

Introduction

Order information, terms and conditions.....	2
Index.....	3

▲ Hydraulic chucks

Information about hydraulic chucks.....	6
System overview.....	7
The Plus-membrane.....	8
Hydrochucks - ISO 7388 / DIN 69871.....	10
Hydrochucks - BT-MAS.....	16
Hydrochucks - HSK-A.....	22
Hydrochucks - CAT.....	29
Hydrochucks - Inch sizes.....	34
Reduction sleeves and accessories.....	43
Operating instructions.....	46

▲ Tapping devices

Tapping technology.....	50
Tapping device - CGS / CGS-C.....	52
Tapping device - ST / STF.....	55
Tapping device - GS.....	58
Tapping device - SA.....	59
Tapping device - SyncTapper.....	60
Tap holders.....	61
Accessories.....	88
Operating instructions.....	90

▲ High speed spindles

Overview, spindles and converters.....	96
Tool-motors.....	98
Air-cooled spindles.....	102
Water-cooled spindles.....	110
Frequency converters.....	122
Accessories.....	124
Deburring machine DB-Matic.....	126

▲ Jahrls Quick-change chucks

Jahrls quick-change chucks.....	130
---------------------------------	-----

Hydrochucks



Quick facts about SPV Spintec's hydrochucks

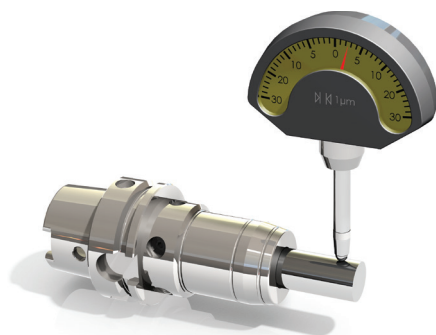
- High clamping force, 320 Nm at a Ø20 mm shank in a standard hydrochuck.
- Runout accuracy better than 0,003 mm (see below).
- Quick assembly method of the tool. No special equipment is needed.
- Standard balanced for 10 000 RPM (G6.3). Can be supplied fine balanced to 30 000 RPM (G2.5)
- The widest range of hydrochucks on the market. Available for all applications.
- If our standard assortment doesn't cover your needs, we can design custom chucks just for you.

Benefits of using SPV Spintec's hydrochucks

- Up to 50% longer tool lifetime compared to conventional tool holder systems.
- Increased surface finish, thanks to the solid fastening of the tool shaft.
- Permits machining with much closer tolerances.
- Quicker and simpler tool changes.

Runout accuracy

All of our different models of hydrochucks are made with a runout accuracy better than 0,003 mm. This allows for precision machining with closer tolerances. It also extends the tool lifetime



Our different types of hydrochucks



▲ **HCF / HCF+**
Short standard chuck



▲ **HCFL / HCFL+**
Standard chuck with extended length



▲ **HCP+**
Pen-chuck in two different lengths



▲ **HCPK+**
Long tapered chuck

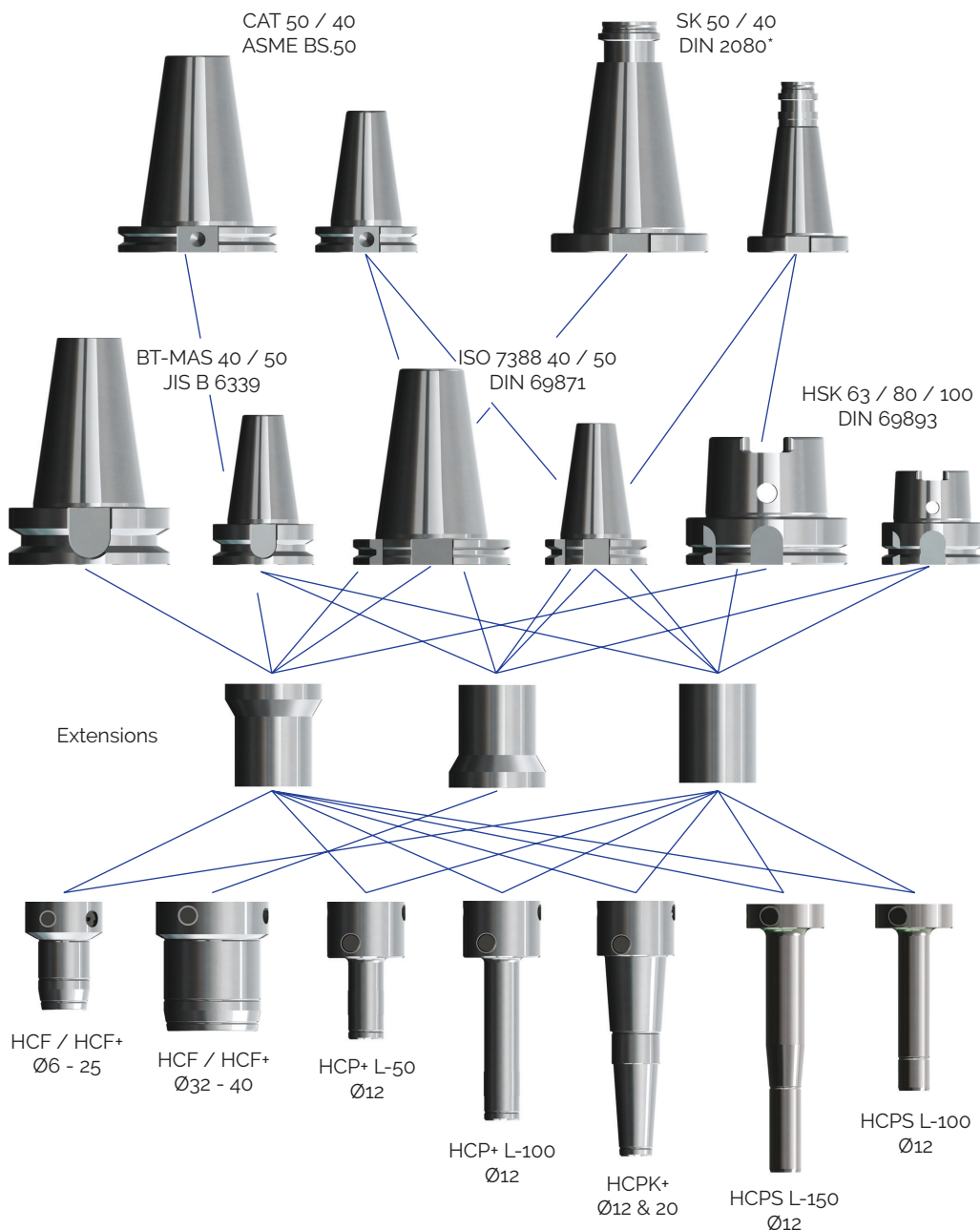


▲ **HCK+**
Extra short and powerful chuck



▲ **HCPS**
Extra long and narrow pen-chuck

Optional combinations for SPV Spintec hydrochucks



* Hydrochucks with DIN 2080 available on request.
Please contact us for more information.

HYDROCHUCKS

The Plus-membrane

Facts about SPV Spintec's developed milling-membrane - The Plus-membrane [+]

SPV Spintec's hexagonal milling membrane (+membrane) permits though, vibration free milling. A highly stable tool anchorage makes it possible to machine at greater feed rates and with greater axial and radial depths of cut than normally recommended.

Limitations of conventional hydrochucks

The limitation in machining with hydraulic chucks has frequently been the use of recommended cutting data for heavy duty milling.

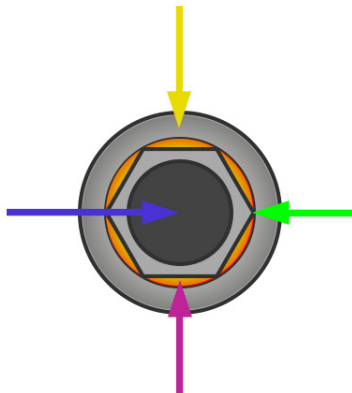
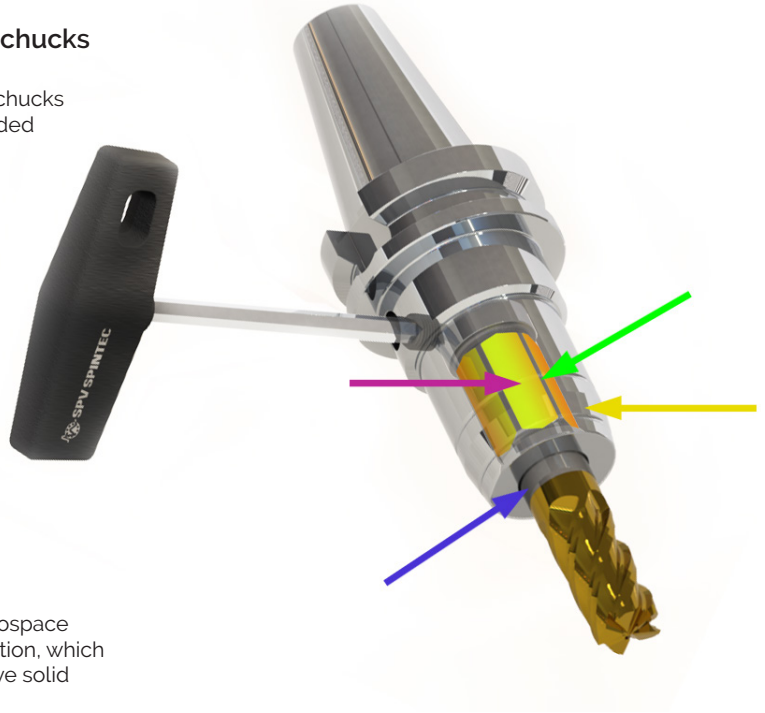
Customers have often been obliged to purchase specially shortened hydraulic milling-chucks with increased torque when they have needed to remove a large amount of material in the shortest possible time.

We have eliminated this limitation and offer our customers the opportunity of using our developed hydraulic milling-membrane for both milling and other operations, resulting in a better overall economy.

History of development

The development started when British Aerospace in England had problems with milling vibration, which lead to very short lifetime for their expensive solid carbide cutting tools.

British Aerospace tried several commercially available retention systems but didn't find a satisfactory solution. At that time SPV developed the hydrochucks with the hexagonal membrane which was found in tests at BA to multiply the period of contact several times over. In some cases it even enabled them to double both radial and axial cutting depths.



Yellow arrow

Outer body of the hydrochuck.

Blue arrow

The cutting tool shaft (drill, cutter etc.)

Purple arrow

The hydraulic chamber which combined with high hydraulic pressure provides a stable anchorage. The long, linear, thin wall gripping-surfaces protects the tool from flexing.

Green arrow

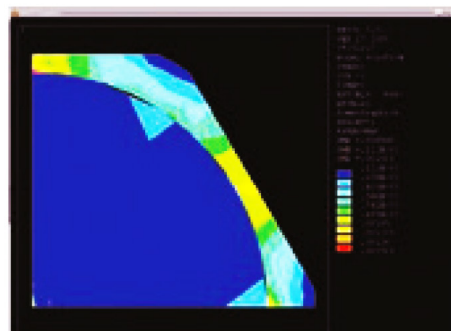
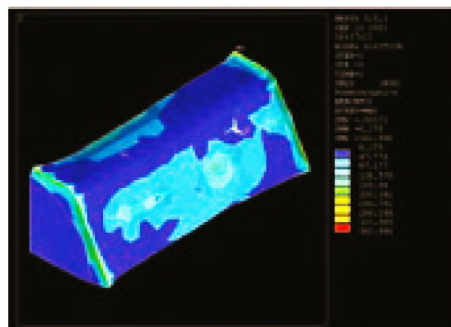
The remaining material between the hydraulic chambers creates reinforcement ribs, which minimize vibrations and stabilizes the membrane.

Analysis

A calculation and simulation of loading cases using the Finite Element Method (FEM) from 3D-models was done in collaboration with the Mälardalen University College in Eskilstuna. This was to verify the results offered by the new design and to make a comparison with the traditional cylindrical membrande design in hydrochucks.

Testing

A trial was done in the spring of 2003 at SECO tools in Fagersta, Sweden to attempt to verify any limits there might be on cutting data. An extract from the test report (P-1006, 2003-04-29 at SECO, Fagersta) shows the following.



- **Test sample:**
Hydrochucks HCF+ with hexagonal membrane
- **Machining tools:**
Solid 3-blade carbide metal cutters made by Jabro, with Tribon coating.
Dimensions: Ø10 mm, Ø12 mm and Ø20 mm.
- **Work piece material:**
Square bar, 75 x 75 mm made from heat threatable steel SS 2244-05, hardness 270 - 315 HB.

Test summary

The results show that the hydrochucks equipped with a hexagonal membrane (The Plus-membrane) can manage up to twice the recommended cutting depth (both radial and axial) without tool chipping or vibrations that affects the surface finish. In practice, this means that the possible swarf yield has been multiplied by four.

HCF+ chucks

- Hydrochucks HCF+ with tools Ø10, Ø12 and Ø20 can manage the cutting data in Jabro's recommendation for coarse slab milling.
- 2 x the recommended axial cutting depth is quite OK, without any vibrations arising that could damage the cutting tool.
- 2 x the recommended radial cutting depth is quite OK.

Specifications

Coarse slab milling with rotational speed and feed rate to Jabro's recommendations:

Recommended depth of cut:
axial: 1 x tool diameter
radial: 0,4 x tool diameter

Results in a chip area of:
 $1 \times D \text{ mm} \times 0,4 \times D \text{ mm} = 0,4 \times D \text{ mm}^2$



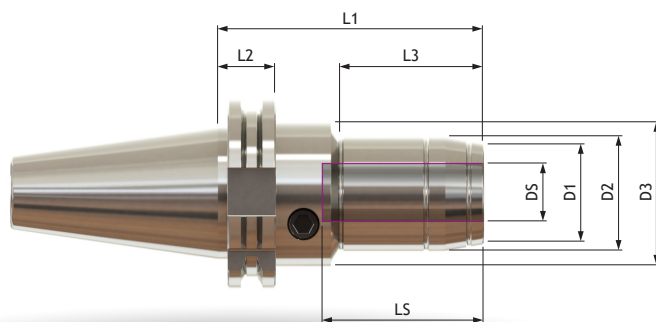
Coarse slab milling with rotational speed and feed rate to Jabro's recommendations:

HCF+ tests with twice the recommended depth of cut, axial and radially.

Results in a chip area of:
 $1 \times D \text{ mm} \times 0,4 \times D \text{ mm} = 0,4 \times D \text{ mm}^2$



HCF / HCF+



For chuck with Plus-membrane, specify + after art.no

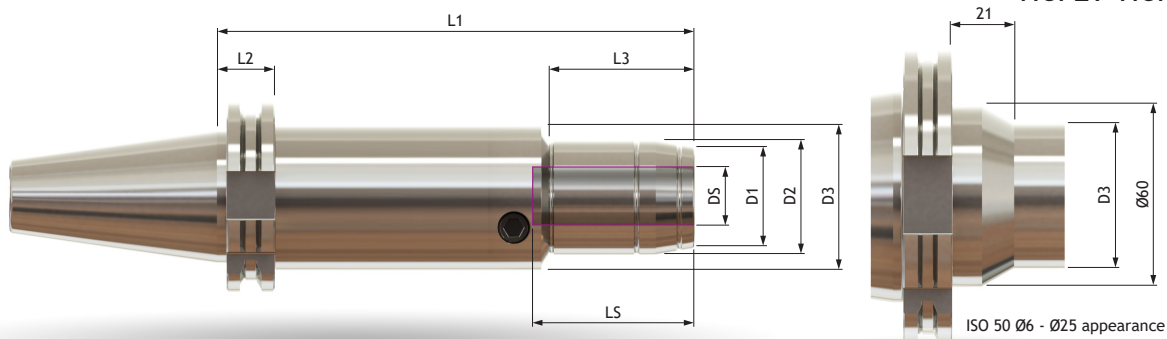
D5 Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	ISO 40	21,5	26	49,5	80,5	19,1	29,5	37,5	54800
	ISO 50	21,5	26	48	87	19,1	43,5	37,5	56630
8	ISO 40	23,5	28	49,5	80,5	19,1	30	37,5	54801
	ISO 50	23,5	28	48	87	19,1	43,5	37,5	56631
10	ISO 40	25,5	30	49,5	80,5	19,1	31	42,5	54802
	ISO 50	25,5	30	48	87	19,1	43,5	42,5	56632
12 	ISO 40	27,5	32	49,5	80,5	19,1	31,5	47,5	54803
	ISO 45	27,5	32	48	87	19,1	44,5	47,5	56803
	ISO 50	27,5	32	48	87	19,1	44,5	47,5	56633
14	ISO 40	27,5	32	49,5	80,5	19,1	31,5	47,5	54804
	ISO 50	29,5	32	48	87	19,1	44,5	47,5	56634
16	ISO 40	34,5	38	49,5	80,5	19,1	33	51	54805
	ISO 50	33,5	38	48	87	19,1	47,5	52,5	56635
18	ISO 40	38	42	49,5	80,5	19,1	34	51	54806
	ISO 50	35,5	40	48	87	19,1	47,5	52,5	56636
20 	ISO 40	38	42	49,5	80,5	19,1	34	51	54807
	ISO 45	37,5	42	48	87	19,1	47,5	52,5	56807
	ISO 50	37,5	42	48	87	19,1	47,5	52,5	56637
25	ISO 40	43,5	48	48	91	19,1	71	55	56628
	ISO 50	43,5	48	48	91	19,1	71	55	56638
32 	ISO 40	55,5	60	70	120	19,1	57	65	56629
	ISO 50	55,5	60	70	100	19,1	57	65	56639
40 *	ISO 50	65	70	70	105	19,1	86	70	56113+

 = dimension compatible with reduction sleeve.

* = Ø40 is only available with ISO-50 and Plus-membrane.

Other dimensions with ISO-45 on request.

HCFL / HCFL+



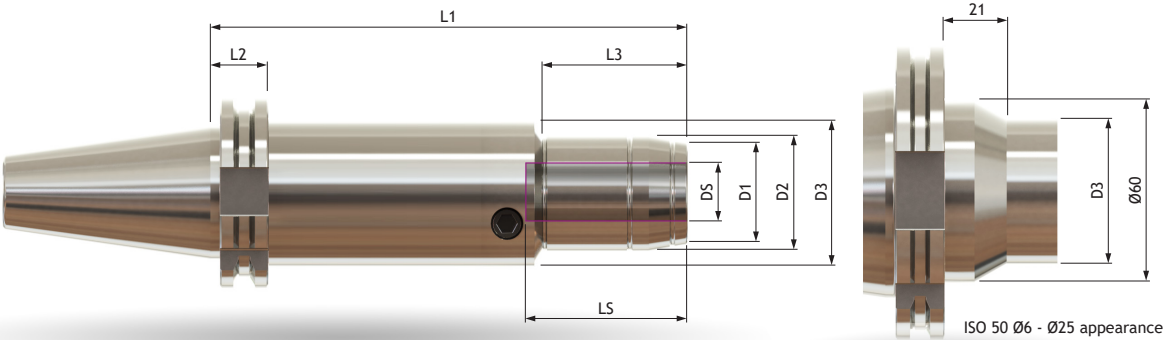
For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	ISO 40	21,5	26	48	130	19,1	43,5	37,5	56700
	ISO 40	21,5	26	48	130 - 480	19,1	43,5	37,5	▲
	ISO 50	21,5	26	48	160	19,1	43,5	37,5	56710
	ISO 50	21,5	26	48	160 - 445	19,1	43,5	37,5	▲
8	ISO 40	23,5	28	48	130	19,1	43,5	37,5	56701
	ISO 40	23,5	28	48	130 - 480	19,1	43,5	37,5	▲
	ISO 50	23,5	28	48	160	19,1	43,5	37,5	56711
	ISO 50	23,5	28	48	160 - 445	19,1	43,5	37,5	▲
10	ISO 40	25,5	30	48	130	19,1	43,5	42,5	56702
	ISO 40	25,5	30	48	130 - 480	19,1	43,5	42,5	▲
	ISO 50	25,5	30	48	160	19,1	43,5	42,5	56712
	ISO 50	25,5	30	48	160 - 445	19,1	43,5	42,5	▲
12 ▴	ISO 40	27,5	32	48	130	19,1	44,5	47,5	56703
	ISO 40	27,5	32	48	130 - 480	19,1	44,5	47,5	▲
	ISO 45	27,5	32	48	160	19,1	44,5	47,5	56753
	ISO 45	27,5	32	48	160 - 445	19,1	44,5	47,5	▲
	ISO 50	27,5	32	48	160	19,1	44,5	47,5	56713
	ISO 50	27,5	32	48	160 - 445	19,1	44,5	47,5	▲
14	ISO 40	29,5	34	48	130	19,1	44,5	47,5	56704
	ISO 40	29,5	34	48	130 - 480	19,1	44,5	47,5	▲
	ISO 50	29,5	34	48	160	19,1	44,5	47,5	56714
	ISO 50	29,5	34	48	160 - 445	19,1	44,5	47,5	▲
16	ISO 40	33,5	38	48	130	19,1	47,5	52,5	56705
	ISO 40	33,5	38	48	130 - 480	19,1	47,5	52,5	▲
	ISO 50	33,5	38	48	160	19,1	47,5	52,5	56715
	ISO 50	33,5	38	48	160 - 445	19,1	47,5	52,5	▲

▴ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).

HCFL / HCFL+

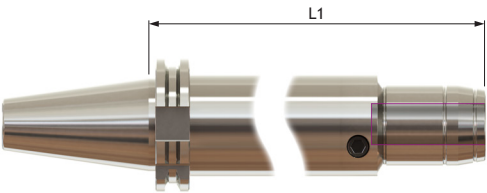


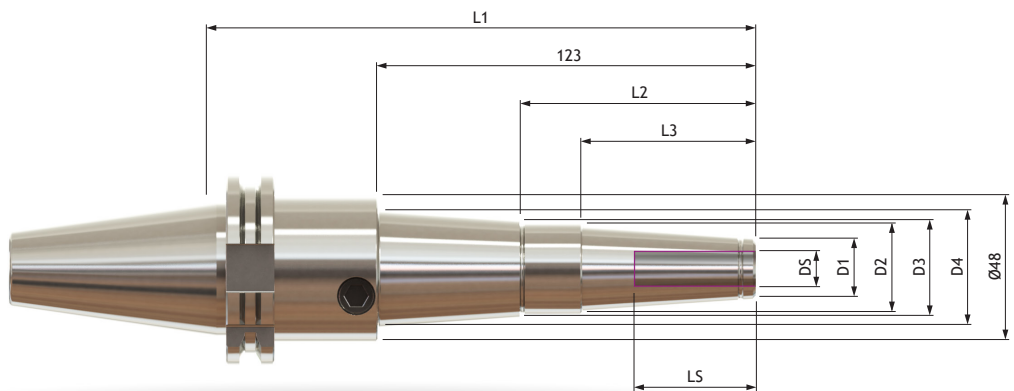
For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
18	ISO 40	35,5	40	48	130	19,1	47,5	52,5	56706
	ISO 40	35,5	40	48	130 - 480	19,1	47,5	52,5	▲
	ISO 50	35,5	40	48	160	19,1	47,5	52,5	56716
	ISO 50	35,5	40	48	160 - 445	19,1	47,5	52,5	▲
20 ▲	ISO 40	37,5	42	48	130	19,1	47,5	52,5	56707
	ISO 40	37,5	42	48	130 - 480	19,1	47,5	52,5	▲
	ISO 45	37,5	42	48	160	19,1	47,5	52,5	56757
	ISO 45	37,5	42	48	160 - 445	19,1	47,5	52,5	▲
	ISO 50	37,5	42	48	160	19,1	47,5	52,5	56717
	ISO 50	37,5	42	48	160 - 445	19,1	47,5	52,5	▲
25	ISO 40	43,5	48	48	134	19,1	114	55	56708
	ISO 40	43,5	48	48	130 - 480	19,1	-----	55	▲
	ISO 50	43,5	48	48	160	19,1	123	55	56718
	ISO 50	43,5	48	48	160 - 445	19,1	-----	55	▲
32 ▲	ISO 40	55,5	60	70	140	19,1	57	65	56709
	ISO 40	55,5	60	70	140 - 480	19,1	57	65	▲
	ISO 50	55,5	60	70	140	19,1	57	65	56719
	ISO 50	55,5	60	70	140 - 445	19,1	57	65	▲

▲ = dimension compatible with reduction sleeve. ▲ = Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCFL / HCFL+. Specify Art.no / L1 on order.



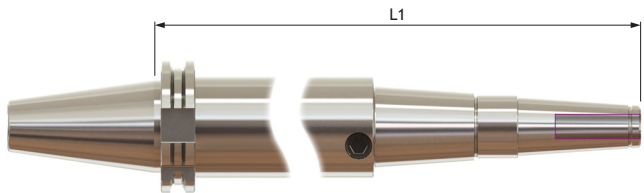


DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Art.no
12	ISO 40	20	30	32	40,5	177	76,8	57	44	59183+
	ISO 40	20	30	32	40,5	217 - 480	76,8	57	44	
	ISO 50	20	30	32	40,5	177	76,8	57	44	59193+
	ISO 50	20	30	32	40,5	217 - 445	76,8	57	44	
20	ISO 40	32	39	42	50,5	177	74,8	55	52	59187+
	ISO 40	32	39	42	50,5	217 - 480	74,8	55	52	
	ISO 50	32	39	42	50,5	177	74,8	55	52	59197+
	ISO 50	32	39	42	50,5	214 - 445	74,8	55	52	

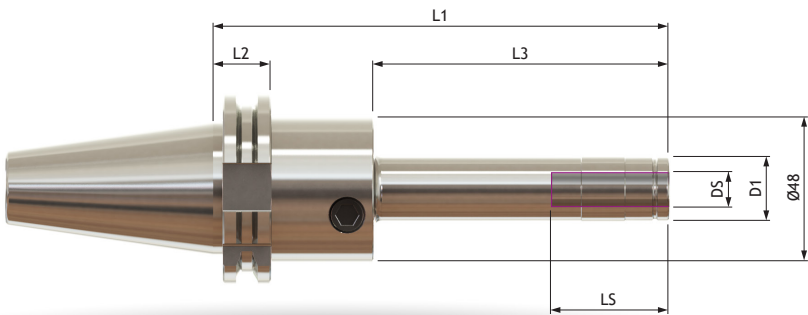
= dimension compatible with reduction sleeve.

= Specify art.no / L1 on order (L1 = length of your choice).

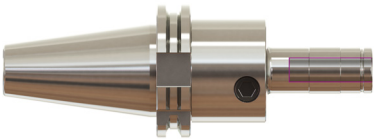
Choose your own length (L1) of HCPK+. Specify Art.no / L1 on order.



HCP+



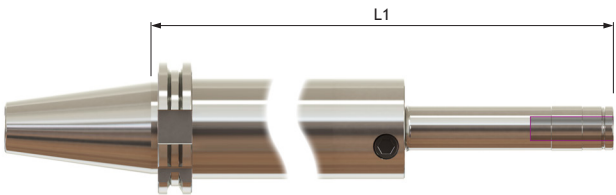
Short model



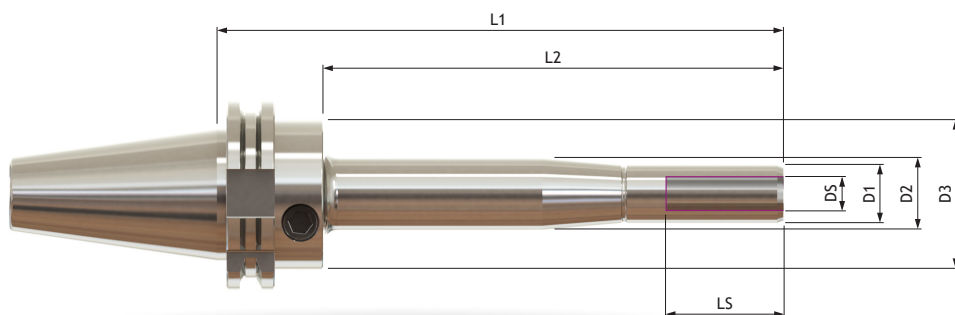
DS Ømm	Mount type.	D1 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12 	ISO 40	22,5	105	19,1	50	44	59003+
	ISO 40	22,5	155	19,1	100	44	59013+
	ISO 50	22,5	105	19,1	50	44	59053+
	ISO 50	22,5	155	19,1	100	44	59063+

 = dimension compatible with reduction sleeve.

Choose your own length (L1) of HCP+. Specify Art.no / L1 on order.



HCPS



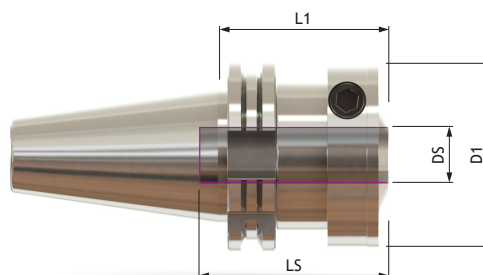
Short model



DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	ISO 40	19,5	-----	48	135	100	-----	42	59623
	ISO 50	19,5	-----	48	135	100	-----	42	59633
	ISO 40	19,5	24	48	185	150	52	42	59723
	ISO 50	19,5	24	48	185	150	52	42	59733

= dimension compatible with reduction sleeve.

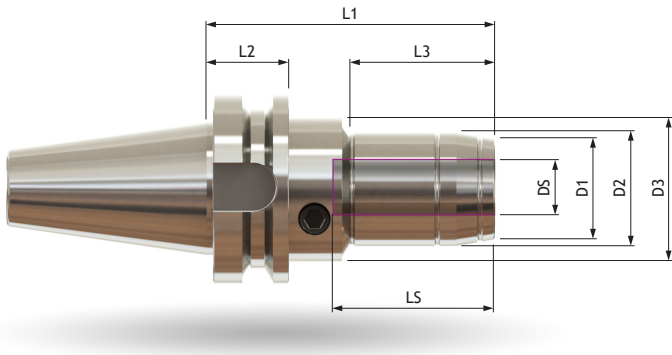
HCK+



HCK+ has an extended membrane which provides 600 Nm compared to 320 Nm on a standard Ø20 mm chuck.

DS Ømm	Mount type.	D1 Ømm	L1 mm	L5 mm	Art.no
20	ISO 40	61	56	70	66122+

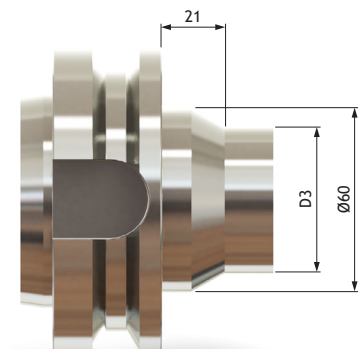
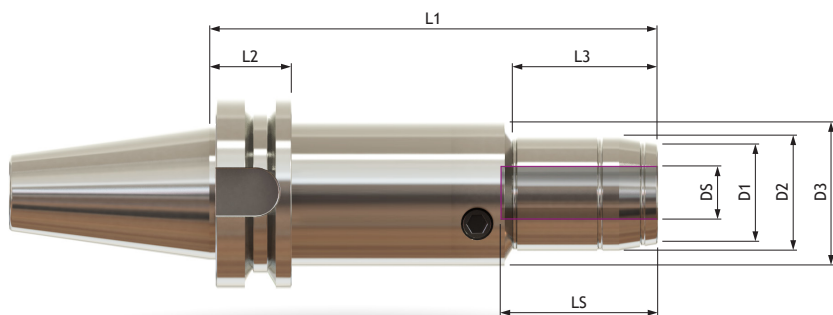
HCF / HCF+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	BT 40	21,5	26	48	95	27	43,5	37,5	56640
	BT 50	21,5	26	48	106	38	43,5	37,5	56650
8	BT 40	23,5	28	48	95	27	43,5	37,5	56641
	BT 50	23,5	28	48	106	38	43,5	37,5	56651
10	BT 40	25,5	30	48	95	27	43,5	42,5	56642
	BT 50	25,5	30	48	106	38	43,5	42,5	56652
12	BT 40	27,5	32	48	95	27	44,5	47,5	56643
	BT 50	27,5	32	48	106	38	44,5	47,5	56653
14	BT 40	29,5	34	48	95	27	44,5	47,5	56644
	BT 50	29,5	34	48	106	38	44,5	47,5	56654
16	BT 40	33,5	38	48	95	27	47,5	52,5	56645
	BT 50	33,5	38	48	106	38	47,5	52,5	56655
18	BT 40	35,5	40	48	95	27	47,5	52,5	56646
	BT 50	35,5	40	48	106	38	47,5	52,5	56656
20	BT 40	37,5	42	48	95	27	47,5	52,5	56647
	BT 50	37,5	42	48	106	38	47,5	52,5	56657
25	BT 40	43,5	48	48	99	27	72	55	56648
	BT 50	43,5	48	48	110	38	72	55	56658
32	BT 40	55,5	60	70	108	27	57	65	56649
	BT 50	55,5	60	70	119	38	57	65	56659
40 *	BT 50	65	70	70	124	38	85	70	56114+

= dimension compatible with reduction sleeve.
* = Ø40 is only available with BT-50 and Plus-membrane.



BT 50 Ø6 - Ø25 appearance

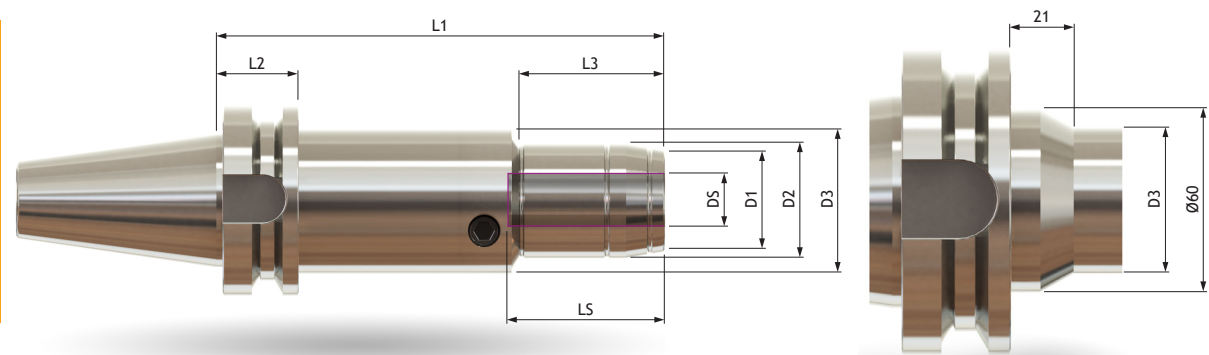
For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	BT 40	21,5	26	48	135	27	43,5	37,5	56720
	BT 40	21,5	26	48	135 - 485	27	43,5	37,5	▲
	BT 50	21,5	26	48	160	38	43,5	37,5	56730
	BT 50	21,5	26	48	160 - 445	38	43,5	37,5	▲
8	BT 40	23,5	28	48	135	27	43,5	37,5	56721
	BT 40	23,5	28	48	135 - 485	27	43,5	37,5	▲
	BT 50	23,5	28	48	160	38	43,5	37,5	56731
	BT 50	23,5	28	48	160 - 445	38	43,5	37,5	▲
10	BT 40	25,5	30	48	135	27	43,5	42,5	56722
	BT 40	25,5	30	48	135 - 485	27	43,5	42,5	▲
	BT 50	25,5	30	48	160	38	43,5	42,5	56732
	BT 50	25,5	30	48	160 - 445	38	43,5	42,5	▲
12 ▲	BT 40	27,5	32	48	135	27	44,5	47,5	56723
	BT 40	27,5	32	48	135 - 485	27	44,5	47,5	▲
	BT 50	27,5	32	48	160	38	44,5	47,5	56733
	BT 50	27,5	32	48	160 - 445	38	44,5	47,5	▲
14	BT 40	29,5	34	48	135	27	44,5	47,5	56724
	BT 40	29,5	34	48	135 - 485	27	44,5	47,5	▲
	BT 50	29,5	34	48	160	38	44,5	47,5	56734
	BT 50	29,5	34	48	160 - 445	38	44,5	47,5	▲
16	BT 40	33,5	38	48	135	27	47,5	52,5	56725
	BT 40	33,5	38	48	135 - 485	27	47,5	52,5	▲
	BT 50	33,5	38	48	160	38	47,5	52,5	56735
	BT 50	33,5	38	48	160 - 445	38	47,5	52,5	▲

▲ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).

HCFL / HCFL+



For chuck with Plus-membrane, specify + after art.no

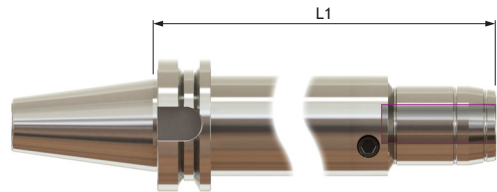
BT 50 Ø6 - Ø25 appearance

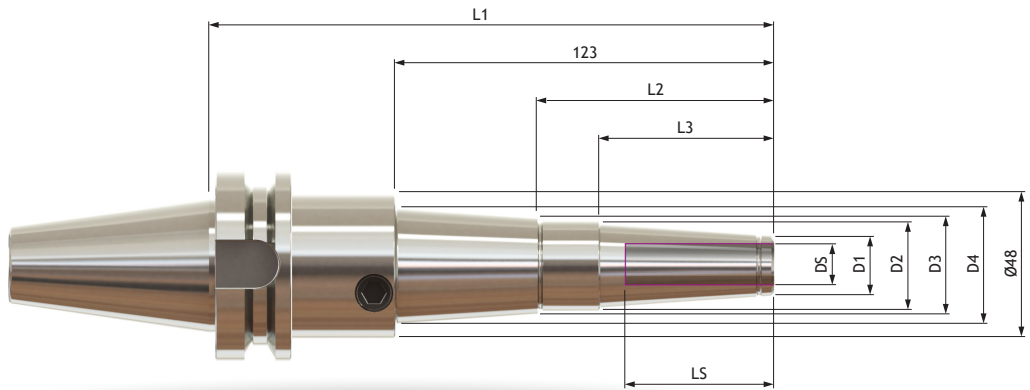
DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
18	BT 40	35,5	40	48	135	27	47,5	52,5	56726
	BT 40	35,5	40	48	135 - 485	27	47,5	52,5	▲
	BT 50	35,5	40	48	160	38	47,5	52,5	56736
	BT 50	35,5	40	48	160 - 445	38	47,5	52,5	▲
20 ▲	BT 40	37,5	42	48	135	27	47,5	52,5	56727
	BT 40	37,5	42	48	135 - 485	27	47,5	52,5	▲
	BT 50	37,5	42	48	160	38	47,5	52,5	56737
	BT 50	37,5	42	48	160 - 445	38	47,5	52,5	▲
25	BT 40	43,5	48	48	139	27	111	55	56728
	BT 40	43,5	48	48	139 - 485	27	-----	55	▲
	BT 50	43,5	48	48	164	38	105	55	56738
	BT 50	43,5	48	48	164 - 445	38	-----	55	▲
32 ▲	BT 40	55,5	60	70	148	27	57	65	56729
	BT 40	55,5	60	70	148 - 485	27	57	65	▲
	BT 50	55,5	60	70	159	38	57	65	56739
	BT 50	55,5	60	70	159 - 445	38	57	65	▲

▲ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCFL / HCFL+. Specify Art.no / L1 on order.



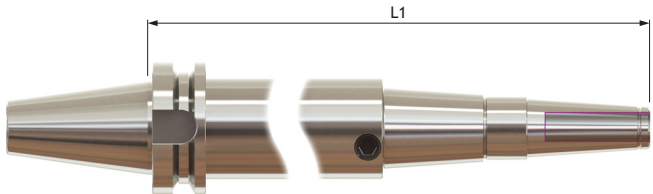


DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Art.no
12	BT 40	20	30	32	40,5	185	76,8	57	44	59143+
	BT 40	20	30	32	40,5	225 - 485	76,8	57	44	
	BT 50	20	30	32	40,5	196	76,8	57	44	59173+
	BT 50	20	30	32	40,5	236 - 445	76,8	57	44	
20	BT 40	32	39	42	50,5	185	74,8	55	52	59147+
	BT 40	32	39	42	50,5	225 - 485	74,8	55	52	
	BT 50	32	39	42	50,5	196	74,8	55	52	59177+
	BT 50	32	39	42	50,5	236 - 445	74,8	55	52	

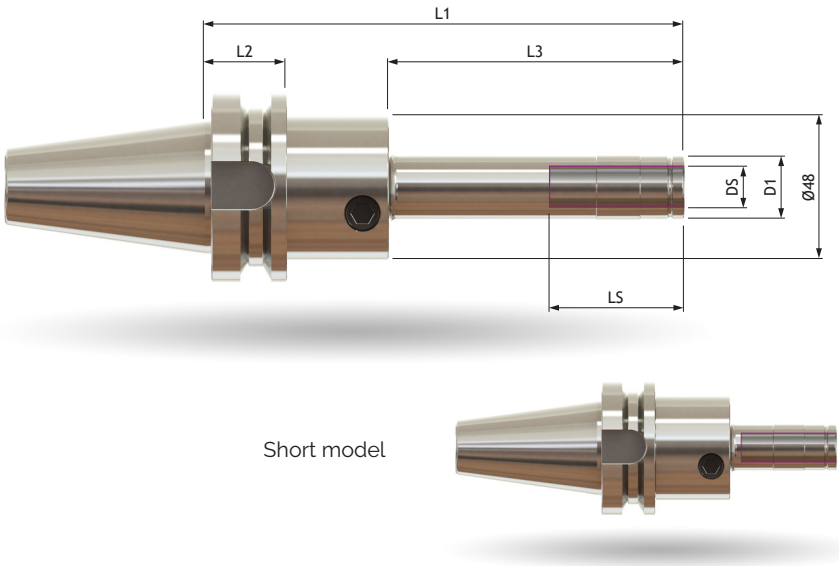
= dimension compatible with reduction sleeve.

= Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCPK+. Specify Art.no / L1 on order.



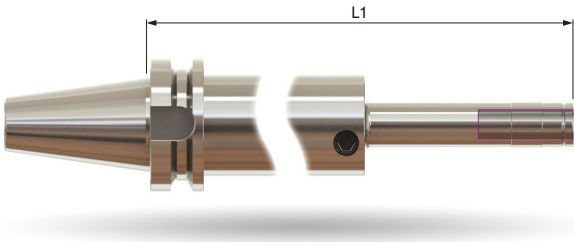
HCP+

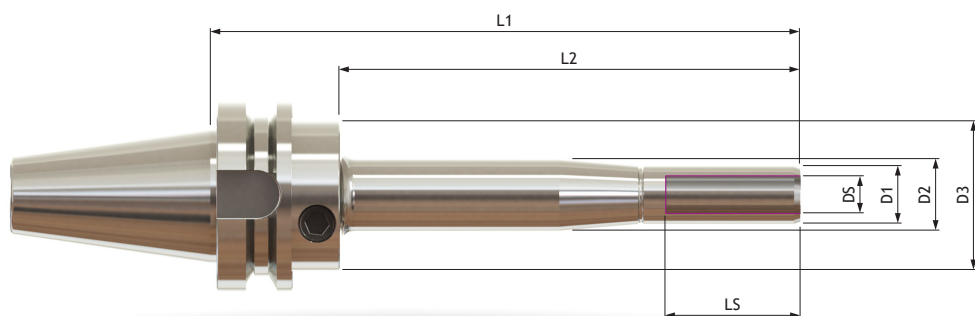


DS Ømm	Mount type.	D1 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12 	BT 40	22,5	113	27	50	44	59103+
	BT 40	22,5	163	27	100	44	59113+
	BT 50	22,5	124	38	50	44	59153+
	BT 50	22,5	174	38	100	44	59163+

 = dimension compatible with reduction sleeve.

Choose your own length (L1) of HCP+. Specify Art.no / L1 on order.



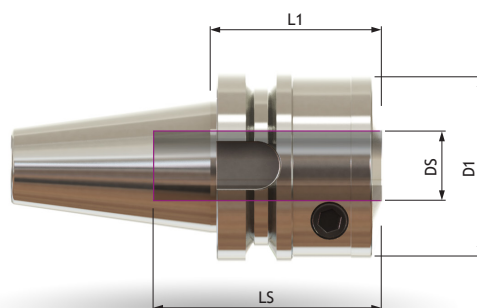


Short model



DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	BT 40	19,5	-----	48	143	100	-----	42	59603
	BT 50	19,5	-----	48	154	100	-----	42	59613
	BT 40	19,5	24	48	193	150	52	42	59703
	BT 50	19,5	24	48	204	150	52	42	59713

= dimension compatible with reduction sleeve.

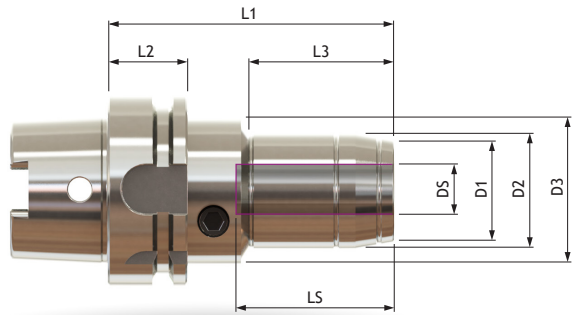


HCK+

HCK+ has an extended membrane which provides 600 Nm compared to 320 Nm on a standard Ø20 mm chuck.

DS Ømm	Mount type.	D1 Ømm	L1 mm	L5 mm	Art.no
20	BT 40	61	56	52,5	66125+

HCF / HCF+

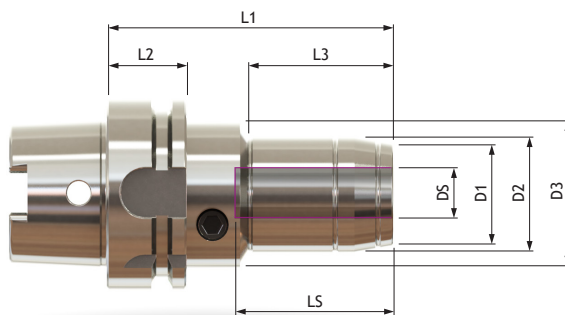


For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	HSK-A63	21,5	26	50	71,5	26	24,5	37,5	54870
	HSK-A80	21,5	26	48	127	26	43,5	37,5	56670
	HSK-A100	21,5	26	48	140	29	43,5	37,5	56680
8	HSK-A63	24	28	50	71,5	26	25,5	37,5	54871
	HSK-A80	23,5	28	48	127	26	43,5	37,5	56671
	HSK-A100	23,5	28	48	140	29	43,5	37,5	56681
10	HSK-A63	26	30	50	81,5	26	35,5	42,5	54872
	HSK-A80	25,5	30	48	127	26	43,5	42,5	56672
	HSK-A100	25,5	30	48	140	29	43,5	42,5	56682
12	HSK-A40	28	32	42	94,5	20	41,5	47,5	54853
	HSK-A50	28	32	42	86,5	26	43,5	47,5	54863
	HSK-A63	28	32	50	86,5	26	41,5	47,5	54873
	HSK-A80	27,5	32	48	127	26	44,5	47,5	56673
	HSK-A100	27,5	32	48	140	29	44,5	47,5	56683
14	HSK-A63	30	34	50	86,5	26	41,5	47,5	54874
	HSK-A80	29,5	34	48	127	26	44,5	47,5	56674
	HSK-A100	29,5	34	48	140	29	44,5	47,5	56684
16	HSK-A63	34	38	50	91,5	26	48	52,5	54875
	HSK-A80	33,5	38	48	127	26	47,5	52,5	56675
	HSK-A100	33,5	38	48	140	29	47,5	52,5	56685
18	HSK-A63	35,5	40	50	91,5	26	48,5	52,5	54876
	HSK-A80	35,5	40	48	127	26	47,5	52,5	56676
	HSK-A100	35,5	40	48	140	29	47,5	52,5	56686

= dimension compatible with reduction sleeve.

Other dimensions (DS) with HSK-40 and HSK-50 on request..



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
20	HSK-A50	38	42	42	91,5	20	65,5	51	54867
	HSK-A63	38	42	50	91,5	26	49,5	52,5	54877
	HSK-A80	37,5	42	48	127	26	47,5	52,5	56677
	HSK-A100	37,5	42	48	140	29	47,5	52,5	56687
25	HSK-A63	53	57	63	121	26	52	61	54878
	HSK-A80	43,5	48	48	131	26	105	55	56678
	HSK-A100	43,5	48	48	144	29	115	55	56688
32	HSK-A63	60	64	75	126	26	62	65	54879
	HSK-A80	55,5	60	70	140	26	57	65	56679
	HSK-A100	55,5	60	70	153	29	57	65	56689

= dimension compatible with reduction sleeve.

Other dimensions (DS) with HSK-40 and HSK-50 on request..

We also manufacture other types of HSK-mounts. Contact us for more info.



HSK-C

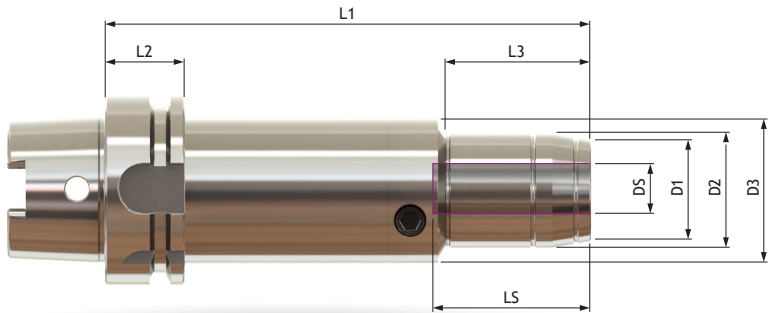


HSK-E



HSK-F

HCFL / HCFL+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	HSK-A63	21,5	26	48	140	26	43,5	37,5	56660
	HSK-A63	21,5	26	48	140 - 515	26	43,5	37,5	▲
	HSK-A80	21,5	26	48	167	26	43,5	37,5	56690
	HSK-A80	21,5	26	48	167 - 510	26	43,5	37,5	▲
	HSK-A100	21,5	26	48	180	29	43,5	37,5	56760
	HSK-A100	21,5	26	48	180 - 500	29	43,5	37,5	▲
8	HSK-A63	23,5	28	48	140	26	43,5	37,5	56661
	HSK-A63	23,5	28	48	140 - 515	26	43,5	37,5	▲
	HSK-A80	23,5	28	48	167	26	43,5	37,5	56691
	HSK-A80	23,5	28	48	167 - 510	26	43,5	37,5	▲
	HSK-A100	23,5	28	48	180	29	43,5	37,5	56761
	HSK-A100	23,5	28	48	180 - 500	29	43,5	37,5	▲
10	HSK-A63	25,5	30	48	140	26	43,5	42,5	56662
	HSK-A63	25,5	30	48	140 - 515	26	43,5	42,5	▲
	HSK-A80	25,5	30	48	167	26	43,5	42,5	56692
	HSK-A80	25,5	30	48	167 - 510	26	43,5	42,5	▲
	HSK-A100	25,5	30	48	180	29	43,5	42,5	56762
	HSK-A100	25,5	30	48	180 - 500	29	43,5	42,5	▲
12	HSK-A63	27,5	32	48	140	26	44,5	47,5	56663
	HSK-A63	27,5	32	48	140 - 515	26	44,5	47,5	▲
	HSK-A80	27,5	32	48	167	26	44,5	47,5	56693
	HSK-A80	27,5	32	48	167 - 510	26	44,5	47,5	▲
	HSK-A100	27,5	32	48	180	29	44,5	47,5	56763
	HSK-A100	27,5	32	48	180 - 500	29	44,5	47,5	▲

▲ = dimension compatible with reduction sleeve. ▲ = Specify art.no / L1 on order (L1 = length of your choice).

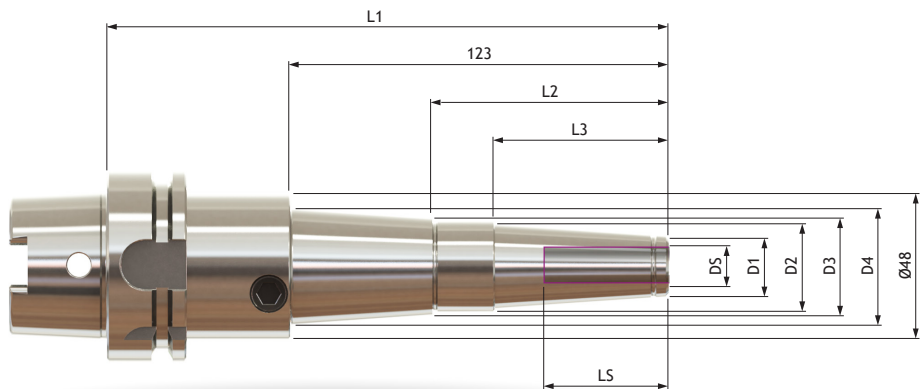
HCFL / HCFL+

D5 Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
14	HSK-A63	29,5	34	48	140	26	44,5	52,5	56664
	HSK-A63	29,5	34	48	140 - 515	26	44,5	52,5	▲
	HSK-A80	29,5	34	48	167	26	44,5	52,5	56694
	HSK-A80	29,5	34	48	167 - 510	26	44,5	52,5	▲
	HSK-A100	29,5	34	48	180	29	44,5	52,5	56764
	HSK-A100	29,5	34	48	180 - 500	29	44,5	52,5	▲
16	HSK-A63	33,5	38	48	140	26	47,5	52,5	56665
	HSK-A63	33,5	38	48	140 - 515	26	47,5	52,5	▲
	HSK-A80	33,5	38	48	167	26	47,5	52,5	56695
	HSK-A80	33,5	38	48	167 - 510	26	47,5	52,5	▲
	HSK-A100	33,5	38	48	180	29	47,5	52,5	56765
	HSK-A100	33,5	38	48	180 - 500	29	47,5	52,5	▲
18	HSK-A63	35,5	40	48	140	26	47,5	52,5	56666
	HSK-A63	35,5	40	48	140 - 515	26	47,5	52,5	▲
	HSK-A80	35,5	40	48	167	26	47,5	52,5	56696
	HSK-A80	35,5	40	48	167 - 510	26	47,5	52,5	▲
	HSK-A100	35,5	40	48	180	29	47,5	52,5	56766
	HSK-A100	35,5	40	48	180 - 500	29	47,5	52,5	▲
20 ▲	HSK-A63	37,5	42	48	140	26	47,5	52,5	56667
	HSK-A63	37,5	42	48	140 - 515	26	47,5	52,5	▲
	HSK-A80	37,5	42	48	167	26	47,5	52,5	56697
	HSK-A80	37,5	42	48	167 - 510	26	47,5	52,5	▲
	HSK-A100	37,5	42	48	180	29	47,5	52,5	56767
	HSK-A100	37,5	42	48	180 - 500	29	47,5	52,5	▲
25	HSK-A63	43,5	48	48	144	26	118	55	56668
	HSK-A63	43,5	48	48	144 - 515	26	-----	55	▲
	HSK-A80	43,5	48	48	171	26	145	55	56698
	HSK-A80	43,5	48	48	171 - 510	26	-----	55	▲
	HSK-A100	43,5	48	48	184	29	155	55	56768
	HSK-A100	43,5	48	48	184 - 500	29	-----	55	▲
32 ▲	HSK-A63	55,5	60	70	193	26	57	65	56669
	HSK-A63	55,5	60	70	153 - 515	26	57	65	▲
	HSK-A80	55,5	60	70	180	26	57	65	56699
	HSK-A80	55,5	60	70	180 - 510	26	57	65	▲
	HSK-A100	55,5	60	70	193	29	57	65	56769
	HSK-A100	55,5	60	70	193 - 500	29	57	65	▲

▲ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).

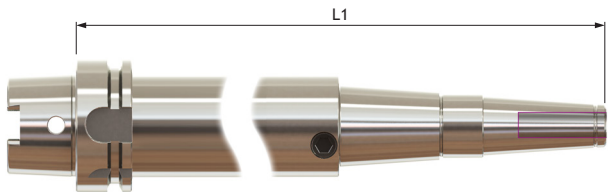
HCPK+

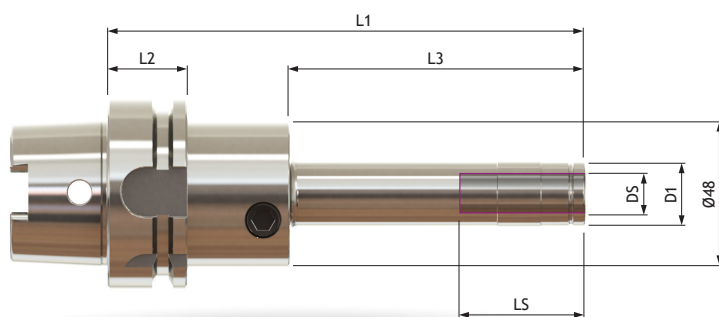


D5 Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	HSK-A63	20	30	32	40,5	197	76,8	57	44	54103+
	HSK-A63	20	30	32	40,5	237 - 515	76,8	57	44	
	HSK-A80	20	30	32	40,5	217	76,8	57	44	54113+
	HSK-A80	20	30	32	40,5	257 - 510	76,8	57	44	
	HSK-A100	20	30	32	40,5	230	76,8	57	44	54123+
	HSK-A100	20	30	32	40,5	270 - 500	76,8	57	44	
20	HSK-A63	32	39	42	50,5	197	74,8	55	52	54107+
	HSK-A63	32	39	42	50,5	237 - 515	74,8	55	52	
	HSK-A80	32	39	42	50,5	217	74,8	55	52	54117+
	HSK-A80	32	39	42	50,5	257 - 510	74,8	55	52	
	HSK-A100	32	39	42	50,5	230	74,8	55	52	54127+
	HSK-A100	32	39	42	50,5	270 - 500	74,8	55	52	

= dimension compatible with reduction sleeve. = Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCPK+. Specify Art.no / L1 on order.





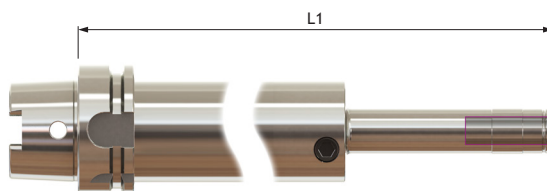
Short model



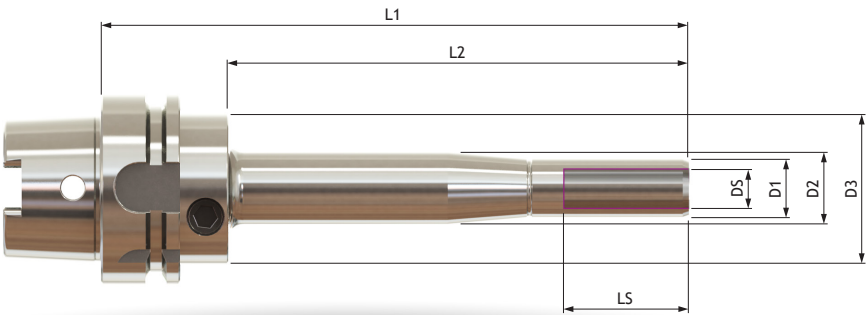
D5 Ømm	Mount type.	D1 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12 	HSK-A63	22,5	125	26	50	44	59303+
	HSK-A63	22,5	175	26	100	44	59313+
	HSK-A80	22,5	145	26	50	44	59238+
	HSK-A80	22,5	195	26	100	44	59243+
	HSK-A100	22,5	158	29	50	44	59353+
	HSK-A100	22,5	208	29	100	44	59363+

 = dimension compatible with reduction sleeve.

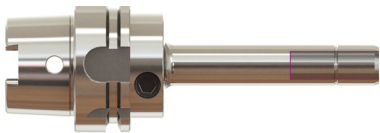
Choose your own length (L1) of HCP+. Specify Art.no / L1 on order.



HCPS



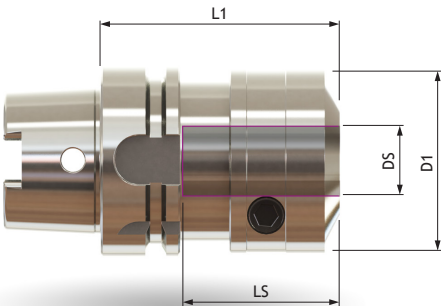
Short model



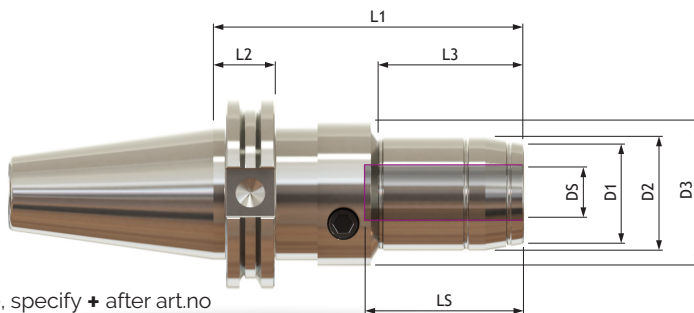
DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	HSK-A63	19,5	----	48	155	100	----	42	59643
	HSK-A80	19,5	----	48	175	100	----	42	59653
	HSK-A100	19,5	----	48	188	100	----	42	59663
	HSK-A63	19,5	24	48	205	150	52	42	59743
	HSK-A80	19,5	24	48	225	150	52	42	59753
	HSK-A100	19,5	24	48	238	150	52	42	59763

= dimension compatible with reduction sleeve.

HCK+



DS Ømm	Mount type.	D1 Ømm	L1 mm	L5 mm	Art.no
20	HSK-A63	61	78	51,8	66109+
32	HSK-A63	82	88	61,8	66111+



For chuck with Plus-membrane, specify + after art.no

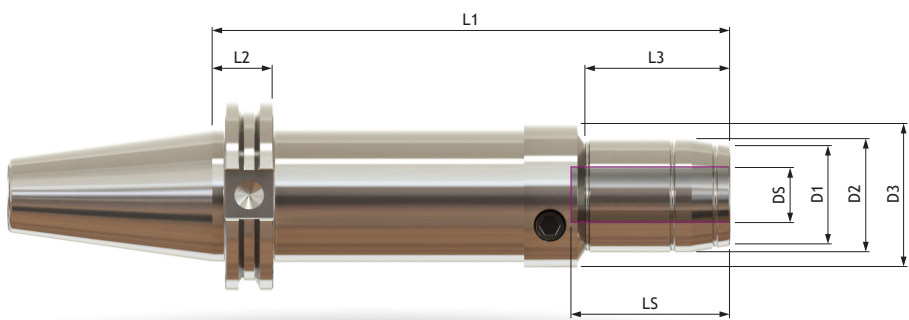
DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	CAT 40	21,5	26	48	105	19,05	43,5	37,5	56470
	CAT 50	21,5	26	48	87	19,05	43,5	37,5	56490
	CAT 50	21,5	26	48	101,6	19,05	43,5	37,5	56480
8	CAT 40	23,5	28	48	105	19,05	43,5	37,5	56471
	CAT 50	23,5	28	48	84	19,05	43,5	37,5	56491
	CAT 50	23,5	28	48	101,6	19,05	43,5	37,5	56481
10	CAT 40	25,5	30	48	105	19,05	43,5	42,5	56472
	CAT 50	25,5	30	48	84	19,05	43,5	42,5	56492
	CAT 50	25,5	30	48	101,6	19,05	43,5	42,5	56482
12	CAT 40	27,5	32	48	105	19,05	43,5	47,5	56473
	CAT 50	27,5	32	48	84	19,05	43,5	47,5	56493
	CAT 50	27,5	32	48	101,6	19,05	43,5	47,5	56483
14	CAT 40	29,5	34	48	105	19,05	44,5	47,5	56474
	CAT 50	29,5	34	48	84	19,05	44,5	47,5	56494
	CAT 50	29,5	34	48	101,6	19,05	44,5	47,5	56484
16	CAT 40	33,5	38	48	105	19,05	47,5	52,5	56475
	CAT 50	33,5	38	48	84	19,05	47,5	52,5	56495
	CAT 50	33,5	38	48	101,6	19,05	47,5	52,5	56485
18	CAT 40	35,5	40	48	105	19,05	47,5	52,5	56476
	CAT 50	35,5	40	48	84	19,05	47,5	52,5	56496
	CAT 50	35,5	40	48	101,6	19,05	47,5	52,5	56486
20	CAT 40	37,5	42	48	105	19,05	47,5	52,5	56477
	CAT 50	37,5	42	48	84	19,05	47,5	52,5	56497
	CAT 50	37,5	42	48	101,6	19,05	47,5	52,5	56487
25	CAT 40	43,5	48	48	109	19,05	89,95	55	56478
	CAT 50	43,5	48	48	91	19,05	82,55	55	56498
	CAT 50	43,5	48	48	105,6	19,05	82,55	55	56488
32	CAT 40	55,5	60	70	120	19,05	57	65	56479
	CAT 50	55,5	60	70	100	19,05	57	65	56499
	CAT 50	55,5	60	70	114,6	19,05	57	65	56489

= dimension compatible with reduction sleeve.

HYDROCHUCKS

CAT / ASME BS.50

HCFL / HCFL+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
6	CAT 40	21,5	26	48	127	19,05	43,5	37,5	56600
	CAT 40	21,5	26	48	127 - 480	19,05	43,5	37,5	▲
	CAT 50	21,5	26	48	152,4	19,05	43,5	37,5	56610
	CAT 50	21,5	26	48	127 - 445	19,05	43,5	37,5	▲
8	CAT 40	23,5	28	48	127	19,05	43,5	37,5	56601
	CAT 40	23,5	28	48	124 - 480	19,05	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,05	43,5	37,5	56611
	CAT 50	23,5	28	48	127 - 445	19,05	43,5	37,5	▲
10	CAT 40	25,5	30	48	127	19,05	43,5	42,5	56602
	CAT 40	25,5	30	48	127 - 480	19,05	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,05	43,5	42,5	56612
	CAT 50	25,5	30	48	127 - 445	19,05	43,5	42,5	▲
12 ▲	CAT 40	27,5	32	48	127	19,05	43,5	47,5	56603
	CAT 40	27,5	32	48	127 - 480	19,05	43,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,05	43,5	47,5	56613
	CAT 50	27,5	32	48	127 - 445	19,05	43,5	47,5	▲
14	CAT 40	29,5	34	48	127	19,05	44,5	47,5	56604
	CAT 40	29,5	34	48	127 - 480	19,05	44,5	47,5	▲
	CAT 50	29,5	34	48	152,4	19,05	44,5	47,5	56614
	CAT 50	29,5	34	48	127 - 445	19,05	44,5	47,5	▲
16	CAT 40	33,5	38	48	127	19,05	47,5	52,5	56605
	CAT 40	33,5	38	48	127 - 480	19,05	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,05	47,5	52,5	56615
	CAT 50	33,5	38	48	127 - 445	19,05	47,5	52,5	▲

▲ = dimension compatible with reduction sleeve. ▲ = Specify art.no / L1 on order (L1 = length of your choice).

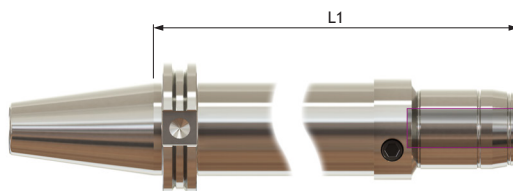
For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
18	CAT 40	35,5	40	48	127	19,05	47,5	52,5	56606
	CAT 40	35,5	40	48	127 - 480	19,05	47,5	52,5	▲
	CAT 50	35,5	40	48	152,4	19,05	47,5	52,5	56616
	CAT 50	35,5	40	48	127 - 445	19,05	47,5	52,5	▲
20 ▲	CAT 40	37,5	42	48	127	19,05	47,5	52,5	56607
	CAT 40	37,5	42	48	127 - 480	19,05	47,5	52,5	▲
	CAT 50	37,5	42	48	152,4	19,05	47,5	52,5	56617
	CAT 50	37,5	42	48	127 - 445	19,05	47,5	52,5	▲
25	CAT 40	43,5	48	48	131	19,05	111,95	55	56608
	CAT 40	43,5	48	48	131 - 480	19,05	-----	55	▲
	CAT 50	43,5	48	48	152,4	19,05	132,4	55	56618
	CAT 50	43,5	48	48	131 - 445	19,05	-----	55	▲
32 ▲	CAT 40	55,5	60	70	158	19,05	57	65	56609
	CAT 40	55,5	60	70	158 - 480	19,05	-----	65	▲
	CAT 50	55,5	60	70	154,6	19,05	57	65	56619
	CAT 50	55,5	60	70	140 - 445	19,05	-----	65	▲

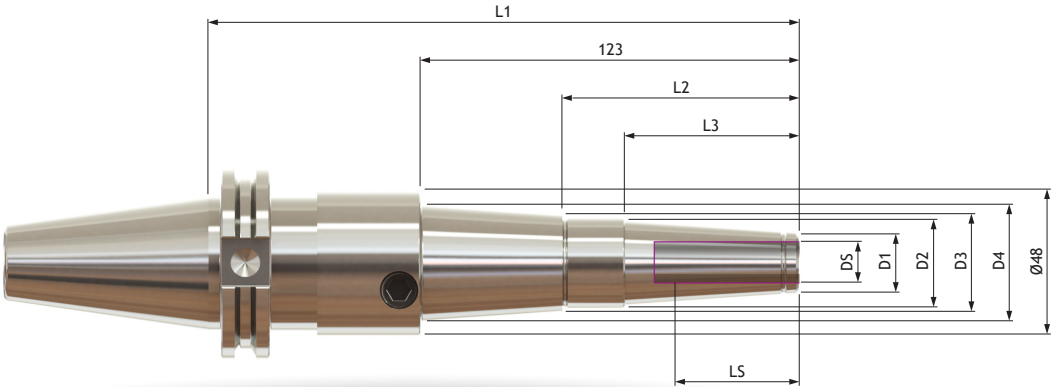
▲ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCFL / HCFL+. Specify Art.no / L1 on order.



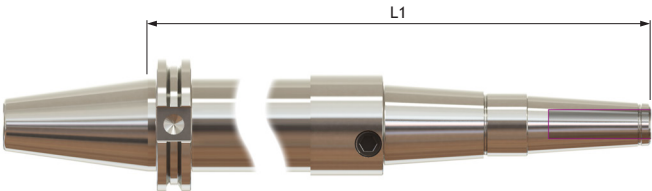
HCPK+

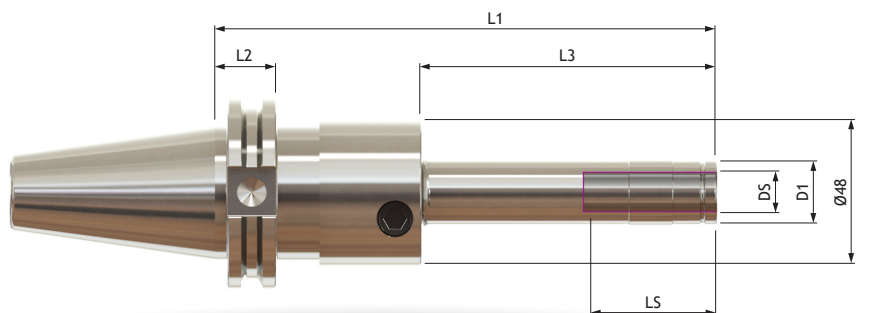


DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	CAT 40	20	30	32	40,5	195	76,8	57	47,5	59263+
	CAT 40	20	30	32	40,5	235 - 480	76,8	57	47,5	
	CAT 50	20	30	32	40,5	177	76,8	57	47,5	59273+
	CAT 50	20	30	32	40,5	217 - 445	76,8	57	47,5	
20	CAT 40	32	39	42	50,5	195	74,8	55	52,5	59267+
	CAT 40	32	39	42	50,5	235 - 480	74,8	55	52,5	
	CAT 50	32	39	42	50,5	177	74,8	55	52,5	59277+
	CAT 50	32	39	42	50,5	217 - 445	74,8	55	52,5	

= dimension compatible with reduction sleeve. = Specify art.no / L1 on order (L1 = length of your choice).

Choose your own length (L1) of HCPK+. Specify Art.no / L1 on order.





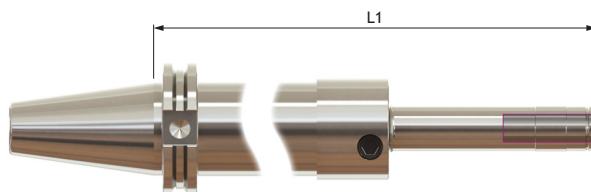
Short model



D5 Ømm	Mount type.	D1 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
12	CAT 40	22,5	123	19,05	50	47,5	59033+
	CAT 40	22,5	173	19,05	100	47,5	59043+
	CAT 50	22,5	105	19,05	50	47,5	59083+
	CAT 50	22,5	155	19,05	100	47,5	59093+

= dimension compatible with reduction sleeve.

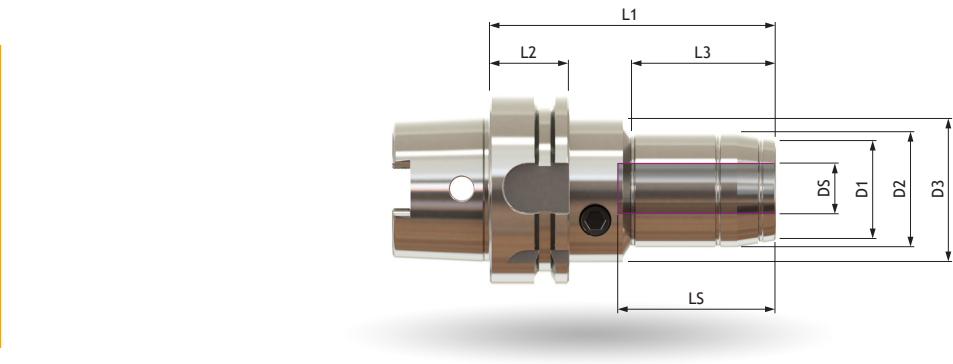
Choose your own length (L1) of HCP+. Specify Art.no / L1 on order.



HYDROCHUCKS - INCH SIZES

HSK-A

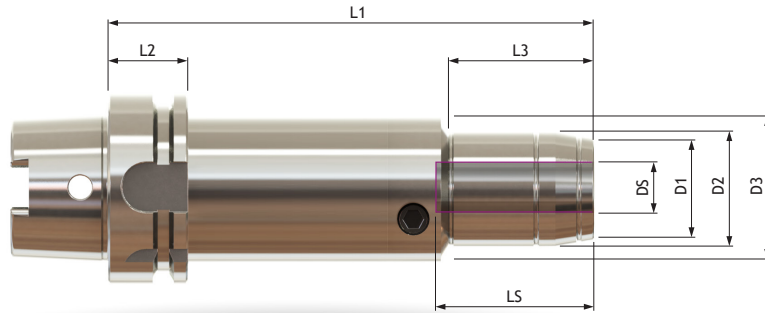
HCF / HCF+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
1/4"	HSK-A63	22	26	50	71,5	26	24,5	37,5	54470
	HSK-A80	21,5	26	48	127	26	43,5	37,5	56550
	HSK-A100	21,5	26	48	140	29	43,5	37,5	56530
5/16"	HSK-A63	24	28	50	71,5	26	25,5	37,5	54471
	HSK-A80	23,5	28	48	127	26	43,5	37,5	56551
	HSK-A100	23,5	28	48	140	29	43,5	37,5	56531
3/8"	HSK-A63	26	30	50	81,5	26	35,5	42,5	54472
	HSK-A80	25,5	30	48	127	26	43,5	42,5	56552
	HSK-A100	25,5	30	48	140	29	43,5	42,5	56532
1/2"	HSK-A63	28	32	50	86,5	26	41,5	47,5	54473
	HSK-A80	27,5	32	48	127	26	44,5	47,5	56553
	HSK-A100	27,5	32	48	140	29	44,5	47,5	56533
5/8"	HSK-A63	34	38	50	91,5	26	48	52,5	54474
	HSK-A80	33,5	38	48	127	26	47,5	52,5	56654
	HSK-A100	33,5	38	48	140	29	47,5	52,5	56534
3/4" 	HSK-A63	38	42	50	91,5	26	49,5	52,5	54475
	HSK-A80	37,5	42	48	127	26	47,5	52,5	56555
	HSK-A100	37,5	42	48	140	29	47,5	52,5	56535
1"	HSK-A63	53	57	63	121	26	52	61	54476
	HSK-A80	43,5	48	48	131	26	105	55	56556
	HSK-A100	43,5	48	48	144	29	115	55	56536
1 1/4" 	HSK-A63	60	64	75	126	26	62	65	54477
	HSK-A80	55,5	60	70	140	26	57	65	56557
	HSK-A100	55,5	60	70	153	29	57	65	56537

 = dimension compatible with reduction sleeve.



For chuck with Plus-membrane, specify + after art.no

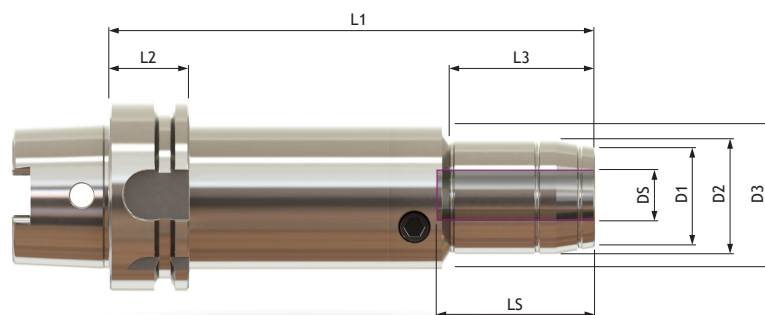
DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
1/4"	HSK-A63	21,5	26	48	140	26	43,5	37,5	56420
	HSK-A63	21,5	26	48	140 - 515	26	43,5	37,5	▲
	HSK-A80	21,5	26	48	167	26	43,5	37,5	56450
	HSK-A80	21,5	26	48	167 - 510	26	43,5	37,5	▲
	HSK-A100	21,5	26	48	180	29	43,5	37,5	56430
	HSK-A100	21,5	26	48	180 - 500	29	43,5	37,5	▲
5/16"	HSK-A63	23,5	28	48	140	26	43,5	37,5	56421
	HSK-A63	23,5	28	48	140 - 515	26	43,5	37,5	▲
	HSK-A80	23,5	28	48	167	26	43,5	37,5	56451
	HSK-A80	23,5	28	48	167 - 510	26	43,5	37,5	▲
	HSK-A100	23,5	28	48	180	29	43,5	37,5	56431
	HSK-A100	23,5	28	48	180 - 500	29	43,5	37,5	▲
3/8"	HSK-A63	25,5	30	48	140	26	43,5	42,5	56422
	HSK-A63	25,5	30	48	140 - 515	26	43,5	42,5	▲
	HSK-A80	25,5	30	48	167	26	43,5	42,5	56452
	HSK-A80	25,5	30	48	167 - 510	26	43,5	42,5	▲
	HSK-A100	25,5	30	48	180	29	43,5	42,5	56432
	HSK-A100	25,5	30	48	180 - 500	29	43,5	42,5	▲
1/2"	HSK-A63	27,5	32	48	140	26	43,5	47,5	56423
	HSK-A63	27,5	32	48	144 - 515	26	43,5	47,5	▲
	HSK-A80	27,5	32	48	171	26	43,5	47,5	56453
	HSK-A80	27,5	32	48	171 - 510	26	43,5	47,5	▲
	HSK-A100	27,5	32	48	184	29	43,5	47,5	56433
	HSK-A100	27,5	32	48	184 - 500	29	43,5	47,5	▲

▲ = Specify art.no / L1 on order (L1 = length of your choice).

HYDROCHUCKS - INCH SIZES

HSK-A

HCFL / HCFL+

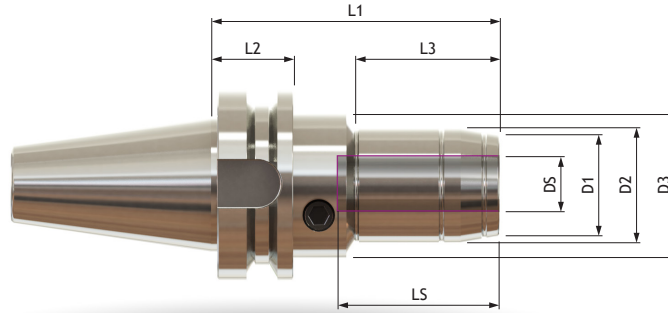


For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
5/8"	HSK-A63	33,5	38	48	140	26	47,5	52,5	56424
	HSK-A63	33,5	38	48	144 - 515	26	47,5	52,5	▲
	HSK-A80	33,5	38	48	171	26	47,5	52,5	56454
	HSK-A80	33,5	38	48	171 - 510	26	47,5	52,5	▲
	HSK-A100	33,5	38	48	184	29	47,5	52,5	56434
	HSK-A100	33,5	38	48	184 - 500	29	47,5	52,5	▲
3/4" ▲	HSK-A63	37,5	42	48	140	26	47,5	52,5	56425
	HSK-A63	37,5	42	48	144 - 515	26	47,5	52,5	▲
	HSK-A80	37,5	42	48	171	26	47,5	52,5	56455
	HSK-A80	37,5	42	48	171 - 510	26	47,5	52,5	▲
	HSK-A100	37,5	42	48	184	29	47,5	52,5	56435
	HSK-A100	37,5	42	48	184 - 500	29	47,5	52,5	▲
1"	HSK-A63	43,5	48	48	140	26	118	55	56426
	HSK-A63	43,5	48	48	144 - 515	26	-----	55	▲
	HSK-A80	43,5	48	48	167	26	145	55	56456
	HSK-A80	43,5	48	48	167 - 510	26	-----	55	▲
	HSK-A100	43,5	48	48	180	29	91	55	56436
	HSK-A100	43,5	48	48	180 - 500	29	-----	55	▲
1 1/4" ▲	HSK-A63	55,5	60	70	140	26	83	65	56427
	HSK-A63	55,5	60	70	140 - 515	26	83	65	▲
	HSK-A80	55,5	60	70	167	26	154	65	56457
	HSK-A80	55,5	60	70	167 - 515	26	154	65	▲
	HSK-A100	55,5	60	70	180	29	164	65	56437
	HSK-A100	55,5	60	70	180 - 500	29	164	65	▲

▲ = dimension compatible with reduction sleeve.

▲ = Specify art.no / L1 on order (L1 = length of your choice).



For chuck with Plus-membrane, specify + after art.no

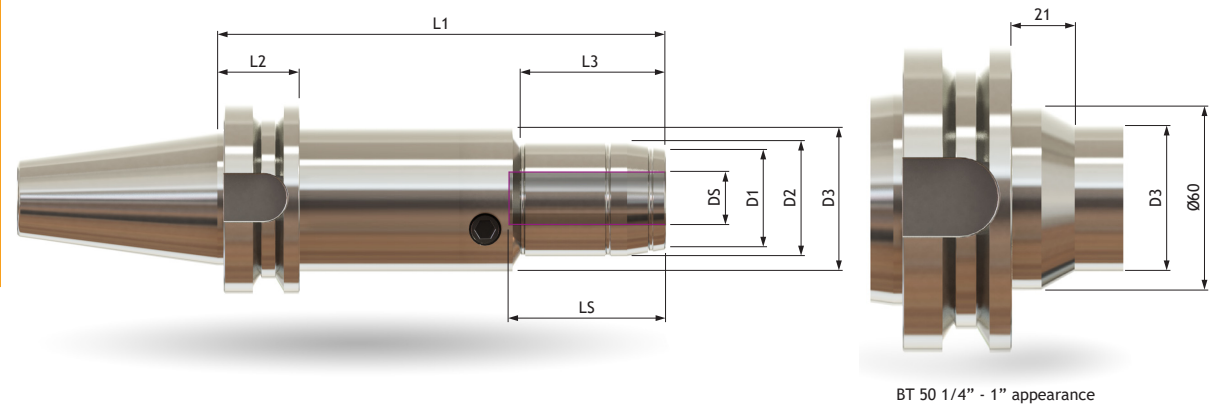
D5 Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
1/4"	BT 40	21,5	26	48	95	27	43,5	37,5	56500
	BT 50	21,5	26	48	106	38	43,5	37,5	56510
5/16"	BT 40	23,5	28	48	95	27	43,5	37,5	56501
	BT 50	23,5	28	48	106	38	43,5	37,5	56511
3/8"	BT 40	25,5	30	48	95	27	43,5	42,5	56502
	BT 50	25,5	30	48	106	38	43,5	42,5	56512
1/2"	BT 40	27,5	32	48	95	27	43,5	47,5	56503
	BT 50	27,5	32	48	106	38	43,5	47,5	56513
5/8"	BT 40	33,5	38	48	95	27	47,5	52,5	56504
	BT 50	33,5	38	48	106	38	47,5	52,5	56514
3/4" ▲	BT 40	37,5	42	48	95	27	47,5	52,5	56505
	BT 50	37,5	42	48	106	38	47,5	52,5	56515
1"	BT 40	43,5	48	48	99	27	72	55	56506
	BT 50	43,5	48	48	110	38	72	55	56516
1 1/4" ▲	BT 40	55,5	60	70	108	27	57	65	56507
	BT 50	55,5	60	70	119	38	57	65	56517

▲ = dimension compatible with reduction sleeve.

HYDROCHUCKS - INCH SIZES

BT-MAS

HCFL / HCFL+



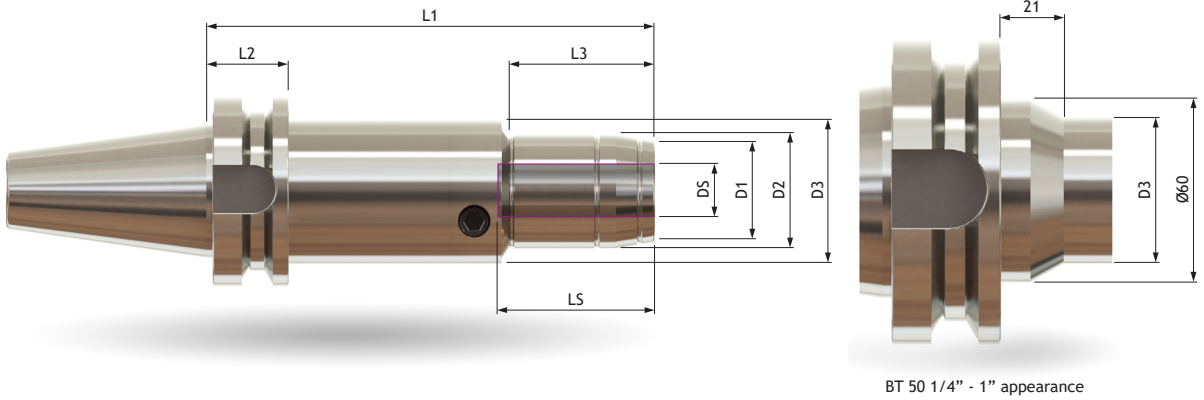
BT 50 1/4" - 1" appearance

For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Art.no
1/4"	BT 40	21,5	26	48	135	27	43,5	37,5	56820
	BT 40	21,5	26	48	135 - 485	27	43,5	37,5	▲
	BT 50	21,5	26	48	160	38	43,5	37,5	56830
	BT 50	21,5	26	48	146 - 445	38	43,5	37,5	▲
5/16"	BT 40	23,5	28	48	135	27	43,5	37,5	56821
	BT 40	23,5	28	48	135 - 485	27	43,5	37,5	▲
	BT 50	23,5	28	48	160	38	43,5	37,5	56831
	BT 50	23,5	28	48	146 - 445	38	43,5	37,5	▲
3/8"	BT 40	25,5	30	48	135	27	43,5	42,5	56822
	BT 40	25,5	30	48	135 - 485	27	43,5	42,5	▲
	BT 50	25,5	30	48	160	38	43,5	42,5	56832
	BT 50	25,5	30	48	146 - 445	38	43,5	42,5	▲
1/2"	BT 40	27,5	32	48	135	27	43,5	47,5	56823
	BT 40	27,5	32	48	135 - 485	27	43,5	47,5	▲
	BT 50	27,5	32	48	160	38	43,5	47,5	56833
	BT 50	27,5	32	48	146 - 445	38	43,5	47,5	▲
5/8"	BT 40	33,5	38	48	135	27	47,5	52,5	56824
	BT 40	33,5	38	48	135 - 485	27	47,5	52,5	▲
	BT 50	33,5	38	48	160	38	47,5	52,5	56834
	BT 50	33,5	38	48	146 - 445	38	47,5	52,5	▲

▲ = Specify art.no / L1 on order (L1 = length of your choice).

HCFL / HCFL+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
3/4"	BT 40	37,5	42	48	135	27	47,5	52,5	56825
	BT 40	37,5	42	48	135 - 485	27	47,5	52,5	
	BT 50	37,5	42	48	160	38	47,5	52,5	56835
	BT 50	37,5	42	48	146 - 445	38	47,5	52,5	
5/16"	BT 40	43,5	48	48	139	27	111	55	56826
	BT 40	43,5	48	48	139 - 485	27	-----	55	
	BT 50	43,5	48	48	160	38	101	55	56836
	BT 50	43,5	48	48	150 - 445	38	-----	55	
1 1/4"	BT 40	55,5	60	70	148	27	57	65	56827
	BT 40	55,5	60	70	148 - 485	27	57	65	
	BT 50	55,5	60	70	160	38	57	65	56837
	BT 50	55,5	60	70	159 - 445	38	57	65	

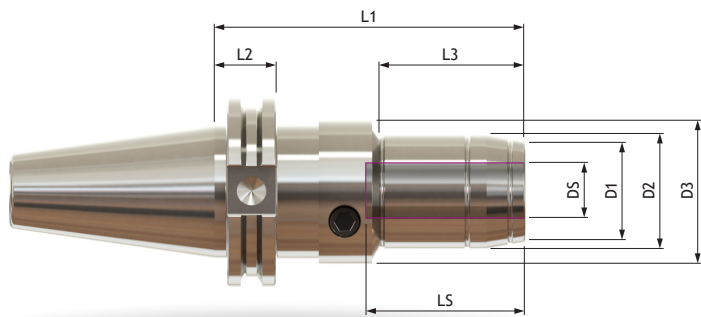
= dimension compatible with reduction sleeve.

= Specify art.no / L1 on order (L1 = length of your choice).

HYDROCHUCKS - INCH SIZES

CAT / ASME BS.50

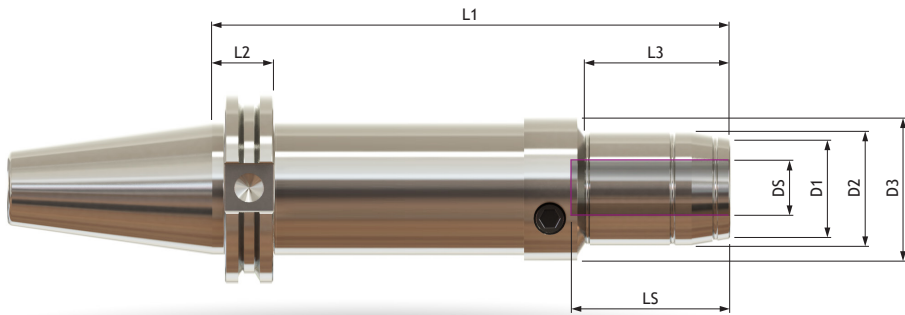
HCF / HCF+



For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
1/4"	CAT 40	21,5	26	48	105	19,05	43,5	37,5	56580
	CAT 50	21,5	26	48	87	19,05	43,5	37,5	56790
	CAT 50	21,5	26	48	101,6	19,05	43,5	37,5	58600
5/16"	CAT 40	23,5	28	48	105	19,05	43,5	37,5	56581
	CAT 50	23,5	28	48	87	19,05	43,5	37,5	56791
	CAT 50	23,5	28	48	101,6	19,05	43,5	37,5	58601
3/8"	CAT 40	25,5	30	48	105	19,05	43,5	42,5	56582
	CAT 50	25,5	30	48	87	19,05	43,5	42,5	56792
	CAT 50	25,5	30	48	101,6	19,05	43,5	42,5	58602
1/2"	CAT 40	27,5	32	48	105	19,05	43,5	47,5	56583
	CAT 50	27,5	32	48	87	19,05	43,5	47,5	56793
	CAT 50	27,5	32	48	101,6	19,05	43,5	47,5	58603
5/8"	CAT 40	33,5	38	48	105	19,05	47,5	52,5	56584
	CAT 50	33,5	38	48	87	19,05	47,5	52,5	56794
	CAT 50	33,5	38	48	101,6	19,05	47,5	52,5	58604
3/4" ▴	CAT 40	37,5	42	48	105	19,05	47,5	52,5	56585
	CAT 50	37,5	42	48	87	19,05	47,5	52,5	56795
	CAT 50	37,5	42	48	101,6	19,05	47,5	52,5	58605
1"	CAT 40	43,5	48	48	109	19,05	89,95	55	56586
	CAT 50	43,5	48	48	91	19,05	82,95	55	56796
	CAT 50	43,5	48	48	105,6	19,05	82,95	55	58606
1 1/4" ▴	CAT 40	55,5	60	70	118	19,05	57	65	56587
	CAT 50	55,5	60	70	100	19,05	57	65	56797
	CAT 50	55,5	60	70	114,6	19,05	57	65	58607

▴ = dimension compatible with reduction sleeve.



For chuck with Plus-membrane, specify + after art.no

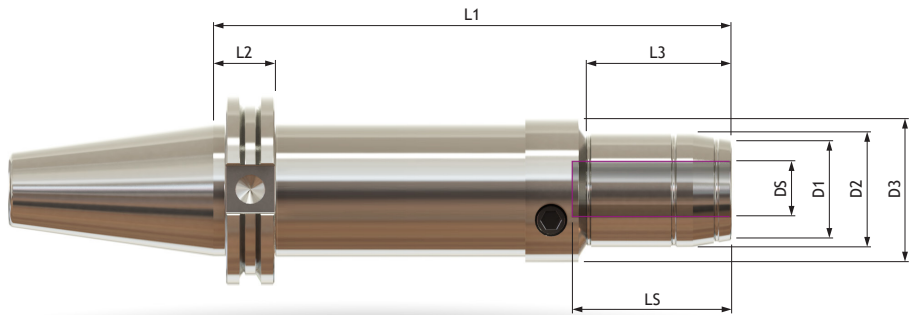
DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
1/4"	CAT 40	21,5	26	48	127	19,05	43,5	37,5	56780
	CAT 40	21,5	26	48	127 - 480	19,05	43,5	37,5	▲
	CAT 50	21,5	26	48	152,4	19,05	43,5	37,5	56740
	CAT 50	21,5	26	48	127 - 445	19,05	43,5	37,5	▲
5/16"	CAT 40	23,5	28	48	127	19,05	43,5	37,5	56781
	CAT 40	23,5	28	48	127 - 480	19,05	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,05	43,5	37,5	56741
	CAT 50	23,5	28	48	127 - 445	19,05	43,5	37,5	▲
3/8"	CAT 40	25,5	30	48	127	19,05	43,5	42,5	56782
	CAT 40	25,5	30	48	127 - 480	19,05	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,05	43,5	42,5	56742
	CAT 50	25,5	30	48	127 - 445	19,05	43,5	42,5	▲
1/2"	CAT 40	27,5	32	48	127	19,05	43,5	47,5	56783
	CAT 40	27,5	32	48	127 - 480	19,05	43,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,05	43,5	47,5	56743
	CAT 50	27,5	32	48	127 - 445	19,05	43,5	47,5	▲
5/8"	CAT 40	33,5	38	48	127	19,05	47,5	52,5	56784
	CAT 40	33,5	38	48	127 - 480	19,05	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,05	47,5	52,5	56744
	CAT 50	33,5	38	48	127 - 445	19,05	47,5	52,5	▲

▲ = Specify art.no / L1 on order (L1 = length of your choice).

HYDROCHUCKS - INCH SIZES

CAT / ASME B5.50

HCFL / HCFL+

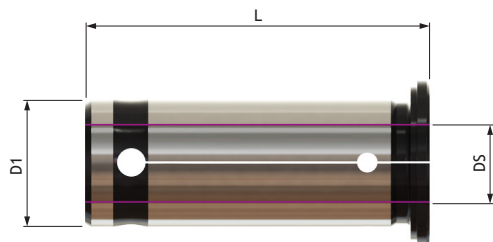


For chuck with Plus-membrane, specify + after art.no

DS Ømm	Mount type.	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	L5 mm	Art.no
3/4"	CAT 40	37,5	42	48	127	19,05	47,5	52,5	56785
	CAT 40	37,5	42	48	127 - 480	19,05	47,5	52,5	
	CAT 50	37,5	42	48	152,4	19,05	47,5	52,5	56745
	CAT 50	37,5	42	48	127 - 445	19,05	47,5	52,5	
1"	CAT 40	43,5	48	48	131	19,05	129,95	55	56786
	CAT 40	43,5	48	48	131 - 480	19,05	-----	55	
	CAT 50	43,5	48	48	152,4	19,05	142,4	55	56746
	CAT 50	43,5	48	48	131 - 445	19,05	-----	55	
1 1/4"	CAT 40	55,5	60	70	160	19,05	57	65	56787
	CAT 40	55,5	60	70	160 - 480	19,05	-----	65	
	CAT 50	55,5	60	70	160	19,05	57	65	56747
	CAT 50	55,5	60	70	140 - 445	19,05	-----	65	

= dimension compatible with reduction sleeve. = Specify art.no / L1 on order (L1 = length of your choice).

Reduction Sleeves



Sealed sleeve with rubber stop.

Sleeves can be converted to unsealed by removing the rubber seal.

Other dimensions on request.

Reduction sleeves D = mm

D1 Ømm	D5 Ømm	L mm	Art.no
12	3	44	90003
	4	44	90004
	5	44	90005
	6	44	90006
	8	44	90008
	10	44	90010
20	3	50	90103
	4	50	90104
	5	50	90105
	6	50	90106
	8	50	90108
	10	50	90110
	12	50	90112
	14	50	90114
32	6	63	90206
	8	63	90208
	10	63	90210
	12	63	90212
	14	63	90214
	16	63	90216
	18	63	90218
	20	63	90220
	25	63	90225

Reduction sleeves D = inch

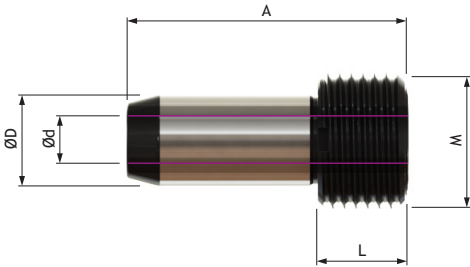
D1 Ømm	D5 Ømm	L mm	Art.no
3/4"	1/8"		67960
	5/32"		67961
	3/16"		67962
	1/4"		67963
	5/16"		67964
	3/8"		67965
	7/16"		67966
	1/2"		67967
1 1/4"	9/16"		67968
	5/8"		67969
	3/8"		67980
	1/2"		67981
	5/8"		67982
	3/4"		67983
	1"		67984

Custom sleeves

We also provide sleeves with custom clamping diameter (DS).

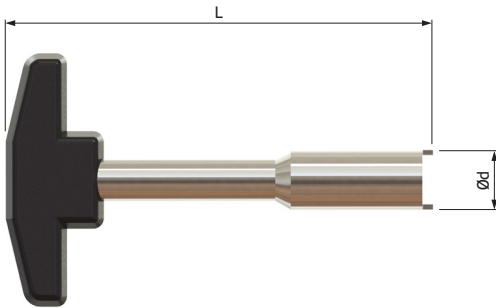
Please contact us for more info.

Coolant-adaptor for HSK



For HSK-size	ØD mm	A mm	Ød mm	L mm	M	Art.no
HSK-A32 , HSK-E32 , HSK-F40	6	25,7	3,5	5,5	M10 x 1	HSKA.32.0100
HSK-A40 , HSK-E40 , HSK-F50	8	29	5	7,5	M12 x 1	HSKA.40.0120
HSK-A50 , HSK-E50 , HSK-F63	10	33	6,4	10	M16 x 1	HSKA.50.0160
HSK-A63 , HSK-E63 , HSK-F80	12	36,2	8	11,5	M18 x 1	HSKA.63.0180
HSK-A80 , HSK-E80 , HSK-F100	14	39,6	10	13,5	M20 x 1,5	HSKA.80.0200
HSK-A100 , HSK-E100 , HSK-F125	16	43,6	12	15,5	M24 x 1,5	HSKA.100.0240

Key to coolant-adaptor for HSK



For HSK-size	ØD mm	L mm	Art.no
HSK-A32 , HSK-E32 , HSK-F40	9	110	CH.HSK.0320
HSK-A40 , HSK-E40 , HSK-F50	11	110	CH.HSK.0400
HSK-A50 , HSK-E50 , HSK-F63	15	120	CH.HSK.0500
HSK-A63 , HSK-E63 , HSK-F80	17	120	CH.HSK.0630
HSK-A80 , HSK-E80 , HSK-F100	18,5	130	CH.HSK.0800
HSK-A100 , HSK-E100 , HSK-F125	22	140	CH.HSK.1000

SPV Spintec also manufactures hydrochucks in fully customized versions for e.g. odd machines that are not equipped with a standard spindle mount. We meet the customer's demands by designing and developing special chucks that fit the customer's application. We manufacture special chucks for both internal and external clamping. The chucks can be designed for holding a tool or as a precision fixture for accurate clamping of a workpiece.

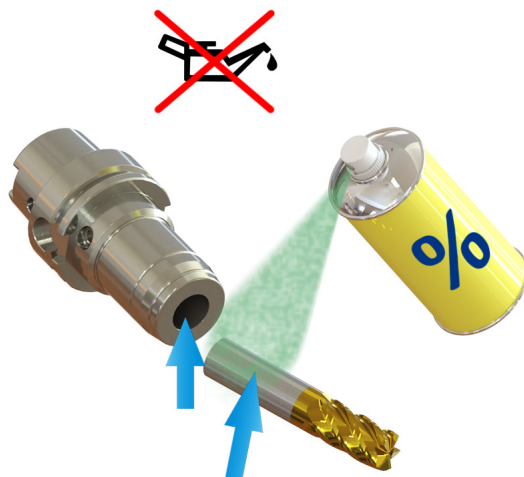


• 1. Working temperature

Ideal and optimized working temperature is between 20° and 50°C. Do not store hydrochucks where the temperature could exceed 50°C.

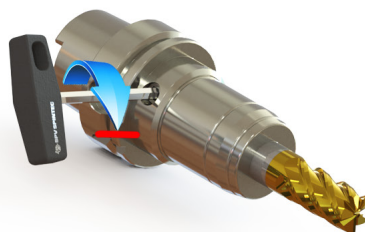
• 2. Cleaning

It is very important that both the tool shaft and the inside of the hydrochuck are free from grease or other contamination. Use an alcohol based degreaser when cleaning the chuck and tool.



• 3. Tightening the membrane

The screw must always be tightened to the fixed stop. No torque-key is needed. Never tighten the screw without a tool in the chuck, since there is a risk that the hydraulic chamber could be deformed.

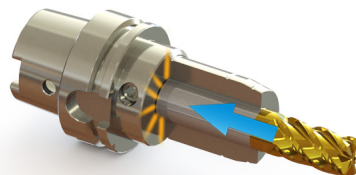


• 4. Tool insertion length

The tool must be inserted to a fixed stop, to prevent the hydraulic chamber from being deformed by the pressure. When reduction sleeves are used, at least 60% of the tool shaft length must be inserted and clamped.

• 5. Service and repair

If you experience that your hydrochuck does not clamp properly, this can be due to several issues. A common explanation is that the hydraulic piston seal is worn out. We always recommend sending the chuck to us for service or repair. Contact us for more info.



Important information about tool shafts.

- **Hydrochucks with standard membrane - HCF / HCFL / HCPS**

For standard chucks from Ø6 to Ø20 mm, Weldon-shafts can be used directly in the chuck.
Shaft tolerance = h6

- **Hydrochucks with The Plus-membrane - HCF+ / HCFL+ / HCP+ / HCPK+ / HCK+**

For chucks with The Plus-membrane (+) only cylindrical shafts must be used directly in the chuck.
Shaft tolerance = h6

- **Reduction sleeves - (Not suitable for HCK+)**

Other types of tool shafts such as Weldon, Whistlenotch etc can be used in combination with a reduction sleeve in the hydrochuck.

Torque specifications

Chuck for tool Ø mm	HCF / HCF+	HCK+	HCP+	HCPK+	HCPS
6	15 Nm				
8	20 Nm				
10	40 Nm				
12	80 Nm		80 Nm	80 Nm	80 Nm
14	110 Nm				
16	130 Nm				
18	190 Nm				
20	320 Nm	600 Nm		320 Nm	
25	400 Nm				
32	650 Nm	1 200 Nm			
40	1 200 Nm				



WARNING!

Disassembling and assembling a hydrochuck requires special tools and equipment.
Always send the chuck to SPV Spintec representative if it needs to be repaired.

Tapping devices



Tapping technology

Good thread quality means that the profile must be geometrically correct and that the surface finish is good. To obtain full thread profile it is important that the axial force that affects the tap is very low. If the axial force exceeds a certain value, the profile will be incomplete.

SPV Spintec's tapping devices are thanks to the ball bearing floating designed to provide a correct thread profile since they counteract negative forces.

To obtain a good thread finish it is necessary to use the correct tap as well as the correct cutting speed. In most materials you get a build up edge formation (BUE) when reaching a certain speed area, which results in bad surface finish. The tapping lapse should follow either over or under the sectioned area. See Fig 1. You should always aim for a tapping cycle that follows graph A. If the tapping lapse follows graph B there is a risk that the thread finish will be bad.

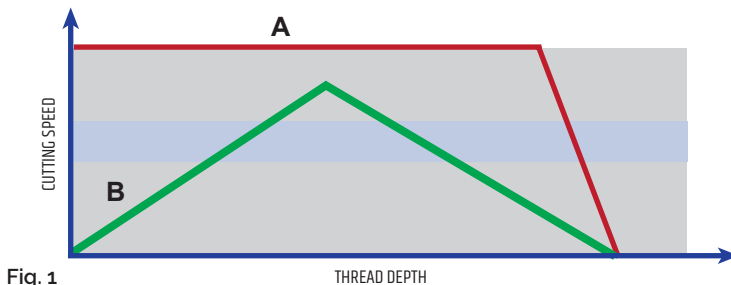
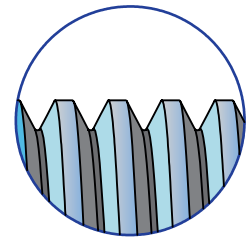
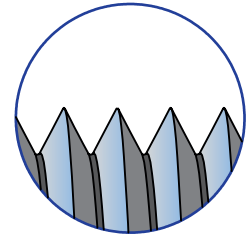


Fig. 1



Incomplete profile



Full profile

When tapping in NC-controlled drilling and milling machines you can use either synchronized tapping or conventional tapping.

Synchronized tapping cycle

Synchronized tapping means that the spindle rotation speed and pitch are synchronized to the axial movement of the machine. The tapping cycle always starts with an inoperative spindle. The advantage of synchronized tapping is the accurate depth of the thread. The disadvantage is that the tapping cycle is slow. Fig 2 shows that when trying to synchronize the spindle and the machine axial movement, the retardation and acceleration will be limited. The tapping cycle will as a result of this be slow. The process follows graph B in Fig 1 at the risk of incomplete thread profile. In case of modern machines with a very accurate synchronizing, rigid tapping is possible to use (the tap have no axial float). Normally when using synchronized tapping the tap must have an axial float to avoid big axial forces that gives incomplete thread profiles.

Conventional tapping cycle

Conventional tapping cycle means that the spindle rotation and machine axial movement must be programmed separately. The tapping cycle starts with full spindle rotation. The advantage is a faster tapping cycle and that the tapping process can follow graph A in Fig 1, which means that you get a better thread finish. To obtain a full profile when tapping conventional, a tapping device with ball bearing axial floating must be used. Fig 3 shows the tapping process at conventional tapping. As you can see from the picture the tapping process can follow graph A in Fig 1 which means that you get a better thread finish.

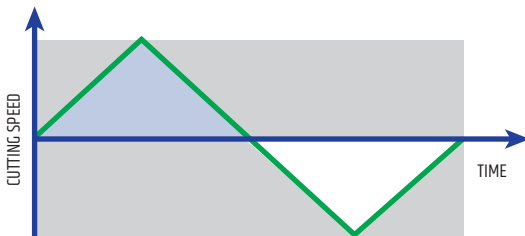


Fig. 2

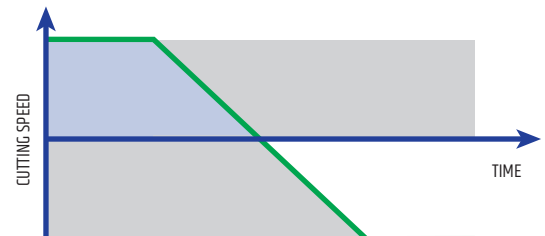


Fig. 3

Our different models of tapping devices



▲ **Typ CGS / CGS-C**
Compact tapping device
with built-in floating



▲ **Typ ST / STF**
Very narrow design, with
or without floating



▲ **Typ GS**
Slim tapping spindle
with adjustable floating



▲ **Typ SA**
Powerful tapping device
with floating and adjustable
torque-clutch

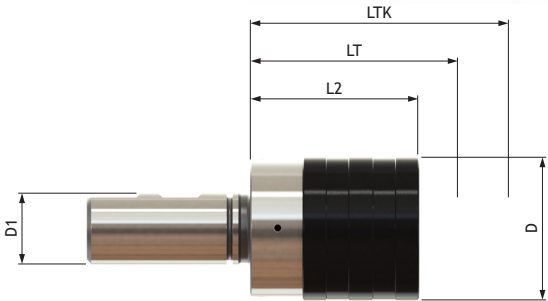


▲ **Typ SyncTapper**
With mini-floating for
modern, rigid tapping

TAPPING DEVICES

CGS / CGS-C

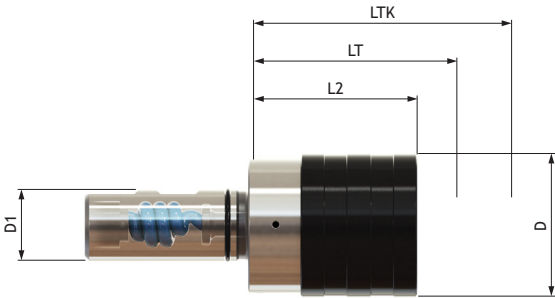
- ▲ Ball bearing axial floating which eliminates the machine axial forces
- ▲ Internal cooling that manages up to 50 bar coolant pressure
- ▲ Adjustable collaring-pressure
- ▲ Hard thrust-pressure makes the tap starting to cut immediately



CGS with Weldon shaft

CGS type	D1 Shaft	D Ømm	B mm	F mm	L2 mm	LT mm	LTK mm	Fits tapholder	Art.no
CGS-12	Weldon 25	50	7	10	53	68	109	T-12 and TK-12	37622
CGS-24	Weldon 25	75	12	18	112	131	131	T-24 and TK-24	37623
CGS-42	Weldon 32	96	15	20	135	153	-----	T-42	37624

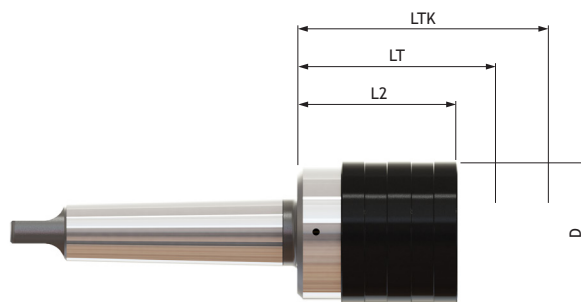
B = Backward floating , F = Forward floating



CGS-C with Weldon shaft and internal cooling

CGS type	D1 Shaft	D Ømm	B mm	F mm	L2 mm	LT mm	LTK mm	Fits tapholder	Art.no
CGS-12C	Weldon 25	50	7	10	53	68	109	T-12 and TK-12	37590
CGS-24C	Weldon 25	75	12	18	112	131	131	T-24 and TK-24	37596
CGS-42C	Weldon 32	96	15	20	135	153	-----	T-42	37597

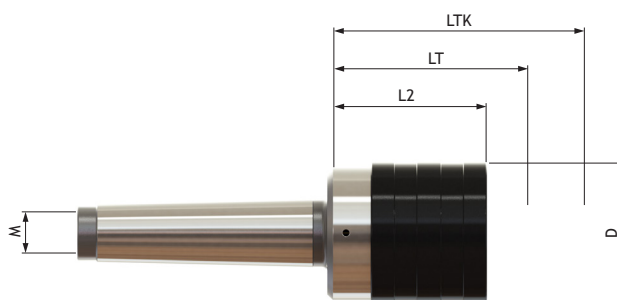
B = Backward floating , F = Forward floating



CGS with Morse Taper shaft

CGS type	Shaft type	D mm	B mm	F mm	L2 mm	LT mm	LTK mm	Fits tapholder	Art.no
CGS-8	Morse Taper 1	40	5	10	48	60	95	T-8 and TK-8	26570
	Morse Taper 2	40	5	10	50	62	97	T-8 and TK-8	26550
CGS-12	Morse Taper 2	50	7	10	55	71	111	T-12 and TK-12	26296
	Morse Taper 3	50	7	10	55	71	111	T-12 and TK-12	26298
CGS-24	Morse Taper 3	75	12	18	94	113	164	T-24 and TK-24	26406
	Morse Taper 4	75	12	18	94	113	164	T-24 and TK-24	26408
CGS-42	Morse Taper 4	96	15	20	130	148	-----	T-42	36332

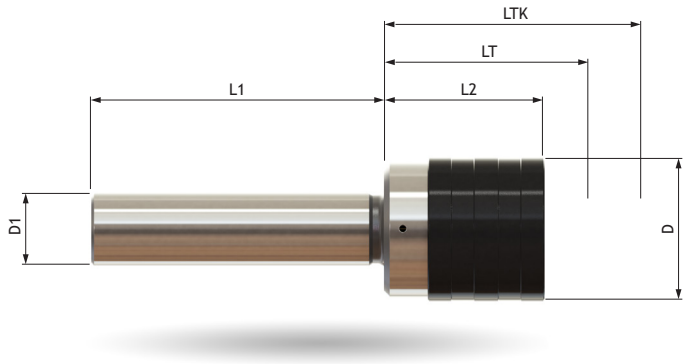
B = Backward floating , F = Forward floating



CGS with Morse Taper shaft for tie rod

CGS type	Shaft type	M Thread	D mm	B mm	F mm	L2 mm	LT mm	LTK mm	Fits tapholder	Art.no
CGS-8	Morse Taper 2	M10	40	5	10	50	62	97	T-8 and TK-8	26973
CGS-12	Morse Taper 2	M10	50	7	10	55	71	111	T-12 and TK-12	36135
	Morse Taper 3	M12	50	7	10	55	71	111	T-12 and TK-12	26975
CGS-24	Morse Taper 3	M12	75	12	18	94	113	164	T-24 and TK-24	26977

B = Backward floating , F = Forward floating



CGS with Weldon shaft

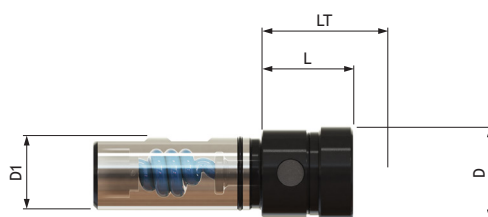
CGS type	D1 Ømm	L1 mm	D Ømm	B mm	F mm	L2 mm	LT mm	LTK mm	Fits tapholder	Art.no
CGS-8	15,88	42	40	5	10	45	57	92	T-8 and TK-8	26981
CGS-12	25,4	100	50	7	10	50	66	106	T-12 and TK-12	26439
CGS-24	25,4	100	75	12	18	89	108	159	T-24 and TK-24	26443

B = Backward floating , F = Forward floating

▲ Narrow design which combined with SPV Spintec's Weldon-extensions and short ISO- or BT-holders will provide very long and narrow tapping tools with high precision

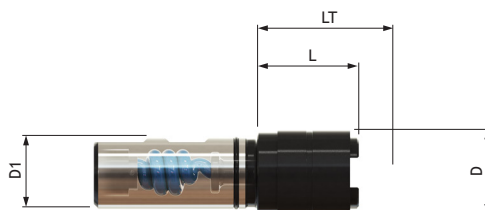
▲ Internal cooling that manages up to 50 bar coolant pressure

▲ Short backward floating (2 mm)



ST-CT without floating, for internal cooling

ST type	D1 Shaft	D Ømm	L mm	LT mm	Fits tapholder	Art.no
ST-16 CT	Weldon 25	32	30	45	T-12 and TK-12	37716
ST-16 CLT	Weldon 25	32	80	90	T-24 and TK-24	37721

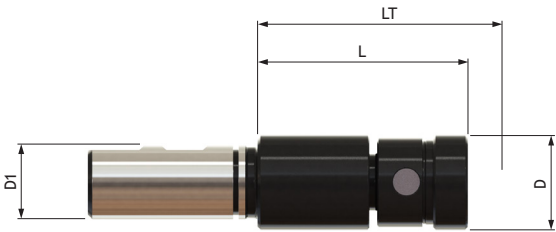


ST-CEU without floating, for internal cooling

ST type	D1 Shaft	D Ømm	L mm	LT mm	Fits tapholder	Art.no
ST-12 CEU	Weldon 25	30	35	42	EU-1	35804
ST-12 CLEU	Weldon 25	30	85	92	EU-1	35805
ST-20 CEU	Weldon 25	50	52	63	EU-2	35806
ST-20 CLEU	Weldon 25	50	102	113	EU-2	35814

TAPPING DEVICES

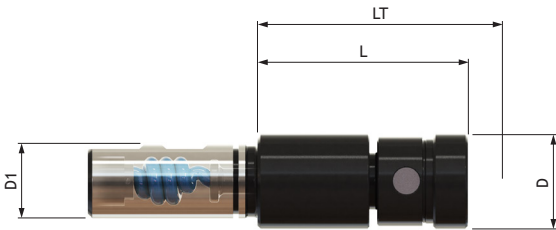
ST / STF



STF-T with floating

STF type	D1 Shaft	D Ømm	B mm	F mm	L mm	LT mm	Fits tapholder	Art.no
STF-16 T	Weldon 25	32	2	10	70	85	T-12 and TK-12	37717
STF-30 T	Weldon 32	50	4	15	130	149	T-24 and TK-24	37740

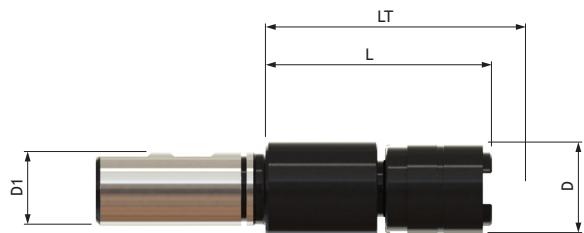
B = Backward floating , F = Forward floating



STF-CT with floating, for internal cooling

STF type	D1 Shaft	D Ømm	B mm	F mm	L mm	LT mm	Fits tapholder	Art.no
STF-16 CT	Weldon 25	32	2	10	74	89	T-12 and T-12C	37718
STF-30 CT	Weldon 32	50	4	15	130	149	T-24 and T-24C	37741

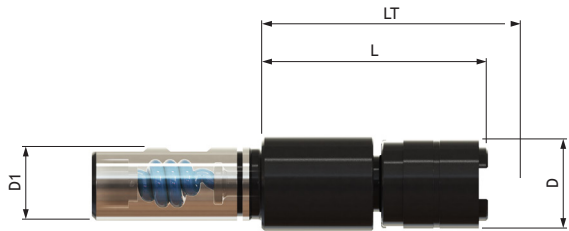
B = Backward floating , F = Forward floating



STF-EU with floating

STF type	D1 Shaft	D Ømm	B mm	F mm	L mm	LT mm	Fits tapholder	Art.no
STF-12 EU	Weldon 25	30	2	10	73	80	EU-1	35807
STF-20 EU	Weldon 25	50	2	10	90	101	EU-2	35808

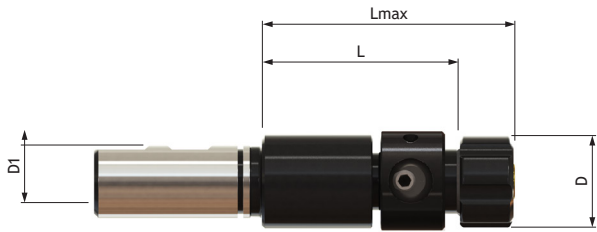
B = Backward floating , F = Forward floating



STF-CEU with floating, for internal cooling

STF type	D1 Shaft	D Ømm	B mm	F mm	L mm	LT mm	Fits tapholder	Art.no
STF-12 CEU	Weldon 25	32	2	10	73	80	EU-1	35809
STF-20 CEU	Weldon 25	50	2	10	90	101	EU-2	35810

B = Backward floating , F = Forward floating



STF-J with floating, for Ruber-flex collets

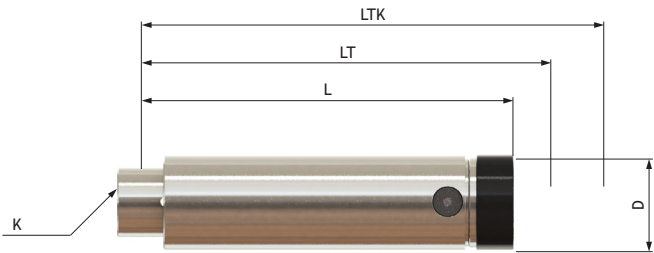
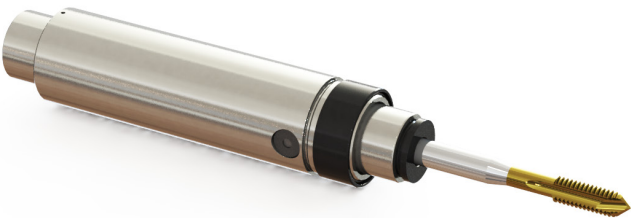
STF type	D1 Shaft	D Ømm	B mm	F mm	L mm	LT mm	Fits collet	Art.no
STF-12 J	Weldon 25	32	2	10	86	51	J-420 - 23	37709
STF-16 J	Weldon 25	40	2	10	90	51	J-440 - 43	37710
STF-33 J	Weldon 32	56	4	15	144	89	J-461 - 62	37711

B = Backward floating , F = Forward floating

TAPPING DEVICES

GS-E

- Adjustable ball bearing axial floating which eliminates the machine axial forces making it suitable for multi-spindle operations
- Internal cooling that manages up to 50 bar coolant pressure
- Hard collaring-pressure makes the tap starting to cut immediately



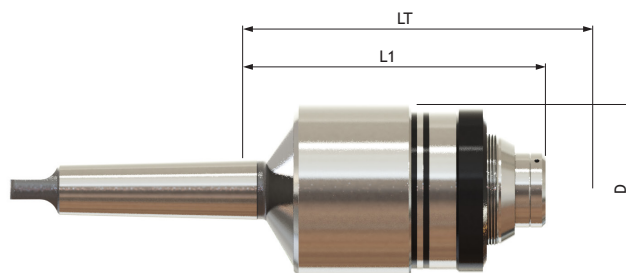
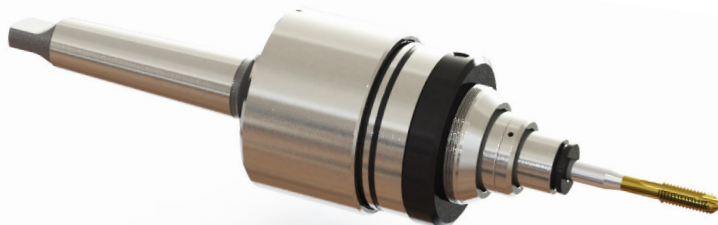
GS-E with adjustable floating

GS-E type	K int taper	D Ømm	Lmin mm	Lmax mm	LTmin mm	LTmax mm	LTkmin mm	LTkmax mm	Fits tapholder	Art.no
GS-8E	B12	23	100	125	112	137	147	172	T-8 and TK-8	36470
GS-12E	B16	30	108	133	123	148	164	189	T-12 and TK-12	36478
GS-24E	B18	50	147	157	166	206	217	257	T-24 and TK-24	36487

GS-E type	Adjustable floating backwards	Adjustable floating forward
GS-8E	0 - 25 mm	25 - 0 mm
GS-12E	0 - 25 mm	25 - 0 mm
GS-24E	0 - 40 mm	40 - 0 mm



- ▶ Ball bearing axial floating which eliminates the machine axial forces
- ▶ Infinitely adjustable torque clutch which releases on set torque
- ▶ Extra long backwards floating
- ▶ Adjustable collaring-pressure makes the tap starting to cut immediately in different materials



SA (for conventional machines)

SA type	Shaft type	D Ømm	B mm	F mm	L mm	LT mm	Fits collet	Art.no
SA-1E	Morse Taper 2	70	9	18	119	136	T-12	22209
	Morse Taper 3	70	9	18	118	135	T-12	22210
SA-2E	Morse Taper 3	104	12	20	178	197	T-24	22428
	Morse Taper 4	104	12	20	176,5	195,5	T-24	22263

B = Backward floating , F = Forward floating

SA-NC (for CNC-machines)

SA type	Shaft type	D Ømm	B mm	F mm	L mm	LT mm	Fits collet	Art.no
SA-1E / NC	Morse Taper 2	70	18	9	128	144	T-12	28437
	Morse Taper 3	70	18	9	127	143	T-12	28351
SA-2E / NC	Morse Taper 3	104	20	12	186	205	T-24	28439
	Morse Taper 4	104	20	12	184,5	203,5	T-24	28352

B = Backward floating , F = Forward floating

TAPPING DEVICES

SyncTapper

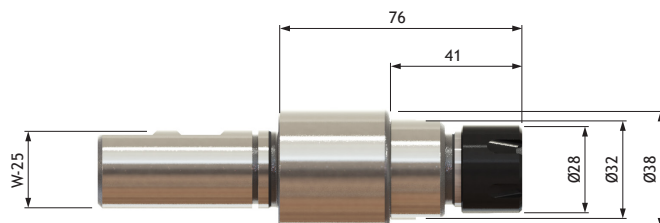
SyncTapper with mini-floating for Rigid Tapping.

Many modern machines have a function that enables Rigid Tapping. This means that the machine spindle is accurately synchronized with the feed of the axial movement. However in many cases it's not 100% accurate which can impair on the thread quality and result in bad surface finish.

To obtain full thread profile it's important that the axial force is very low. If the force exceeds a certain value the profile will be incomplete.

SPV Spintec's SyncTapper has a built-in rigid mini-floating of only 0.5 mm to counteract on any negative forces, allowing the tap to cut the best way and extending the tool lifetime.

The tap is clamped by an ER-collet, making the setup much more stable than a conventional tap holder.



Model type	K int.taper	Art.no
SYNCTAPPER	TAPPING CHUCK SYNCTAPPER, ER-20, WELDON-25, LENGTH 76	38010

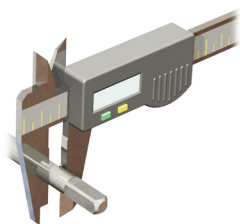
SyncTapper comes complete with clamping-nut and wrench
For clamping the tap it use collets type ER-20

Tap holders - For quick and simple tool changes

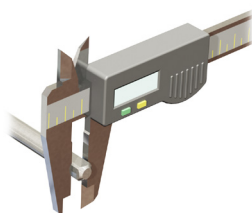
- ▲ Long clamping area improves rigidity and thread quality
- ▲ The tap is controlled with precision which improves the thread quality
- ▲ Internal cooling ducts for cooling along the tap (model TC)
- ▲ Built-in adjustable torque clutch to save the tap (model TK)



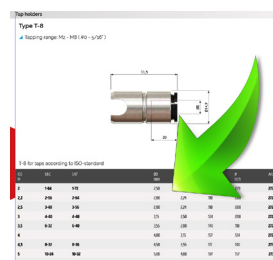
Find the correct tap holder with 3 easy steps.



- ▲ Check the dimension of the tap diameter



- ▲ Check the dimension of the tap square



- ▲ Search the catalogue table for Ø and #

Tap holder model T and TC



- ▲ **Type T**
For cooling from outside the tapping device



- ▲ **Type T**
For taps with internal cooling ducts



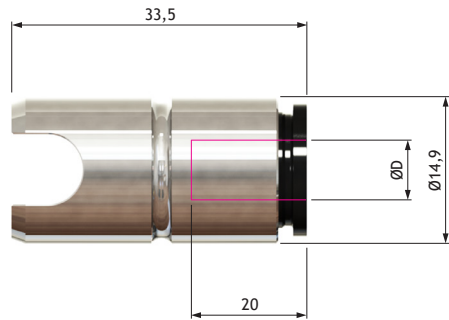
- ▲ **Type TC**
For external cooling along the tap

TAPPING DEVICES

Tap holders

Type T-8

▲ Tapping range: M2 - M8 (#0 - 5/16")



T-8 for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	Art.no
2	1-64	1-72	2,50	2,00	.098	.079	27279
2,2	2-56	2-64	2,80	2,24	.110	.088	27284
2,5	3-48	3-56	2,80	2,24	.110	.088	27284
3	4-40	4-48	3,15	2,50	.124	.098	27288
3,5	6-32	6-40	3,55	2,80	.140	.110	27293
4			4,00	3,15	.157	.124	27299
4,5	8-32	8-36	4,50	3,55	.177	.140	27307
5	10-24	10-32	5,00	4,00	.197	.157	27315
	12-24	12-28	5,60	4,50	.220	.177	27320
6	1/4"-20	1/4"-28	6,30	5,00	.248	.197	27328
7			7,10	5,60	.280	.220	27802
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	27809
11	7/16"-14	7/16"-20	8,00	6,30	.315	.248	27809

Type T-8

T-8 for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	Art.no
1 - 1,8	1 - 1,8	3,5	1/16"		2,50	2,10	.098	.083	27280
2	2	4	3/32"		2,80	2,10	.110	.083	27283
2,2	2,2		5/32"		2,80	2,10	.110	.083	27283
2,5	2,5				2,80	2,10	.110	.083	27283
3		5	1/8"		3,50	2,70	.138	.106	27292
3,5	3,5				4,00	3,00	.157	.118	27298
4	4	6	5/32"		4,50	3,40	.177	.134	27306
			7/32"		4,00	3,00	.157	.118	27298
5	5		7/32"		6,00	4,90	.236	.193	27624
			1/4"		4,50	3,40	.177	.134	27306
6	6		1/4"		6,00	4,90	.236	.193	27324
		7			5,50	4,30	.217	.169	27317
7					6,00	4,90	.236	.193	27324
	7		1/4"		7,00	5,50	.276	.217	27332
8		8	5/16"		6,00	4,90	.236	.193	27324
	8		5/16"		8,00	6,20	.315	.244	27808
9		9	3/8"	1/8"	7,00	5,50	.276	.217	27332
10		10			7,00	5,50	.276	.217	27332
11		11	7/16"		8,00	6,20	.315	.244	27808

T-8 for taps according to ANSI-standard

UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
0-6	3,58	2,79	.141	.110	27294
8	4,27	3,33	.168	.131	27305
10	4,93	3,86	.194	.152	27313
12	5,59	4,19	.220	.165	27319
1/4"	6,48	4,85	.255	.191	27330

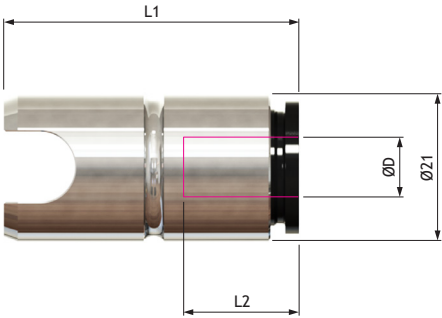
TAPPING DEVICES

Tap holders

Type T-12 / T-12C

▲ Tapping range: M4 - M16 (5/32" - 5/8")

ØD mm	L1 mm	L2 mm
4,0 - 7,0	36	20
7,1 - 10,0	36	17
10,5 - 12,5	37,5	17



T-12 and T-12C for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	T-12 Art.no	T-12C Art.no
3	4-40	4-48	3,15	2,50	.124	.098	27950	---
3,5	6-32	6-40	3,55	2,80	.140	.110	37213	---
4			4,00	3,15	.157	.124	22809	---
4,5	8-32	8-36	4,50	3,55	.177	.140	22810	---
5	10-24	10-32	5,00	4,00	.197	.157	20860	---
	12-24	12-28	5,60	4,50	.220	.177	22811	---
6	1/4"-20	1/4"-28	6,30	5,00	.248	.197	22812	22812C
7			7,10	5,60	.280	.220	22813	22813C
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	22814	22814C
9			9,00	7,10	.354	.280	22815	22815C
10	3/8"-16	3/8"-24	10,00	8,00	.394	.315	20887	20887C
11	7/16"-14	7/16"-20	8,00	6,30	.315	.248	22814	22814C
12	1/2"-13	1/2"-20	9,00	7,10	.354	.280	22815	22815C
14	9/16"-12	9/16"-18	11,20	9,00	.441	.354	22817	22817C
16	5/8"-11	5/8"-18	12,50	10,00	.492	.394	22259	22259C

Type T-12 / T-12C

T-12 and T-12C for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	T-12 Art.no	T-12C Art.no
3		5	1/8"		3,50	2,70	.138	.106	20847	---
3,5	3,5				4,00	3,00	.157	.118	20849	---
4	4	6	5/32"		4,50	3,40	.177	.134	20854	20854C
			7/32"		4,00	3,00	.157	.118	20849	---
5	5		7/32"		6,00	4,90	.236	.193	20865	20865C
	6		1/4"		4,50	3,40	.177	.134	20854	20854C
6			1/4"		6,00	4,90	.236	.193	20865	20865C
		7			5,50	4,30	.217	.169	20861	20861C
7					6,00	4,90	.236	.193	20865	20865C
	7		1/4"		7,00	5,50	.276	.217	20872	20872C
8		8	5/16"		6,00	4,90	.236	.193	20865	20865C
	8		5/16"		8,00	6,20	.315	.244	20875	20875C
9		9	3/8"	1/8"	7,00	5,50	.276	.217	20872	20872C
10		10			7,00	5,50	.276	.217	20872	20872C
	9		3/8"		9,00	7,00	.354	.276	20880	20880C
11		11	7/16"		8,00	6,20	.315	.244	20875	20875C
12		12	1/2"		9,00	7,00	.354	.276	20880	20880C
	10				10,00	8,00	.394	.315	20887	20887C
14		14	9/16"	1/4"	11,00	9,00	.433	.354	22255	22255C
16	12	16	5/8"	3/8"	12,00	9,00	.472	.354	22257	22257C

T-12 for taps according to ANSI-standard

UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	T-12 Art.no
0-6		3,58	2,79	.141	.110	37382
8		4,27	3,33	.168	.131	20853
10		4,93	3,86	.194	.152	20858
12		5,59	4,19	.220	.165	20862
1/4"		6,48	4,85	.255	.191	20870
5/16"		8,08	6,00	.318	.236	20877
3/8"		7,47	5,59	.294	.220	29103
3/8"		9,68	7,26	.381	.286	20886
	1/8"	11,12	8,33	.437	.328	22256
7/16"		8,20	6,15	.323	.242	20878
1/2"		9,32	6,99	.367	.275	20883
9/16"		10,90	8,18	.429	.322	22254
5/8"		12,19	9,14	.480	.360	22258

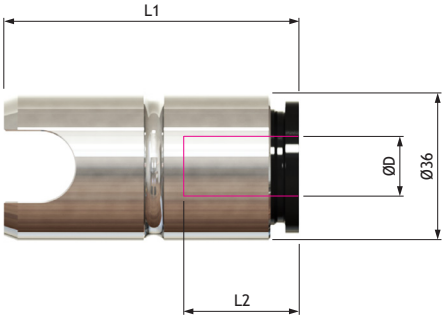
TAPPING DEVICES

Tap holders

Type T-24 / T-24C

Tapping range: M8 - M36 (5/8" - 1 3/8")

ØD mm	L1 mm	L2 mm
8,0 - 20,32	65	30
22,4 - 25,0	75	30



T-24 and T-24C for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	T-24 Art.no	T-24C Art.no
7			7,10	5,60	.280	.220	22839	22839C
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	22840	22840C
9			9,00	7,10	.354	.280	22841	22841C
10	3/8"-16	3/8"-24	10,00	8,00	.394	.315	22843	22843C
11	7/16"-11	7/16"-20	8,00	6,30	.315	.248	22840	22840C
12	1/2"-13	1/2"-20	9,00	7,10	.354	.280	22841	22841C
14	9/16"-12	9/16"-18	11,20	9,00	.441	.354	22844	22844C
16	5/8"-11	5/8"-18	12,50	10,00	.492	.394	22071	22071C
18			14,00	11,20	.551	.441	22845	22845C
20	3/4"-10	3/4"-16	14,00	11,20	.551	.441	22845	22845C
22	7/8"-9	7/8"-14	16,00	12,50	.630	.492	22846	22846C
24	1"-8	1"-12	18,00	14,00	.709	.551	22089	22089C
27	1 1/8"-7	1 1/8"-12	20,00	16,00	.787	.630	22096	22096C
30			20,00	16,00	.787	.630	22096	22096C
33	1 1/4"-7	1 1/4"-12	22,40	18,00	.882	.709	28528	28528C
36	1 3/8"-6	1 3/8"-12	25,00	20,00	.984	.787	36033	36033C

T-24 and T-24C for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	T-24 Art.no	T-24C Art.no
	7		1/4"		7,00	5,50	.276	.217	22050	22050C
	8		5/16"		8,00	6,20	.315	.244	22055	22055C
9		9	3/8"	1/8"	7,00	5,50	.276	.217	22050	22050C
10		10			7,00	5,50	.276	.217	22050	22050C

Type T-24 / T-24C

T-24 and T-24C for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	T-24 Art.no	T-24C Art.no
	9		3/8"		9,00	7,00	.354	.276	22062	22062C
11		11	7/16"		8,00	6,20	.315	.244	22055	22055C
12		12	1/2"		9,00	7,00	.354	.276	22062	22062C
	10				10,00	8,00	.394	.315	22843	22843C
14		14	9/16"	1/4"	11,00	9,00	.433	.354	22067	22067C
16		16	5/8"	3/8"	12,00	9,00	.472	.354	22069	22069C
18		18	11/16"		14,00	11,00	.551	.433	22075	22075C
	12		3/4"		14,00	11,00	.551	.433	22075	22075C
20		20	13/16"	1/2"	16,00	12,00	.630	.472	22081	22081C
22		22	7/8"	5/8"	18,00	14,50	.709	.571	22090	22090C
24		24	15/16"		18,00	14,50	.709	.571	22090	22090C
27		27	1"	3/4"	20,00	16,00	.787	.630	22096	22096C
30		30	1 1/8"	7/8"	22,00	18,00	.866	.709	28527	28527C
33		33	1 1/4"	1"	25,00	20,00	.964	.787	36033	36033C

T-24 for taps according to ANSI-standard

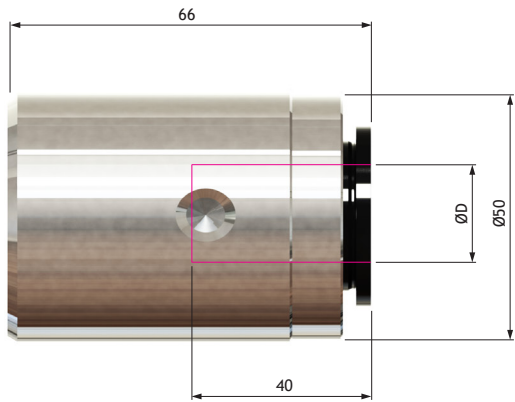
UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	T-24 Art.no
5/16"		8,08	6,00	.318	.236	22056
3/8"		7,47	5,59	.294	.220	22052
3/8"		9,68	7,26	.381	.286	27855
	1/8"	11,12	8,33	.437	.328	36205
7/16"		8,20	6,15	.323	.242	22057
1/2"		9,32	6,99	.367	.275	22063
9/16"		10,90	8,18	.429	.322	22066
5/8"		12,19	9,14	.480	.360	22070
9/16"	1/4"	14,27	10,69	.562	.421	36205
3/4"		14,99	11,23	.590	.442	22077
	1/2"	17,45	13,08	.687	.515	36206
13/16"		16,56	12,42	.652	.489	22083
7/8"		17,70	13,28	.697	.523	22087
	3/8"	17,78	13,49	.700	.531	36207
15/16"		19,30	14,48	.760	.570	22094
1"		20,32	15,24	.800	.600	22097
	3/4"	23,01	17,25	.906	.679	36208
1 1/8"		22,76	17,07	.896	.672	28529

TAPPING DEVICES

Tap holders

Type T-42 / T-42C

▲ Tapping range: M18 - M42 (1/2" - 1 5/8")



T-42 and T-42C for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	T-42 Art.no	T-42C Art.no
18			14,00	11,20	.551	.441	36252	36252C
20	3/4"-10	3/4"-16	14,00	11,20	.551	.441	36252	36252C
22	7/8"-9	7/8"-14	16,00	12,50	.630	.492	36255	36255C
24	1"-8	1"-12	18,00	14,00	.709	.551	36258	36258C
27	1 1/8"-7	1 1/8"-12	20,00	16,00	.787	.630	36261	36261C
30			20,00	16,00	.787	.630	36261	36261C
33	1 1/4"-7	1 1/4"-12	22,40	18,00	.882	.709	36264	36264C
36	1 3/8"-6	1 3/8"-12	25,00	20,00	.984	.787	36267	36267C
39	1 1/2"-6	1 1/2"-12	28,00	22,40	1.102	.882	36270	36270C
42			28,00	22,40	1.102	.882	36270	36270C

Type T-42 / T-42C

T-42 and T-42C for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	T-42 Art.no	T-42C Art.no
20		20	13/16"	1/2"	16,00	12,00	.630	.472	36254	36254C
22		22	7/8"	5/8"	18,00	14,50	.709	.571	36259	36259C
24		24	15/16"		18,00	14,50	.709	.571	36259	36259C
27		27	1"	3/4"	20,00	16,00	.787	.630	36261	36261C
30		30	11/8"	7/8"	22,00	18,00	.866	.709	36263	36263C
33		33	11/4"	1"	25,00	20,00	.984	.787	36267	36267C
36		36	13/8"	11/8"	28,00	22,00	1.102	.866	36269	36269C
39		39	11/2"		32,00	24,00	1.260	.945	36274	36274C
42		42	15/8"	11/4"	32,00	24,00	1.260	.945	36274	36274C

T-42 for taps according to ANSI-standard

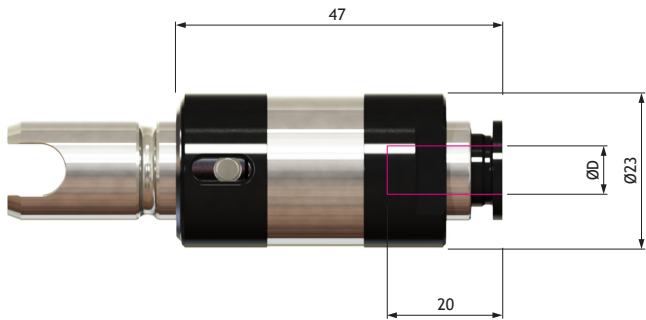
UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	T-42 Art.no
	1/2"	17,45	13,08	.687	.545	36256
7/8"		17,70	13,28	.697	.523	36257
15/16"		19,30	14,48	.760	.570	36260
1"		20,32	15,24	.800	.600	36262
	3/4"	23,01	17,25	.906	.679	36266
11/8"		22,76	17,07	.896	.672	36265
11/8"	1"	28,57	21,41	1.125	.843	36272
11/4"		25,93	19,45	1.021	.766	36268
13/8"		28,14	21,10	1.108	.831	36271
11/2"		31,32	23,49	1.233	.925	36273
15/8"		33,15	24,86	1.305	.979	36275
	11/4"	33,33	24,99	1.312	.954	36318

TAPPING DEVICES

Tap holders

Type TK-8

- ▲ Built-in torque clutch
- ▲ Tapping range: M2 - M11 (1/16" - 7/16")



TK-8 for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	Art.no
2	1-64	1-72	2,50	2,00	.098	.079	29822
2,2	2-56	2-64	2,80	2,24	.110	.088	29823
2,5	3-48	3-56	2,80	2,24	.110	.088	29823
3	4-40	4-48	3,15	2,50	.124	.098	29824
3,5	6-32	6-40	3,55	2,80	.140	.110	29825
4			4,00	3,15	.157	.124	29826
4,5	8-32	8-36	4,50	3,55	.177	.140	29827
5	10-24	10-32	5,00	4,00	.197	.157	29828
	12-24	12-28	5,60	4,50	.220	.177	29829
6	1/4"-20	1/4"-28	6,30	5,00	.248	.197	29830
7			7,10	5,60	.280	.220	29831
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	29832
11	7/16"-14	7/16"-20	8,00	6,30	.315	.248	29832

Type TK-8

TK-8 for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	Art.no
1 - 1,8	1 - 1,8	3,5	1/16"		2,50	2,10	.098	.083	29837
2	2	4	3/32"		2,80	2,10	.110	.083	29840
2,2	2,2		5/32"		2,80	2,10	.110	.083	29840
2,5	2,5				2,80	2,10	.110	.083	29840
3		5	1/8"		3,50	2,70	.138	.106	29847
3,5	3,5				4,00	3,00	.157	.118	29852
4	4	6	5/32"		4,50	3,40	.177	.134	29859
			7/32"		4,00	3,00	.157	.118	29852
5	5		7/32"		6,00	4,90	.236	.193	29874
			1/4"		4,50	3,40	.177	.134	29859
6	6		1/4"		6,00	4,90	.236	.193	29874
		7			5,50	4,30	.217	.169	29868
7					6,00	4,90	.236	.193	29874
	7		1/4"		7,00	5,50	.176	.217	29881
8		8	5/16"		6,00	4,90	.236	.193	29874
	8		5/16"		8,00	6,20	.315	.244	29887
9		9	3/8"	1/8"	7,00	5,50	.276	.217	29881
10		10			7,00	5,50	.276	.217	29881
11		11	7/16"		8,00	6,20	.315	.244	29887

TK-8 for taps according to ANSI-standard

UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
0-6	3,58	2,79	.141	.110	29848
8	4,27	3,33	.168	.131	29858
10	4,93	3,86	.194	.152	29865
12	5,59	4,19	.220	.165	29870
1/4"	6,48	4,85	.255	.191	29879
5/16"	8,08	6,00	.318	.236	36731

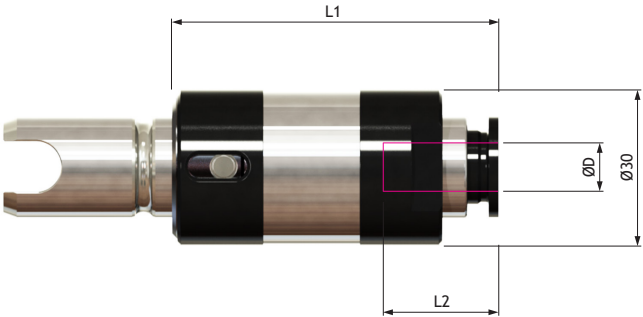
TAPPING DEVICES

Tap holders

Type TK-12

- ▲ Built-in torque clutch
- ▲ Tapping range: M3 - M16 (1/8" - 5/8")

ØD mm	L1 mm	L2 mm
4,0 - 7,0	56	20
7,1 - 10,0	56	17
10,5 - 12,5	63	17



TK-12 for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	Art.no
3	4-40	4-48	3,15	2,50	.124	.098	26590
4			4,00	3,15	.157	.124	29724
4,5	8-32	8-36	4,50	3,55	.177	.140	29725
5	10-24	10-32	5,00	4,00	.197	.157	29726
	12-24	12-28	5,60	4,50	.220	.177	29727
6	1/4"-20	1/4"-28	6,30	5,00	.248	.197	29728
7			7,10	5,60	.280	.220	29729
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	29730
9			9,00	7,10	.354	.280	29731
10	3/8"-16	3/8"-24	10,00	8,00	.394	.315	29733
11	7/16"-14	7/16"-20	8,00	6,30	.315	.248	29730
12	1/2"-13	1/2"-20	9,00	7,10	.354	.280	29731
14	9/16"-12	9/16"-18	11,20	9,00	.441	.354	36825
16	5/8"-11	5/8"-18	12,50	10,00	.492	.394	36828

Type TK-12

TK-12 for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	Art.no
3		5	1/8"		3,50	2,70	.138	.106	29735
3,5	3,5				4,00	3,00	.157	.118	29737
4	4	6	5/32"		4,50	3,40	.177	.134	29742
			7/32"		4,00	3,00	.157	.118	29737
5	5		7/32"		6,00	4,90	.236	.193	29752
			1/4"		4,50	3,40	.177	.134	29742
6	6		1/4"		6,00	4,90	.236	.193	29752
		7			5,50	4,30	.217	.169	29748
7					6,00	4,90	.236	.193	29752
	7		1/4"		7,00	5,50	.276	.217	29759
8		8	5/16"		6,00	4,90	.236	.193	29752
	8		5/16"		8,00	6,20	.315	.244	29762
9		9	3/8"	1/8"	7,00	5,50	.276	.217	29759
10		10			7,00	5,50	.276	.217	29759
	9		3/8"		9,00	7,00	.354	.276	29769
11		11	7/16"		8,00	6,20	.315	.244	29762
12		12	1/2"		9,00	7,00	.354	.276	29769
	10				10,00	8,00	.394	.315	29733
14		14	9/16"	1/4"	11,00	9,00	.433	.354	36823
16	12	16	5/8"	3/8"	12,00	9,00	.472	.354	36826

TK-12 for taps according to ANSI-standard

UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	Art.no
8		4,27	3,33	.168	.131	29741
10		4,93	3,86	.194	.152	29746
12		5,59	4,19	.220	.165	29749
1/4"		6,48	4,85	.255	.191	29757
5/16"		8,08	6,00	.318	.236	29763
3/8"		9,68	7,26	.381	.286	29774
	1/8"	11,12	8,33	.437	.328	36824
7/16"		8,20	6,15	.323	.242	29765
1/2"		9,32	6,99	.367	.275	29771
9/16"		10,90	8,18	.429	.322	36822
5/8"		12,19	9,14	.480	.360	36827

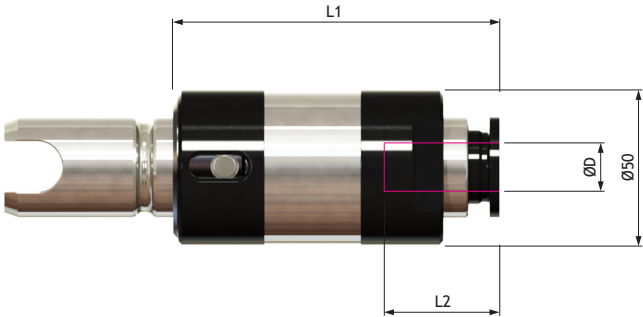
TAPPING DEVICES

Tap holders

Type TK-24

- ▲ Built-in torque clutch
- ▲ Tapping range: M6 - M30 (1/4" - 1")

ØD mm	L1 mm	L2 mm
4,0 - 7,0	70	30
7,1 - 10,0	85	30



TK-24 for taps according to ISO-standard

ISO M	UNC	UNF	ØD mm	# mm	ØD inch	# inch	Art.no
8	5/16"-18	5/16"-24	8,00	6,30	.315	.248	26095
9			9,00	7,10	.354	.280	26096
10	3/8"-16	3/8"-24	10,00	8,00	.394	.315	26098
11	7/16"-14	7/16"-20	8,00	6,30	.315	.248	26095
12	1/2"-13	1/2"-20	9,00	7,10	.354	.280	26096
14	9/16"-12	9/16"-18	11,20	9,00	.441	.354	26099
16	5/8"-11	5/8"-18	12,50	10,00	.492	.394	26100
18			14,00	11,20	.551	.441	26101
20	3/4"-10	3/4"-16	14,00	11,20	.551	.441	26101
22	7/8"-9	7/8"-14	16,00	12,50	.630	.492	26102
24	1"-8	1"-12	18,00	14,00	.709	.551	26103
27	1 1/8"-7	1 1/8"-12	20,00	16,00	.787	.630	26104
30			20,00	16,00	.787	.630	26104

TK-24 for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	Art.no
6	6		1/4"		6,00	4,90	.236	.193	26983
7					6,00	4,90	.236	.193	26983
	7		1/4"		7,00	5,50	.276	.217	26105
8		8	5/16"		6,00	4,90	.236	.193	26983
	8		5/16"		8,00	6,20	.315	.244	26110

Type TK-24

TK-24 for taps according to DIN-standard

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	ØD mm	# mm	ØD inch	# inch	Art.no
9		9	3/8"	1/8"	7,00	5,50	.276	.217	26105
10		10			7,00	5,50	.276	.217	26105
	9		3/8"		9,00	7,00	.354	.276	26117
11		11	7/16"		8,00	6,20	.315	.244	26110
12		12	1/2"		9,00	7,00	.354	.276	26117
	10				10,00	8,00	.394	.315	26098
14		14	9/16"	1/4"	11,00	9,00	.433	.354	26124
16	12	16	5/8"	3/8"	12,00	9,00	.472	.354	26126
18		18	11/16"		14,00	11,00	.551	.433	26131
			3/4"		14,00	11,00	.551	.433	26131
20		20	13/16"	1/2"	16,00	12,00	.630	.472	26137
22		22	7/8"	5/8"	18,00	14,50	.709	.571	26145
24		24	15/16"		18,00	14,50	.709	.571	26145
27		27	1"	3/4"	20,00	16,00	.787	.630	26104

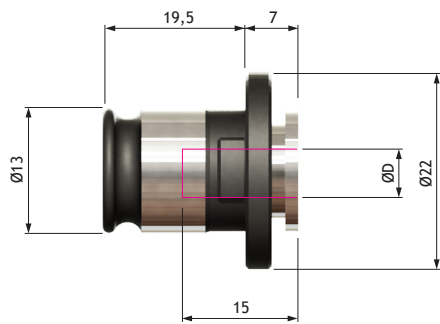
TK-24 for taps according to ANSI-standard

UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	Art.no
5/16"		8,08	6,00	.318	.236	26111
3/8"		7,47	5,59	.294	.220	26107
3/8"		9,68	7,26	.381	.286	26121
	1/8"	11,12	8,33	.437	.328	26125
7/16"		8,20	6,15	.323	.242	26112
1/2"		9,32	6,99	.367	.275	26118
9/16"		10,90	8,18	.429	.322	26123
5/8"		12,19	9,14	.480	.360	26127
9/16"	1/4"	14,27	10,69	.562	.421	26132
3/4"		14,99	11,23	.590	.442	26133
	1/2"	17,45	13,08	.687	.515	26141
13/16"		16,56	12,42	.652	.489	26139
7/8"		17,70	13,28	.697	.523	26143
	3/8"	17,78	13,49	.700	.531	26144
15/16"		19,20	14,48	.760	.570	26149
1"		20,32	15,25	.800	.600	26151

TAPPING DEVICES

Tap holders

Type EU-o



EU-o for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
2	2,50	2,00	098	079	72850
3	3,15	2,50	124	098	72852
3,5	3,55	2,80	140	110	72854
4	4,00	3,15	157	124	72856
5	5,00	4,00	197	157	72858
6	6,30	5,00	248	197	72860

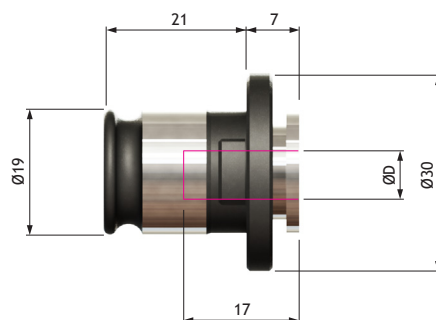
EU-o for taps according to DIN-standard

352 M	ØD mm	# mm	ØD inch	# inch	Art.no
1 - 1,8	2,50	2,10	.098	.083	72850
2 - 2,5	2,80	2,10	.110	.083	72851
3	3,50	2,70	.138	.106	72853
3,5	4,00	3,00	.157	.118	72855
4	4,50	3,40	.177	.134	72857
5 - 8	6,00	4,90	.236	.193	72859
9 - 10	7,00	5,50	.276	.217	72861
11	8,00	6,20	.315	.244	72862

EU-o for taps according to ANSI-standard

UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
0-6	3,58	2,79	.141	.110	72863
8	4,27	3,33	.168	.131	72864
10	4,93	3,86	.194	.152	72865
12	5,59	4,19	.220	.165	72866

Type EU-1



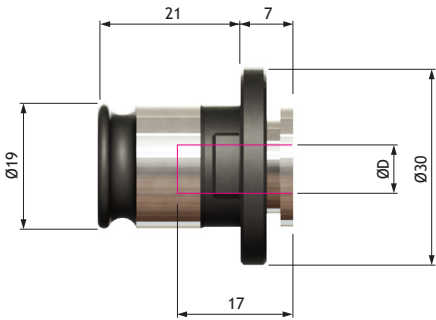
EU-1 for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
3	3,15	2,50	.124	.098	73002
3,5	3,55	2,80	.140	.110	73004
4	4,00	3,15	.157	.124	73006
4,5	4,50	3,55	.177	.140	73009
5	5,00	4,00	.197	.157	73011
6	6,30	5,00	.248	.197	73015
7	7,10	5,60	.280	.220	73018
8	8,00	6,30	.315	.248	73029
9	9,00	7,10	.354	.280	73022
10	10,00	8,00	.394	.315	73025
11	8,00	6,30	.315	.248	73029
12	9,00	7,10	.354	.280	73022

TAPPING DEVICES

Tap holders

Type EU-1



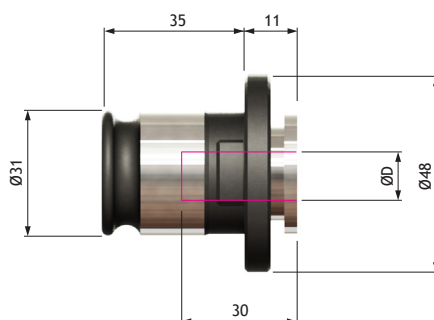
EU-1 for taps according to DIN-standard

352 M	ØD mm	# mm	ØD inch	# inch	Art.no
3	3,50	2,70	.138	.106	73003
3,5	4,00	3,00	.157	.118	73005
4	4,50	3,40	.177	.134	73008
5 - 8	6,00	4,90	.236	.193	73014
9 - 10	7,00	5,50	.276	.217	73017
11	8,00	6,20	.315	.244	73019
12	9,00	7,00	.354	.276	73022
14	11,00	9,00	.433	.354	73027

EU-1 for taps according to ANSI-standard

UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
0-6	3,57	2,79	.141	.110	73091
8	4,27	3,33	.168	.131	73007
10	4,93	3,86	.194	.152	73010
12	5,59	4,19	.220	.165	73012
1/4"	6,48	4,85	.225	.191	73016
5/16"	8,08	6,00	.318	.236	73020
3/8"	9,68	7,26	.381	.286	73024
7/16"	8,20	6,15	.323	.242	73021
1/2"	9,32	6,99	.367	.275	73023
9/16"	10,90	8,18	.429	.322	73026

Type EU-2



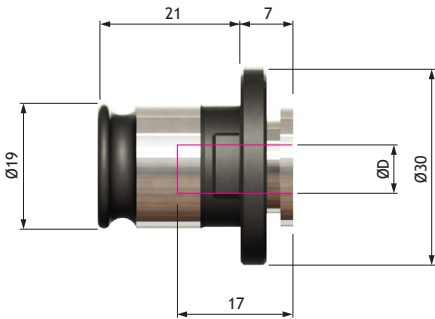
EU-2 for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
6	6,30	5,00	.248	.197	73033
7	7,10	5,60	.280	.220	73035
8	8,00	6,30	.315	.248	73036
9	9,00	7,10	.354	.280	73039
10	10,00	8,00	.394	.315	73042
11	8,00	6,30	.315	.248	73036
12	9,00	7,10	.354	.280	73039
14	11,20	9,00	.441	.354	73045
16	12,50	10,00	.492	.394	73048
18	14,00	11,20	.551	.441	73051
20	14,00	11,20	.551	.441	73051
22	16,00	12,50	.630	.492	73055

TAPPING DEVICES

Tap holders

Type EU-2



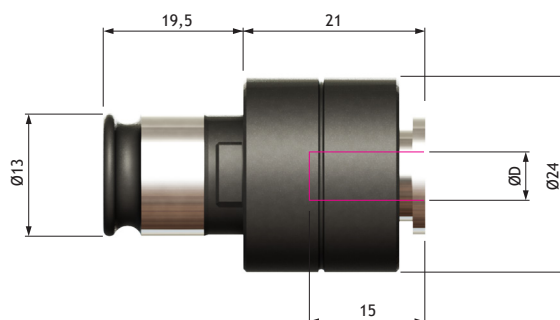
EU-2 for taps according to DIN-standard

352 M	ØD mm	# mm	ØD inch	# inch	Art.no
5 - 8	6,00	4,90	.236	.193	73032
9 - 10	7,00	5,50	.276	.217	73034
11	8,00	6,20	.315	.244	73036
12	9,00	7,00	.354	.276	73039
14	11,00	9,00	.433	.354	73044
16	12,00	9,00	.472	.354	73046
18	14,00	11,00	.551	.433	73050
20	16,00	12,00	.630	.472	73054
22	18,00	14,50	.709	.571	73061

EU-2 for taps according to ANSI-standard

UNC, UNF NC, NF	NPTS	ØD mm	# mm	ØD inch	# inch	Art.no
5/16"		8,08	6,00	.318	.236	73037
3/8"		9,68	7,26	.381	.286	73041
7/16"		8,20	6,15	.323	.242	73038
1/2"		9,32	6,99	.367	.275	73040
9/16"		10,90	8,18	.429	.322	73043
5/8"		12,19	9,14	.480	.360	73047
11/16"		17,45	13,08	.687	.515	73057
13/16"		15,56	12,42	.652	.489	73056
7/8"		17,07	13,28	.697	.523	73058
	3/8"	17,78	13,49	.700	.531	73059

Type EUK-o

 Built-in torque clutch


EUK-o for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
2	2,50	2,00	.098	.079	72950
3	3,15	2,50	.124	.098	72952
3,5	3,55	2,80	.140	.110	72954
4	4,00	3,15	.157	.124	72956
5	5,00	4,00	.197	.157	72958
6	6,30	5,00	.248	.197	72960

EUK-o for taps according to DIN-standard

352 M	ØD mm	# mm	ØD inch	# inch	Art.no
1 - 1,8	2,50	2,10	.098	.083	72950
2 - 2,5	2,80	2,10	.110	.083	72951
3	3,50	2,70	.138	.106	72953
3,5	4,00	3,00	.157	.118	72955
4	4,50	3,40	.177	.134	72957
5 - 8	6,00	4,90	.236	.193	72959
9 - 10	7,00	5,50	.276	.217	72961
11	8,00	6,20	.315	.244	72962

EUK-o for taps according to ANSI-standard

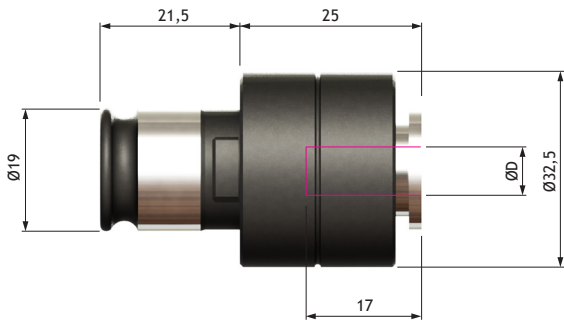
UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
0 - 6	3,58	2,79	.141	.110	72963
8	4,27	3,33	.168	.131	72964
10	4,93	3,86	.194	.152	72965
1/4"	6,48	4,85	.225	.191	72967

TAPPING DEVICES

Tap holders

Type EUK-1

▲ Built-in torque clutch



EUK-1 for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
3 - 4,5	6,00	4,90	.236	.193	73032
5 - 6	7,00	5,50	.276	.217	73034
7	8,00	6,20	.315	.244	73036
8	9,00	7,00	.354	.276	73039
9	11,00	9,00	.433	.354	73044
10	12,00	9,00	.472	.354	73046
11	14,00	11,00	.551	.433	73050
12	16,00	12,00	.630	.472	73054

Type EUK-1

 Built-in torque clutch

EUK-1 for taps according to DIN-standard

352 M	371 M	ØD mm	# mm	ØD inch	# inch	Art.no
3		3,50	2,70	.138	.106	73103
3,5		4,00	3,00	.157	.118	73105
4		4,50	3,40	.177	.134	73108
5 - 8		6,00	4,90	.236	.193	73114
9 - 10		7,00	5,50	.276	.217	73117
11		8,00	6,20	.315	.244	73119
12		9,00	7,00	.354	.276	73122
	10	10,00	8,00	.394	.315	73125
14		11,00	9,00	.433	.354	73127

EUK-1 for taps according to ANSI-standard

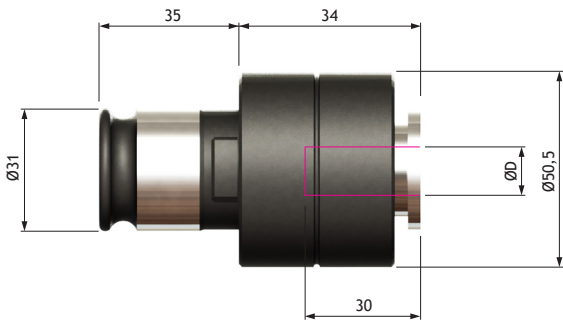
UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
8	4,27	3,33	.168	.131	73107
10	4,93	3,86	.194	.152	73110
12	5,59	4,19	.220	.165	73112
1/4"	6,48	4,85	.225	.191	73116
5/16"	8,08	6,00	.318	.236	73120
3/8"	9,68	7,26	.381	.286	73124
7/16"	8,20	6,15	.323	.242	73121
1/2"	9,32	6,99	.367	.275	73123
9/16"	10,50	8,18	.429	.322	73126

TAPPING DEVICES

Tap holders

Type EUK-2

▲ Built-in torque clutch



EUK-2 for taps according to ISO-standard

ISO M	ØD mm	# mm	ØD inch	# inch	Art.no
6	6,30	5,00	.248	.197	73133
7	7,10	5,60	.280	.220	73135
8	8,00	6,30	.315	.248	73136
9	9,00	7,10	.354	.280	73139
10	10,00	8,00	.394	.315	73142
11	8,00	6,30	.315	.248	73136
12	9,00	7,10	.354	.280	73139
14	11,20	9,00	.441	.354	73145
16	12,50	10,00	.492	.394	73148
18	14,00	11,20	.551	.441	73151
20	14,00	11,20	.551	.441	73151
22	16,00	12,50	.630	.492	73155

Type EUK-2

 Built-in torque clutch

EUK-2 for taps according to DIN-standard

352 M	371 M	ØD mm	# mm	ØD inch	# inch	Art.no
5 - 8		6,00	4,90	.236	.193	73132
9 - 10		7,00	5,50	.276	.217	73134
11		8,00	6,20	.315	.244	73136
12		9,00	7,00	.354	.276	73139
	10	10,00	8,00	.394	.315	73142
14		11,00	9,00	.433	.354	73144
16		12,00	9,00	.472	.354	73146
18		14,00	11,00	.551	.433	73150
20		16,00	12,00	.630	.482	73154
22		18,00	14,50	.709	.571	73161

EUK-2 for taps according to ANSI-standard

UNC, UNF NC, NF	ØD mm	# mm	ØD inch	# inch	Art.no
5/16"	8,08	6,00	.318	.236	73137
7/16"	8,20	6,15	.323	.242	73138
9/16"	10,90	8,18	.429	.322	73143
3/4"	14,99	11,23	.590	.442	73153

TAPPING DEVICES

Tap holders

Type T-ER



As the industry gets modernized and more machines can handle so called Rigid Tapping, the demand for more stable tap holders has increased.

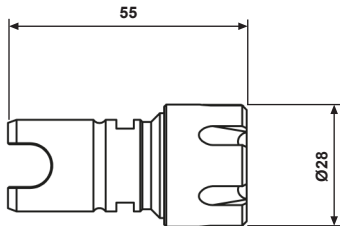
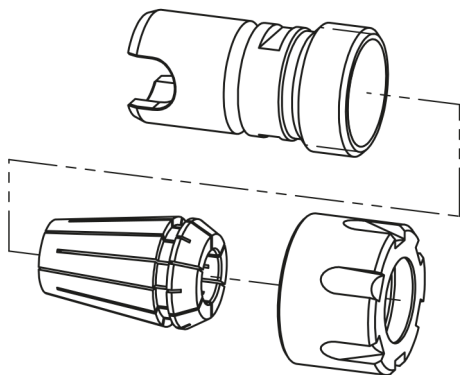
SPV Spintec has always been very responsive for our customer's comments and opinions. Therefore we have developed a completely new type of tap holder to meet today's modern machinery.

Our new tap holder type T-ER has been provided with a collet chuck type ER-20 in the front end which allows a very stable and accurate clamping of the tool.

At the same time it follows our previous standard of tapping devices and can easily be combined with our different types of tapping chucks. It still has the advantage of quick and simple tool changes.

Ordering information

Tap holder T-12 ER-20 Art.no	Clamping nut ER-20 mini Art.no	Wrench for ER-20 mini nut Art.no	Wrench for T-12 body Art.no
36946	245.24.ER20M	CH.28.ER20M	17710



Die holders

SPV Spintec has developed a new type of tap holder adapted for threading dies.

The new threading die holders are available for our standard size T-24 and fits dies from Ø20 to Ø55, M3 to M24.

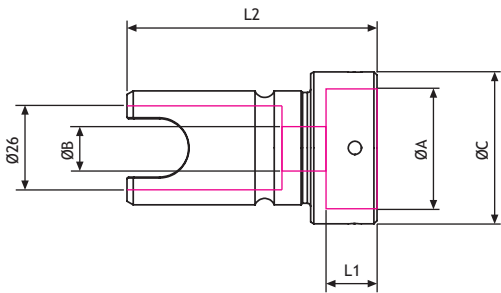
Being tailored to our ordinary tapping chuck program it can easily be combined with our different types of chucks, both with the floating movement and fixed models.

There is also a possibility to get the torque clutch function when combined with our SA tapping chuck.



Ordering information

ØA mm	ØB mm	ØC mm	L1 mm	L2 mm	Capacity	Art.no
20	14	35	5	76	M3 - M4	22903
20	14	35	7	76	M5 - M6	22905
25	14	35	9	76	M8	22908
30	26	40	11	76	M10	22910
38	26	48	14	79	M12 - M14	22912
45	26	55	18	83	M16 - M20	22916
55	26	65	22	87	M24	22924



TAPPING DEVICES

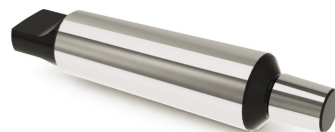
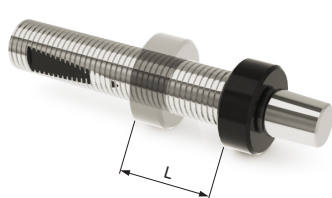
Accessories

C-chucks



Model	Internal taper	ØD mm	L mm	ØD inch	L inch	For tap holder	Art.no
C-8	J1	23	47	.905	1.850	T-8 / TK-8	28194
	B12	23	47	.905	1.850		37624
C-12	J2	30	49	1.181	1.930	T-12 / TK-12	20777
	B12	30	48	1.181	1.850		36583
	B16	30	53	1.181	2.085		36817
C-24	B18	50	87	1.968	3.425	T-24 / TK-24	27866

Arbors



Type	Mount, taper etc	L mm	Art.no
B12	Morse Taper 2		27419
	Cylindrical Ø10 x 46		27421
	TR 16 x 1,5	26	27587
B16	Morse Taper 1		21104
	Morse Taper 2		20823
	Morse Taper 3		20824
	Cylindrical Ø25 x 127		23092
	TR 16 x 1,5	28	21113
	TR 20 x 2	28	21114
B18	TR 28 x 2	30	21115
	Morse Taper 2		22265
	Morse Taper 3		22266
	Morse Taper 4		22267
	TR28 x 2	30	22269
	TR36 x 2	36	22070

Adjustment ring is included on all arbors with TR-shaft

Weldon extensions



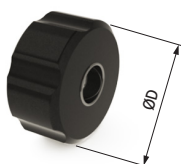
Shank Weldon Ø	Internal Weldon Ø	ØD mm	L mm	ØD inch	# inch	Art.no
25	25	36	100	1.417	3.937	37800
25	25	36	150	1.417	5.905	37799

RubberFlex collets for Jacobs-chucks



For tapping device	Collets	Ø mm	# mm	ØD inch	# inch	Art.no
ST-12 J / STF-12 J	J420	4,5 - 8,0	2,3 - 8,0	.180 - .310	.090 - .310	17953
	J421	3,5 - 6,5	2,3 - 8,0	.140 - .260	.090 - .310	18058
	J422	6,5 - 10,0	2,3 - 8,0	.260 - .390	.090 - .310	17936
ST-16 J / STF-16 J	J443	2,8 - 7,1	3,0 - 10,0	.110 - .280	.120 - .360	22195
	J441	4,5 - 9,7	3,0 - 10,0	.180 - .380	.120 - .360	22197
	J440	7,1 - 12,7	3,0 - 10,0	.280 - .500	.120 - .360	22196
ST-33 J / STF-33 J	J461	10,0 - 16,0	8,0 - 18,0	.390 - .630	.315 - .710	37443
	J462	16,0 - 23,0	8,0 - 18,0	.630 - .905	.315 - .710	37444

Nut and wrench for Jacobs-chucks



Nut type	ØD mm	Art.no
ST-12 J / STF-12 J	32	41826
ST-16 J / STF-16 J	40	95207
ST-33 J / STF-33 J	56	37441

Wrench for nut type	Art.no
ST-12 J / STF-12 J	41827
ST-16 J / STF-16 J	95208
ST-33 J / STF-33 J	37442

CGS / CGS-C

Collaring pressure

An important function with the CGS-chuck is the opportunity to set the collaring pressure. To achieve good thread quality it is important that the collaring pressure is adapted to the size of the tap you are using, and also relative to the type of material you are processing.

A hard collaring pressure makes the tap start to cut directly when feeding into the material.

Keep in mind that the tapping device is always set to maximum value when delivered.

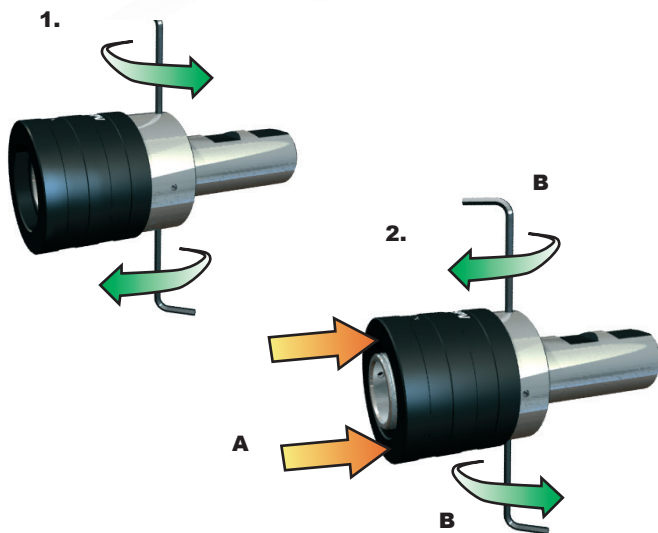
- 1. **Release the collaring pressure**
Loosen both of the screws counter clockwise just as much on both sides.
- 2. **Set the maximum collaring pressure**
Push the outer sleeve so that the sliding-body reaches the bottom (A) and screw down both of the screws clockwise to stop (B). Finally unscrew both of the screws no more than one round, counter clockwise.

- Guideline values for standard steel tapping**

M3 - M8	40 - 80 N
M9 - M16	80 - 170 N
M18 - M30	170 - 200 N

- Model type CGS-C - For internal cooling**

The type CGS-C is designed to be used with internal cooling and manages a coolant pressure at **max 50 Bar**. CGS-C can be used with our tap holders model type T and TC depending on which type of cooling you want.



▲ CGS-C equipped with a tap holder type TC provides cooling along the shaft of the tap.



▲ CGS-C equipped with a tap holder type T provides cooling through for taps with internal coolant ducts.

Specifications

The tapping spindle type GS has an adjustable ball-bearing, axial movement (floating) which eliminates the machine spindle axial force. This enables the use of taps with different pitch in multi-spindle machines. A hard collaring pressure makes the tap starting to cut directly when feeding into the material.

A major advantage of the GS is that the floating can be adjusted forward or backward to achieve the best result.

• Putting into operation

The tapping chuck has an internal taper for assembling on to an arbor shaft, or directly on to the machine spindle. The internal taper is prepared with two holes for fixing it against the arbor. We always recommend fixation to the arbor taper by dowelling.

When mounting into a machine, please follow the 4 steps of the instruction.

1. Before assembling on a taper, the floating movement shall be compressed to prevent the internal components from damages. Screw clockwise to the bottom.
2. Clean the internal taper and the machine taper properly before assembling of the tapping spindle.
3. Assemble with a hard push. Do NOT use a hammer or other violent treatment.
4. Re-tighten the floating screw counter clockwise and fix the taper by dowelling. Now the floating can be adjusted for the best performance.

• Adjusting the floating

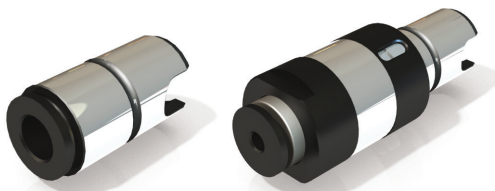
The tapping spindle can be adjusted to allow full floating backward, forward or in both directions. Use and Allen key for adjustment. Clockwise turning extends the forward floating and counter clockwise extends the backward floating.

The spindles total floating is:

GS-8	25 mm
GS-12	25 mm
GS-24	40 mm

• Accessories

The tapping spindle type GS can be used along with SPV Spintec tap holders type T or type TK (with torque clutch).



WARNING!

Disassembling and assembling of the unit requires special tools and equipment. Always send the chuck to SPV Spintec representative if it needs to be repaired.



TAPPING DEVICES

Operating instructions

SA / SA-NC

Specifications

Our tapping device type SA is available in two different models. A standard version (SA) and for CNC-machines (SA-NC). Both models have an adjustable torque clutch. The SA-NC also have an extended backward floating, and adjustable collaring pressure.

To achieve good thread quality it is important that the collaring pressure is adapted to the size of the tap you are using and also relative to the type of material you are processing.

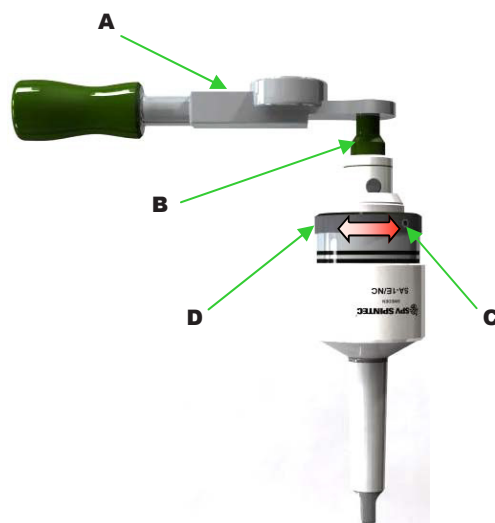
- **Adjusting the torque clutch**

1. Clamp the tapping unit in a vice. We recommend that you clamp over the Morse Taper tongue to prevent damages on the device.

2. Release the locking screw (C).

3. Attach a torque key (A) with an adjustment adaptor (B) in the front of the tapping device.

4. Desired torque is achieved by turning the clutch sleeve (D) clockwise for increasing and counter clockwise for decreasing the torque.



- **Adjusting the collaring pressure (SA-NC)**

The collaring pressure is adjustable with an Allen key. Clockwise turning will increase and counter clockwise turning will decrease the pressure.

A hard collaring pressure makes the tap to start cut directly when feeding into the material.

Keep in mind that the tapping device is always set to maximum value when delivered.



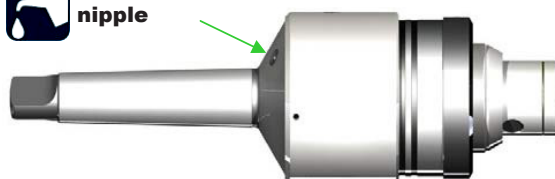
- **Service and maintenance**

Lubricate the tapping device by the oil nipple. Use only the prescribed lubrication.

Lubrication interval: Once a week is recommended for continuous and intensive usage.



Lubrication nipple



We recommend: Castrol Magna BD68

Thread M	UNC	W	Recommended torque Nm	inch-lbs	For intractable material
M2			0,3	2,4	+20%
M3	#4		0,5	5,2	+20%
	#5	1/8"	0,9	7,8	+20%
	#6		1,6	14	+20%
M4		5/32"	1,8	16	+30%
	#8		2,0	18	+30%
M5			2,5	22	+30%
	#10		3,0	28	+30%
M6	#12		4,4	38	+30%
	1/4"	1/4"	6,5	56	+30%
M8			9,0	78	+30%
	5/16"	5/16"	11,5	100	+30%
M10	3/8"	3/8"	14,0	122	+30%
	7/16"	7/16"	22,0	190	+30%
M12			23,0	200	+50%
M14			30,0	260	+50%
	1/2"	1/2"	33,0	285	+50%
M16	9/16"	9/16"	35,0	305	+50%
	5/8"	5/8"	45,0	390	+50%
M18			55,0	475	+50%
M20	3/4"	3/4"	65,0	565	+50%
M22			75,0	650	+50%
	7/8"	7/8"	85,0	740	+50%
M24			105,0	910	+50%
M27	1"	1"	120,0	1040	+50%
M30	1 1/8"	1 1/8"	150,0	1300	+50%
	1 1/4"	1 1/4"	196,0	1700	+50%
	1 3/8"	1 3/8"	261,0	2260	+50%
	R 1/8"		5,5	48	+50%
	R 1/4"		15,0	130	+50%
	R 3/8"		20,0	170	+50%
	R 1/2"		45,0	390	+50%
	R 5/8"		50,0	435	+50%
	R 3/4"		58,0	505	+50%
	R 7/8"		65,0	565	+50%
	R 1"		112,0	970	+50%
	R 1 1/8"		128,0	1110	+50%
	R 1 1/4"		142,0	1230	+50%

High speed spindles

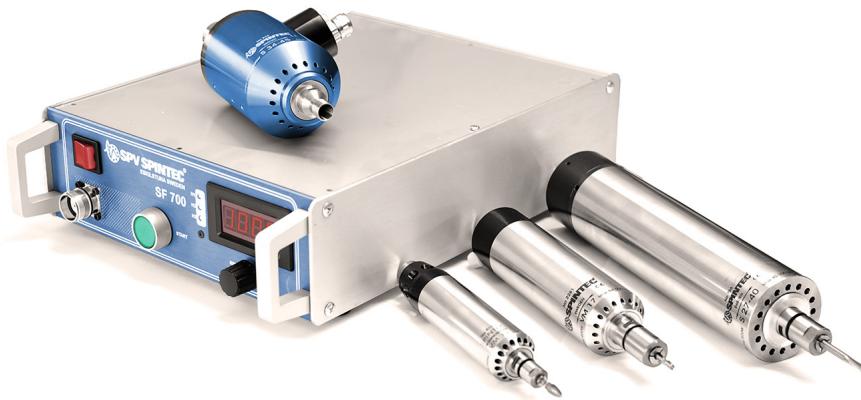


High speed spindles for many different applications

SPV Spintec's spindles are designed for clients with high demands on accuracy and reliability of service. The spindles are manufactured with the highest accuracy. All rotating parts are dynamically balanced and exchangeable without impairing the tolerance of the spindle. We also carry out the service and repair of our spindles.

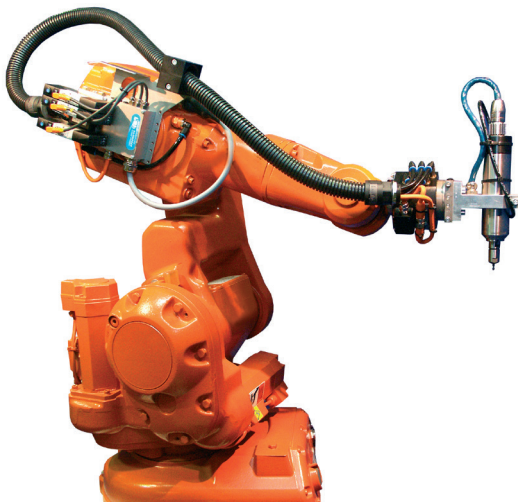
Our wide range of high frequency spindles helps you to renew and adapt your machinery to modern tools that require higher working speeds. The spindles can easily be clamped into existing machines.

SPV Spintec has a range of compact electronic converters to power the spindles. These have adjustable controls which enables the setting of optimum cutting speeds. Thermal and overload cut-outs are incorporated as well as RS-232 interface for connecting a computer.



Quick facts about our high speed spindles

- High speed allows machining with small tools.
- Runout accuracy better than 0.005 mm results in longer tool lifetime as well as improved surface finish.
- RPM ratio between 5.000 and 90.000 RPM, effects from 100 W to 5 kW.
- Short time of delivery and quick service.



Robot processing

The use of lightweight materials is increasing all the time and both materials and processing methods are developed continuously. Components become more complex and much of the processes of machining is currently governed over to robots and automation.

SPV Spintec presents in cooperation with RSP (Robot System Products AB) a unique system that allows very accurate and stable processing in a robotic cell with simple and rapid shift of the spindle.

With a robotic tool-changer you can fast and easy shift between different spindles or other robot-tools such as grippers etc. This makes it possible to use the robot to the maximum and get a much better overall economy.

Different types of spindles

Tool-motors

VM 10 and VM 17 are used for hand work, as auxiliary spindles in machines for deburring, drilling, milling, engraving and grinding.

Air-cooled spindles

S11, S16, S18, S19, S24 and S27. The slim dimensions of these spindles makes the suitable for building into multi-spindle machines. The spindles are used for bore grinding, jig grinding, drilling and milling.

Water-cooled spindles

S20 and S28 are designed for applications where heavy and continuous loading is required. Suitable for grinding, jig grinding, milling, deburring and drilling.

Water-cooled, oil-mist lubricated spindles

S21, S30, S33 and S50 are intended for production grinding with high precision like internal grinding etc.

Static frequency converters

SF 700, SF 1500 and SF 3000 are intended for speed control of SPV Spintec's motors and spindle series.

We also supply frequency converters for building into machine enclosures. The type CDA are available in a range of sizes and speed.

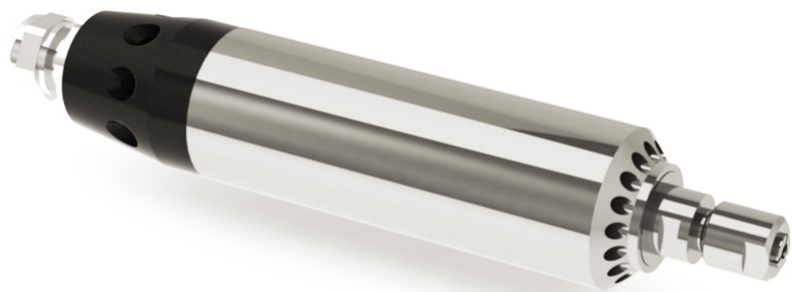
Technical specifications

Spindle model	Effect kW	Speed max RPM	Speed min RPM	Outer diameter Ømm	Type of cooling	Type of lubrication
VM 10	0,1	72 000	36 000	33	Compressed air / Fan	Permanently lubricated
VM 17	0,4	54 000	15 000	45	Compressed air / Fan	Permanently lubricated
S 11	0,1	72 000	36 000	33	Compressed air / Fan	Permanently lubricated
S 16	0,4	60 000	15 000	45	Compressed air / Fan	Permanently lubricated
S 18	0,4	60 000	15 000	50	Compressed air / Fan	Permanently lubricated
S 19	0,4	60 000	15 000	60	Compressed air / Fan	Permanently lubricated
S 20	0,65	60 000	15 000	60	Water-cooling	Permanently lubricated
S 21	0,7	90 000	15 000	60	Water-cooling	Oil-mist lubricated
S 24	0,3	75 000	30 000	70	Compressed air	Permanently lubricated
S 27	0,8	54 000	9 000	60	Compressed air / Fan	Permanently lubricated
S 28	1,1	40 000	9 000	80	Water-cooling	Permanently lubricated
S 30	2,0	60 000	15 000	80	Water-cooling	Oil-mist lubricated
S 33	1,2	75 000	25 000	80	Water-cooling	Oil-mist lubricated
S 34	0,5	45 000	15 000	70	Compressed air	Permanently lubricated
S 44	2,5	50 000	5 000	110	Water-cooling	Permanently lubricated
S 50	5,0	30 000	15 000	100	Water-cooling	Oil-mist lubricated

HIGH SPEED SPINDLES

Tool-motors

VM 10



Air-cooled motor intended for handwork and as spindle in machines where simpler drilling, grinding, milling and deburring is to be performed. Stainless steel housing (type R) is suitable for building into machines. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is required. The noise level will also be lower.



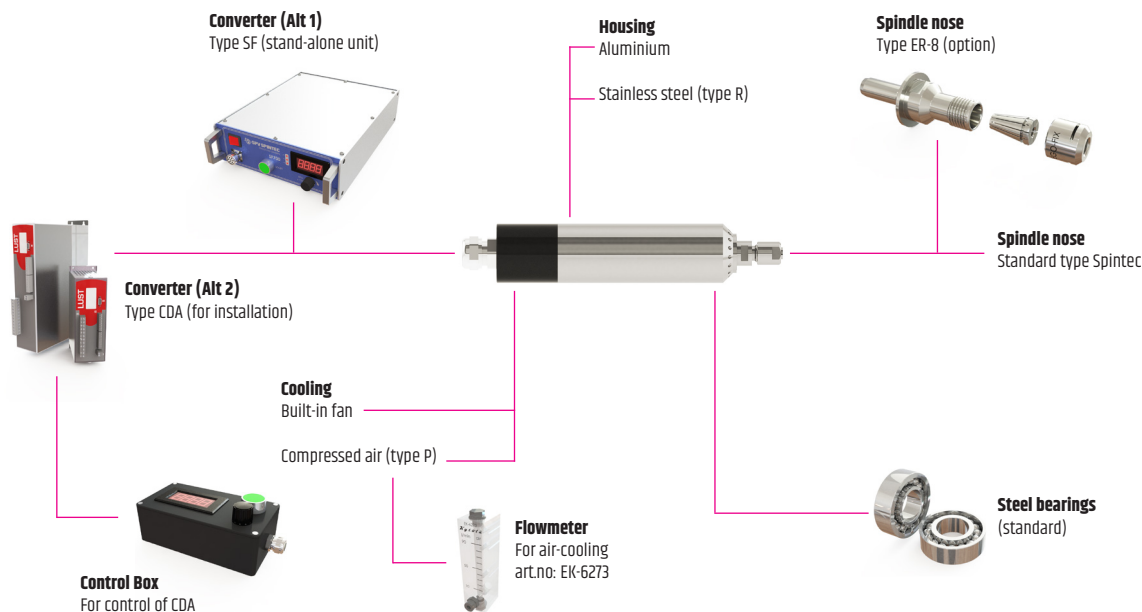
VM 10
Fan-cooled



VM 10
Compressed
air-cooled

Technical specifications

VM 10
Housing:
Anodized aluminum Stainless steel (type R)
Cooling:
Built-in fan Compressed air (type P)
Ball bearings:
Permanently lubricated, pre-loaded, high performance groove ball bearings.
Electrical connection:
6-pin contact via frequency converter.
Rotation direction:
Right rotating Left rotating (option)



Standard accessories included

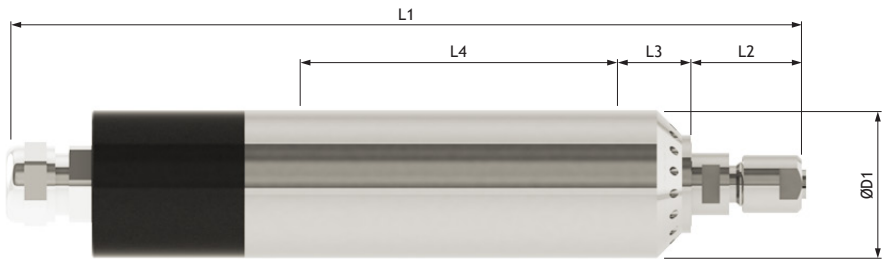
- 3 m cable
- 2 chuck keys
- 1 collet in any dimension (specify on order)

Drive unit

- Frequency converter, stand-alone unit: SF700
- Frequency converter for installation: CDA-0.75
- Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
VM 10	33	177	26	15	71	0,3	Spintec 10	4,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
VM 10	0,1	184	72 000	36 000	0,01	0,3	50 *	74

* The air flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Tool-motors

VM 17



Air-cooled motor intended for handwork and as spindle in machines where simpler drilling, grinding, milling and deburring is to be performed. Stainless steel housing (type R) is suitable for building into machines. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is required. The noise level will also be lower.



VM 17
Fan-cooled



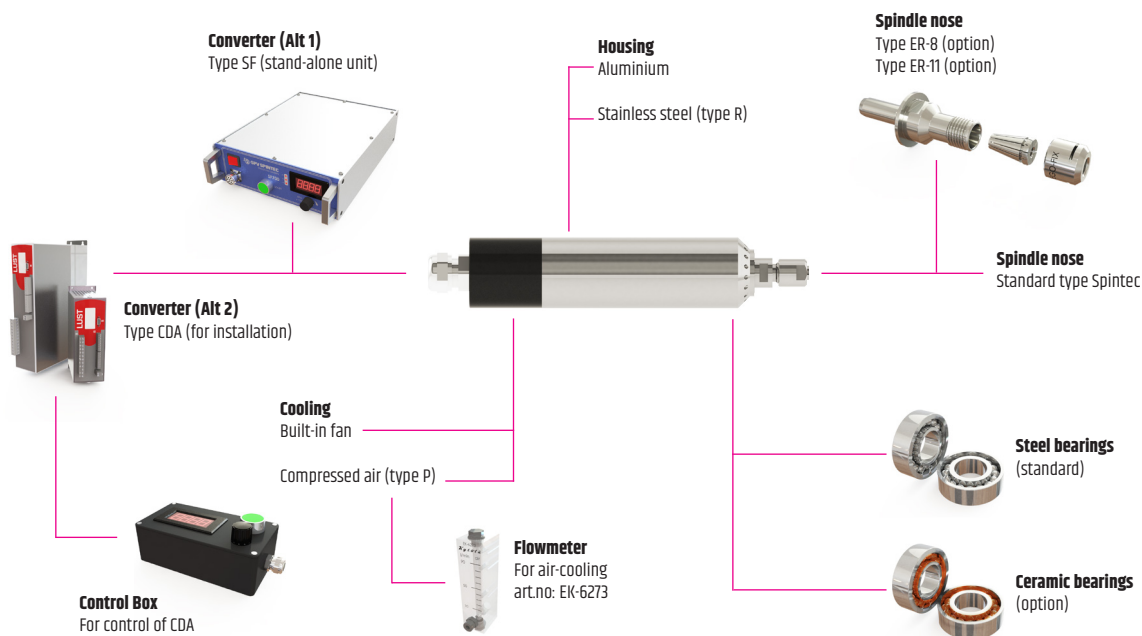
VM 17 P
Air-cooled



Type AC
Angular
connection

Technical specifications

VM 17
Housing: Anodized aluminum Stainless steel (type R)
Cooling: Built-in fan Compressed air (type P)
Ball bearings: Permanently lubricated, pre-loaded, high performance groove ball bearings.
Electrical connection: 6-pin contact via frequency converter.
Rotation direction: Right rotating Left rotating (option)



Standard accessories included

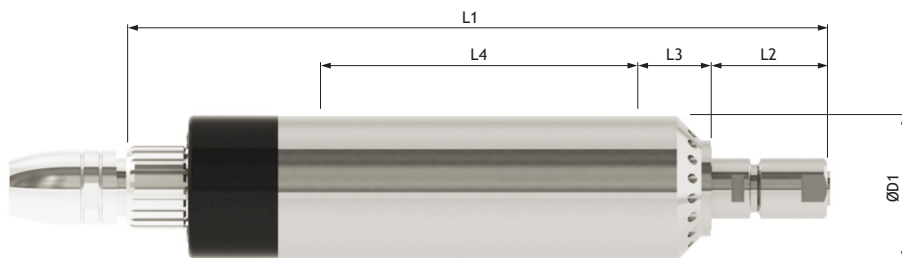
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF700
- ▲ Frequency converter for installation: CDA-0.75
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
VM 17	45	226	37	20	102	0,9	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
VM 17	0,4	189	54 000	15 000	0,01	0,3	90 *	82

* The air flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Air-cooled spindles

S 11



Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines or automated cells for such operations as grinding, drilling, milling and deburring etc. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is requested. The noise level will also be lower.



▲ S 11-72
Fan-cooled



▲ S 11-72 P
Compressed
air-cooled

Technical specifications

S 11 - 72

Housing:

Steel

Cooling:

Built-in fan
Compressed air (type P)

Ball bearings:

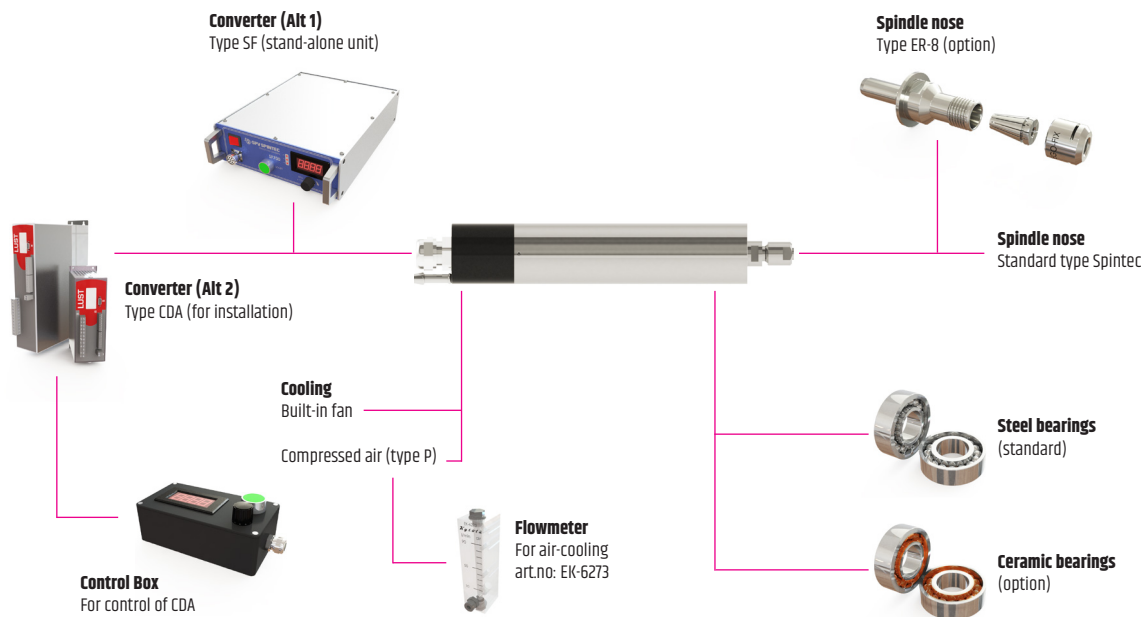
Permanently lubricated, spring pre-loaded,
high performance angular contact ball
bearings.

Electrical connection:

6-pin contact with PTC via frequency converter.

Rotation direction:

Right rotating
Left rotating (option)



Standard accessories included

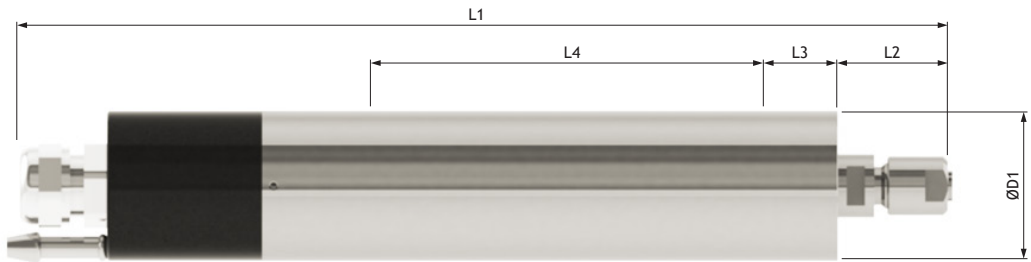
- 3 m cable
- 2 chuck keys
- 1 collet in any dimension (specify on order)

Drive unit

- Frequency converter, stand-alone unit: SF700
- Frequency converter for installation: CDA-0.75
- Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 11 - 72	33	203	25	15	71	0,6	Spintec 10	4,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
S 11 - 72	0,1	184	72 000	36 000	0,005	0,05	50 *	74

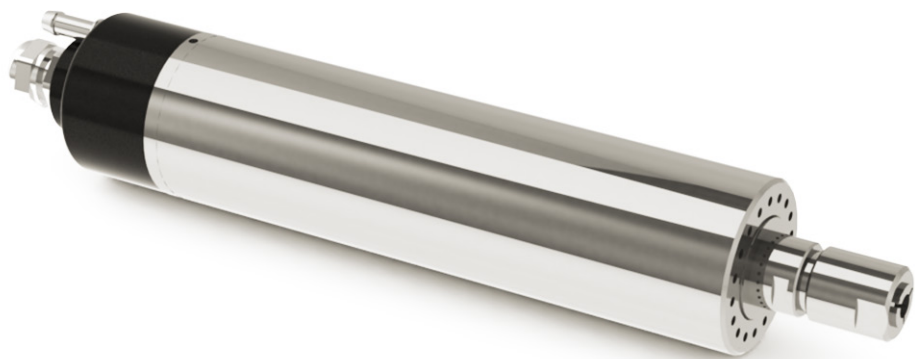
* The air flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Air-cooled spindles

S 16 / S 18



Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines or automated cells for such operations as grinding, drilling, milling and deburring etc. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is requested. The noise level will also be lower.



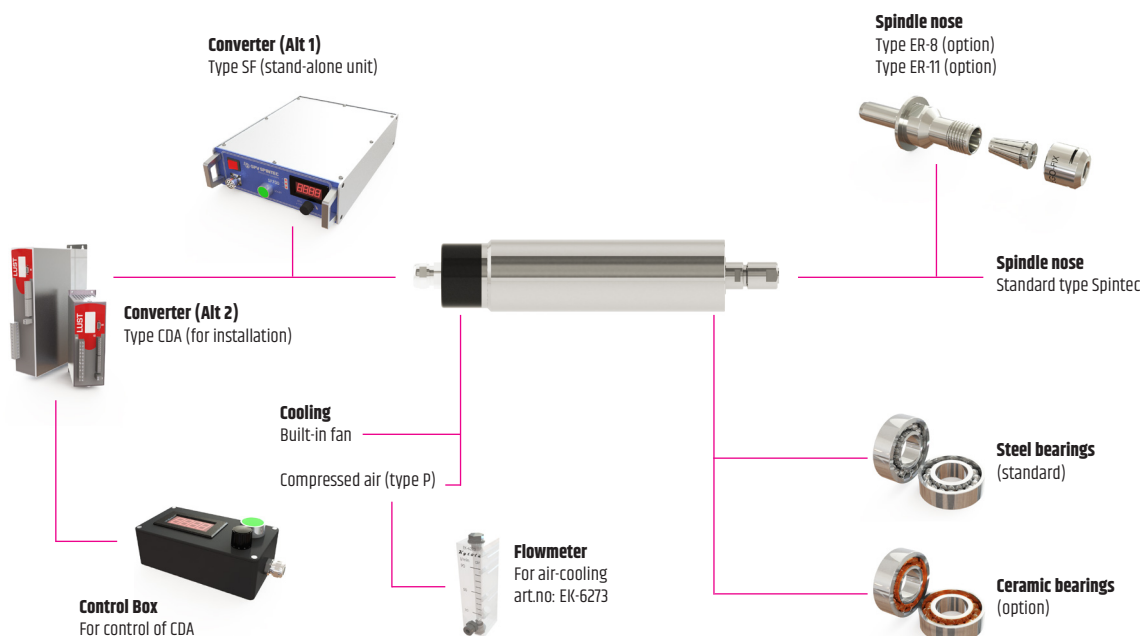
▲ S 16 - 60



▲ S 18 - 60

Technical specifications

S 16 / S 18	
Housing:	
	Steel
Cooling:	
	Built-in fan Compressed air (type P)
Ball bearings:	
	Permanently lubricated, spring pre-loaded, high performance angular contact ball bearings.
Electrical connection:	
	6-pin contact with PTC via frequency converter.
Rotation direction:	
	Right rotating Left rotating (option)



Standard accessories included

- 3 m cable
- 2 chuck keys
- 1 collet in any dimension (specify on order)

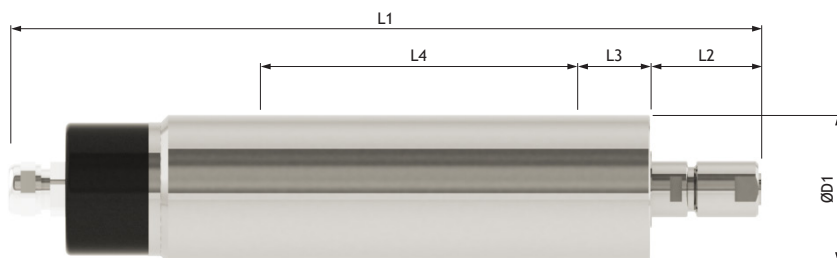
Drive unit

- Frequency converter, stand-alone unit: SF700
- Frequency converter for installation: CDA-0.75
- Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 16 - 60	50	251 **	37	20	102	2,0	Spintec 17	8,0
S 18 - 60	45	251 **	37	20	102	2,0	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
S 16 - 60	0,4	210	60 000	15 000	0,005	0,05	90 *	80
S 18 - 60	0,4	210	60 000	15 000	0,005	0,05	90 *	80

* The air flow between the spindle and the flowmeter may vary depending on various conditions

** Type P = +10 mm



HIGH SPEED SPINDLES

Air-cooled spindles

S 19



Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines or automated cells for such operations as grinding, drilling, milling and deburring etc. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is requested. The noise level will also be lower.



▲ S 19-60
Fan-cooled



▲ S 19-60
Compressed
air-cooled

S 19 - 60

Housing:

Steel

Cooling:

Built-in fan
Compressed air (type P)

Ball bearings:

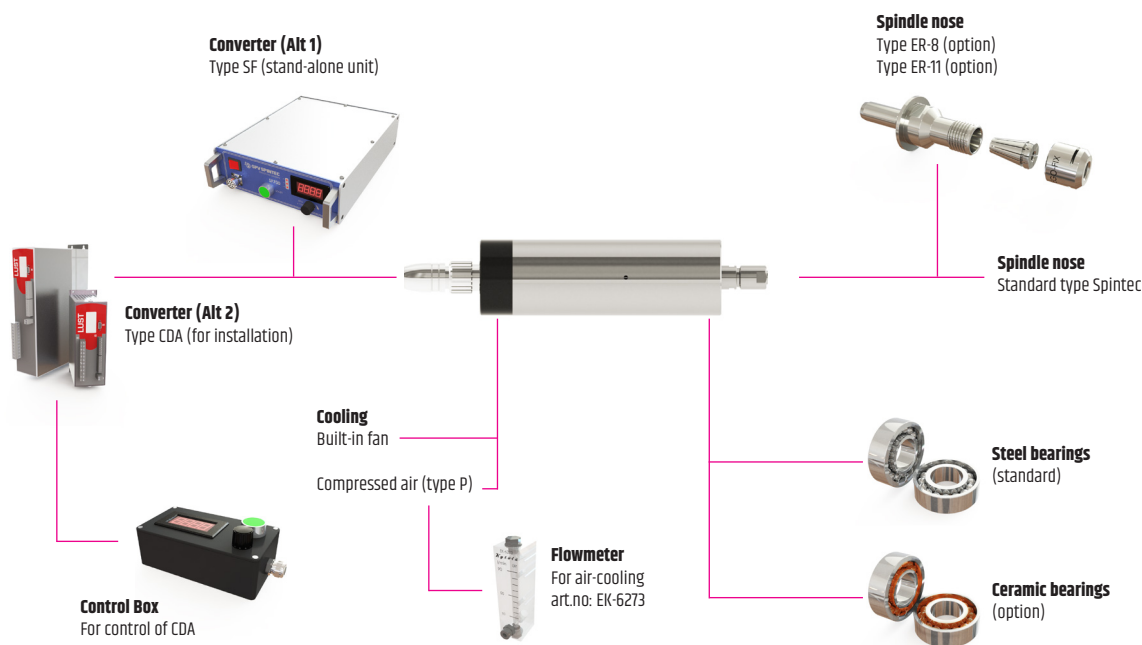
Permanently lubricated, spring pre-loaded,
high performance angular contact ball
bearings.

Electrical connection:

6-pin contact with PTC via frequency converter.

Rotation direction:

Right rotating
Left rotating (option)



Standard accessories included

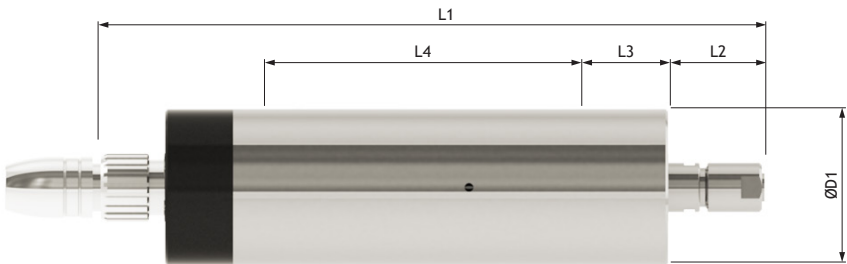
- 3 m cable
- 2 chuck keys
- 1 collet in any dimension (specify on order)

Drive unit

- Frequency converter, stand-alone unit: SF700
- Frequency converter for installation: CDA-0.75
- Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 19 - 60	60	289	37	20	145	3,6	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
S 19 - 60	0,4	210	60 000	15 000	0,005	0,05	90 *	80

* The air flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Air-cooled spindles

S 27



Air-cooled spindle designed for high speed, precision and reliability. It is intended for building in to machines or automation cells for such operations as grinding, milling and deburring etc. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or if more effective cooling is required. The noise level is also lower.



▲ S 27-30



▲ S 27-40



▲ S 27-54



▲ Type AC
angular
connection

Technical specifications

S 27

Housing:

Steel

Cooling:

Built-in fan
Compressed air (type P)

Ball bearings:

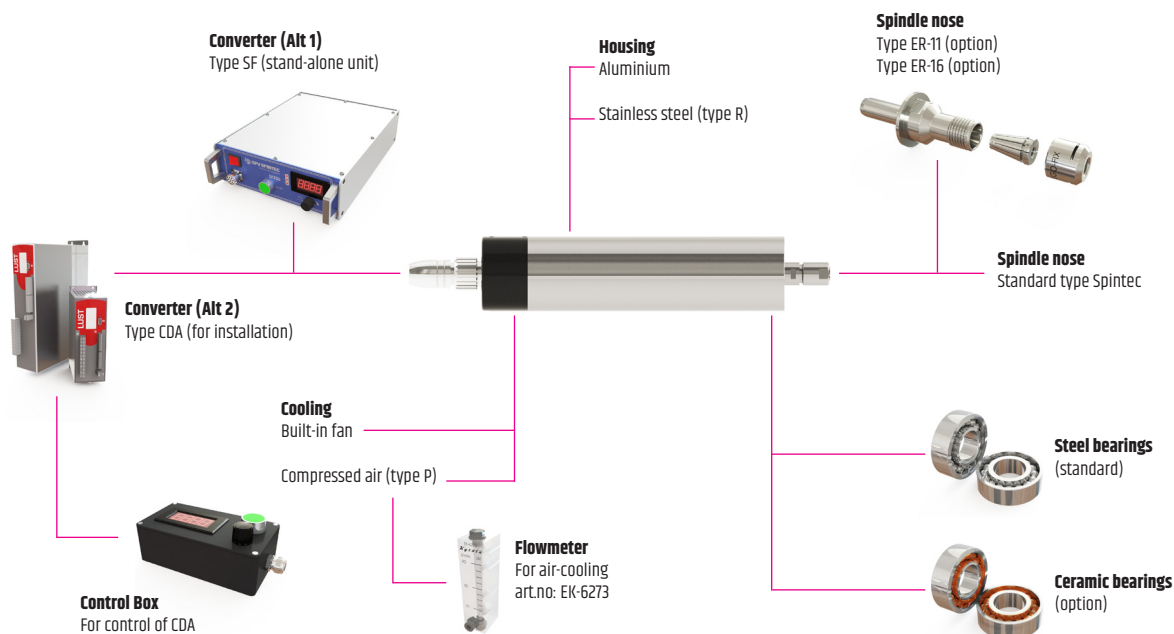
Permanently lubricated, spring pre-loaded, high performance angular contact ball bearings. S 27-30 is provided with dual front ball bearings.

Electrical connection:

6-pin contact with included PTC via frequency converter.

Rotation direction:

Right rotating
Left rotating (option)



Standard accessories included

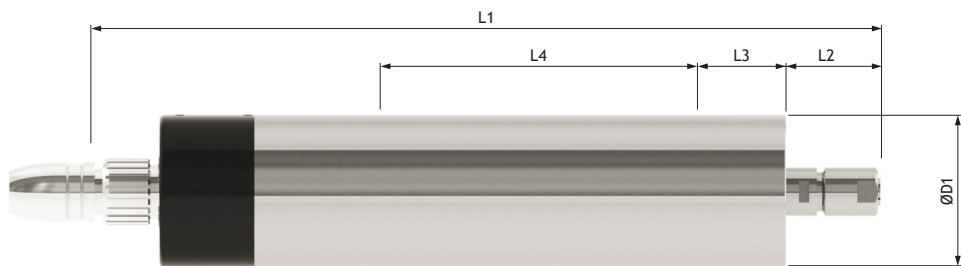
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF1500
- ▲ Frequency converter for installation: CDA-1,5
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 27 - 30	60	347	37	25	102	3,3	Spintec 17	8,0
S 27 - 40	60	337	37	20	102	3,2	Spintec 17	8,0
S 27 - 54	60	318	37	20	82	3,0	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (type p)	Noise level dB
S 27 - 30	0,56	200	30 000	9 000	0,005	0,05	100 *	80
S 27 - 40	0,8	204	40 000	9 000	0,005	0,05	80 *	80
S 27 - 54	0,75	189	54 000	9 000	0,005	0,05	80 *	80

* The air flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Water-cooled spindles

S 20



Water-cooled spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S20 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

Technical specifications

S 20 - 60

Housing:

Stainless steel

Cooling:

Water-cooling

Ball bearings:

Permanently lubricated, spring pre-loaded, high performance angular contact ball bearings.

Electrical connection:

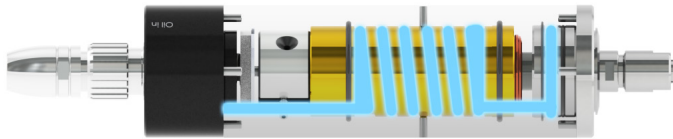
6-pin contact with included PTC via frequency converter.

Rotation direction:

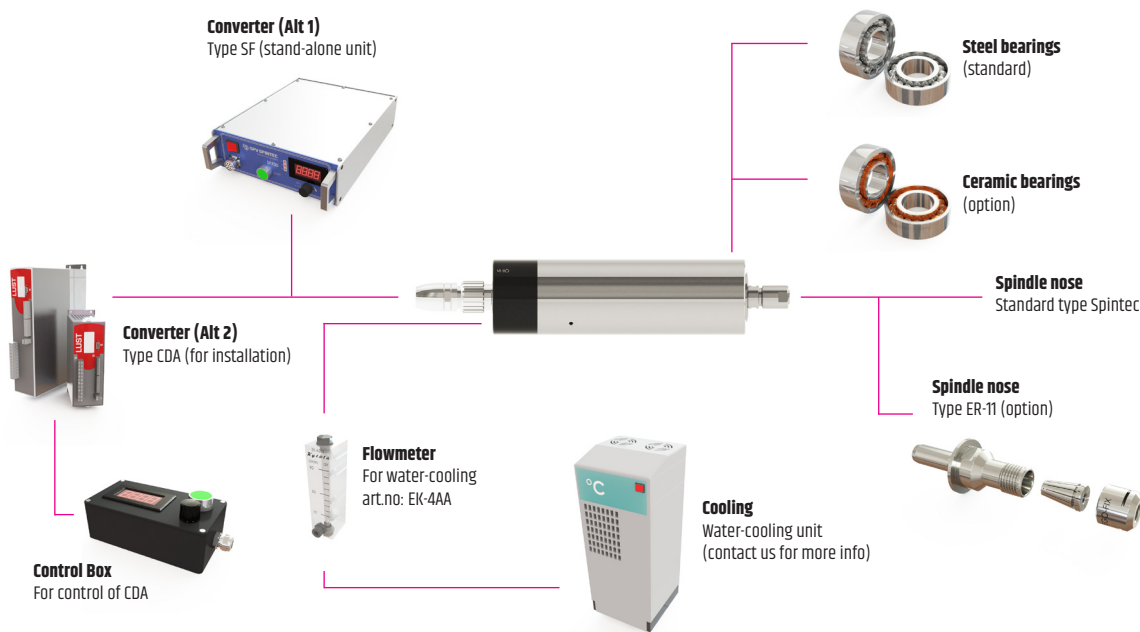
Both directions are available

Water connection:

In- and outlet (R 1/8")



▲ Efficient water-cooling over the stator and the front ball bearings



Standard accessories included

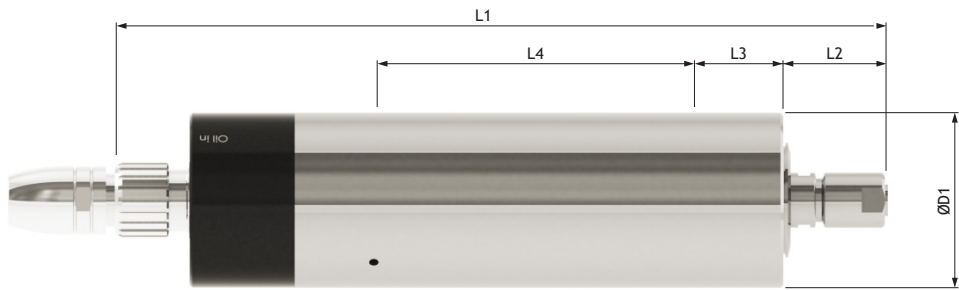
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF700
- ▲ Frequency converter for installation: CDA-0.75
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 20 - 60	60	259	36	25	168	3,6	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Water flow l / min	Noise level dB
S 20 - 60	0,8	210	60 000	15 000	0,005	0,05	0,6 *	64

* The coolant flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Water-cooled spindles

S 21

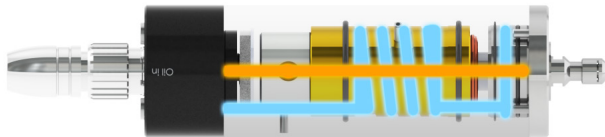


Water-cooled and oil mist lubricated spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S21 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

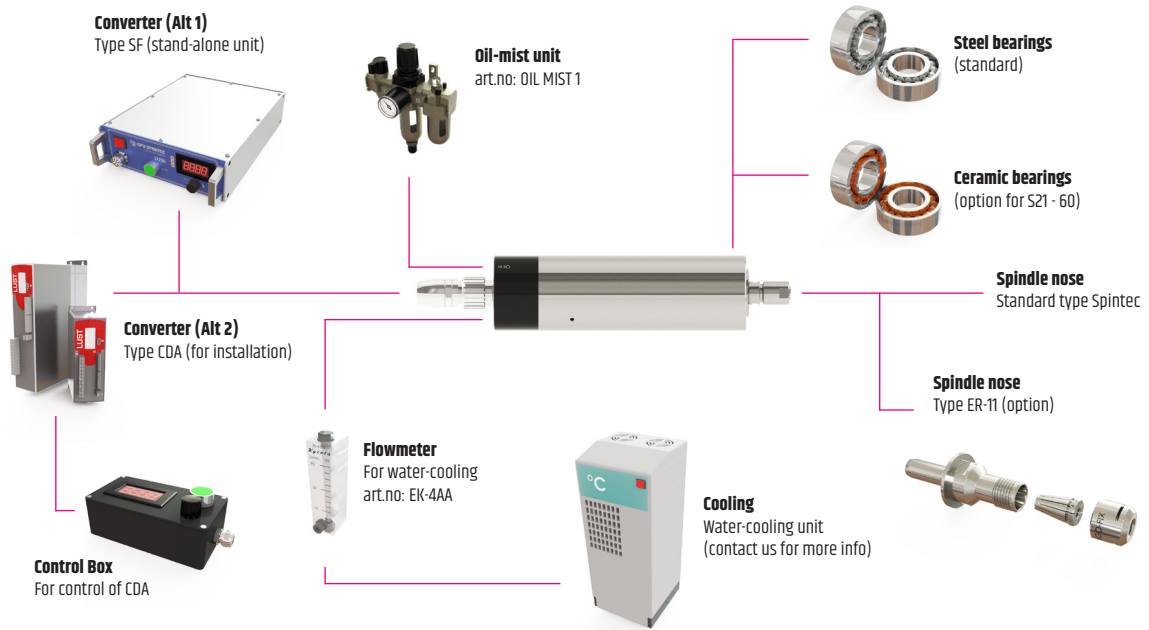
Technical specifications

S 21
Housing:
Stainless steel
Cooling:
Water-cooling
Ball bearings:
Oil-mist lubricated, spring pre-loaded, high performance angular contact ball bearings.
Electrical connection:
6-pin contact with included PTC via frequency converter.
Rotation direction:
Both directions are available
Water connection:
In- and outlet (R 1/8")
Oil mist connection:
Inlet (R 1/8")

- Oil-mist lubrication of both front and rear ball bearing



- Efficient water-cooling over the stator and the front ball bearings



Standard accessories included

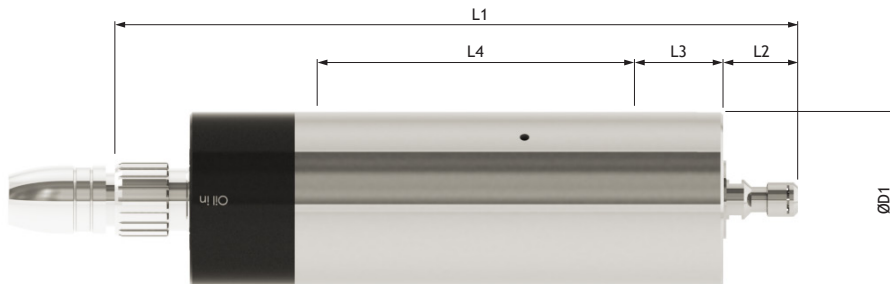
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF700
- ▲ Frequency converter for installation: CDA-0.75
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 21 - 60	60	259	36	25	168	3,6	Spintec 17	8,0
S 21 - 90	60	229	33	20	125	2,9	Regofix ER-8	5,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min	Noise level dB
S 21 - 60	0,7	210	60 000	15 000	0,005	0,05	0,6 *	60
S 21 - 90	0,4	230	90 000	30 000	0,005	0,05	0,6 *	60

* The water flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

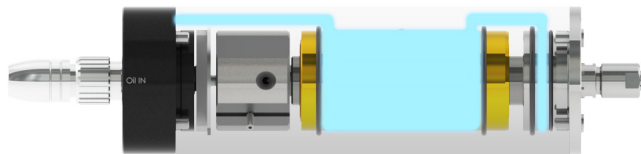
Water-cooled spindles

S 28



Water-cooled spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S28 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

Oil-mist lubrication of both front and rear ball bearing



Technical specifications

S 28 - 40

Housing:

Stainless steel

Cooling:

Water-cooling

Ball bearings:

Permanently lubricated, spring pre-loaded, high performance angular contact ball bearings.

Electrical connection:

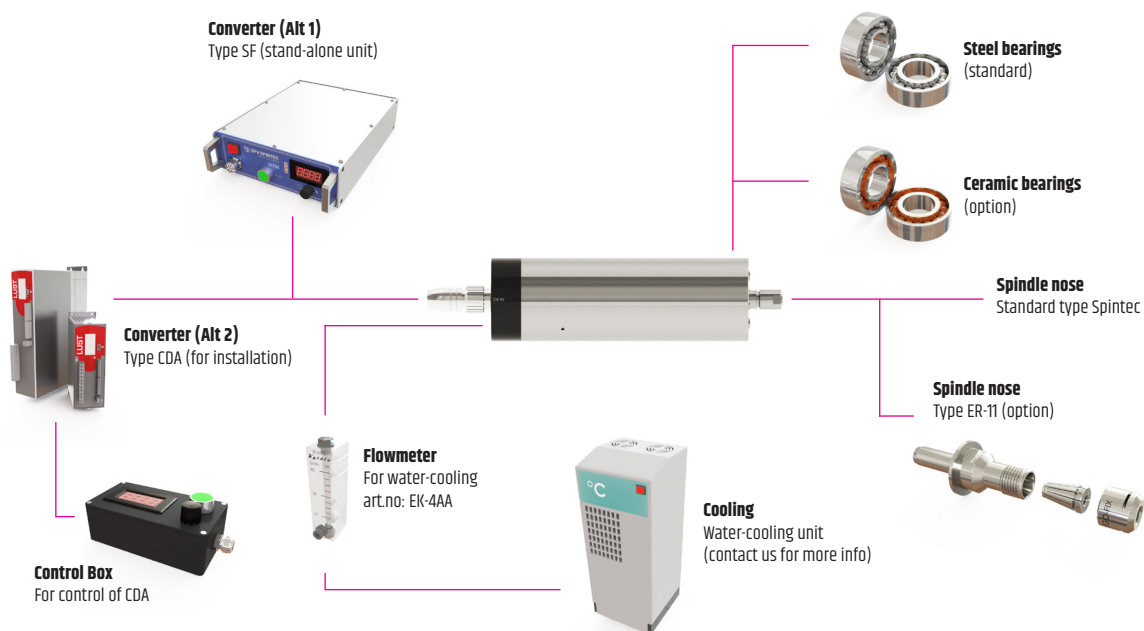
6-pin contact with included PTC via frequency converter.

Rotation direction:

Both directions are available

Water connection:

In- and outlet (R 1/8")



Standard accessories included

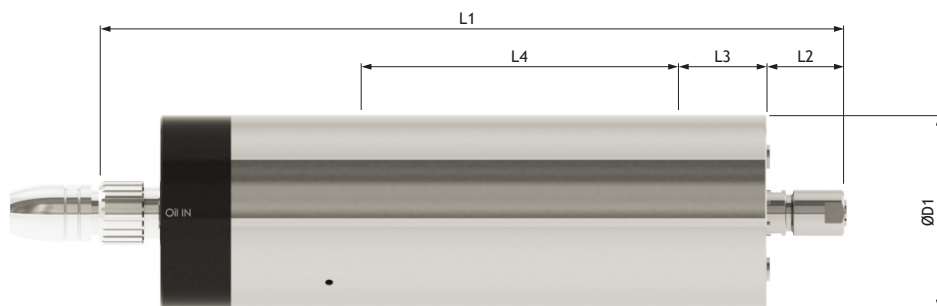
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF1500
- ▲ Frequency converter for installation: CDA-1,5
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 28 - 40	80	340	34	35	177	6,8	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Water flow l / min	Noise level dB
S 28 - 40	1,1	204	40 000	9 000	0,005	0,05	1,2 *	60

* The coolant flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Water-cooled spindles

S 30

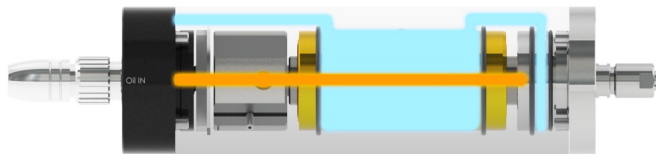


Water-cooled and oil mist lubricated spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S30 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

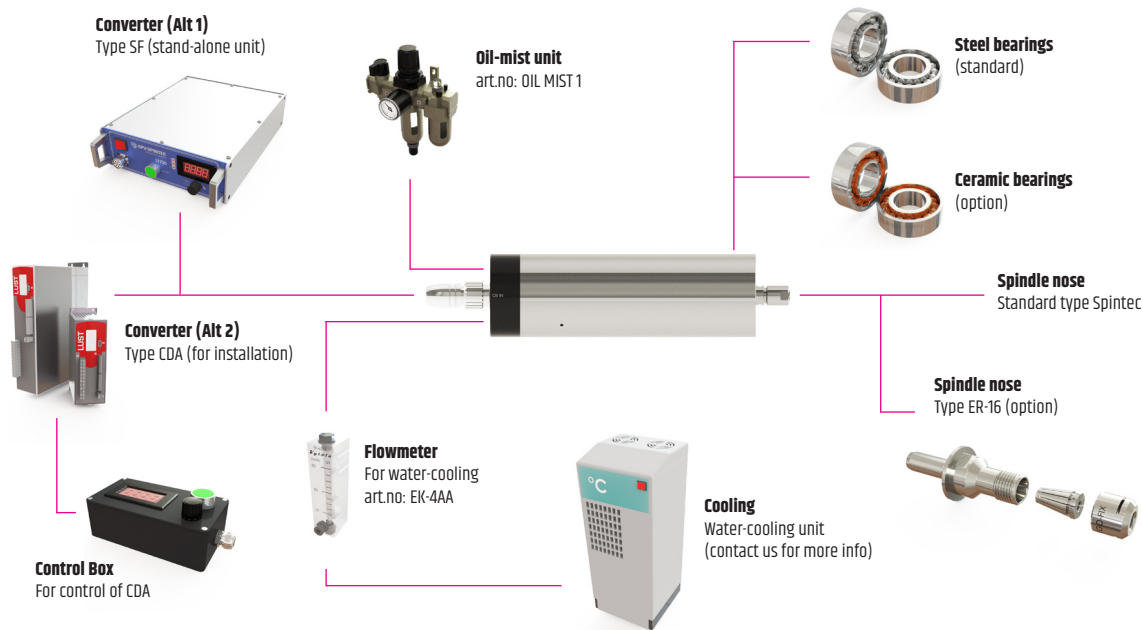
Technical specifications

S 30
Housing:
Stainless steel
Cooling:
Water-cooling
Ball bearings:
Oil-mist lubricated, spring pre-loaded, high performance angular contact ball bearings.
Electrical connection:
6-pin contact with included PTC via frequency converter.
Rotation direction:
Both directions are available
Water connection:
In- and outlet (R 1/8")
Oil mist connection:
Inlet (R 1/8")

- Oil-mist lubrication of both front and rear ball bearings



- Efficient water-cooling over the stator and the front ball bearings



Standard accessories included

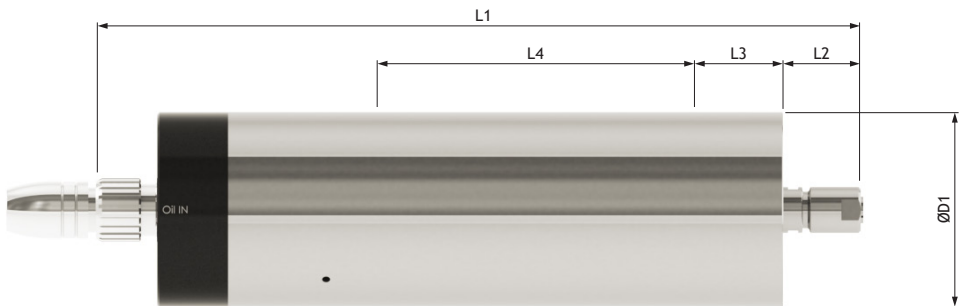
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF3000
- ▲ Frequency converter for installation: CDA-3,0
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 30 - 60	80	303	34	43	169	7,0	Spintec 17	8,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Water flow l / min	Noise level dB
S 30 - 60	2,0	210	60 000	15 000	0,005	0,05	1,2 *	63

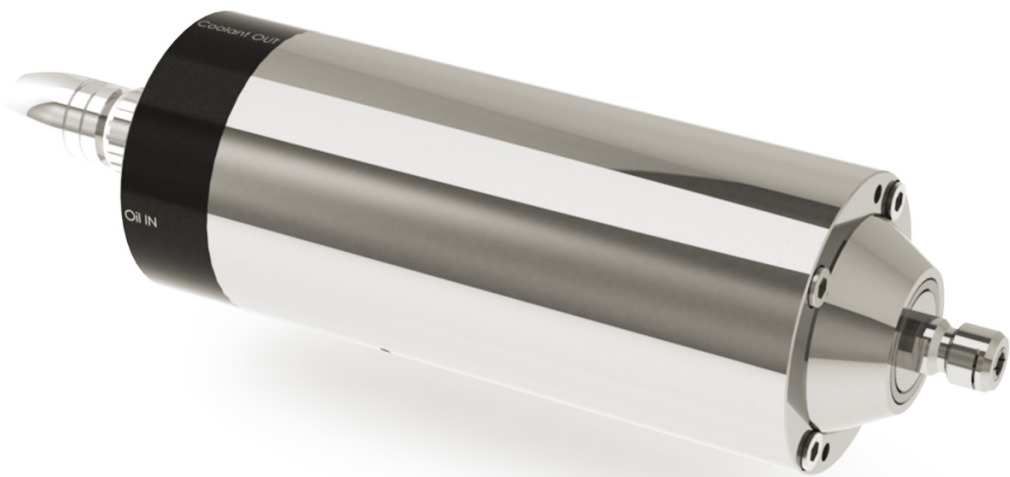
* The coolant flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Water-cooled spindles

S 33

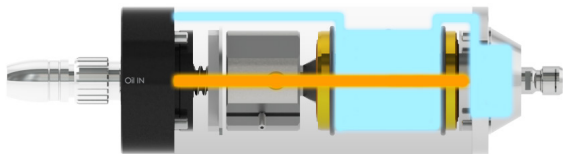


Water-cooled and oil mist lubricated spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S33 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

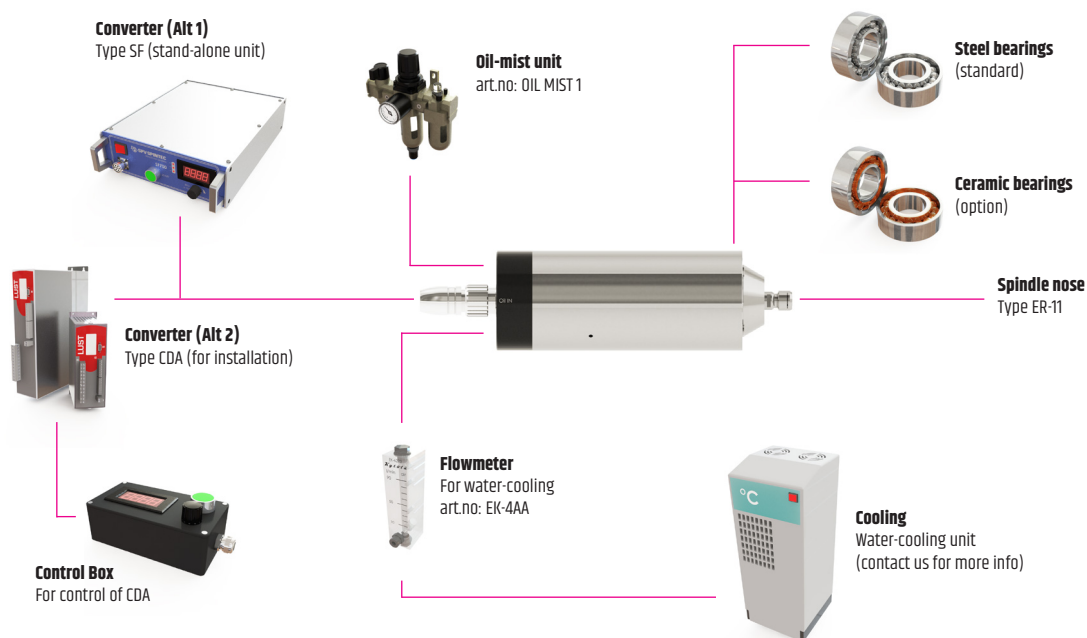
Technical specifications

S 33
Housing:
Stainless steel
Cooling:
Water-cooling
Ball bearings:
Oil-mist lubricated, spring pre-loaded, high performance angular contact ball bearings.
Electrical connection:
6-pin contact with included PTC via frequency converter.
Rotation direction:
Both directions are available
Water connection:
In- and outlet (R 1/8")
Oil mist connection:
Inlet (R 1/8")

- Oil-mist lubrication of both front and rear ball bearings



- Efficient water-cooling over the stator and the front ball bearings



Standard accessories included

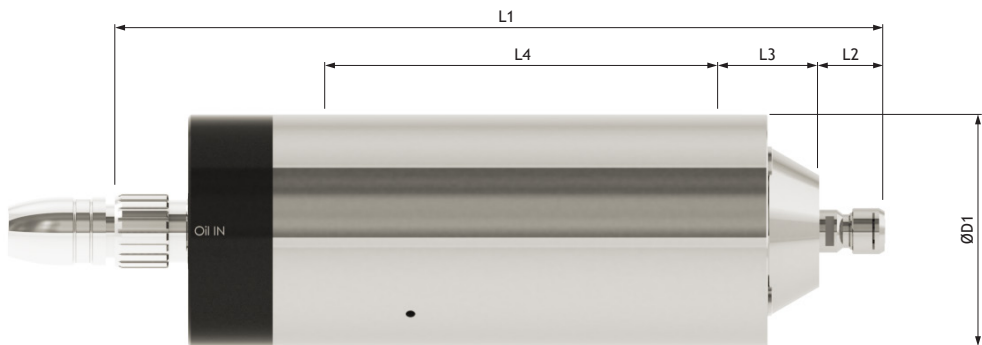
- ▲ 3 m cable
- ▲ 2 chuck keys
- ▲ 1 collet in any dimension (specify on order)

Drive unit

- ▲ Frequency converter, stand-alone unit: SF1500
- ▲ Frequency converter for installation: CDA-1,5
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 33 - 75	80	257	24	35	151	7,0	Regofix ER-11	7,0
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Water flow l / min	Noise level dB
S 33 - 75	1,2	192	75 000	25 000	0,005	0,05	1,2 *	64

* The coolant flow between the spindle and the flowmeter may vary depending on various conditions



HIGH SPEED SPINDLES

Water-cooled spindles

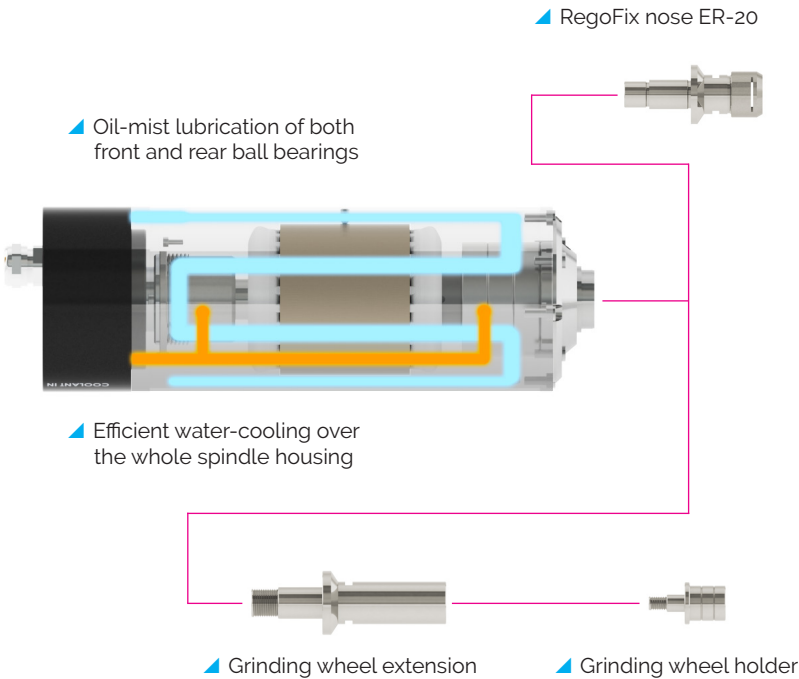
S 50

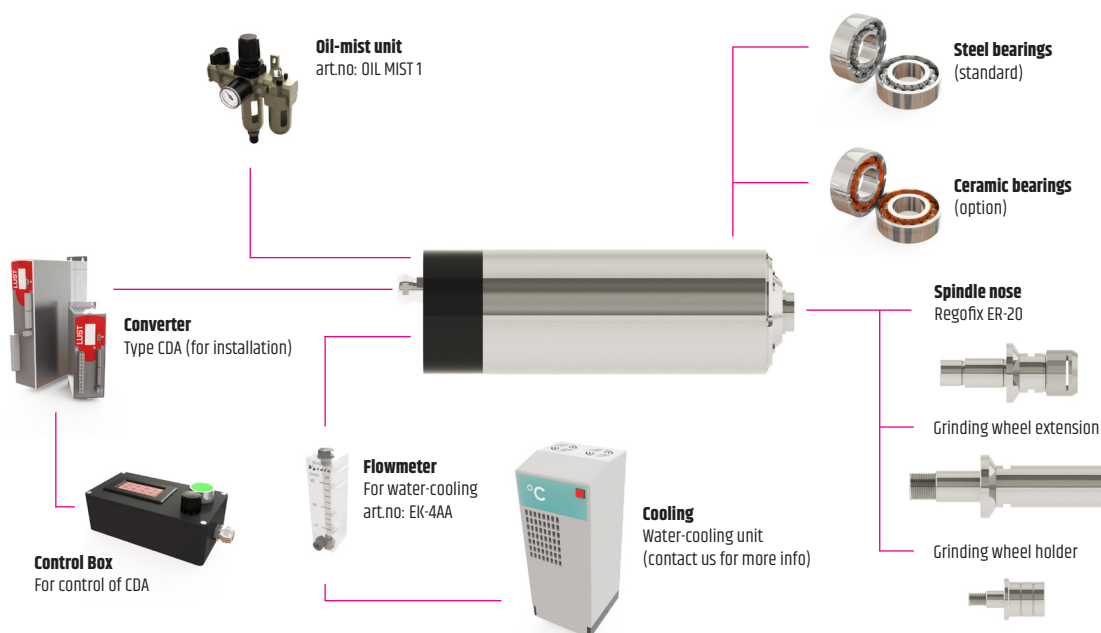


Water-cooled and oil mist lubricated spindle intended for building into machine or automation cells, where power, wide speed range and low noise level are essential. S50 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding or other precision high speed machining.

Technical specifications

S 50
Housing:
Stainless steel
Cooling:
Water-cooling
Ball bearings:
Oil-mist lubricated, spring pre-loaded, high performance angular contact ball bearings.
Electrical connection:
6-pin contact with included PTC via frequency converter.
Rotation direction:
Both directions are available
Water connection:
In- and outlet (R 1/8")
Oil mist connection:
Inlet (R 1/8")





Standard accessories included

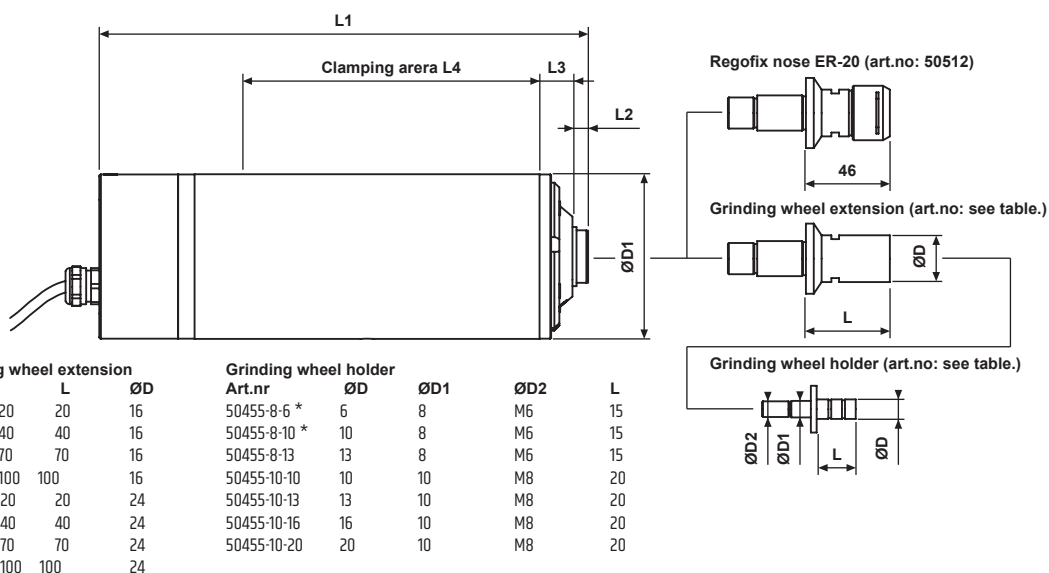
- ▲ 3 m cable

Drive unit

- ▲ Frequency converter for installation: CDA-5.5
- ▲ Control Box for control of CDA: CONTROL BOX

Spindle model	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight kg	Spindle nose type	
S 50 - 30	100	298	9	21	150	12,0	See below	
	Effect max kW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Water flow l / min	Noise level dB
S 50 - 30	5,0	350	30 000	5 000	0,005	0,05	1,2 *	60

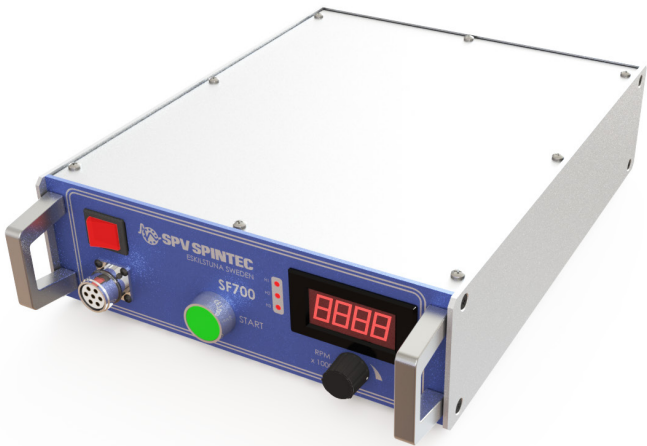
* The coolant flow between the spindle and the flowmeter may vary depending on various conditions



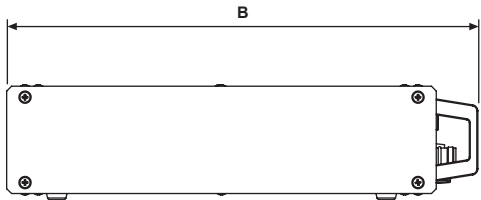
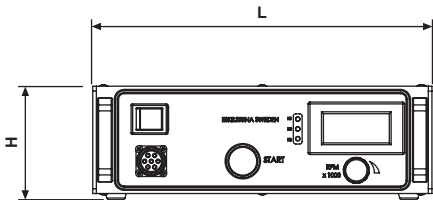
HIGH SPEED SPINDLES

Frequency converters

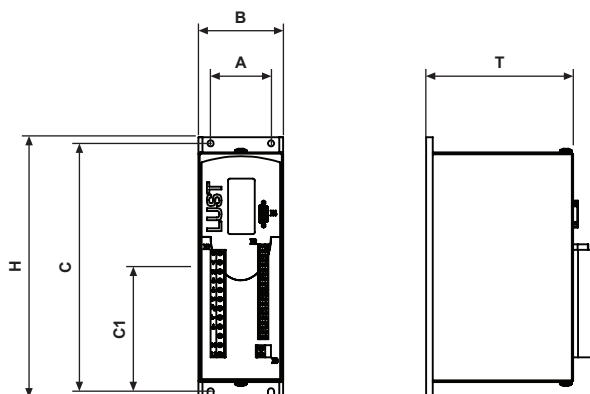
Model type SF (stand alone unit)



Converter model	SF 700	SF 1500	SF 3000
Voltage input	1-phase 50/60 Hz 230 V	1-phase 50/60 Hz 230 V	3-phase 50/60 Hz 400 V
Fuse	10 Ampere	10 Ampere	----
Output effect, max	750 W	1500 W	3 000 W
Frequency range	0 - 1500 Hz	0 - 1500 Hz	0 - 1500 Hz
Voltage output	3-phase 0 - 220 V	3-phase 0 - 220 V	3-phase 0 - 380 V
Dimensions L	280 mm	280 mm	435 mm
W	385 mm	385 mm	345 mm
H	95 mm	95 mm	95 mm
Weight	4,5 kg	5,0 kg	8,5 kg



Model type CDA (for installation)



Converter model	CDA-0,75-1	CDA-1,5-1	CDA-3,0-3	CDA-5,5-3
Voltage input	1-phase 50/60 Hz 230 V	1-phase 50/60 Hz 230 V	3-phase 50/60 Hz 400 V	3-phase 50/60 Hz 400 V
Output effect, max	750 W	1 500 W	3 000 W	5 500 W
Frequency range	0 - 1 500 Hz	0 - 1 500 Hz	0 - 1 500 Hz	0 - 1 500 Hz
Voltage output	3-phase 0 - 220 V	3-phase 0 - 220 V	3-phase 0 - 380 V	3-phase 0 - 380 V
Dimensions				
A	50 mm	50 mm	40 mm	135 mm
B	70 mm	70 mm	70 mm	150 mm
C	205 mm	230 mm	320 mm	200 mm
C1	----	----	----	100 mm
H	215 mm	240 mm	330 mm	300 mm
T	120 mm	145 mm	150 mm	150 mm
Mounting screws	4 x M4	4 x M4	6 x M5	6 x M5
Weight	1,6 kg	2,3 kg	3,2 kg	5,2 kg

Control Box

By using our Control Box you get the chance for easy handling of start / stop, continuous control of speed and a display which shows the set RPM. There is also a possibility to purchase the components contained for operation



Key Pad

By using a Key Pad KP 300 you can easily change program and adjust the parameter settings for the CDA converters. All data can be saved and downloaded to a SmartCard. (Not included).



HIGH SPEED SPINDLES

Accessories

Collets type Spintec 10 and 17 (for VM 10 / VM 17)

Collet Ø mm	Standard collet Spintec 10 - Art.no	Standard collet Spintec 17 - Art.no
3,0	10570 3,0	17570 3,0
4,0	10570 4,0	17570 4,0
6,0	----	17570 6,0
8,0	----	17570 8,0



High precision collets type Spintec 10 and 17 (for spindles)

Collet Ø mm	High precision collet Spintec 10 - Art.no	High precision collet Spintec 17 - Art.no
3,0	10571 3,0	17571 3,0
4,0	10571 4,0	17571 4,0
6,0	----	17571 6,0
8,0	----	17571 8,0



Collets type RegoFix® ER

RegoFix model	Width Ø mm	Length mm	Capacity Ø mm	Collet clamping capacity mm
ER-8	8,5	15,0	0,5 - 5,0	0,5
ER-11	11,5	18,0	0,5 - 7,0	0,5
ER-16	17,0	27,5	0,5 - 10,0	1,0
ER-20	21,0	31,5	0,5 - 13,0	1,0



High speed clamping nut RegoFix®

Nut Art.no	Width Ø mm	Length mm	Thread type
ER-8 MS	12,0	10,8	M10 x 0,75
ER-11 MS	16,0	11,3	M13 x 0,75
ER-16 MS	22,0	17,0	M19 x 1,0
ER-20 MS	28,0	19,0	M24 x 1,0



Wrench for high speed clamping nut RegoFix®

Wrench Art.no	Width mm	Length mm
ER-8 EMS	19,0	76
ER-11 EMS	22,0	100
ER-16 EMS	33,0	130
ER-20 EMS	42,0	140



Other accessories



- ▲ Flowmeter for regulation of cooling flow to units with compressed air-cooling. Capacity: 10 - 100 l / min

Art.no: EK-6273



- ▲ Flowmeter for regulation of cooling flow to units with water-cooling. Capacity: 0,1 - 1,25 l / min

Art.no: EK-4AA



- ▲ Oil-mist lubrication unit for spindles with oil-mist lubricated bearings.

Art.no: OIL MIST1



- ▲ Special oil for oil-mist lubrication units, 1 litre

Art.no: P-036997



- ▲ System cleaner for cleaning of water-cooled spindle systems, 1 litre. 3% is mixed with water.

Art.no: MOTOREX 02



- ▲ Corrosion protection concentrate for water-cooled spindles, 1 litre. 5% is mixed with water.

Art.no: COOLANT-F



- ▲ Water-cooling units for spindles: S20, S21, S28, S30, S33 and S50.

Depending on the type of processing and other condictions such as surrounding temperature, we recommend different types of water coolers.

Contact us for more information.

HIGH SPEED SPINDLES

Deburring machine

DB-Matic - For automatic deburring on rotation symmetrical parts.

- ▀ **Deburring spindle**
DB-Matic is equipped with a spindle type VM 17 RP, with a stainless steel housing and efficient cooling with compressed air.

- ▀ **High flexibility**
To fit your specific type of process the DB-Matic have an amount of different settings for application of the workpiece. Length, turn and angular settings enables deburring on many different types of gear wheels etc. All settings are infinite and very easy to access.

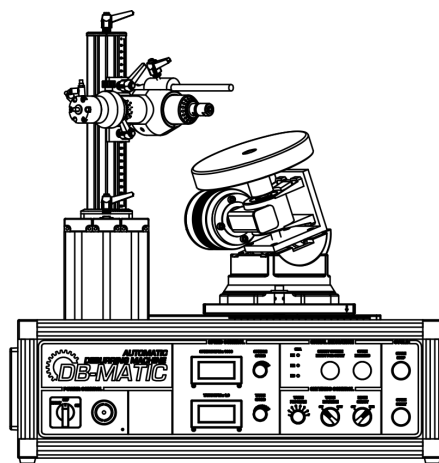
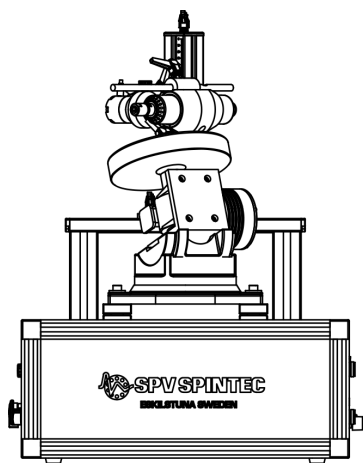
- ▀ **Integration and automation**
For quick and easy integration in a robotic cell or automation process the DB-Matic is prepared to be able to communicate with a superior control system.

- ▀ **Uncomplicated operation**
The control panel is designed for easy operation, but even so it has many different settings. For example a choice between right or left rotating table, the amount of machining cycles and infinite adjustable speed for both the spindle and the workpiece.

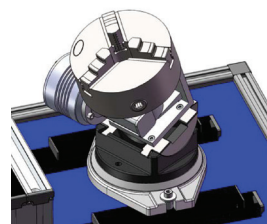
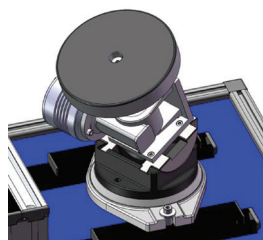
Properties

- For deburring of gear wheels, splines and other rotation symmetrical parts.
- Infinite adjustable length, height and processing angle makes it easy to adapt the process for many different parts.
- Deburring spindle type VM 17 RP with an effect of 0,4 kW and a maximum speed of 54 000 RPM.
- Easy setting of the machining cycle. Infinite adjustment of speed for both the spindle and the workpiece.

Technical specifications



Dimensions	Weight	Working temperature	Input voltage	Frequency	Fuse
L 700 mm	45 kg	+5°C to +45°C	230 VAC	50/60 Hz	6 A (slow)
W 700 mm					
H 600 mm					
Compressed air input	Air consumption	Air hose input	Noise level	Max spindle effect	Max spindle speed
5 - 8 Bar	75 - 100 l / min	Ø6,0 mm	85 db	0,4 kW	54 000 RPM



Options for increased safety

For better personal safety the DB-Matic can be supplied with an enclosed cover which is equipped with magnetic contacts that stops the process if the doors are opened. The safety function can also be adapted to an automation cell etc.

Customized options

As options for the workpiece we offer a blank disc for adapting to fixtures etc. There is also the possibility to get a manual 3-jaw chuck. Choose what fits your type of process in the best way. On request we can also design special fixtures for different products.

Quick-change chucks



Operation

By raising the locking sleeve the two sets of balls are released and the different types of inserts can be inserted or removed from the chuck.

When the sleeve is pulled down the insert gets locked in position.

Tool change can occur with both stopped and running machine spindle.

Precision and stability

The design consists of a solid chuck body with an internal taper and locking sleeve. Two sets of three balls serve to lock the inserts.

The first set of balls locks the annular groove on the insert's taper and pulls the insert in axial direction, while the upper sets locks in three of the six semispherical recesses and transfers the torque.

Properties

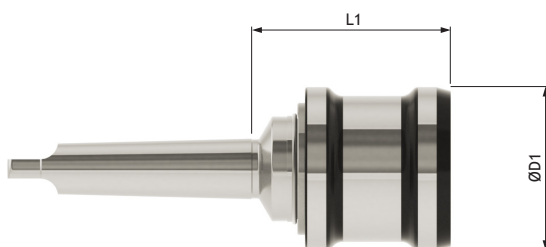
- The inserts are absolutely stuck
- Runout accuracy better than 0,01 mm
- Minimum space required for changing tool thanks to the possibility of oblique insertion
- For both left- and right-handed tools.
- Works in any spindle position (vertical, horizontal etc.)

One-hand function - Model 80-4E

A variant of the chuck that has been simplified even further

- The insert is released as described above, by lifting the locking sleeve
- A new tool is applied with one hand since the return of the locking sleeve is done automatically

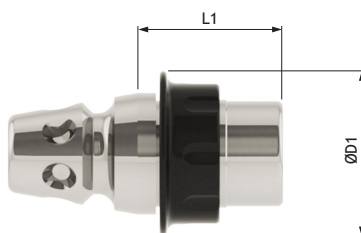




JahrIs Quick-Change Chuck

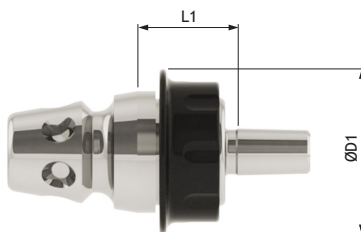
JahrIs model	Mount, taper	L mm	ØD mm	Art.no
80-3	Morse Taper 3	77	65	95143
80-3	Morse Taper 4	76	65	95145
80-4E	Morse Taper 4	93,5	83	95429
80-4E	Morse Taper 5	91	83	98220

* One-hand function



JahrIs Inserts for Morse Taper

JahrIs model	Internal taper	L mm	ØD mm	Art.no
80-3	Morse Taper 1	29	52	95164
80-3	Morse Taper 2	29	52	95165
80-3	Morse Taper 3	43	52	95166
80-4	Morse Taper 1	34	63	95167
80-4	Morse Taper 2	34	63	95168
80-4	Morse Taper 3	34	63	95169
80-4	Morse Taper 4	65	63	95170



JahrIs Inserts for chucks with internal B-taper

JahrIs model	External taper	L mm	ØD mm	Art.no
80-3	B16	33	52	95187
80-4	B16	38	63	95189

