SPV SPINTEC®

PRODUCT CATALOGUE 2015

made in SWEDEN

Terms and conditions

WE HAVE THE KNOWLEDGE, THE EXPERIENCE AND THE SOLUTIONS!

SPV Spintec
aims to be your complete supplier and partner when it comes to processing in modern industry worldwide.

Our vision
Is to be percieved by our customers as a sounding board and a first choice for support through both service and development.

Customization
is very important to us and thanks to a steady contact with the market we develop and adapt our products and solutions for the customers and give them a great and long-term value.

Production and development
SPV Spintec whose roots go back to 1933 has over the years developed a number of unique products. Today all production, development and sale is based on the plant in Eskilstuna, Sweden. Thanks to that we can quickly develop new products and customized solutions while we still have full control of the quality and accuracy that is our hallmark.

Ordering and information
For ordering or more information, please use one of the following alternatives.

Telephone: +46 - 16 - 15 30 30

Fax: +46 - 16 - 51 34 64

E-mail: info@spvspintec.se

Website: www.spvspintec.se

The website
On our website, which is under constand development you can always find updated information and we are continue to add more info, such as videos, web-tools etc. Everything to make it as easy as possible for you find just what you are looking for. You can also find information about our resellers and agents worldwide.

Terms of delivery
We deliver Ex Works from our plant in Eskilstuna/Sweden. For consignee the customer shall, the latest in connection with order notice us about that.

Delivery time
Disposible products are shipped the same day in cases where the order is recorded before 14:00 (UTC+1). In cases where the goods are out of stock or not available, the delivery time is noticed along with the order acknowledgement. We reserve the right to make customary credit checks prior to delivery.

Terms of payment
Payment must reach SPV Spintec AB within 30 days of the invoice date. After the experiation date we charge interest at the statutory reference rate. If the invoice is desired via e-mail, the correct adress must be notified to us within the context of the order to avoid invoice fee.

Return of goods
Returns must be made within 8 days from receipt of the goods. An invoice copy must be attached. Returns must be in original packaging. Catalogue goods is credited with 80% of the gross price. Special items are not accepted for return.

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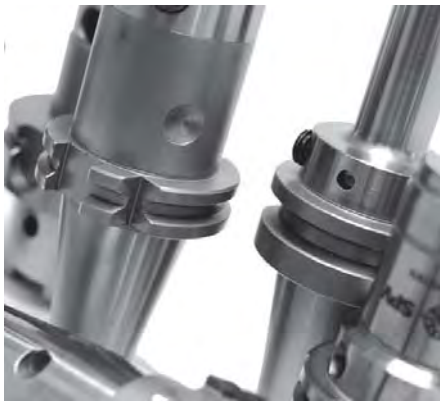
HYDRAULIC CHUCKS



Information

Quick facts about SPV Spintec´s hydraulic chucks!

- High clamping torque, 320 Nm at a Ø20 mm shank in a standard hydraulic chuck.
- Runout accuracy better than 0,003 mm. (see below).
- Quick assembly method of the tool. No special equipment needed.
- Balanced for 10 000 RPM (G 6.3) as standard - can be supplied fine balanced up to 30 000 RPM (G 2.5).
- The widest range of hydraulic chucks on the market. Available for all applications.
- If our standard assortment isn´t enough we will design a chuck according to your needs!

Why should you use SPV Spintec´s hydraulic chucks?

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

Runout accuracy

All of our hydraulic chuck models are made with runout accuracy better than 0,003 mm. This means that you can machine to closer tolerances and tool lifetime is extended - giving you better overall economy.

Our different types of hydraulic chucks

- Type HCF / HCF+
  Short standard chuck

- Type HCFL / HCFL+
  Extended standard chuck

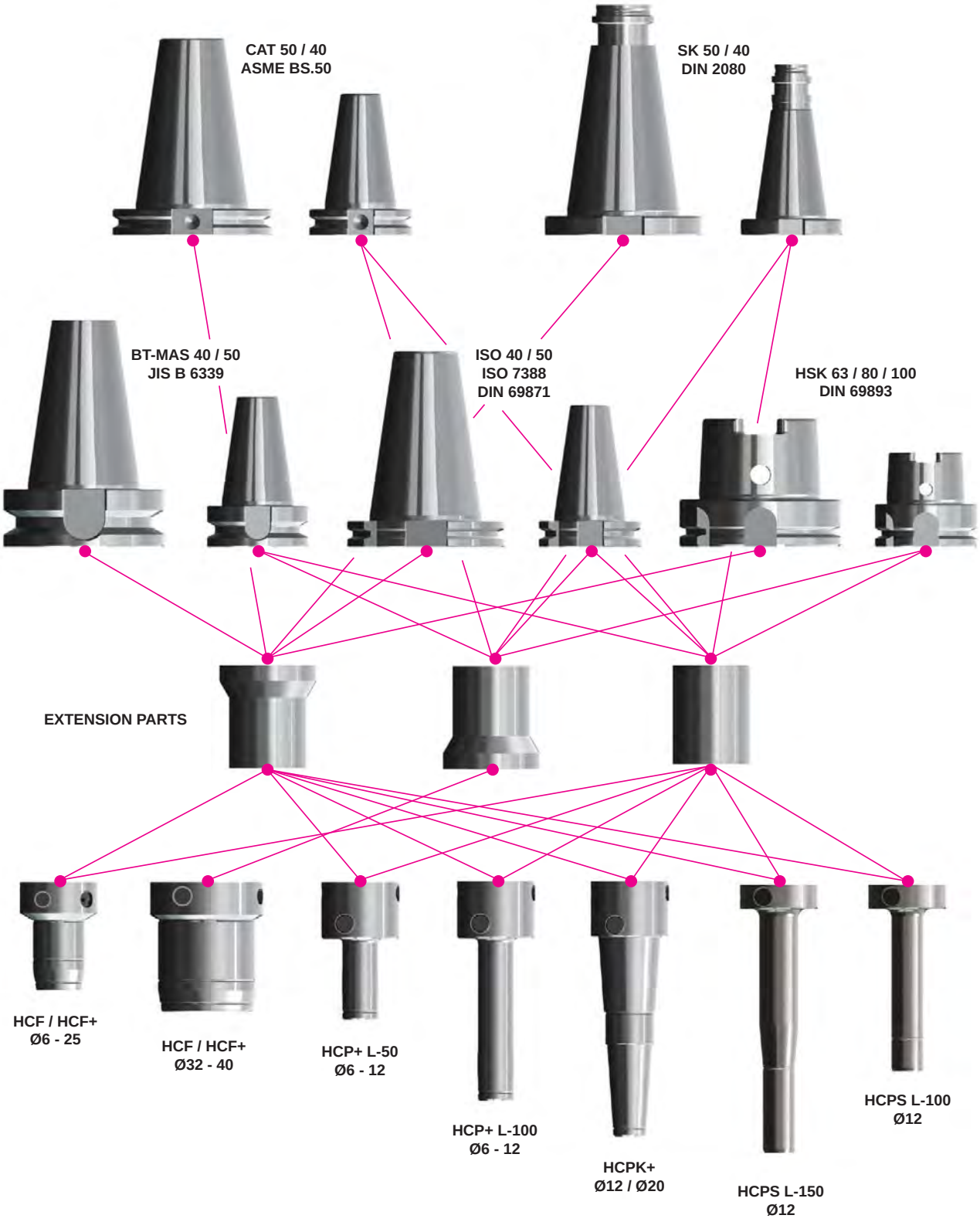
- Type HCP+
  Pen-chuck in two different lengths

- Type HCPK+
  Long tapered chuck

- Type HCK+
  Extra short chuck

- Type HCPS
  Extra long and slim pen-chuck

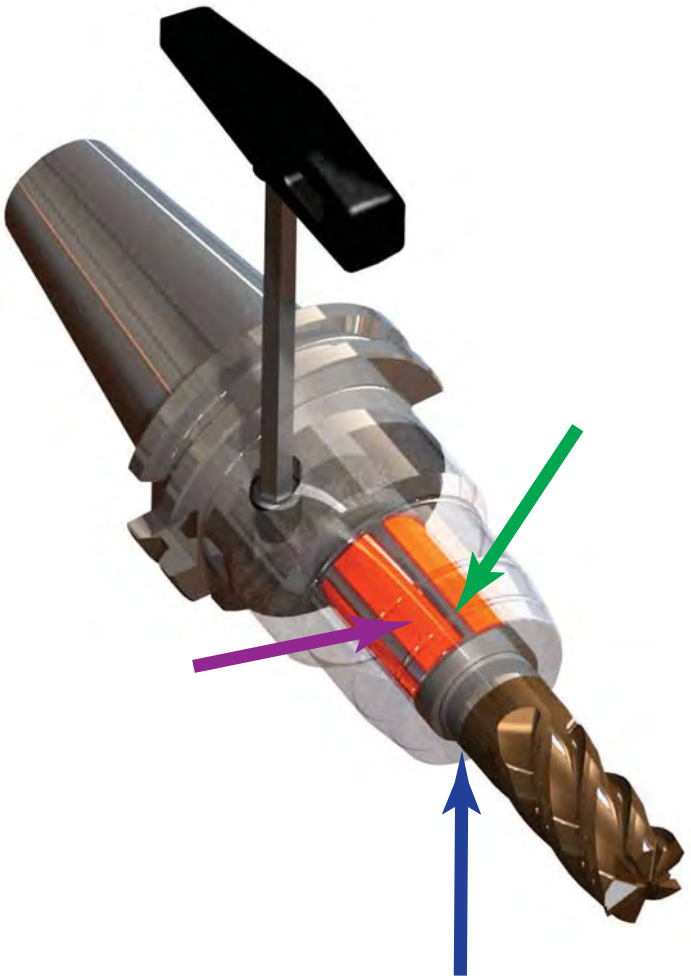
Optional combinations for our hydraulic chucks



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 hydraulic chucks

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

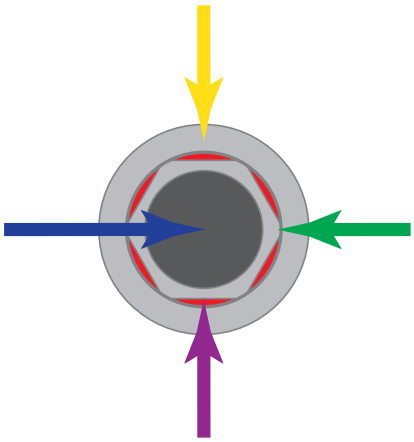
Customers have often been obliged to purchase specially shortened hydraulic milling chucks with increased torque when they have needed to remove a large amount of material in the shortest possible time.

We have eliminated this limitation and offer our customers the opportunity of using our developed hydraulic milling chuck for both drilling and milling, which offers 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 metal cutting tools.

BA tried several commercially available retention systems but did not find a satisfactory solution. At that time SPV developed the hexagonal milling membrane which was found in tests at British Aerospace to multiply the period of contact several times over and in some cases, enabled them to double both radial and axial cutting depths.



Yellow arrow
Outer housing, hydraulic chuck

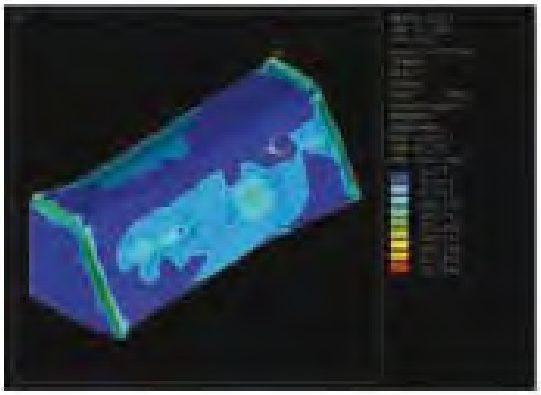
Blue arrow
Tool (drill, cutter, etc.)

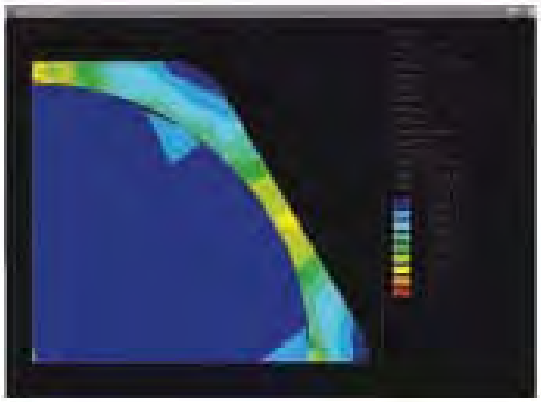
Purple arrow
Hydraulic chamber which combines with high hydraulic pressure in the chuck to provide stable anchorage, with long, linear, thinwall gripping surfaces which protect the tool from flexing.

Green arrow
The remaining material between the hydraulic chambers creates - reinforcement ribs - which minimise vibration and stiffen the membrane.

Analysis

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





Testing

A trial was done in the spring of 2003 at SECO in Fagersta, Sweden in an 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:
  Hydraulic chucks, HCF+ with hexagonal membrane.
- Machining tools:
  Solid 3-blade hard metal cutters, made by Jabro, with Tribon coating in dimensions Ø10, Ø12 and Ø20 mm.
- Work piece material:
  Square bar, 75x75 mm made from heat treatable steel SS 2244-05, hardness 270 - 315 HB.

Test summary

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

HCF+ chucks:

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

Specifications

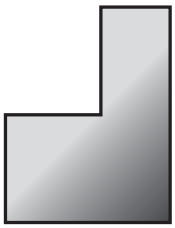
Coarse slab milling with rotational speed and feed rate to Jabro's recommendations:

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

This gives a chip area of:
1 x D mm x 0,4 x D mm = 0,4 x D mm²

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

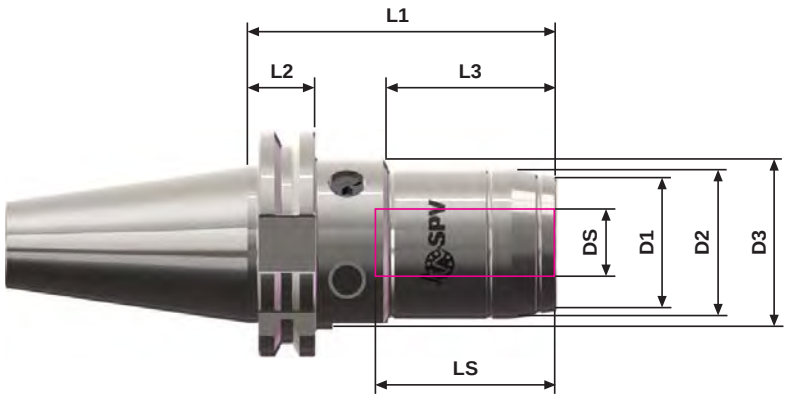
HCF+ test with twice the recommended depth of cut, axially and radially.



This gives a chip area of:
2 x D mm x 0,8 x D mm = 1,6 x D mm²

ISO 7388 / DIN 69871

STANDARD CHUCK HCF / HCF+

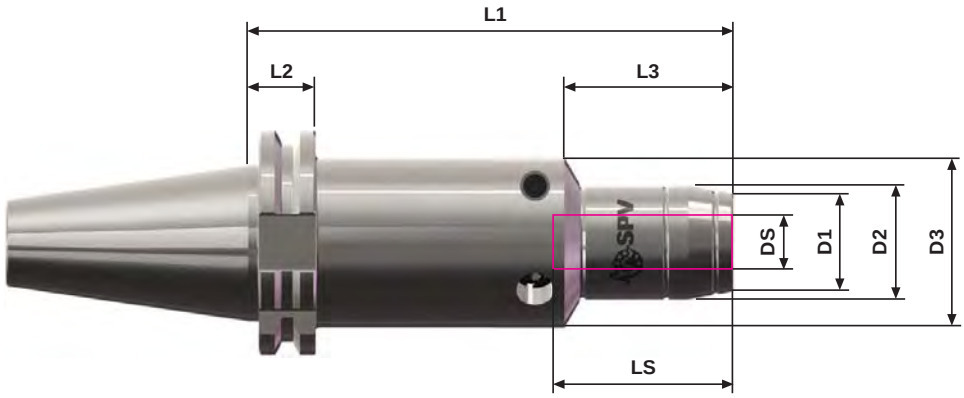


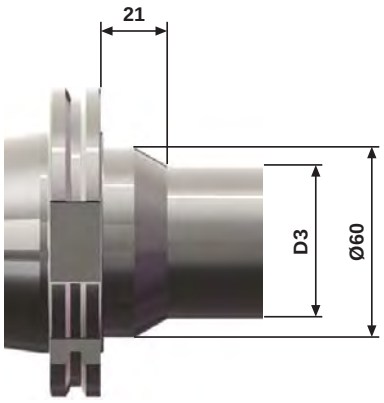
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	34	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	54835
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	54836
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+

* Dimensions that can be used with reduction sleeves. (Reduction sleeves, see p.40.)
Other dimensions with ISO-45 on request.
** Ø40 is only available with ISO-50 and milling-membrane (+).

EXTENDER STANDARD CHUCK HCFL / HCFL+





ISO-50 appearance Ø6 - Ø25

For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	ISO-40	21,5	26	50	130	19,1	43,5	37,5	56700
	ISO-40	21,5	26	50	130-480	19,1	43,5	37,5	▲
	ISO-50	21,5	26	50	160	19,1	43,5	37,5	56710
	ISO-50	21,5	26	50	160-445	19,1	43,5	37,5	▲
8	ISO-40	23,5	28	50	130	19,1	43,5	37,5	56701
	ISO-40	23,5	28	50	130-480	19,1	43,5	37,5	▲
	ISO-50	23,5	28	50	160	19,1	43,5	37,5	56711
	ISO-50	23,5	28	50	160-445	19,1	43,5	37,5	▲
10	ISO-40	25,5	30	50	130	19,1	43,5	42,5	56702
	ISO-40	25,5	30	50	130-480	19,1	43,5	42,5	▲
	ISO-50	25,5	30	50	160	19,1	43,5	42,5	56712
	ISO-50	25,5	30	50	160-445	19,1	43,5	42,5	▲
12 *	ISO-40	27,5	32	50	130	19,1	44,5	47,5	56703
	ISO-40	27,5	32	50	130-480	19,1	44,5	47,5	▲
	ISO-45	27,5	32	50	160	19,1	44,5	47,5	56753
	ISO-45	27,5	32	50	160-445	19,1	44,5	47,5	▲
	ISO-50	27,5	32	50	160	19,1	44,5	47,5	56713
	ISO-50	27,5	32	50	160-445	19,1	44,5	47,5	▲
14	ISO-40	29,5	34	50	130	19,1	44,5	47,5	56704
	ISO-40	29,5	34	50	130-480	19,1	44,5	47,5	▲
	ISO-50	29,5	34	50	160	19,1	44,5	47,5	56714
	ISO-50	29,5	34	50	160-445	19,1	44,5	47,5	▲
16	ISO-40	33,5	38	50	130	19,1	47,5	52,5	56705
	ISO-40	33,5	38	50	130-480	19,1	47,5	52,5	▲
	ISO-50	33,5	38	50	160	19,1	47,5	52,5	56715
	ISO-50	33,5	38	50	160-445	19,1	47,5	52,5	▲

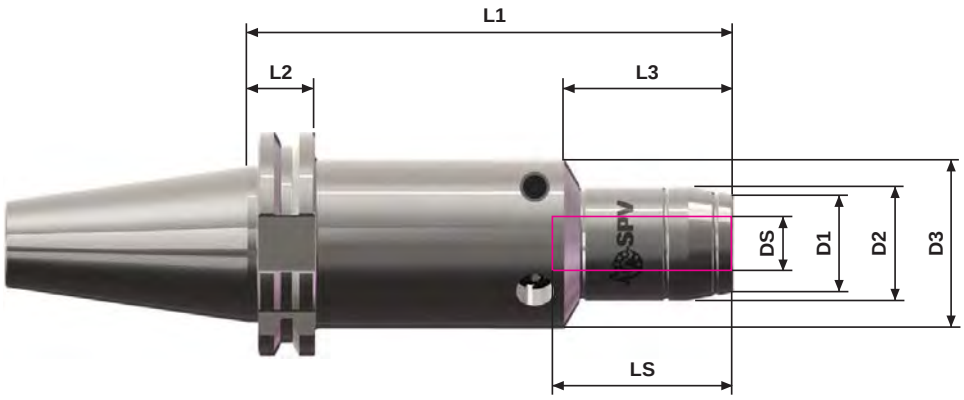
* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

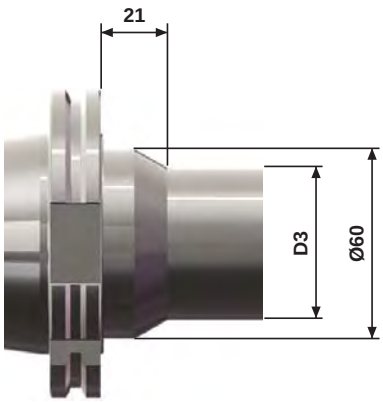
▲ Depending on desired length (L1). Specify art.no / L1 on order.
Other dimensions with ISO-45 on request.

Continued on next page...

ISO 7388 / DIN 69871

EXTENDED STANDARD CHUCK HCFL / HCFL+





ISO-50 appearance Ø6 - Ø25

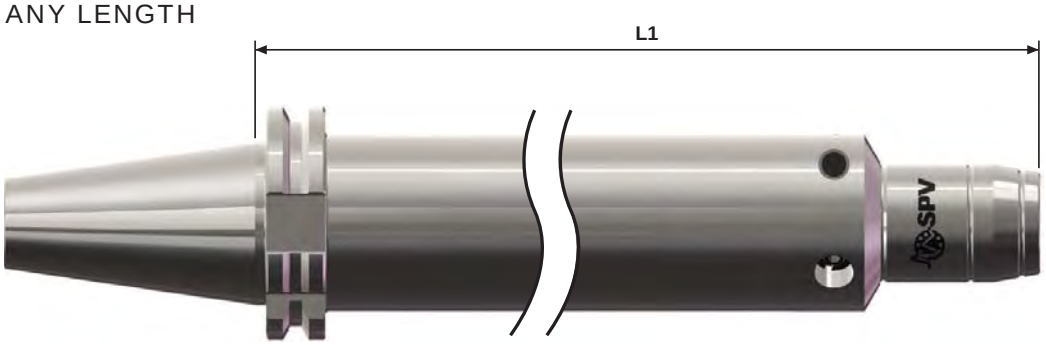
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	130	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

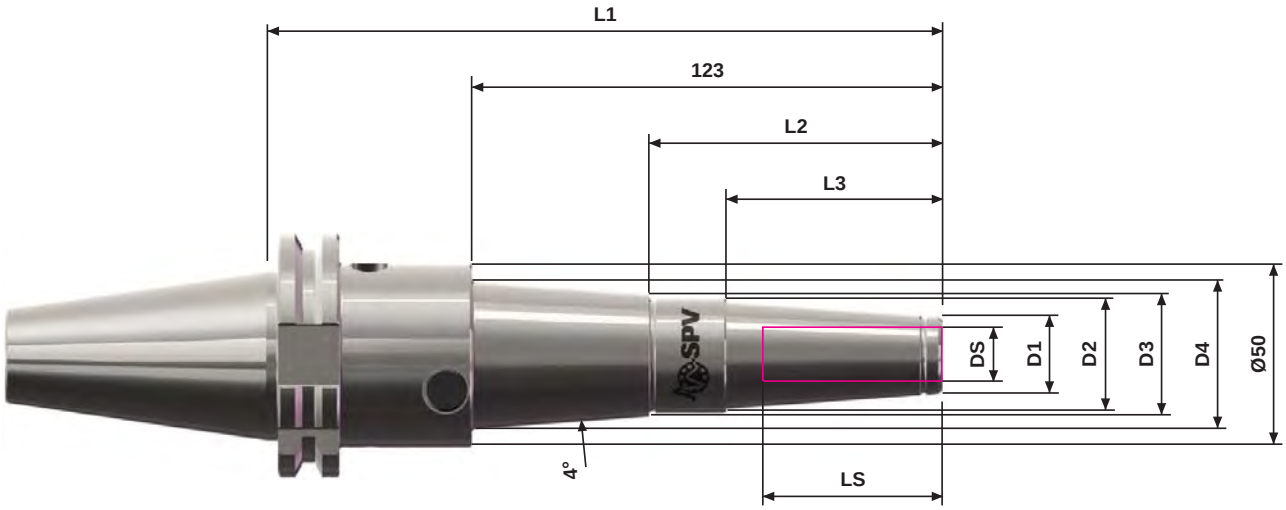
▲ Depending on desired length (L1). Specify art.no / L1 on order.
Other dimensions with ISO-45 on request.

HCFL / HCFL+ IN ANY LENGTH



Ordering example: ISO-40, Ø20, L1 = 290 mm, type HCFL+ Article number: 56707+/290

TAPERED, LONG CHUCK WITH MILLING-MEMBRANE HCPK+

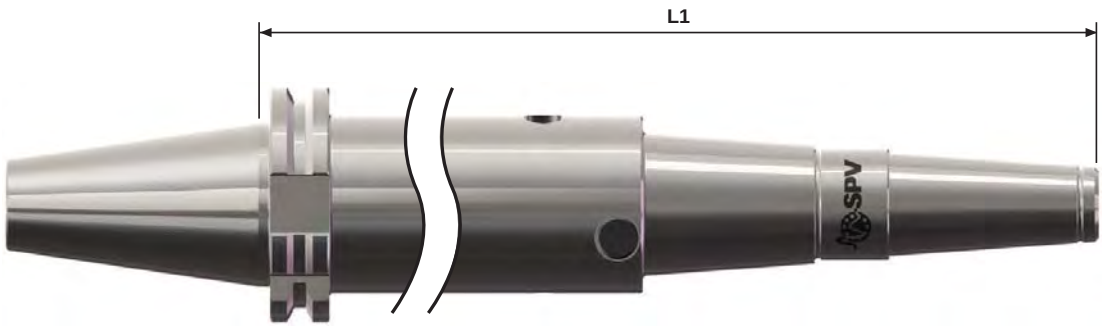


DS Ømm	Fäste typ	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Artikel-nummer
12 *	ISO-40	20	30	32	40,5	177	76,8	57	44	59183+
	ISO-40	20	30	32	40,5	217-480	76,8	57	44	▲
	ISO-50	20	30	32	40,5	177	76,8	57	44	59193+
	ISO-50	20	30	32	40,5	217-445	76,8	57	44	▲
20 *	ISO-40	32	39	42	50,5	177	74,8	55	52	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.
Other dimensions with ISO-45 on request.

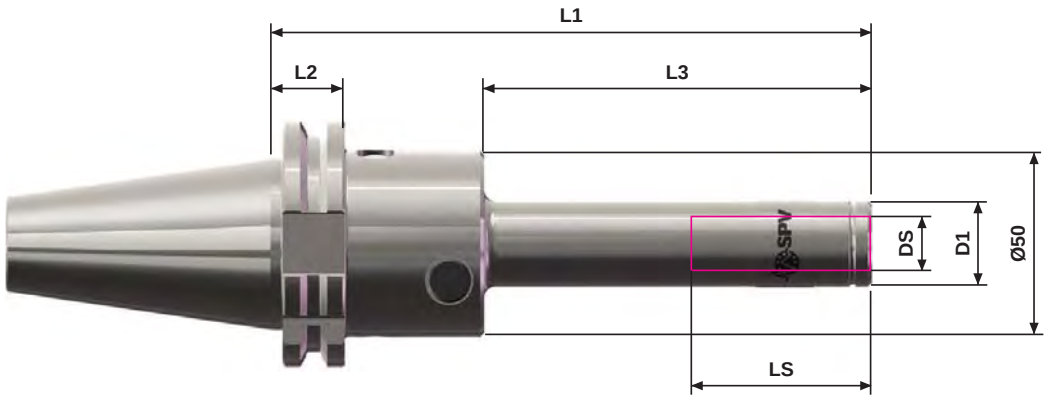
HCPK+ IN ANY LENGTH



Ordering example: ISO-40, Ø20, L1 = 277 mm, type HCPK+ Article number: 59187+/277

ISO 7388 / DIN 69871

PEN-CHUCK WITH MILLING-MEMBRANE HCP+

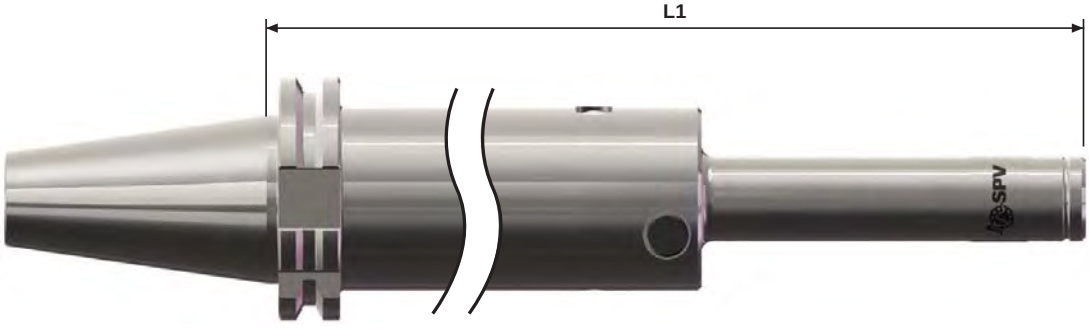


DS Ømm	Mount type	D1 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	ISO-40	22,5	105	19,1	50	37,5	59000+
	ISO-40	22,5	155	19,1	100	37,5	59010+
	ISO-50	22,5	105	19,1	50	37,5	59050+
	ISO-50	22,5	155	19,1	100	37,5	59060+
8	ISO-40	22,5	105	19,1	50	37,5	59001+
	ISO-40	22,5	155	19,1	100	37,5	59011+
	ISO-50	22,5	105	19,1	50	37,5	59051+
	ISO-50	22,5	155	19,1	100	37,5	59061+
10	ISO-40	22,5	105	19,1	50	42,5	59002+
	ISO-40	22,5	155	19,1	100	42,5	59012+
	ISO-50	22,5	105	19,1	50	42,5	59052+
	ISO-50	22,5	155	19,1	100	42,5	59062+
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+

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

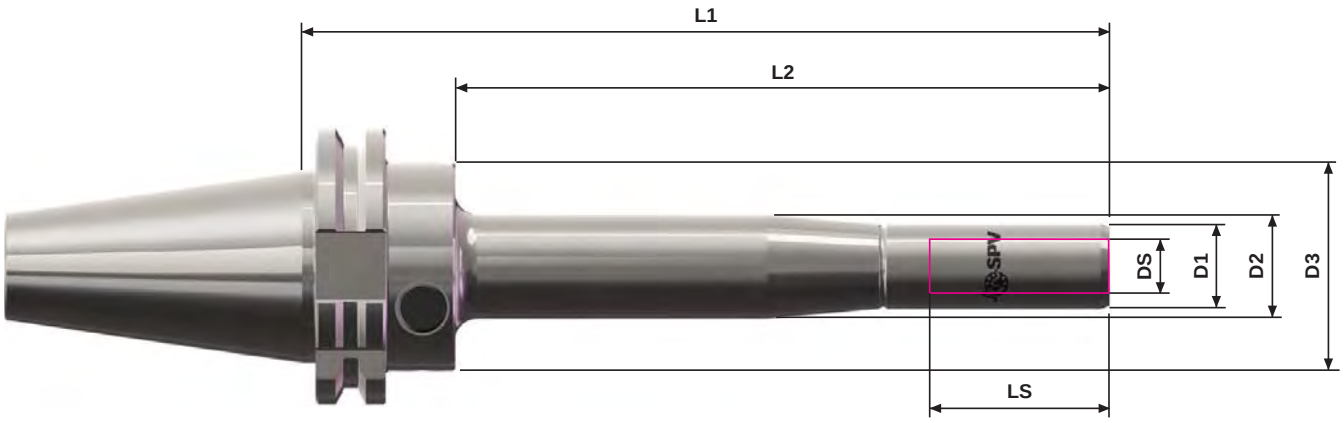
ISO-45 on request.

HCP+ IN ANY LENGTH



Ordering example: ISO-40, Ø12, L3 = 50 mm L1 = 290 mm, type HCP+ Article number: 59003+/290

EXTRA LONG, SLIM PEN-CHUCK HCPS

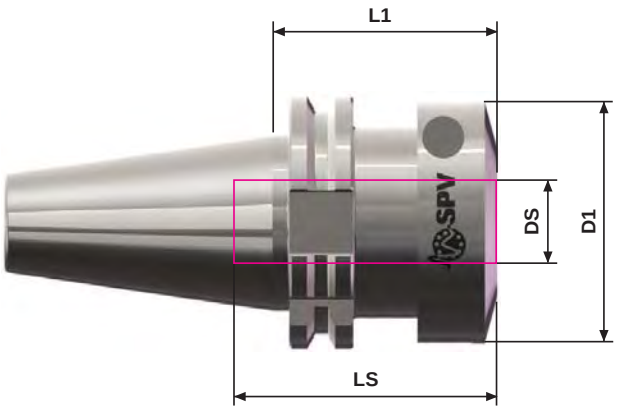


DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 Ømm	L2 Ømm	L3 Ømm	LS Ømm	Article-number
12 *	ISO-40	19,5	----	48	135	100	----	42	59623
	ISO-50	19,5	----	48	135	100	----	42	59633
12 *	ISO-40	19,5	24	48	185	150	52	42	59723
	ISO-50	19,5	24	48	185	150	52	42	59733

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

Also available as extended chuck. Contact us for more info.
ISO-45 on request.

EXTRA SHORT MILLING-CHUCK MED PLUS-MEMBRANE HCK+

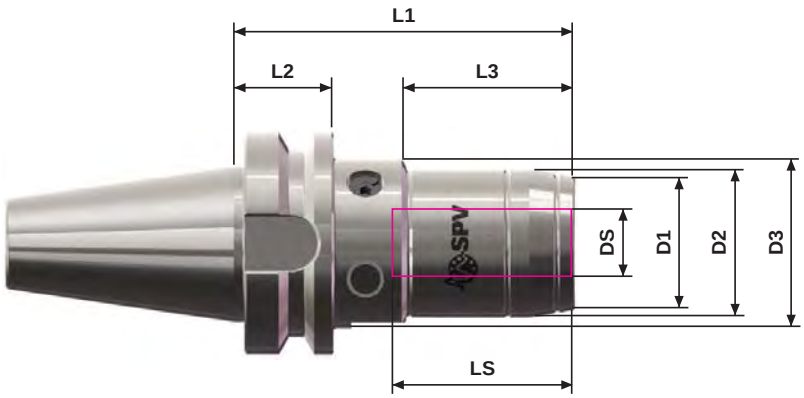


HCK+ has an extended membrane which provides 600 Nm compared to 320 Nm on a standard chuck. Check the LS dimension!

DS Ømm	Mount type	D1 Ømm	L1 Ømm	LS Ømm	Article-number
20	ISO-40	61	56	70	66122+

BT-MAS

STANDARD CHUCK HCF / HCF+

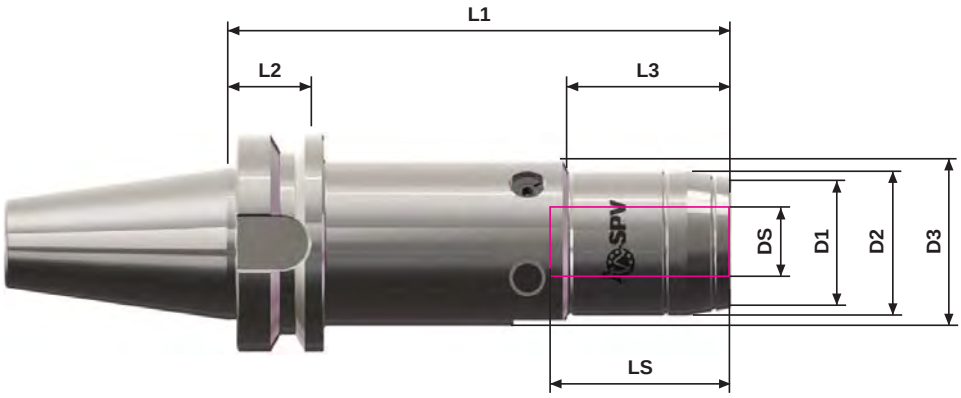


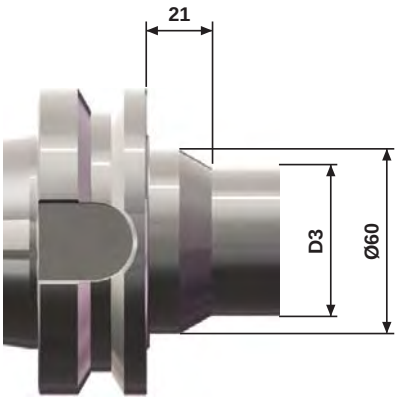
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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+

* Dimensions that can be used with reduction sleeves. (Reduction sleeves, see p.40.)
** Ø40 is only available with ISO-50 and milling-membrane (+).

EXTENDED STANDARD CHUCK HCFL / HCFL+





BT-50 appearance Ø6 - Ø25

For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	▲
	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	▲
14	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	▲
	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	▲
16	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	▲

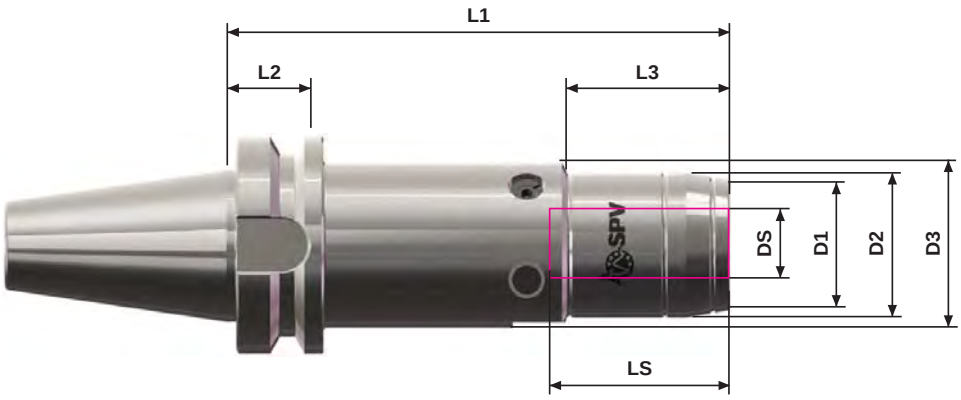
* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

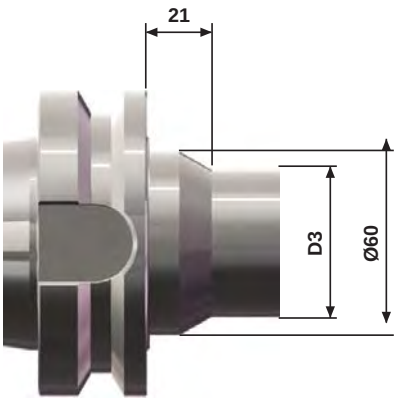
▲ Depending on desired length (L1). Specify art.no / L1 on order.

Continued on next page...

BT-MAS

EXTENDED STANDARD CHUCK HCFL / HCFL+





BT-50 appearance Ø6 - Ø25

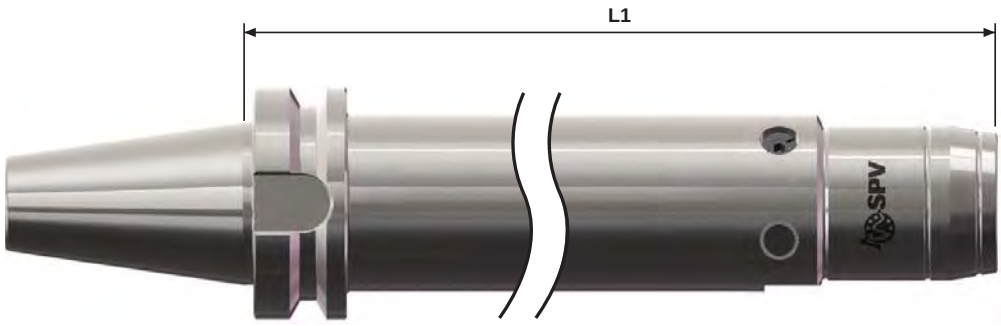
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	▲
	BT-40	43,5	48	48	139	27	111	55	56728
	BT-40	43,5	48	48	139-485	27	---	55	▲
25	BT-50	43,5	48	48	164	38	105	55	56738
	BT-50	43,5	48	48	164-445	38	---	55	▲
	BT-40	55,5	60	70	148	27	57	65	56729
	BT-40	55,5	60	70	148-485	27	57	65	▲
32 *	BT-50	55,5	60	70	159	38	57	65	56739
	BT-50	55,5	60	70	159-445	38	57	65	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

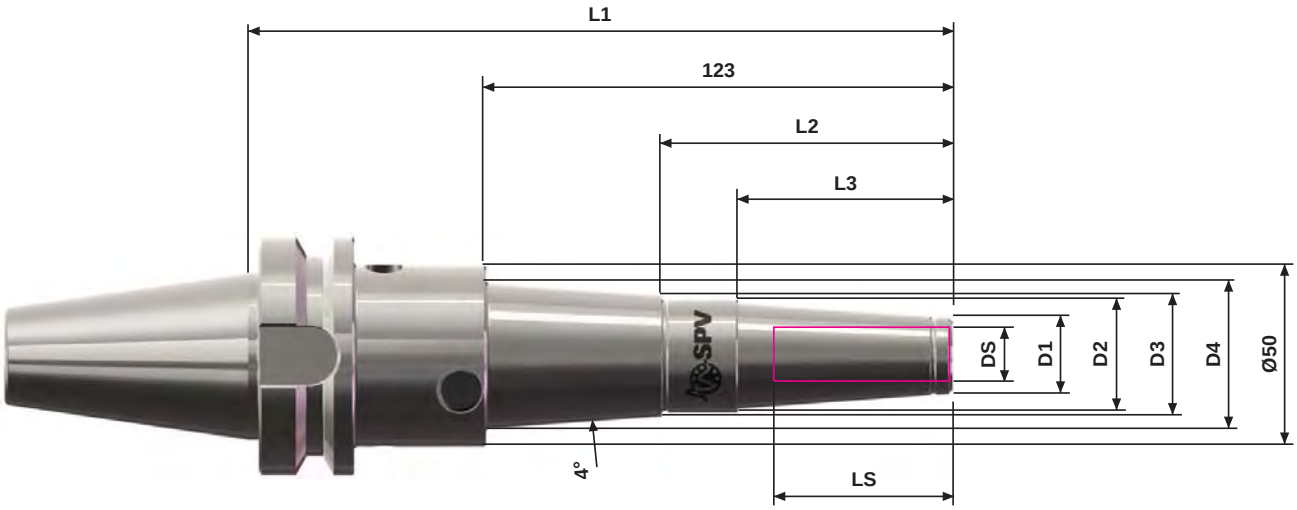
▲ Depending on desired length (L1). Specify art.no / L1 on order.

HCFL / HCFL+ IN ANY LENGTH



Ordering example: BT-40, Ø20, L1 = 295 mm, type HCFL+ Artikle number: 56727+/295

TAPERED, LONG CHUCK WITH MILLING-MEMBRANE HCPK+

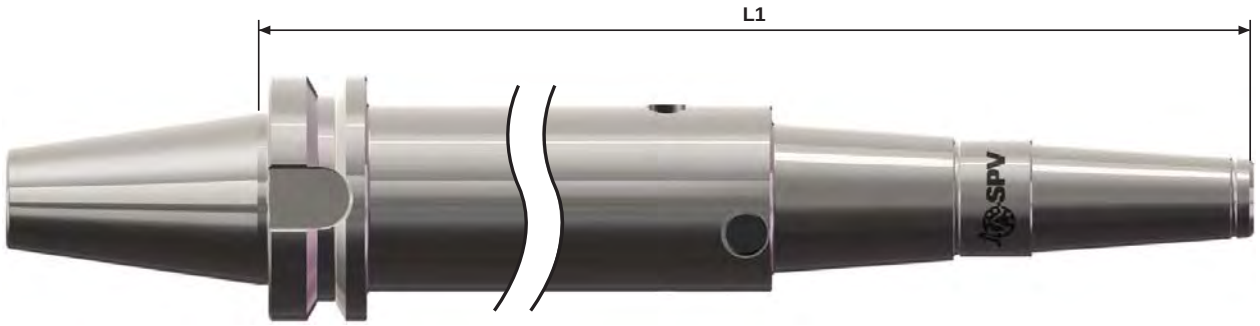


DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
12 *	BT-40	20	30	32	40,5	185	76,8	57	44	59153+
	BT-40	20	30	32	40,5	225-485	76,8	57	44	▲
	BT-50	20	30	32	40,5	196	76,8	57	44	59173+
	BT-50	20	30	32	40,5	236-445	76,8	57	44	▲
20 *	BT-40	32	39	42	50,5	185	74,8	55	52	59157+
	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.

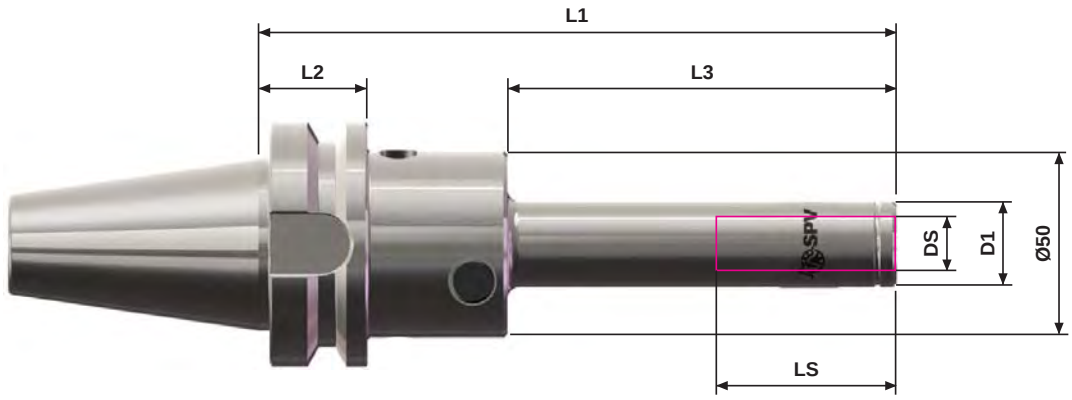
HCPK+ IN ANY LENGTH



Ordering example: BT-40, Ø20, L1 = 285 mm, type HCPK+ Article number: 59147+/285

BT-MAS

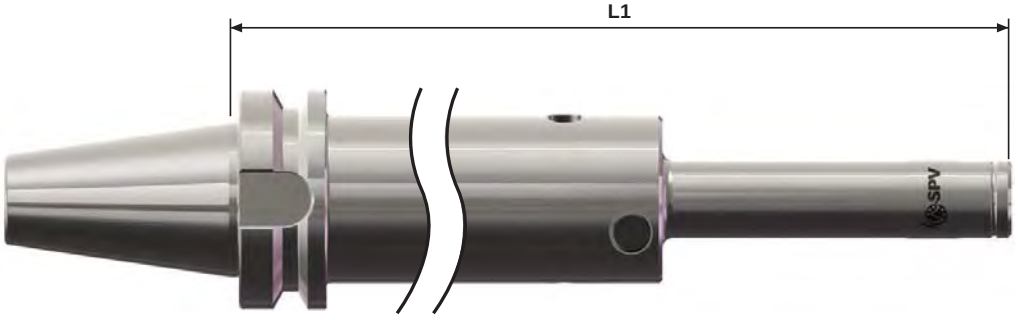
PEN-CHUCK WITH MILLING-MEMBRANE HCP+



DS Ømm	Mount type	D1 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	BT-40	22,5	113	27	50	37,5	59100+
	BT-40	22,5	163	27	100	37,5	59110+
	BT-50	22,5	124	38	50	37,5	59150+
	BT-50	22,5	174	38	100	37,5	59160+
8	BT-40	22,5	113	27	50	37,5	59101+
	BT-40	22,5	163	27	100	37,5	59111+
	BT-50	22,5	124	38	50	37,5	59151+
	BT-50	22,5	174	38	100	37,5	59161+
10	BT-40	22,5	113	27	50	42,5	59102+
	BT-40	22,5	163	27	100	42,5	59112+
	BT-50	22,5	124	38	50	42,5	59152+
	BT-50	22,5	174	38	100	42,5	59162+
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+

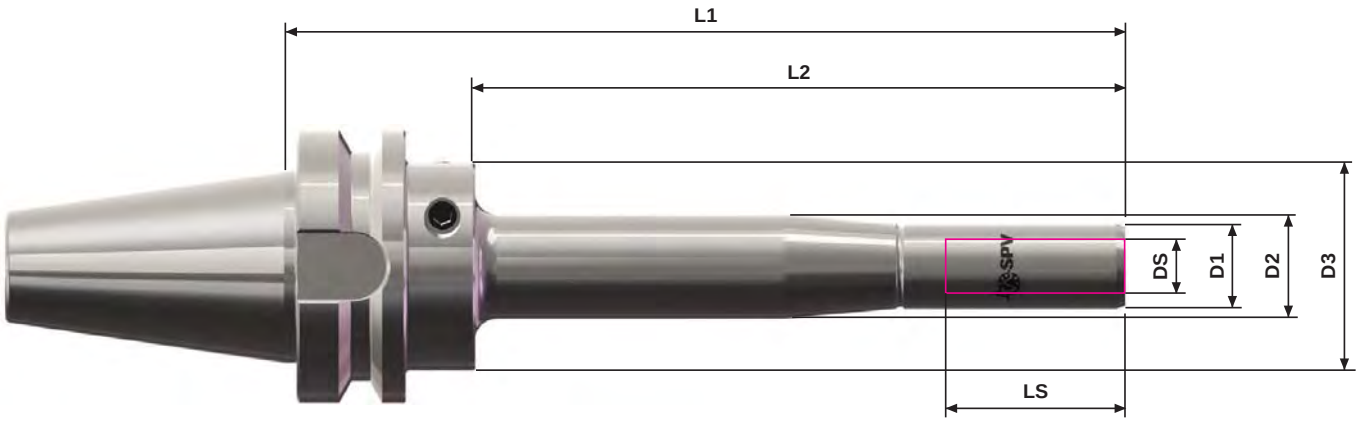
* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

HCP+ IN ANY LENGTH



Ordering example: BT-40, Ø12, L1 = 263 mm, L3 = 100, type HCP+ Article number: 59113+/263

EXTRA LONG, SLIM PEN-CHUCK HCPS

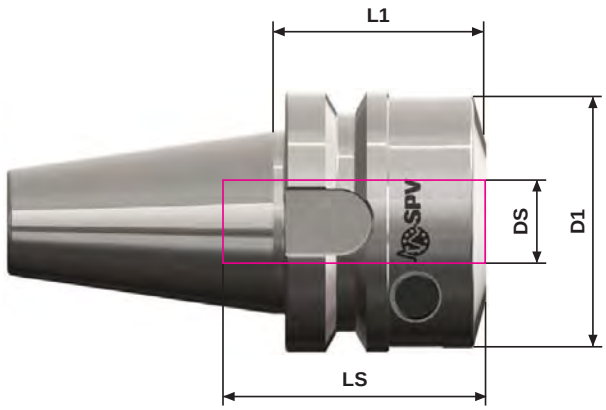


DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 Ømm	L2 Ømm	L3 Ømm	LS Ømm	Article-number
12 *	BT-40	19,5	----	48	143	100	----	42	59603
	BT-50	19,5	----	48	154	100	----	42	59613
12 *	BT-40	19,5	24	48	193	150	52	42	59703
	BT-50	19,5	24	48	204	150	52	42	59713

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

Also available as extended chuck. Contact us for more info.

EXTRA SHORT MILLING-CHUCK MED MILLING-MEMBRANE HCK+

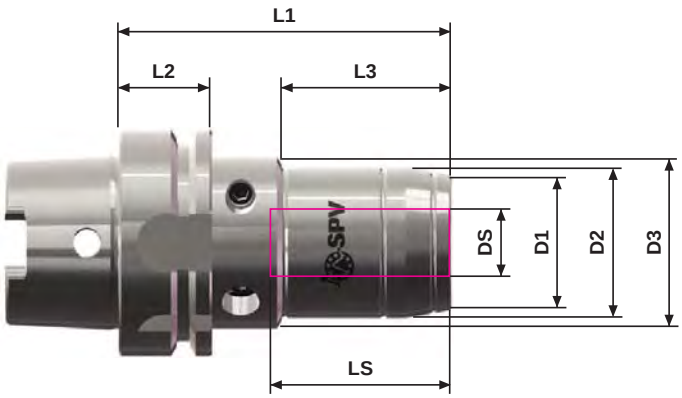


HCK+ has an extended membrane which provides 600 Nm compared to 320 Nm on a standard chuck. Check the LS dimension!

DS Ømm	Mount type	D1 Ømm	L1 Ømm	LS Ømm	Article-number
20	BT-40	61	56	70	66125+

HSK-A

STANDARD CHUCK HCF / HCF+

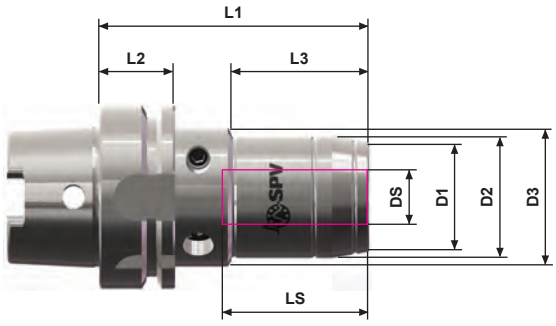


For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

STANDARD CHUCK HCF / HCF+



*For milling-membrane (+) specify **+** after art.no.*

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
20 *	HSK-A50	37,5	42	48	91,5	26	47,5	52,5	**54867**
	HSK-A63	37,5	42	48	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	145	29	47,5	52,5	**56687**
25	HSK-A63	43,5	48	48	121	26	51,5	55	**54878**
	HSK-A80	43,5	48	48	131	26	51,5	55	**56678**
	HSK-A100	43,5	48	48	144	29	51,5	55	**56688**
32 *	HSK-A63	55,5	60	70	126	26	57	65	**54879**
	HSK-A80	55,5	60	70	140	26	57	65	**56679**
	HSK-A100	55,5	60	70	153	29	57	65	**56689**
40 **	HSK-A100	65	70	70	158	29	42	70	**56120+**

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)
** Ø40 is only available with ISO-50 and milling-membrane (+).

Other dimensions with HSK-40 and HSK-50 on request.

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

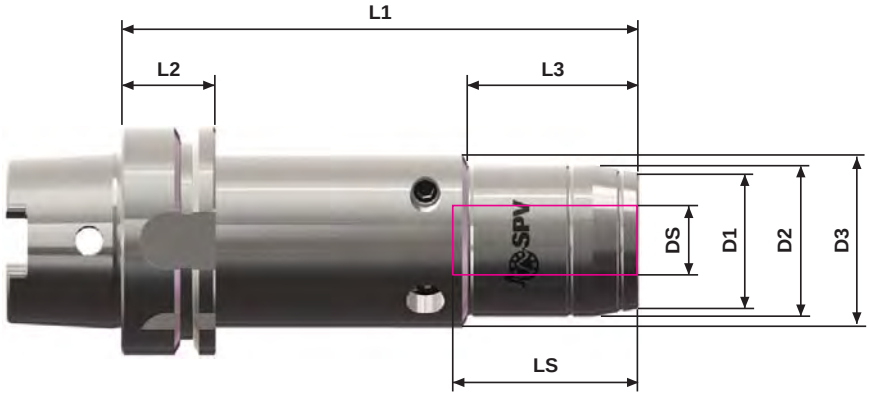
HSK-C

HSK-E

HSK-F

HSK-A

EXTENDED STANDARD CHUCK HCFL / HCFL+



For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	56764
	HSK-A100	27,5	32	48	180-500	29	44,5	47,5	▲
14	HSK-A63	29,5	34	48	140	26	44,5	52,5	56665
	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	56695
	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	56765
	HSK-A100	29,5	34	48	180-500	29	44,5	52,5	▲

EXTENDED STANDARD CHUCK HCFL / HCFL+

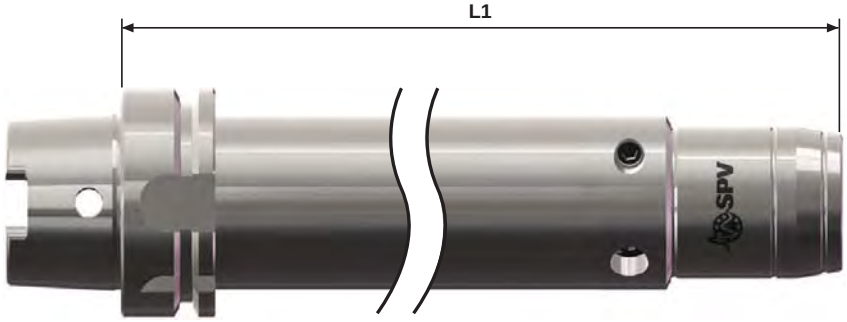
For milling-membrane (+) specify + after art.no.

DS Ømm	Fäste typ	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	56468
	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.

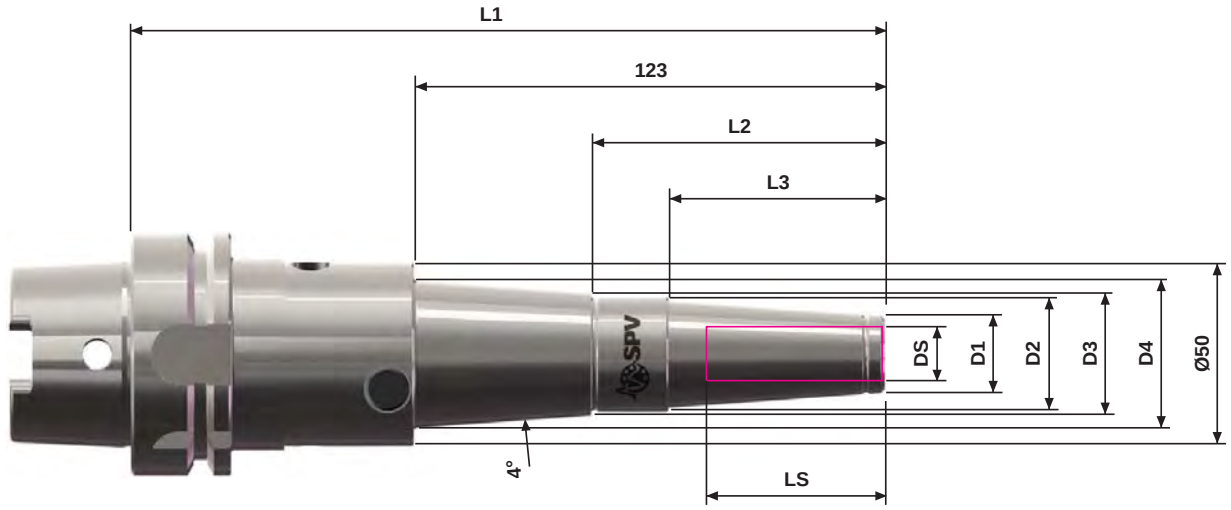
HCFL / HCFL+ IN ANY LENGTH



Ordering example: HSK-63, Ø20, L1 = 300 mm, type HCFL+ Artikle number: 56677+/300

HSK-A

TAPERED, LONG CHUCK WITH MILLING-MEMBRANDE HCPK+

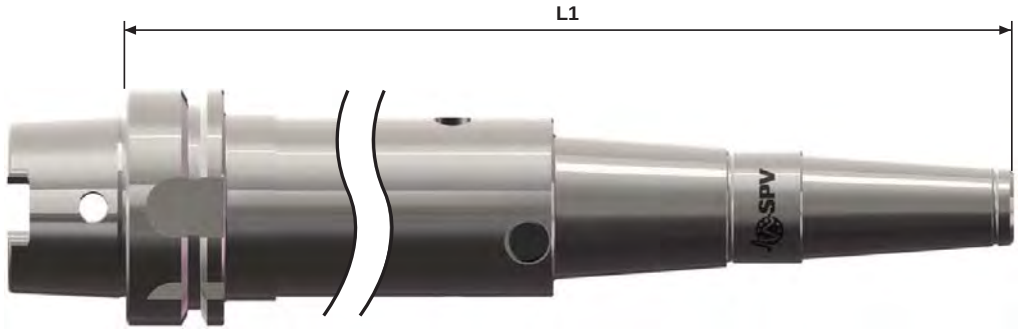


DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
12 *	HSK-A63	20	30	32	40,5	197	76,8	57	44	54103+
	HSK-A63	20	30	32	40,5	237-515	76,8	57	44	▲
	HSK-A80	20	30	32	40,5	217	76,8	57	44	54113+
	HSK-A80	20	30	32	40,5	257-510	76,8	57	44	▲
	HSK-A100	20	30	32	40,5	230	76,8	57	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

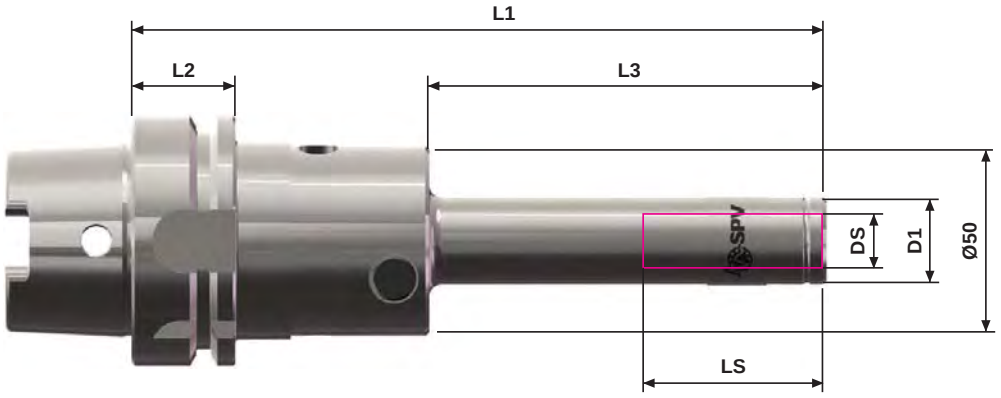
▲ Depending on desired length (L1). Specify art.no / L1 on order.

HCPK+ IN ANY LENGTH



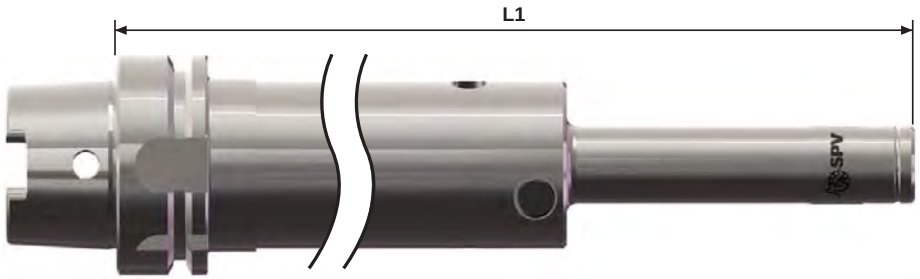
Ordering example: HSK-40, Ø20, L1 = 297 mm, type HCPK+ Article number: 54107+/297

PEN-CHUCK WITH MILLING-MEMBRANE HCP+



DS Ømm	Mount type	D1 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	HSK-A63	22,5	125	26	50	37,5	59300+
	HSK-A63	22,5	175	26	100	37,5	59310+
	HSK-A80	22,5	145	26	50	37,5	59235+
	HSK-A80	22,5	195	26	100	37,5	59240+
	HSK-A100	22,5	158	29	50	37,5	59350+
	HSK-A100	22,5	208	29	100	37,5	59360+
8	HSK-A63	22,5	125	26	50	37,5	59301+
	HSK-A63	22,5	175	26	100	37,5	59311+
	HSK-A80	22,5	145	26	50	37,5	59237+
	HSK-A80	22,5	195	26	100	37,5	59242+
	HSK-A100	22,5	158	29	50	37,5	59351+
	HSK-A100	22,5	208	29	100	37,5	59361+
10	HSK-A63	22,5	125	26	50	42,5	59302+
	HSK-A63	22,5	175	26	100	42,5	59312+
	HSK-A80	22,5	145	26	50	42,5	59237+
	HSK-A80	22,5	195	26	100	42,5	59242+
	HSK-A100	22,5	158	29	50	42,5	59352+
	HSK-A100	22,5	208	29	100	42,5	59362+
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+

* Dimensions that can be used with reduction sleeves. (Reduction sleeves, see p.40.)



HCP+ IN ANY LENGTH

Ordering example:

BT-40, Ø20, L1 = 285 mm,

type HCPK+

Art.no: 59147+/285

HSK-A

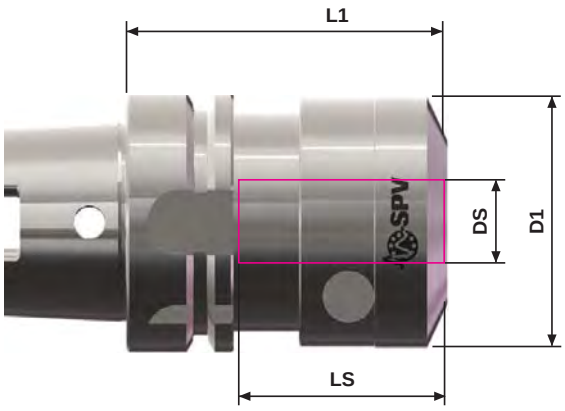
EXTRA LONG, SLIM PEN-CHUCK HCPS

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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
12 *	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

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

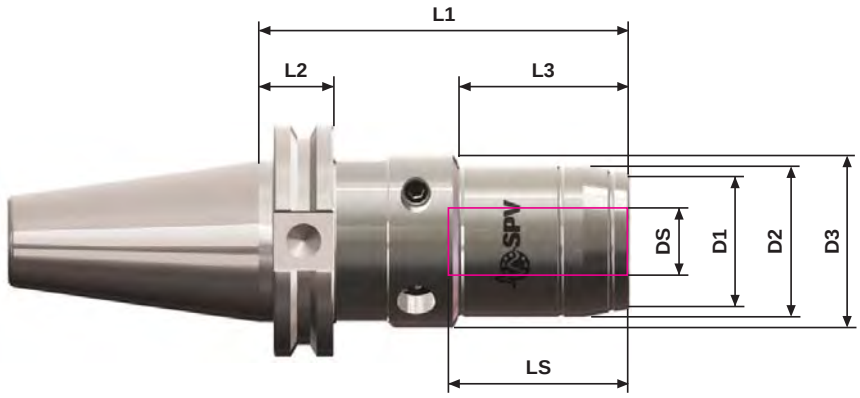
Also available as extended chuck. Contact us for more info.

EXTRA SHORT MILLING-CHUCK WITH MILLING-MEMBRANE HCK+



DS Ømm	Mount type	D1 Ømm	L1 mm	LS mm	Article-number
20	HSK-A63	61	78	51,8	66109+
32	HSK-A63	82	88	61,8	66111+

STANDARD CHUCK HCF / HCF+



For milling-membrane (+) specify + after art.no.

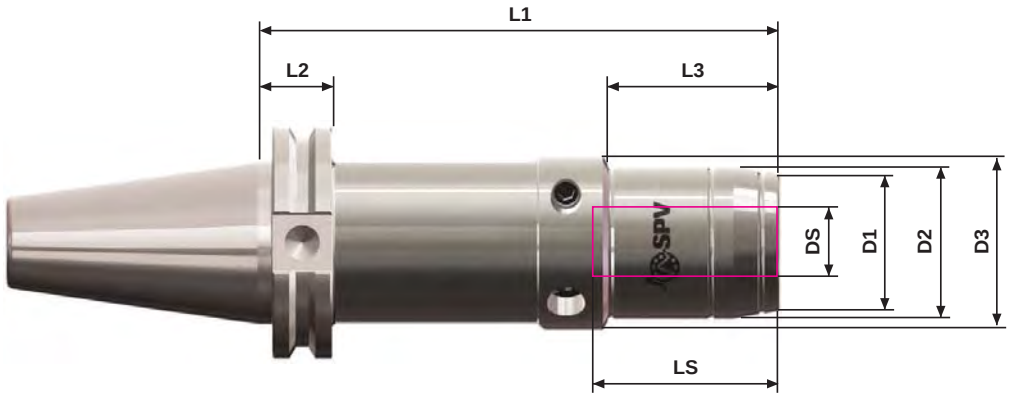
DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	CAT-40	21,5	26	48	105	19,05	43,5	37,5	56470
	CAT-50	21,5	26	48	87	19,05	43,5	37,5	56490
	CAT-50	21,5	26	48	101,6	19,05	43,5	37,5	56480
8	CAT-40	23,5	28	48	105	19,05	43,5	37,5	56471
	CAT-50	23,5	28	48	84	19,05	43,5	37,5	56491
	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

* Dimensions that can be used with reduction sleeves. (Reduction sleeves, see p.40.)

CAT-45 on request.

CAT / ASME BS.50

EXTENDED STANDARD CHUCK HCFL / HCFL+



For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	127-480	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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.
CAT-45 on request.

EXTENDED STANDARD CHUCK HCFL / HCFL+

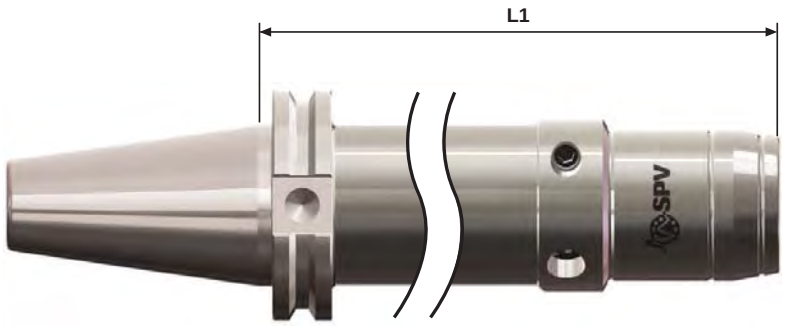
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.
CAT-45 on request.

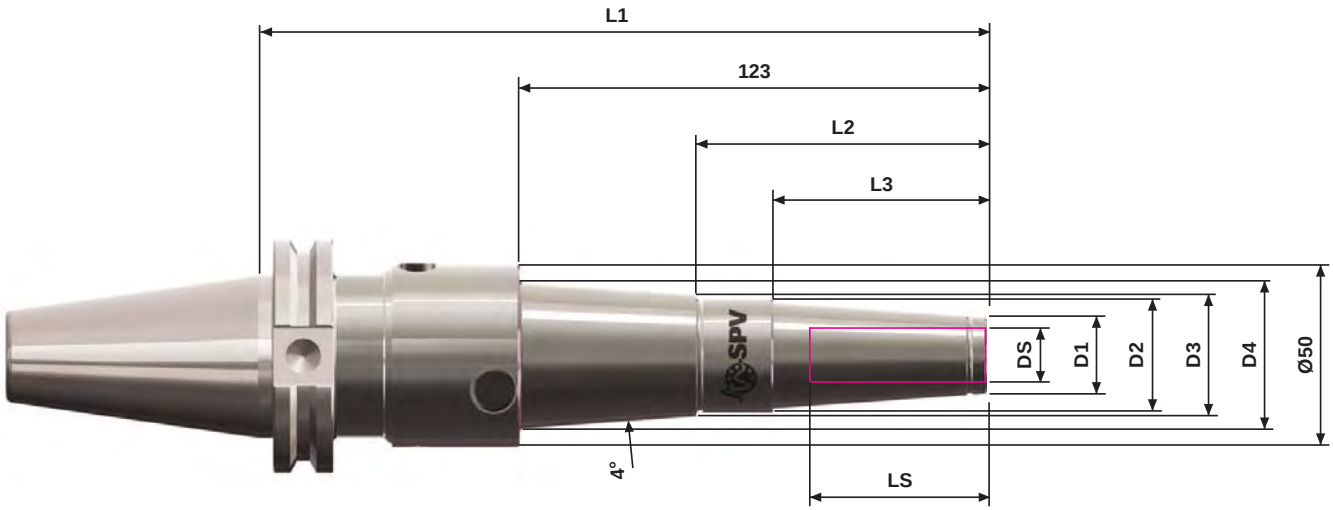
HCFL / HCFL+ IN ANY LENGTH



Ordering example: CAT-40, Ø20, L1 = 275 mm, type HCFL+ Article number: 56607+/275

CAT / ASME BS.50

TAPERED, LONG CHUCK WITH MILLING-MEMBRANE HCPK+

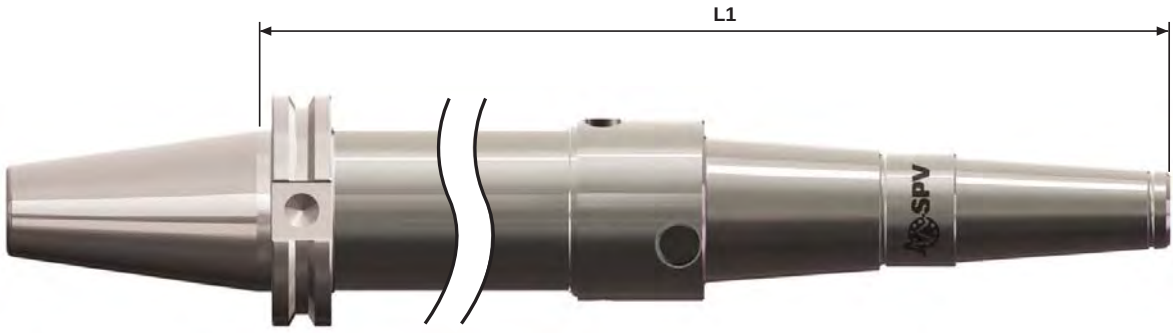


DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	D4 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
12 *	CAT-40	20	30	32	40,5	195	76,8	57	47,5	59263+
	CAT-40	20	30	32	40,5	235-480	76,8	57	47,5	▲
	CAT-50	20	30	32	40,5	177	76,8	57	47,5	59273+
	CAT-50	20	30	32	40,5	217-445	76,8	57	47,5	▲
20 *	CAT-40	30	40	42	50,5	195	74,8	55	52,5	59267+
	CAT-40	30	40	42	50,5	235-480	74,8	55	52,5	▲
	CAT-50	30	40	42	50,5	177	74,8	55	52,5	59277+
	CAT-50	30	40	42	50,5	217-445	74,8	55	52,5	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

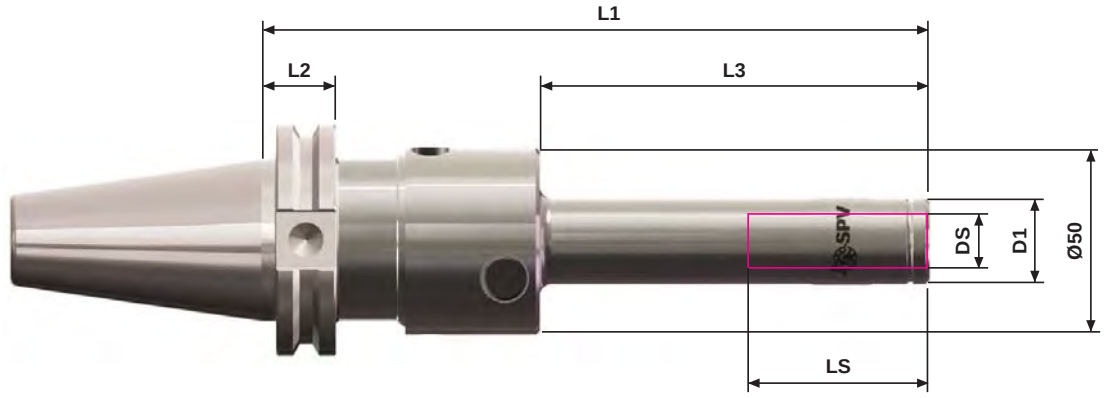
▲ Depending on desired length (L1). Specify art.no / L1 on order.
CAT-45 on request.

HCPK+ IN ANY LENGTH



Ordering example: CAT-40, Ø20, L1 = 375 mm. Article number: 59267+/375

PEN-CHUCK WITH MILLING-MEMBRANE HCP+

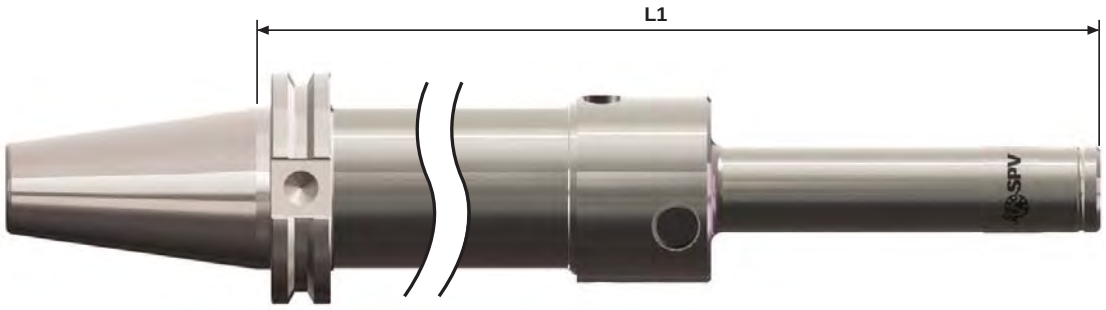


DS Ømm	Mount type	D1 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
6	CAT-40	22,5	123	19,05	50	37,5	59030+
	CAT-40	22,5	173	19,05	100	37,5	59040+
	CAT-50	22,5	105	19,05	50	37,5	59080+
	CAT-50	22,5	155	19,05	100	37,5	59090+
8	CAT-40	22,5	123	19,05	50	37,5	59031+
	CAT-40	22,5	173	19,05	100	37,5	59041+
	CAT-50	22,5	105	19,05	50	37,5	59081+
	CAT-50	22,5	155	19,05	100	37,5	59091+
10	CAT-40	22,5	123	19,05	50	42,5	59032+
	CAT-40	22,5	173	19,05	100	42,5	59042+
	CAT-50	22,5	105	19,05	50	42,5	59082+
	CAT-50	22,5	155	19,05	100	42,5	59092+
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+

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

CAT-45 on request.

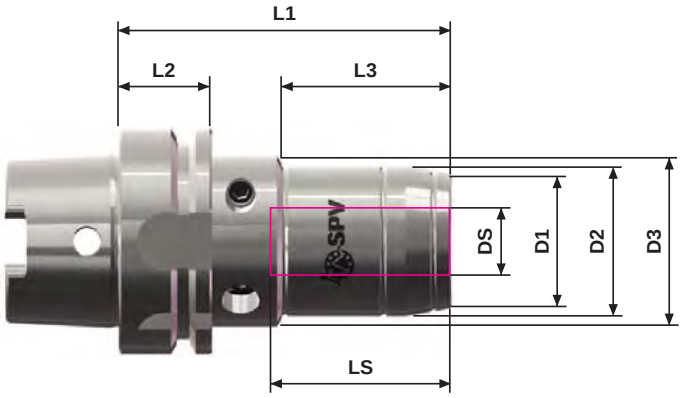
HCP+ IN ANY LENGTH



Ordering example: CAT-40, Ø12, L1 = 335 mm, L3 = 50. Article number: 59033+/335

HSK-A (inch sizes)

STANDARD CHUCK HCF / HCF+

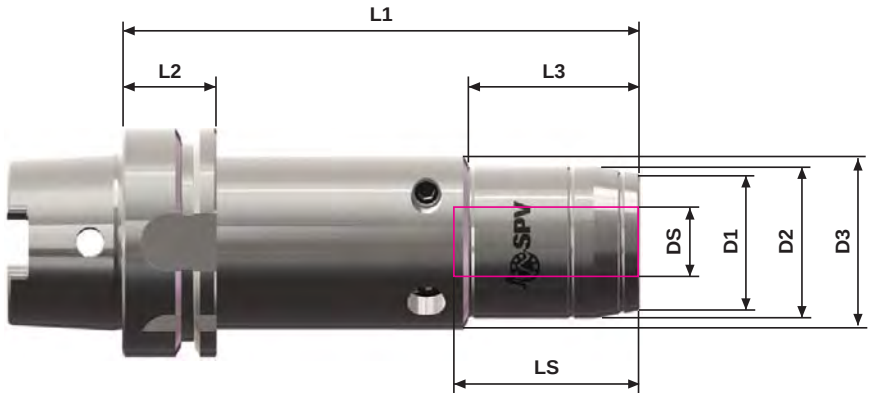


For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	56554
	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

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

EXTENDED STANDARD CHUCK HCFL / HCFL+



For milling-membrane (+) specify + after art.no.

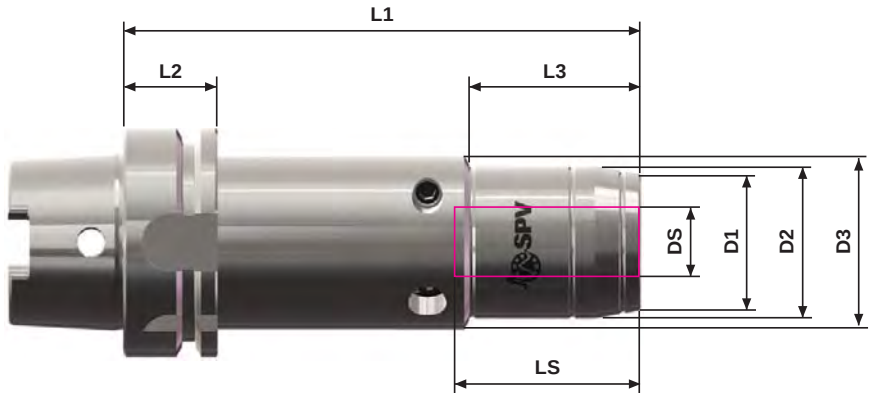
DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
1/4"	HSK-A63	21,5	26	48	140	26	43,5	37,5	56420
	HSK-A63	21,5	26	48	140-515	26	43,5	37,5	▲
	HSK-A80	21,5	26	48	167	26	43,5	37,5	56450
	HSK-A80	21,5	26	48	167-510	26	43,5	37,5	▲
	HSK-A100	21,5	26	48	180	29	43,5	37,5	56430
	HSK-A100	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	50	184-500	29	43,5	47,5	▲

▲ Depending on desired length (L1). Specify art.no / L1 on order.

Continued on next page...

HSK-A (inch sizes)

EXTENDED STANDARD CHUCK HCFL / HCFL+



For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	140-515	26	47,5	52,5	▲
	HSK-A80	37,5	42	48	167	26	47,5	52,5	56455
	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	56435
	HSK-A100	37,5	42	48	180-500	29	47,5	52,5	▲
1"	HSK-A63	43,5	48	48	140	26	118	55	56426
	HSK-A63	43,5	48	48	140-515	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	94	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	167-510	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	▲

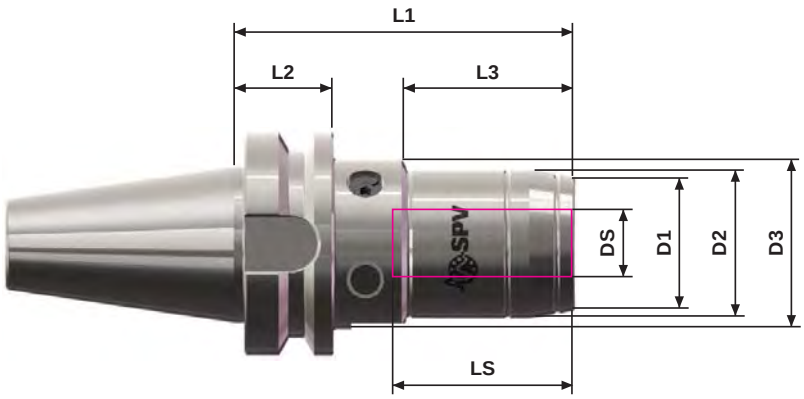
* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.

HCFL / HCFL+ IN ANY LENGTH

Ordering example: CAT-40, Ø20, L1 = 375 mm. Article number: 59267+/375

STANDARD CHUCK HCF / HCF+



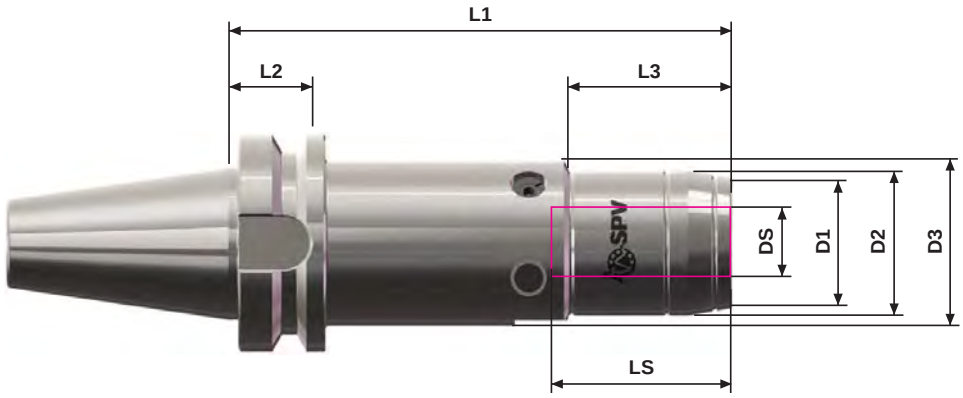
For milling-membrane (+) specify + after art.no.

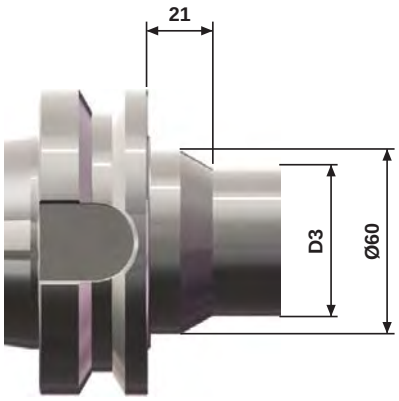
DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
1/4”	BT-40	21,5	26	48	95	27	43,5	37,5	56500
	BT-50	21,5	26	48	106	38	43,5	37,5	56510
5/16”	BT-40	23,5	28	48	95	27	43,5	37,5	56501
	BT-50	23,5	28	48	106	38	43,5	37,5	56511
3/8”	BT-40	25,5	30	48	95	27	43,5	42,5	56502
	BT-50	25,5	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

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

BT-MAS (inch sizes)

EXTENDED STANDARD CHUCK HCFL / HCFL+





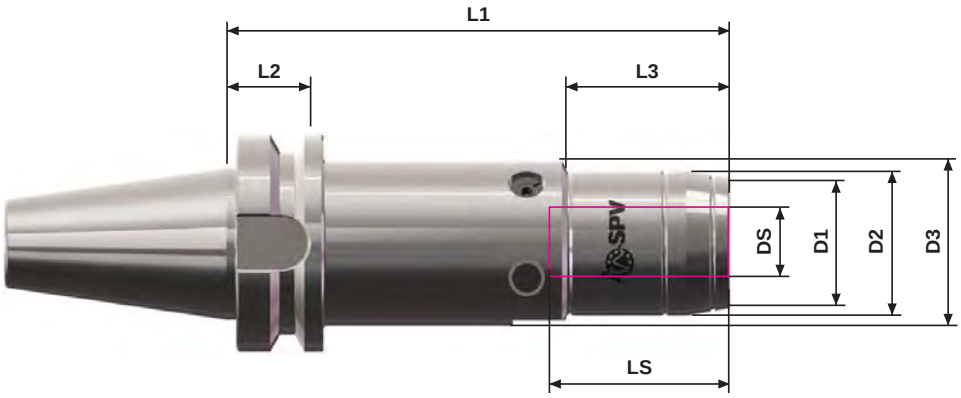
BT-50 appearance Ø1/4" - 1"

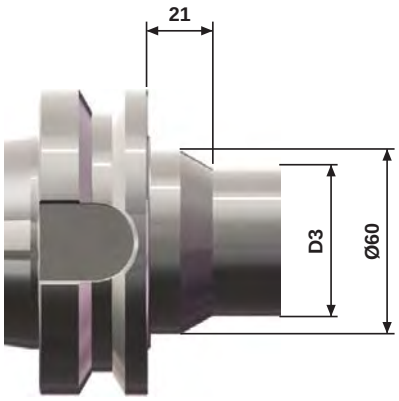
For milling-membrane (+) specify + after art.no.

DS Ømm	Mount type	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	▲

▲ Depending on desired length (L1). Specify art.no / L1 on order.

EXTENDED STANDARD CHUCK HCFL / HCFL+





BT-50 appearance Ø1/4" - 1"

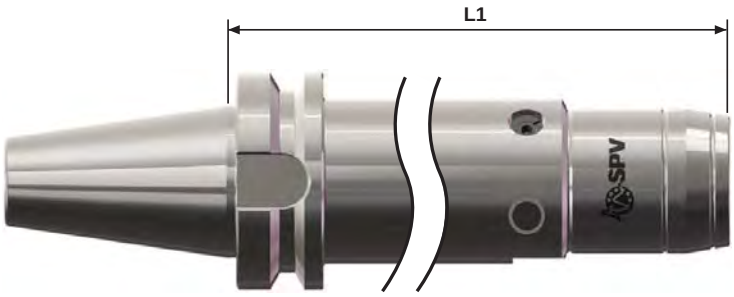
For milling-membrane (+) specify + after art.no.

DS Ømm	Fäste typ	D1 Ømm	D2 Ømm	D3 Ømm	L1 mm	L2 mm	L3 mm	LS mm	Article-number
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	▲

* Dimensions that can be used with reduction sleeves.
(Reduction sleeves, see p.40.)

▲ Depending on desired length (L1). Specify art.no / L1 on order.

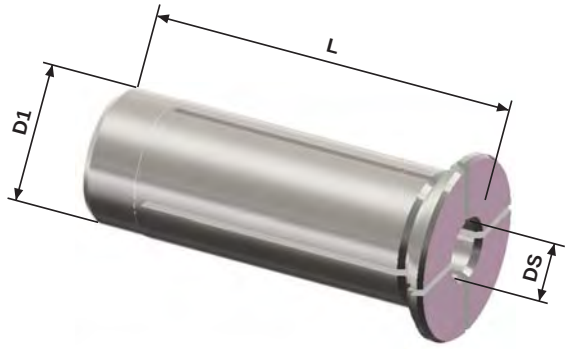
HCFL / HCFL+ IN ANY LENGTH



Ordering example: BT-40, Ø1", L1 = 285 mm, type HCFL+ Article number: 56826+/285

Reduction sleeves HC

Cylindrical reduction sleeves for hydraulic chucks



Sealed sleeve with rubber stop.

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

Other dimensions on request.

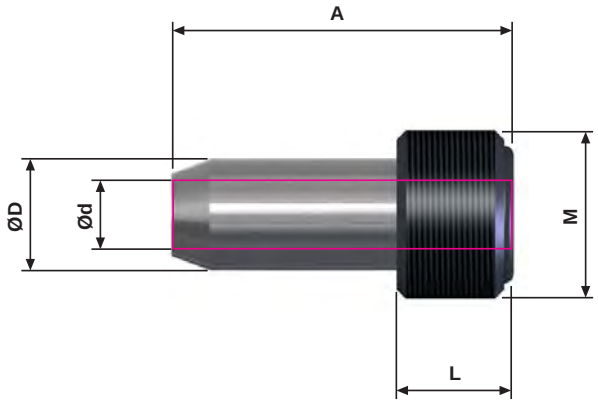
REDUCTION SLEEVES D = mm

D Ømm	DS Ømm	L mm	Article-number
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
	16	50	90116
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

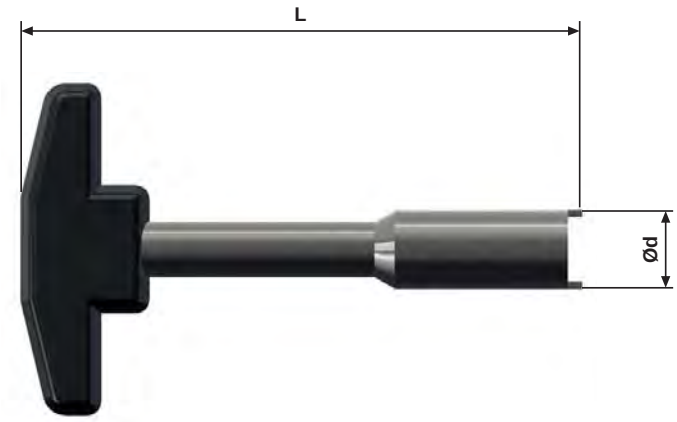
D Ømm	DS Ømm	L mm	Article-number
3/4”	1/8”		67960
	5/32”		67961
	3/16”		67962
	1/4”		67963
	5/16”		67964
	3/8”		67965
	7/16”		67966
	1/2”		67967
	9/16”		67968
	5/8”		67969
1 1/4”	3/8”		67980
	1/2”		67981
	5/8”		67982
	3/4”		67983
	1”		67984

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



Coolant-adaptor for HSK

For mount type	ØD mm	A mm	Ød mm	L mm	M	Article-number
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 mount type	Ød mm	Ød mm	Article-number
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

Operating instructions

1. Working temperature

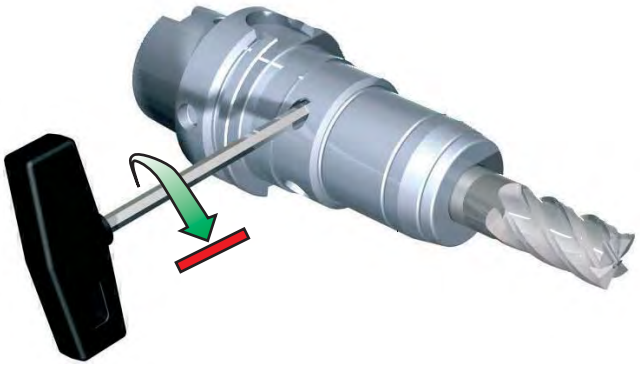
Ideal and optimised working temperature is between 20° och 50 ° C. Do not store hydraulic chucks where the temperature could exceed 50 ° C.

2. Cleaning

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

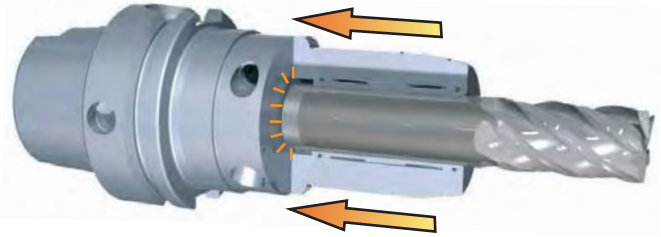
3. Tightening the membrane

The screw must always be tightened to the fixed stop. 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 length of the tool shank must be used.



5. Service and repair

If you experience that your hydraulic chuck doesn´t clamp properly, this can be due to several things. A common explanation is that the hydraulic piston seal is worn out. We always perform service on our hydraulic chucks. Contact us for more information.

Important information about tool-shanks.

- Standard chucks - ***type HCF / HCFL / HCPS***

  In standard chucks from Ø6 up to Ø20, Weldon-shanks can be used directly in the chucks. Shank tolerance h6.

- Chucks with milling-membrane [+] - ***type HCF+ / HCFL+ / HCP+ / HCPK+ / HCK+***

  In chucks with milling membrane (+) only cylindrical shanks can be used directly in the chuck. Shank tolerance h6.

- Other types of tool-shanks - ***all except HCK+***

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

Torque-table

Tool diameter ØDS mm	HCF / HCF+	HCK+	HCP+	HCPK+	HCPS
6	15 Nm		15 Nm		
8	20 Nm		20 Nm		
10	40 Nm		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 hydraulic chuck requires special tools and equipment. Always send the chuck to SPV Spintec representative if it needs to be repaired.

Customized hydraulic chucks

HYDRAULIC CHUCKS IN CUSTOMIZED SPECIAL APPEARANCES

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

TAPPING DEVICES

Introduction

TAPPING TECHNOLOGY

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

SPV SPINTEC:s tapping attachments are due to the ball bearing floating designed to provide correct thread profile and counteract negative forces.

To obtain good thread finish it is necessary to use the correct tap as well as correct cutting speed. In most materials you recieve a build up edge formation (BUE) in a certain cutting speed area which gives bad surface finish. The tapping lapse should follow either over or under the sectioned area, see Fig. 1. The aim should be 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.

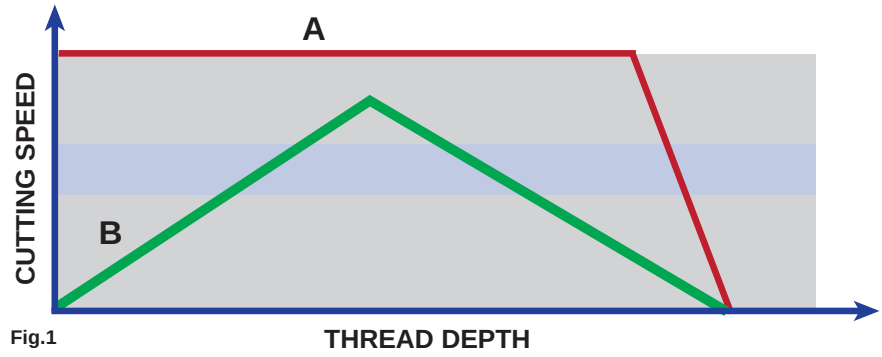
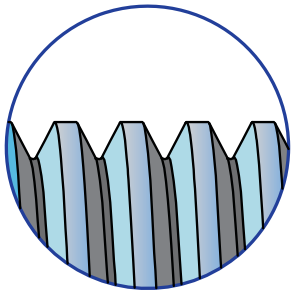
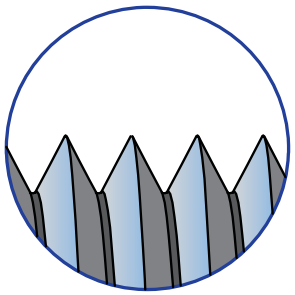


Fig.1



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 x pitch are synchronized to the Z-movement of the machine. The tapping cycle always starts with an inoperative spindle. The advantage of synchronized tapping is accurate depth of the thread. The dis-advantage is that the tapping cycle is slow. Fig. 2 shows that when trying to synchronize spindle- and Z-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). Normaly when using synchronized tapping the tap must have an axial float to avoid big axial forces which gives incomplete thread profiles.

CONVENTIONAL TAPPING CYCLE

Conventional tapping cycle means that the spindle rotation and Z-movement must be programmed separately. The tapping cycle starts with full spindle rotation. The advantage is faster tapping cycle and that the tapping process can follow graph A in Fig. 1 which means that you recieve a better thread finish. To obtain a full profile when tapping conventional, a tapping attachment with ball bearing drive and axial float 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 better thread finish.

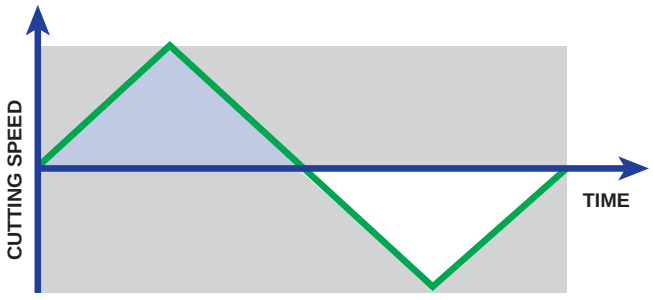


Fig. 2

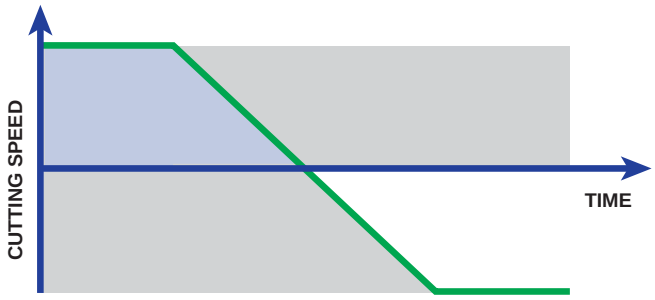


Fig. 3

WE KNOW TAPPING

SPV Spintec is a true pioneer when it comes to tapping attachment and chucks. We have customers on the market that have tapping units that are purchased from SPV over 40 years ago that are still in production. We still manufacture and refurbish these. Our range of tapping chucks covers the whole range from manual conventional tapping to synchronous tapping in modern NC machines.

OUR DIFFERENT TYPES OF TAPPING DEVICES

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

- **Type ST / STF**
  Very slim design, with or without floating

- **Type GS**
  Slim tapping spindle with adjustable floating

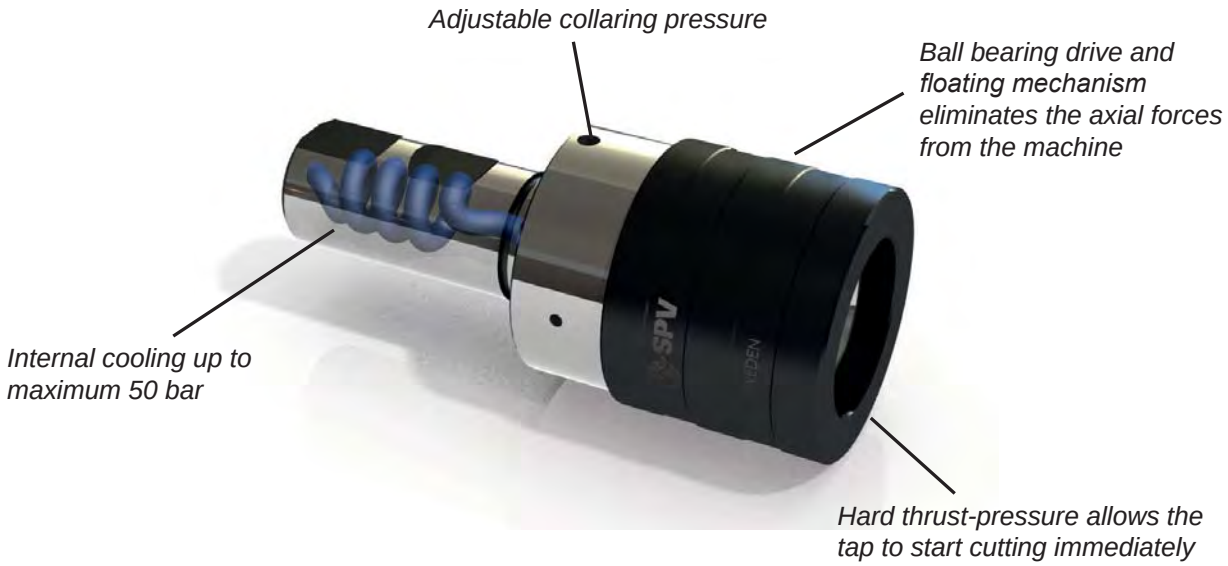
- **Type SA**
  Powerfull tapping device with floating and adjustable torque-clutch

- **Type SyncTapper**
  With mini-floating for modern, rigid tapping

- **Tap holders**
  Tapholders with quick-release for fast tool changes.

Type CGS / CGS-C

SUMMARY



Tap holders, see page 56 - 69

TAPPING RANGE	CGS-8	CGS-12	CGS-24	CGS-42
	M2 - M8 #0 - 5/16”	M3 - M16 1/8” - 5/8”	M7 - M36 5/16” - 1 1/8”	M18 - M42 3/4” - 1 5/8”

Type CGS with Weldon shank

Type	D1 fäste	D Ømm	B mm	F mm	L2 Ømm	LT mm	LTK mm	Tap-holder	Article-number
CGS-12	W-25	50	7	10	53	68	109	T-12 / TK-12	37622
CGS-24	W-25	75	12	18	112	131	131	T-24 / TK-24	37623
CGS-42	W-32	96	15	20	135	153	----	T-42 / TK-42	37624

Type CGS-C with Weldon shank (for internal cooling)

Type	D1 fäste	D Ømm	B mm	F mm	L2 Ømm	LT mm	LTK mm	Tap-holder	Article-number
CGS-12C	W-25	50	7	10	53	68	109	T-12 / TK-12	37590
CGS-24C	W-25	75	12	18	112	131	131	T-24 / TK-24	37596
CGS-42C	W-32	96	15	20	135	153	----	T-42 / TK-42	37597

Type CGS / CGS-C

Type CGS with Morse Taper shank

Type	Shank	D Ømm	B mm	F mm	L2 Ømm	LT mm	LTK mm	Tap holder	Article-number
CGS-8	MK1	40	5	10	48	60	95	T-8 / TK-8	26570
	MK2	40	5	10	50	62	97		26550
CGS-12	MK2	50	7	10	55	71	111	T-12 / TK-12	26296
	MK3	50	7	10	55	71	111		26298
CGS-24	MK3	75	12	18	94	113	164	T-24 / TK-24	26406
	MK4	75	12	18	94	113	164		26408
CGS-42	MK4	96	15	20	130	148	----	T-42	36332

Type CGS with Morse Taper shank for tie rod

Type	Shank thread	D Ømm	B mm	F mm	L2 Ømm	LT mm	LTK mm	Tap holder	Article-number
CGS-8	MK2 M10	40	5	10	50	62	97	T-8 / TK-8	26973
CGS-12	MK2 M10	50	7	10	55	71	111	T-12 / TK-12	36135
	MK3 M12	50	7	10	55	71	111		26975
CGS-24	MK3 M12	75	12	18	94	113	164	T-24 / TK-24	26977

Type CGS with cylindrical shank

Type	D1 Ømm L1 mm	D Ømm	B mm	F mm	L2 Ømm	LT mm	LTK mm	Tap holder	Article-number
CGS-8	15,88 42	40	5	10	45	57	92	T-8 / TK-8	26981
CGS-12	25,4 100	50	7	10	50	66	106	T-12 / TK-12	26439
CGS-24	25,4 100	75	12	18	89	108	159	T-24 / TK-24	26443

Type ST / STF (SlimTapper)

SUMMARY

Slim design gives together with SPV SPINTEC:s Weldon extensions and short ISO/BT Weldon shanks, long and slim tapping chucks with high precision.

Short backward floating, 2mm

Internal cooling for up to 50 bar pressure.

Tap holders, see page 56 - 79

TAPPING RANGE	ST / STF-12	ST / STF-16	ST / STF-20	ST / STF-30	ST / STF-33
	M3 - M12 1/8" - 1/2"	M3 - M16 1/8" - 5/8"	M8 - M20 5/16" - 3/4"	M8 - M33 5/16" - 1 1/4"	M10 - M33 5/16" - 1 1/4"

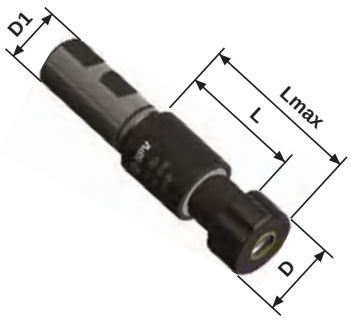
Type ST without floating (for internal cooling) *Fits SPV Spintec tapholders*

Type	D1 fäste	D Ømm	L Ømm	LT mm	Tap holder	Article-number
ST-16 CT	W-25	32	30	45	T-12 / TK-12	37716
ST-16 CLT	W-25	32	80	95	T-24 / TK-24	37721

Type ST without floating (for internal cooling) *Fits EU-tap holders*

Type	D1 fäste	D Ømm	L Ømm	LT mm	Tap holders	Article-number
ST-12 CEU	W-25	30	35	42	EU-1	35804
ST-12 CLEU	W-25	30	85	92	EU-1	35805
ST-20 CEU	W-25	50	52	63	EU-2	35806
ST-20 CLEU	W-25	50	102	113	EU-2	35814

Type STF with floating *For RubberFlex-collets*



Type	D1 fäste	D Ømm	B mm	F mm	Lmax Ømm	L mm	Tap holders	Article-number
STF-12 J	W-25	32	2	10	86	51	J-420 -23	37709
STF-16 J	W-25	40	2	10	90	51	J-440 -43	37710
STF-33 J	W-32	56	4	15	144	89	J-461 -62	37711

B = spring loaded backward floating F = spring loaded forward floating

Type ST / STF (SlimTapper)

Fits SPV Spintec tap holders

Type STF without floating

Type	D1 fäste	D Ømm	B mm	F mm	L Ømm	LT mm	Tap holder	Article-number
STF-16 T	W-25	32	2	10	70	85	T-12	37717
STF-30 T	W-32	50	4	15	130	149	T-24	37740

B = spring loaded backward floating F = spring loaded forward floating

Fits EU-tap holders

Type STF with floating

Type	D1 fäste	D Ømm	B mm	F mm	L Ømm	LT mm	Tap holder	Article-nummer
STF-12 EU	W-25	30	2	10	73	80	EU-1	35807
STF-20 EU	W-25	50	2	10	90	101	EU-2	35808

B = spring loaded backward floating F = spring loaded forward floating

Fits SPV Spintec tap holders

Type STF with floating (for internal cooling)

Type	D1 fäste	D Ømm	B mm	F mm	L Ømm	LT mm	Tap holder	Article-number
STF-16 CT	W-25	32	2	10	74	89	T-12 / T-12C	37718
STF-30 CT	W-32	50	4	15	130	149	T-24 / T-24C	37741

B = spring loaded backward floating F = spring loaded forward floating

Fits EU-tap holders

Type STF with floating (for internal cooling)

Type	D1 fäste	D Ømm	B mm	F mm	L Ømm	LT mm	Tap holder	Article-number
STF-16 CEU	W-25	32	2	10	73	80	EU-1	35809
STF-30 CEU	W-25	50	2	10	90	101	EU-2	35810

B = spring loaded backward floating F = spring loaded forward floating

Type GS-E

SUMMARY

Internal taper makes it possible to combine with several different shanks such as Morse taper, cylindrical shank etc.

Infinitely adjustable free axial movement (floating) enables use with different pitch at multi-spindle tapping.

Hard thrust pressure makes the tap start cutting immediately.

Tap holders, see page 56 - 69

TAPPING RANGE	GS-8	GS-12	GS-24
	M2 - M8 #0 - 5/16”	M3 - M16 #8 - 5/8”	M10 - M33 5/16” - 1 1/8”

Type GS with adjustable floating

Type	K Int.taper	D Ømm	Lmin mm	Lmax mm	LTmin mm	LTmax mm	LTKmin mm	LTKmax mm	Tap holder	Article-number
GS-8E	B12	23	100	125	112	137	147	172	T-8 / TK-8	36470
GS-12E	B16	30	108	133	123	148	164	189	T-12 / TK-12	36478
GS-24E	B18	50	147	157	166	206	217	257	T-24 / TK-24	36487

Type	Floating backwards mm	Floating forwards mm
GS-8E	0 - 25 mm	25 - 0 mm
GS-12E	0 - 25 mm	25 - 0 mm
GS-24E	0 - 40 mm	40 - 0 mm

SUMMARY

Tap holders, see page 56 - 61

TAPPING RANGE	SA-1E	SA-2E
	M6 - M16 1/4” - 5/8”	M14 - M30 9/16” - 1 1/8”

Type SA (for conventional machines)

Type	Shank type	D Ømm	B mm	F mm	L1 Ømm	LT mm	Tap holder	Article-number
SA-1E	MK2	70	9	18	119	136	T-12	22209
	MK3	70	9	18	118	135		22210
SA-2E	MK3	104	12	20	178	197	T-24	22428
	MK4	104	12	20	176,5	195,5		22263

B = spring loaded backward floating F = spring loaded forward floating

Type SA/NC (for CNC-machines)

Type	Shank type	D Ømm	B mm	F mm	L1 Ømm	LT mm	Tap holder	Article-number
SA-1E/NC	MK2	70	18	9	128	144	T-12	22209
	MK3	70	18	9	127	143		22210
SA-2E/NC	MK3	104	20	12	186	205	T-24	22428
	MK4	104	20	12	184,5	203,5		22263

B = spring loaded backward floating F = spring loaded forward floating

Type SyncTapper

SUMMARY

SyncTapper with mini-floating for Rigid Tapping.

Many new machines have a function called Rigid Tapping which means that the machine spindle is synchronized with the speed of the machine axis movement. However in many cases it is not 100% accurate which can impair on the thread quality and result in a bad surface finish.

To obtain full thread profile it is important that the axial force that affects the tap is very small. If the axial force exceeds a certain value the profile will be incomplete.

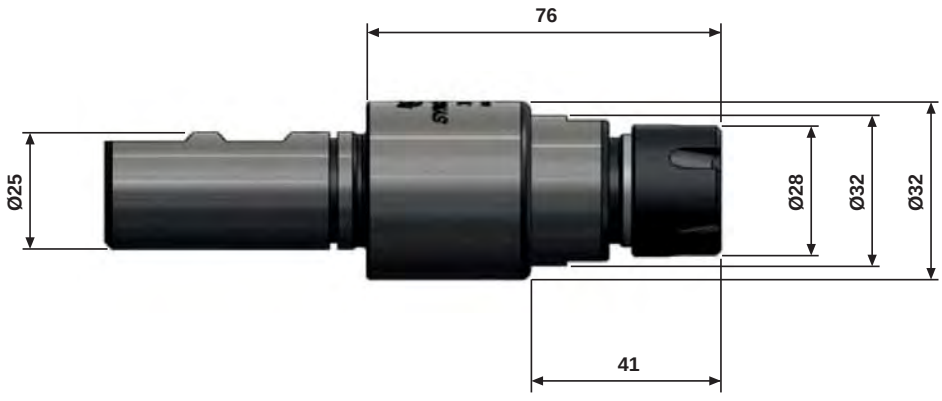
SPV Spintec's Synctapper as a built-in rigid mini-floating of only 0,5 mm to counteract negative forces and allow the tap to cut the best way.

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

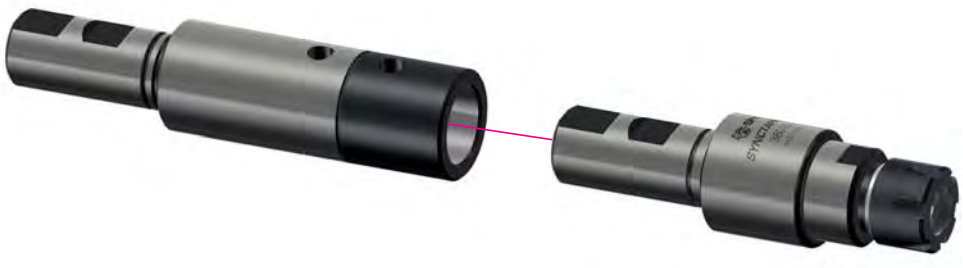
Type	Article-title	Article-number
SyncTapper	Tapping chuck Synctapper, ER-20, Weldon-25, Length 76	38010

SyncTapper comes complete with clamping-nut and wrench.

Dimensions



Combinations



SyncTapper can easilly be extended with our slimmed Weldon-extensions (see page 81)

SUMMARY

- 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 (type TC)
- Built-in adjustable torque clutch (type TK)

Type T and TC
(page 56)

Type TK
(page 64)

Type EU
(page 70)

Type EUK
(page 75)

TAP HOLDERS - Find the correct tap holder with 3 easy steps.

1. Meassure the tap diameter

2. Meassure the tap square

3. Search the table for Ø och #

Tap holders type T and TC

Type T

For cooling from outside the tapping device

Type T

For taps with internal cooling ducts

Type TC

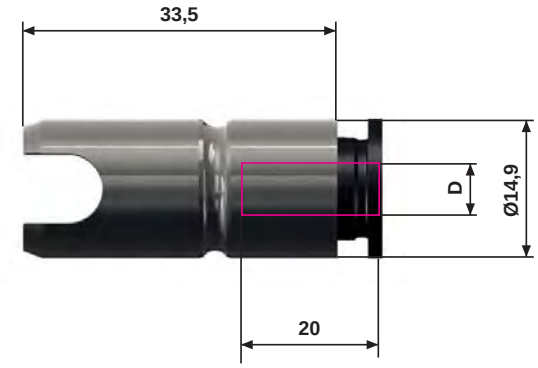
For external cooling along the tap

Tap holder type T-8

Tap holder type T-8 dimensions

Tapping range: ***M2 - M8***
#0 - 5/16”

D: ***Ø2,5 - 8,0 mm***



Tap holder type T-8 ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder typ T-8 DIN

*For taps accoring to **DIN**-standard*

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	Article-number
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	27324
			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

Tap holder type T-8 ANSI

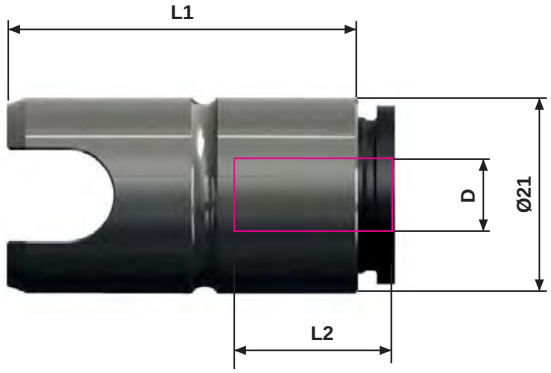
*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Artikel-nummer
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

Tap holder type T-12 / T-12C

Tap holder type T-12 dimensions

Tapping range	D Ø mm	L1 mm	L2 mm
M4 - M16 5/32” - 5/8”	4,0 - 7,0	36	20
	7,1 - 10,0	36	17
	10,5 - 12,5	37,5	17



Tap holder type T-12 / T-12C ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	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
18-20	3/4”-10	3/4”-16	14,00	11,20	.551	.441	36233*	

Tap holder type T-12 / T-12C DIN

*For taps according to **DIN**-standard*

352 M	371 M	376 M	UNF UNC	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	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
			1/4”		4,50	3,40	.177	.134	20854	20854C
6	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

Tap holder type T-12 / T-12C ANSI

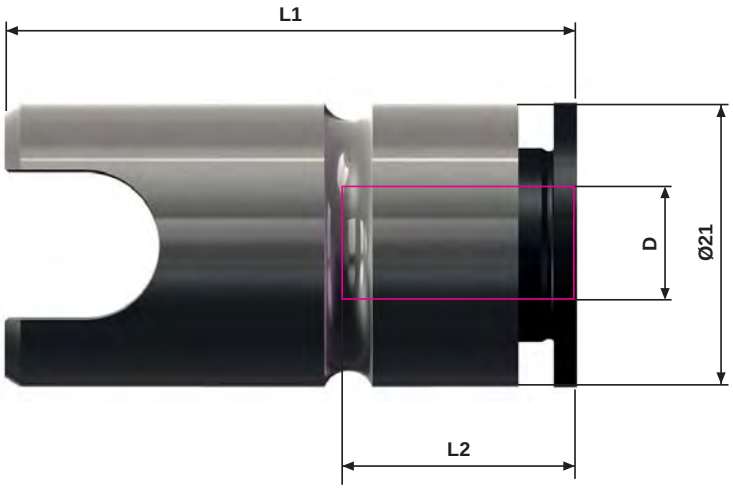
*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	T-12 Art.no	T-12C 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	

Tap holder typ T-24 / T-24C

Tap holder type T-24 dimensions

Tapping range	D Ø mm	L1 mm	L2 mm
M8 - M36 5/8” - 1 3/8”	8,0 - 20,32	65	30
	22,4 - 25,0	75	30



Tapholder type T-24 / T-24C ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	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”-14	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

Tap holder type T-24 / T-24C DIN

*For taps according to **DIN**-standard*

352 M	371 M	376 M	UNF UNC	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	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
	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	12	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
			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

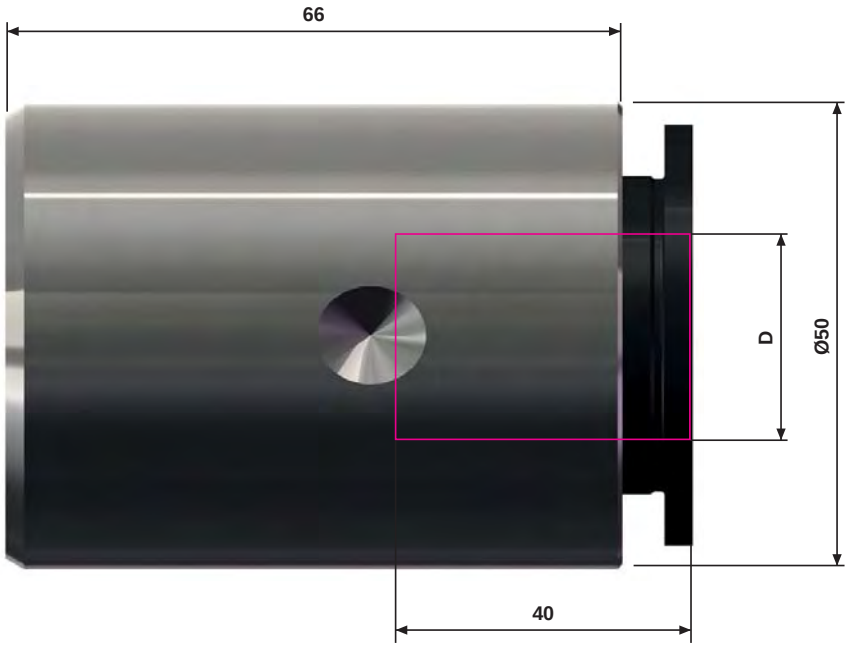
Tap holder type T-24 / T-24C ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	T-24 Art.no	T-24C 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	

Tap holder type T-42 / T-42C

Tap holder type T-42 dimensions



Tapping range: ***M18 - M42***
3/4" - 1 5/8"

D: ***Ø14,0 - 28,0 mm***

Tap holder type T-42 / T-42C ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	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

Tap holder type T-42 / T-42C DIN

*For taps according to **DIN**-standard*

352 M	371 M	376 M	UNF UNC	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	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	1 1/8”	7/8”	22,00	18,00	.866	.709	36263	36263C
33		33	1 1/4”	1”	25,00	20,00	.984	.787	36267	36267C
36		36	1 3/8”	1 1/8”	28,00	22,00	1.102	.866	36269	36269C
39		39	1 1/2”		32,00	24,00	1.260	.945	36274	36274C
42		42	1 5/8”	1 1/4”	32,00	24,00	1.260	.945	36274	36274C

Tap holder type T-42 / T-42C ANSI

*For taps according to **ANSI**-standard*

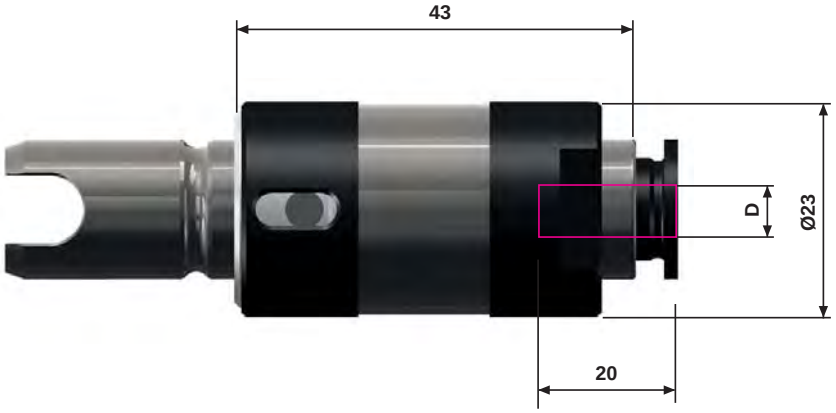
UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	T-42 Art.no	T-42C Art.no
	1/2”	17,45	13,08	.687	.545	36256	
7/8”		17,70	13,28	.697	.523	36257	
15/16”		19,30	14,48	.760	.570	36260	
1”		20,32	15,24	.800	.600	36262	
	3/4”	23,01	17,25	.906	.679	36266	
1 1/8”		22,76	17,07	.896	.672	36265	
1 1/8”	1”	28,57	21,41	1.125	.843	36272	
1 1/4”		25,93	19,45	1.021	.766	36268	
1 3/8”		28,14	21,10	1.108	.831	36271	
1 1/2”		31,32	23,49	1.233	.925	36273	
1 5/8”		33,15	24,86	1.305	.979	36275	
	1 1/4”	33,33	24,99	1.312	.954	36318	

Tap holder type TK-8

Tap holder type TK-8 with built in torque-clutch

Tapping range: ***M2 - M11***
1/16” - 7/16”

D: ***Ø2,5 - 8,0 mm***



Tap holder type TK-8 ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-8 DIN

*For taps according to **DIN**-standard*

352 M	371 M	376 M	UNC UNF	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	Article-number
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	.276	.217	29881
8		8	5/16”		6,00	4,90	.236	.193	29874
	8		5/16”		8,00	6,20	.315	.244	26887
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

Tap holder type TK-8 ANSI

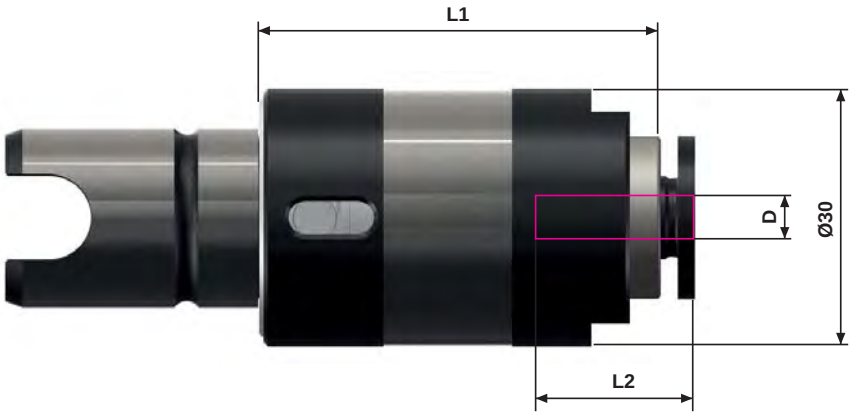
*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-12

Tap holder type TK-12 with built in torque-clutch

Tapping-capacity	D Ø mm	L1 mm	L2 mm
M3 - M16 1/8” - 5/8”	4,0 - 7,0	47	20
	7,1 - 10,0	47	17
	10,5 - 12,5	54	17



Tap holder type TK-12 ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-12 DIN

*For taps according to **DIN**-standard*

352 M	371 M	376 M	UNF UNC	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-12 ANSI

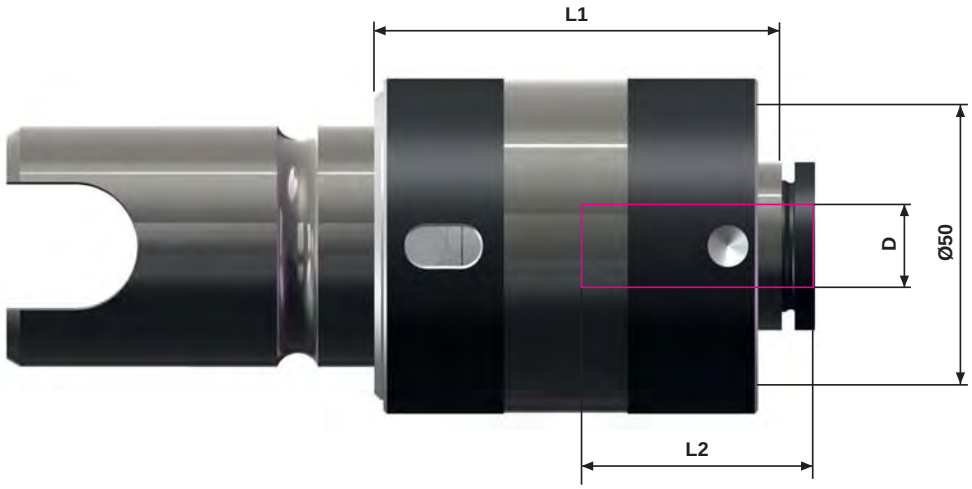
*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-24

Tap holder type TK-24 with built in torque-clutch

Tapping-capacity	D Ø mm	L1 mm	L2 mm
M6 - M30 1/4” - 1”	8,0 - 15,5	61	30
	16,0 - 20,32	76	30



Tap holder type TK-24 ISO

*For taps according to **ISO**-standard*

ISO M	UNC	UNF	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type TK-24 DIN

*For taps according to **DIN**-standard*

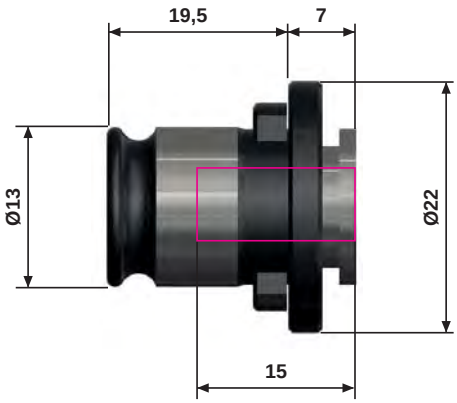
352 M	371 M	376 M	UNF UNC	353, 354 G (R)	Ø mm	# mm	Ø tum	# tum	Article-number
6	6		1/4”		6,00	4,90	.236	.193	26983
7					6,00	4,90	.236	.193	26983
	7		1/4”		7,00	5,50	.276	.217	26105
8		8	5/16”		6,00	4,90	.236	.193	26983
	8		5/16”		8,00	6,20	.315	.244	26110
9		9	3/8”	1/8”	7,00	5,50	.276	.217	26105
10		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

Tap holder type TK-24 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	Article-number
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”		19,30	14,48	.760	.570	26149
1”		20,32	15,24	.800	.600	26151

Tap holder type EU-0



Tap holder type EU-0 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type EU-0 DIN

*For taps according to **DIN**-standard*

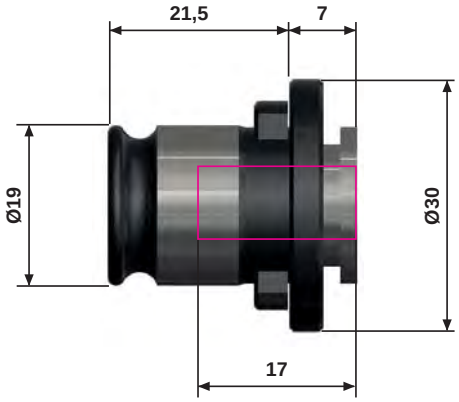
352 M	Ø mm	# mm	Ø tum	# tum	Article-number
1-1,8	2,50	2,10	.098	.083	72850
2	2,80	2,10	.110	.083	72851
2,5	2,80	2,10	.110	.083	72851
3	3,50	2,70	.138	.106	72853
3,5	4,00	3,00	.157	.118	72855
4	4,50	3,40	.177	.134	72857
5	6,00	4,90	.236	.193	72859
6	6,00	4,90	.236	.193	72859
7	6,00	4,90	.236	.193	72859
8	6,00	4,90	.236	.193	72859
9	7,00	5,50	.276	.217	72861
10	7,00	5,50	.276	.217	72861
11	8,00	6,20	.315	.244	72862

Tap holder type EU-0 ANSI

*For taps according to **ANSI**-standard*

352 M	Ø mm	# mm	Ø tum	# tum	Article-number
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
1/4”	6,48	4,85	.225	.191	72867

Tap holder type EU-1



Tap holder type EU-1 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
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

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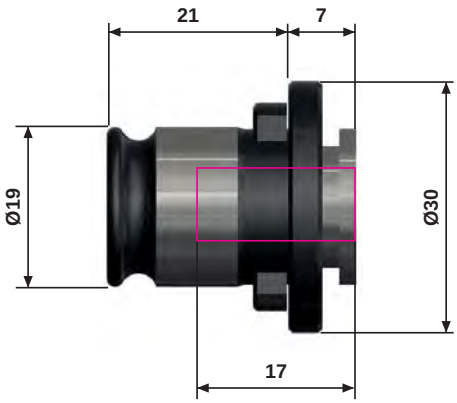
Tap holder type EU-1



Tap holder type EU-1 DIN

*For taps according to **DIN**-standard*

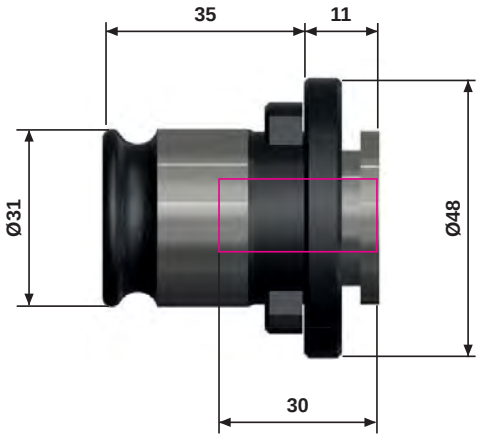
352 M	Ø mm	# mm	Ø tum	# tum	Article- number
3	3,50	2,70	.138	.106	73003
3,5	4,00	3,00	.157	.118	73005
4	4,50	3,40	.177	.134	73008
5	6,00	4,90	.236	.193	73014
6	6,00	4,90	.236	.193	73014
7	6,00	4,90	.236	.193	73014
8	6,00	4,90	.236	.193	73014
9	7,00	5,50	.276	.217	73017
10	7,00	5,50	.276	.217	73017
11	8,00	6,20	.315	.244	73019
12	9,00	7,00	.354	.276	73022
14	11,00	9,00	.433	.354	73027

Tap holder type EU-1 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Article- number
0-6	3,58	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

Tap holder type EU-2



Tap holder type EU-2 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
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

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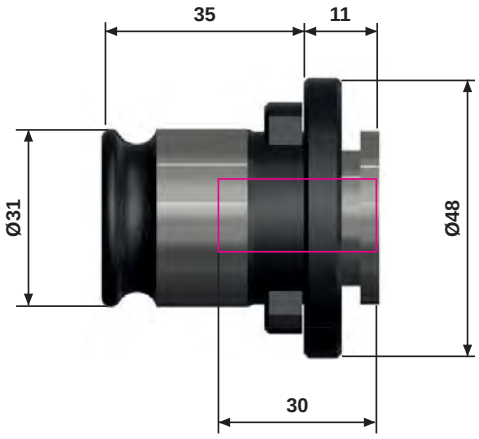
Tap holder type EU-2



Tap holder type EU-2 DIN

*For taps according to **DIN**-standard*

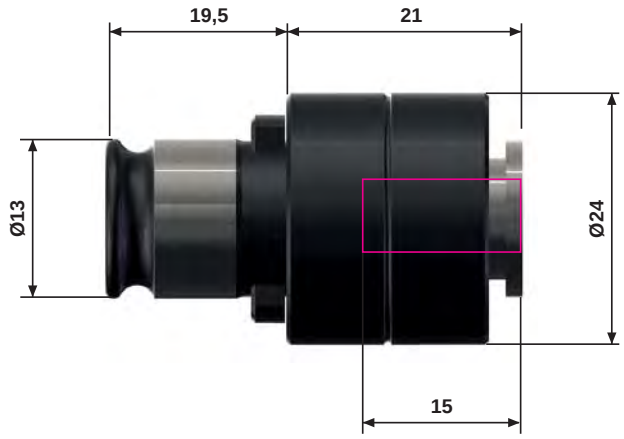
352 M	Ø mm	# mm	Ø tum	# tum	Article-number
5	6,00	4,90	.236	.193	73032
6	6,00	4,90	.236	.193	73032
7	6,00	4,90	.236	.193	73032
8	6,00	4,90	.236	.193	73232
9	7,00	5,50	.276	.217	73034
10	7,00	5,50	.276	.217	73034
11	8,00	6,20	.315	.244	73036
12	9,00	7,00	.354	.276	73039
14	11,00	9,00	.433	.354	73044
16	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

Tap holder type EU-2 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	NPTS	Ø mm	# mm	Ø tum	# tum	Article-number
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
3/4”		14,99	11,23	.590	.442	73053
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

Tap holder type EUK-0



Tap holder type EUK-0 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type EUK-0 DIN

*For taps according to **DIN**-standard*

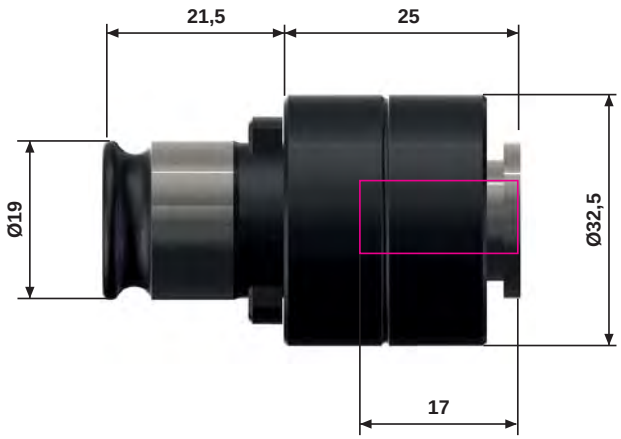
352 M	Ø mm	# mm	Ø tum	# tum	Article-number
1-1,8	2,50	2,10	.098	.083	72950
2	2,80	2,10	.110	.083	72951
2,5	2,80	2,10	.110	.083	72951
3	3,50	2,70	.138	.106	72953
3,5	4,00	3,00	.157	.118	72955
4	4,50	3,40	.177	.134	72957
5	6,00	4,90	.236	.193	72959
6	6,00	4,90	.236	.193	72959
7	6,00	4,90	.236	.193	72959
8	6,00	4,90	.236	.193	72959
9	7,00	5,50	.276	.217	72961
10	7,00	5,50	.276	.217	72961
11	8,00	6,20	.315	.244	72962

Tap holder type EUK-0 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Article-number
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
12	5,59	4,19	.220	.165	72966
1/4”	6,48	4,85	.225	.191	72967

Tap holder type EUK-1



Tap holder type EUK-1 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
3	6,00	4,90	.236	.193	73032
3,5	6,00	4,90	.236	.193	73032
4	6,00	4,90	.236	.193	73032
4,5	6,00	4,90	.236	.193	73232
5	7,00	5,50	.276	.217	73034
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

Tap holder type EUK-1 DIN

*For taps according to **DIN**-standard*

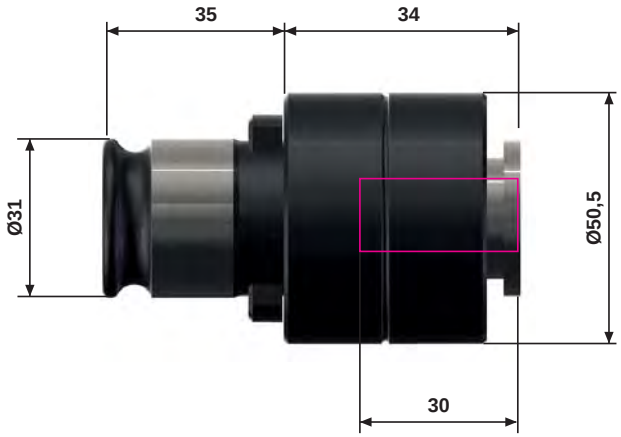
352 M	371 M	Ø mm	# mm	Ø tum	# tum	Article-number
3		3,50	2,70	.138	.106	73103
3,5		4,00	3,00	.157	.118	73105
4		4,50	3,40	.177	.134	73108
5		6,00	4,90	.236	.193	73114
6		6,00	4,90	.236	.193	73114
7		6,00	4,90	.236	.193	73114
8		6,00	4,90	.236	.193	73114
9		7,00	5,50	.276	.217	73117
10		7,00	5,50	.276	.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

Tap holder type EUK-1 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Article-number
8	4,27	3,33	.168	.131	73107
10	4393	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

Tap holder type EUK-2



Tap holder type EUK-2 ISO

*For taps according to **ISO**-standard*

M	Ø mm	# mm	Ø tum	# tum	Article-number
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

Tap holder type EUK-2 DIN

*For taps according to **DIN**-standard*

352 M	371 M	Ø mm	# mm	Ø tum	# tum	Article-number
5		6,00	4,90	.236	.193	73132
6		6,00	4,90	.236	.193	73132
7		6,00	4,90	.236	.193	73132
8		6,00	4,90	.236	.193	73132
9		7,00	5,50	.276	.217	73134
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

Tap holder type EUK-2 ANSI

*For taps according to **ANSI**-standard*

UNC, UNF NC, NF	Ø mm	# mm	Ø tum	# tum	Article-number
5/16”	8,08	6,00	.318	.236	73137
3/8”	9,68	7,26	.381	.286	73141
7/16”	8,20	6,15	.323	.242	73138
1/2”	9,32	6,99	.367	.275	73140
9/16”	10,90	8,18	.429	.322	73143
5/8”	12,19	9,14	.480	.360	73147
3/4”	14,99	11,23	.590	.442	73153
11/16”	17,45	13,08	.687	.515	73157
13/16”	15,56	12,42	.652	.489	73156
7/8”	17,07	13,28	.697	.523	73158

Tap holder 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.

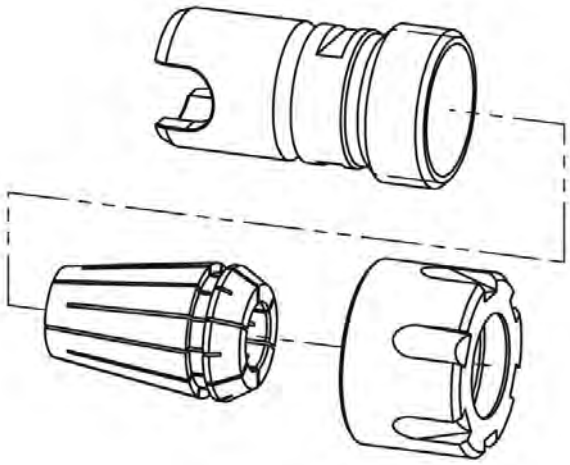
SPV Spintec has always been very resoinsive for the customers' comments and opinions. Therefore we have developed a completely new type of tap holder to meet today's modenr machinery.

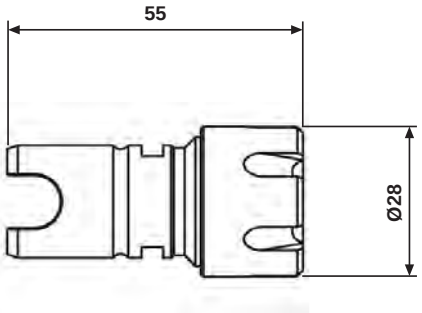
Out new tap holder type T-ER has been provided with a collet chuck type ER-20 in the front end which allows a very stable and accurate clamping of the tool.

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 have the advantage of the quick and simple tool changes.

Article number

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





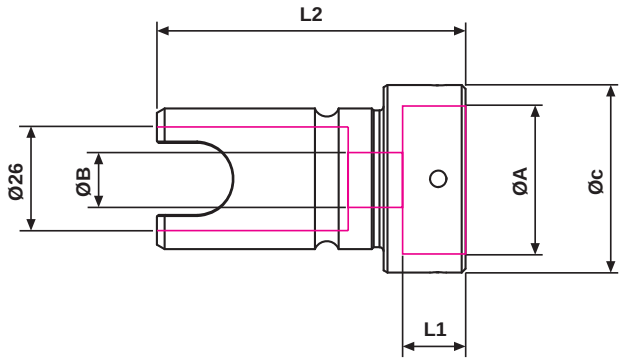
SPV Spintec has developed a new type of tap holder adapted for threading dies.

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

Beeing 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.

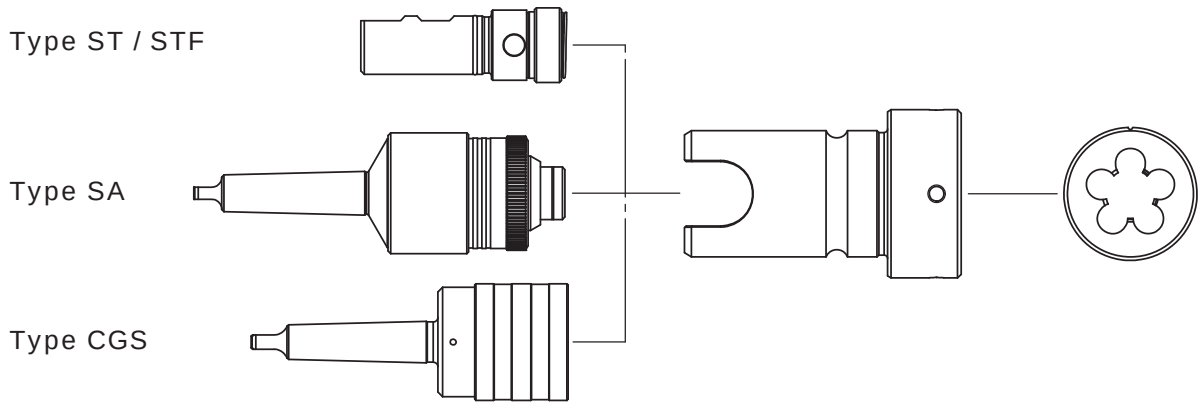
There is also a possibility to get the torque clutch function when combined with our SA tapping chuck.

Dimensions, article number



ØA mm	ØB mm	Øc mm	L1 mm	L2 mm	Capacity	Article-number
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

Possible combinations



Accessories

C-chucks

Quick-change chucks type C

Fits SPV Spintec tap holders

Type	Internal taper	ØD mm	L tum	ØD tum	L tum	Tap holder	Article-number
C-8	J1	23	47	.905	1.850	T-8 / TK-8	28194
	B12	23	47	.905	1.850		36724
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

Fits C-chucks

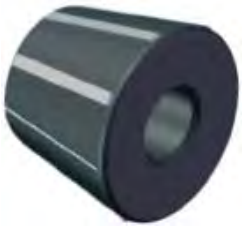
Type	mount, taper etc.	L mm	Article-number
B12	MK 2		27419
	Cyl. Ø10 x 46		27421
	TR 16 x 1,5	26	27587*
B16	MK 1		21104
	MK 2		20823
	MK 3		20824
	Cyl. Ø25 x 127		23092
	TR 16 x 1,5	28	21113*
	TR 20 x 2	28	21114*
	TR 28 x 2	30	21115*
B18	MK 2		22265
	MK 3		22266
	MK 4		22267
	TR 28 x 2	30	22269*
	TR 36 x 2	36	22070*

* adjustment ring included

Weldon extensions

Hole through for internal cooling

Shank Weldon Ø	Internal Weldon Ø mm	ØD mm	L mm	ØD tum	L tum	Article-number
25	25	36	100	1.417	3.937	37800
25	25	36	150	1.417	5.905	37799



RubberFlex collets for Jacobs-chucks

Fits tapping device	Collets	Ø mm	# mm	ØD tum	# tum	Article-number
ST-12 J /	J 420	4,5 - 8,0	2,3 - 8,0	.180 - .310	.090 - .310	17953
STF-12 J	J 421	3,5 - 6,5	2,3 - 8,0	.140 - .260	.090 - .310	18058
	J 422	6,5 - 10,0	2,3 - 8,0	.260 - .390	.090 - .310	17936
ST-16 J /	J 443	2,8 - 7,1	3,0 - 10,0	.110 - .280	.120 - .360	22195
STF-16 J	J 441	4,5 - 9,7	3,0 - 10,0	.180 - .380	.120 - .360	22197
	J 440	7,1 - 12,7	3,0 - 10,0	.280 - .500	.120 - .360	22196
ST-33 J /	J 461	10,0 - 16,0	8,0 - 18,0	.390 - .630	.315 - .710	37443
STF-33 J	J 462	16,0 - 23,0	8-0 - 18,0	.630 - .905	.315 - .710	37444

Nut and key for Jacobs-chucks

Nut type	ØD tum	Article-number
ST-12 J /	32	41826
STF-12 J		
ST-16 J /	40	95207
STF-16 J		
ST-33 J /	56	37441
STF-33 J		

Key for nut to type	Article-number
ST-12 J /	41827
STF-12 J	
ST-16 J /	95208
STF-16 J	
ST-33 J /	37442
STF-33 J	

Operation - type CGS / CGS-C

Type CGS

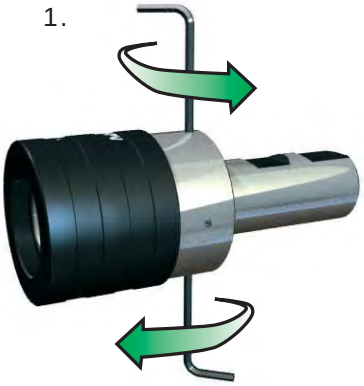
An important function on our tapping CGS-chuck is the oportunity to set the collaring pressure. To achieve good thread quality it is important that the collaring pressure is adapted to the size of tap you are using and also relative to the type of material you are processing.

A hard collaring pressure makes tha 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.

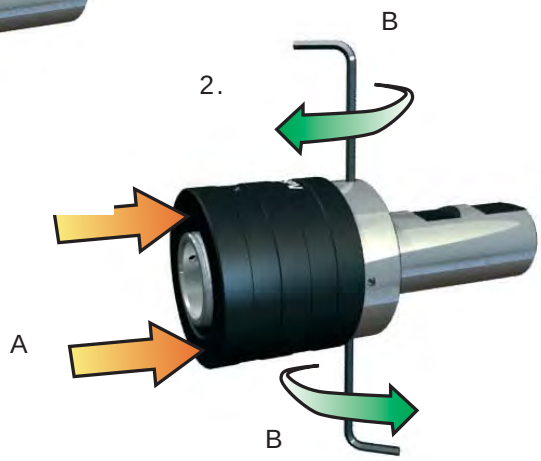
1. Releasing the collaring pressure

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 them one round (counter clockwise).



Guideline values for standard steel

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

Tapping chuck 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 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 tap holder type T provides cooling through for taps with internal cooling ducts.

Type GS

The tapping spindle type GS has an adjustable ball-bearing, axial movement (floating) which eliminates the machine spindles axial forces. 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 results.

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 clockvice to the bottom.

2. Clean the internal taper and machine taper properly before assembling of the Tapping chuck.

3. Assembly 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 best performance.

Adjusting the floating

The tapping chuck can be adjusted to allow full floating backwards, forwards or in both directions. Use an Allen key for adjustment, clockwise turning extend the forward movement and counter clockwise turning extend the backwards movement.

The tapping 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 Spintecs tap holders type T and type TK.

IMPORTANT!
To disassemble and assemble the unit, special tools are required.
Always send the device to SPV Spintec for service and repair.

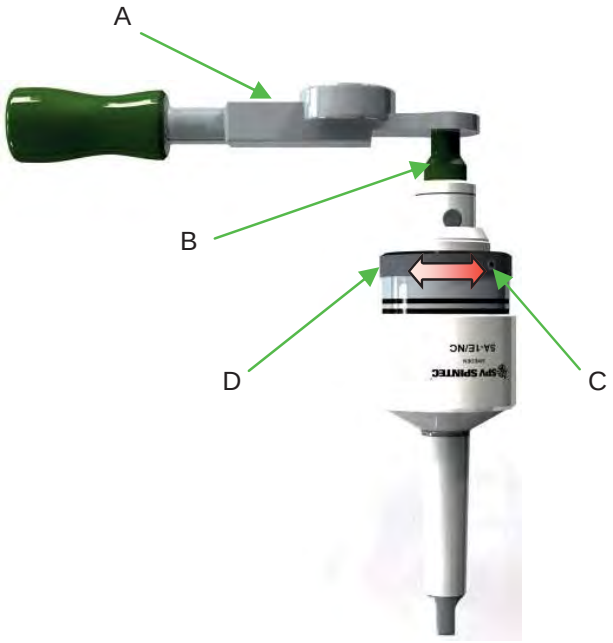
Operation - type SA / SA-NC

Type SA / SA-NC

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 backwards floating, and ajustable collaring pressure.

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

Adjusting the torque-clutch.



1. Clamp the tapping device in a Vice. We recommend that you clamp over the Morse Taper tounge 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. Requested torque is received by turning the clutch sleeve (D) clockwise for increasing and counter clock-wise for decreasing the torque.

5. Retighten the locking screw (C).

(adjustment-adaptor (B) can be bought separately.)

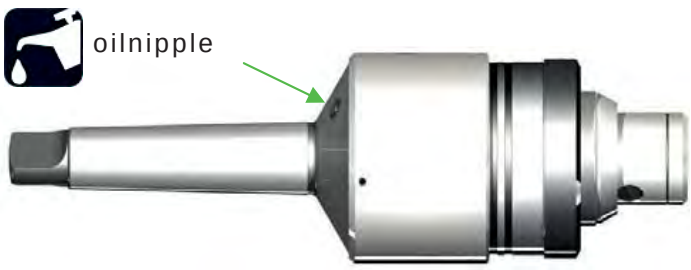
Adjusting the collaring pressure (SA-NC)

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

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.

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 hard usage.

We recommend: Castrol Magna BD68

Torque-table, tapping

Thread M	UNC	W	Recommended torque Nm	Inch-lbs	Harder material that is difficult to process
M2			0,3	2,4	
M3	#4		0,5	5,2	+ 20 %
	#5	1/8”	0,9	7,8	
	#6		1,6	14	
M4		5/32”	1,8	16	
	#8		2,0	18	
M5			2,5	22	
	#10		3,0	28	
M6	#12		4,4	38	+ 30 %
	1/4”	1/4”	6,5	56	
M8			9,0	78	
	5/16”	5/16”	11,5	100	
M10	3/8”	3/8”	14,0	122	
	7/16”	7/16”	22,0	190	
M12			23,0	200	
M14			30,0	260	
	1/2”	1/2”	33,0	285	
M16	9/16”	9/16”	35,0	305	
	5/8”	5/8”	45,0	390	
M18			55,0	475	
M20	3/4”	3/4”	65,0	565	+ 50 %
M22			75,0	650	
	7/8”	7/8”	85,0	740	
M24			105,0	910	
M27	1”	1”	120,0	1040	
M30	1 1/8”	1 1/8”	150,0	1300	
	1 1/4”	1 1/4”	196,0	1700	
	1 3/8”	1 3/8”	261,0	2260	
	1 1/2”	1 1/2”	266,0	2475	

Rörgänga		Recommended torque Nm	Inch-lbs	Harder material that is difficult to process
	1/8”	5,5	48	
	1/4”	15,0	130	
	3/8”	20,0	170	
	1/2”	45,0	390	
	5/8”	50,0	435	+ 50 %
	3/4”	58,0	505	
	7/8”	65,0	565	
	1”	112,0	970	
	1 1/8”	128,0	1110	
	1 1/4”	142,0	1230	

HIGH SPEED SPINDLES

Introduction

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 imparing the tolerance of the spindle. We also carry out the service of all spindles.

SPV Spintec's 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 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 100.000 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 continuosly. 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 auxilary spindles in machines for deburring, drilling, milling, engraving and grinding.

Air-cooled spindles
S11, S16, S18, S19, S24 & S27. The slim dimensions of these spindles makes them suitable for building into multispindle 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 a requirement. Suitable for grinding, jig grinding, milling, deburring and drilling.

Water-cooled and 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 motor and spindle series

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

Technical specifications

Spindle type	Effect KW	Speed max RPM	Speed min RPM	Outer diameter Ø mm	Cooling type	Lubrication type
VM 10	0,1	72 000	36 000	33	Comp. air / Fan	Permanently lubricated
VM 17	0,4	54 000	15 000	45	Comp. air / Fan	Permanently lubricated
S 11	0,1	72 000	36 000	33	Comp. air / Fan	Permanently lubricated
S 16	0,4	60 000	15 000	45	Comp. air / Fan	Permanently lubricated
S 18	0,4	60 000	15 000	50	Comp. air / Fan	Permanently lubricated
S 19	0,4	60 000	15 000	60	Comp. air / Fan	Permanently lubricated
S 20	0,65	60 000	15 000	60	Water	Permanently lubricated
S 21	0,7	90 000	15 000	60	Water	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	Comp. air / Fan	Permanently lubricated
S 28	1,1	40 000	9 000	80	Water	Permanently lubricated
S 30	2,0	60 000	15 000	80	Water	Oil-mist lubricated
S 33	1,2	75 000	25 000	80	Water	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	Permanently lubricated
S 50	5,0	30 000	15 000	100	Water	Oil-mist lubricated

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 more 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.

Appearance

VM 10

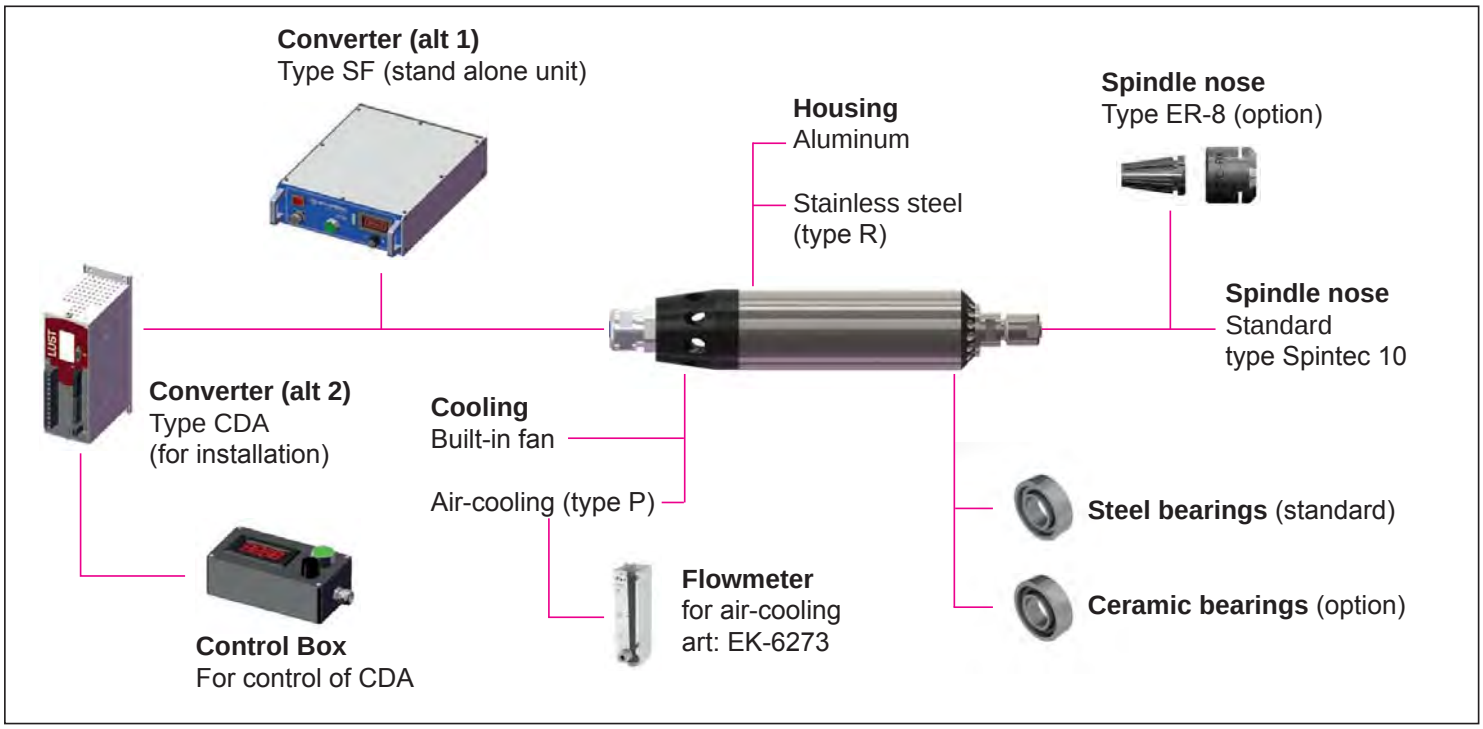
Up to 72 000 RPM and 0,1 KW

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

VM 10
Fan-cooled

VM 10 P
Air-cooled

Application overview



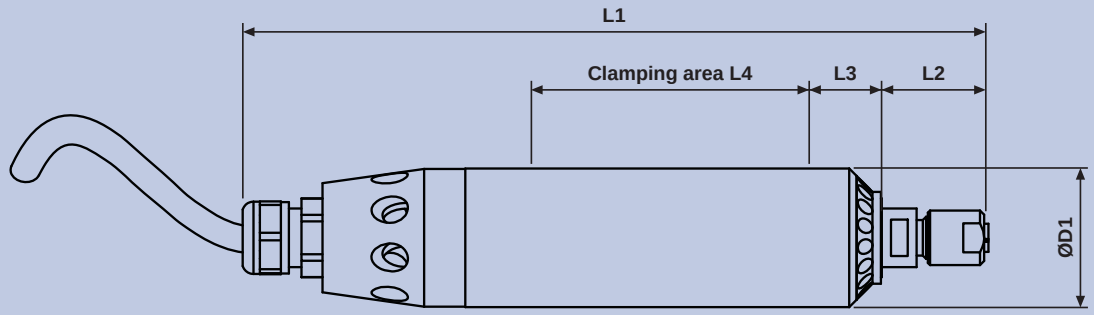
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø4,0

Spindle type	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.

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 more suitable for building into machines. Compressed air-cooling (type P) is advisable when operating in either dirty or hostile environments or i more effective cooling is required. The noise level will also be lower.

Appearance

VM 17

Up to 54 000 RPM and 0,4 KW

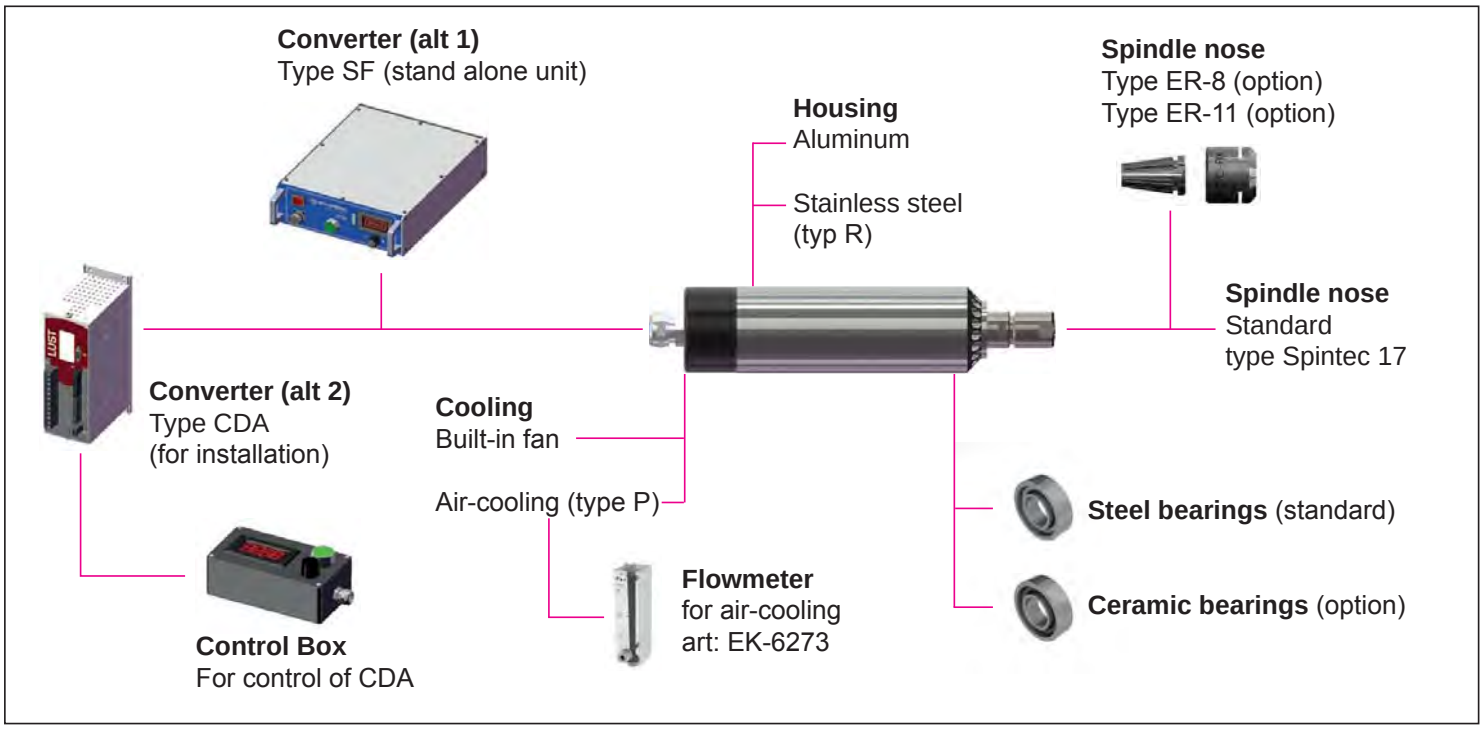
Housing:	
Anodized aluminum Stainless steel (type R)	
Cooling:	
Built-in fan Compressed air (type P)	
Ball bearings:	
Permanently lubricated, preloaded, high performance groove ball bearings.	
Electrical connection:	
6-pole contact via frequency converter.	
Rotation direction:	
Right rotating Left rotating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

VM 17
Fan-cooled

VM 17 P
Air-cooled

VM 17 AC
Angular connections

Application overview



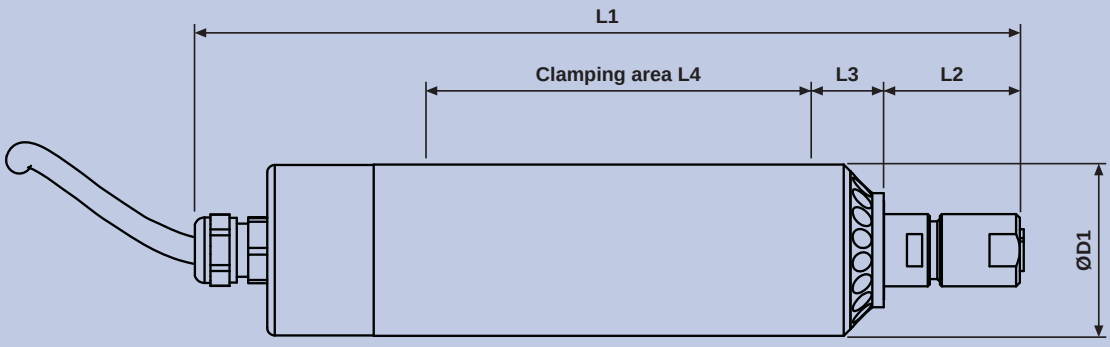
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø8,0

Spindle type	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

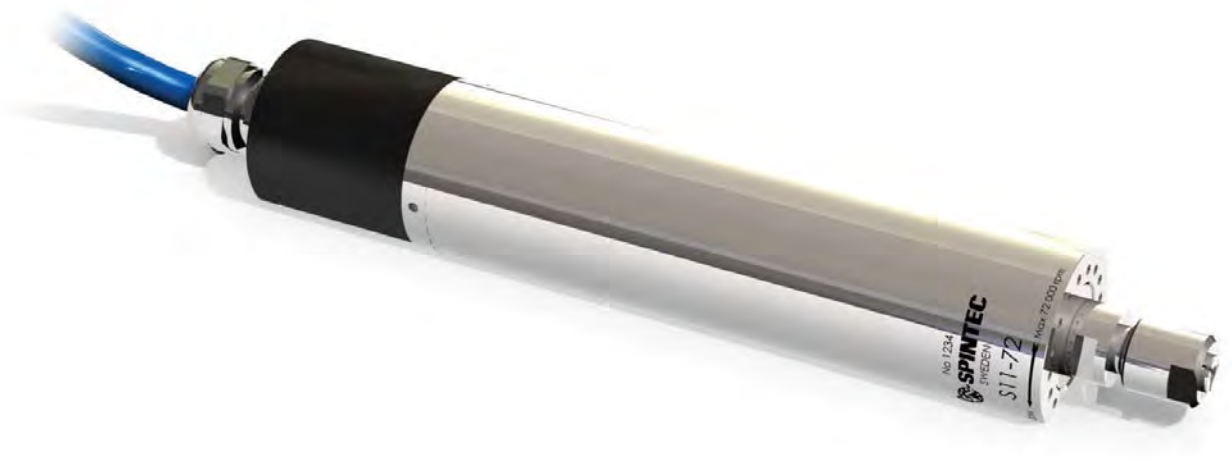


* The air-flow between the spindle and the flowmeter may vary depending on various conditions.
** Type AC = -21mm, type P = +28 mm

Air-cooled spindles

S 11

Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines 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 required. The noise level will also be lower.



Appearance

S 11

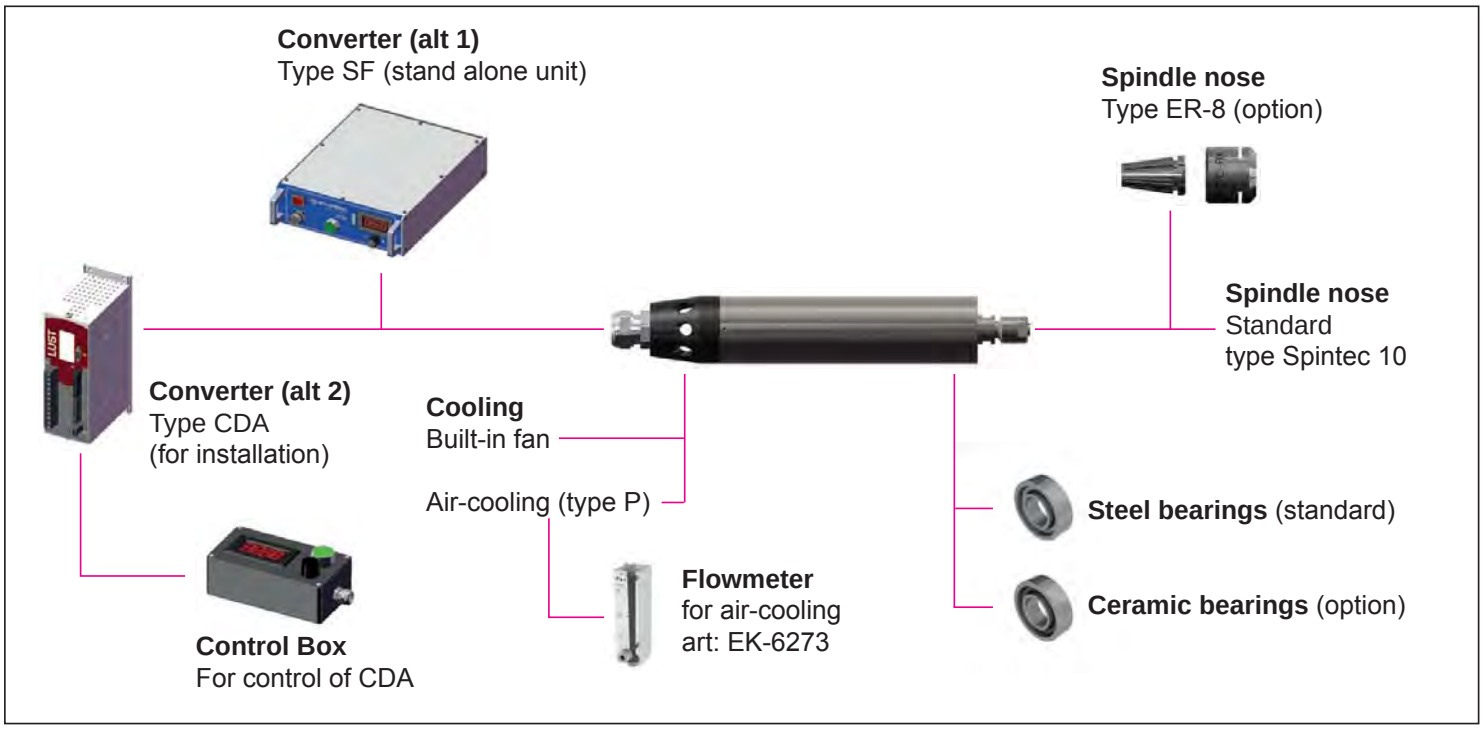
Up to 72 000 RPM and 0,1 KW

Housing:
Steel
Cooling:
Built-in fan Compressed air (type P)
Ball bearings:
Permanently lubricated, spring preloaded, high precision angular contact ball bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Right rotating Left rotating (option)

S 11-72
Fan-cooled

S 11-72 P
Air-cooled

Application overview



Standard accessories

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

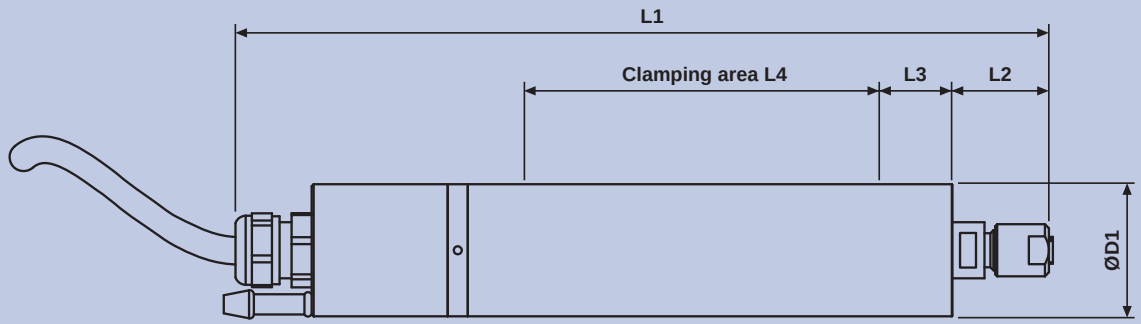
Drive unit

Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø4,0

Spindle type	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.

Air-cooled spindles

S 16 & S 18

Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines 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 required. The noise level will also be lower.

Appearance

S 16 & S 18

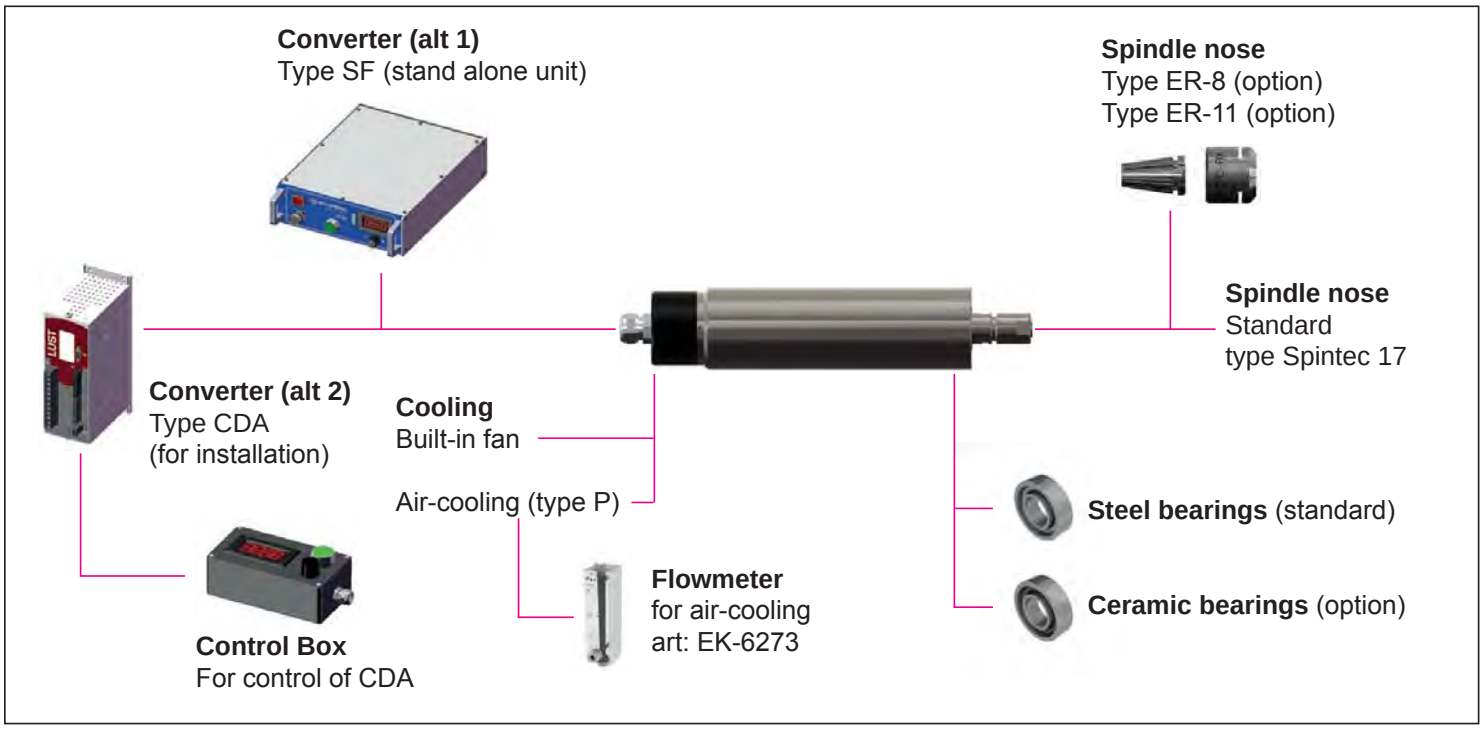
Up to 60 000 RPM and 0,4 KW

Housing:	Steel
Cooling:	Built-in fan Compressed air (type P)
Ball bearings:	Permanently lubricated, spring preloaded, high precision angular contact ball bearings.
Electrical connection:	6-pole contact with PTC via frequency converter
Rotation direction:	Right rotating Left rotating (option)

Standard
Fan-cooled

Type P
Air-cooled

Application overview



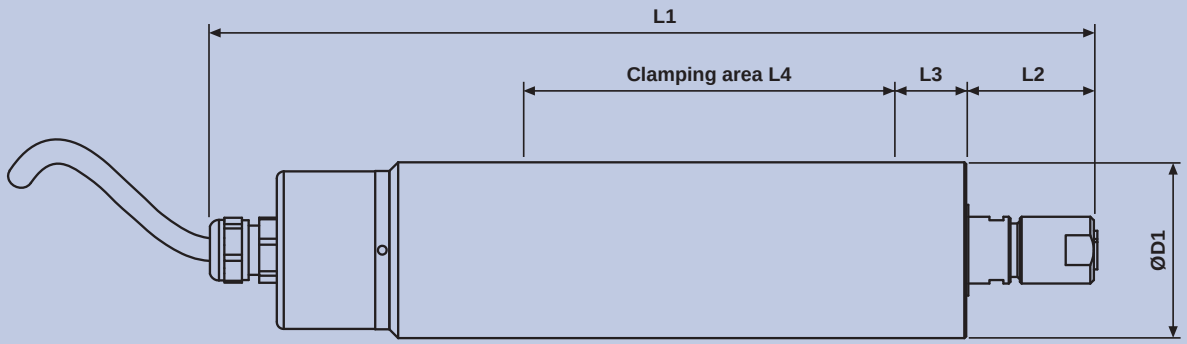
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø8,0
S 18-60	45	251 **	37	20	102	2,0	Spintec 17	Ø8,0

Spindle type	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

Air-cooled spindles

S 19

Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines 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 required. The noise level will also be lower.

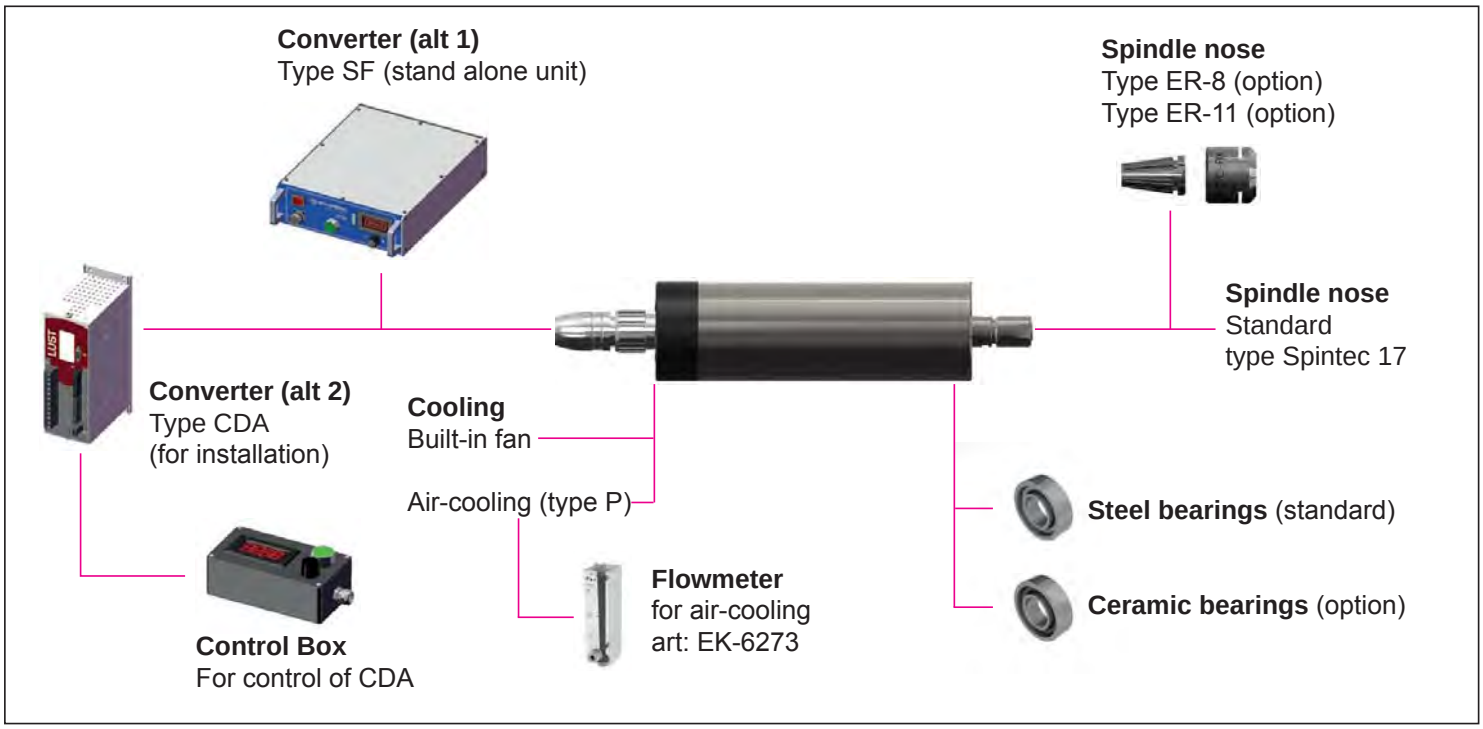
Appearance

S 19

Up to 60 000 RPM and 0,4 KW

Housing:
Steel
Cooling:
Built-in fan Compressed air (type P)
Ball bearings:
Permanently lubricated, spring preloaded, high precision angular contact ball bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Right rotating Left rotating (option)

Application overview



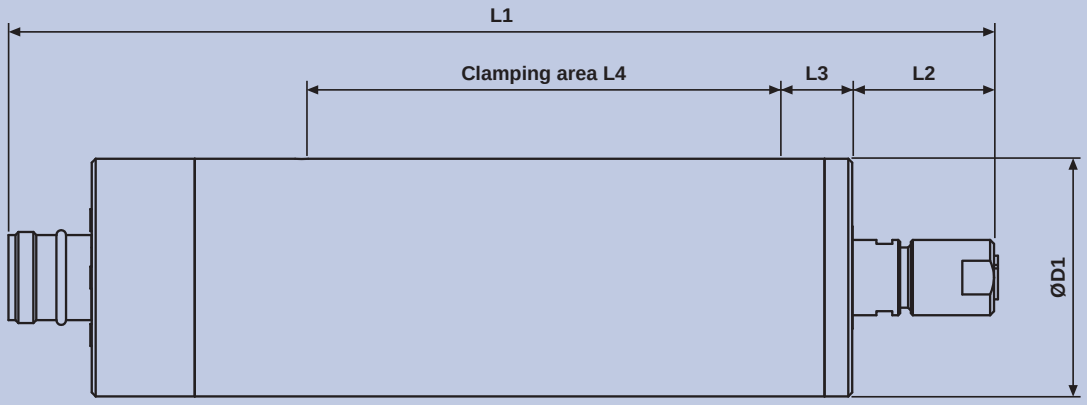
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø8,0

Spindle type	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

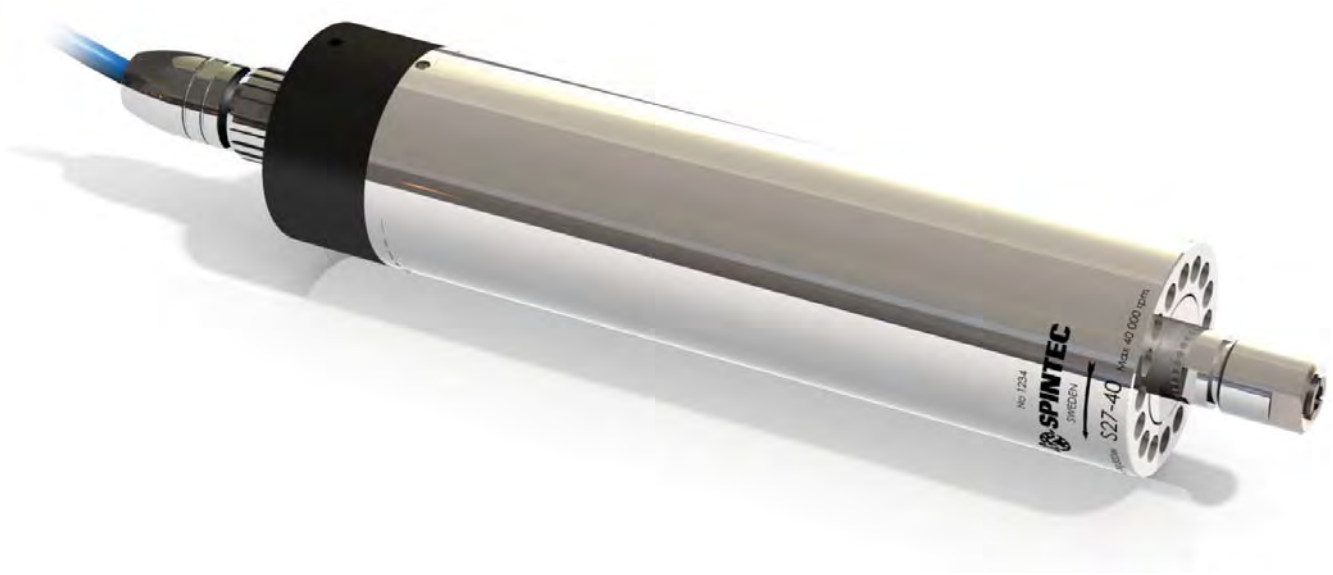


* The air-flow between the spindle and the flowmeter may vary depending on various conditions.

Air-cooled spindles

S 27

Air-cooled spindle designed for high speed, precision and reliability. It is intended for building into machines 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 required. The noise level will also be lower.



Appearance

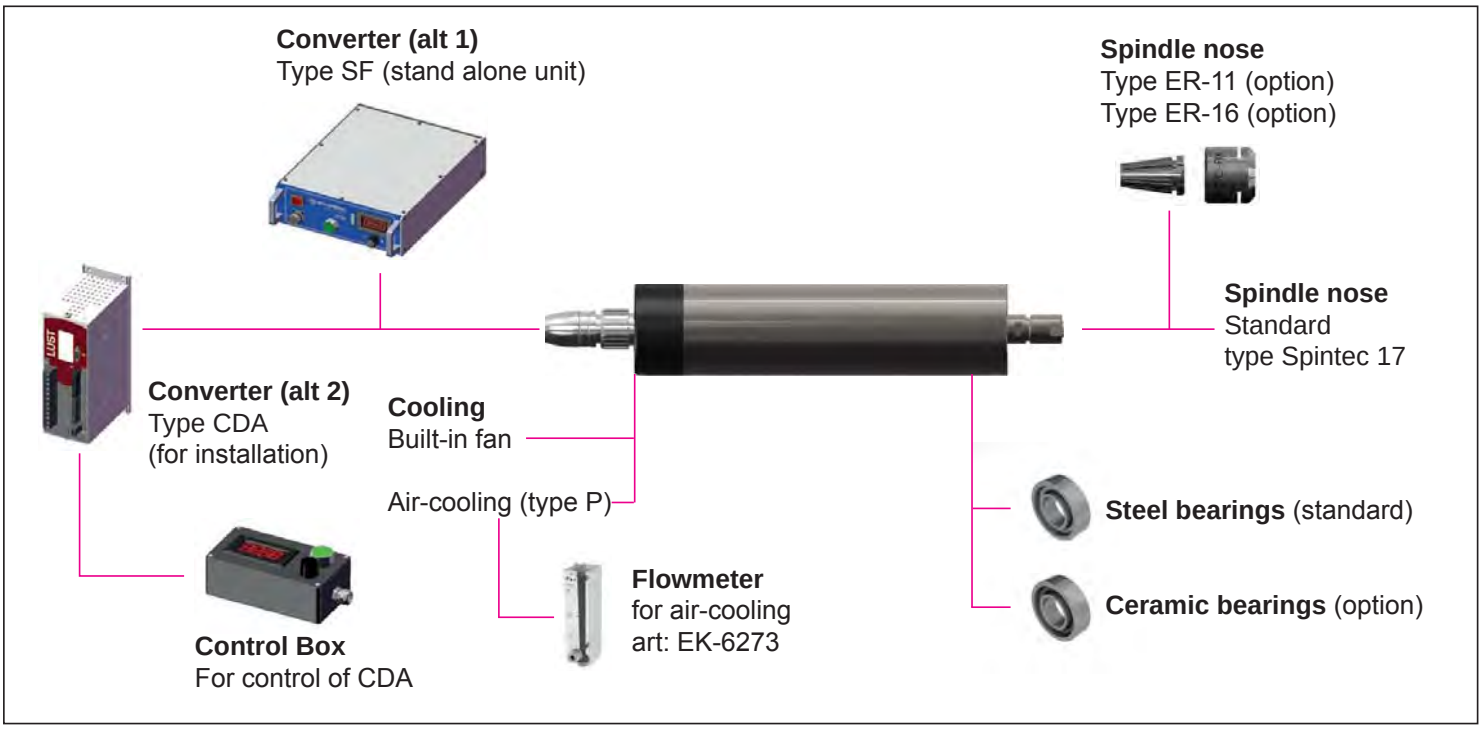
S 27

Up to 54 000 RPM and 0,8 KW

Housing:	
Steel	
Cooling:	
Built-in fan Compressed air (type P)	
Ball bearings:	
Permanently lubricated, spring preloaded, high precision angular contact ball bearings. S27-30 is provided with dual front bearings.	
Electrical connection:	
6-pole contact with PTC via frequency converter	
Rotation direction:	
Right rotating Left rotating (option)	

S 27-30 S 27-38 S 27-40 S 27-54 type AC angular connections

Application overview



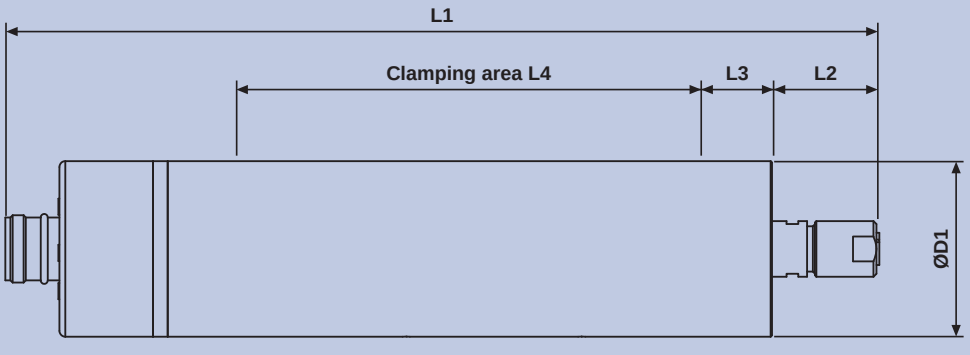
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 1500***
Frequency converter for installation : ***CDA-1,5***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm (h7)	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	Ø8,0
S 27-40	60	337	37	20	102	3,2	Spintec 17	Ø8,0
S 27-38	60	330	37	25	82	3,3	Spintec 17	Ø8,0
S 27-54	60	318	37	20	82	3,0	Spintec 17	Ø8,0

Spindle type	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 27-38	0,55	133	38 000	9 000	0,005	0,05	100 *	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.

Electrical RPM-raisers

S 24

Air-cooled spindle with compact dimensions, intended as an RPM raiser for light milling, grinding, drilling, deburring and engraving with small tools that require high speeds. Suitable for robot applications and multioperation machines. S 24 is manufactured with highest precision and accuracy and is designed to give you the ability to adapt your machines to modern tools.

Appearance

S 24

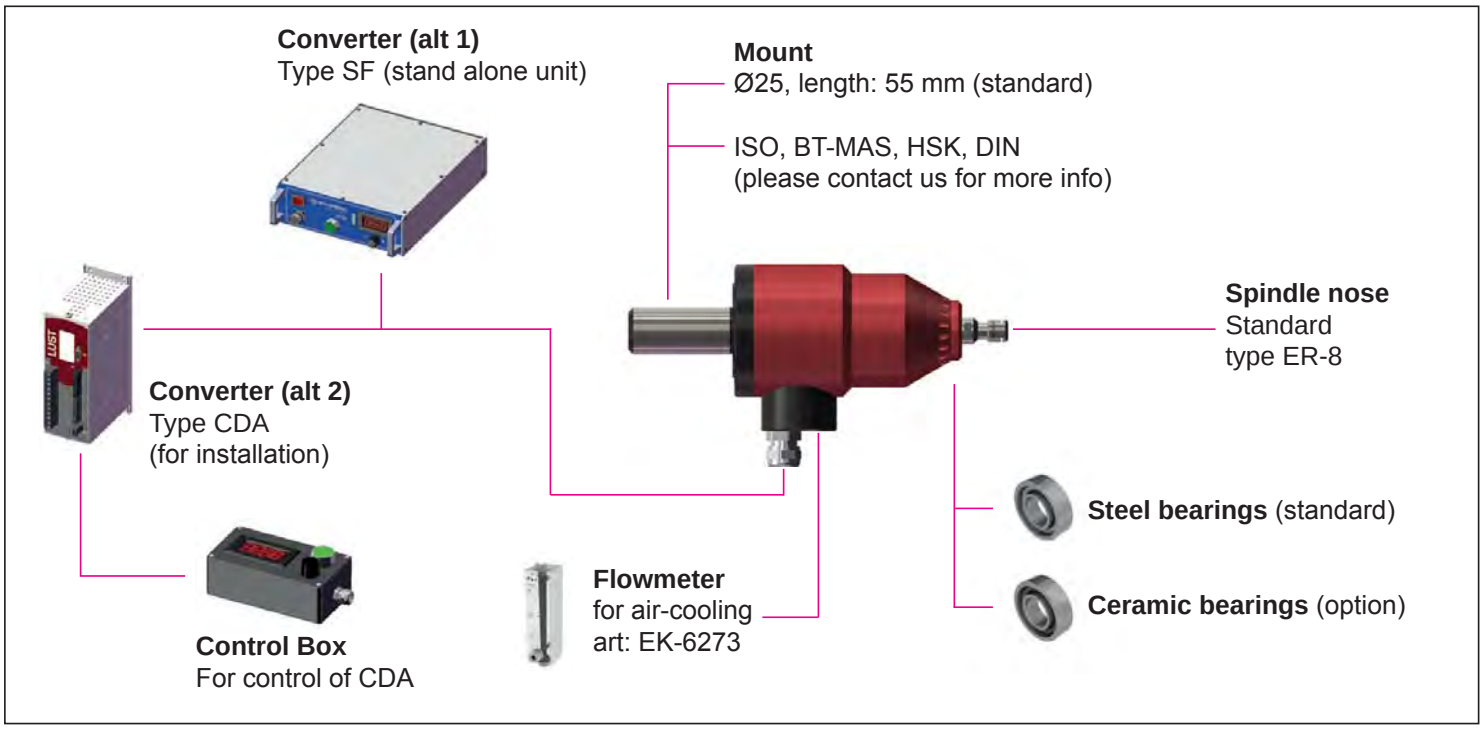
Up to 75 000 RPM and 0,3 KW

Housing:
Anodized aluminum
Cooling:
Compressed air
Ball bearings:
Permanently lubricated, encapsulated, spring preloaded, high precision groove ball bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Right rotating Left rotating (option)

Standard shaft
cylindrical Ø25

Alternative mounts
(BT-MAS, HSK, DIN etc)

Application overview



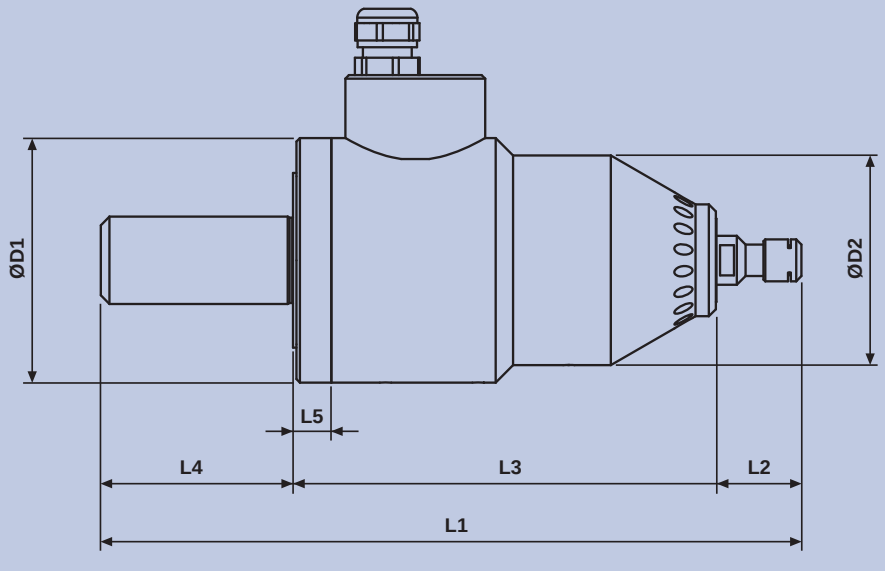
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm	ØD2 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 24-75P	70	60	202 **	26	121	55 **	10	1,6	Regofix ER-8	Ø5,0

Spindle type	Effect max KW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (typ P)	Noise level dB
S 24-75P	0,3	192	75 000	30 000	0,01	0,05	50 *	65



* The air-flow between the spindle and the flowmeter may vary depending on various conditions.
** Applies to Ø25, see application overview for other varieties.

Electrical RPM-raisers

S 34

Air-cooled spindle with compact dimensions, intended as an RPM raiser for light milling, grinding, drilling, deburring and engraving with small tools that require high speeds. Suitable for robot applications and multioperation machines. S 34 is manufactured with highest precision and accuracy and is designed to give you the ability to adapt your machines to modern tools.

Appearance

S 34

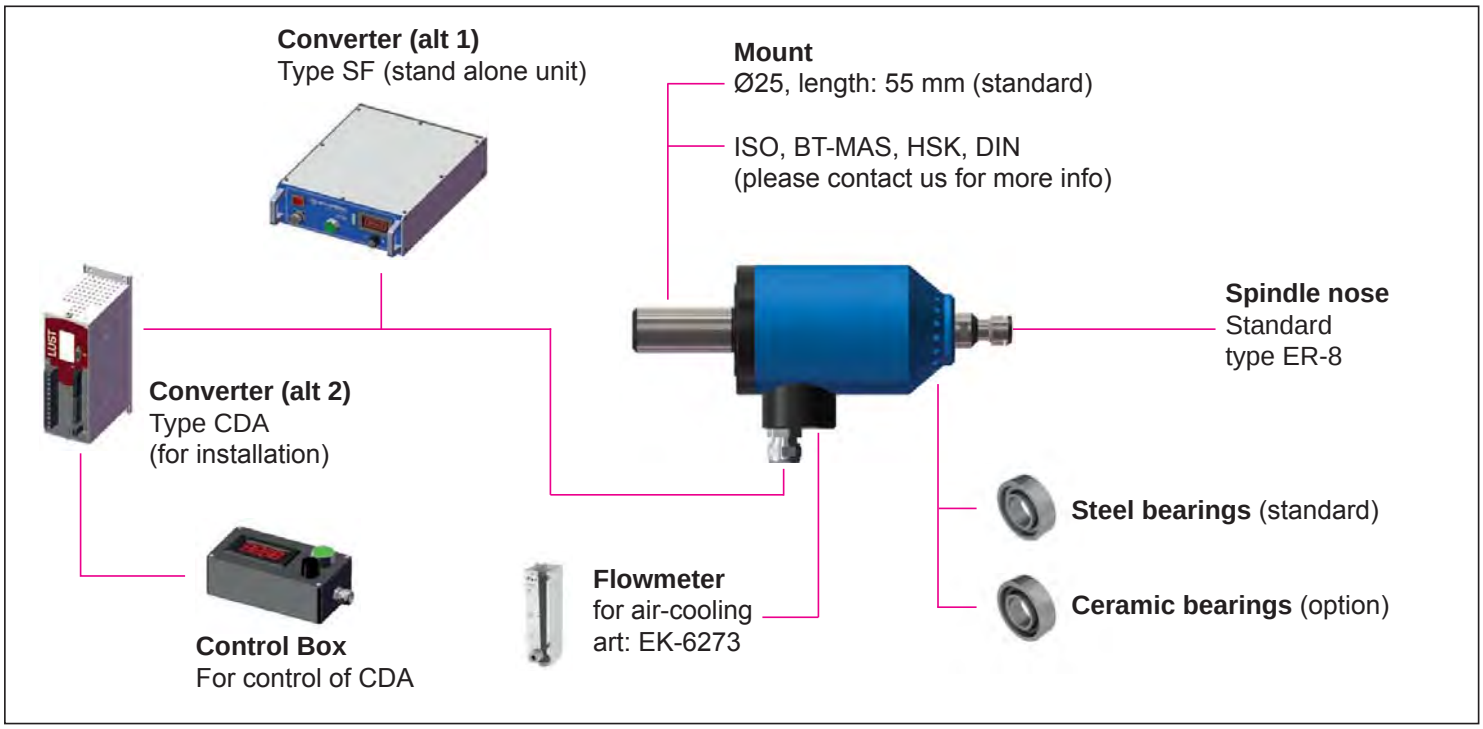
Up to 45 000 RPM and 0,5 KW

Housing:	
Anodized aluminum	
Cooling:	
Compressed air	
Ball bearings:	
Permanently lubricated, encapsulated, spring preloaded, high precision groove ball bearings.	
Electrical connection:	
6-pole contact with PTC via frequency converter	
Rotation direction:	
Right rotating Left rotating (option)	

Standard shaft
cylindrical Ø25

Alternative mounts
(BT-MAS, HSK, DIN etc)

Application overview



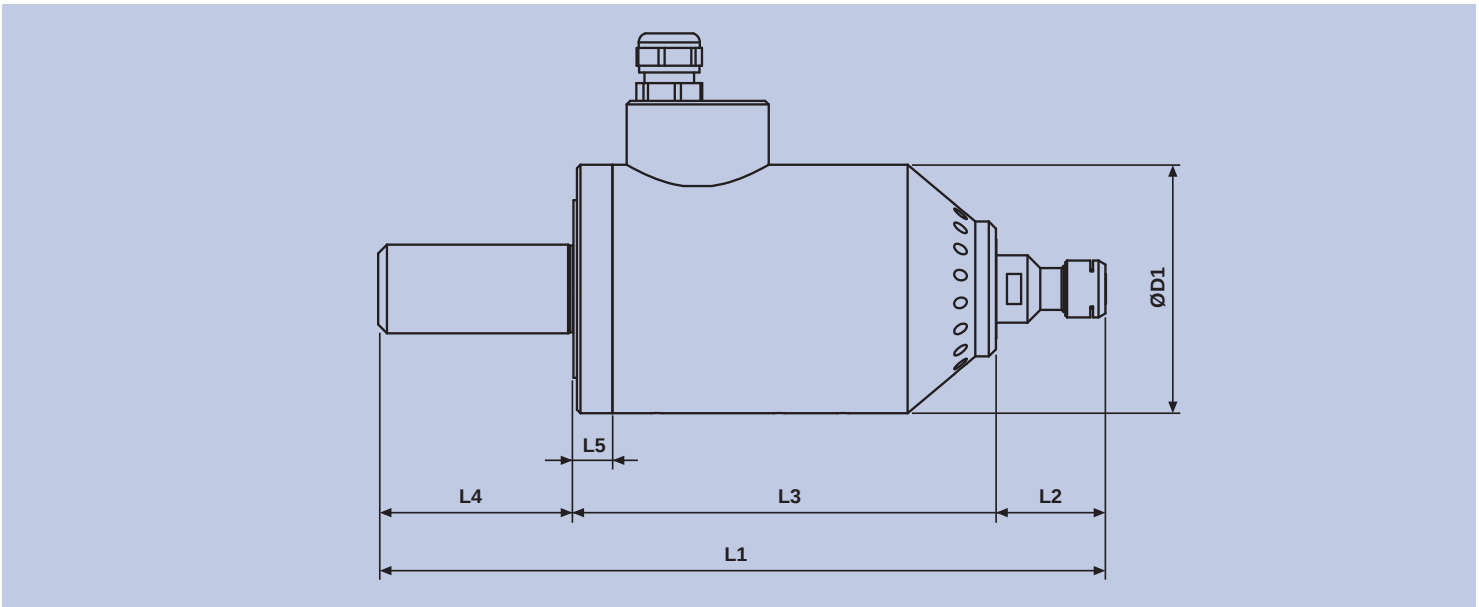
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 34-45P	70	207 **	33	119	55 **	10	2,0	Regofix ER-11	Ø7,0

Spindle type	Effect max KW	Voltage V	Speed max RPM	Speed min RPM	Run-out max mm	Coaxiality max mm	Air consumption l / min (typ P)	Noise level dB
S 34-45P	0,5	230	45 000	15 000	0,01	0,05	50 *	65



* The air-flow between the spindle and the flowmeter may vary depending on various conditions.
** Applies to Ø25, see application overview for other varieties.

Electrical RPM-raisers

S 44

Water-cooled spindle with compact dimensions, intended as an RPM raiser for milling, grinding, drilling and deburring with small tools that require high speeds. Suitable for robot applications and multi-operation machines. S 44 is manufactured with highest precision and accuracy and is designed to give you the ability to adapt your machines to modern tools.

Appearance

S 44

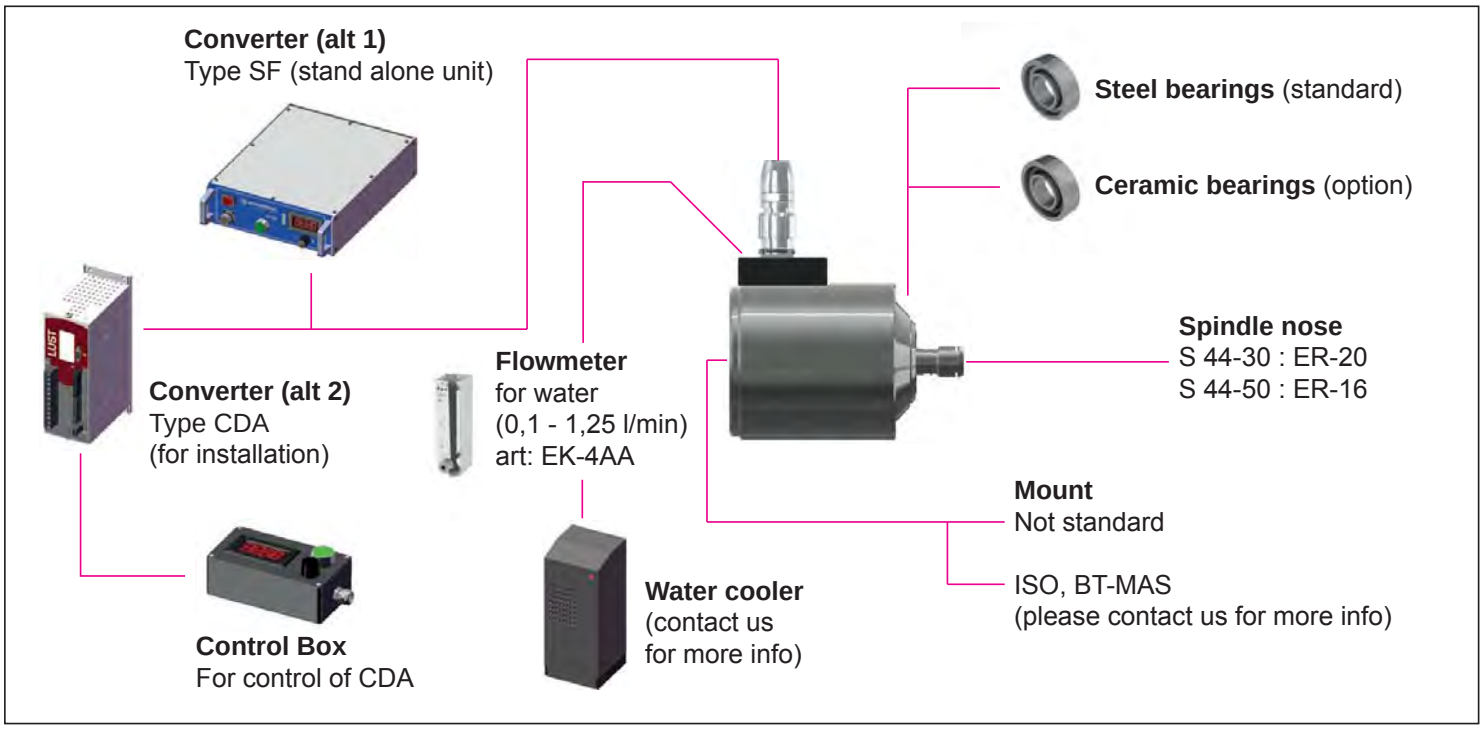
Up to 50 000 RPM and 2,5 KW

Housing:	
Stainless steel	
Cooling:	
Water	
Ball bearings:	
Spring preloaded, permanently lubricated, high precision angular contact ball bearings.	
Electrical connection:	
6-pole contact with PTC via frequency converter	
Rotation direction:	
Right rotating Left rotating (option)	
Water connection:	
In- and outlet (R1/8”)	

Standard appearance

With mount

Application overview



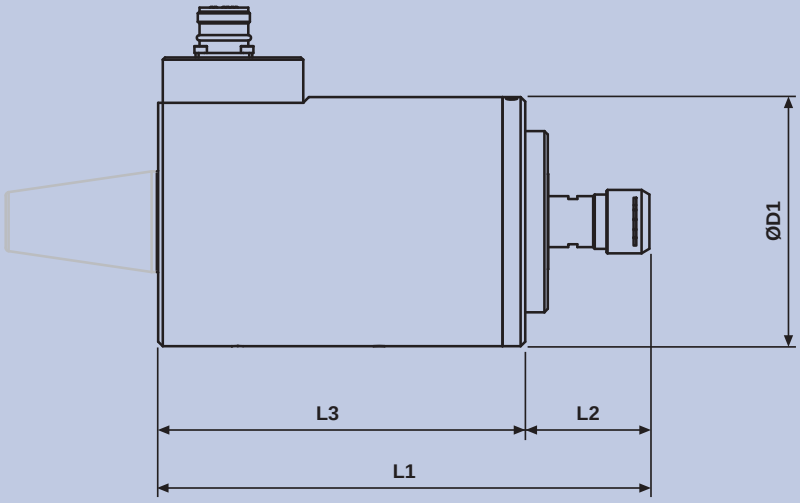
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 3000***
Frequency converter for installation : ***CDA-3,0***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	ØD1 mm	L1 mm	L2 mm	L3 mm	Weight kg	Spindle nose type	Collet max Ø mm
S 44-30	110	218	56	162	8,5	Regofix ER-20	Ø13,0
S 44-50	110	158	33	125	6,5	Regofix ER-16	Ø10,0

Spindle type	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 44-30	2,5	300	30 000	5 000	0,005	0,05	1,2 *	65
S 44-50	2,2	300	50 000	10 000	0,005	0,05	1,2 *	65

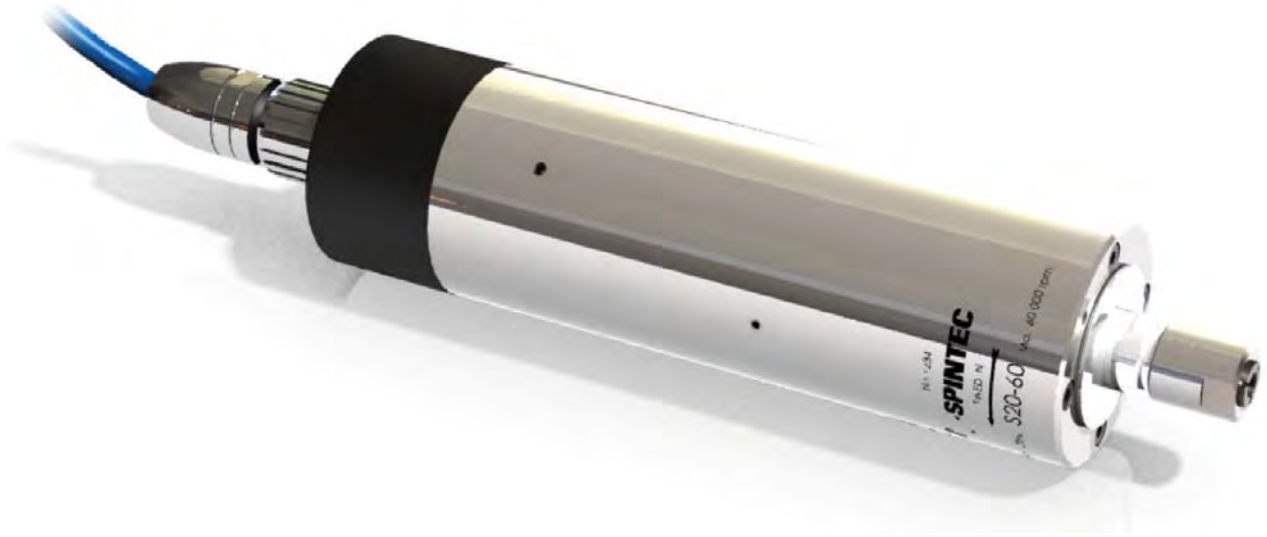


* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 20

Water-cooled spindle intended for building into machines, where power, wide speed range and low noise levels are essential. S 20 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.

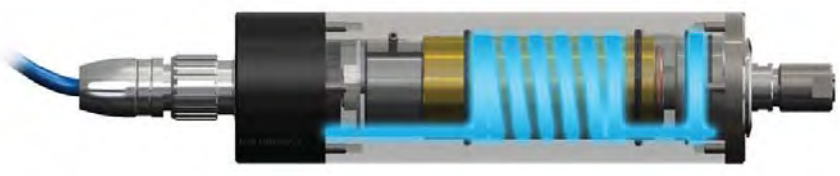


Appearance

S 20

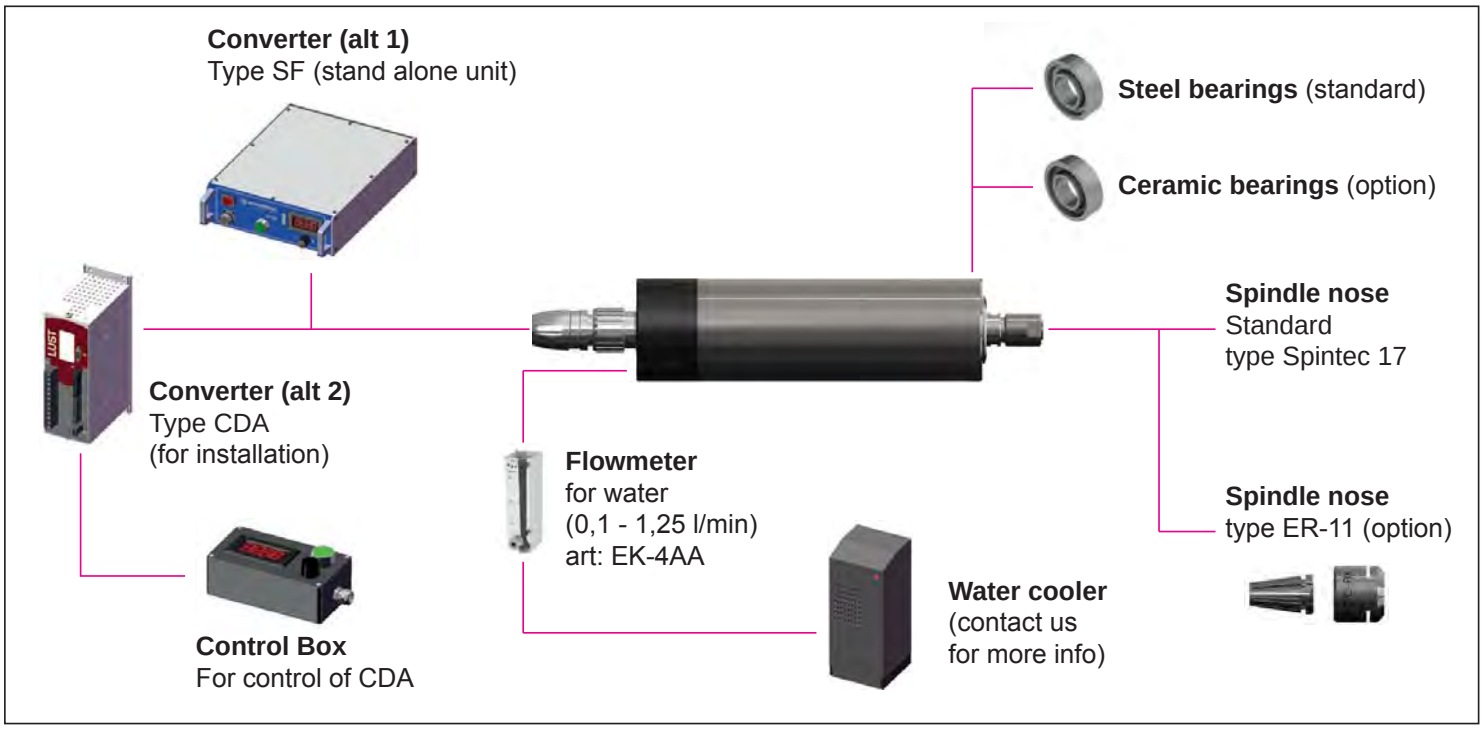
Up to 60 000 RPM and 0,65 KW

Housing:
Stainless steel
Cooling:
Water
Ball bearings:
Spring preloaded, permanently lubricated, high precision angular contact ball bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Both directions available
Water connection:
In- and outlet (R1/8”)



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

Application overview



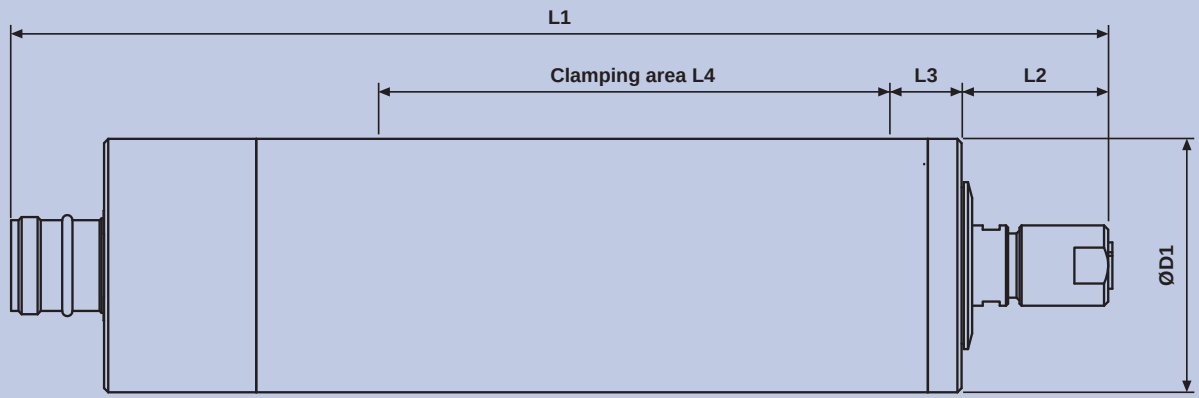
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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	Ø8,0

Spindle type	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

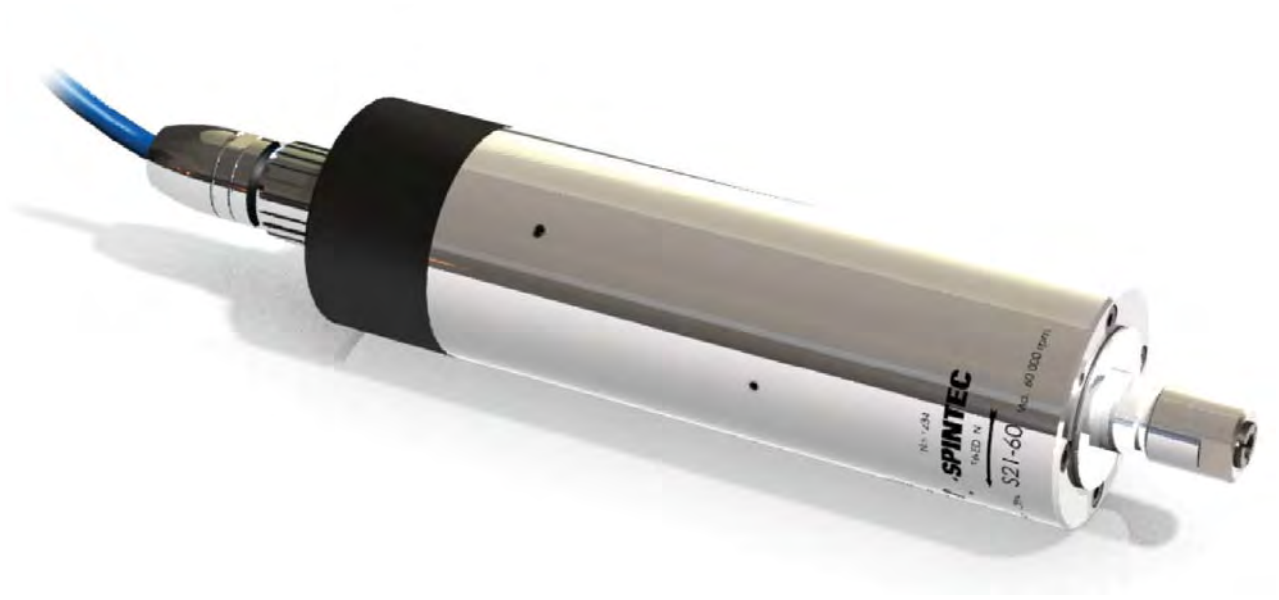


* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 21

Water-cooled, oil mist lubricated spindle intended for building into machines, where power, wide speed range and low noise are essential. S 21 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.



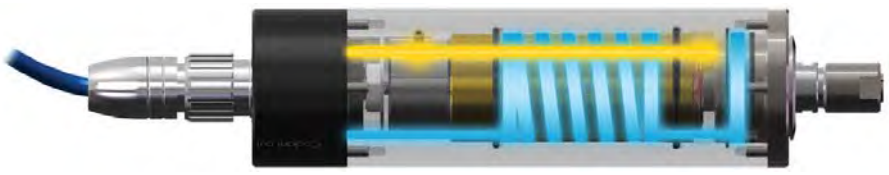
Appearance

S 21

Up to 90 000 RPM and 0,7 KW

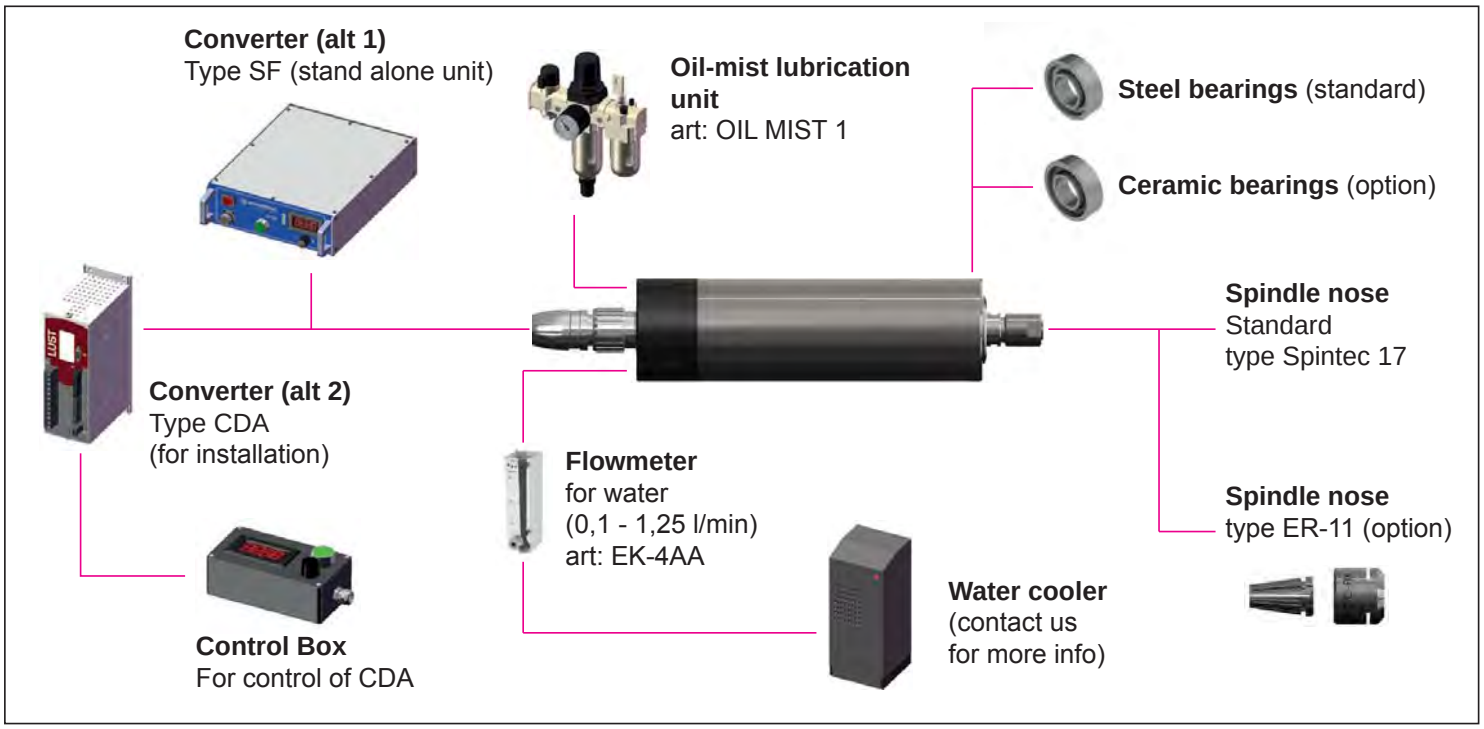
Housing:
Stainless steel
Cooling:
Water
Ball bearings:
Spring preloaded, Oil-mist lubricated, high precision angular contact bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Both directions available
Water connection:
In- and outlet (R1/8”)
Oil-mist connection:
Inlet (R1/8”)

Oil-mist lubrication
of the ball bearings



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

Application overview



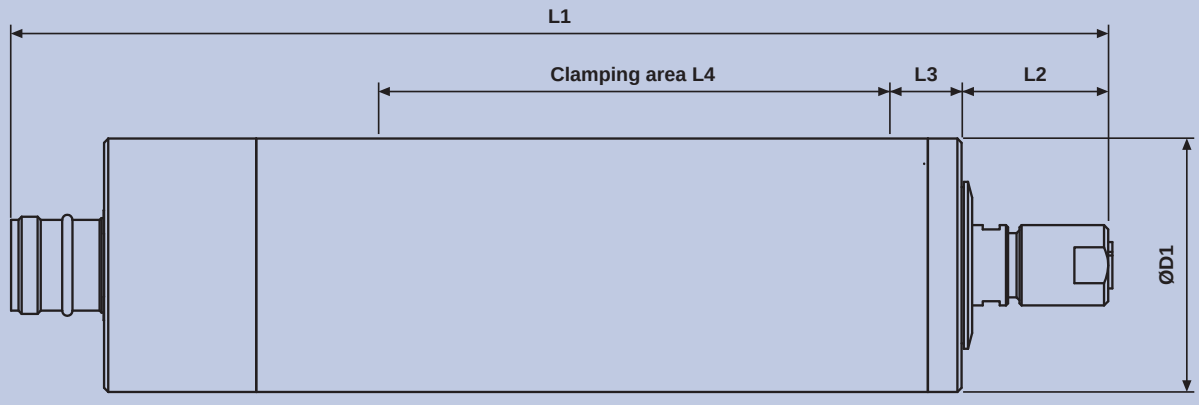
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 700***
Frequency converter for installation : ***CDA-0,75***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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	Ø8,0
S 21-90	60	229	33	20	125	2,9	Regofix ER-8	Ø5,0

Spindle type	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 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

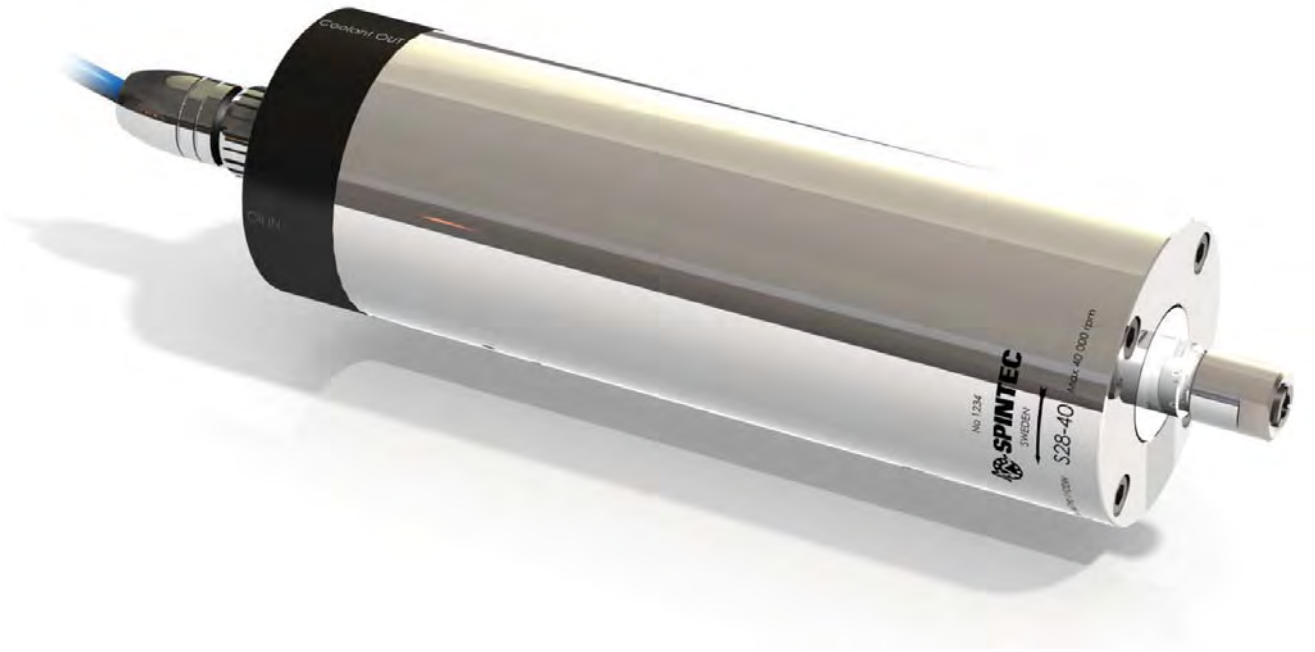


* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 28

Water-cooled spindle intended for building into machines, where power, wide speed range and low noise levels are essential. S 28 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.

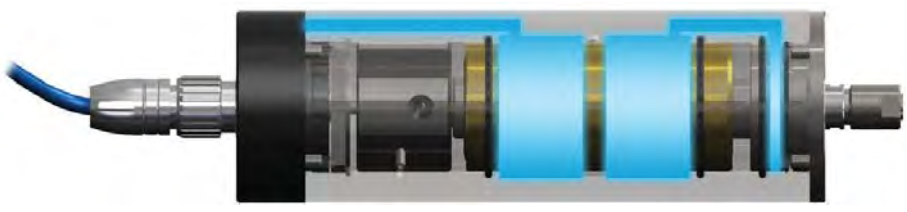


Appearance

S 28

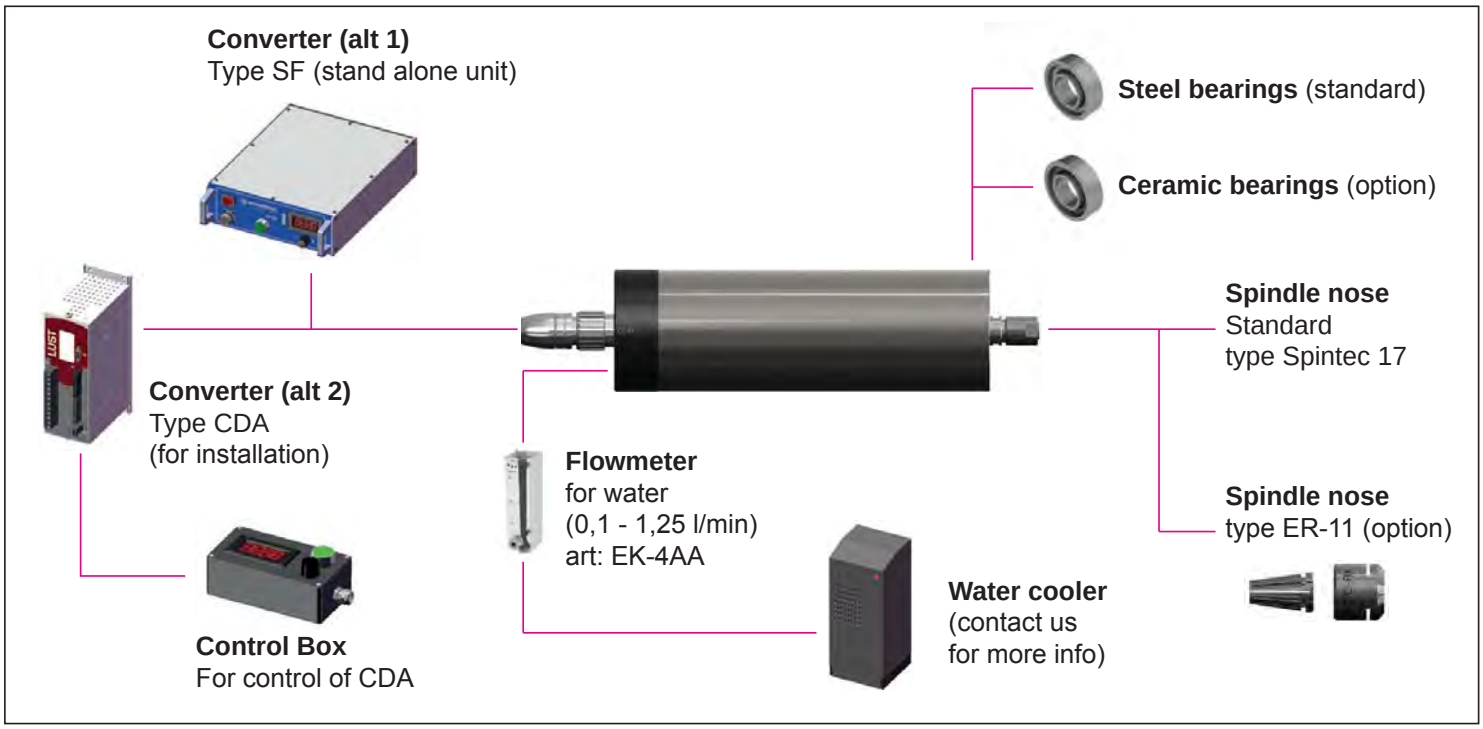
Up to 40 000 RPM and 1,1 KW

Housing:
Stainless steel
Cooling:
Water
Ball bearings:
Spring preloaded, permanently lubricated, high precision angular contact ball bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Both directions available
Water connection:
In- and outlet (R1/8”)



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

Application overview



Standard accessories

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

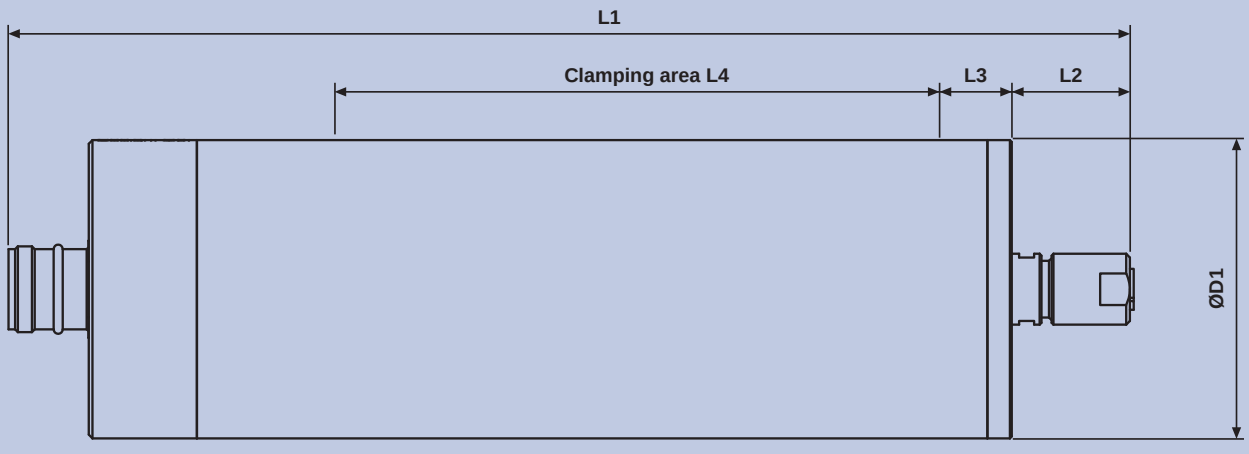
Drive unit

Frequency converter, stand alone unit : ***SF 1500***
Frequency converter for installation : ***CDA-1,5***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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	Ø8,0

Spindle type	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

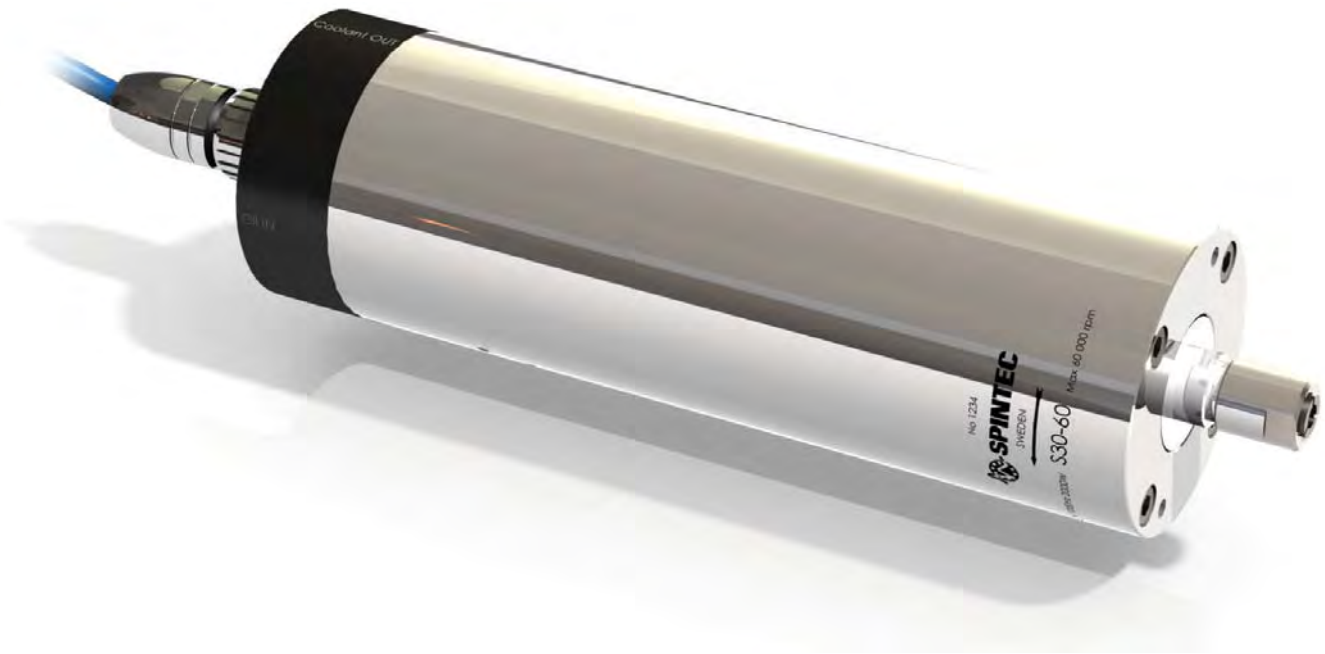


* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 30

Water-cooled, oil mist lubricated spindle intended for building into machines, where power, wide speed range and low noise levels are essential. S 30 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.



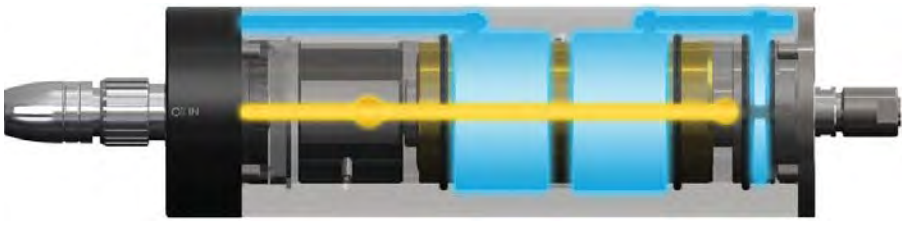
Appearance

S 30

Up to 60 000 RPM and 2,0 KW

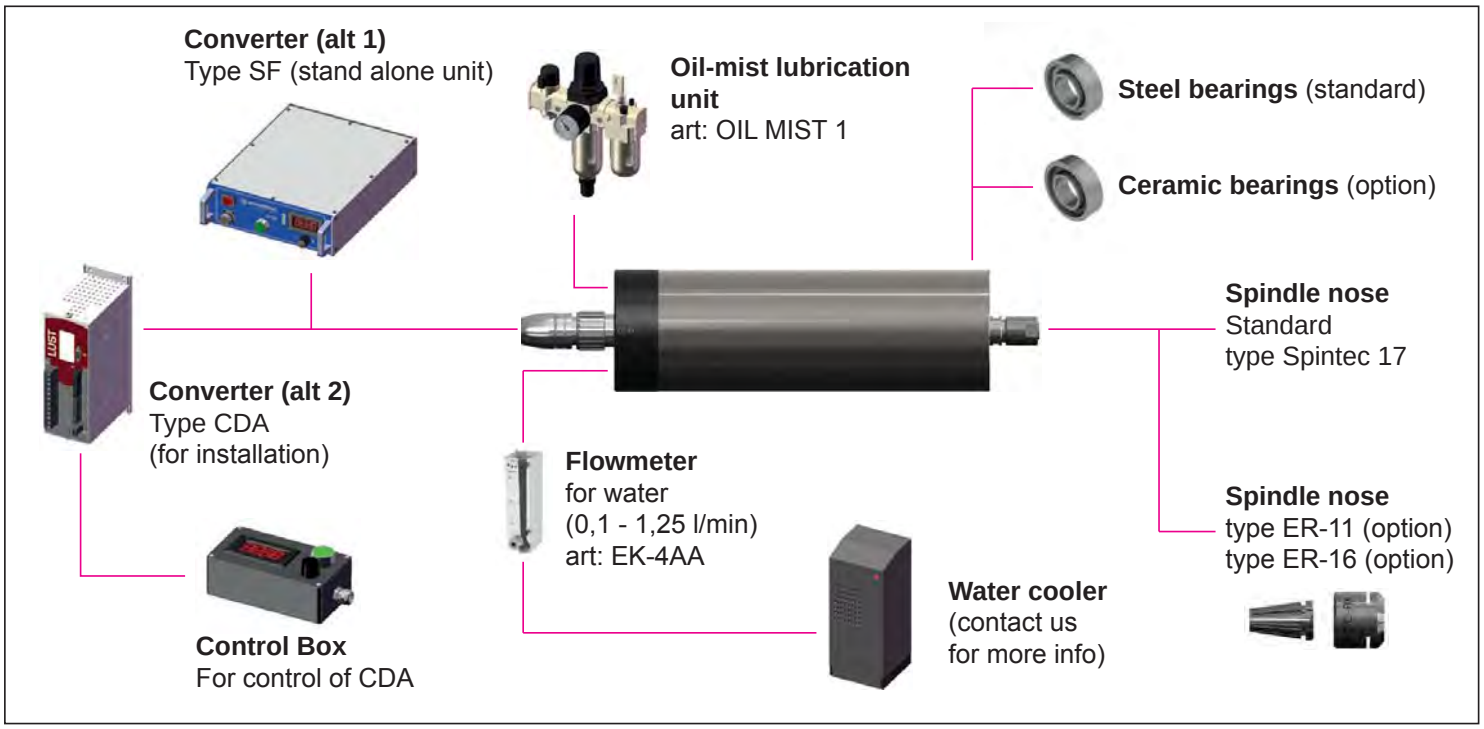
Housing:
Stainless steel
Cooling:
Water
Ball bearings:
Spring preloaded, Oil-mist lubricated, high precision angular contact bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Both directions available
Water connection:
In- and outlet (R1/8”)
Oil-mist connection:
Inlet (R1/8”)

Oil-mist lubrication
of the ball bearings



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

Application overview



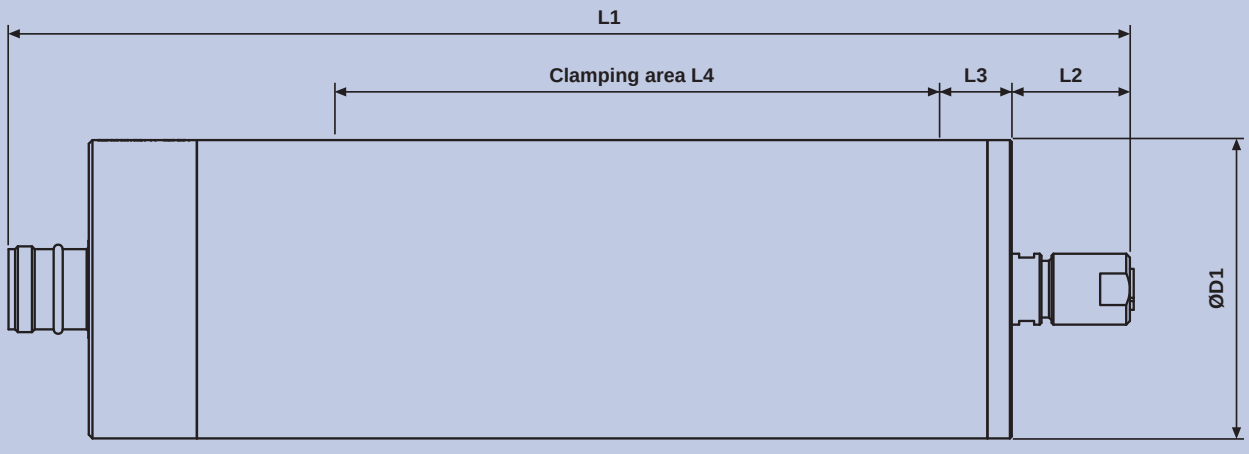
Standard accessories
3 m cable
2 chuck keys
1 collet in any dimension (specify Ø on order)

Drive unit
Frequency converter, stand alone unit : ***SF 3000***
Frequency converter for installation : ***CDA-3,0***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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	Ø8,0

Spindle type	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 cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 33

Water-cooled, oil mist lubricated spindle intended for building into machines, where power, wide speed range and low noise levels are essential. S 33 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.

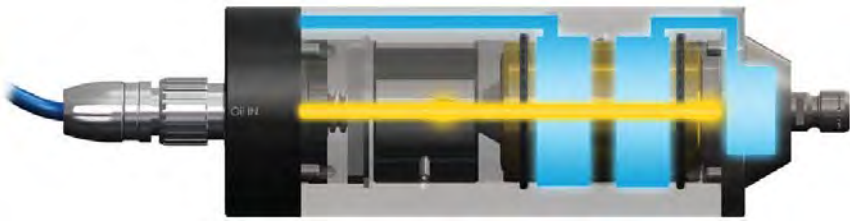
Appearance

S 33

Up to 75 000 RPM and 1,2 KW

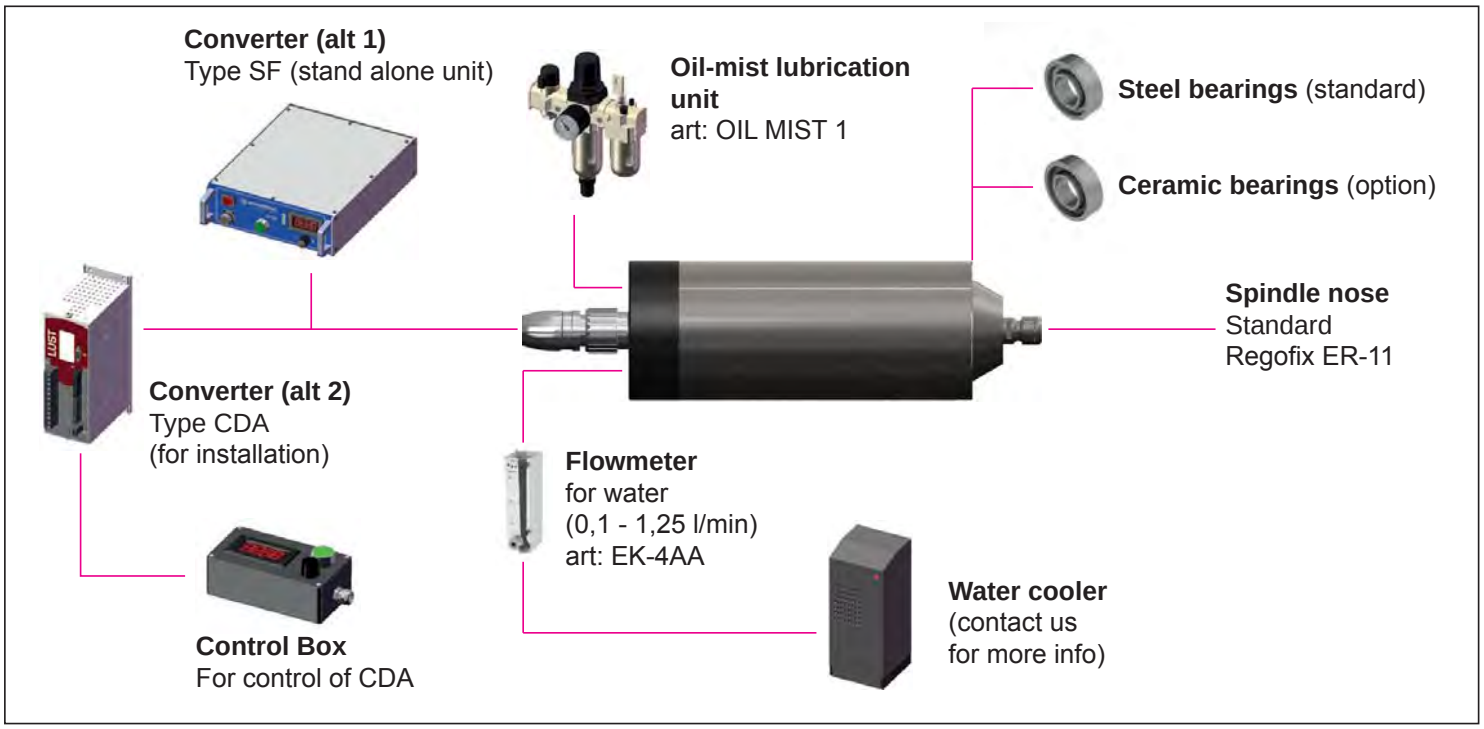
Housing:
Stainless steel
Cooling:
Water
Ball bearings:
Spring preloaded, Oil-mist lubricated, high precision angular contact bearings.
Electrical connection:
6-pole contact with PTC via frequency converter
Rotation direction:
Both directions available
Water connection:
In- and outlet (R1/8”)
Oil-mist connection:
Inlet (R1/8”)

Oil-mist lubrication
of the ball bearings



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

Application overview



Standard accessories

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

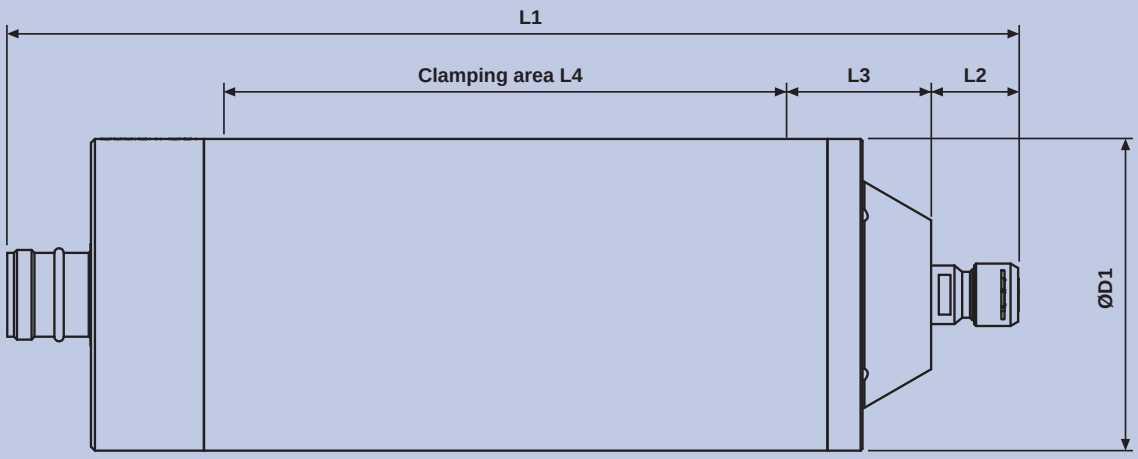
Drive unit

Frequency converter, stand alone unit : ***SF 1500***
Frequency converter for installation : ***CDA-1,5***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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	Ø7,0

Spindle type	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

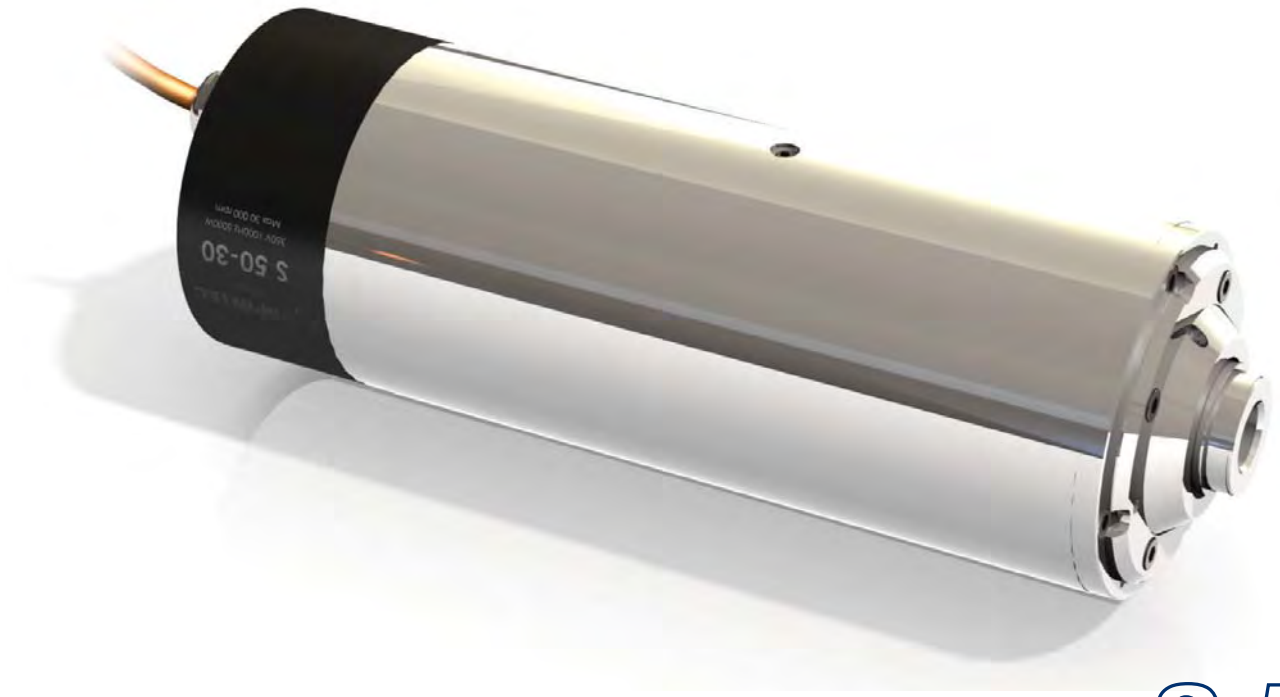


* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.

Water-cooled spindles

S 50

Water-cooled, oil mist lubricated spindle intended for building into machines, where high power, wide speed range and low noise levels are essential. S 50 is designed and manufactured with highest precision and accuracy which makes it optimal for internal grinding etc.



Appearance

S 50

Up to 30 000 RPM and 5,0 KW

Housing:	
Stainless steel	
Cooling:	
Water	
Ball bearings:	
Spring preloaded, Oil-mist lubricated, high precision angular contact bearings.	
Electrical connection:	
6-pole contact with PTC via frequency converter	
Rotation direction:	
Both directions available	
Water connection:	
In- and outlet (R1/8”)	
Oil-mist connection:	
Inlet (R1/8”)	

Oil-mist lubrication
of the ball bearings

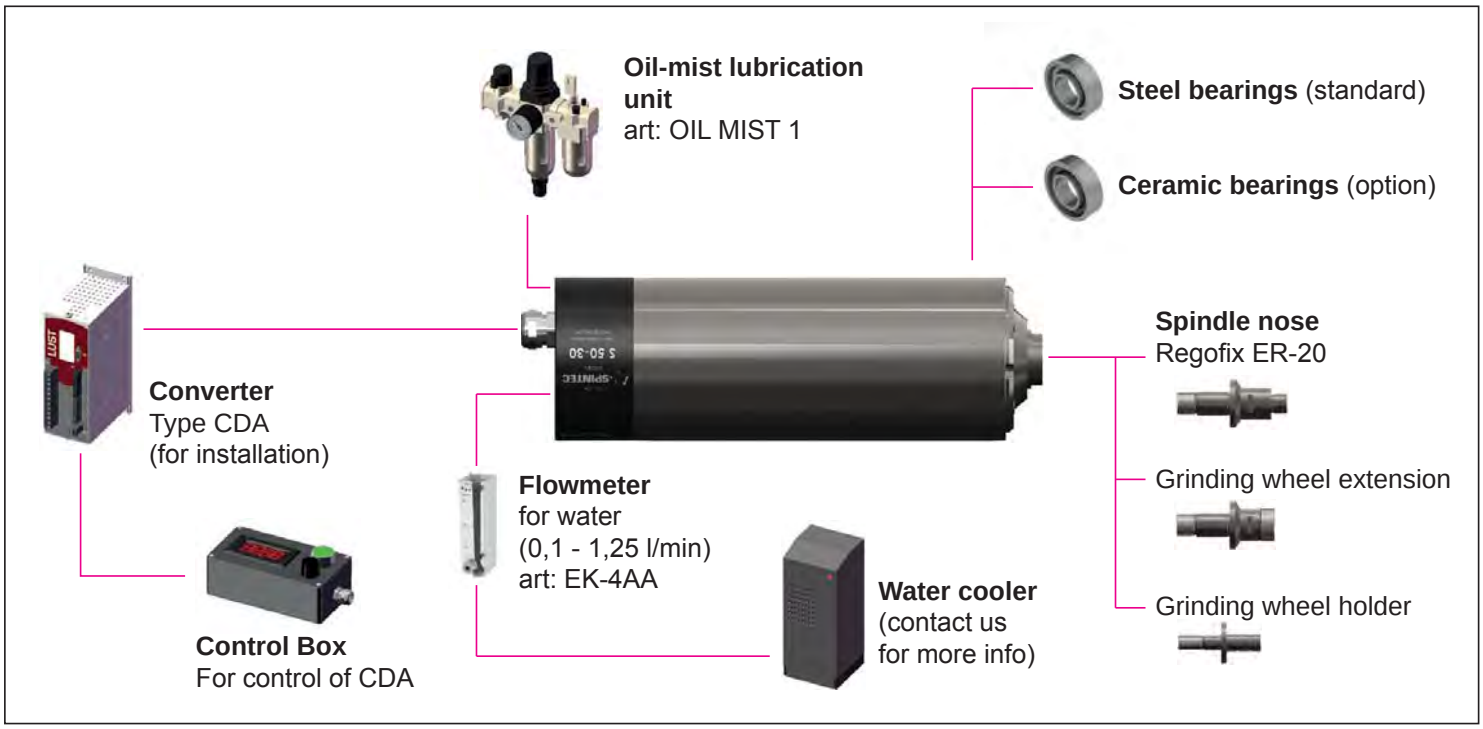
Efficient water-cooling over
the the whole spindle housing

Regofix nose ER-20

Grinding wheel extenstion

Grinding wheel holder

Application overview



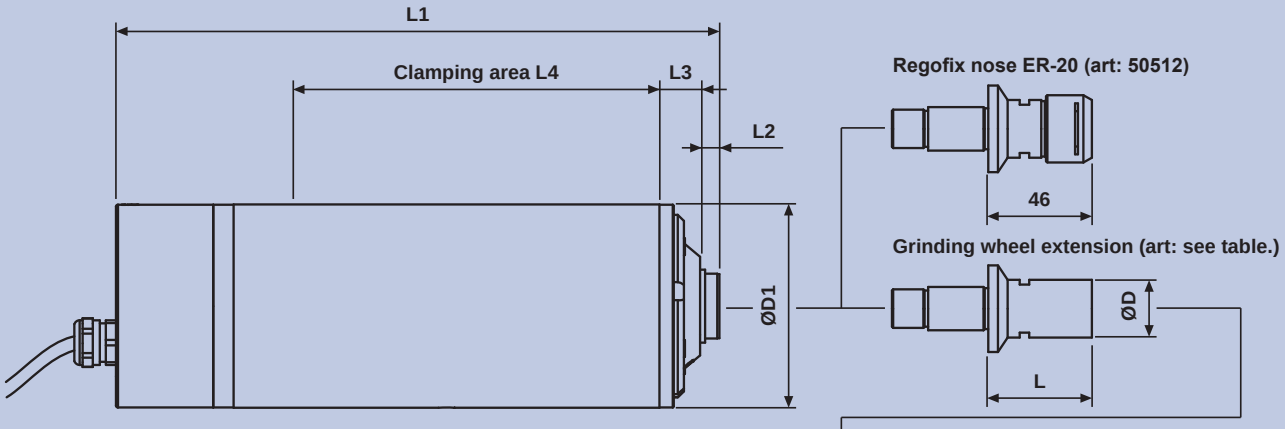
Standard accessories
3 m cable

Drive unit
Frequency converter for installation : ***CDA-5,5***
Control Box for control of CDA : ***CONTROL BOX***

Technical specifications

Spindle type	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 **

Spindle type	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



Grinding wheel extension

Art.nr	L	ØD
50452-16-20	20	16
50452-16-40	40	16
50452-16-70	70	16
50452-16-100	100	16
50452-24-20	20	24
50452-24-40	40	24
50452-24-70	70	24
50452-24-100	100	24

Grinding wheel holder

Art.nr	ØD	ØD1	ØD2	L
50455-8-6 *	6	8	M6	15
50455-8-10 *	10	8	M6	15
50455-8-13	13	8	M6	15
50455-10-10	10	10	M8	20
50455-10-13	13	10	M8	20
50455-10-16	16	10	M8	20
50455-10-20	20	10	M8	20

* suitable for 50452-16-...

* The cooling-flow between the spindle and the flowmeter may vary depending on various conditions.
** Selectable option, not included with the spindle.

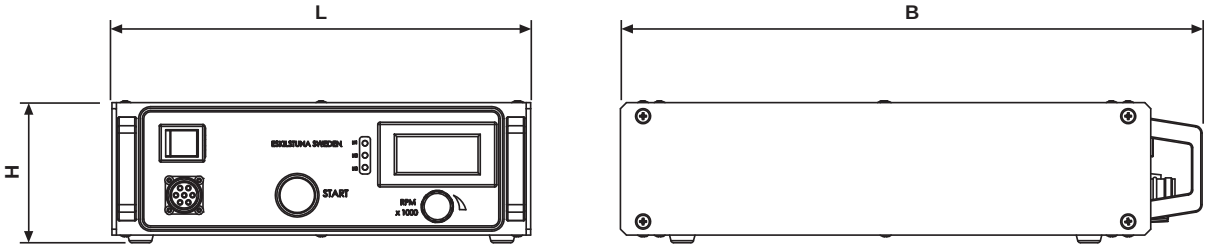
Frequency converters

Type SF (stand alone unit)

Static frequency converter for variable speed control of SPV Spintec's spindle- and motor series. These converters are built using the latest developments and technology regarding circuit design for optimal use of the spindles at different speed ranges. The frequency converters has various built in functions such as electronic over current protection and excess temperature control circuits for the spindles / motors. Acceleration- and deceleration time are regulated. Remote start / stop functions and speed regulation is built in. There is also a possibility to connect a PC through an RS-232 interface. The display on the front panel shows the set RPM.

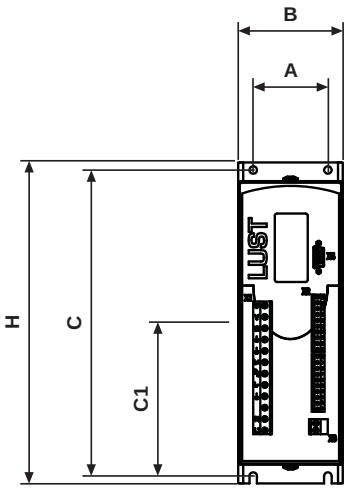
Technical specifications

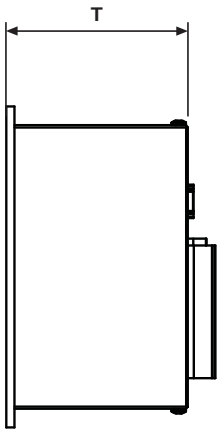
Frequency converter, model		SF 700	SF 1500	SF 3000
Voltage input		1-ph 50/60 Hz 230 V	1-ph 50/60 Hz 230 V	3-ph 50/60 Hz 400 V
Fuse		10 Ampere	10 Ampere	----
Output effect, max		750 W	1500 W	3000 W
Frequency range		0 - 1500 Hz	0 - 1500 Hz	0 - 1500 Hz
Voltage output		3-ph, 0 - 220 V	3-ph, 0 - 220 V	3-ph, 0 - 380 V
RPM range		0 - 90 000 RPM	0 - 54 000 RPM	0 - 75 000 RPM
Dimensions	L	280 mm	280 mm	435 mm
	B	385 mm	385 mm	345 mm
	H	95 mm	95 mm	95 mm
Weight		4,5 kg	5,0 kg	8,5 kg



Typ CDA (for installation)

Static frequency converters for variable speed control of the SPV Spintec spindle and motor series. These converters are designed and developed with modern components and according to recent findings regarding circuit solutions for optimum utilization of the spindles at different speeds. The converters have a number of features such as overload protection, thermal control of the motor and acceleration / deceleration control. In addition, there are built-in capabilities for remote start / stop, speed control and possibility of PC-connection via the RS 232 interface. The CONTROL-BOX (option) manages the simple operations such as start / stop and speed control while the display shows, shows the set speed.





Technical specifications

Frequency converter, model		CDA-0,75-1	CDA-1,5-1	CDA-3,0-3	CDA-5,5-3
Voltage input		1-ph 50/60 Hz 230 V	1-ph 50/60 Hz 230 V	3-ph 50/60 Hz 400 V	3-ph 50/60 Hz 400 V
Output effect, max		750 W	1500 W	3000 W	5500 W
Frequency range		0 - 1500 Hz	0 - 1500 Hz	0 - 1500 Hz	0 - 1500 Hz
Voltage output		3-ph, 0 - 220 V	3-ph, 0-220 V	3-ph, 0 - 380 V	3-ph, 0 - 380 V
RPM range		0 - 90 000 RPM	0 - 54 000 RPM	0 - 75 000 RPM	0 - 30 000 RPM
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 ControlBox 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 Keypad you can easily change program and adjust the parameters in the frequency converter. All data is saved then easily downloaded on a SmartCard.

Accessories

Collets type Spintec 10 and 17

Collet Ø mm	Spintec typ 10	Spintec typ 17
3,0	■	■
4,0	■	■
6,0		■
8,0		■

Grinding wheel extension for Spintec 17 nose

Spindle nose / extension mm	Screw M4	Screw M5	Screw M6	Screw M8
17 / 20	■	■	■	■
17 / 40	■	■	■	■
17 / 70	■	■	■	■

Collets type Regofix ER

Regofix size type	Width Ø mm	Length mm	Capacity Ø mm	Clamping width 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 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

Suitable for spindles equipped with spindle nose type ER

Key for high speed nut Regofix

Key art.no	Width Ø mm	Length mm
ER-8 EMS	19,0	76
ER-11 EMS	22,0	10
ER-16 EMS	33,0	130
ER-20 EMS	42,0	140

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

Art: EK-6273

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

Art: EK-4AA

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

Art: OIL MIST1

Special oil for oil-mist lubrication, 1 liter

Art: P-036997

System cleaner for cleaning of water-cooled spindles, 1 liter. 3 % is mixed with water.

Art: SWISSCARE SC

Corrosion protection concentrate, for watercooled spindles, 1 liter. 5% is mixed with water.

Art: COOLANT-F

Water-cooling units for spindles: S 20, S 21, S 28, S 30, S 33, S 44 and S 50

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

Contact us for more information.

Deburring machine DB-Matic

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 amout of different settings for application of the workpiece. Length, turn and angular settings enables deburring of many different types of gear wheels etc. All settings are infinite and very easy to access.

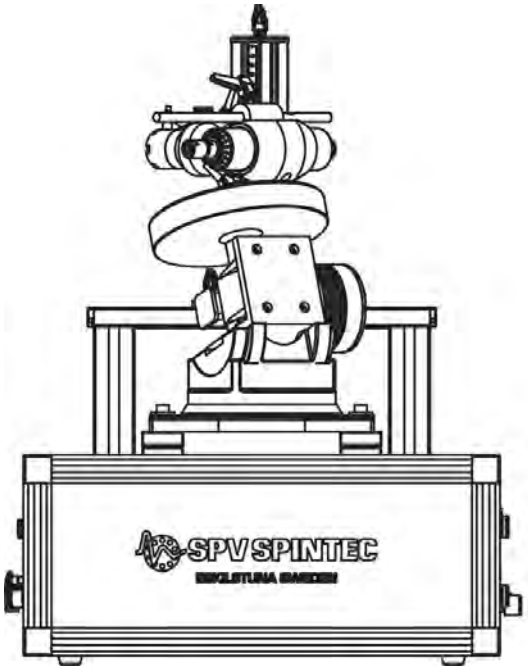
Integration and automation
For quick and easy integration in a robotic cell or automation process the DB-Matic is prepared to be able to comunicate with a superior control system.

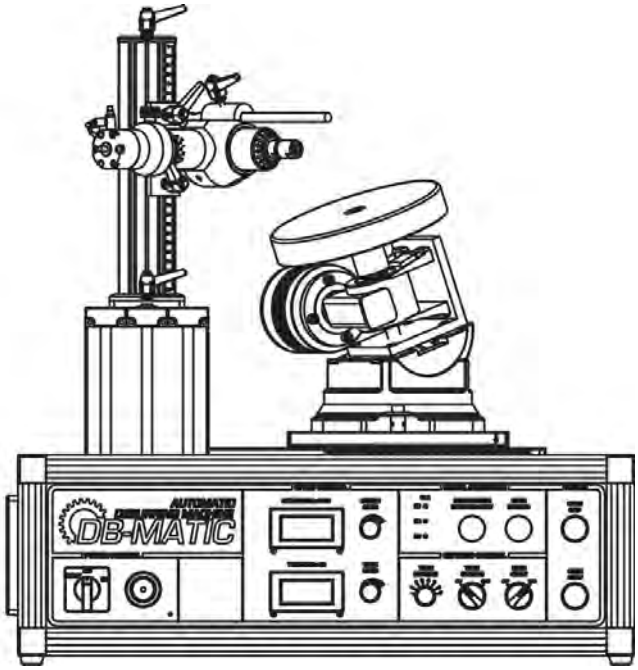
Uncomplicated operation
The control panel is designad for easy operation, but even so it has an many different settings. For example a choice between right or left rotation, the amount of machining cycles and infinite adjustable speed for both the spindle and workpiece.

- For deburring of gear wheels, splines and other symmetrical parts.
- **Infinite adjustable in length, height and processing angle makes it** easy to adapt the process for many different parts.
- Deburring spindle VM-17 RP with a maximum speed of 54.000 RPM.
- **Easy setting of the machining cycle. Infinite adjustment of the speed** for both the spindle and the workpiece.

Deburring machine DB-Matic

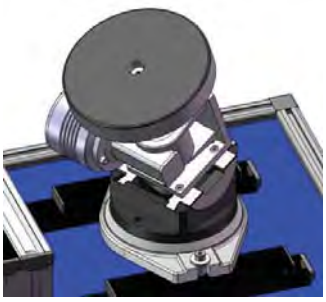
Technical specifications

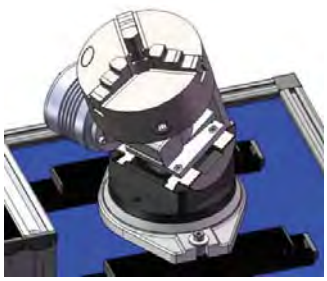




Data					
Dimensions	Weight	Temperature range	Input voltage	Frequency	Fuse
L 700 mm	45 kg	+5°C till +45°C	230 V AC	50 / 60 Hz	6 A (T)
B 700 mm					
H 600 mm					

Data					
Compr. air input	Air consumption	Air hose input	Noise level	Max effect spindle	Max speed spindle
5 - 8 Bar	75 - 100 l / min	Ø6,0 mm	ca 85 db	0,4 KW	54 000 RPM
			(in process)		





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 automatic cell etc.

Customized options

As options for the workpice 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.

JAHRLS QUICK-CHANGE CHUCKS

JAHRLS quick-change chucks

Self locking quick-change chuck

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.

Tool change can occur with both stopped and rotating 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 set locks in three of the six semispherical recesses and transfers the torque.

Properties:

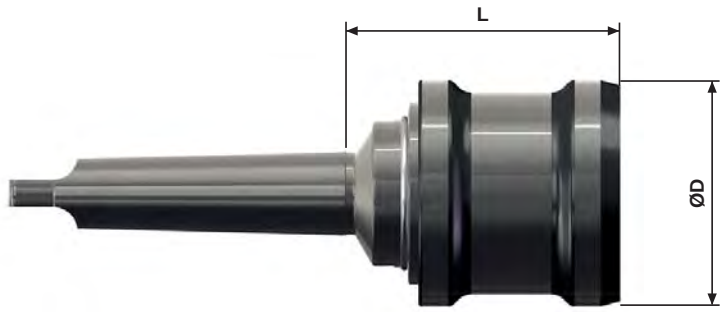
- The inserts are absolutely stuck.
- Runout accuracy better than 0,01 mm.
- Minimum space required for changing tool thanks to the possibility of oblique insertion.
- For both left- and righthanded tools.
- Works in any spindle position (vertical, horizontal, etc.).

One-hand chuck - type 80-4E

A variant of the chuck that has been simplified even further.

- The tool 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.

JAHRLS quick-change chucks

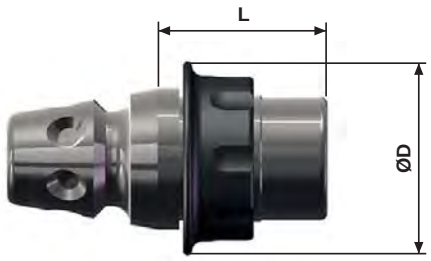


Quick-change chuck Jahrls

With Morse Taper

Type size	Mount, taper	L mm	ØD mm	Article number
80-3	MK 3	77	65	95143
80-3	MK 4	76	65	95145
80-4E *	MK 4	93,5	83	95429
80-4E *	MK 5	91	83	98220

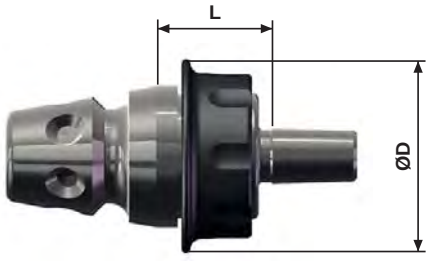
* One-hand chuck



Inserts Jahrls

For tools with Morse Taper

Type size	Internal taper	L mm	ØD mm	Article number
80-3	MK 1	29	52	95164
80-3	MK 2	29	52	95165
80-3	MK 3	43	52	95166
80-4	MK 1	34	63	95167
80-4	MK 2	34	63	95168
80-4	MK 3	34	63	95169
80-4	MK 4	65	63	95170



Inserts Jahrls

For chucks / holders with internal B-taper

Type size	External taper	L mm	ØD mm	Article number
80-3	B16	33	52	95187
80-4	B16	38	63	95189

NOTES

COMPANY INFORMATION

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