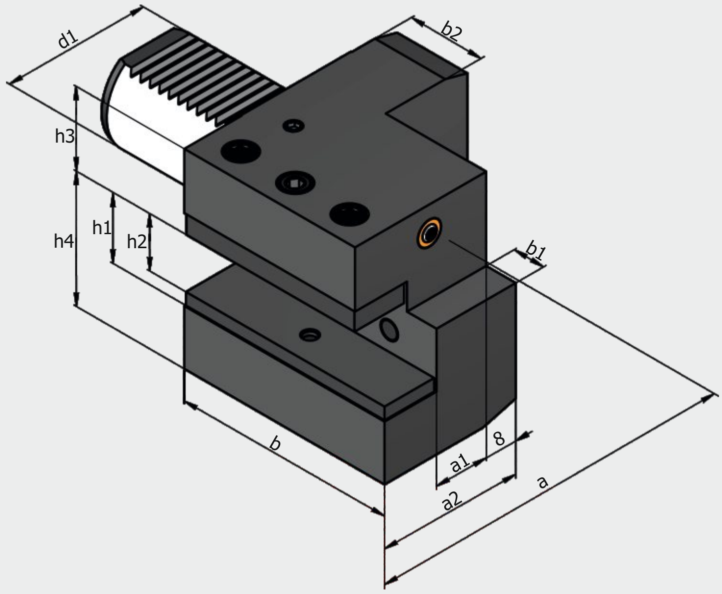


Toolholder - axial, left hand

VDI

Form C2

d1	a	a1	a2	b	b1	b2	h1	h2	h3	h4	code
30	70	17	35	70	10	30	20	16	28	38	**C2.030.100**
40	85	21	42,5	85	12,5	30	25	20	32,5	48	**C2.040.125**



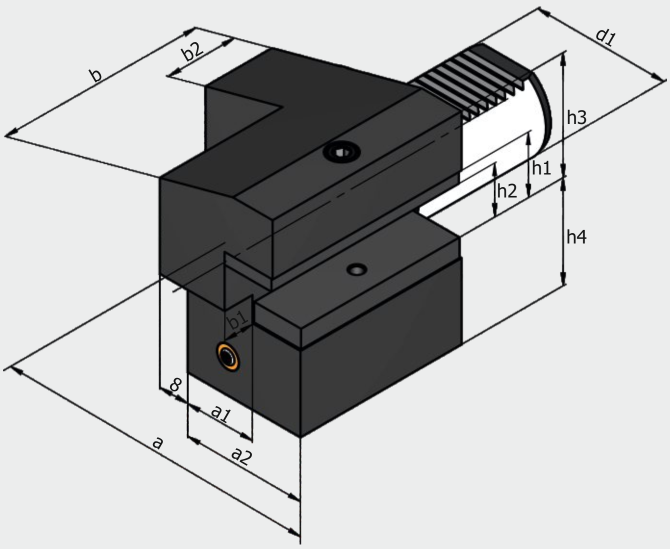
SAB

Toolholder - axial, right hand

VDI

Form C3

d1	a	a1	a2	b	b1	b2	h1	h2	h3	h4	code
30	70	17	35	70	10	30	20	16	38	35	**C3.030.100**
40	85	21	42,5	85	12,5	30	25	20	48	42,5	**C3.040.125**

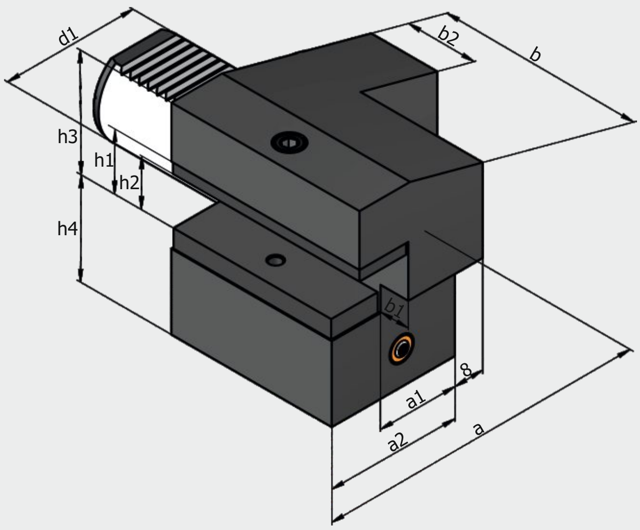


Toolholder - axial, left hand

Form C4

VDI

d1	a	a1	a2	b	b1	b2	h1	h2	h3	h4	code
30	70	17	35	70	10	30	20	16	38	35	**C4.030.100**
40	85	21	42,5	85	12,5	30	25	20	48	42,5	**C4.040.125**

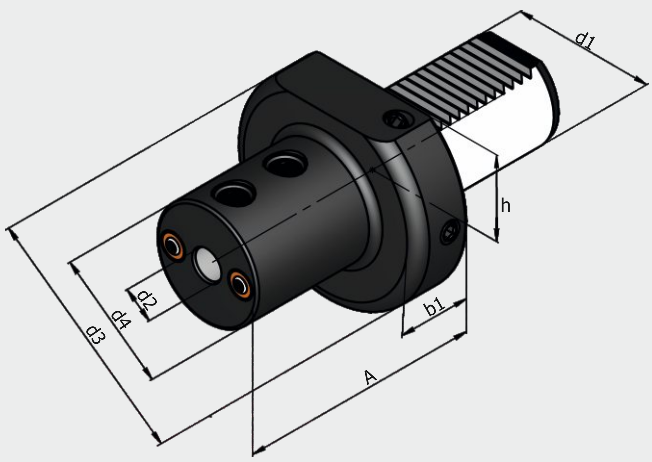


Toolholder - cylindrical

Form E2

VDI

d1	b	b1	d2	d3	d4	h	code
30	60	22	8	68	55	28	**E2.030.008**
30	60	22	10	68	55	28	**E2.030.010**
30	60	22	12	68	55	28	**E2.030.012**
30	60	22	16	68	55	28	**E2.030.016**
30	60	22	20	68	55	28	**E2.030.020**
30	60	22	25	68	68	28	**E2.030.025**
30	75	22	32	68	68	28	**E2.030.032**
40	75	22	8	83	55	32,5	**E2.040.008**
40	75	22	10	83	55	32,5	**E2.040.010**
40	75	22	12	83	55	32,5	**E2.040.012**
40	75	22	16	83	55	32,5	**E2.040.016**
40	75	22	20	83	55	32,5	**E2.040.020**
40	75	22	25	83	55	32,5	**E2.040.025**
40	75	22	32	83	83	32,5	**E2.040.032**
40	90	22	40	83	83	32,5	**E2.040.040**



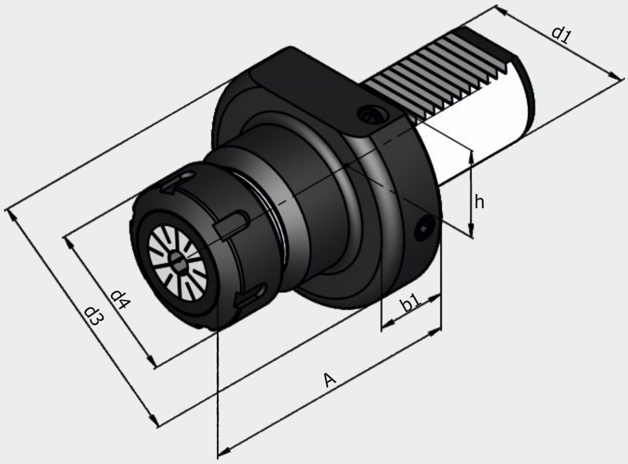
DIN 69880

Collet chuck for ER collet

VDI

Form E4

d1	A	b1	d3	d4	h	Size	range	code
30	75	22	68	42	28	ER25	2-16	**E4.030.116**
30	75	22	68	50	28	ER32	2-20	**E4.030.220**
40	75	22	83	50	32,5	ER32	2-20	**E4.040.220**
40	75	22	83	63	32,5	ER40	3-26	**E4.040.326**



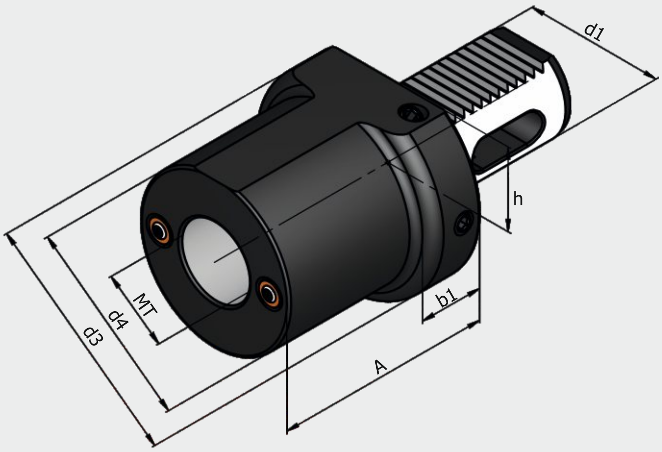
SAB

Toolholder for MT shank

VDI

Form F0

d1	MT	A	b1	d3	d4	h	code
30	1	27	-	68	-	28	**F0.030.001**
30	2	27	-	68	-	28	**F0.030.002**
30	3	50	-	68	-	28	**F0.030.003**
40	1	36	22	83	55	32,5	**F0.040.001**
40	2	36	22	83	55	32,5	**F0.040.002**
40	3	36	22	83	58	32,5	**F0.040.003**
40	4	80	22	83	68	32,5	**F0.040.004**



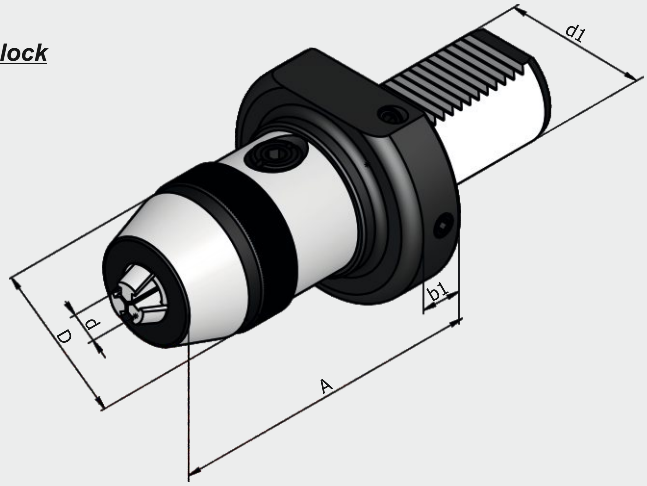
NC-drill chuck for CW and CCW rotation

≤30µ VDI

With allen key for tightening

d1	d	D	A	b1	code
30	1-13	53	113	22	**HX13.030.113**
30	3-16	57	116	22	**HX16.040.116**
40	1-13	53	101	22	**HX13.040.101**
40	3-16	57	104	22	**HX16.040.104**

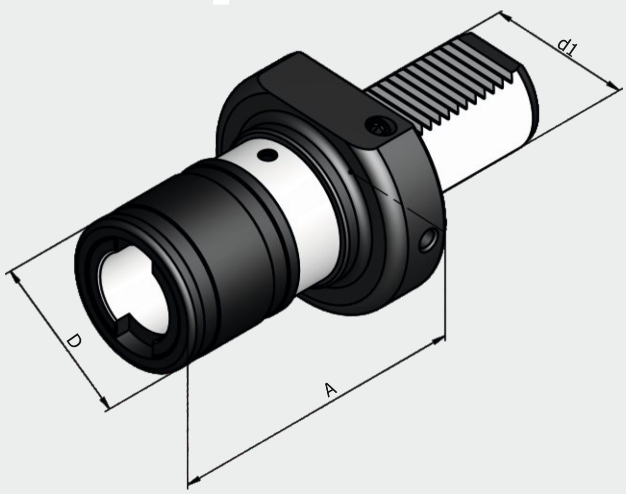
Precision drill chuck with integrated shank and hexagonal key lock
For use on high-speed CNC machines
Drilling, milling, reaming, tapping
Permits CW and CCW turning
High gripping torque, exceeding 100 Nm
Maximum coolant pressure 50 bar
Optional balancing service up to G2.5-25.000 rpm
***internal coolant*



Tapping head quick change

VDI

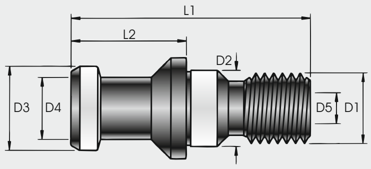
d1	Taping range	Compensation	D	A	Insert size	code
30	M3-M12	8	36	55	1	**GN12.030.055**
30	M8-M20	10	53	76	2	**GN20.030.076**
40	M3-M20	12	36	55	1	**GN12.040.055**
40	M8-M20	16	53	76	2	**GN20.040.076**
40	M14-M33	20	78	122	3	**GN33.040.122**



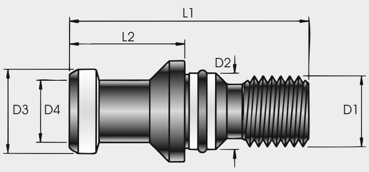
Drška ∅x□ Shaft Schaft Queue	DIN 352	DIN 5157	DIN 371	DIN 374	DIN 376
2.5 x 2.1	M 1	-	M 1	M 3	M 3.5
2.5 x 2.1	M 1.1	-	M 1.1	M 3.5	-
2.5 x 2.1	M 1.2	-	M 1.2	-	-
2.5 x 2.1	M 1.4	-	M 1.4	-	-
2.5 x 2.1	M 1.6	-	M 1.6	-	-
2.5 x 2.1	M 1.8	-	M 1.8	-	-
2.8 x 2.1	M 2	-	M 2	M 4	M 4
2.8 x 2.1	M 2.2	-	M 2.2	-	-
2.8 x 2.1	M 2.5	-	M 2.5	-	-
3.5 x 2.7	M 3	-	M 3	M 5	M 5
4.0 x 3.0	M 3.5	-	M 3.5	-	-
4.5 x 3.4	M 4	-	M 4	M 6	M 6
6.0 x 4.9	M 5	-	M 5	-	-
6.0 x 4.9	M 6	-	M 6	-	-
6.0 x 4.9	M 8	-	-	M 8	M 8
7.0 x 5.5	M 10	G 1/8"	-	M 10	M 10
8.0 x 6.2	-	-	M 8	-	-
9.0 x 7.0	M 12	-	-	M 12	M 12
10 x 8	-	-	-	-	-
11 x 9	M 14	G 1/4"	-	M 14	M 14
12 x 9	M 16	G 3/8"	-	M 16	M 16
14 x 11	M 18	-	-	M 18	M 18
16 x 12	M 20	G 1/2"	-	M 20	M 20
18 x 14.5	M 22	G 5/8"	-	M 22	M 22
18 x 14.5	M 24	-	-	M 24	M 24
20 x 16	M 27	G 3/4"	-	M 27	M 27
22 x 18	M 30	G 7/8"	-	M 30	M 30
25 x 20	M 33	G 1"	-	M 33	M 33
28 x 22	M 36	G 1 1/8"	-	M 36	M 36
32 x 24	M 39	G 1 1/4"	-	M 39	M 39
32 x 24	M 42		-	M 42	M 42
36 x 29	M 45	G 1 3/8"	-	M 45	M 45
36 x 29	M 48	G 1 1/2"	-	M 48	M 48
36 x 29	-	G 1 3/4"	-	-	-
36 x 29	-	G 2"	-	-	-

Accessories

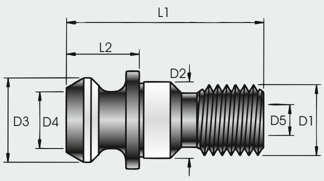
Material : Steel with 1000N/mm² tensile strength. Hardness : 58±2 HRc



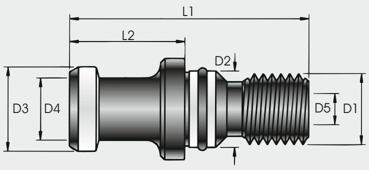
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
30	**DIN69872A**	M12	13	13	9	4	44	24	**PV12.DA**
40	**DIN69872A**	M16	17	19	14	7	54	26	**PV16.DA**
45	**DIN69872A**	M20	21	23	17	9,5	65	30	**PV20.DA**
50	**DIN69872A**	M24	25	28	21	11,5	74	34	**PV24.DA**



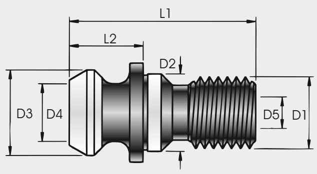
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
30	**DIN69872B**	M12	13	13	9	-	44	24	**PV12.DB**
40	**DIN69872B**	M16	17	19	14	-	54	26	**PV16.DB**
45	**DIN69872B**	M20	21	23	17	-	65	30	**PV20.DB**
50	**DIN69872B**	M24	25	28	21	-	74	34	**PV24.DB**



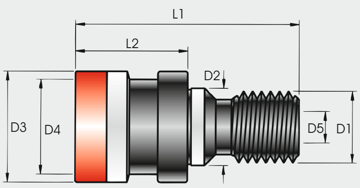
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	**ISO7388IIB**	M16	17	18.95	12.95	7.35	44.55	16.4	**PV16.IB**
50	**ISO7388IIB**	M24	25	29.10	19.60	11.5	65.50	25.6	**PV24.IB**
40	**ISO7388IIA**	M16	17	18.95	12.95	-	44.55	16.4	**PV16.IA**
50	**ISO7388IIA**	M24	25	29.10	19.60	-	65.50	25.6	**PV24.IA**



SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	**JIS-B-6339**	M16	17	19	14	4	54	29	**PV16.J40**
40	**JIS-B-6339**	M16	17	19	14	5.5	54	29	**PV16.J55**
40	**JIS-B-6339**	M16	17	19	14	5.5/4	54	29	**PV16.J45**
40	**JIS-B-6339**	M16	17	19	14	7	54	29	**PV16.J70**

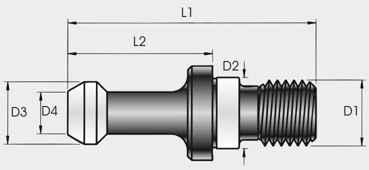


SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	**CAT metr.**	M16	17	18.80	12.45	7	41.26	16.26	**PV16.CAT**
50	**CAT metr.**	M24	25	28.95	20.90	10	65.40	25.40	**PV24.CAT**
40	**CAT-FADAL**	M16	17	18.90	12.50	7	44.10	19.10	**PV16.CAT/F**

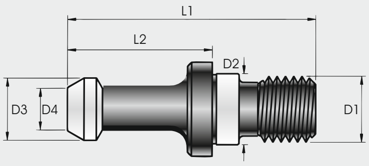


SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	**DIN2080**	M16	17	25	M16	7	53	25	**PV16.OTT/N**
50	**DIN2080**	M24	25	39.3	M24	7	65	25	**PV24.OTT/N**

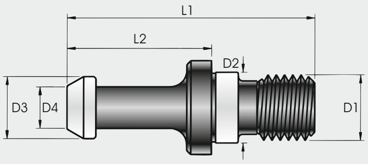
Material : Steel with 1000N/mm² tensile strength. Hardness : 58±2 HRc



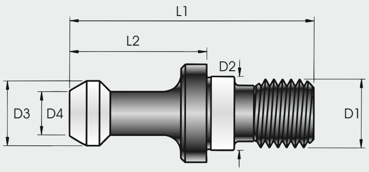
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
30	MAS-BT 45°	M12	12.5	11	7	-	43	23	PV12.BT45
40	MAS-BT 45°	M16	17	15	10	-	60	35	PV16.BT45
50	MAS-BT 45°	M24	25	23	17	-	85	45	PV24.BT45



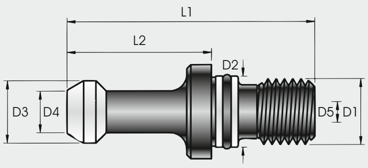
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
30	MAS-BT 60°	M12	12.5	11	7	-	43	23	PV12.BT60
40	MAS-BT 60°	M16	17	15	10	-	60	35	PV16.BT60
50	MAS-BT 60°	M24	25	23	17	-	85	45	PV24.BT60



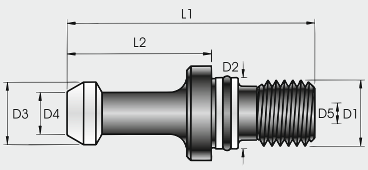
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
30	MAS-BT 90°	M12	12.5	11	7	-	43	23	PV12.BT90
40	MAS-BT 90°	M16	17	15	10	-	60	35	PV16.BT90
50	MAS-BT 90°	M24	25	23	17	-	85	45	PV24.BT90



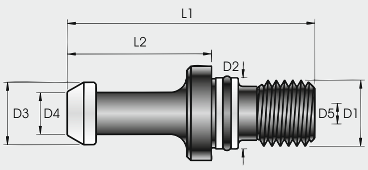
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	MAS-BT 45°	M16	17	15	10	-	57.15	32.15	PV16.BT45X
	L1=57.15°								



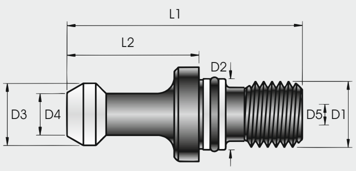
SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	MAS-BT 45°	M16	17	15	10	5	60	35	PV16.BT45C
50	MAS-BT 45°	M24	25	23	17	6	85	45	PV24.BT45C



SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	MAS-BT 60°	M16	17	15	10	5	60	35	PV16.BT60C
50	MAS-BT 60°	M24	25	23	17	6	85	45	PV24.BT60C

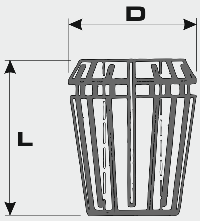


SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	MAS-BT 90°	M16	17	15	10	5	60	35	PV16.BT90C
50	MAS-BT 90°	M24	25	23	17	6	85	45	PV24.BT90C



SK	standard	D1	D2	D3	D4	D5	L1	L2	code
40	MAS-BT 45°	M16	17	15	10	5	60	35	PV16.BT45XC
	L1=57.15								

Collet ER DIN6499



ER		D	L
11	(424 E)	11.5	18
16	(426 E)	17	27
20	(428 E)	21	31.5
25	(430 E)	26	34
32	(470 E)	33	40
40	(472 E)	41	46

ER11 (1-7mm)

Ø	code	Ø	code	Ø	code
1.0	ER11.010	4.0	ER11.040	7.0	ER11.070
1.5	ER11.015	4.5	ER11.045		
2.0	ER11.020	5.0	ER11.050		
2.5	ER11.025	5.5	ER11.055		
3.0	ER11.030	6.0	ER11.060		
3.5	ER11.035	6.5	ER11.065		

code	Ø
ER11.SET	1 - 7mm

7 pcs

ø1-2-3-4-5-6-7

ER16 (1-10mm)

Ø	code	Ø	code	Ø	code	Ø	code
1.0	ER16.010	4.0	ER16.040	7.0	ER16.070	10	ER16.100
1.5	ER16.015	4.5	ER16.045	7.5	ER16.075		
2.0	ER16.020	5.0	ER16.050	8.0	ER16.080		
2.5	ER16.025	5.5	ER16.055	8.5	ER16.085		
3.0	ER16.030	6.0	ER16.060	9.0	ER16.090		
3.5	ER16.035	6.5	ER16.065	9.5	ER16.095		

code	Ø
ER16.SET	1 - 10mm

10 pcs

ø1-2-3-4-5-6-7-8-9-10

ER20 (1-13mm)

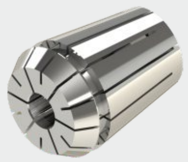
Ø	code	Ø	code
2.0	ER20.020	8.0	ER20.080
3.0	ER20.030	9.0	ER20.090
4.0	ER20.040	10.0	ER20.100
5.0	ER20.050	11.0	ER20.110
6.0	ER20.060	12.0	ER20.120
7.0	ER20.070	13.0	ER20.130

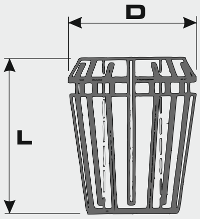
code	Ø
ER20.SET	2 - 13mm

12 pcs

ø2-3-4-5-6-7-8-9-10-11-12-13

SAB





ER		D	L
11	(424 E)	11.5	18
16	(426 E)	17	27
20	(428 E)	21	31.5
25	(430 E)	26	34
32	(470 E)	33	40
40	(472 E)	41	46

ER25 (1-16mm)

Ø	code	Ø	code	Ø	code
2.0	ER25.020	8.0	ER25.080	14.0	ER25.140
3.0	ER25.030	9.0	ER25.090	15.0	ER25.150
4.0	ER25.040	10.0	ER25.100	16.0	ER25.160
5.0	ER25.050	11.0	ER25.110		
6.0	ER25.060	12.0	ER25.120		
7.0	ER25.070	13.0	ER25.130		

code	Ø
ER25.SET	2 - 16mm

15 pcs

ø2-3-4-5-6-7-8-9-10-11-12-13-14-15-16

ER32 (2-20mm)

Ø	code	Ø	code	Ø	code
3.0	ER32.030	9.0	ER32.090	15.0	ER32.150
4.0	ER32.040	10.0	ER32.100	16.0	ER32.160
5.0	ER32.050	11.0	ER32.110	17.0	ER32.170
6.0	ER32.060	12.0	ER32.120	18.0	ER32.180
7.0	ER70.070	13.0	ER32.130	19.0	ER32.190
8.0	ER80.080	14.0	ER32.140	20.0	ER32.200

code	Ø
ER32.SET	2 - 20mm

18 pcs

ø3-4-5-6-7-8-9-10-11-12-13
14-15-16-17-18-19-20

ER40 (3-26mm)

Ø	code	Ø	code	Ø	code	Ø	code
4.0	ER40.040	10.0	ER40.100	16.0	ER40.160	22.0	ER40.220
5.0	ER40.050	11.0	ER40.110	17.0	ER40.170	23.0	ER40.230
6.0	ER40.060	12.0	ER40.120	18.0	ER40.180	24.0	ER40.240
7.0	ER40.070	13.0	ER40.130	19.0	ER40.190	25.0	ER40.250
8.0	ER40.080	14.0	ER40.140	20.0	ER40.200	26.0	ER40.260
9.0	ER40.090	15.0	ER50.150	21.0	ER40.210		

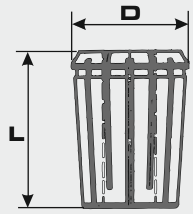
code	Ø
ER40.SET	3 - 26mm

23 pcs

ø4-5-6-7-8-9-10-11-12-13-14-15-16
17-18-19-20-21-22-23-24-25-26

Collet 1:10 DIN66388

OZ	D	L
2-16 (415 E)	25.5	40
2-25 (462 E)	35.5	52
4-32 (467 E)	44.2	60



2-16mm

Ø	code	Ø	code	Ø	code	Ø	code	Ø	code	Ø	code
2.0	**B216.020**	4.5	**B216.045**	7.0	**B216.070**	9.5	**B216.095**	12.0	**B216.120**	14.5	**B216.145**
2.5	**B216.025**	5.0	**B216.050**	7.5	**B216.075**	10.0	**B216.100**	12.5	**B216.125**	15.0	**B216.150**
3.0	**B216.030**	5.5	**B216.055**	8.0	**B216.080**	10.5	**B216.105**	13.0	**B216.130**	15.5	**B216.155**
3.5	**B216.035**	6.0	**B216.060**	8.5	**B216.085**	11.0	**B216.110**	13.5	**B216.135**	16.0	**B216.160**
4.0	**B216.040**	6.5	**B216.065**	9.0	**B216.090**	11.5	**B216.115**	14.0	**B216.140**		

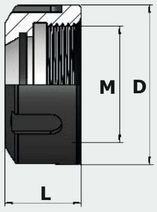
2-25mm

Ø	code	Ø	code	Ø	code	Ø	code	Ø	code	Ø	code
2.0	**B225.020**	6.0	**B225.060**	10.0	**B225.100**	14.0	**B225.140**	18.0	**B225.180**	22.0	**B225.220**
2.5	**B225.025**	6.5	**B225.065**	10.5	**B225.105**	14.5	**B225.145**	18.5	**B225.185**	22.5	**B225.225**
3.0	**B225.030**	7.0	**B225.070**	11.0	**B225.110**	15.0	**B225.150**	19.0	**B225.190**	23.0	**B225.230**
3.5	**B225.035**	7.5	**B225.075**	11.5	**B225.115**	15.5	**B225.155**	19.5	**B225.195**	23.5	**B225.235**
4.0	**B225.040**	8.0	**B225.080**	12.0	**B225.120**	16.0	**B225.160**	20.0	**B225.200**	24.0	**B225.240**
4.5	**B225.045**	8.5	**B225.085**	12.5	**B225.125**	16.5	**B225.165**	20.5	**B225.205**	24.5	**B225.245**
5.0	**B225.050**	9.0	**B225.090**	13.0	**B225.130**	17.0	**B225.170**	21.0	**B225.210**	25.0	**B225.250**
5.5	**B225.055**	9.5	**B225.095**	13.5	**B225.135**	17.5	**B225.175**	21.5	**B225.215**		

4-32mm

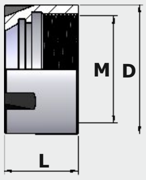
Ø	code	Ø	code	Ø	code	Ø	code	Ø	code	Ø	code
4.0	**B432.040**	9.0	**B432.090**	14.0	**B432.140**	19.0	**B432.190**	24.0	**B432.240**	29.0	**B432.290**
4.5	**B432.045**	9.5	**B432.095**	14.5	**B432.145**	19.5	**B432.195**	24.5	**B432.245**	29.5	**B432.295**
5.0	**B432.050**	10.0	**B432.100**	15.0	**B432.150**	20.0	**B432.200**	25.0	**B432.250**	30.0	**B432.300**
5.5	**B432.055**	10.5	**B432.105**	15.5	**B432.155**	20.5	**B432.205**	25.5	**B432.255**	30.5	**B432.305**
6.0	**B432.060**	11.0	**B432.110**	16.0	**B432.160**	21.0	**B432.210**	26.0	**B432.260**	31.0	**B432.310**
6.5	**B432.065**	11.5	**B432.115**	16.5	**B432.165**	21.5	**B432.215**	26.5	**B432.265**	31.5	**B432.315**
7.0	**B432.070**	12.0	**B432.120**	17.0	**B432.170**	22.0	**B432.220**	27.0	**B432.270**	32.0	**B432.320**
7.5	**B432.075**	12.5	**B432.125**	17.5	**B432.175**	22.5	**B432.225**	27.5	**B432.275**		
8.0	**B432.080**	13.0	**B432.130**	18.0	**B432.180**	23.0	**B432.230**	28.0	**B432.280**		
8.5	**B432.085**	13.5	**B432.135**	18.5	**B432.185**	23.5	**B432.235**	28.5	**B432.285**		

Clamping nuts ER DIN6499

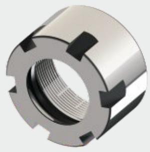


ER	M	D	L	code
11	M14x0,75	19	11.3	**D6499.ER11**
16	M22X1,5	32	17.5	**D6499.ER16**
20	M25X1,5	35	19	**D6499.ER20**
25	M32X1,5	42	20	**D6499.ER25**
32	M40X1,5	50	22.5	**D6499.ER32**
40	M50X1,5	60	25.5	**D6499.ER40**

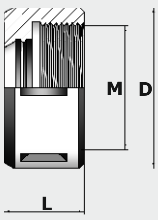
Clamping nuts ER-MINI DIN6499



ER	M	D	L	code
11	M13x0.75	16	12	**D6499.ER11M**
16	M19x1	22	18	**D6499.ER16M**
20	M24x1	28	19	**D6499.ER20M**
25	M30x1	35	20	**D6499.ER25M**

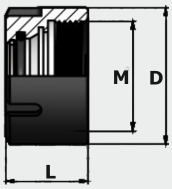


Clamping nuts OZ DIN6388 ball bearing version

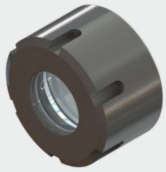


OZ	M	D	L	code
16	M33x1,5	43	24	**D6388.116**
25	M48x2	60	30	**D6388.225**
32	M60x2,5	72	33.5	**D6388.432**

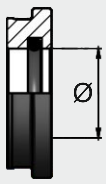
Clamping nuts ER DIN6499 for sealing ring



ER	M	D	L	code
25	M32x1.5	42	28	**D6499.ER25.BP**
32	M40x1.5	50	30	**D6499.ER32.BP**
40	M50x1,5	63	34	**D6499.ER40.BP**



Sealing ring



ER25

Ø	code	Ø	code	Ø	code	Ø	code
6.0	**BP.ER25.060**	9.0	**BP.ER25.090**	12.0	**BP.ER25.120**	15.0	**BP.ER25.150**
7.0	**BP.ER25.070**	10.0	**BP.ER25.100**	13.0	**BP.ER25.130**	16.0	**BP.ER25.160**
8.0	**BP.ER25.080**	11.0	**BP.ER25.110**	14.0	**BP.ER25.140**		

ER32

Ø	code	Ø	code	Ø	code	Ø	code
6.0	**BP.ER32.060**	10.0	**BP.ER32.100**	14.0	**BP.ER32.140**	18.0	**BP.ER32.180**
7.0	**BP.ER32.070**	11.0	**BP.ER32.110**	15.0	**BP.ER32.150**	19.0	**BP.ER32.190**
8.0	**BP.ER32.080**	12.0	**BP.ER32.120**	16.0	**BP.ER32.160**	20.0	**BP.ER32.200**
9.0	**BP.ER32.090**	13.0	**BP.ER32.130**	17.0	**BP.ER32.170**		

ER40

Ø	code	Ø	code	Ø	code	Ø	code
6.0	**BP.ER40.060**	12.0	**BP.ER40.120**	18.0	**BP.ER40.180**	24.0	**BP.ER40.240**
7.0	**BP.ER40.070**	13.0	**BP.ER40.130**	19.0	**BP.ER40.190**	25.0	**BP.ER40.250**
8.0	**BP.ER40.080**	14.0	**BP.ER40.140**	20.0	**BP.ER40.200**	26.0	**BP.ER40.260**
9.0	**BP.ER40.090**	15.0	**BP.ER40.150**	21.0	**BP.ER40.210**		
10.0	**BP.ER40.100**	16.0	**BP.ER40.160**	22.0	**BP.ER40.220**		
11.0	**BP.ER40.110**	17.0	**BP.ER40.170**	23.0	**BP.ER40.230**		

SAB

Wrench for clamping nuts

Wrench ER

ER	code
25	**KLJ.ER25**
32	**KLJ.ER32**
40	**KLJ.ER40**

Wrench ER Mini

ER	code
11	**K.ER11.M**
16	**K.ER16.M**
20	**K.ER20.M**
25	**K.ER25.M**

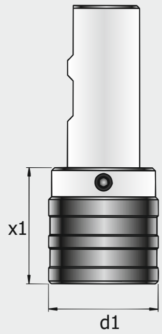
Wrench OZ

OZ	code
16	**KLJ.SP116**
25	**KLJ.SP225**
32	**KLJ.SP432**

Tapping head quick-change «WELDON»

With lenght compensation in compression and tension

Cilindrical shaft	Tap size	Compensation	Insert size	x1	d1	code
WE20	M3-M14	±7.5	1	39	36	**GN12.W20.039**
WE25	M3-M14	±7.5	1	39	36	**GN12.W25.039**
WE25	M5-M22	±12.5	2	63	53	**GN20.W25.063**
WE32	M5-M22	±12.5	2	63	53	**GN20.W32.063**
WE32	M14-M33	±20	3	124	78	**GN33.W32.124**
WE40	M22-M48	±22.5	4	126	96	**GN48.W40.126**



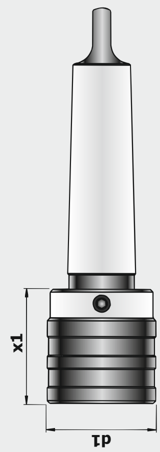
Accessories 7.01

Accessories 7.01

Tapping head quick-change «MK -Form B»

With lenght compensation in compression and tension

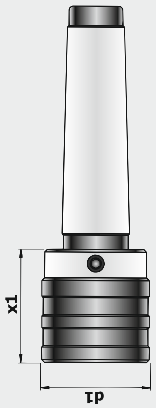
MK form B	Tap size	Compensation	Insert size	x1	d1	code
2	M3-M14	±7.5	1	46	36	**GN12.M2B.046**
3	M3-M14	±7.5	1	46	36	**GN12.M3B.046**
3	M5-M22	±12.5	2	70	53	**GN20.M3B.070**
4	M5-M22	±12.5	2	71	53	**GN20.M4B.071**
4	M14-M33	±20	3	104	78	**GN33.M4B.104**
5	M14-M33	±20	3	104	78	**GN33.M5B.104**
5	M22-M48	±22.5	4	115	96	**GN48.M5B.115**
6	M22-M48	±22.5	4	117	96	**GN48.M6B.117**



Accessories 7.01

Accessories 7.01

With lenght compensation in compression and tension



MK form A	Tap size	Compensation	Insert size	x1	d1	code
2	M3-M14	±7.5	1	46	36	**GN12.M2A.046**
3	M3-M14	±7.5	1	46	36	**GN12.M3A.046**
3	M8-M20	±12.5	2	70	53	**GN20.M3A.070**
4	M8-M20	±12.5	2	71	53	**GN20.M4A.071**
4	M14-M33	±20	3	104	78	**GN33.M4A.104**
5	M14-M33	±20	3	104	78	**GN33.M5A.104**
5	M22-M48	±22.5	4	115	96	**GN48.M5A.115**
6	M22-M48	±22.5	4	117	96	**GN48.M6A.117**

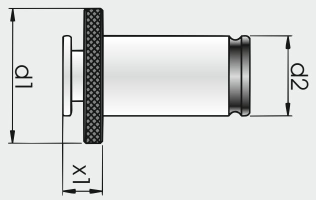
Accessories 7.10

Accessories 7.11

Quick-change inserts without safety coupling

SE

Size	d1	d2	x1
1 (M3-M12)	32	19	25
2 (M8-M20)	50	31	34
3 (M14-M33)	72	48	45
4 (M22-M48)	95	60	68



Size	Ø (mm)	☐ (mm)	code
1 (M3-M12)	3.5	2.7	**SE0312.M03**
	4	3.0	**SE0312.M35**
	4.5	3.4	**SE0312.M04**
	6	4.9	**SE0312.M05**
	6	4.9	**SE0312.M06**
	6	4.9	**SE0312.M08**
	7	5.5	**SE0312.M10**
	8	6.2	**SE0312.M08A**
	9	7.0	**SE03112.M12**
	10	8.0	**SE0312.M10A**
	11	9.0	**SE0312.M14**

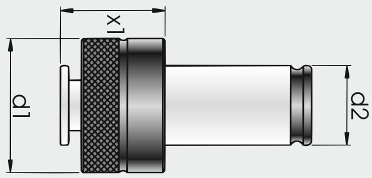
Size	Ø (mm)	☐ (mm)	code
2 (M8-M20)	6	4.9	**SE0820.M08**
	7	5.5	**SE0820.M10**
	8	6.2	**SE0820.M08A**
	9	7.0	**SE0820.M12**
	10	8.0	**SE0820.M10A**
	11	9.0	**SE0820.M14**
	12	9.0	**SE0820.M16**
	14	11.0	**SE0820.M18**
	16	12.0	**SE0820.M20**
	18	14.5	**SE0820.M24**

Size	Ø (mm)	☐ (mm)	code
3 (M14-M33)	11	9.0	**SE1433.M14**
	12	9.0	**SE1433.M16**
	14	11.0	**SE1433.M18**
	16	12.0	**SE1433.M20**
	18	14.5	**SE1433.M22**
	20	16.0	**SE1433.M27**
	22	18.0	**SE1433.M30**
	25	20.0	**SE1433.M33**
	28	22.0	**SE1433.M36**

Size	Ø (mm)	☐ (mm)	code
4 (M22-M48)	18	14.5	**SE2248.M24**
	20	16.0	**SE2248.M27**
	22	18.0	**SE2248.M30**
	25	20.0	**SE2248.M33**
	28	22.0	**SE2248.M36**
	32	24.0	**SE2248.M42**
	36	29.0	**SE2248.M45**

SES

Size	d1	d2	x1
1 (M3-M12)	32	19	25
2 (M8-M20)	50	31	34
3 (M14-M33)	72	48	45
4 (M22-M48)	95	60	68



Size	Ø (mm)	□ (mm)	code
1 (M3-M12)	3.5	2.7	**SES0312.M03**
	4	3.0	**SES0312.M35**
	4.5	3.4	**SES0312.M04**
	6	4.9	**SES0312.M05**
	6	4.9	**SES0312.M06**
	6	4.9	**SES0312.M08**
	7	5.5	**SES0312.M10**
	8	6.2	**SES0312.M08A**
	9	7.0	**SES03112.M12**
	10	8.0	**SES0312.M10A**
	11	9.0	**SES0312.M14**

Size	Ø (mm)	□ (mm)	code
2 (M8-M20)	6	4.9	**SES0820.M08**
	7	5.5	**SES0820.M10**
	8	6.2	**SES0820.M08A**
	9	7.0	**SES0820.M12**
	10	8.0	**SES0820.M10A**
	11	9.0	**SES0820.M14**
	12	9.0	**SES0820.M16**
	14	11.0	**SES0820.M18**
	16	12.0	**SES0820.M20**
	18	14.5	**SES0820.M24**

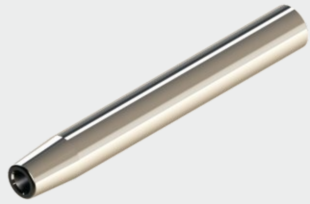
Size	Ø (mm)	□ (mm)	code
3 (M14-M33)	11	9.0	**SES1433.M14**
	12	9.0	**SES1433.M16**
	14	11.0	**SES1433.M18**
	16	12.0	**SES1433.M20**
	18	14.5	**SES1433.M22**
	20	16.0	**SES1433.M27**
	22	18.0	**SES1433.M30**
	25	20.0	**SES1433.M33**
	28	22.0	**SES1433.M36**

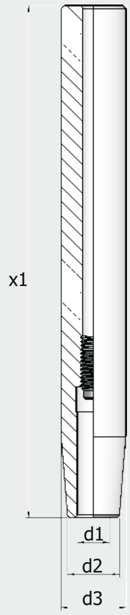
Size	Ø (mm)	□ (mm)	code
4 (M22-M48)	18	14.5	**SES2248.M24**
	20	16.0	**SES2248.M27**
	22	18.0	**SES2248.M30**
	25	20.0	**SES2248.M33**
	28	22.0	**SES2248.M36**
	32	24.0	**SES2248.M42**
	36	29.0	**SES2248.M45**

≤3μ

From d1=3 to d1=5, without length adjusting thread

d3	d1	d2	x1	code
12	3	9	80	**SF03.C12.080**
12	3	9	120	**SF03.C12.120**
12	3	9	160	**SF03.C12.160**
12	4	10	80	**SF04.C12.080**
12	4	10	120	**SF04.C12.120**
12	4	10	160	**SF04.C12.160**
16	3	9	80	**SF03.C16.080**
16	3	9	120	**SF03.C16.120**
16	3	9	160	**SF03.C16.160**
16	4	10	80	**SF04.C16.080**
16	4	10	120	**SF04.C16.120**
16	4	10	160	**SF04.C16.160**
16	5	11	80	**SF05.C16.080**
16	5	11	120	**SF05.C16.120**
16	5	11	160	**SF05.C16.160**
16	6	12	80	**SF06.C16.080**
16	6	12	120	**SF06.C16.120**
16	6	12	160	**SF06.C16.160**
20	6	12	120	**SF06.C20.120**
20	6	12	160	**SF06.C20.160**
20	6	12	200	**SF06.C20.200**
20	8	16	120	**SF08.C20.120**
20	8	16	160	**SF08.C20.160**
20	8	16	200	**SF08.C20.200**
20	10	16	120	**SF10.C20.120**
20	10	16	160	**SF10.C20.160**
20	10	16	200	**SF10.C20.200**
20	12	18	120	**SF12.C20.120**
20	12	18	160	**SF12.C20.160**
20	12	18	200	**SF12.C20.200**
25	12	18	120	**SF12.C25.120**
25	12	18	160	**SF12.C25.160**
25	12	18	200	**SF12.C25.200**
25	14	20	120	**SF14.C25.120**
25	14	20	160	**SF14.C25.160**
25	14	20	200	**SF14.C25.200**
25	16	25	120	**SF16.C25.120**
25	16	25	160	**SF16.C25.160**
25	16	25	200	**SF16.C25.200**





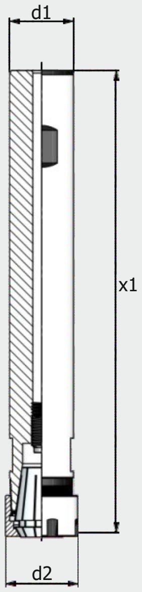
Shrinking equipment 5.01

Accessories 7.14

ER collet chuck DIN6499-MINI - EXTENSIONS

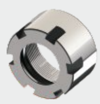
≤3μ

Delivery with clamping nut and adjusting screw



d1	TIP	Range mm	x1	d2	code
16	ER11	0.5-7	100	80	**ER11.C16.100**
16	ER11	0.5-7	150	120	**ER11.C16.150**
16	ER11	0.5-7	200	160	**ER11.C16.200**
20	ER16	0.5-10	100	80	**ER16.C20.100**
20	ER16	0.5-10	150	120	**ER16.C20.150**
20	ER16	0.5-10	200	160	**ER16.C20.200**
25	ER20	1-13	100	80	**ER20.C25.100**
25	ER20	1-13	150	120	**ER20.C25.150**
25	ER20	1-13	200	160	**ER20.C20.200**
32	ER25	1-16	100	80	**ER25.C32.100**
32	ER25	1-16	150	120	**ER25.C32.150**
32	ER25	1-16	200	160	**ER25.C32.200**

Accessories 7.03



Accessories 7.06

Accessories 7.07

Accessories 7.14

Locking screw DIN1835B for standard «WELDON»

Weldon	M	code
6	M6x10	**WE.06**
8	M8x10	**WE.08**
10	M10x12	**WE.10**
12	M12x16	**WE.12**

Weldon	M	code
14	M12x16	**WE.14**
16	M14x16	**WE.16**
18	M14x16	**WE.18**
20	M16x16	**WE.20**

Weldon	M	code
25	M18x2x20	**WE.25**
32	M20x2x20	**WE.32**
40	M20x2x25	**WE.40**
50	M24x2x25	**WE.50**

Locking screw DIN1835B for «FORM-LINE»

Weldon	M	code
6	M6x6	**WE.06.F**
8	M8x7.5	**WE.08.F**
10	M10x8	**WE.10.F**
12	M12x8	**WE.12.F**

Weldon	M	code
14	M12x8.5	**WE.14.F**
16	M14x8.5	**WE.16.F**
18	M14x8.5	**WE.18.F**
20	M16x10	**WE.20.F**

Weldon	M	code
25	M18x2x11.5	**WE.25.F**
32	M20x2x13	**WE.32.F**

Adjusting screw for «ER colet chuck» and «OZ collet chuck»

ER	M	code
11	M6x10	**VP.ER11**
16	M8x15	**VP.ER16**
20	M10x18	**VP.ER20**
25	M12x18	**VP.ER25**

ER	M	code
32	M12x18	**VP.ER32**
40	M12x18	**VP.ER40**

OZ	M	code
16	M12x18	**VP.116**
25	M12x18	**VP.225**
32	M12x18	**VP.432**

Adjusting screw for «SHRINK FIT holders»

SF	M	code
6	M5x10	**VP.M05**
8	M6x10	**VP.M06**
10	M8x1x15	**VP.M081**
12	M10x1x18	**VP.M101**

SF	M	code
14	M10x1x18	**VP.M121**
16	M12x1x18	**VP.M121**
18	M12x1x18	**VP.M161**
20	M16x1x20	**VP.M161**

SF	M	code
25	M16x1x20	**VP.M161**
32	M16x1x20	**VP.M161**

Driving ring for «COMBI shell mill holders»

KD	code
16	**D6366.16**
22	**D6366.22**
27	**D6366.27**
32	**D6366.32**

KD	code
40	**D6366.40**
50	**D6366.50**

Cross screw for «Shell mill holders»

KD	code
16	**D6367.M08**
22	**D6367.M10**
27	**D6367.M12**
32	**D6367.M16**

KD	code
40	**D6367.M20**
50	**D6367.M24**

Driving key for «Combi shell mill holders»

KD	code
16	**UP.04420**
22	**UP.06622**
27	**UP.07725**
32	**UP.08730**

KD	code
40	**UP.10832**
50	**UP.12836**

Driving key for «Shell mill holder»

AD	code
16	PK.16
22	PK,22
27	PK.27
32	PK.32

AD	code
40	PK.40
50	PK.50

Collant tube

HSK	M	code
32	M10x1	CT32.M10
40	M12x1	CT40.M12
50	M16x1	CT50.M16
63	M18x1	CT63.M18

HSK	M	code
80	M20x1.5	CT80.M20
100	M24x1.5	CT100.M24
125	M30x1.5	CT125.M30

Wrench for collant tube

HSK	code
32	CTS.32
40	CTS.40
50	CTS.50
63	CTS.63

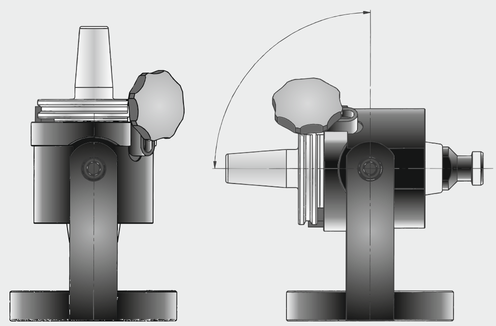
HSK	code
80	CTS.80
100	CTS.100

Nut for MK form A

MK	code
1	MK1.M10L
2	MK2.M15L
3	MK3.M20L
4	MK4.M26L

Screw for MK form A

MK	code
1	MK1.M06
2	MK2.M10
3	MK3.M12
4	MK4.M16



Assembly block

Cone	code
SK30	MB.SK30
SK40	MB.SK40
SK50	MB.SK50
BT30	MB.BT30

Cone	code
BT40	MB.BT40
BT50	MB.BT50
HSK40	MB.HSK40
HSK50	MB.HSK50

Cone	code
HSK63	MB.HSK63
HSK80	MB.HSK80
HSK100	MB.HSK100

1990. godine u Daruvaru, g. Ivan Budinjaš je utemeljio SAB d.o.o. kao poduzeće za proizvodnju alata, pribora i uređaja. Od osnutka naši proizvodi visoke kvalitete su prisutni na zahtjevnim tržištima industrijski visoko razvijenih zemalja svijeta. Naš moto «SAMO KVALITETA» je prepoznat od strane brojnih kupaca iz sektora autoindustrije, avio-svemirske industrije, brodogradnje, te industrije strojeva i opreme.

Danas se naš proizvodni program sastoji od držača alata i pribora za alatne strojeve, a prema svim najvažnijim svjetskim industrijskim standardima (ISO, DIN, ANSI-CAT, MAS-BT).

Iskustvo u razvoju i proizvodnji, znanje i entuzijazam zaposlenika u usvajanju novih tehnologija te fleksibilnost i dinamičnost u prilagođavanju promjenama na tržištu su glavne odlike našeg načina poslovanja te pravi odgovor na izazove 21. stoljeća.

SAB Ltd. is founded 1990 in Daruvar by Mr. Ivan Budinjaš, as a company for manufacturing of tools, accessories and devices for machine tools. From the beginnings, our high quality products are present at demanding markets of industrially high developed countries, all over the world.

Our company slogan «ONLY THE QUALITY» is recognized by numerous customers from aerospace, automotive industry, shipbuliding as well as machine and accessories industry.

Today, our manufacturing program consists of toolholders and accessories for machine tools, according to the most important industrial standards in the world.

Experience in development and production, skill and enthusiasm of our employees in new technologies adoption, as well as flexibility and dynamism in reacting to permanent market changes, are main excellences in our way of making bussiness and right answer to challenges of the 21st century.

Notes

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SAB d.o.o.
Podborska 1b
43500 Daruvar
HRVATSKA (Croatia)
tel. +385 43 675 850
fax. + 385 43 334 700
sab@sab.hr
www.sab.hr

SAB

SAB TOOLHOLDERS SAB