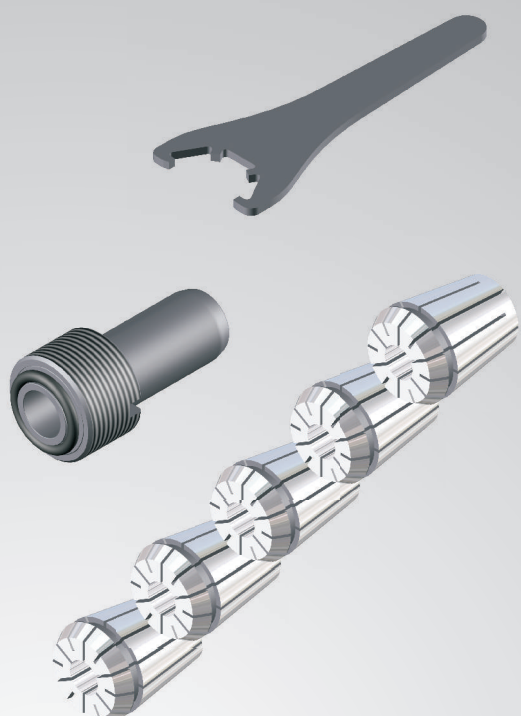
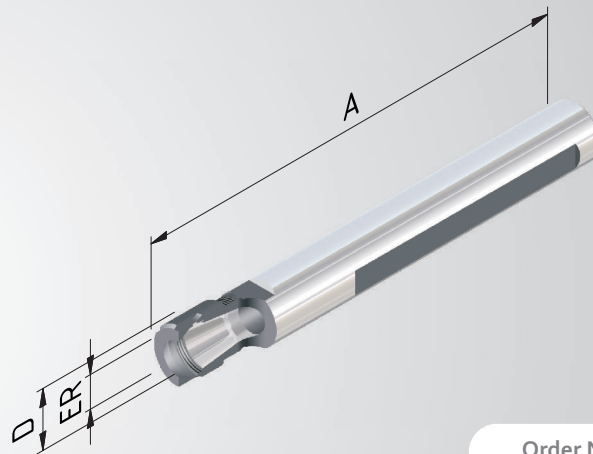


ACCESSORIES AND SPARE PARTS



Collet chuck extensions »Mini«

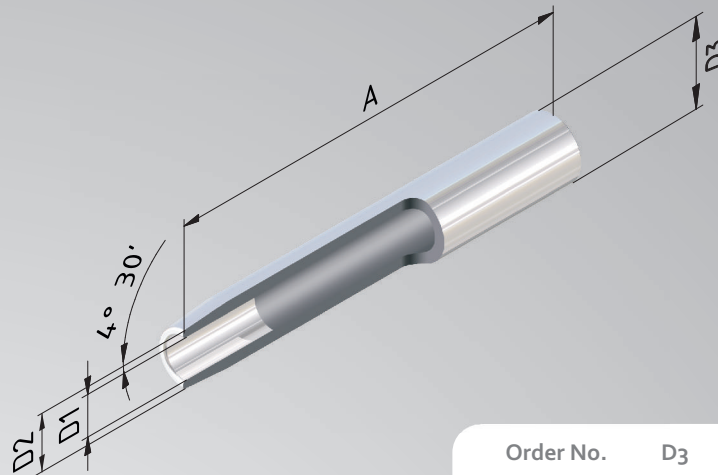
- Application:** For the extension of tool holders. Cylindrical shank can be clamped in end mill holder or collet chuck.
- Includes:** Clamping nut.
- Accessories:** See page 130.



Order No.	D	ER	A SHORT
119-49	16	11	169
119-50	20	16	163
119-51	25	20	164

Shrink fit extensions without length adjustment screw

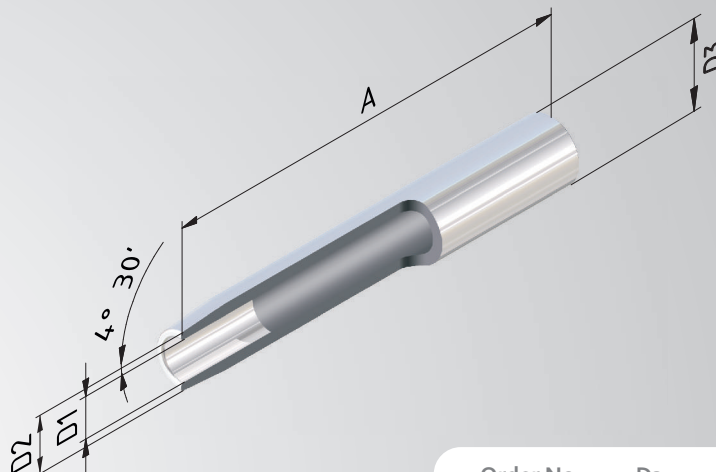
Application: For the extension of tool holders. Cylindrical shank can be clamped in end mill holder or collet chuck.



Order No.	D ₃	D ₁	D ₂	A = 160
2112-13	12	3	8	160
2112-14	12	4	8	160
2116-13	16	3	10	160
2116-14	16	4	10	160
2116-15	16	5	10	160
2116-01	16	6	10	160
2116-02	16	8	14	160
2120-15	20	5	14	160
2120-01	20	6	14	160
2120-02	20	8	14	160
2125-02	25	8	19	160
2125-03	25	10	20	160
2125-04	25	12	20	160
2125-05	25	14	20	160
2125-06	25	16	22	160
2132-03	32	10	24	160
2132-04	32	12	24	160
2132-05	32	14	27	160
2132-06	32	16	27	160
2132-07	32	18	27	160
2132-08	32	20	27	160

Shrink fit extensions without length adjustment screw

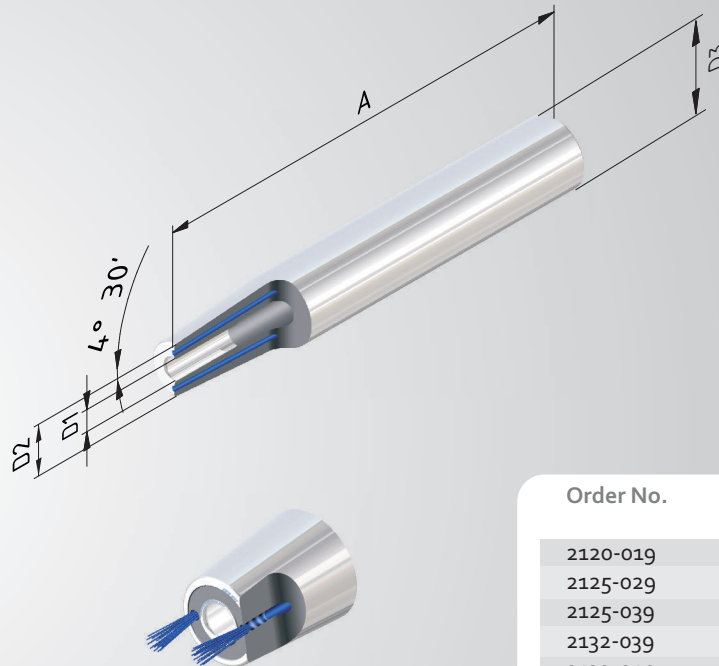
Application: For the extension of tool holders. Cylindrical shank can be clamped in end mill holder or collet chuck.



Order No.	D3	D1	D2	A
				= 300
2120-61	20	6	14	300
2120-62	20	8	14	300
2125-62	25	8	19	300
2125-63	25	10	20	300
2125-64	25	12	20	300
2125-65	25	14	20	300
2125-66	25	16	22	300
2132-63	32	10	24	300
2132-64	32	12	24	300
2132-65	32	14	27	300
2132-66	32	16	27	300
2132-68	32	20	27	300

Shrink fit extensions »cool tool« without length adjustment screw

Application: For the extension of tool holders. Cylindrical shank can be clamped in end mill holder or collet chuck.

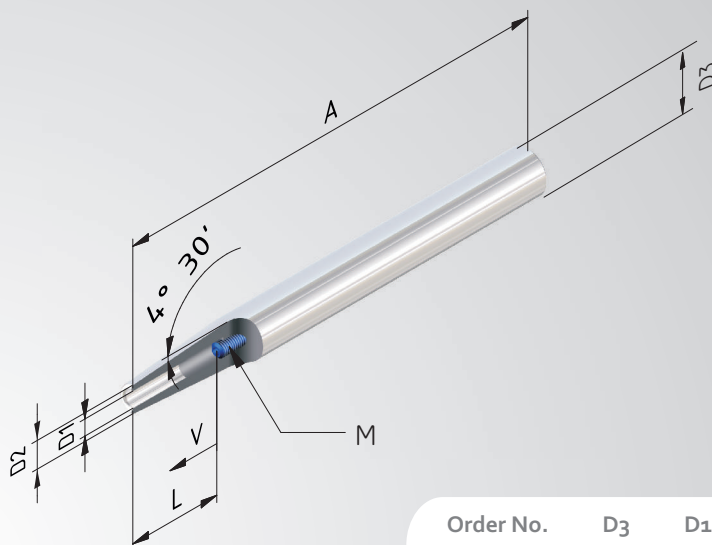


Order No.	D3	D1	D2	A = 160
2120-019	20	6	14	160
2125-029	25	8	19	160
2125-039	25	10	20	160
2132-039	32	10	24	160
2132-049	32	12	24	160
2132-059	32	14	27	160
2132-069	32	16	27	160

Shrink fit extensions with length adjustment screw

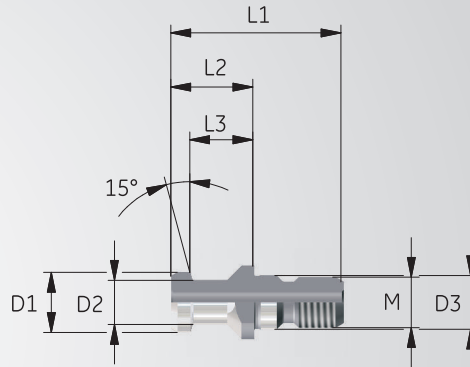
- Application:** For the extension of tool holders. Cylindrical shank can be clamped in end mill holder or collet chuck.
- Includes:** Clamping screw.
- Accessories:** See page 135.

ACCESSORIES



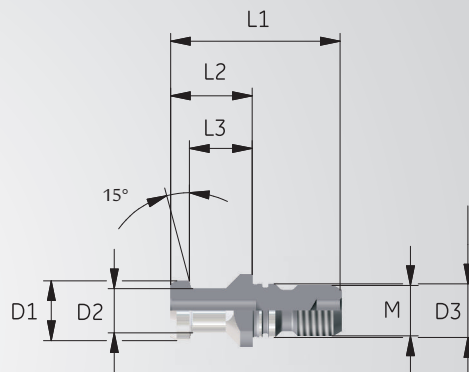
Order No.	D3	D1	D2	A = 160	V	L	M
211621-01	16	6	10	160	10	37	M5
212021-01	20	6	14	160	10	37	M5
212021-02	20	8	14	160	10	37	M6
212521-02	25	8	19	160	10	37	M6
212521-03	25	10	20	160	10	42	M8x1
212521-04	25	12	20	160	10	48	M10x1
212521-05	25	14	20	160	10	48	M10x1
212521-06	25	16	22	160	10	51	M12x1
213221-03	32	10	24	160	10	42	M8x1
213221-04	32	12	24	160	10	48	M10x1
213221-05	32	14	27	160	10	48	M10x1
213221-06	32	16	27	160	10	51	M12x1
213221-07	32	18	27	160	10	51	M12x1
213221-08	32	20	27	160	10	53	M16x1

Pull stud DIN 69872 Form A, with through hole



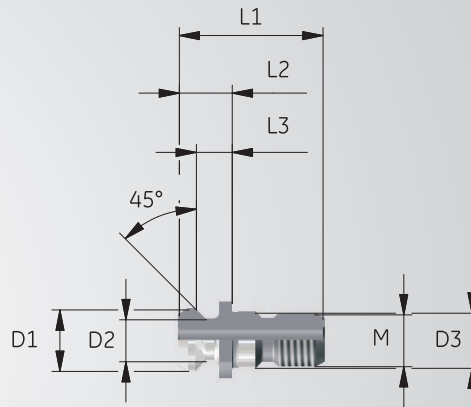
Order No.	SK	D1	D2	D3	L1	L2	L3	M
7124-01	40	19	14	17	54	26	20	M16
7124-21	50	28	21	25	74	34	25	M24

Pull stud DIN 69872 Form B, without through hole, with O-Ring on the collar



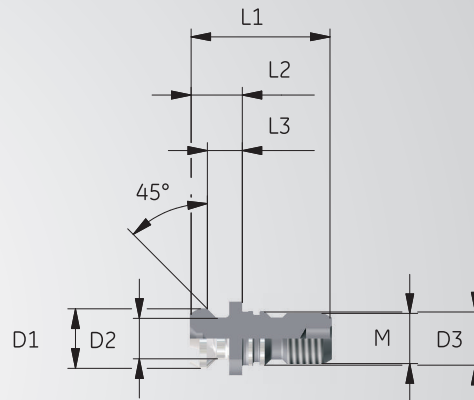
Order No.	SK	D1	D2	D3	L1	L2	L3	M
7124-01B	40	19	14	17	54	26	20	M16
7124-21B	50	28	21	25	74	34	25	M24

Pull stud ISO 7388 B with through hole



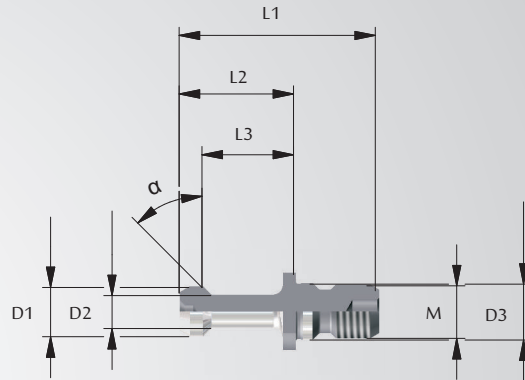
Order No.	SK	D1	D2	D3	L1	L2	L3	M
7425-11	40	18,95	12,95	17	44,5	16,4	11,5	M16
7425-31	50	29,1	19,6	25	65,5	25,55	17,95	M24

Pull stud ISO 7388 B without through hole, with O-Ring on the collar



Order No.	SK	D1	D2	D3	L1	L2	L3	M
7425-11B	40	18,95	12,95	17	44,5	16,4	11,5	M16
7425-31B	50	29,1	19,6	25	65,5	25,55	17,95	M24

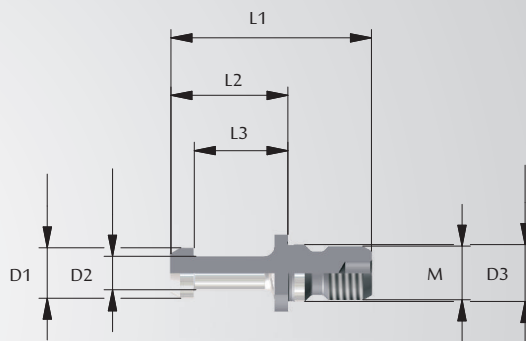
Pull stud MAS 403 30° and 45°



Order No.	BT	Degree	D1	D2	D3	L1	L2	L3	M
7525-51	30	30	11	7	12,5	43	23	18	M12
7524-11	40	45	15	10	17	60	35	28	M16
7524-01*	40	45	15	10	17	57,2	32,2	25,2	M16
7525-11	40	30	15	10	17	60	35	28	M16
7524-31	50	45	23	17	25	85	45	35	M24
7525-31	50	30	23	17	25	85	45	35	M24

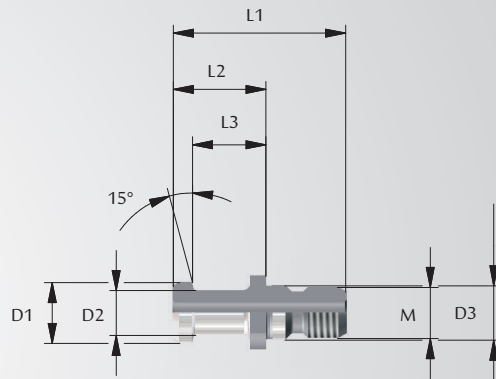
* BT 40 45° 3 mm shortened.

Pull stud Mori-Seiki MAS 90°



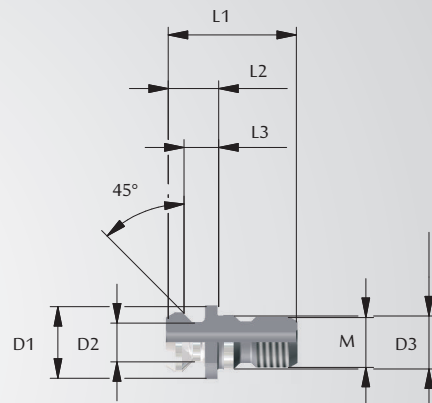
Order No.	BT	D1	D2	D3	L1	L2	L3	M
7526-11	40	15	10	17	60	35	28	M16
7526-31	50	23	17	25	85	45	35	M24

Pull stud JIS B 6339 with through hole



Order No.	BT	D1	D2	D3	L1	L2	L3	M
7528-11	4 ⁰	19	14	17	54	29	23	M16
7528-31	5 ⁰	28	21	25	74	34	25	M24

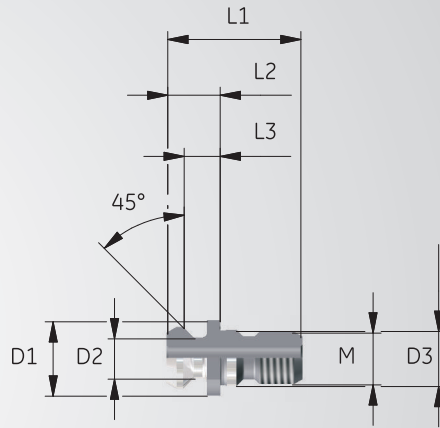
Pull stud ANSI-CAT 40 (Mazak) with through hole and sealing at the end face



Order No.	SK	D1	D2	D3	L1	L2	L3	M
7424-62	4 ⁰	18,796	12,446	17	41,3	16,3	11,2	M16
7424-61*	4 ⁰	18,796	12,446	17	44,5	19,3	14,03	M16

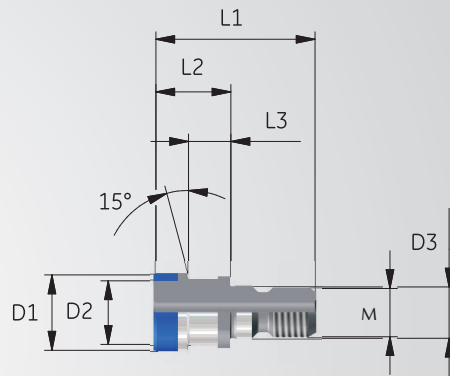
* 3mm extended.

Pull stud ANSI-CAT 50 (Mazak) with through hole and recess for O-Ring



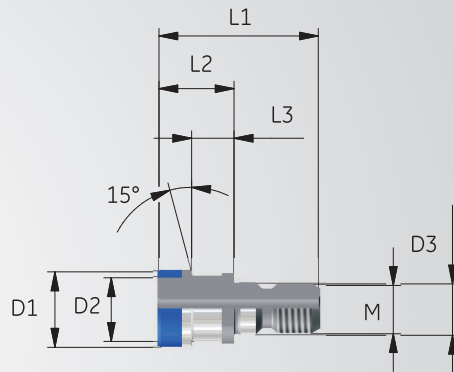
Order No.	SK	D1	D2	D3	L1	L2	L3	M
7424-31	50	28,95	20,82	25	65,4	25,4	17,78	M24

Pull stud Ott-Ringnut with through hole



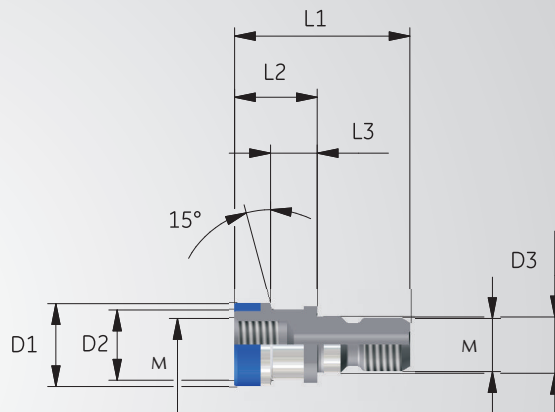
Order No.	SK	D1	D2	D3	L1	L2	L3	M
7125-41	40	25	21,1	17	53	25	13,6	M16
7125-42	50	39,3	32	25	65	25	13,35	M24

Pull stud Ott-Ringnut without through hole, sealed



Order No.	SK	D1	D2	D3	L1	L2	L3	M
7125-46	40	25	21,1	17	53	25	13,6	M16
7125-47	50	39,3	32	25	65	25	13,35	M24

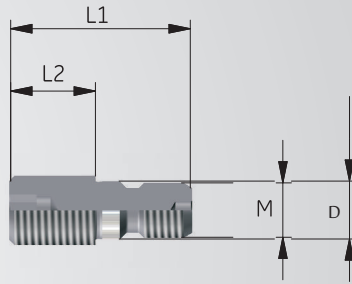
Pull stud Ott-Ringnut with internal thread



Order No.	SK	D1	D2	D3	L1	L2	L3	M
7125-11	40	25	21,1	17	53	25	13,6	M16
7125-12	50	39,3	32	25	65	25	13,35	M24

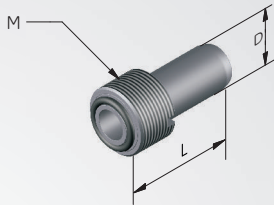
Pull stud with thread S20x2

ACCESSORIES



Order No.	SK	D	L1	L2	M
7428-01	40	17	41,3	16,3	M16

Coolant tube



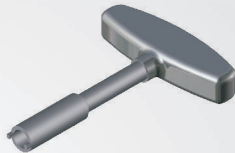
Order No.	HSK	M	D	L
603224	32	M10x1	6	26
604024	40	M12x1	8	29
605024	50	M16x1	10	33
606324	63	M18x1	12	36,5
608024	80	M20x1,5	14	39,5
610024	100	M24x1,5	16	43,5

Coolant tube CORUM



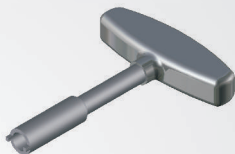
Order No.	C
304024	4
305024	5
306324	6
308024	8

Wrench for coolant tube



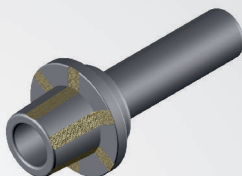
Order No.	HSK
603225	32
604025	40
605025	50
606325	63
608025	80
610025	100

Wrench for coolant tube CORUM



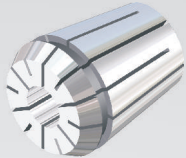
Order No.	C
304025	4
305025	5
306325	6
308025	8

Taper cleaner



Order No.	HSK
228032	32
228040	40
228050	50
228063	63
228080	80
228100	100

ER-collets – repeatable accuracy 5 μ



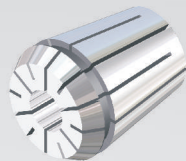
- High precision design with concentricity and repeat accuracy of 5 μ .
- All lengthwise edges deburred and rounded additionally. This protects the inner cone of the chuck and provides consistently high concentricity.
- Increased holding forces and rigidity by super-finish-version.

Order No.	ER	Diam.	increasing
-----------	----	-------	------------

124-0xxx	11	1,0-2,5	0,5
		3,0-7,0	0,5
124-1xxx	16	1,0-2,5	0,5
		3,0-10,0	1
124-2xxx	20	1,0-2,5	0,5
		3,0-13,0	1
124-3xxx	25	1,0-2,5	0,5
		3,0-16,0	1
124-4xxx	32	2,0-2,5	0,5
		3,0-20,0	1
124-5xxx	40	4,0-26,0	1

Please complete the item no. with the respective diameter of the collet, i.e. ER 16 with \varnothing 2,5 = 124-1025.

ER-collets – repeatable accuracy 2 μ



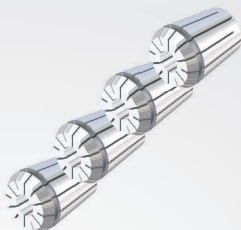
- Ultra high precision design with concentricity and repeat accuracy of 2 μ .
- All lengthwise edges deburred and rounded additionally. This protects the inner cone of the chuck and provides consistently high concentricity.
- Increased holding forces and rigidity by super-finish-version.

Order No.	ER	Diam.	increasing
-----------	----	-------	------------

131-1xxx	16	1,0	1
		2,0	1
		3,0-10,0	1
131-2xxx	20	1,0-13,0	1
131-3xxx	25	1,0	1
		2,0	1
		3,0-16,0	1
131-4xxx	32	2,0	1
		3,0-20,0	1

Please complete the item no. with the respective diameter of the collet, i.e. ER 16 with \varnothing 6,0 = 131-106.

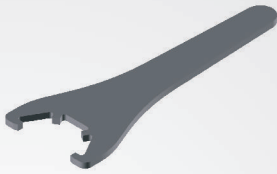
Collet set, repeatable accuracy 5 μ



Order No.	ER	Diam.	increasing	Pieces/Set
-----------	----	-------	------------	------------

124-0S	11	1,0-7,0	0,5	13
124-1S	16	1,0-10,0	1	10
124-2S	20	2,0-13,0	1	12
124-3S	25	2,0-16,0	1	15
124-4S	32	3,0-20,0	1	18
124-5S	40	4,0-26,0	1	23

Wrench

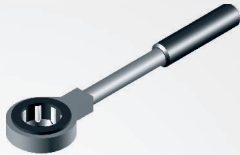


Order No.	ER	SW
162-02	11	17
162-03	16	25
162-04	20	30
162-05	25	-
162-06	32	-
162-07	40	-

Wrench ER Mini

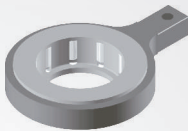
Order No.	ER
162-22	11
162-23	16
162-24	20
162-25	25

Ball bearing wrench ER one-piece



Order No.	ER
163-03	16
163-04	20
163-05	25
163-06	32

Ball bearing wrench ER square drive



Order No.	VK	ER
163-33	9x12	16
163-34	14x18	20
163-35	14x18	25
163-36	14x18	32

Torque wrench for ball bearing wrench attachment

Order No.	VK
163-83	9x12
163-85	14x18

Nuts ER

fig. 1

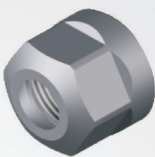
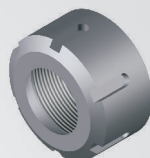


fig. 2



Order No.	ER	SW	fig.
107-10	11	17	1
107-20	16	25	1
107-30	20	30	1
107-40	25	-	2
107-50	32	-	2
107-60	40	-	2

Nuts ER Mini



Order No.	ER
107-10M	11
107-20M	16
107-30M	20
107-40M	25

Sealed ER-collets with jet nozzels »Cool Tool« – repeatable accuracy of collet 2 μ

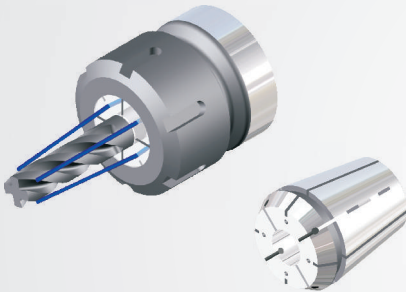


fig.: Collet with jet nozzels »Cool Tool« for tool holders without internal cooling.

- Highest runout accuracy combined with effective cooling and chip removal.
- Applicable up to 120 bar.
- Only shanks with nominal size can be used, tolerance h8.
- Shanks with lateral clamping flat can only be used limited. Which means the clamping flat has to be behind the sealing plug, otherwise the coolant can leak along the shank.

Order No.	ER	Diameter
129-3xx	25	4/6/8/10/12/14
129-4xx	32	4/6/8/10/12 14/16/18

Please complete the item number with the respective diameter of the collet, i.e. ER 25 with $\varnothing 8 = 129-308$.

Sealed ER-collets – repeatable accuracy of collet 5 μ

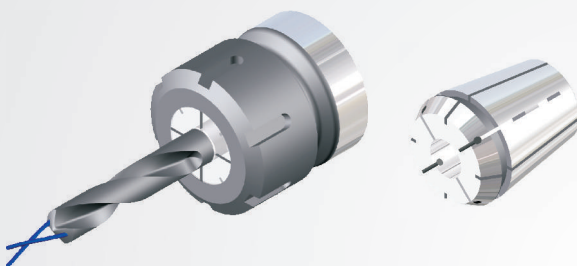


fig.: internal cooling with sealed collet.

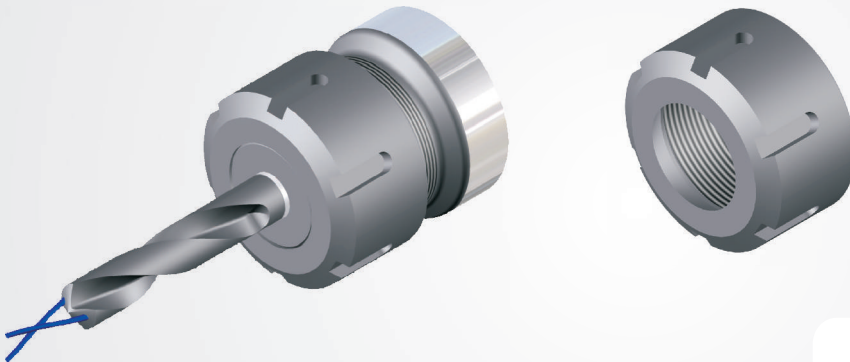
- For tools with internal coolant up to 120 bar!
- Only shanks with standard dimensions can be used, tolerance h8.
- Shanks with lateral clamping flat can only be used limited, which means the clamping flat has to be behind the sealing plug, otherwise the coolant can leak along the shank.

Order No.	ER	Diameter
128-1xx	16	3/4/6/8/10 5/7/9
128-2xx	20	3/4/6/8 10/12 5/7/9/11
128-3xx	25	4/6/8/10/12 14/16 3/5/7/9/11 13/15
128-4xx	32	6/8/10/12 14/16/18/20 3/5/7/9/11 13/15/17/19
128-5xx	40	6/8/10/12/14 16/18/20/25

Please complete the item number with the respective diameter of the collet, i.e. ER 25 with $\varnothing 10 = 128-310$.

Sealable ER -Nuts

- for using with sealing discs, for sealing conventional ER-collets.
- for tools with internal cooling up to 100 bar.



Please note:
Sealable clamping nuts are 5 mm longer than regular clamping nuts.
Due to this the overall length of the chucks also increases by 5 mm.

Order No.	ER	AF
107-21	16	25
107-31	20	30
107-41	25	-
107-51	32	-
107-61	40	-

Sealing discs for sealable ER clamping nuts

The sealing discs are available in steps of 0,5 mm.
This means, the discs can cover a range of 0,4 mm from normal size shank down to smaller diameters. For example, to clamp a drill of dia. 5,7 a disc of the size 6 mm will be used.

Please note! For high pressure of 100 bar, the size of the shank has to be the same as the nominal size of the disc.

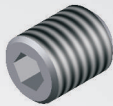
For ordering please complete the item number with the diameter of the disc,

- i.e.: sealing disc for ER 25 with diameter 5,5 = 107-41055
- i.e.: sealing disc for ER 32 with diameter 12 = 107-5112



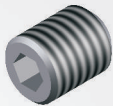
Order No.	ER
107-21XXX	16
107-31XXX	20
107-41XXX	25
107-51XXX	32
107-61XXX	40

Clamping screw for endmill holder (DIN 1835 B)



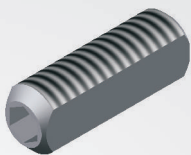
Order No.	for Ø	Thread
235-02	6	M6
235-03	8	M8
235-04	10	M10
235-05	12+14	M12
235-06	16+18	M14
235-07	20	M16
235-08	25	M18x2
235-09	32	M20x2

Clamping screw for slim endmill holder with ball head



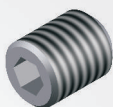
Order No.	for Ø	Thread
236-02	6-12	M6
236-03	14-20	M8

Length adjustment screw for slim endmill holder (bored)



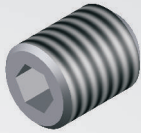
Order No.	for Ø	Thread
238-01	6	M5
238-02	8	M6
238-03	10	M8x1
238-04	12 + 14	M10x1
238-06	16 + 18	M12x1
238-08	20	M16x1

Plug screw for cool tool bore



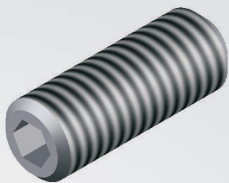
Order No.	for Ø	Thread
242-01	6-32	M3

Clamping screw for Whistle-Notch DIN 1835B



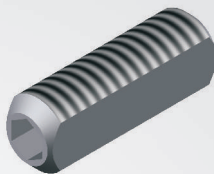
Order No.	for Ø	Thread
235-02	6	M6
235-03	8	M8
235-04	10	M10
235-05	12+14	M12
235-06	16+18	M14
235-07	20	M16
235-08	25	M18x2
235-09	32	M20x2

Length adjustment screw for Whistle-Notch (bored)



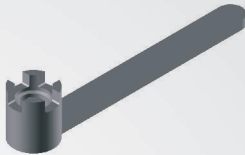
Order No.	for Ø	Thread
237-01	6	M5
237-02	8	M6
237-03	10	M8
237-04	12	M10
237-05	14	M10
237-06	16	M12
237-07	18	M12
237-08	20	M16
237-09	25+32	M20

Length adjustment screw for shrink fit holder (bored)



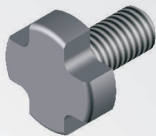
Order No.	for Ø	Thread
238-01	6	M5
238-02	8	M6
238-03	10	M8x1
238-04	12+14	M10x1
238-06	16+18	M12x1
238-08	20+25+32	M16x1

Wrench for shell mill holder



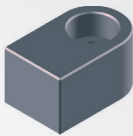
Order No.	for Ø
226-03	16
226-04	22
226-05	27
226-06	32
226-07	40
226-08	50
226-09	60

Clamping screw for shell mill holder



Order No.	for Ø	Thread
225-03	16	M8
225-04	22	M10
225-05	27	M12
225-06	32	M16
225-07	40	M20
225-08	50	M24
225-09	60	M30

Drive key half-round for shell mill holder



Order No.	for Ø
240-51	16
240-52	22
240-53	27
240-54	32
240-55	40

Drive key for shell mill holder



Order No.	for Ø
240-01	16
240-02	22
240-03	27
240-04	32
240-05	40
240-06	50
240-07	60

SK40 SHORT for Ø

240-01	16
240-02	22
240-43	27
240-04	32
240-05	40

Drive key for CORUM



Order No. C4 for Ø

240-01	16
240-42	22

C5 for Ø

240-01	16
240-02	22
240-43	27
240-44	32

C6 for Ø

240-01	16
240-02	22
240-43	27
240-44	32

C8 for Ø

240-01	16
240-02	22
240-43	27
240-44	32

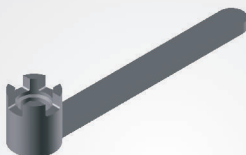
Drive key screws



Order No. for Ø

240-31	16
240-32	22
240-33	27
240-34	32
240-35	40
240-36	50
240-37	60

Wrench for combi shell mill holder



Order No. for Ø

226-03	16
226-04	22
226-05	27
226-06	32
226-07	40

Clamping screw for combi shell mill holder



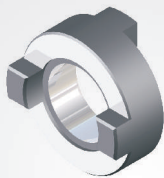
Order No.	for Ø	Thread
225-03	16	M8
225-04	22	M10
225-05	27	M12
225-06	32	M16
225-07	40	M20

Adjustment spring



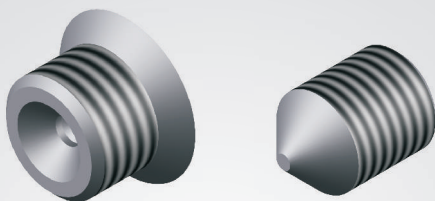
Order No.	for Ø
223-02	16
223-03	22
223-04	27
223-05	32
223-06	40

Drive key



Order No.	for Ø
224-03	16
224-04	22
224-05	27
224-06	32
224-07	40

Spare parts for ABS holders



Clamping set consisting of tapered screw and clamping screw.

Order No.	ABS
400-01	25
400-02	32
400-03	40
400-04	50
400-05	63
400-06	80
400-07	100