

# Hydraulic Chucks



# INDEX

**Introduction** 2 - 9

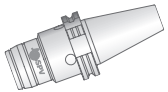
**Index / Quick facts** 2 - 3

**System introduction / Example Hydraulic chucks** 4 - 5

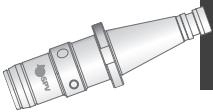
**Facts about SPV SPINTEC milling membrane [+]** 6 - 7

**Options - Quick-set, Fine balancing, Torque table** 8

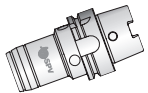
**Handeling, Maintenance, Tool shank info** 9



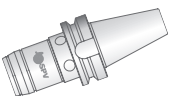
**Hydraulic chucks - CAT [inch] Form AD/B** 10 - 18



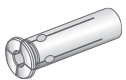
**Hydraulic chucks - CAT [mm] Form AD/B** 16 - 24



**Hydraulic chucks - HSK-A** 25 - 31



**Hydraulic chucks - BT-MAS** 32 - 37



**Reduction sleeves / Torque mandrel** 38

*We reserve the right to change the design, data and dimensions without prior notice.*

## QUICK FACTS ABOUT SPV SPINTEC HYDRAULIC CHUCKS

### Why you should use our Hydraulic chucks

- High clamping force.
- Runout accuracy better than 0,003 mm.
- Quick application method for tools.
- Balanced for 10.000 rpm as standard - can be supplied fine balanced up to 30.000 rpm.
- Available with quick length adjustment from side (Quick-set).
- Widest range of hydraulic chucks on the market. Available for all applications.

### Why you should use our Hydraulic chucks with milling membrane [+]

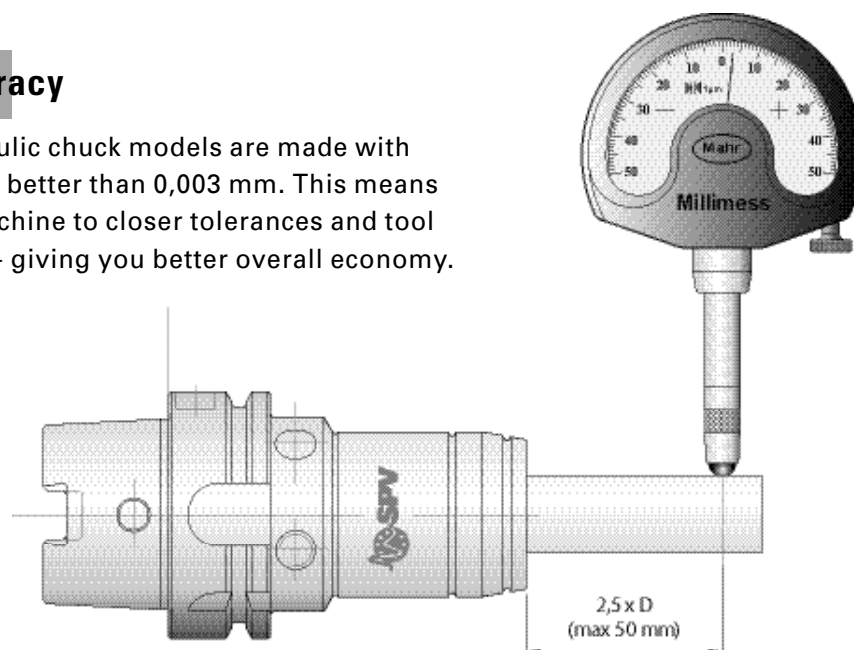
- They offer all the advantages of our standard Hydraulic chucks.
- Very stable tool fixing.
- Permits up to twice the recommended axial and radial cutting depths.
- Reduces vibration.

### SPV SPINTEC's Hydraulic chucks offer you:

- Increased tool life.
- Increased surface finish.
- Permits machining with much closer tolerances.
- Quicker and simpler tool changes.

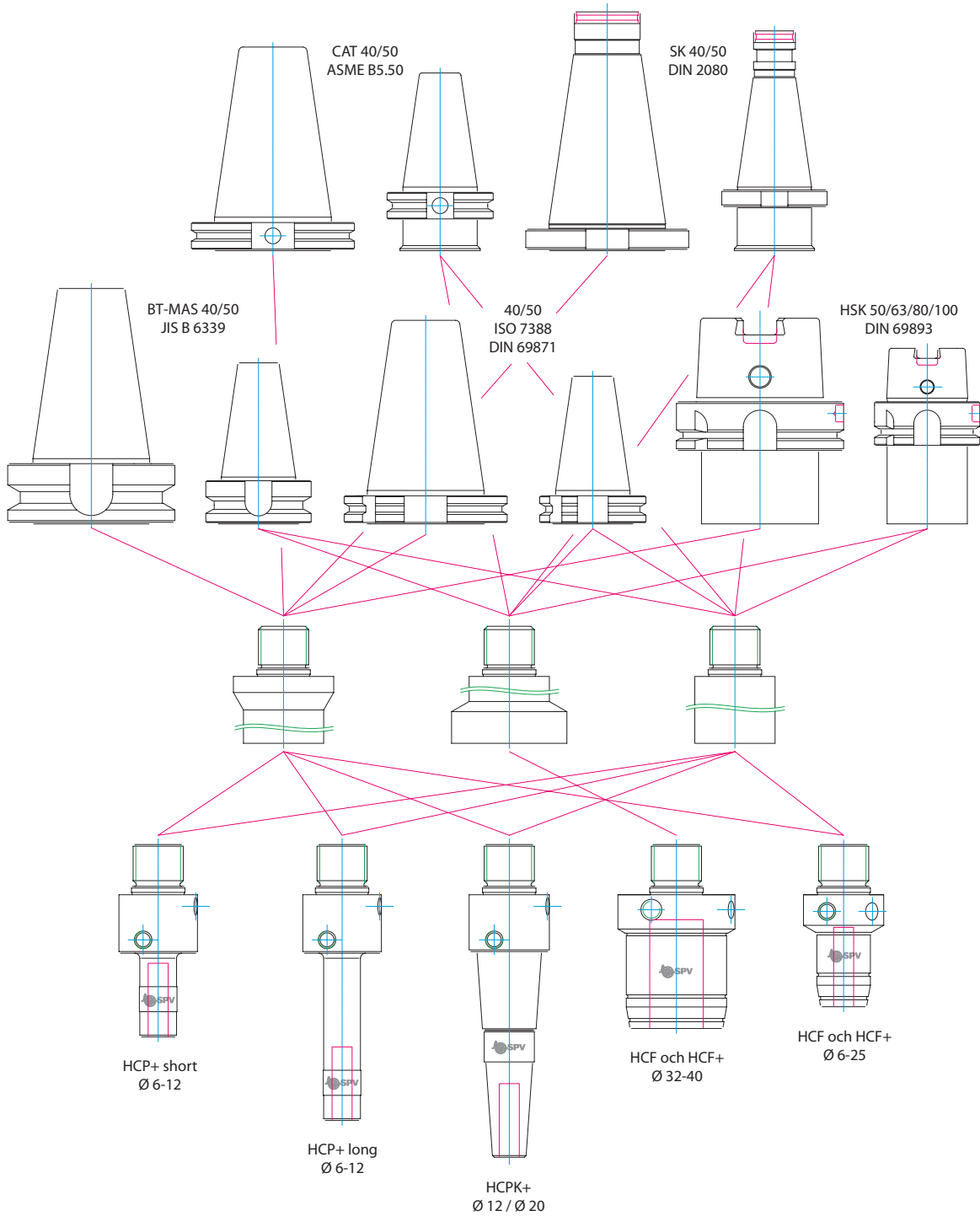
### Runout accuracy

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 life is extended - giving you better overall economy.



# SYSTEM SUMMARY

## Optional combinations for our Hydraulic chucks



# EXAMPLES OF DIFFERENT HYDRAULIC CHUCKS

Extended chuck  
HCFL, HCFL+



Extra short  
chuck  
HCK+



Short standard  
chuck  
HCF, HCF+



Tapered chuck  
HCPK+



Pin chuck  
HCP+



## MILLING MEMBRANE [+]

### Fact about Hydraulic chucks with milling membrane [+]

SPV SPINTEC's hexagonal milling membrane (+membrane) permits tough, 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

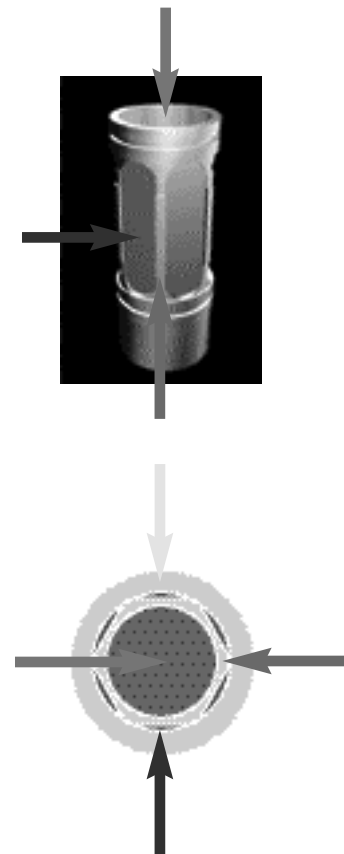
The limitation in the use of hydraulic chucks has frequently been the use of recommended cutting data for heavy duty milling. Customers have often been obliged to purchase specially shortened hydraulic milling chucks with increased torque when they have needed to remove a large amount of material in the shortest possible time.

We have eliminated this limitation and offers our customers the opportunity of using the newly-developed hydraulic milling chuck for both drilling and milling, which offers better overall economy.

#### Development - history

Development started when British Aerospace in England had problems with milling vibration, which lead to very short life for their expensive, solid metal cutters.

BA tried several commercially available retention systems but did not find a satisfactory solution. We then 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.*

#### **Light blue arrow**

*Tool (drill, cutter etc.)*

#### **Dark blue arrow**

*Milled 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 milled recesses creates – reinforcement ribs – which minimise vibration and stiffen the membrane.*

**Research**

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

The analysis showed a superior distribution of stress concentrations in the mathematical model of the hexagonal membrane, which explains the stable anchorage and its ability to minimise vibration during the machining process.

**Testing**

A trial was done in the spring of 2003 at SECO in Fagersta, 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 tool:

Sold 3-blade hard metal cutters, made by Jabro, with Tribon coating in dimensions Ø10, Ø12 and Ø20 mm.

Work piece:

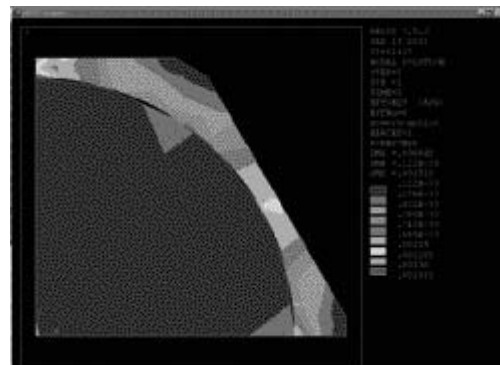
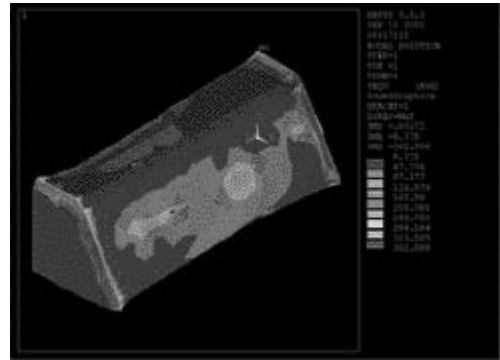
Square bar, 75x75 mm, made from heat treatable steel SS 2244-05, hardness 270-315 HB.

**Test summary**

The results show that 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 of Ø10, Ø12 and Ø20 mm can manage the cutting data in Jabro’s recommendation for coarse slab milling.
- 2x recommended axial cutting depth is quite OK, without any vibration arising that could damage the tool.
- 2x recommended radial cutting depth is quite OK.



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

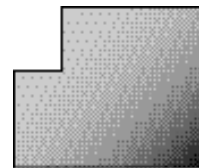
Recommended depth of cut:

axial = 1x tool diameter

radial = 0.4x tool diameter

This gives a chip area of:

$$1x D \text{ mm} \times 0.4x D \text{ mm} = 0.4x D \text{ mm}^2$$



**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:

$$2x D \text{ mm} \times 0.8x D \text{ mm} = 1.6x D \text{ mm}^2$$



## OPTION

### Quick-set and Fine balancing

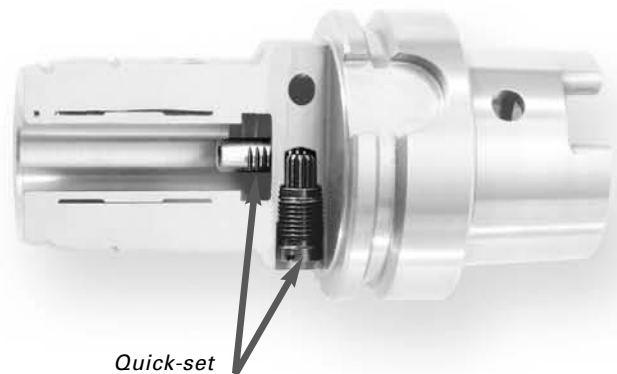
In most of our hydraulic chucks, it is possible to combine the standard version of the chuck with one or more optional features. In this way, you can design your hydraulic chucks to suit your needs.

**Q Quick-set**

Rapid tool length adjustment.  
Using this function, you can adjust tool length (up to 10 mm) with a key from the side of the chuck. The Quick-set is quick and easy to use, saves time, and offers high precision.

**G Fine balancing**

Supplementary balancing G 2.5 to SS-ISO 1940/1 up to 30.000 rpm, depending on size



When ordering, please specify Q or G, our part number, and rpm (rev/min) required.

**Quick-set sleeves, please refer to page 41**

Sleeves must also be equipped with the Quick-set function if you want to use Quick-set with reduction sleeves.

### Torque table

Tool dia. DS	HCF/HCF+	HCK+	HCP+	HCPK+
6	15 Nm		15 Nm	
8	20 Nm		20 Nm	
10	40 Nm		40 Nm	
12	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	1200 Nm		
40	1200 Nm			



## HANDELING, MAINTENANCE

### Operation of Hydraulic chucks

#### 1. 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.

#### 2. Tightening the hydraulic operation screw

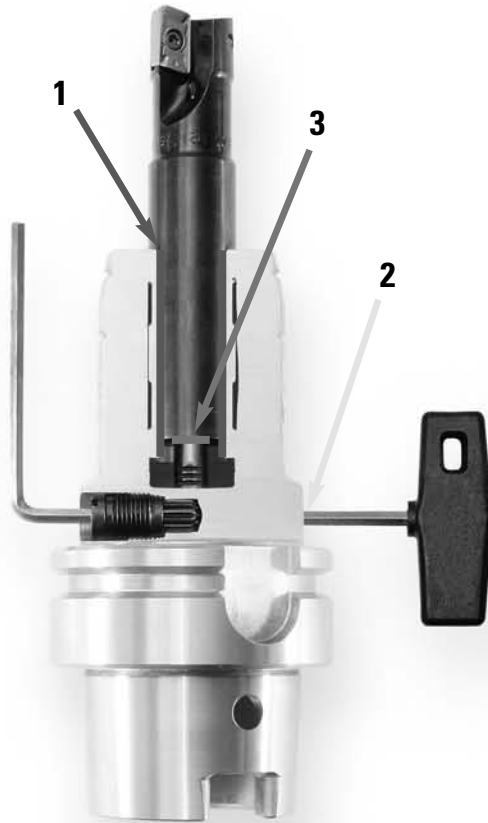
The screw must always be tightened to the fixed stop. Never tighten the screw without a tool in the chuck, since there is a risk that the hydraulic chamber could be deformed.

#### 3. 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.

#### 4. Working temperature

Ideal and optimised working temperature is between 20 and 50°C.



### Tool shank info

#### Standard chucks – type HCF / HCFL

In standard chucks from  $\varnothing$  6 to  $\varnothing$  20 mm, Weldon shanks can be used directly in the chuck.

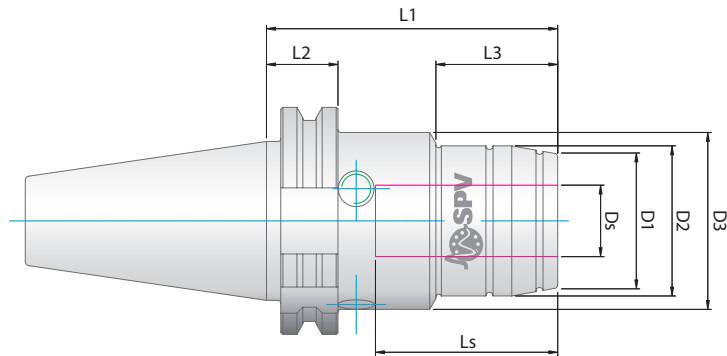
#### Chucks with milling membrane [+] – types HCF+ / HCFL+ / HCPK+ / HCP+ / HCK+

In chucks with milling membrane [+], only cylindrical shanks can be used directly in the chuck.

#### Other types of tool shank – all

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

# STANDARD CHUCK



## TYPE HCF standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	CAT 40	21,5	26	49,5	105	19,1	29,5	37,5	56580
	CAT 50	23,5	26	48	87	19,1	43,5	37,5	56790
	CAT 50	23,5	26	48	101,6	19,1	43,5	37,5	58600
5/16"	CAT 40	23,5	28	49,5	105	19,1	30	37,5	56581
	CAT 50	23,5	28	48	87	19,1	43,5	37,5	56791
	CAT 50	23,5	28	48	101,6	19,1	43,5	37,5	58601
3/8"	CAT 40	25,5	30	49,5	105	19,1	31	42,5	56582
	CAT 50	25,5	30	48	87	19,1	43,5	42,5	56792
	CAT 50	25,5	30	48	101,6	19,1	43,5	42,5	58602
1/2"	CAT 40	27,5	32	49,5	105	19,1	31,5	47,5	56583
	CAT 50	27,5	32	48	87	19,1	44,5	47,5	56793
	CAT 50	27,5	32	48	101,6	19,1	44,5	47,5	58603
5/8"	CAT 40	34,5	38	49,5	105	19,1	33	51	56584
	CAT 50	33,5	38	48	87	19,1	47,5	52,5	56794
	CAT 50	33,5	38	48	101,6	19,1	47,5	52,5	58604
3/4"	CAT 40	38	42	49,5	105	19,1	34	51	56585
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56795
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	58605
1"	CAT 40	43,5	48	48	109	19,1	71	55	56586
	CAT 50	43,5	48	48	91	19,1	71	55	56796
	CAT 50	43,5	48	48	105,6	19,1	71	55	58606
1 1/4"	CAT 40	55,5	60	70	118	19,1	57	65	56587
	CAT 50	55,5	60	70	100	19,1	57	65	56797
	CAT 50	55,5	60	70	114,6	19,1	57	65	58607

- Dimensions which can be used with reduction sleeves.  
CAT 45 tool diameters [DS] please enquire.

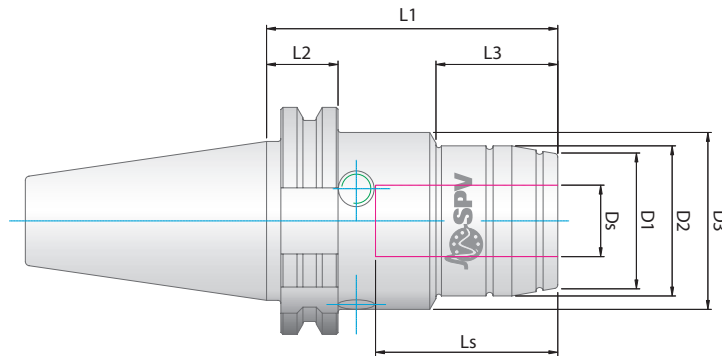
## OPTIONS FOR HCF

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

*type of tool shank, please refer to page 9*

## CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCF+ [milling membrane] standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	CAT 40	21,5	26	49,5	105	19,1	29,5	37,5	56580+
	CAT 50	23,5	26	48	87	19,1	43,5	37,5	56790+
	CAT 50	23,5	26	48	101,6	19,1	43,5	37,5	58600+
5/16"	CAT 40	23,5	28	49,5	105	19,1	30	37,5	56581+
	CAT 50	23,5	28	48	87	19,1	43,5	37,5	56791+
	CAT 50	23,5	28	48	101,6	19,1	43,5	37,5	58601+
3/8"	CAT 40	25,5	30	49,5	105	19,1	31	42,5	56582+
	CAT 50	25,5	30	48	87	19,1	43,5	42,5	56792+
	CAT 50	25,5	30	48	101,6	19,1	43,5	42,5	58602+
1/2"	CAT 40	27,5	32	49,5	105	19,1	31,5	47,5	56583+
	CAT 50	27,5	32	48	87	19,1	44,5	47,5	56793+
	CAT 50	27,5	32	48	101,6	19,1	44,5	47,5	58603+
5/8"	CAT 40	34,5	38	49,5	105	19,1	33	51	56584+
	CAT 50	33,5	38	48	87	19,1	47,5	52,5	56794+
	CAT 50	33,5	38	48	101,6	19,1	47,5	52,5	58604+
3/4"	CAT 40	38	42	49,5	105	19,1	34	51	56585+
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56795+
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	58605+
1"	CAT 40	43,5	48	48	109	19,1	71	55	56586+
	CAT 50	43,5	48	48	91	19,1	71	55	56796+
	CAT 50	43,5	48	48	105,6	19,1	71	55	58606+
1 1/4"	CAT 40	55,5	60	70	118	19,1	57	65	56587+
	CAT 50	55,5	60	70	100	19,1	57	65	56797+
	CAT 50	55,5	60	70	114,6	19,1	57	65	58607+

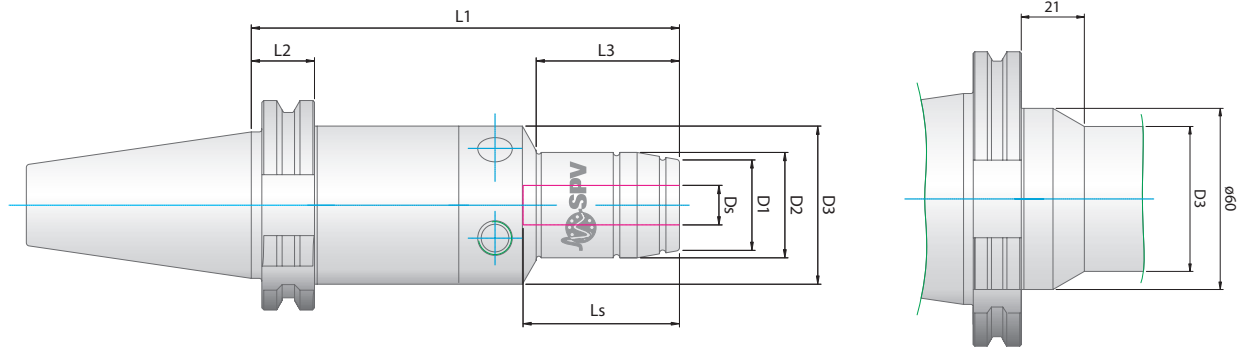
- Dimensions which can be used with reduction sleeves.  
CAT 45 tool diameters [DS] please enquire.

### OPTIONS FOR HCF+

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

## EXTENDED STANDARD CHUCK



ISO 50 design Ø6 - 25

### TYPE HCFL with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	CAT 40	23,5	26	48	145	19,1	43,5	37,5	56780
	CAT 40	23,5	26	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	26	48	152,4	19,1	43,5	37,5	56740
	CAT 50	23,5	26	48	152,4-445	19,1	43,5	37,5	▲
5/16"	CAT 40	23,5	28	48	145	19,1	43,5	37,5	56781
	CAT 40	23,5	28	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,1	43,5	37,5	56741
	CAT 50	23,5	28	48	152,4-445	19,1	43,5	37,5	▲
3/8"	CAT 40	25,5	30	48	145	19,1	43,5	42,5	56782
	CAT 40	25,5	30	48	145-480	19,1	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,1	43,5	42,5	56742
	CAT 50	25,5	30	48	152,4-445	19,1	43,5	42,5	▲
1/2"	CAT 40	27,5	32	48	145	19,1	44,5	47,5	56783
	CAT 40	27,5	32	48	145-480	19,1	44,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,1	44,5	47,5	56743
	CAT 50	27,5	32	48	152,4-445	19,1	44,5	47,5	▲
5/8"	CAT 40	33,5	38	48	145	19,1	47,5	52,5	56785
	CAT 40	33,5	38	48	145-480	19,1	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,1	47,5	52,5	56745
	CAT 50	33,5	38	48	152,4-445	19,1	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL** with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	CAT 40	37,5	42	48	145	19,1	47,5	52,5	56785
	CAT 40	37,5	42	48	145-480	19,1	47,5	52,5	▲
	CAT 50	37,5	42	48	152,4	19,1	47,5	52,5	56745
	CAT 50	37,5	42	48	152,4-445	19,1	47,5	52,5	▲
<b>1"</b>	CAT 40	43,5	48	48	149	19,1	114	55	56786
	CAT 40	43,5	48	48	149-480	19,1	-	55	▲
	CAT 50	43,5	48	48	156,4	19,1	144	55	56746
	CAT 50	43,5	48	48	156,4-445	19,1	-	55	▲
<b>1 1/4"</b>	CAT 40	55,5	60	70	158	19,1	141	65	56787
	CAT 40	55,5	60	70	158-480	19,1	-	65	▲
	CAT 50	55,5	60	70	160	19,1	141	65	56747
	CAT 50	55,5	60	70	160-445	19,1	-	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
CAT 45 tool diameters [DS] please enquire.

**OPTIONS FOR HCFL**

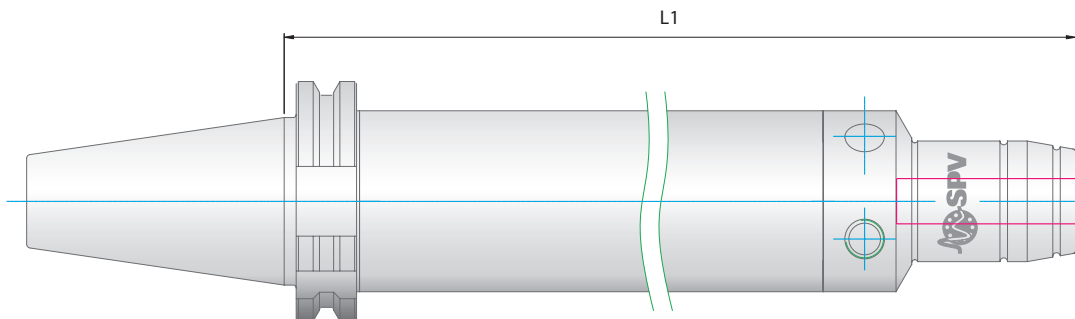
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL** any length L1 as table

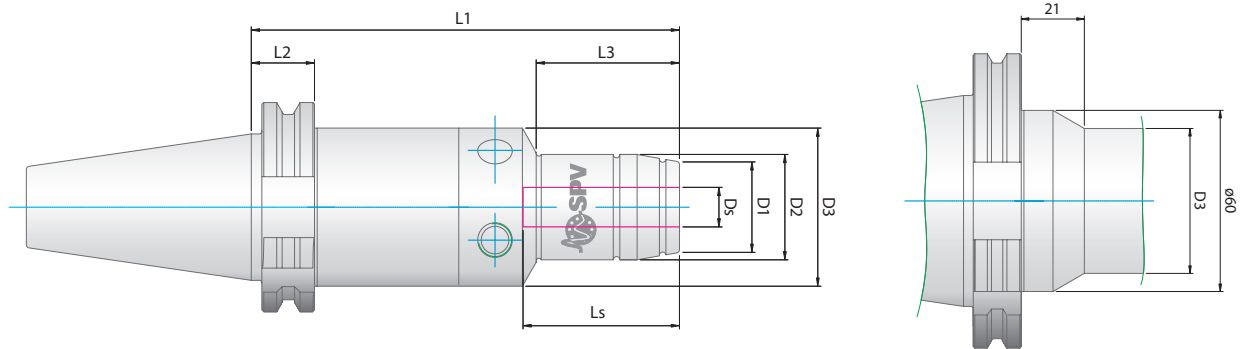
**Ordering example**

- ▲ CAT 40, Ø1/2", L1=290 mm, type HCFL Art.no.: 56783/290



type of tool shank, please refer to page 9

## EXTENDED CHUCK WITH MILLING MEMBRANE [+]



ISO 50 design Ø6 - 25

### TYPE HCFL+ [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	CAT 40	23,5	26	48	145	19,1	43,5	37,5	56780+
	CAT 40	23,5	26	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	26	48	152,4	19,1	43,5	37,5	56740+
	CAT 50	23,5	26	48	152,4-445	19,1	43,5	37,5	▲
5/16"	CAT 40	23,5	28	48	145	19,1	43,5	37,5	56781+
	CAT 40	23,5	28	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,1	43,5	37,5	56741+
	CAT 50	23,5	28	48	152,4-445	19,1	43,5	37,5	▲
3/8"	CAT 40	25,5	30	48	145	19,1	43,5	42,5	56782+
	CAT 40	25,5	30	48	145-480	19,1	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,1	43,5	42,5	56742+
	CAT 50	25,5	30	48	152,4-445	19,1	43,5	42,5	▲
1/2"	CAT 40	27,5	32	48	145	19,1	44,5	47,5	56783+
	CAT 40	27,5	32	48	145-480	19,1	44,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,1	44,5	47,5	56743+
	CAT 50	27,5	32	48	152,4-445	19,1	44,5	47,5	▲
5/8"	CAT 40	33,5	38	48	145	19,1	47,5	52,5	56784+
	CAT 40	33,5	38	48	145-480	19,1	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,1	47,5	52,5	56744+
	CAT 50	33,5	38	48	152,4-445	19,1	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL+** [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	CAT 40	37,5	42	48	145	19,1	47,5	52,5	56785+
	CAT 40	37,5	42	48	145-480	19,1	47,5	52,5	▲
	CAT 50	37,5	42	48	152,4	19,1	47,5	52,5	56745+
	CAT 50	37,5	42	48	152,4-445	19,1	47,5	52,5	▲
<b>1"</b>	CAT 40	43,5	48	48	149	19,1	114	55	56786+
	CAT 40	43,5	48	48	149-480	19,1	-	55	▲
	CAT 50	43,5	48	48	156,4	19,1	144	55	56746+
	CAT 50	43,5	48	48	156,4-445	19,1	-	55	▲
<b>1 1/4"</b>	CAT 40	55,5	60	70	158	19,1	141	65	56787+
	CAT 40	55,5	60	70	158-480	19,1	-	65	▲
	CAT 50	55,5	60	70	160	19,1	141	65	56747+
	CAT 50	55,5	60	70	160-445	19,1	-	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
CAT 45 tool diameters [DS] please enquire.

**OPTIONS FOR HCFL+**

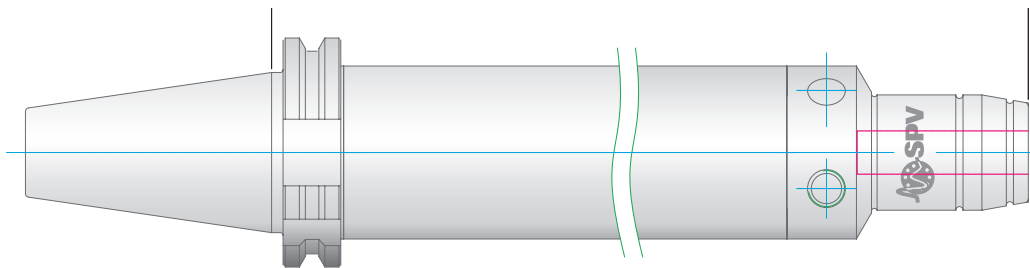
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL+** [milling membrane] any length L1 as table

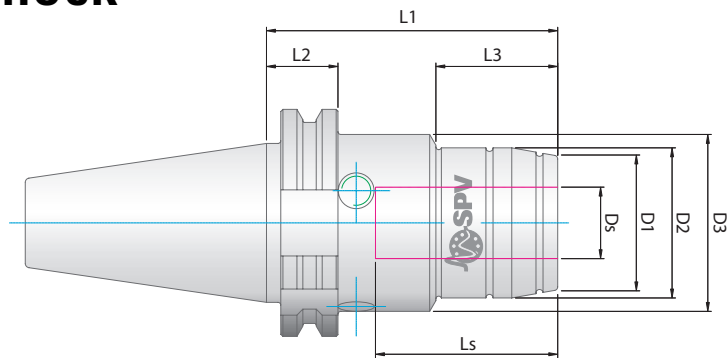
**Ordering example**

- ▲ CAT 40, Ø1/2", L1=290 mm, type HCFL+ Art.no.: 56783+/290



type of tool shank, please refer to page 9

# STANDARD CHUCK



## TYPE HCF standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	L5	ART.NO.
6	CAT 40	21,5	26	49,5	105	19,1	29,5	37,5	56470
	CAT 50	23,5	26	48	87	19,1	43,5	37,5	56490
	CAT 50	23,5	26	48	101,6	19,1	43,5	37,5	56480
8	CAT 40	23,5	28	49,5	105	19,1	30	37,5	56471
	CAT 50	23,5	28	48	87	19,1	43,5	37,5	56491
	CAT 50	23,5	28	48	101,6	19,1	43,5	37,5	56481
10	CAT 40	25,5	30	49,5	105	19,1	31	42,5	56472
	CAT 50	25,5	30	48	87	19,1	43,5	42,5	56492
	CAT 50	25,5	30	48	101,6	19,1	43,5	42,5	56482
12	CAT 40	27,5	32	49,5	105	19,1	31,5	47,5	56473
	CAT 50	27,5	32	48	87	19,1	44,5	47,5	56493
	CAT 50	27,5	32	48	101,6	19,1	44,5	47,5	56483
14	CAT 40	34,5	38	49,5	105	19,1	33	51	56474
	CAT 50	33,5	38	48	87	19,1	47,5	52,5	56494
	CAT 50	33,5	38	48	101,6	19,1	47,5	52,5	56484
16	CAT 40	38	42	49,5	105	19,1	34	51	56475
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56495
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56485
18	CAT 40	38	42	49,5	105	19,1	34	51	56476
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56496
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56486
20	CAT 40	38	42	49,5	105	19,1	34	51	56477
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56497
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56487
25	CAT 40	43,5	48	48	109	19,1	71	55	56478
	CAT 50	43,5	48	48	91	19,1	71	55	56498
	CAT 50	43,5	48	48	105,6	19,1	71	55	56488
32	CAT 40	55,5	60	70	123	19,1	57	65	56497
	CAT 50	55,5	60	70	100	19,1	57	65	56799
	CAT 50	55,5	60	70	114,6	19,1	57	65	56489

- Dimensions which can be used with reduction sleeves.  
CAT 45 tool diameters [DS] please enquire.

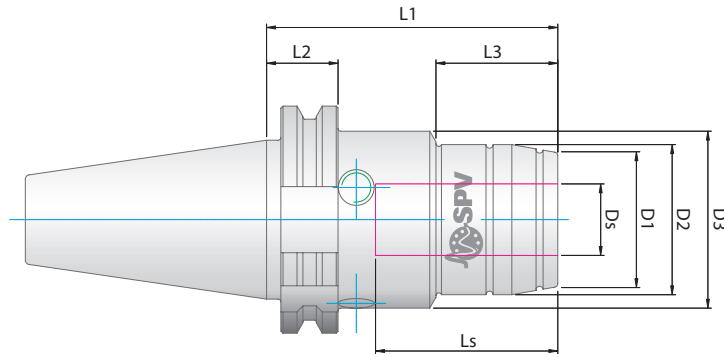
## OPTIONS FOR HCF

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
  - G** Supplementary balancing up to 30.000 rpm, depending on size
- Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

*type of tool shank, please refer to page 9*



## CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCF+ [milling membrane] standard length

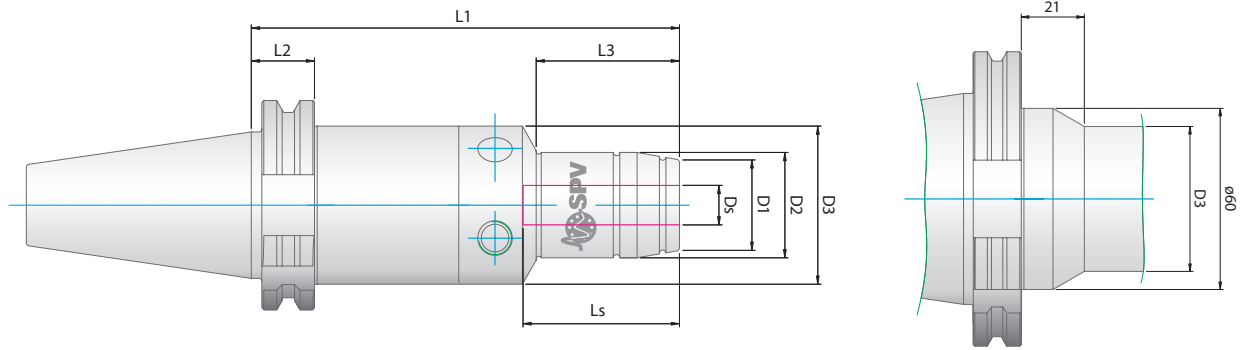
DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
6	CAT 40	21,5	26	49,5	105	19,1	29,5	37,5	56470+
	CAT 50	23,5	26	48	87	19,1	43,5	37,5	56490+
	CAT 50	23,5	26	48	101,6	19,1	43,5	37,5	56480+
8	CAT 40	23,5	28	49,5	105	19,1	30	37,5	56471+
	CAT 50	23,5	28	48	87	19,1	43,5	37,5	56491+
	CAT 50	23,5	28	48	101,6	19,1	43,5	37,5	56481+
10	CAT 40	25,5	30	49,5	105	19,1	31	42,5	56472+
	CAT 50	25,5	30	48	87	19,1	43,5	42,5	56492+
	CAT 50	25,5	30	48	101,6	19,1	43,5	42,5	56482+
12	CAT 40	27,5	32	49,5	105	19,1	31,5	47,5	56473+
	CAT 50	27,5	32	48	87	19,1	44,5	47,5	56493+
	CAT 50	27,5	32	48	101,6	19,1	44,5	47,5	56483+
14	CAT 40	34,5	38	49,5	105	19,1	33	51	56474+
	CAT 50	33,5	38	48	87	19,1	47,5	52,5	56494+
	CAT 50	33,5	38	48	101,6	19,1	47,5	52,5	56484+
16	CAT 40	38	42	49,5	105	19,1	34	51	56475+
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56495+
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56485+
18	CAT 40	38	42	49,5	105	19,1	34	51	56476+
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56496+
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56486+
20	CAT 40	38	42	49,5	105	19,1	34	51	56477+
	CAT 50	37,5	42	48	87	19,1	47,5	52,5	56497+
	CAT 50	37,5	42	48	101,6	19,1	47,5	52,5	56487+
25	CAT 40	43,5	48	48	109	19,1	71	55	56478+
	CAT 50	43,5	48	48	91	19,1	71	55	56498+
	CAT 50	43,5	48	48	105,6	19,1	71	55	56488+
32	CAT 40	55,5	60	70	123	19,1	57	65	56497+
	CAT 50	55,5	60	70	100	19,1	57	65	56799+
	CAT 50	55,5	60	70	114,6	19,1	57	65	56489+

- Dimensions which can be used with reduction sleeves.  
CAT 45 tool diameters [DS] please enquire.

### OPTIONS FOR HCF+

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
  - G** Supplementary balancing up to 30.000 rpm, depending on size
- Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

## EXTENDED STANDARD CHUCK



CAT 50 design Ø6 - 25

### TYPE HCFL with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>6</b>	CAT 40	23,5	26	48	145	19,1	43,5	37,5	56600
	CAT 40	23,5	26	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	26	48	152,4	19,1	43,5	37,5	56610
	CAT 50	23,5	26	48	152,4-445	19,1	43,5	37,5	▲
<b>8</b>	CAT 40	23,5	28	48	145	19,1	43,5	37,5	56601
	CAT 40	23,5	28	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,1	43,5	37,5	56611
	CAT 50	23,5	28	48	152,4-445	19,1	43,5	37,5	▲
<b>10</b>	CAT 40	25,5	30	48	145	19,1	43,5	42,5	56602
	CAT 40	25,5	30	48	145-480	19,1	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,1	43,5	42,5	56612
	CAT 50	25,5	30	48	152,4-445	19,1	43,5	42,5	▲
<b>12</b>	CAT 40	27,5	32	48	145	19,1	44,5	47,5	56603
	CAT 40	27,5	32	48	145-480	19,1	44,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,1	44,5	47,5	56613
	CAT 50	27,5	32	48	152,4-445	19,1	44,5	47,5	▲
<b>14</b>	CAT 40	29,5	34	48	145	19,1	47,5	52,5	56604
	CAT 40	29,5	34	48	145-480	19,1	47,5	52,5	▲
	CAT 50	29,5	34	48	152,4	19,1	47,5	52,5	56614
	CAT 50	29,5	34	48	152,4-445	19,1	47,5	52,5	▲
<b>16</b>	CAT 40	33,5	38	48	145	19,1	47,5	52,5	56605
	CAT 40	33,5	38	48	145-480	19,1	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,1	47,5	52,5	56615
	CAT 50	33,5	38	48	152,4-445	19,1	47,5	52,5	▲
<b>18</b>	CAT 40	35,5	40	48	145	19,1	47,5	52,5	56606
	CAT 40	35,5	40	48	145-480	19,1	47,5	52,5	▲
	CAT 50	35,5	40	48	152,4	19,1	47,5	52,5	56616
	CAT 50	35,5	40	48	152,4-445	19,1	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL** with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>20</b>	CAT 40	37,5	42	48	145	19,1	47,5	52,5	56607
	CAT 40	37,5	42	48	145-480	19,1	47,5	52,5	▲
	CAT 50	37,5	42	48	152,4	19,1	47,5	52,5	56617
	CAT 50	37,5	42	48	152,4-445	19,1	47,5	52,5	▲
<b>25</b>	CAT 40	43,5	48	48	149	19,1	114	55	56608
	CAT 40	43,5	48	48	149-480	19,1	-	55	▲
	CAT 50	43,5	48	48	156,4	19,1	144	55	56618
	CAT 50	43,5	48	48	156,4-445	19,1	-	55	▲
<b>32</b>	CAT 40	55,5	60	70	158	19,1	141	65	56609
	CAT 40	55,5	60	70	158-480	19,1	-	65	▲
	CAT 50	55,5	60	70	160	19,1	141	65	56619
	CAT 50	55,5	60	70	160-445	19,1	-	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
CAT 45 tool diameters [DS] please enquire.

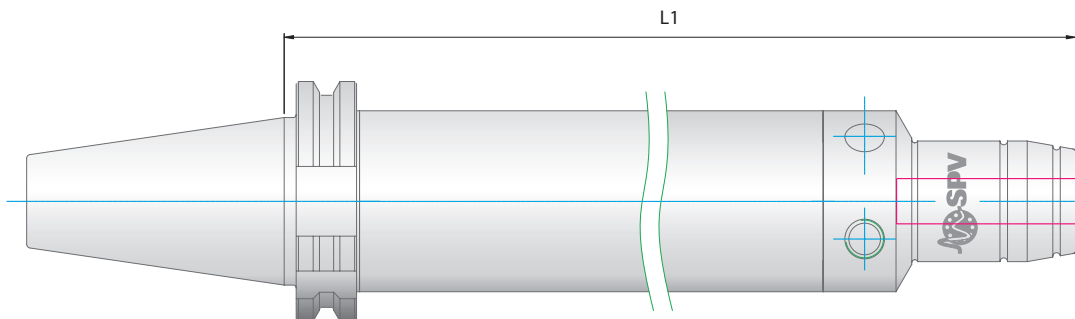
**OPTIONS FOR HCFL**

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
  - G** Supplementary balancing up to 30.000 rpm, depending on size
- 
- Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.
- 

**EXTRA LONG CHUCKS HCFL** any length L1 as table

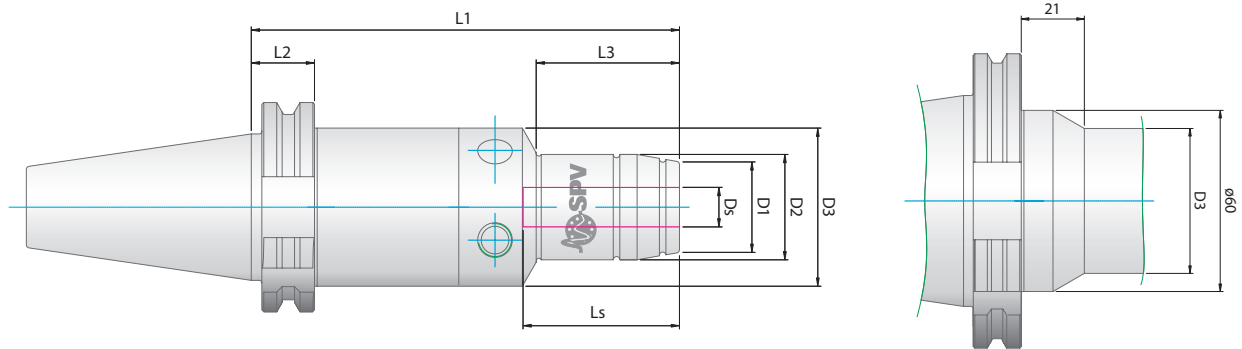
**Ordering example**

- ▲ CAT 40, Ø20, L1=290 mm, type HCFL Art.no.: 56607/290



type of tool shank, please refer to page 9

## EXTENDED CHUCK WITH MILLING MEMBRANE [+]



CAT 50 design Ø6 - 25

### TYPE HCFL+ [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>6</b>	CAT 40	23,5	26	48	145	19,1	43,5	37,5	56600+
	CAT 40	23,5	26	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	26	48	152,4	19,1	43,5	37,5	56610+
	CAT 50	23,5	26	48	152,4-445	19,1	43,5	37,5	▲
<b>8</b>	CAT 40	23,5	28	48	145	19,1	43,5	37,5	56601+
	CAT 40	23,5	28	48	145-480	19,1	43,5	37,5	▲
	CAT 50	23,5	28	48	152,4	19,1	43,5	37,5	56611+
	CAT 50	23,5	28	48	152,4-445	19,1	43,5	37,5	▲
<b>10</b>	CAT 40	25,5	30	48	145	19,1	43,5	42,5	56602+
	CAT 40	25,5	30	48	145-480	19,1	43,5	42,5	▲
	CAT 50	25,5	30	48	152,4	19,1	43,5	42,5	56612+
	CAT 50	25,5	30	48	152,4-445	19,1	43,5	42,5	▲
<b>12</b>	CAT 40	27,5	32	48	145	19,1	44,5	47,5	56603+
	CAT 40	27,5	32	48	145-480	19,1	44,5	47,5	▲
	CAT 50	27,5	32	48	152,4	19,1	44,5	47,5	56613+
	CAT 50	27,5	32	48	152,4-445	19,1	44,5	47,5	▲
<b>14</b>	CAT 40	29,5	34	48	145	19,1	47,5	52,5	56604+
	CAT 40	29,5	34	48	145-480	19,1	47,5	52,5	▲
	CAT 50	29,5	34	48	152,4	19,1	47,5	52,5	56614+
	CAT 50	29,5	34	48	152,4-445	19,1	47,5	52,5	▲
<b>16</b>	CAT 40	33,5	38	48	145	19,1	47,5	52,5	56605+
	CAT 40	33,5	38	48	145-480	19,1	47,5	52,5	▲
	CAT 50	33,5	38	48	152,4	19,1	47,5	52,5	56615+
	CAT 50	33,5	38	48	152,4-445	19,1	47,5	52,5	▲
<b>18</b>	CAT 40	35,5	40	48	145	19,1	47,5	52,5	56606+
	CAT 40	35,5	40	48	145-480	19,1	47,5	52,5	▲
	CAT 50	35,5	40	48	152,4	19,1	47,5	52,5	56616+
	CAT 50	35,5	40	48	152,4-445	19,1	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL+** [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>20</b>	CAT 40	37,5	42	48	145	19,1	47,5	52,5	56607+
	CAT 40	37,5	42	48	145-480	19,1	47,5	52,5	▲
	CAT 50	37,5	42	48	152,4	19,1	47,5	52,5	56617+
	CAT 50	37,5	42	48	152,4-445	19,1	47,5	52,5	▲
<b>25</b>	CAT 40	43,5	48	48	149	19,1	114	55	56608+
	CAT 40	43,5	48	48	149-480	19,1	-	55	▲
	CAT 50	43,5	48	48	156,4	19,1	144	55	56618+
	CAT 50	43,5	48	48	156,4-445	19,1	-	55	▲
<b>32</b>	CAT 40	55,5	60	70	158	19,1	141	65	56609+
	CAT 40	55,5	60	70	158-480	19,1	-	65	▲
	CAT 50	55,5	60	70	160	19,1	141	65	56619+
	CAT 50	55,5	60	70	160-445	19,1	-	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
CAT 45 tool diameters [DS] please enquire.

**OPTIONS FOR HCFL+**

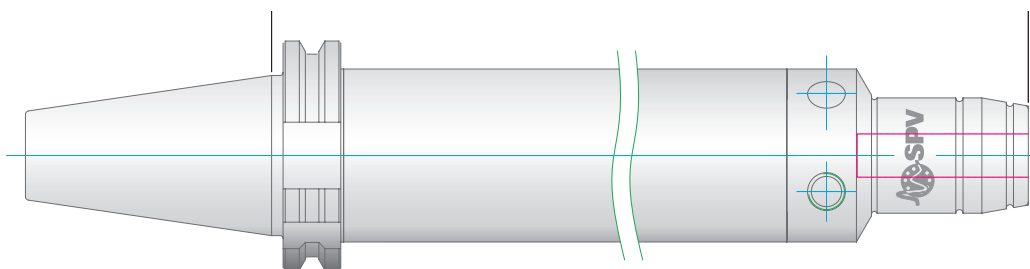
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL+** [milling membrane] any length L1 as table

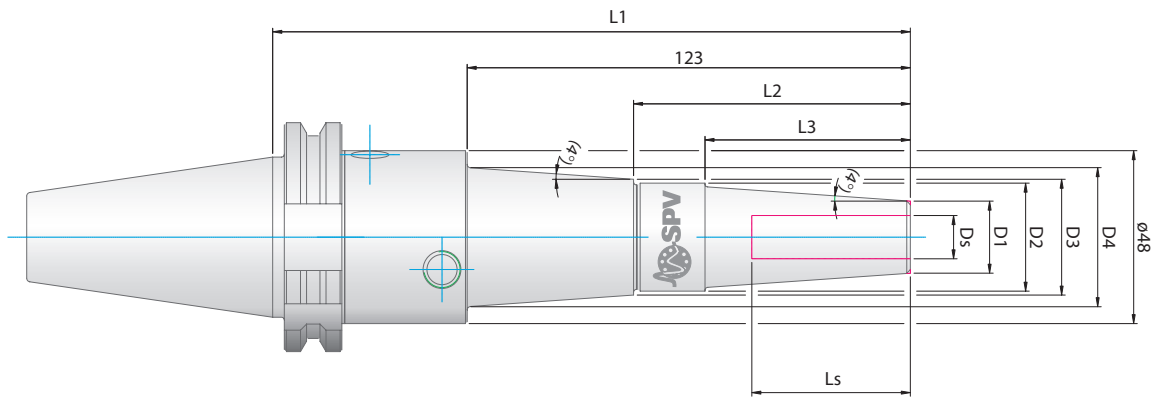
**Ordering example**

- ▲ CAT 40, Ø20, L1=290 mm, type HCFL+ Art.no.: 56607+/290



type of tool shank, please refer to page 9

## TAPERED CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCPK+ [milling membrane]

DS	SHANK	D1	D2	D3	D4	L1	L2	L3	LS	ART.NO.
12	CAT 40	20	30	32	40,5	195	76,8	57	47,5	59263+
	CAT 40	20	30	32	40,5	235-480	76,8	57	47,5	▲
	CAT 50	20	30	32	40,5	177	76,8	57	47,5	59273+
	CAT 50	20	30	32	40,5	217-445	76,8	57	47,5	▲
20	CAT 40	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 which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
Other tool diameters [DS] and with CAT 45 please enquire.

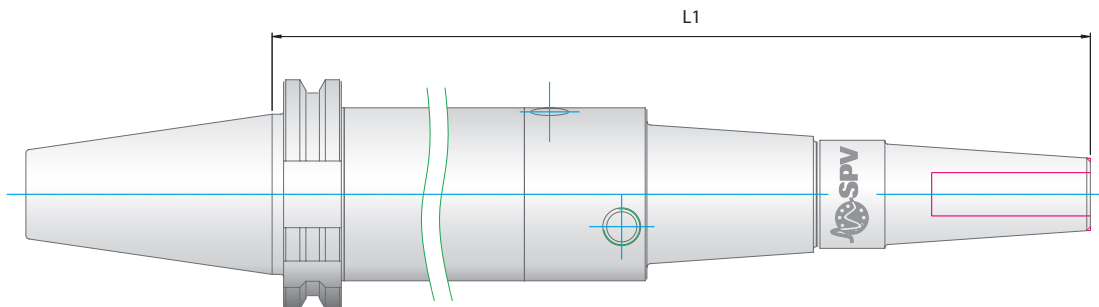
### OPTIONS FOR HCPK+

- G** Supplementary balancing up to 30.000 rpm, depending on size  
Balanced for 10.000 rpm G 6.3 as standard.

### EXTRA LONG CHUCKS HCPK+ [milling membrane] any length L1 as table

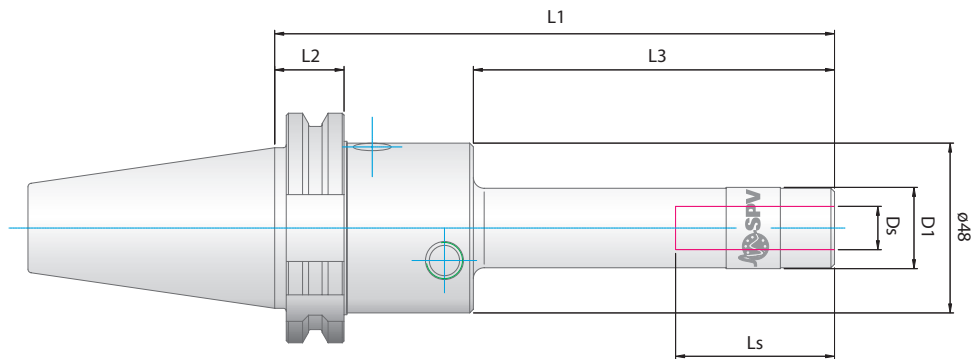
#### Ordering example

- ▲ CAT 40, Ø20, L1=277 mm, type HCPK+ Art.no.: 59267+/277



type of tool shank, please refer to page 9

## PEN CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCP+ [milling membrane]

DS	SHANK	D1	L1	L2	L3	LS	ART.NO.
<b>6</b>	CAT 40	22,5	123	19,1	50	37,5	59030+
	CAT 40	22,5	173	19,1	100	37,5	59040+
	CAT 50	22,5	105	19,1	50	37,5	59080+
	CAT 50	22,5	155	19,1	100	37,5	59090+
<b>8</b>	CAT 40	22,5	123	19,1	50	37,5	59031+
	CAT 40	22,5	173	19,1	100	37,5	59041+
	CAT 50	22,5	105	19,1	50	37,5	59081+
	CAT 50	22,5	155	19,1	100	37,5	59091+
<b>10</b>	CAT 40	22,5	123	19,1	50	42,5	59032+
	CAT 40	22,5	173	19,1	100	42,5	59042+
	CAT 50	22,5	105	19,1	50	42,5	59082+
	CAT 50	22,5	155	19,1	100	42,5	59092+
<b>12</b>	CAT 40	22,5	123	19,1	50	47,5	59033+
	CAT 40	22,5	173	19,1	100	47,5	59043+
	CAT 50	22,5	105	19,1	50	47,5	59083+
	CAT 50	22,5	155	19,1	100	47,5	59093+

- Dimensions which can be used with reduction sleeves.  
CAT 45 tool diameters [DS] please enquire.

### OPTIONS FOR HCP+

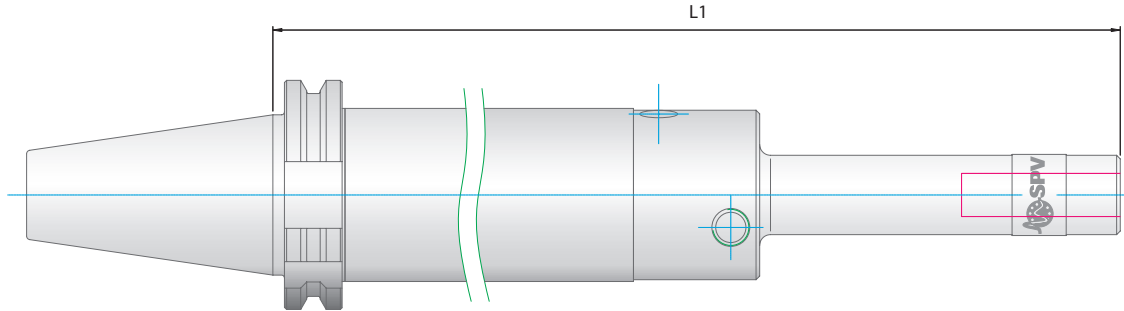
- G** Supplementary balancing up to 30.000 rpm, depending on size  
Balanced for 10.000 rpm G 6.3 as standard.

Extra long chucks HCP+ please refer to next page ►

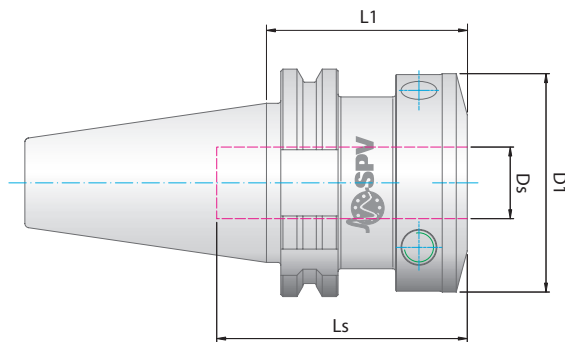
**EXTRA LONG CHUCKS HCP+ [milling membrane] any length L1 as table**

**Ordering example**

CAT 40, Ø12, L1=255 mm, type HCP+ Art.no.: 59030+/255  
 Max L1: CAT 40 = 480 mm CAT 50 = 445 mm



**EXTRA SHORT POWER CHUCK WITH MILLING MEMBRANE [+]**



**TYPE HCK+ [milling membrane] extra short length, extended torque**

DS	SHANK	D1	L1	LS	ART.NO.
20	CAT 40	61	56	70	66122+

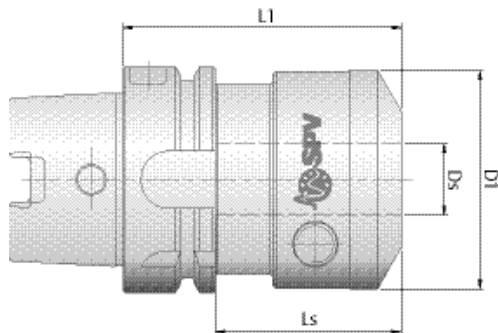
■ Dimensions which can be used with reduction sleeves.

**OPTIONS FOR HCK+**

- G** Supplementary balancing up to 30.000 rpm, depending on size  
 Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.



## EXTRA SHORT POWER CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCK+ [milling membrane] extra short length, extended torque

DS	SHANK	D1	L1	LS	ART.NO.
20	HSK-A 63	61	78	51,8	66109+
32	HSK-A 63	82	88	61,8	66111+

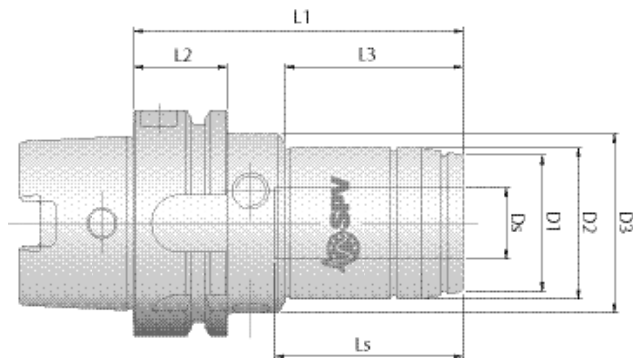
### OPTIONS FOR HCK+

**G** Supplementary balancing up to 30.000 rpm, depending on size

Coolant pipe and centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.



# STANDARD CHUCK



## TYPE HCF standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	HSK-A63	22	26	50	71,5	26	24,5	37,5	54470
	HSK-A80	23,5	26	48	127	26	43,5	37,5	56550
	HSK-A100	23,5	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 which can be used with reduction sleeves.  
Other types of HSK, form C, E and F please enquire.

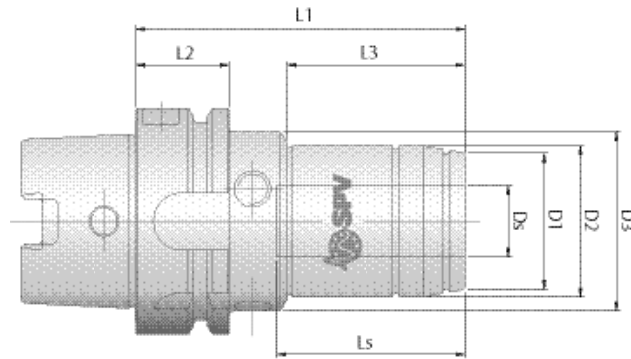
## OPTIONS FOR HCF

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Coolant pipe and centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

*type of tool shank, please refer to page 9*

## CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCF+ [milling membrane] standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	HSK-A63	22	26	50	71,5	26	24,5	37,5	54470+
	HSK-A80	23,5	26	48	127	26	43,5	37,5	56550+
	HSK-A100	23,5	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 which can be used with reduction sleeves.  
Other types of HSK, form C, E and F please enquire.

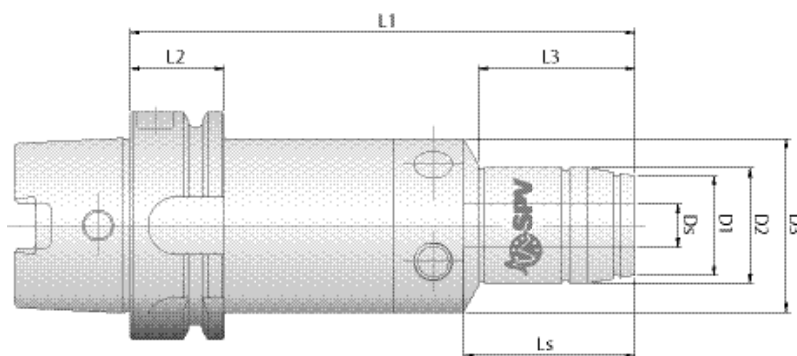
### OPTIONS FOR HCF+

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Coolant pipe and centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

*type of tool shank, please refer to page 9*

## EXTENDED STANDARD CHUCK



### TYPE HCFL with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	HSK-A63	23,5	26	48	140	26	43,5	37,5	56420
	HSK-A63	23,5	26	48	140-515	26	43,5	37,5	▲
	HSK-A80	23,5	26	48	167	26	43,5	37,5	56450
	HSK-A80	23,5	26	48	167-510	26	43,5	37,5	▲
	HSK-A100	23,5	26	48	180	29	43,5	37,5	56430
	HSK-A100	23,5	26	48	220-500	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	220-500	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	220-500	29	43,5	42,5	▲
1/2"	HSK-A63	27,5	32	48	140	26	44,5	47,5	56423
	HSK-A63	27,5	32	48	180-515	26	44,5	47,5	▲
	HSK-A80	27,5	32	48	167	26	44,5	47,5	56453
	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	56433
	HSK-A100	27,5	32	48	220-500	29	44,5	47,5	▲
5/8"	HSK-A63	33,5	38	48	140	26	47,5	52,5	56424
	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	56454
	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	56434
	HSK-A100	33,5	38	48	220-500	29	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL** with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	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	220-500	29	47,5	52,5	▲
<b>1"</b>	HSK-A63	43,5	48	48	144	26	118	55	56426
	HSK-A63	43,5	48	48	144-515	26	-	55	▲
	HSK-A80	43,5	48	48	171	26	145	55	56456
	HSK-A80	43,5	48	48	171-510	26	-	55	▲
	HSK-A100	43,5	48	48	184	29	94	55	56436
	HSK-A100	43,5	48	48	224-500	29	-	55	▲
<b>1 1/4"</b>	HSK-A63	55,5	60	70	153	26	83	65	56427
	HSK-A63	55,5	60	70	153-515	26	83	65	▲
	HSK-A80	55,5	60	70	180	26	154	65	56457
	HSK-A80	55,5	60	70	180-510	26	154	65	▲
	HSK-A100	55,5	60	70	193	29	164	65	56437
	HSK-A100	55,5	60	70	224-500	29	164	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
Other types of HSK, form C, E and F please enquire.

**OPTIONS FOR HCFL**

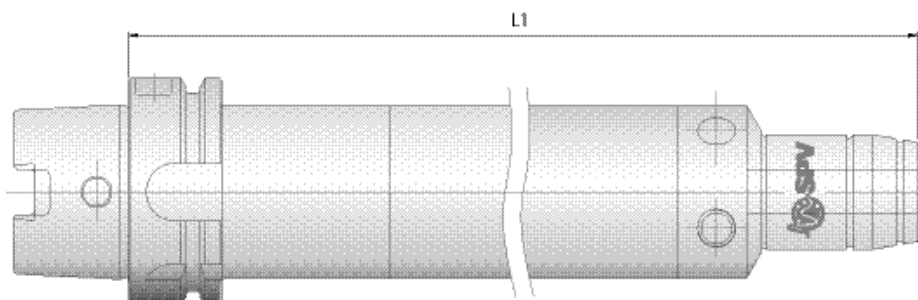
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Coolant pipe and centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL** any length L1 as table

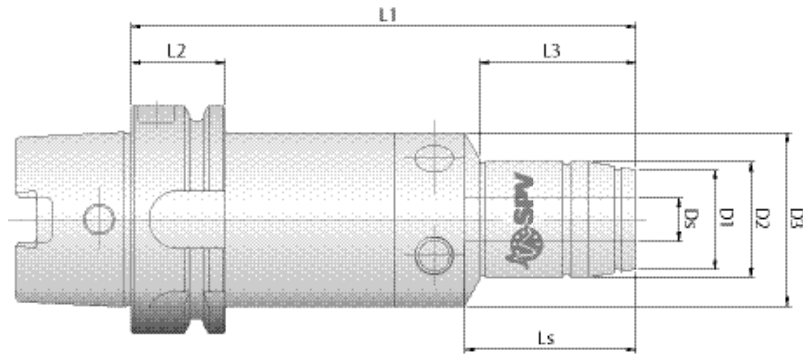
**Ordering example**

- ▲ HSK-63, Ø3/4", L1=300 mm, type HCFL Art.no.: 56425/300



*type of tool shank, please refer to page 9*

## EXTENDED CHUCK WITH MILLING MEMBRANE [+]



### TYPE HCFL+ [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>1/4"</b>	HSK-A63	23,5	26	48	140	26	43,5	37,5	56420+
	HSK-A63	23,5	26	48	140-515	26	43,5	37,5	▲
	HSK-A80	23,5	26	48	167	26	43,5	37,5	56450+
	HSK-A80	23,5	26	48	167-510	26	43,5	37,5	▲
	HSK-A100	23,5	26	48	180	29	43,5	37,5	56430+
	HSK-A100	23,5	26	48	220-500	29	43,5	37,5	▲
<b>5/16"</b>	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	220-500	29	43,5	37,5	▲
<b>3/8"</b>	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	220-500	29	43,5	42,5	▲
<b>1/2"</b>	HSK-A63	27,5	32	48	140	26	44,5	47,5	56423+
	HSK-A63	27,5	32	48	180-515	26	44,5	47,5	▲
	HSK-A80	27,5	32	48	167	26	44,5	47,5	56453+
	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	56433+
	HSK-A100	27,5	32	48	220-500	29	44,5	47,5	▲
<b>5/8"</b>	HSK-A63	33,5	38	48	140	26	47,5	52,5	56424+
	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	56454+
	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	56434+
	HSK-A100	33,5	38	48	220-500	29	47,5	52,5	▲

**TYPE HCFL+** [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	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	220-500	29	47,5	52,5	▲
<b>1"</b>	HSK-A63	43,5	48	48	144	26	118	55	56426+
	HSK-A63	43,5	48	48	144-515	26	-	55	▲
	HSK-A80	43,5	48	48	171	26	145	55	56456+
	HSK-A80	43,5	48	48	171-510	26	-	55	▲
	HSK-A100	43,5	48	48	184	29	94	55	56436+
	HSK-A100	43,5	48	48	224-500	29	-	55	▲
<b>1 1/4"</b>	HSK-A63	55,5	60	70	153	26	83	65	56427+
	HSK-A63	55,5	60	70	153-515	26	83	65	▲
	HSK-A80	55,5	60	70	180	26	154	65	56457+
	HSK-A80	55,5	60	70	180-510	26	154	65	▲
	HSK-A100	55,5	60	70	193	29	164	65	56437+
	HSK-A100	55,5	60	70	224-500	29	164	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen  
Other types of HSK, form C, E and F please enquire.

**OPTIONS FOR HCFL+**

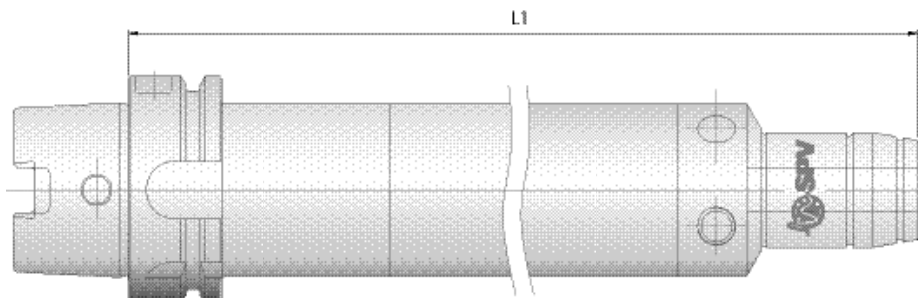
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Coolant pipe and centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL+** [milling membrane] any length L1 as table

**Ordering example**

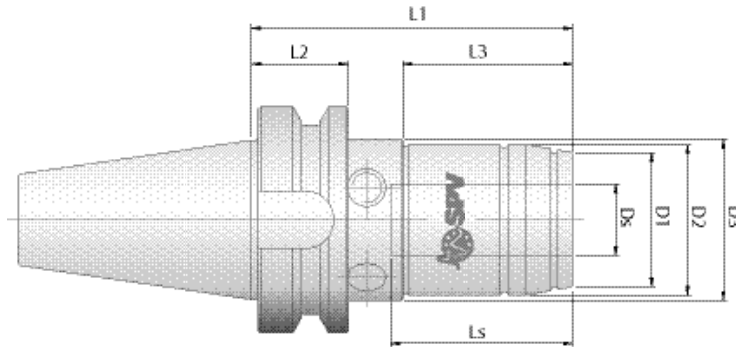
- ▲ HSK-63, Ø3/4", L1=300 mm, type HCFL+ Art.no.: 56425+/300



*type of tool shank, please refer to page 9*

# STANDARD CHUCK

Coolant supply according to DIN 69871 AD/B



## TYPE HCF standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	BT 40	23,5	26	48	95	27	43,5	37,5	56500
	BT 50	23,5	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	44,5	47,5	56503
	BT 50	27,5	32	48	106	38	44,5	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	83	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 which can be used with reduction sleeves.

## OPTIONS FOR HCF

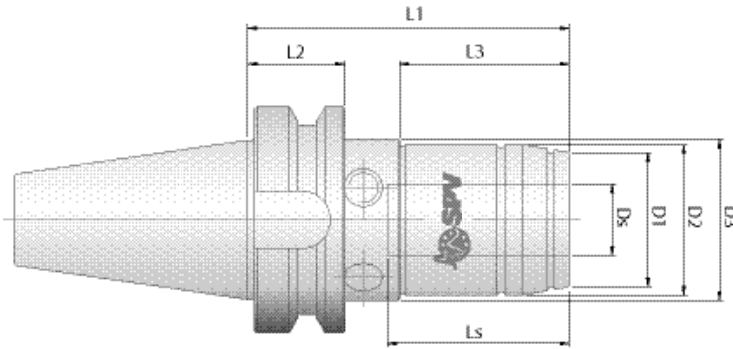
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.



## CHUCK WITH MILLING MEMBRANE [+]

Coolant supply according to DIN 69871 AD/B



### TYPE HCF+ [milling membrane] standard length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	BT 40	23,5	26	48	95	27	43,5	37,5	56500+
	BT 50	23,5	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	44,5	47,5	56503+
	BT 50	27,5	32	48	106	38	44,5	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	83	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 which can be used with reduction sleeves.

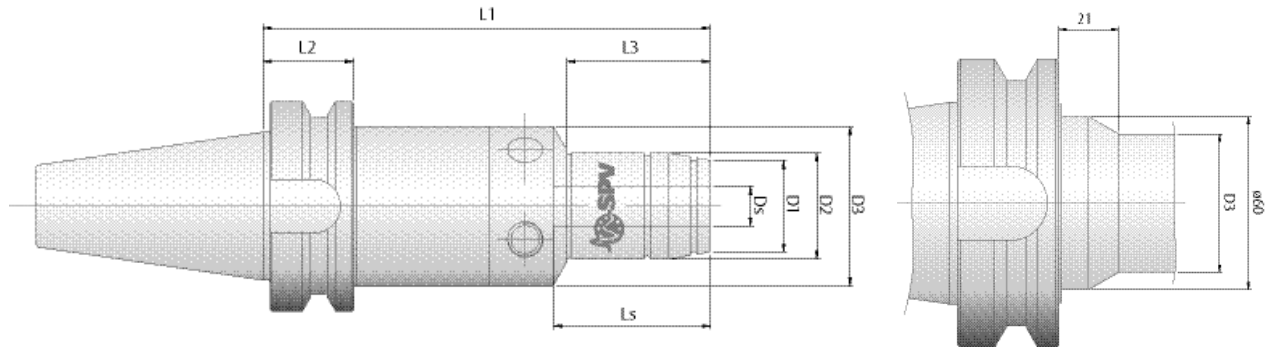
### OPTIONS FOR HCF+

- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

# EXTENDED STANDARD CHUCK

Coolant supply according to DIN 69871 AD/B



BT 50 design Ø6 - 25

## TYPE HCFL with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>1/4"</b>	BT 40	23,5	26	48	135	27	43,5	37,5	56820
	BT 40	23,5	26	48	135-485	27	43,5	37,5	▲
	BT 50	23,5	26	48	160	38	43,5	37,5	56830
	BT 50	23,5	26	48	160	38	43,5	37,5	▲
<b>5/16"</b>	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	160-445	38	43,5	37,5	▲
<b>3/8"</b>	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	160-445	38	43,5	42,5	▲
<b>1/2"</b>	BT 40	27,5	32	48	135	27	44,5	47,5	56823
	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	56833
	BT 50	27,5	32	48	160-445	38	44,5	47,5	▲
<b>5/8"</b>	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	160-445	38	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL** with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	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	160-445	38	47,5	52,5	▲
<b>1"</b>	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	164	38	116	55	56836
	BT 50	43,5	48	48	164-445	38	-	55	▲
<b>1 1/4"</b>	BT 40	55,5	60	60	148	27	121	65	56827
	BT 40	55,5	60	60	148-485	27	161	65	▲
	BT 50	55,5	60	60	159	38	121	65	56837
	BT 50	55,5	60	60	159-445	38	161	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen

**OPTIONS FOR HCFL**

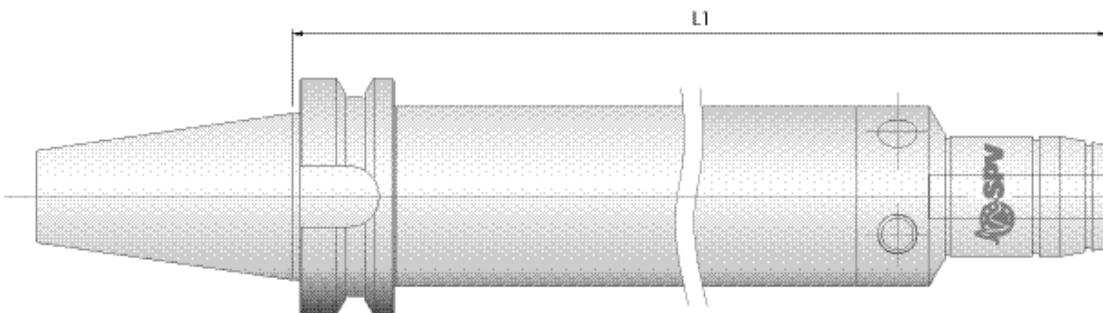
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL** any length L1 as table

**Ordering example**

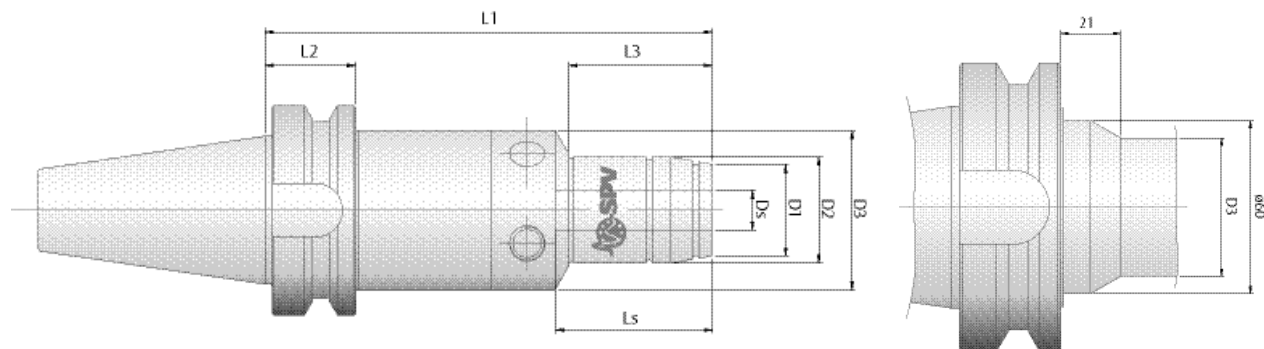
- ▲ BT 40, Ø3/4", L1=295 mm, type HCFL Art.no.: 56825/295



type of tool shank, please refer to page 9

## EXTENDED CHUCK WITH MILLING MEMBRANE [+]

Coolant supply according to DIN 69871 AD/B



BT 50 design Ø6 - 25

### TYPE HCFL+ [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
1/4"	BT 40	23,5	26	48	135	27	43,5	37,5	56820+
	BT 40	23,5	26	48	135-485	27	43,5	37,5	▲
	BT 50	23,5	26	48	160	38	43,5	37,5	56830+
	BT 50	23,5	26	48	160	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	160-445	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	160-445	38	43,5	42,5	▲
1/2"	BT 40	27,5	32	48	135	27	44,5	47,5	56823+
	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	56833+
	BT 50	27,5	32	48	160-445	38	44,5	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	160-445	38	47,5	52,5	▲

type of tool shank, please refer to page 9

**TYPE HCFL+** [milling membrane] with example of min and max length

DS	SHANK	D1	D2	D3	L1	L2	L3	LS	ART.NO.
<b>3/4"</b>	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	160-445	38	47,5	52,5	▲
<b>1"</b>	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	164	38	116	55	56836+
	BT 50	43,5	48	48	164-445	38	-	55	▲
<b>1 1/4"</b>	BT 40	55,5	60	60	148	27	121	65	56827+
	BT 40	55,5	60	60	148-485	27	161	65	▲
	BT 50	55,5	60	60	159	38	121	65	56837+
	BT 50	55,5	60	60	159-445	38	161	65	▲

- Dimensions which can be used with reduction sleeves.
- ▲ Depending on L1 chosen

**OPTIONS FOR HCFL+**

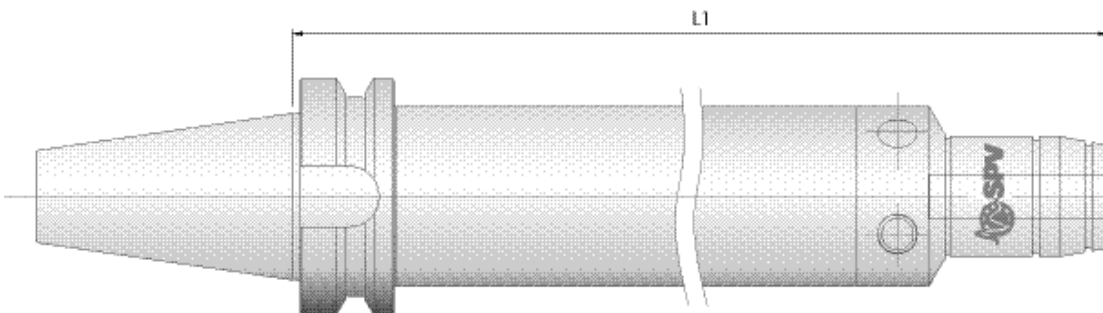
- Q** Quick-set (quick length adjustment - 10 mm from chuck side)
- G** Supplementary balancing up to 30.000 rpm, depending on size

Centre screw included as standard. Balanced for 10.000 rpm G 6.3 as standard.

**EXTRA LONG CHUCKS HCFL+** any length L1 as table

**Ordering example**

- ▲ BT 40, Ø3/4", L1=295 mm, type HCFL+ Art.no.: 56825+/295

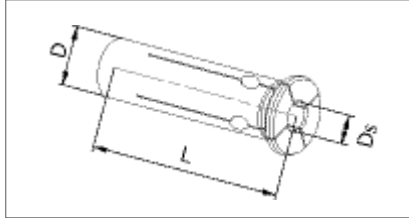


type of tool shank, please refer to page 9

# REDUCTION SLEEVES

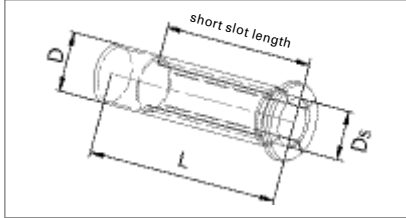
**TYPE A**

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



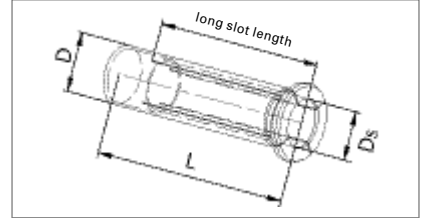
**TYPE B**

Sealed sleeve.  
With short slot length.



**TYPE C**

Unsealed sleeve.  
With long slot length.



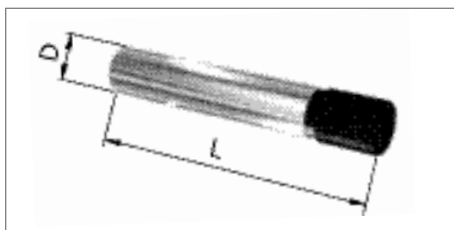
**Standard sleeves**

D	DS	L	Type	ART.NO.
12	3	46	C	68413
	4		C	68414
	5		A	68425
	6		A	68426
	8		A	68428
	10		C	68420
	10		B	68430
20	3	53	C	66929
	4		C	66930
	5		C	66931
	6		A	65800
	8		A	65801
	10		A	65802
	12		A	65803
	14		A	65804
	16		A	65805
	32		10	64,5
12		A	65808	
14		A	65809	
16		A	65810	
18		A	65811	
20		A	65812	
25		A	65813	

**With Quick-set [adjustable]**

D	DS	L	Type	ART.NO.
20	6	53	A	65800Q
	8		A	65801Q
	10		A	65802Q
	12		A	65803Q
	14		A	65804Q
32	10	64,5	A	65807Q
	12		A	65808Q
	14		A	65809Q
	16		A	65810Q
	18		A	65811Q
	20		A	65812Q
40	25	71	A	65813Q
	16		A	66904Q
	20		A	66905Q
	25		A	66906Q
	32		A	66907Q

## TORQUE MANDREL



D	L	ART.NO.	D	L	ART.NO.
6	65	66800	16	77	66804
8	65	66801	18	77	66809
10	69	66802	20	81	66805
12	74	66803	25	85	66806
14	74	66808	32	92	66807

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*Spintec AB is a family company which was formed in 1977 in Eskilstuna, with the aim of making and marketing high speed electric machining spindles, plus converters and accessories for the Swedish market and other industrialised countries.*

*Right from the start, the company aimed at marketing high quality products and services, with a high technology content, and always endeavoured to use the latest machine and appliance technology in its own manufacture.*

*In the summer of 2003, it acquired SPV Tools as a measure to widen its product range. SPV Tools was founded in 1933 and makes very high precision tool holders for industry. Its products include hydraulic chucks, threading tools and other tool holders. When combined with Spintec products, this gives a full-range supplier of equipment for industrial machining.*

*After SPV Tools was acquired, the SPV Spintec AB was formed. These days, the SPV Spintec AB has become known as a problem-solving collaboration partner, whose unique machining know-how can offer customised solutions.*

*Technical consultation, quick service and reliable deliveries are our hall-marks.*