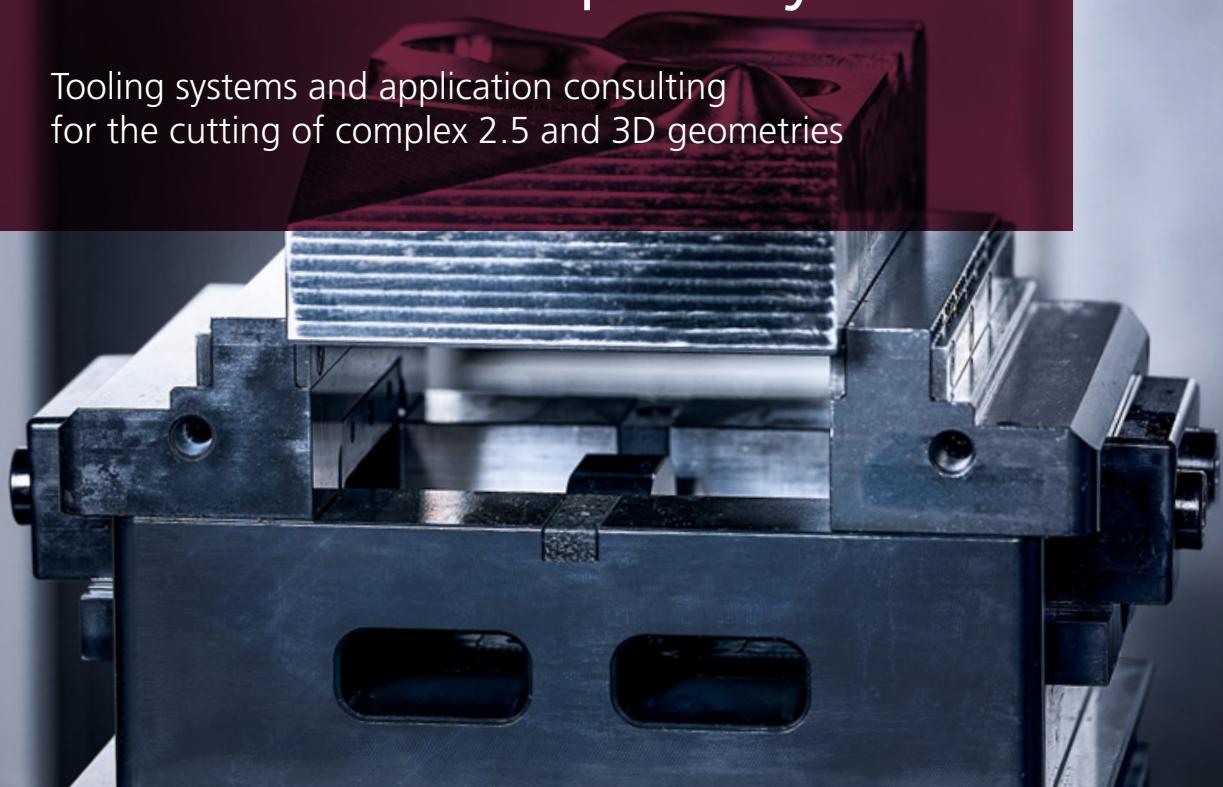




Thinking in solutions

Arbor and Adapter Systems

Tooling systems and application consulting
for the cutting of complex 2.5 and 3D geometries



THINKING IN SOLUTIONS



Arbor system catalog

Dear customer,

This catalog provides up-to-date and detailed documentation for Pokolm Arbor and Adapter Systems.

To make your search even easier, this catalog is structured fully based on the machine-side connection.

Our arbor and adapter system product catalog has been expanded to meet current industry standards, with even more important and useful information.

We are sure that you will be able to find the products and information you need quickly in the new catalog structure. If you have any questions, suggestions or specific product requirements then do not hesitate to contact us!

We are happy to be of service and look forward to hearing from you!

Your Pokolm team

Food technology

Medical
technology

Tool/mold
construction

Airplane
construction

Energy
technology

Mechanical
engineering

 pokolm



Individual designs for any application

From intricate medical technology to high-powered racing applications – our services are used in a wide range of different industries. The demands placed on our products are as diverse as they are challenging. But they all have one thing in common: Every application demands the highest level of precision, quality, and expertise. It does not matter whether we are producing huge components for aviation or a highly specialized tool for the woodworking industry.

With such a wide variety of products, direct contact with our customers is essential. This is the only way we can understand precisely what specific challenges are at play. Our highly trained technical sales representatives will assist you directly on site, and address individual requirements flexibly with custom solutions. This kind of service is what makes us experts in our industry.

Process optimization, guaranteed

Standing still is a step backwards. That is why we are continuously developing our product portfolio. This is the only way we can remain a technological leader in the field. It is also the only way you can benefit from our innovations and patents, to secure your competitive advantage for the long term.



DUOPLUG®, SPINWORX® and other patents

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Pokolm Frästechnik GmbH & Co. KG



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info@pokolm.de



7:30 AM – 6:00 PM (weekdays)



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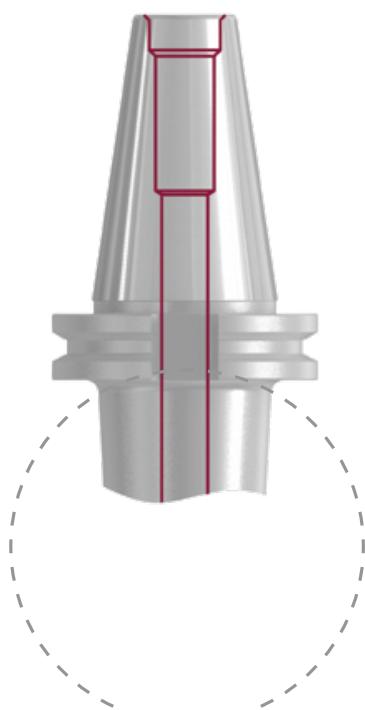
www.pokolm.de/en

Structure: 1. Machine | 2. Tool

Being better means not just staying ahead of the competition but also scrutinizing our own products and services looking for ways to improve and become more efficient. Pokolm is well-known for this practice. This is also one of the reasons why successful practitioners choose Pokolm premium tools. This added value gives Pokolm customers a decisive edge over the competition, and is created by merging excellent products with outstanding technical service advice and tailoring both entirely to the needs of the customer. The structure of the product range and the corresponding documentation must also be 100% customer-oriented in accordance with Pokolm's standards.

Machine connection, e.g.

SK, HSK or BT in all common taper forms



Tool connection, e.g.



Drill chucks



Collet chucks



Morse tapers



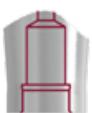
Shrink fit arbors



Arbors for shell type
milling cutters



CoolCap®



Arbors for thread
connection



Shrink SB

The structure of the Pokolm arbor and adapter catalog is focused on our customers' needs. This is because it structured around the machine-side connection. Simply choose the connection type and connection dimension in the structure for the type of machine in use and all of the corresponding tool connections will be listed under it. The arbors within this group are then categorized according to the connection type and size.

THINKING IN SOLUTIONS

Overview of arbor and adapter systems

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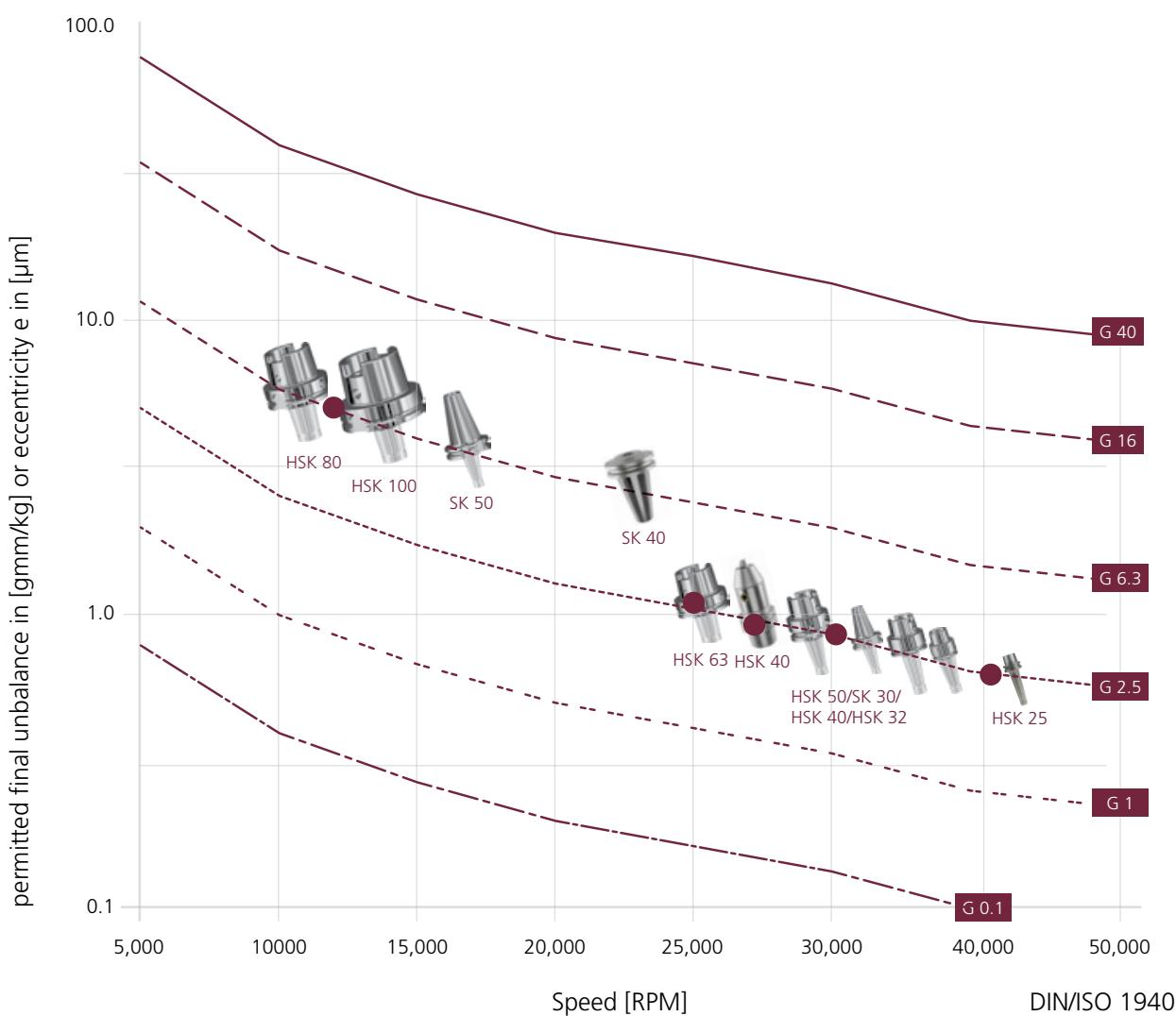
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Balance

Balancing grade of Pokolm arbors

Arbor type	ISO/BT			HSK				
View								
Size	30	40	50	25	32	40	50	63
Form	-	-	-	all	all	all	all	all
Grade level	2.5	6.3	6.3	2.5	2.5	2.5	2.5	6.3
RPM	30,000	18,000	12,000	40,000	30,000	30,000	30,000	25,000

We would be glad to implement balancing grades and special requests deviating from this table – please ask our sales personnel.



Calculations and definitions

Balancing grade classes and typical applications

G 0.4	e.g. ultrafine grinding machines
G 1	e.g. small motors, grinding machine drives
G 2.5	e.g. tools, small tool arbors, electric motors, turbines
G 6.3	e.g. tools, tool arbors, tooling machine parts
G 16	e.g. large tool arbors, cardan shafts, drive shafts
G 40	e.g. drive shafts, car wheels, crankshaft drives

 Adapters, extensions,
collars, drill chucks

 Hollow shank taper HSK
Steep taper SK / BT

Flat contact surface

List of formulas:

Calculation
of final unbalance in
[gmm/kg]

$$e = \frac{U}{m}$$

Calculation
of angular frequency in
[1/s]

$$\omega = \frac{2 \cdot \pi \cdot n}{60}$$

Calculation
of balancing grade in
[mm/s]

$$G = e \cdot \omega = \frac{U \cdot \pi \cdot n}{m \cdot 30}$$

Calculation
of equalizing weight

$$m_r = \frac{e \cdot m}{r}$$

Accessories

Order / request forms

Terms and dimensions:

G = balancing grade in [mm/s]

U = unbalance ($m \cdot e$) in [gmm]

e = final unbalance in [gmm] or center gravity shift in [μm]

m = rotor weight in [g]

ω = angular frequency ($2 \cdot \pi \cdot f$) in [1/s]

F = centrifugal force ($U \cdot \omega$) in [N]

f = frequency ($n/60$) in [1/s]

r = radius of unbalance in [mm]

n = speed in [U/min]

m_r = final unbalance [g]

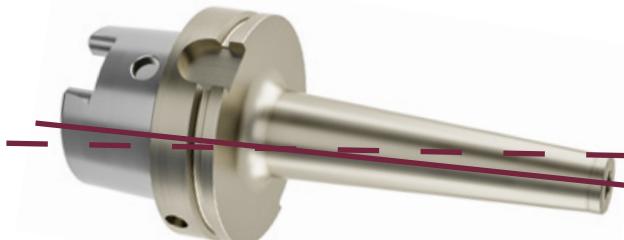
 Spindle systems / shrink
technology

Assembly instructions

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Balance error and balancing

Definition of balance error



Rotational axis ≠ mass axis



Rotational axis = mass axis

If the mass axis of a rotating part is not the same as its rotational axis, this is considered a balance error.

What can cause a balance error?

- Changeover positioning corner in SK and HSK
- Driving slots for SK and BT
- Driving slots for HSK Form A, C, CE
- Weldon surfaces on shank
- Straining screws for e.g. Weldon
- Uneven pitch on milling bodies
- Collets and collet nuts
- Production tolerances

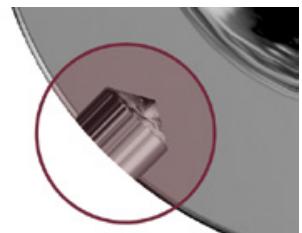
When balancing a tool arbor, a balance error is compensated for either by adding compensating bores or adding material (see image: balancing by adding compensating bores).



Unbalanced arbor



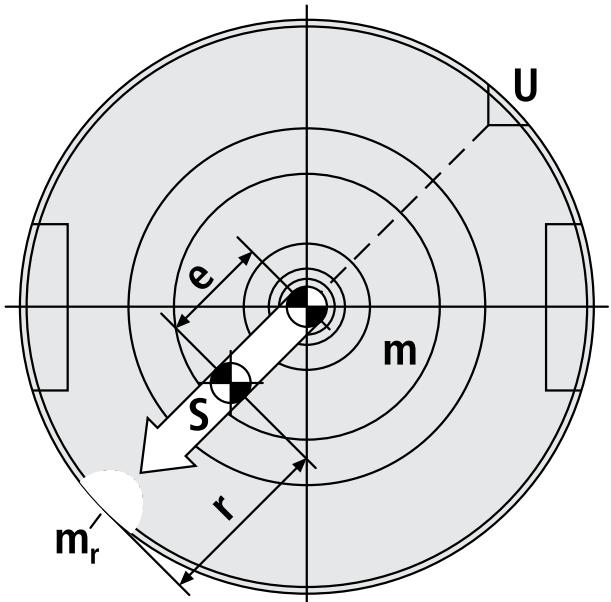
Balanced arbor with compensating bore



Balancing by adding compensating bores
Example calculations and detailed diagram on the next page.

Example calculation

HSK shrink fit arbor, 50 08 A63 S | weight: 760g
 Taper radius: 31.5 mm | balancing grade G 2.5 at 25,000 RPM



$$G = \frac{U \cdot 2 \cdot \pi \cdot n}{m \cdot 60} \Leftrightarrow U = \frac{G \cdot m \cdot 60}{2 \cdot \pi \cdot n}$$

$$U = \frac{2,5 \cdot 760 \cdot 60}{2 \cdot \pi \cdot 25,000} \Rightarrow U = 0.726 \text{ gmm}$$

$$e = \frac{0.726}{760} \Rightarrow e = 0.96 \mu\text{m}$$

Remarks on the diagram: "S" = Mass axis

Calculation of remaining unbalanced mass based on the example above:

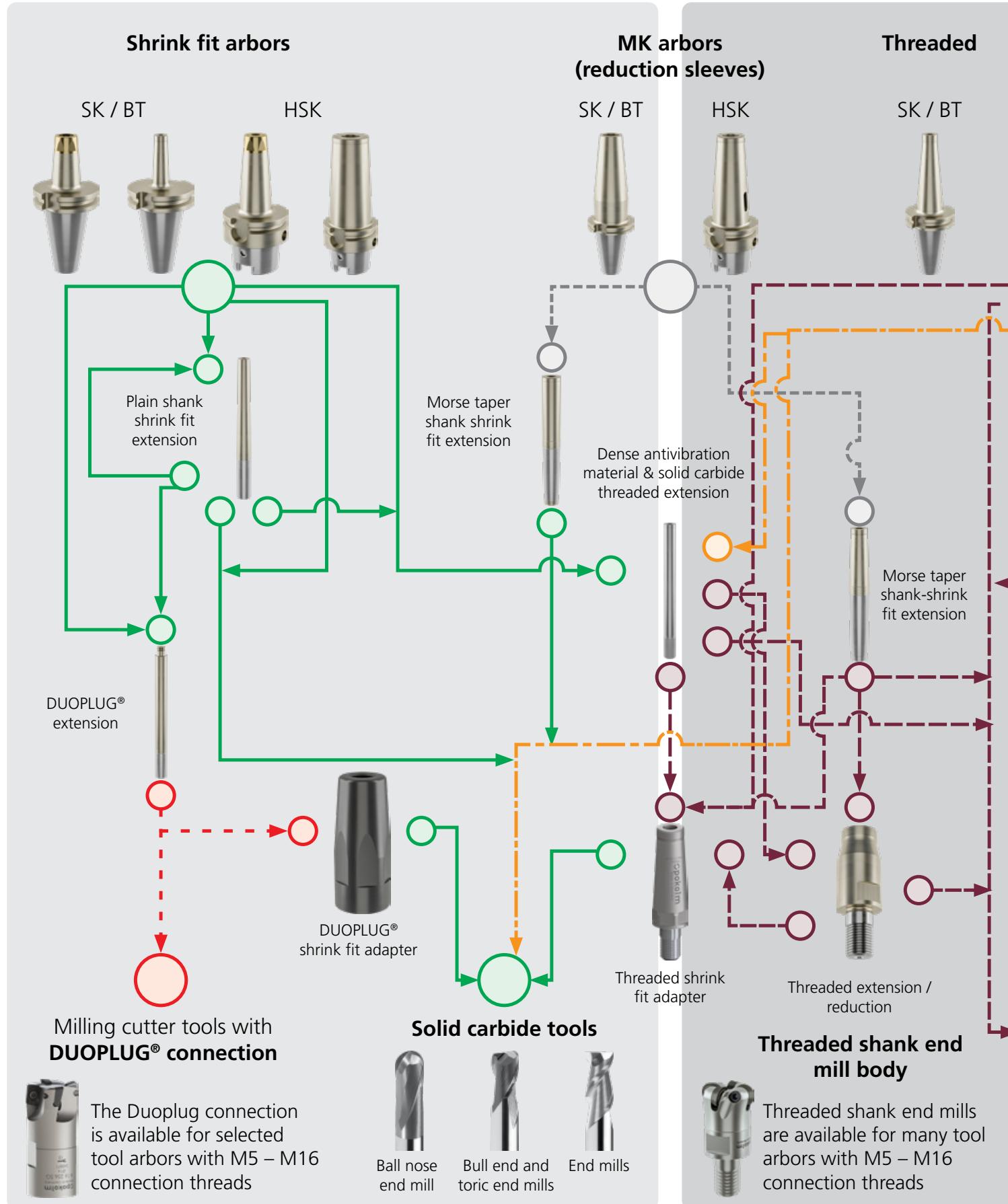
$$m_r = \frac{m \cdot e}{r} \Rightarrow m_r = \frac{760 \cdot 0.00096}{31.5} \Rightarrow m_r = 0.023 \text{ g}$$

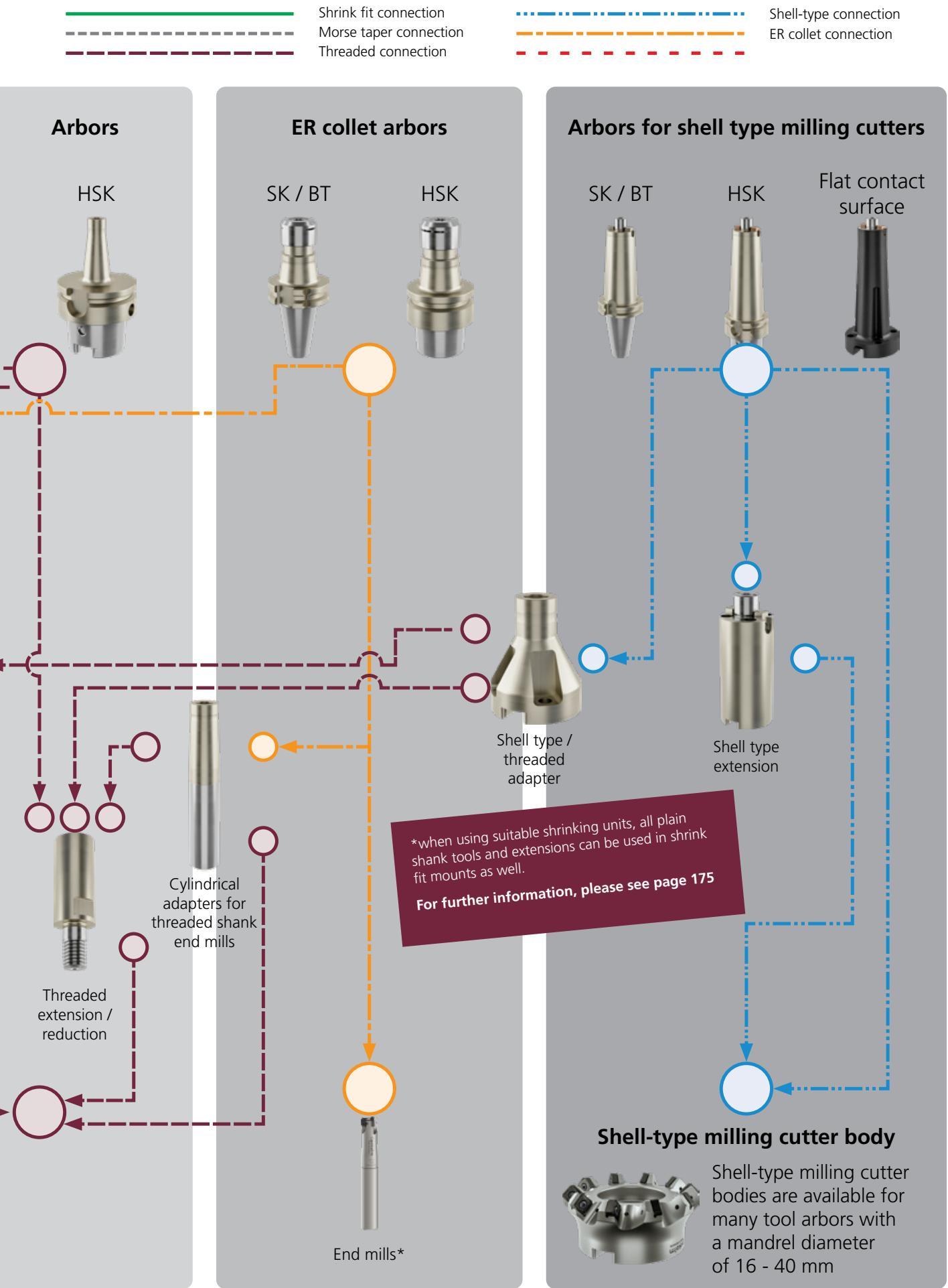
Fine balancing of the arbor, therefore, minimizes the remaining unbalanced mass to 0.023 g (based on the arbor taper radius of 31.5 mm).

Your advantages – Why this issue is so important.

Balancing, in particular in conjunction with a high level of concentricity, reduces centrifugal forces and protects the machine spindle by reducing vibrations. This results in a very smooth-running tool, significantly increasing machining and workpiece quality, and facilitating better cutting parameters – both in HSC and conventional machining.

The Pokolm tool system





Technology comparison

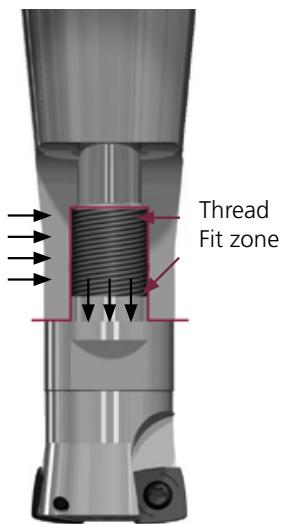
Threaded connection vs. Pokolm DuoPlug® connection

What sets the systems apart:

Pokolm threaded connection – the powerful standard

Pokolm threaded connection

The black arrows indicate the holding and supporting forces.



Benefits

- no undercut, avoiding a predetermined breaking point
- high-precision fit zone, and high-precision contact surface
- higher tensile strength and thermal stability by using custom materials with specialized hard coating
- for hundreds of tool changes
- optimized chamfer design on the milling arbors

Your benefits

- universal use for roughing and finishing operations
- high durability and red hardness
- lower tool costs thanks to longer service life
- significant increase in stability due to larger contact surface

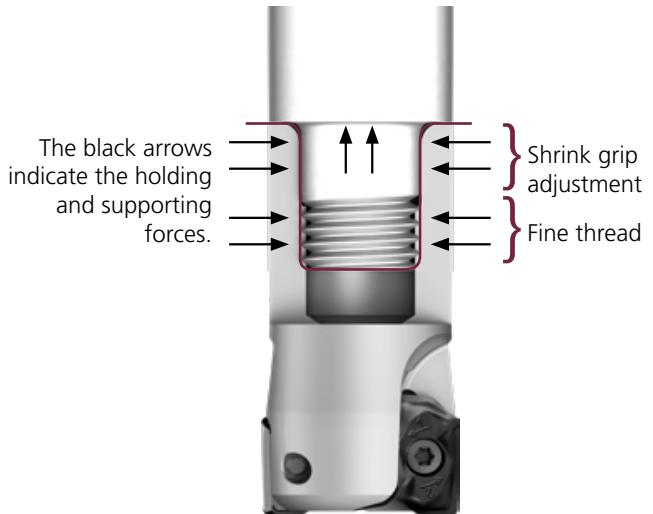
Ideal applications

- standard option for milling operations in short and medium machining depths
- specifically for deep machining situations without vertical walls

The standard threaded connection is produced with the highest tolerances using state of the art technology. Structural optimizations of the tool and arbor significantly improve the performance capabilities of the Pokolm thread connection system.

The patented DuoPlug® system – the perfect improvement

Pokolm-DuoPlug®=shrink grip and screw fit



Benefits

- highest precision and concentricity
- optimal stability
- absolutely backlash-free tolerance fit seat thanks to shrink grip connection
- extremely precise and reproducible tool seat
- significantly better holding force than common threaded systems
- higher tensile strength and thermal stability by using custom materials with specialized hard coating

Your benefits

- increased process reliability
- longer tool life
- significant reduction in vibrations with long overhangs
- facilitates the highest precision in finishing operations
- high availability for the tool system and improved process reliability
- improved performance in roughing operations
- high durability and red hardness

Ideal applications

- high-precision finishing operations
- finishing and roughing work with long overhangs
- machining situations on vertical walls thanks to extremely narrow arbor system

The Pokolm **DuoPlug®** system offers optimal stability with the highest precision and concentricity. As a supplement to common screw-fitting tools, the holding forces between the tool and arbor system act over the full surface of the entire shrink grip connection, and large portions of the shrink grip thread. See the assembling instructions for the **DuoPlug®** in the "Technical Data" section for further information.

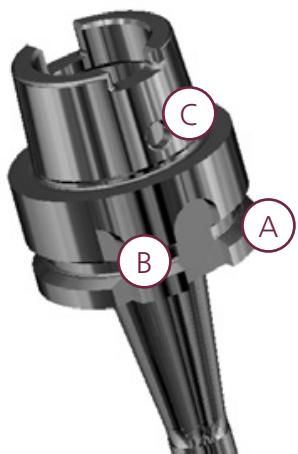
It's a fact:

DuoPlug® perfects threaded connections with significantly better holding force and the highest precision, at extremely narrow dimensions.

HSK forms and delivery versions

Form A – DIN 69 893-1

Form A is automatically exchangeable with grip (A) and indexing slots (B). The indexing slot allows for an oriented spindle stop. Design with bore (C) for manual activation of the clamping mechanism and central coolant feed.



Form EC – in accordance with DIN 69 893-5

The basic design of Form EC is the same as that of Form E. The added driving slots (D), however, allow its use both in HSK version Form C and Form E. Version with bore (C) for manual activation of the clamping mechanism.



Form E – DIN 69 893-5

Form E is automatically exchangeable with grip slot (A). Upon request with bore (C) for manual activation of the clamping mechanism.



Hollow shank taper HSK / BT

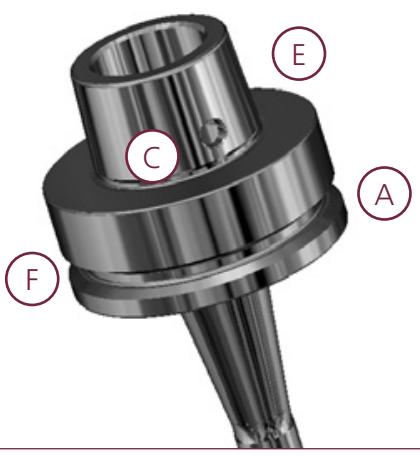
Steep taper SK / BT

Flat contact surface

Accessories

Form F – DIN 69 893-6

Form F is automatically exchangeable with grip slot (A). Version with bore (C) for manual activation of the clamping mechanism. To ensure a larger contact surface, the taper diameter (E) is smaller than the selected bore diameter (F).



Order / request forms

Spindle systems / shrink
technology

Assembly instructions

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The Pokolm arbor system

The optimal solution for your application

Arbor system	Advantages	Recommended applications
1 Arbors for thread connection, conical	 <ul style="list-style-type: none"> stable standard version large variety of types and lengths, added flexibility thanks to extensions and reductions improved stability through eliminating excess interfaces 	<ul style="list-style-type: none"> machining situations in flat to deep contours for small tool diameters up to 42 mm
2 Arbors for thread connection, cylindrical	 <ul style="list-style-type: none"> slim design improved stability through eliminating excess interfaces added flexibility if needed thanks to extensions and reductions 	<ul style="list-style-type: none"> moderate machining depths, in particular with deeper vertical walls for tool diameters up to 42 mm
3 Reduction sleeves with MK adapters	 <ul style="list-style-type: none"> MK adapters available as threaded and shrink grip variants for solid carbide tools fast and flexible tool exchange modular system for achieving large machining depths 	<ul style="list-style-type: none"> for standard machining situations with normal stability and precision requirements, for tool diameters up to 42 mm
4 Arbors for shell type milling cutters	 <ul style="list-style-type: none"> stable variant, in particular for roughing and finishing operations in large diameter ranges, with a wide variety of types and lengths improved stability through eliminating excess interfaces 	<ul style="list-style-type: none"> flat to deep machining situations in pre-finishing to roughing for tool diameters from 42 mm to 125 mm and above
5 Arbors with flat contact surface	 <ul style="list-style-type: none"> extremely stable hold thanks to flat contact surface good machining conditions at large depths improved stability through eliminating excess interfaces 	<ul style="list-style-type: none"> deep to extra-deep machining on SK50 tools with particularly high stability requirements for tool diameters from 52 mm to over 125 mm
6 Shrink grip arbors, standard design	 <ul style="list-style-type: none"> slim design with 3° pitch to the arbor collar direct shrink gripping of all common cylindrical tool shanks improved stability through eliminating excess interfaces improved concentricity can be combined with solid carbide and dense antivibration material adapters 	<ul style="list-style-type: none"> machining situations in narrow spaces for solid carbide tools up to a 25 mm diameter, in combination with solid carbide or dense antivibration material adapters even up to a tool diameter of 42 mm

Arbor system	Advantages	Recommended applications
7 Shrink grip arbors, reinforced design	 <ul style="list-style-type: none"> version with 4.5° pitch to the arbor collar and reinforced shank direct shrink gripping of all common cylindrical tool shanks improved stability through eliminating excess interfaces improved concentricity 	<ul style="list-style-type: none"> machining with increased requirements for arbor stability for solid carbide tools up to a diameter of 20 mm
8 Arbors with shrink-grip DuoPlug® adapters	 <ul style="list-style-type: none"> extremely long and slim arbor combinations greatest possible vibration reduction with solid carbide rod DuoPlug® connection for the highest precision and concentricity increased holding forces 	<ul style="list-style-type: none"> machining at greater depths with cylindrical walls roughing operations with high holding forces finishing operations with the highest requirements for surface grade up to a tool diameter of 25 mm
9 Arbors with shrink-grip dense antivibration material adapters	 <ul style="list-style-type: none"> long and slim arbor combinations low vibration thanks to dense antivibration material with threaded connection, no shrinking operations necessary. 	<ul style="list-style-type: none"> machining at greater depths with cylindrical walls for, narrow, deep molds and dies Machining situations in which vibrations normally occur for tool diameters up to 42 mm
10 Zero reach arbors	 <ul style="list-style-type: none"> due to direct shrink gripping of the DuoPlug®, solid carbide, or dense antivibration material adapter in the arbor cone, cylindrical machining is possible up to directly under the arbor collar. This provides significant added stability by reducing the distance between the tool and spindle 	<ul style="list-style-type: none"> machining of especially deep cavities with vertical walls, both with limited space and limited Z travel paths, with high requirements for stability and low-vibration work
11 ER-20 precision collet chucks	 <ul style="list-style-type: none"> universal solution for direct clamping of all common cylindrical tool shanks, without a shrinking unit also clamps "uneven" shank diameters and shanks smaller than 3 mm 	<ul style="list-style-type: none"> for changing applications for finishing, pre-finishing, and light roughing operations
12 Arbors with shrink-grip solid carbide adapters	 <ul style="list-style-type: none"> long and slim arbor combinations low vibration, thanks to solid dense antivibration material with threaded connection, no shrinking operations necessary. 	<ul style="list-style-type: none"> machining at greater depths with cylindrical walls for, narrow, deep molds and dies Machining situations in which vibrations normally occur for tool diameters up to 42 mm

*please note: Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid or dense antivibration material adapter (please indicate the required adapter when placing your order) and delivered ready for use.

PRODUCT VARIETY IN THE HIGHEST QUALITY



Adapters,
extensions,
collets and
drill chucks

At a glance

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ADAPTERS | EXTENSIONS | COLLETS AND DRILL CHUCKS



Pokolm adapters, extensions, collets and drill chucks

Pokolm solid carbide adapters were developed for our patented Duoplug® system. They are especially suited for HSC, and deliver extreme precision thanks to a fit that is absolutely backlash-free, combined with the holding forces needed for roughing applications. All adapters have an internal coolant supply as a standard.

Pokolm shrink fit extensions have a cylindrical shank in accordance with DIN 1835A that makes them excellent for use in all commonly available collets, hydro expansion and power collet chucks. The products can also be used in shrink-grip arbors in some cases, using appropriate shrinking units.

Pokolm threaded shrink fit adapters are an excellent choice when troubleshooting machining for deep cavities. Their slim design allows access to narrow areas.

Pokolm shell-type adapters for insertion and threading are the fast, stable, and inexpensive alternative to custom manufacturing. All adapters are manufactured according to the Pokolm standard with smoothed contact and mating surfaces and an internal coolant supply option. To use the adapters, the base arbors must be fitted with 4 threaded bores.

ER collets from Pokolm are used to securely and quickly clamp tools with cylindrical shanks in combination with the matching collet chuck. Using Pokolm collet systems makes it possible to achieve a high level of concentricity for the individual tool. Our collets are certified in accordance with DIN 6499-B

CNC precision drill chucks from Pokolm can be used up to $n = 7,000/\text{min}$ and has an internal coolant supply. It stands out for its very short and slim design, and can be used for any direction of rotation.

Pokolm DuoPlug®

M 7 – M 16

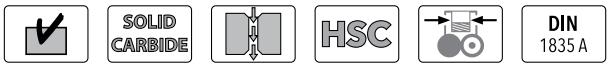


Characteristics:



M 7 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
M 7	20 07 603	7	20	–	10.8	11.4	12	–	68	–
	40 07 603	7	40	–	10.8	11.4	12	–	88	–
	60 07 603/12	7	60	–	10.8	11.4	12	–	108	–
	80 07 603/12	7	80	–	10.8	11.4	12	–	128	–
	100 07 603	7	100	–	10.8	15.9	16	–	148	–
	120 07 603	7	120	–	10.8	15.9	16	–	168	–
M 10	25 10 603	10	25	–	15	15.4	16	–	73	–
	50 10 603	10	50	–	15	15.4	16	–	98	–
	75 10 603	10	75	–	15	15.4	16	–	123	–
	100 10 603	10	100	–	15	15.4	16	–	148	–
	125 10 603	10	125	–	15	15.4	16	–	173	–
	150 10 603	10	150	–	15	15.4	16	–	200	–
M 12	25 12 603	12	25	–	18.5	19.4	20	–	75	–
	50 12 603	12	50	–	18.5	19.4	20	–	100	–
	75 12 603	12	75	–	18.5	19.4	20	–	125	–
	100 12 603	12	100	–	18.5	19.4	20	–	150	–
	125 12 603	12	125	–	18.5	19.4	20	–	175	–
	150 12 603	12	150	–	18.5	19.4	20	–	200	–
	175 12 603	12	175	–	18.5	19.4	20	–	225	–

Characteristics:



M 7 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
-------------	-----------	----------------	----------------	---	----------------	----------------	----------------	-------------	----------------	----------------

 M 16	25 16 603	16	25	–	23.4	24.4	25	–	81	–
	50 16 603	16	50	–	23.4	24.4	25	–	106	–
	75 16 603	16	75	–	23.4	24.4	25	–	131	–
	100 16 603	16	100	–	23.4	24.4	25	–	156	–
	125 16 603	16	125	–	23.4	24.4	25	–	181	–
	150 16 603	16	150	–	23.4	24.4	25	–	206	–
	175 16 603	16	175	–	23.4	24.4	25	–	231	–
	200 16 603	16	200	–	23.4	24.4	25	–	256	–

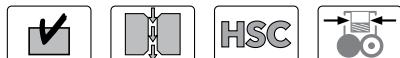
<2/2

Pokolm DuoPlug® shrink fit adapter

Diameter 6 to 10 mm



Characteristics:



Diameter 6 to 10 mm	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
---------------------	-----------	----------------	----------------	---	----------------	----------------	----------------	-------------	----------------	----------------

DuoPlug®	Diameter 6 mm	35 06 10 SG	6	35	–	12	15	10	–	–	–
		43 06 12 SG	6	43	–	12	18.5	12	–	–	–
		45 06 12 SG	6	45	–	12	18.5	12	–	–	–
		50 06 16 SG	6	50	–	12	23.5	16	–	–	–
Diameter 8 mm	45 08 12 SG	8	45	–	16	18.5	12	–	–	–	–
	50 08 16 SG	8	50	–	16	23.5	16	–	–	–	–
Diameter 10 mm	50 10 16 SG	10	50	–	20	23.5	16	–	–	–	–

Pokolm shrink fit extensions

Diameter 3 to 12 mm

Characteristics:



Diameter 3 to 12 mm	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
----------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	Diameter 3 mm	112 03 604 S.01	3	66.8	–	9	16	16	–	160	–
		115 03 604 S.01	3	28.6	–	9	12	12	–	160	–
	Diameter 4 mm	112 04 604 S.01	4	66.8	–	10.5	16	16	–	160	–
		115 04 604 S.01	4	14.31	–	10.5	12	12	–	160	–
	Diameter 6 mm	112 06 604 S	6	47.7	–	11	16	16	–	160	–
		115 06 604 S	6	11.45	–	11	12	12	–	160	–
	Diameter 8 mm	110 08 604 S	8	66.8	–	13	20	20	–	160	–
		112 08 604 S	8	28.6	–	13	16	16	–	160	–
	Diameter 10 mm	110 10 604 S	10	47.7	–	15	20	20	–	160	–
		104 12 604 S	12	76.3	–	17	25	25	–	160	–

Pokolm threaded shrink fit adapter

Diameter 6 to 12 mm



Characteristics:



Diameter 6 to 12 mm	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
Diameter 6 mm	40 06 10 784 S	6	40	–	12	18	10	–	–	7.8
	40 06 12 784 S	6	40	–	12	21	12	–	–	7.8
	40 06 16 784 S	6	40	–	12	29	16	–	–	7.8
Diameter 8 mm	40 08 10 784 S	8	40	–	16	18	10	–	–	7.8
	40 08 12 784 S	8	40	–	16	21	12	–	–	7.8
	40 08 16 784 S	8	40	–	16	29	16	–	–	7.8
Diameter 10 mm	60 10 10 784 S	10	60	–	18	18	10	–	–	7.8
	60 10 12 784 S	10	60	–	20	21	12	–	–	7.8
	60 10 16 784 S	10	60	–	20	29	16	–	–	7.8
Diameter 12 mm	60 12 12 784 S	12	60	–	21	21	12	–	–	7.8
	60 12 16 784 S	12	60	–	24	29	16	–	–	7.8

Note: Pokolm threaded shrink fit adapters can also be requested in additional diameter sizes.

Solid carbide adapters – for threaded shank end mills

M 6 – M 16

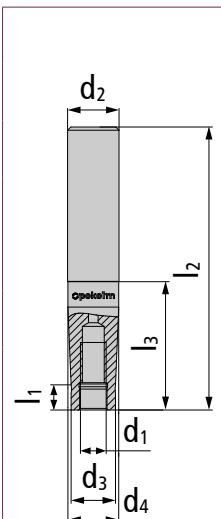
Characteristics:



Adapters, extensions,
colllets, drill chucks

Tips and practical
information

M 6 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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M 6	20 06 606/10 ZYL	6	20	–	9.5	9.5	10	–	60	–
	20 06 606/12 ZYL	6	20	–	11.5	11.5	12	–	65	–
	40 06 606/10 ZYL	6	40	–	9.5	9.5	10	–	80	–
	40 06 606/12 ZYL	6	40	–	11.5	11.5	12	–	85	–
	60 06 606/10 ZYL	6	60	–	9.5	9.5	10	–	100	–
	60 06 606/12 ZYL	6	60	–	11.5	11.5	12	–	105	–
	80 06 606/10 ZYL	6	80	–	9.5	9.5	10	–	120	–
	80 06 606/12 ZYL	6	80	–	11.5	11.5	12	–	125	–
	100 06 606/12 ZYL	6	100	–	11.5	11.5	12	–	145	–

M 8	40 08 606	8	40	–	14.2	15.3	16	–	88	9
	60 08 606	8	60	–	14.2	15.3	16	–	108	9
	80 08 606	8	80	–	14.2	15.3	16	–	128	9
	100 08 606	8	100	–	14.2	15.3	16	–	148	9
	120 08 606	8	120	–	14.2	15.3	16	–	168	9

M 10	60 10 606	10	60	–	18.5	19.3	20	–	110	9
	80 10 606	10	80	–	18.5	19.3	20	–	130	9
	100 10 606	10	100	–	18.5	19.3	20	–	150	9
	120 10 606	10	120	–	18.5	19.3	20	–	170	9
	140 10 606	10	140	–	18.5	19.3	20	–	190	9

Flat contact surface
Accessories

Spindle systems / shrink
technology
Order / request forms

Assembly instructions
Index

Index

Solid carbide adapters – for threaded shank end mills

M 6 – M 16



Characteristics:



**SOLID
CARBIDE**



HSC

**DIN
1835 A**

M 6 to M 16	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 12	80 12 606	12	80	–	23	24.3	25	–	136	9
		100 12 606	12	100	–	23	24.3	25	–	156	9
		120 12 606	12	120	–	23	24.3	25	–	176	9
		140 12 606	12	140	–	23	24.3	25	–	196	9
		160 12 606	12	160	–	23	24.3	25	–	216	9
	M 16	100 16 606/32	16	100	–	29	31.5	32	–	160	9
		150 16 606/32	16	150	–	29	31.5	32	–	210	9
		200 16 606/32	16	200	–	29	31.5	32	–	260	9
		250 16 606/32	16	250	–	29	31.5	32	–	310	9
		300 16 606/32	16	300	–	29	31.5	32	–	360	9

<2/2

Dense antivibration material adapters – for threaded shank end mills

M 8 – M 16



Characteristics:



M 8 to M 12	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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	M 8	40 08 601	8	40	–	14.2	15.3	16	–	88	9
		60 08 601	8	60	–	14.2	15.3	16	–	108	9
	M 10	80 08 601	8	80	–	14.2	15.3	16	–	128	9
		100 08 601	8	100	–	14.2	15.3	16	–	148	9
	M 12	120 08 601	8	120	–	14.2	15.3	16	–	168	9
		150 08 601	8	150	–	14.2	15.3	16	–	198	9
	M 8	40 10 601	10	60	–	18.5	19.3	20	–	110	9
		60 10 601	10	80	–	18.5	19.3	20	–	130	9
	M 10	80 10 601	10	100	–	18.5	19.3	20	–	150	9
		100 10 601	10	120	–	18.5	19.3	20	–	170	9
	M 12	120 10 601	10	140	–	18.5	19.3	20	–	190	9
		150 10 601	10	175	–	23	24.3	25	–	215	9

Dense antivibration material adapters – for threaded shank end mills

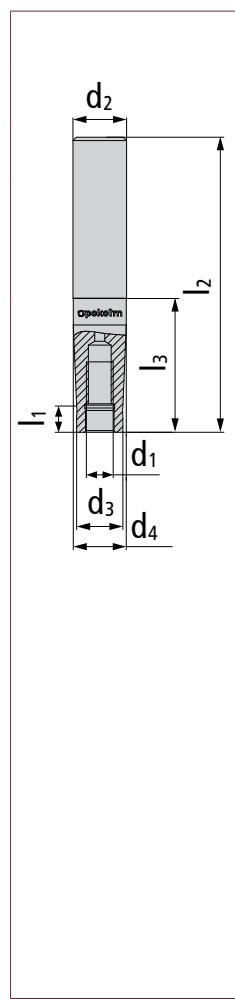
M 8 – M 16



Characteristics:



M 8 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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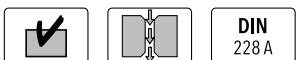
M 16	100 16 601/32	16	100	–	29	31.5	32	–	160	9
	150 16 601/32	16	150	–	29	31.5	32	–	210	9
	200 16 601/32	16	200	–	29	31.5	32	–	260	9
	250 16 601/32	16	250	–	29	31.5	32	–	310	9
	300 16 601/32	16	300	–	29	31.5	32	–	360	9

<2/2

MK adapters – for threaded shank end mills

M 8 – M 16


Characteristics:


**DIN
228 A**

M 8 to M 16	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 8	20 08 MK2	8	20	–	13.8	18	2	–	–
		40 08 MK2	8	40	–	13.8	18	2	–	–
		60 08 MK2	8	60	–	13.8	18	2	–	–
		80 08 MK3	8	80	–	13.8	24	3	–	–
		100 08 MK3	8	100	–	13.8	24.1	3	–	8.5
	M 10	20 10 MK2	10	20	–	18	18	2	–	–
		40 10 MK2	10	40	–	18	18	2	–	–
		60 10 MK2	10	60	–	18	18	2	–	–
		80 10 MK3	10	80	–	18	24	3	–	–
		100 10 MK3	10	100	–	18	23.6	3	–	8.5
	M 12	30 12 MK3	12	30	–	21	23.6	3	–	–
		45 12 MK3	12	45	–	21	24.1	3	–	–
		60 12 MK3	12	60	–	21	24.1	3	–	–
		75 12 MK3	12	75	–	21	24.1	3	–	–
		95 12 MK3	12	95	–	21	24.1	3	–	–
		120 12 MK4	12	120	–	21	31.6	4	–	8.5

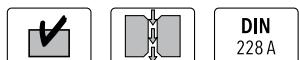
1/2>

MK adapters – for threaded shank end mills

M 8 – M 16



Characteristics:



M 8 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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<p>M 16</p>	35 16 MK4	16	35	–	29	31.5	4	–	–	8.5
	50 16 MK4	16	50	–	29	31.6	4	–	–	8.5
	65 16 MK4	16	65	–	29	31.6	4	–	–	8.5
	80 16 MK4	16	80	–	29	31.6	4	–	–	8.5
	95 16 MK4	16	95	–	29	31.5	4	–	–	8.5
	120 16 MK5	16	120	–	29	44.5	5	–	–	8.5
	150 16 MK5	16	150	–	29	44.7	5	–	–	8.5
	180 16 MK5	16	180	–	29	44	5	–	–	8.5

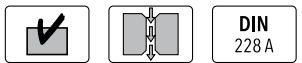
<2/2

MK adapters – for shrink gripping

Diameter 6 to 16 mm



Characteristics:



Diameter 6 to 16 mm	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 6 mm	50 06 MK3 S	6	50	–	12	23.5	3	–	–	7.8
	100 06 MK3 S	6	100	–	12	24	3	–	–	–	7.8
	150 06 MK3 S	6	150	–	12	24	3	–	–	–	7.8
	Diameter 8 mm	50 08 MK3 S	8	50	–	16	24	3	–	–	7.8
	100 08 MK3 S	8	100	–	16	24	3	–	–	–	7.8
	150 08 MK3 S	8	150	–	16	24	3	–	–	–	7.8
	200 08 MK5 S	8	200	–	16	44.5	5	–	–	–	7.8
	Diameter 10 mm	50 10 MK3 S	10	50	–	20	24	3	–	–	7.8
	100 10 MK3 S	10	100	–	20	24	3	–	–	–	7.8
	150 10 MK4 S	10	150	–	20	32	4	–	–	–	7.8
	200 10 MK5 S	10	200	–	20	44.2	5	–	–	–	7.8
	Diameter 12 mm	50 12 MK3 S	12	50	–	24	24	3	–	–	7.8
	100 12 MK3 S	12	100	–	24	24	3	–	–	–	–
	150 12 MK4 S	12	150	–	24	31	4	–	–	–	7.8
	200 12 MK5 S	12	200	–	24	44.5	5	–	–	–	7.8
	Diameter 16 mm	150 16 MK4 S	16	150	–	32	32	4	–	–	7.8
	200 16 MK5 S	16	200	–	32	44.2	5	–	–	–	7.8

Pokolm extensions – for threaded shanks

M 8 – M 16



Characteristics:



M 8 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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	M 8	08 40 780	8	40	–	13.8	13.8	8	–	–
		08 60 780	8	60	–	13.8	13.8	8	–	–
M 10	10 40 780	10	40	–	18	18	10	–	–	–
	10 60 780	10	60	–	18	18	10	–	–	–
M 12	12 40 780	12	40	–	21	21	12	–	–	–
	12 60 780	12	60	–	21	21	12	–	–	–
M 16	16 40 780	16	40	–	29	29	16	–	–	–
	16 60 780	16	60	–	29	29	16	–	–	–

Pokolm reductions – for threaded shanks

M 6 – M 12



Characteristics:



M 6 to M 12	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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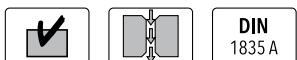
	M 6	08 20 781	6	20	–	9.75	13.8	8	–	–	7.8
	M 8	10 40 781	8	40	–	13.8	18	10	–	–	7.8
		12 60 781	8	60	–	13.8	21	12	–	–	7.8
	M 10	12 40 781	10	40	–	18	21	12	–	–	7.8
		16 60 781	10	60	–	18	29	16	–	–	7.8
	M 12	16 40 781	12	40	–	21	29	16	–	–	7.8

Pokolm plain shank – DIN 1835A

M 6 – M 16



Characteristics:



M 6 to M 16	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 6	20 06 600/10 G	6	20	–	9.75	9.8	10	–	60	7.8
		20 06 600/12 G	6	20	–	11.5	11.8	12	–	65	7.8
		40 06 600/10 G	6	40	–	9.75	9.8	10	–	80	7.8
		40 06 600/12 G	6	40	–	11.5	11.8	12	–	85	7.8
M 8	20 16 600 G	8	20	–	13.8	15.8	16	–	68	7.8	
	40 16 600 G	8	40	–	13.8	15.8	16	–	88	7.8	
M 10	25 20 600 G	10	25	–	18	19.8	20	–	75	7.8	
	45 20 600 G	10	45	–	18	19.8	20	–	95	7.8	
M 12	30 25 600 G	12	30	–	21	24.8	25	–	86	7.8	
	50 25 600 G	12	50	–	21	24.8	25	–	106	7.8	
M 16	50 32 600 G	16	50	–	29	31.8	32	–	110	7.8	

Pokolm plain shank – DIN 1835B

M 6 – M 16

Characteristics:



M 6 to M 16	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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	M 6	20 06 600/10	6	20	–	9.75	9.8	10	–	60	7.8
		20 06 600/12	6	20	–	11.5	11.8	12	–	65	7.8
	M 8	40 06 600/10	6	40	–	9.75	9.8	10	–	80	7.8
		40 06 600/12	6	40	–	11.5	11.8	12	–	85	7.8
	M 10	20 16 600	8	20	–	13.8	15.8	16	–	68	7.8
		40 16 600	8	40	–	13.8	15.8	16	–	88	7.8
	M 12	25 20 600	10	25	–	18	19.8	20	–	75	7.8
		45 20 600	10	45	–	18	19.8	20	–	95	7.8
	M 16	30 25 600	12	30	–	21	24.8	25	–	86	7.8
		50 25 600	12	50	–	21	24.8	25	–	106	7.8
		50 32 600	16	50	–	29	31.8	32	–	110	7.8

Pokolm shell-type adapters – for insertion

for shell-type milling cutters



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 22 mm	50 22 782	22	50	–	48	48	22	–	–
		100 22 782	22	100	–	48	48	22	–	–

Accesso- ries	DRIVING10X8	Driving block 10 x 8							> Page 161	
	M4X10	Screw for driving block 10 x 8							> Page 160	
	M6X55	Cheese-head screw							> Page 160	
	M10X35	Screw M10X35							> Page 161	

	Bore diam. 27 mm	50 27 782	27	50	–	62	62	27	–	–
		100 27 782	27	100	–	62	62	27	–	–

Accesso- ries	DRIVING12X12/2	Driving block 12 x 12							> Page 161	
	M5X16	Screw for driving block 12 x 12 and 14 x 14							> Page 160	
	M8X55	Cheese-head screw							> Page 160	
	M12X35	Screw M12X35							> Page 161	

The scope of delivery includes 4 cheese-head screws for mounting the adapter.

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores!
This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEBO-AUF

Pokolm shell-type adapter – for threaded shank end mills

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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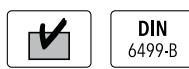
	M 10	60 22 M10 783	M 10	60	–	18	48	22	–	–	12
	M 10	100 22 M10 783	M 10	100	–	18	48	22	–	–	12
	Accessories	M6X25 Cheese-head screw > Page 160									
	M 10	60 27 M10 783	M 10	60	–	18	62	27	–	–	12
	M 10	100 27 M10 783	M 10	100	–	18	62	27	–	–	12
	Accessories	M8X25 Cheese-head screw > Page 160									
	M 12	60 22 M12 783	M 12	60	–	21	48	22	–	–	12
	M 12	100 22 M12 783	M 12	100	–	21	48	22	–	–	12
	Accessories	M6X25 Cheese-head screw > Page 160									
	M 12	60 27 M12 783	M 12	60	–	21	62	27	–	–	12
	M 12	100 27 M12 783	M 12	100	–	21	62	27	–	–	12
	Accessories	M8X25 Cheese-head screw > Page 160									
	M 16	60 22 M16 783	M 16	60	–	29	48	22	–	–	12
	M 16	100 22 M16 783	M 16	100	–	29	48	22	–	–	12
	Accessories	M6X25 Cheese-head screw > Page 160									
	M 16	60 27 M16 783	M 16	60	–	29	62	27	–	–	12
	M 16	100 27 M16 783	M 16	100	–	29	62	27	–	–	12
	Accessories	M8X25 Cheese-head screw > Page 160									

Precision collet chucks

ER 16 | for diam. 1– 10 mm

DIN ISO 15488 Form B | clamping range (mm) or tolerance: 1 | Concentricity: 5 µm

Characteristics:



ER 16 diam. 1 – 10 mm	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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<p>ER 16</p>	ER16 1-2	2	–	–	1	–	16	–	–	–
	ER16 2-3	3	–	–	2	–	16	–	–	–
	ER16 3-4	4	–	–	3	–	16	–	–	–
	ER16 4-5	5	–	–	4	–	16	–	–	–
	ER16 5-6	6	–	–	5	–	16	–	–	–
	ER16 7-8	8	–	–	7	–	16	–	–	–
	ER16 8-9	9	–	–	8	–	16	–	–	–
	ER16 9-10	10	–	–	9	–	16	–	–	–
	Accesso- ries	ER16 001	Tightning nut ER 16					> Page 161		
		16 501	Collet chuck wrench for ER 16 tightning nut					> Page 161		

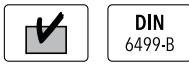
Precision collet chucks

ER 20 | for diam. 1– 12 mm

DIN ISO 15488 Form B | clamping range (mm) or tolerance: 1 | Concentricity: 5 µm



Characteristics:



DIN
6499-B

ER 20 diam. 1 – 12 mm	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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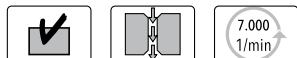
	ER20 0.5-1	1	–	–	0.5	–	20	–	–	–
	ER20 1-2	2	–	–	1	–	20	–	–	–
	ER20 2-3	3	–	–	2	–	20	–	–	–
	ER20 3-4	4	–	–	3	–	20	–	–	–
	ER20 4-5	5	–	–	4	–	20	–	–	–
	ER20 5-6	6	–	–	5	–	20	–	–	–
	ER20 7-8	8	–	–	7	–	20	–	–	–
	ER20 9-10	10	–	–	9	–	20	–	–	–
	ER20 11-12	12	–	–	11	–	20	–	–	–
	Accesso- ries	ER20 001	Tightning nut				> Page 161			
		20 501	Collet chuck wrench for ER 20 tightning nut				> Page 161			

Drill chucks – threaded

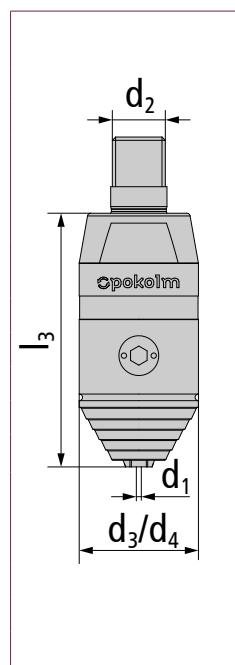
M 16



Characteristics:



M 16	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diam. 0.3-8 mm	BF 0.3-8 M16 IC	8	75	–	36	36	16	–	–	–
Accessories	HEXA 4T	HEXA 4T								> Page 161
	BF08DS04	Gasket 0804								> Page 163
	BF08DS08	Gasket 0808								> Page 163
	BF08MW	Wrench 08								> Page 163
Diam. 0.5-13 mm	BF 0.5-13 M16 IC	13	100	–	50	50	16	–	–	–
Accessories	HEXA 6T	HEXA 6T								> Page 161
	BF13DS06	Gasket 1306								> Page 163
	BF13DS13	Gasket 1313								> Page 163
	BF13MW	Wrench 13/16								> Page 163
Diam. 2.5-16 mm	BF 2.5-16 M16 IC	16	100	–	50	50	16	–	–	–
Accessories	HEXA 6T	HEXA 6T								> Page 161
	BF16DS06	Gasket 1606								> Page 163
	BF16DS16	Gasket 1616								> Page 163
	BF13MW	Wrench 13/16								> Page 163

Drill chuck includes gasket and Allen wrench



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Spindle systems / shrink technology

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Flat contact surface

Steep taper SK / BT

Hollow shank taper HSK

Adapters, extensions,
collets, drill chucks

Tips and practical
information

PRODUCT VARIETY WITH THE HIGHEST PRECISION

Hollow shank taper HSK

At a glance

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HOLLOW SHANK TAPER HSK



Pokolm hollow shaft tapers

Features and advantages:

- Wide range of variants available as a standard
- HSK 25 – HSK 100 arbors available
- Thanks to complete in-house production, custom designs can even be created for your application.
- Shank tolerance H6
- High balancing precision
- Suitable for HSS and solid carbide tools
- Suitable for coolants and MMS
- Extended shrink adjustment for optimal holding forces
- Hardness 52-54 HRC
- Arbors made of high temperature-resistant material

HSK 25 form E

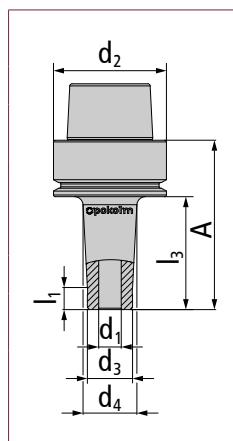
for shrinking



Characteristics:



for shrink-fitting	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 3 mm	40 03 E25 S.01	3	40	50	9	14	25	Form E	-	7.8
Diameter 4 mm	40 04 E25 S.01	4	40	50	10.5	13.9	25	Form E	-	7.8
Diameter 6 mm	40 06 E25 S	6	40	50	12	15.4	25	Form E	-	7.8
Diameter 8 mm	40 08 E25 S	8	40	50	16	19	25	Form E	-	7.8
Diameter 10 mm	40 10 E25 S	10	40	50	19	19	25	Form E	-	-

The accessories shown here must be used for all sizes!

Accessories	KMR-25 WRENCHHSK25	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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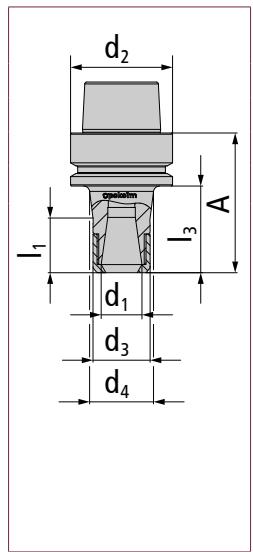
HSK 25 form E

HSC precision collet chucks ER 16

Characteristics:



HSC precision collet chucks ER 16	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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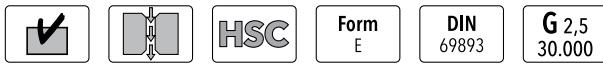


ER 16	40 ER16 E25	16	40	50	22	20	25	Form E	-	10.5
Accessories	4ER16 001 Tightning nut ER 16 > Page 161									
	16 501 Collet chuck wrench for ER 16 tightning nut > Page 161									
	KMR-25 Coolant supply tube for HSK tooling > Page 162									
	WRENCHHHSK25 Wrench for coolant tubes > Page 162									

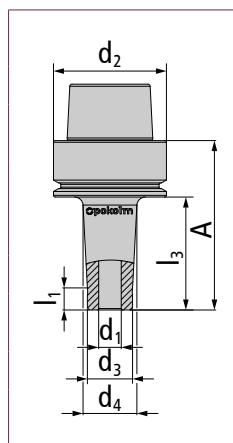
HSK 32 form E

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 3 mm	40 03 E32 S.01	3	40	60	9	12.4	32	Form E	-	7.8
Diameter 4 mm	40 04 E32 S.01	4	40	60	10.5	13.87	32	Form E	-	7.8
Diameter 6 mm	40 06 E32 S	6	40	60	12	15.4	32	Form E	-	7.8
Diameter 8 mm	40 08 E32 S	8	40	60	16	20	32	Form E	-	7.8
Diameter 10 mm	40 10 E32 S	10	40	60	20	24	32	Form E	-	7.8

The accessories shown here must be used for all sizes!

Accessories	KMR-32 WRENCHHSK32	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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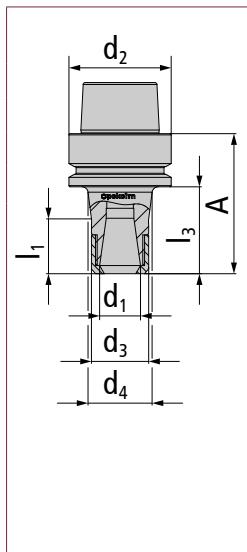
HSK 32 form E

HSC precision collet chucks ER 20

Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20	40 ER20 E32	20	40	60	28	28	32	Form E	-	11.8
Accessories	ER20 001 Tightning nut > Page 161									
	20 501 Collet chuck wrench for ER 20 tightning nut > Page 161									
	KMR-32 Coolant supply tube for HSK tooling > Page 162									
	WRENCHHSK32 Wrench for coolant tubes > Page 162									

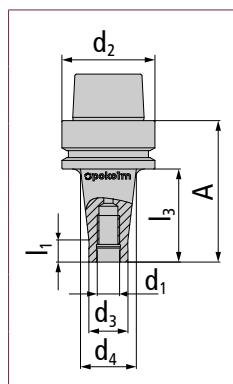
HSK 40 form E

for threaded shank end mills

Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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M 8	25 08 E40	8	25	45	13.8	15	40	Form E	–	12
	50 08 E40	8	50	70	13.8	23	40	Form E	–	12
	75 08 E40	8	75	95	13.8	25	40	Form E	–	12

M 10	25 10 E40	10	25	45	18	23	40	Form E	–	12
	50 10 E40	10	50	70	18	25	40	Form E	–	12
	75 10 E40	10	75	95	18	30	40	Form E	–	12

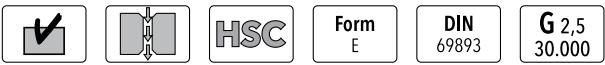
The accessories shown here must be used for all sizes!	Accessories	KMR-40A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK40	Wrench for coolant tubes	> Page 162

HSK 40 form E

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	40 03 E40 S.01	3	40	60	9	14	40	Form E	-	7.8
		70 03 E40 S.01	3	70	90	9	18.79	40	Form E	-	7.8
	Diameter 4 mm	40 04 E40 S.01	4	40	60	10.5	13.9	40	Form E	-	7.8
		70 04 E40 S.01	4	70	90	10.5	17.02	40	Form E	-	7.8
	Diameter 6 mm	40 06 E40 S	6	40	60	12	15.4	40	Form E	-	7.8
		70 06 E40 S	6	70	90	12	18.5	40	Form E	-	7.8
	Diameter 8 mm	40 08 E40 S	8	40	60	16	19	40	Form E	-	7.8
		70 08 E40 S	8	70	90	16	23	40	Form E	-	7.8
	Diameter 10 mm	40 10 E40 S	10	40	60	20	23.4	40	Form E	-	7.8
		70 10 E40 S	10	70	90	20	26.5	40	Form E	-	7.8
	Diameter 12 mm	40 12 E40 S	12	40	60	24	27.4	40	Form E	-	7.8
		70 12 E40 S	12	70	90	24	30.5	40	Form E	-	7.8
	Diameter 16 mm	40 16 E40 S	16	40	60	32	32	40	Form E	-	-

The accessories shown here must be used for all sizes!

Accessories	KMR-40A	Coolant supply tube for HSK tooling	> Page 162
	WRENCHHHSK40	Wrench for coolant tubes	> Page 162

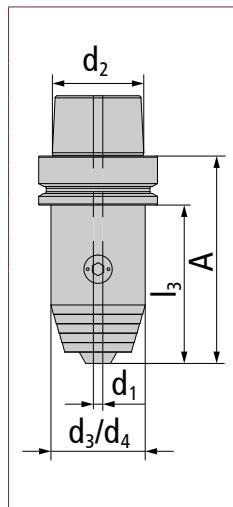
HSK 40 form E

Drill chucks

Characteristics:



Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diam. 0.3 to 8 mm	BF 0.3-8 E40 IC	8	74	94	36	36	40	Form E	-	-
Accessories										
	HEXA 4T			HEXA 4T					> Page 161	
	KMR-40A			Coolant supply tube for HSK tooling					> Page 162	
	WRENCHHSK40			Wrench for coolant tubes					> Page 162	
	BF08DS04			Gasket 0804					> Page 163	
	BF08DS08			Gasket 0808					> Page 163	
	BF08MW			Wrench 08					> Page 163	

Scope of delivery includes wrench and gasket

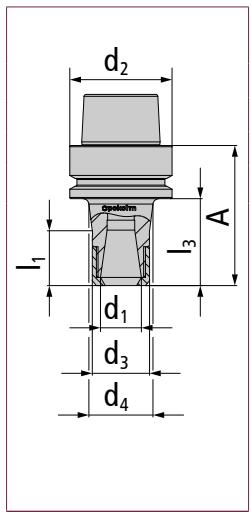
HSK 40 form E

HSC precision collet chucks ER 20

Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20	50 ER20 E40	20	50	70	28	32	40	Form E	-	34.3
Accessories										
	ER20 001		Tightning nut							> Page 161
	20 501		Collet chuck wrench for ER 20 tightning nut							> Page 161
	KMR-40A		Coolant supply tube for HSK tooling							> Page 162
	WRENCHHSK40		Wrench for coolant tubes							> Page 162

Scope of delivery includes a tightning nut, which is approved up to $n = 80,000$ 1/min

HSK 40 form EC

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1	
	Diameter 3 mm	40 03 EC 40 S.01	3	40	60	9	14	40	Form E+C	–	7.8
		70 03 EC 40 S.01	3	70	90	9	18.79	40	Form E+C	–	7.8
Diameter 4 mm	40 04 EC 40 S.01	4	40	60	10.5	13.87	40	Form E+C	–	7.8	
	70 04 EC 40 S.01	4	70	90	10.5	17	40	Form E+C	–	7.8	
Diameter 6 mm	40 06 EC 40 S	6	40	60	12	15.4	40	Form E+C	–	7.8	
	70 06 EC 40 S	6	70	90	12	19	40	Form E+C	–	7.8	
	100 06 EC 40 S	6	100	120	12	22	40	Form E+C	–	7.8	
Diameter 8 mm	40 08 EC 40 S	8	40	60	16	19.4	40	Form E+C	–	7.8	
	70 08 EC 40 S	8	70	90	16	22.5	40	Form E+C	–	7.8	
	100 08 EC 40 S	8	100	120	16	26	40	Form E+C	–	7.8	
Diameter 10 mm	40 10 EC 40 S	10	40	60	20	24	40	Form E+C	–	7.8	
	70 10 EC 40 S	10	70	90	20	26.5	40	Form E+C	–	7.8	
	100 10 EC 40 S	10	100	120	20	29.6	40	Form E+C	–	7.8	
Diameter 12 mm	40 12 EC 40 S	12	40	60	24	28	40	Form E+C	–	7.8	
	70 12 EC 40 S	12	70	90	24	30.5	40	Form E+C	–	7.8	
Diameter 16 mm	40 16 EC 40 S	16	40	60	32	32	40	Form E+C	–	–	

The accessories shown here must be used for all sizes!

Accessories

KMR-40A

WRENCHHSK40

Coolant supply tube for HSK tooling

> Page 162

Wrench for coolant tubes

> Page 162

HSK 50 form E

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 8	25 08 E50	8	25	51	13.8	15	50	Form E	-	12
		50 08 E50	8	50	76	13.8	23	50	Form E	-	12
M 10	25 10 E50	10	25	51	18	23	50	Form E	-	12	
	50 10 E50	10	50	76	18	25	50	Form E	-	12	
M 12	25 12 E50	12	25	51	21	24	50	Form E	-	12	
	50 12 E50	12	50	76	21	30	50	Form E	-	12	
	100 12 E50	12	100	126	21	38	50	Form E	-	12	
M 16	25 16 E50	16	25	51	29	29	50	Form E	-	-	
	50 16 E50	16	50	76	29	34	50	Form E	-	12	

The accessories shown here must be used for all sizes!	Accessories	KMR-50A WRENCHHHSK50	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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HSK 50 form E

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 E50 S.01	3	50	76	9	15.6	50	Form E	–	7.8
		100 03 E50 S.01	3	100	126	9	23.5	50	Form E	–	7.8
	Diameter 4 mm	50 04 E50 S.01	4	50	76	10.5	14.9	50	Form E	–	7.8
		100 04 E50 S.01	4	100	126	10.5	20.2	50	Form E	–	7.8
	Diameter 6 mm	50 06 E50 S	6	50	76	12	16.4	50	Form E	–	7.8
		100 06 E50 S	6	100	126	12	21.6	50	Form E	–	7.8
Diameter 8 mm	50 08 E50 S	8	50	76	16	20.3	50	Form E	–	7.8	
	100 08 E50 S	8	100	126	16	25.7	50	Form E	–	7.8	
Diameter 10 mm	50 10 E50 S	10	50	76	20	24.4	50	Form E	–	7.8	
	100 10 E50 S	10	100	126	20	30	50	Form E	–	7.8	

The accessories shown here must be used for all sizes!	Accessories	KMR-50A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK50	Wrench for coolant tubes	> Page 162

Characteristics:



on Shrink-fitting	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 12 mm	50 12 E50 S	12	50	76	24	28.4	50	Form E	-	7.8
	Diameter 16 mm	50 16 E50 S	16	50	76	32	36.4	50	Form E	-	7.8
	Diameter 20 mm	60 20 E50 S	20	60	86	40	40	50	Form E	-	-

The accessories shown here must be used for all sizes!	Accessories	KMR-50A WRENCHHSK50	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162
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<2/2

HSK 50 form E

Drill chucks

Characteristics:



Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diam. 0.3 to 8 mm	BF 0.3-8 E50 IC	8	72	98	36	36	50	Form E	—	—
	Accessories	HEXA 4T		HEXA 4T						> Page 161	
		BF08DS04		Gasket 0804						> Page 163	

	Diam. 0.5 to 13 mm	BF 0.5-13 E50 IC	13	96	122	50	50	50	Form E	—	—
	Accessories	HEXA 6T		HEXA 6T						> Page 161	
		BF13DS06		Gasket 1306						> Page 163	

	Diam. 2.5 to 16 mm	BF 2.5-16 E50 IC	16	101	127	57	57	50	Form E	—	—
	Accessories	HEXA 6T		HEXA 6T						> Page 161	
		BF16DS06		Gasket 1606						> Page 163	

The accessories shown here must be used for all sizes!	Accessories	KMR-50A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK50	Wrench for coolant tubes	> Page 162

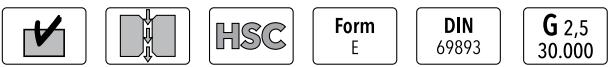
The scope of delivery includes a hex key and gasket

HSK 50 form E

HSC precision collet chucks ER 20



Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	ER 20	50 ER20 E50	20	50	76	28	32	50	Form E	-	34.3
	Accessories	ER20 001		Tightning nut							> Page 161
		20 501		Collet chuck wrench for ER 20 tightning nut							> Page 161
		KMR-50A		Coolant supply tube for HSK tooling							> Page 162
		WRENCHHSK50		Wrench for coolant tubes							> Page 162

 Scope of delivery includes a tightning nut, which is approved up to $n = 80,000$ 1/min

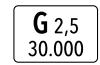
HSK 50 form E

for shrink gripping | CoolCap®

New



Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 4 mm	50 04 E50 SR1	4	50	76	15	23.4	50	Form E	–	–
		75 04 E50 SR1	4	75	101	15	27.3	50	Form E	–	–
		100 04 E50 SR1	4	100	126	15	31.3	50	Form E	–	–
	Accessories	SR1 S06 SW17 CoolCap® screw-on cap diam. 6 > Page 162									
		SR1 A04 SW17 CoolCap® screw-on cap diam. 4 > Page 163									
	Diameter 6 mm	50 06 E50 SR1	6	50	76	16.5	24.4	50	Form E	–	–
		75 06 E50 SR1	6	75	101	16.5	28.33	50	Form E	–	–
		100 06 E50 SR1	6	100	126	16.5	32.27	50	Form E	–	–
	Accessories	SR1 S06 SW17 CoolCap® screw-on cap diam. 6 > Page 162									
		SR1 A06 SW17 CoolCap® screw-on cap diam. 6 > Page 163									
	Diameter 8 mm	50 08 E50 SR1	8	50	76	20.5	28.4	50	Form E	–	–
		75 08 E50 SR1	8	75	101	20.5	32.33	50	Form E	–	–
		100 08 E50 SR1	8	100	126	20.5	36.27	50	Form E	–	–
	Accessories	SR1 S08 SW21 CoolCap® screw-on cap diam. 8 > Page 162									
		SR1 A08 SW21 CoolCap® screw-on cap diam. 8 > Page 163									

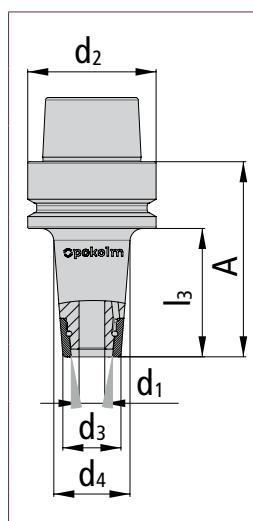
The accessories shown here must be used for all sizes!	Accessories	KMR-50A WRENCHHSK50 SR1 ZSW 002 DMS 3/8 8-60 NM	Coolant supply tube for HSK tooling Wrench for coolant tubes CoolCap® application tool Torque wrench 3/8"	> Page 162 > Page 162 > Page 163 > Page 163
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The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
--------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------



Diameter 10 mm	50 10 E50 SR1	10	50	76	22.5	30.4	50	Form E	-	-
	75 10 E50 SR1	10	75	101	22.5	34.3	50	Form E	-	-
	100 10 E50 SR1	10	100	126	22.5	38.3	50	Form E	-	-
Accesso- ries	SR1 S10 SW22 CoolCap® screw-on cap diam. 10								> Page 162	
	SR1 A10 SW22 CoolCap® screw-on cap diam. 10								> Page 163	

Diameter 12 mm	50 12 E50 SR1	12	50	76	26.5	34.4	50	Form A	-	-
	75 12 E50 SR1	12	75	101	26.5	38.33	50	Form A	-	-
	100 12 E50 SR1	12	100	126	26.5	40	50	Form A	-	-
Accesso- ries	SR1 S12 SW27 CoolCap® screw-on cap diam. 12								> Page 162	
	SR1 A12 SW27 CoolCap® screw-on cap diam. 12								> Page 163	

The accessories shown here must be used for all sizes!

Accesso- ries	KMR-50A	Coolant supply tube for HSK tooling	> Page 162
	WRENCHHHSK50	Wrench for coolant tubes	> Page 162
	SR1 ZSW 002	CoolCap® application tool	> Page 163
	DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

HSK 63 form A

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 8	25 08 A63	8	25	51	13.8	15	63	Form A	-	12
		50 08 A63	8	50	76	13.8	23	63	Form A	-	12
		75 08 A63	8	75	101	13.8	25	63	Form A	-	12
		100 08 A63	8	100	126	13.8	30	63	Form A	-	12
	M 10	25 10 A63	10	25	51	18	23	63	Form A	-	12
		50 10 A63	10	50	76	18	25	63	Form A	-	12
		75 10 A63	10	75	101	18	30	63	Form A	-	12
		100 10 A63	10	100	126	18	35	63	Form A	-	12
		125 10 A63	10	125	151	18	38	63	Form A	-	12
		150 10 A63	10	150	176	18	45	63	Form A	-	12
	M 12	25 12 A63	12	25	51	21	24	63	Form A	-	12
		50 12 A63	12	50	76	21	30	63	Form A	-	12
		75 12 A63	12	75	101	21	35	63	Form A	-	12
		100 12 A63	12	100	126	21	38	63	Form A	-	12
		125 12 A63	12	125	151	21	43	63	Form A	-	12
		150 12 A63	12	150	176	21	45	63	Form A	-	12

The accessories shown here must be used for all sizes!
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Accessories	KMR-63A WRENCHHSK63	Coolant tubes Wrench for coolant tubes	> Page 162 > Page 162
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Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 16	25 16 A63	16	25	51	29	29	63	Form A	-	-
		50 16 A63	16	50	76	29	34	63	Form A	-	12
		75 16 A63	16	75	101	29	35	63	Form A	-	12
		100 16 A63	16	100	126	29	40	63	Form A	-	12
		125 16 A63	16	125	151	29	44	63	Form A	-	12
		150 16 A63	16	150	176	29	48	63	Form A	-	12
		175 16 A63	16	175	201	29	50	63	Form A	-	12
		200 16 A63	16	200	226	29	50	63	Form A	-	12
		250 16 A63	16	250	276	29	50	63	Form A	-	12

The accessories shown here must be used for all sizes!	Accesso- ries	KMR-63A	Coolant tubes	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

<2/2

HSK 63 form A

for threaded shank milling | cylindrical

Characteristics:



for threaded shank milling cylindrical	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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	M 8	50 08 A63 ZYL	8	50	76	13.8	13.8	63	Form A	—	—
	M 10	50 10 A63 ZYL	10	50	76	18	18	63	Form A	—	—
		75 10 A63 ZYL	10	75	101	18	18	63	Form A	—	—
	M 12	50 12 A63 ZYL	12	75	101	21	21	63	Form A	—	—
		75 12 A63 ZYL	12	50	76	21	21	63	Form A	—	—
		100 12 A63 ZYL	12	100	126	21	21	63	Form A	—	—
M 16	50 16 A63 ZYL	16	50	76	29	29	63	Form A	—	—	
	75 16 A63 ZYL	16	75	101	29	29	63	Form A	—	—	
	100 16 A63 ZYL	16	100	126	29	29	63	Form A	—	—	
	125 16 A63 ZYL	16	125	151	29	29	63	Form A	—	—	

The accessories shown here must be used for all sizes!	Accessories	KMR-63A WRENCHHSK63	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162
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HSK 63 form A

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 A63 S.01	3	50	76	9	15.6	63	Form A	-	7.8
		100 03 A63 S.01	3	100	126	9	23.5	63	Form A	-	7.8
	Diameter 4 mm	50 04 A63 S.01	4	50	76	10.5	14.9	63	Form A	-	7.8
		75 04 A63 S.01	4	75	101	10.5	17.6	63	Form A	-	7.8
		100 04 A63 S.01	4	100	126	10.5	20.2	63	Form A	-	7.8
	Diameter 6 mm	50 06 A63 S	6	50	76	12	16.4	63	Form A	-	7.8
		75 06 A63 S	6	75	101	12	19	63	Form A	-	7.8
		100 06 A63 S	6	100	126	12	21.7	63	Form A	-	7.8
		150 06 A63 S	6	150	176	12	27	63	Form A	-	7.8
		200 06 A63 S	6	200	226	12	32.1	63	Form A	-	7.8
	Diameter 8 mm	50 08 A63 S	8	50	76	16	20.4	63	Form A	-	7.8
		75 08 A63 S	8	75	101	16	23	63	Form A	-	7.8
		100 08 A63 S	8	100	126	16	25.7	63	Form A	-	7.8
		150 08 A63 S	8	150	176	16	30.9	63	Form A	-	7.8
		200 08 A63 S	8	200	226	16	36.1	63	Form A	-	7.8

The accessories shown here
must be used for all sizes!

Accesso- ries	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
	WRENCHHSK63	Wrench for coolant tubes	> Page 162

1/3>

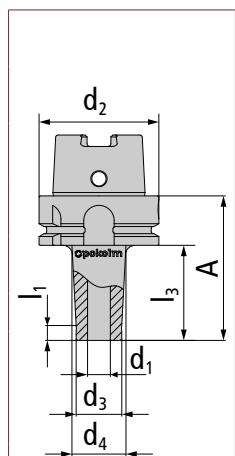
HSK 63 form A for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 10 mm	50 10 A63 S	10	50	76	20	24.4	63	Form A	–	7.8
	75 10 A63 S	10	75	101	20	27	63	Form A	–	7.8
	100 10 A63 S	10	100	126	20	30	63	Form A	–	7.8
	150 10 A63 S	10	150	176	20	35	63	Form A	–	7.8
	200 10 A63 S	10	200	226	20	40.1	63	Form A	–	7.8

Diameter 12 mm	50 12 A63 S	12	50	76	24	28.4	63	Form A	–	7.8
	75 12 A63 S	12	75	101	24	31	63	Form A	–	7.8
	100 12 A63 S	12	100	126	24	33.7	63	Form A	–	7.8
	150 12 A63 S	12	150	176	24	39	63	Form A	–	7.8
	200 12 A63 S	12	200	226	24	44.1	63	Form A	–	7.8

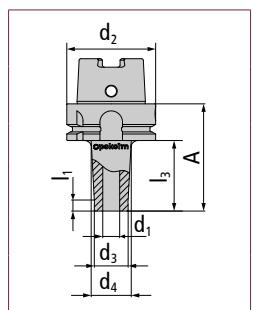
Diameter 16 mm	50 16 A63 S	16	50	76	32	36.4	63	Form A	–	7.8
	75 16 A63 S	16	75	101	32	39	63	Form A	–	7.8
	100 16 A63 S	16	100	126	32	41.7	63	Form A	–	7.8
	150 16 A63 S	16	150	176	32	46.9	63	Form A	–	7.8

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 20 mm	60 20 A63 S	20	60	86	40	45.5	63	Form A	-	7.8
	100 20 A63 S	20	100	126	40	49.7	63	Form A	-	7.8
Diameter 25 mm	60 25 A63 S	25	60	86	46	46	63	Form A	-	-
Diameter 32 mm	60 32 A63 S	32	60	86	44	52	63	Form A	-	-

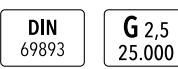
The accessories shown here must be used for all sizes!	Accessories	KMR-63A WRENCHHHSK63	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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<3/3

HSK 63 form A

for shrinking | reinforced design

Characteristics:



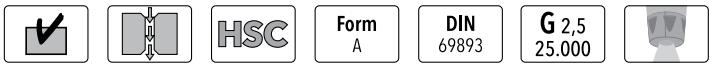
for shrinking reinforced design	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁	
	Diameter 6 mm	50 06 A63 SB	6	50	76	21	27.6	63	Form A	–	7.8
		100 06 A63 SB	6	100	126	21	35.5	63	Form A	–	7.8
	Diameter 8 mm	50 08 A63 SB	8	50	76	21	27.6	63	Form A	–	7.8
		100 08 A63 SB	8	100	126	21	35.5	63	Form A	–	7.8
	Diameter 10 mm	50 10 A63 SB	10	50	76	24	30.6	63	Form A	–	7.8
		100 10 A63 SB	10	100	126	24	38.5	63	Form A	–	7.8
	Diameter 12 mm	50 12 A63 SB	12	50	76	24	30.6	63	Form A	–	7.8
		100 12 A63 SB	12	100	126	24	38.5	63	Form A	–	7.8
	Diameter 16 mm	50 16 A63 SB	16	50	76	32	38.6	63	Form A	–	7.8
		100 16 A63 SB	16	100	126	32	46.5	63	Form A	–	7.8

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant tubes	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

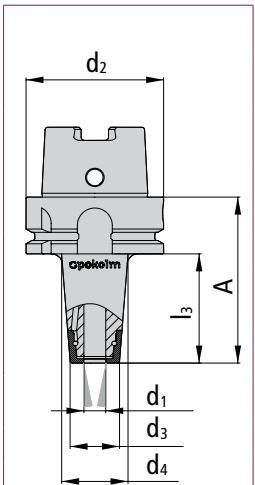
HSK 63 form A

for shrink gripping | CoolCap®

Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 4 mm	50 04 A63 SR1	4	50	76	15	22.9	63	Form A	-	-
Accessories	SR1 S06 SW17	CoolCap® screw-on cap diam. 6								> Page 162
	SR1 A04 SW17	CoolCap® screw-on cap diam. 4								> Page 163

Diameter 6 mm	50 06 A63 SR1	6	50	76	16.5	24.4	63	Form A	-	-
Accessories	SR1 S06 SW17	CoolCap® screw-on cap diam. 6								> Page 162
	SR1 A06 SW17	CoolCap® screw-on cap diam. 6								> Page 163

Diameter 8 mm	50 08 A63 SR1	8	50	76	20.5	27.4	63	Form A	-	-
Accessories	SR1 S08 SW21	CoolCap® screw-on cap diam. 8								> Page 162
	SR1 A08 SW21	CoolCap® screw-on cap diam. 8								> Page 163

Diameter 10 mm	50 10 A63 SR1	10	50	76	22.5	30.4	63	Form A	-	-
Accessories	SR1 S10 SW22	CoolCap® screw-on cap diam. 10								> Page 162
	SR1 A10 SW22	CoolCap® screw-on cap diam. 10								> Page 163

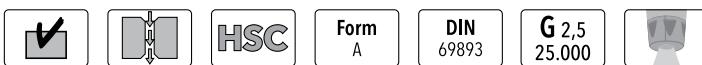
The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant tubes	> Page 162
		WRENCHHHSK63	Wrench for coolant tubes	> Page 162
		SR1 ZSW 002	CoolCap® application tool	> Page 163
		DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

HSK 63 form A

for shrink gripping | CoolCap®



Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 12 mm	60 12 A63 SR1	12	60	86	26.5	36	63	Form A	-	-
		75 12 A63 SR1	12	75	101	26.5	38.4	63	Form A	-	-
		100 12 A63 SR1	12	100	126	26.5	42.3	63	Form A	-	-
	Accessories	SR1 S12 SW27 CoolCap® screw-on cap diam. 12 > Page 162									
		SR1 A12 SW27 CoolCap® screw-on cap diam. 12 > Page 163									
	Diameter 16 mm	60 16 A63 SR1	16	60	86	31.5	41	63	Form A	-	-
		100 16 A63 SR1	16	100	126	31.5	47.3	63	Form A	-	-
		SR1 S16 SW32 CoolCap® screw-on cap diam. 16 > Page 162									
		SR1 A16 SW32 CoolCap® screw-on cap diam. 16 > Page 162									
	Diameter 20 mm	60 20 A63 SR1	20	60	86	36	45	63	Form A	-	-
		100 20 A63 SR1	20	100	126	36	51.3	63	Form A	-	-
		SR1 S20 SW36 CoolCap® screw-on cap diam. 20 > Page 162									
		SR1 A20 SW36 CoolCap® screw-on cap diam. 20 > Page 163									

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant tubes	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162
		SR1 ZSW 002	CoolCap® application tool	> Page 163
		DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

<2/2

HSK 63 form A

for Weldon shank | CoolCap®



Characteristics:



for Weldon shank CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 10 mm	50 10 A63 SR1 W	10	50	76	22.5	30.4	63	Form A	-	-
	Accessories	SR1 S10 SW22			CoolCap® screw-on cap diam. 10					> Page 162	
		SR1 A10 SW22			CoolCap® screw-on cap diam. 10					> Page 163	
		M10X9 SR1 W			Weldon diam. 10 straining screw					> Page 160	

	Diameter 12 mm	60 12 A63 SR1 W	12	60	86	26.5	36	63	Form A	-	-
	Accessories	SR1 S12 SW27			CoolCap® screw-on cap diam. 12					> Page 162	
		SR1 A12 SW27			CoolCap® screw-on cap diam. 12					> Page 163	
		M12X10 SR1 W			Weldon diam. 10 straining screw					> Page 160	

	Diameter 16 mm	60 16 A63 SR1 W	16	60	86	31.5	41	63	Form A	-	-
	Accessories	SR1 S16 SW32			CoolCap® screw-on cap diam. 16					> Page 162	
		SR1 A16 SW32			CoolCap® screw-on cap diam. 16					> Page 163	
		M14X11 SR1 W			Weldon diam. 16 straining screw					> Page 160	

	Diameter 20 mm	60 20 A63 SR1 W	20	60	86	36	45	63	Form A	-	-
	Accessories	SR1 S20 SW36			CoolCap® screw-on cap diam. 20					> Page 162	
		SR1 A20 SW36			CoolCap® screw-on cap diam. 16					> Page 163	
		M16X10 SR1 W			Weldon diam. 20 straining screw					> Page 160	

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162
		SR1 ZSW 002	CoolCap® application tool	> Page 163
		DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

HSK 63 form A

for shell-type milling cutters

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Bore diam. 16 mm</p>	25 16 A63 Z	16	25	51	38	40	63	Form A	-	7.8
	50 16 A63 Z	16	50	76	38	42	63	Form A	-	7.8
	75 16 A63 Z	16	75	101	38	45	63	Form A	-	7.8
	100 16 A63 Z	16	100	126	38	50	63	Form A	-	7.8
	125 16 A63 Z	16	125	151	38	50	63	Form A	-	7.8
	150 16 A63 Z	16	150	176	38	50	63	Form A	-	7.8
	200 16 A63 Z	16	200	226	38	50	63	Form A	-	7.8
Accessories	DRIVING8X8	Driving block 8 x 8						> Page 161		
	M3X10	Screw for driving block 8 x 8						> Page 160		
	M8X30	Screw M8x30						> Page 161		

<p>Bore diam. 22 mm</p>	25 22 A63.01	22	25	51	48	48	63	Form A	-	-	
	50 22 A63.01	22	50	76	48	48	63	Form A	-	-	
	75 22 A63.01	22	75	101	48	50	63	Form A	-	7.8	
	100 22 A63.01	22	100	126	48	50	63	Form A	-	7.8	
	150 22 A63	22	150	176	48	48	63	Form A	-	7.8	
	200 22 A63	22	200	226	48	49	63	Form A	-	7.8	
	DRIVING10X8 Accessories						Driving block 10 x 8				
						> Page 161					
						M4X10 M10X35				> Page 160	
						> Page 161					

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162
		4XGEOB-AUF	Threaded bores for adapter	> Page 160

Characteristics:

for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Bore diam. 27 mm</p>	25 27 A63	27	25	51	48	48	63	Form A	-	-
	50 27 A63	27	50	76	48	48	63	Form A	-	-
	75 27 A63	27	75	101	48	48	63	Form A	-	-
	100 27 A63	27	100	126	48	48	63	Form A	-	-
	150 27 A63	27	150	176	48	48	63	Form A	-	-
	200 27 A63	27	200	226	48	50	63	Form A	-	7.8
	Accessories	DRIVING12X8 Driving block 12 x 8 > Page 161 M5X12 Screw for driving block 12 x 8 > Page 160 M12X35 Screw M12X35 > Page 160								

The accessories shown here must be used for all sizes!	Accessories	KMR-63A Coolant supply tube for HSK tooling > Page 162
		WRENCHHSK63 Wrench for coolant tubes > Page 162
		4XGEO-AUF Threaded bores for adapter > Page 164

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF <2/2

HSK 63 form A

for shell-type milling cutters (vibration-dampened)

New



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	A200 16 A63 VD	16	174	200	38	38	63	Form A	-	-
		A300 16 A63 VD	16	274	300	38	38	63	Form A	-	-
		Accessories									
	Bore diam. 22 mm	A200 22 A63 VD	22	174	200	48	48	63	Form A	-	-
		A300 22 A63 VD	22	274	300	48	48	63	Form A	-	-
		Accessories									

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHHSK63	Wrench for coolant tubes	> Page 162

HSK 63 form A

Drill chucks

Characteristics:



Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diam. 0.3 to 8 mm	BF 0.3-8 A63 IC	8	73	99	36	36	63	Form A	-	-
	Accessories	HEXA 4T		HEXA 4T							> Page 161
		BF08DS04		Gasket 0804							> Page 163
	Diam. 0.5 to 13 mm	BF 0.5-13 A63 IC	13	84	110	50	50	63	Form A	-	-
	Accessories	HEXA 6T		HEXA 6T							> Page 161
		BF13DS06		Gasket 1306							> Page 163
	Diam. 2.5 to 16 mm	BF 2.5-16 A63 IC	16	89	115	57	57	63	Form A	-	-
	Accessories	HEXA 6T		HEXA 6T							> Page 161
		BF16DS06		Gasket 1606							> Page 163
	Diam. 2.5 to 16 mm	A109 BF 2.5-16 A63	16	83	109	50	50	63	Form A	-	-
	Accessories	HEXA 6T		Screw for driving block 10 x 8							> Page 161
		BF16DS06		Gasket 1606							> Page 163
	Diam. 2.5 to 16 mm	BF16DS16		Gasket 1616							> Page 163
	Accessories	BF13MW		Wrench 13/16							> Page 163

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHHSK63	Wrench for coolant tubes	> Page 162

Scope of delivery includes wrench and gasket

HSK 63 form A

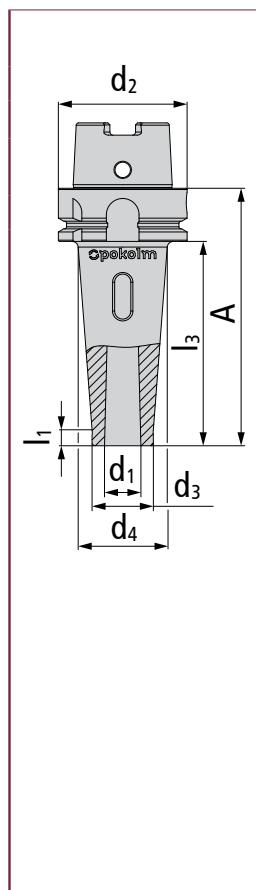
for Morse tapers with tangs



Characteristics:



for Morse taper shanks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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MK 2	100 MK2 AL A63	2	100	126	30	44	63	Form A	-	7.8
Accessories	M10X45 IC Screw for 100 MK2 AL A63									> Page 160
MK 3	120 MK3 AL A63	3	120	146	35	46	63	Form A	-	7.8
Accessories	M12X50 IC Screw for 120 MK3 AL A63									> Page 160

The accessories shown here must be used for all sizes!	Accessories	Z 00142	Spacer for arbors with tangs	> Page 161
		KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

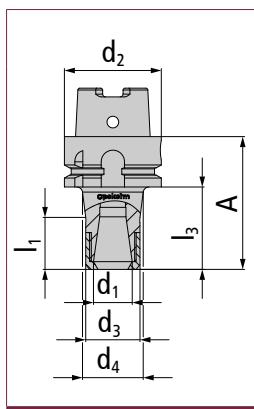
HSK 63 form A

HSC precision collet chucks ER 20

Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20	50 ER20 A63	20	50	76	28	32	63	Form A	–	34.3
	100 ER20 A63	20	100	126	28	40	63	Form A	–	34.3
Accesso- ries	ER20 001	Tightning nut								> Page 161
	20 501	Collet chuck wrench for ER 20 tightning nut								> Page 161
	KMR-63A	Coolant supply tube for HSK tooling								> Page 162
	WRENCHHSK6	Wrench for coolant tubes								> Page 162

Scope of delivery includes a tightning nut, which is approved up to $n = 80,000$ 1/min

HSK 100 form A

for threaded shank end mills

Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	M 8	50 08 A100	8	50	79	13.8	23	100	Form A	-	12
		100 08 A100	8	100	129	13.8	30	100	Form A	-	12
	M 10	50 10 A100	10	50	79	18	25	100	Form A	-	12
		75 10 A100	10	75	104	18	30	100	Form A	-	12
		100 10 A100	10	100	129	18	35	100	Form A	-	12
		150 10 A100	10	150	179	18	45	100	Form A	-	12
	M 12	50 12 A100	12	50	79	21	30	100	Form A	-	12
		100 12 A100	12	100	129	21	38	100	Form A	-	12
		150 12 A100	12	150	179	21	52	100	Form A	-	12
		200 12 A100	12	200	229	21	58	100	Form A	-	12
		250 12 A100	12	250	279	21	62	100	Form A	-	12
		300 12 A100	12	300	329	21	68	100	Form A	-	12

The accessories shown here must be used for all sizes!	Accesso-ries	KMR-100A WRENCHHSK100	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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Characteristics:


 Adapters, extensions,
collars, drill chucks

Hollow shank taper HSK

for threaded shank end mill body	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
----------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

 M 16	50 16 A100	16	50	79	29	34	100	Form A	-	12
	100 16 A100	16	100	129	29	40	100	Form A	-	12
	150 16 A100	16	150	179	29	58	100	Form A	-	12
	200 16 A100	16	200	229	29	58	100	Form A	-	12
	250 16 A100	16	250	279	29	66	100	Form A	-	12
	300 16 A100	16	300	329	29	66	100	Form A	-	12
	Accessories	KMR-100A	Coolant supply tube for HSK tooling					> Page 162		
		WRENCHHSK100	Wrench for coolant tubes					> Page 162		

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Accessories

Order / request forms

Spindle systems / shrink technology

Assembly instructions

Index

HSK 100 form A

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1	
	Diameter 6 mm	100 06 A100 S	6	100	129	12	22	100	Form A	–	7.8
		150 06 A100 S	6	150	179	12	26.9	100	Form A	–	7.8
	Diameter 8 mm	100 08 A100 S	8	100	129	16	25.7	100	Form A	–	7.8
		150 08 A100 S	8	150	179	16	30.9	100	Form A	–	7.8
	Diameter 10 mm	100 10 A100 S	10	100	129	20	29.7	100	Form A	–	7.8
		150 10 A100 S	10	150	179	20	35	100	Form A	–	7.8
	Diameter 12 mm	100 12 A100 S	12	100	129	24	33.7	100	Form A	–	7.8
		150 12 A100 S	12	150	179	24	39	100	Form A	–	7.8
	Diameter 16 mm	60 16 A100 S	16	60	89	32	37.5	100	Form A	–	7.8
		100 16 A100 S	16	100	129	32	41.7	100	Form A	–	7.8
		150 16 A100 S	16	150	179	32	46.9	100	Form A	–	7.8
	Diameter 20 mm	60 20 A100 S	20	60	89	40	40	100	Form A	–	7.8
	Diameter 25 mm	60 25 A100 S	25	60	89	46	46	100	Form A	–	7.8
	Diameter 32 mm	70 32 A100 S	32	70	99	44	53	100	Form A	–	7.8

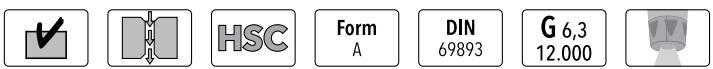
The accessories shown here must be used for all sizes!	Accessories	KMR-100A WRENCHHSK100	Coolant supply tube for HSK tooling Wrench for coolant tubes	> Page 162 > Page 162
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HSK 100 form A

For shrink gripping | CoolCap®



Characteristics:



For shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
--------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	Diameter 6 mm	100 06 A100 SR1	6	100	129	16.5	32.3	100	Form A	–	–
	Accessories	SR1 S06 SW17	CoolCap® screw-on cap diam. 6 > Page 162								
		SR1 A06 SW17	CoolCap® screw-on cap diam. 6 > Page 163								
	Diameter 8 mm	100 08 A100 SR1	8	100	129	20.5	36.3	100	Form A	–	–
	Accessories	SR1 S08 SW21	CoolCap® screw-on cap diam. 8 > Page 162								
		SR1 A08 SW21	CoolCap® screw-on cap diam. 8 > Page 163								
	Diameter 10 mm	100 10 A100 SR1	10	100	129	22.5	38.3	100	Form A	–	–
	Accessories	SR1 S10 SW22	CoolCap® screw-on cap diam. 10 > Page 162								
		SR1 A10 SW22	CoolCap® screw-on cap diam. 10 > Page 163								
	Diameter 12 mm	100 12 A100 SR1	12	100	129	26.5	42.3	100	Form A	–	–
	Accessories	SR1 S12 SW27	CoolCap® screw-on cap diam. 12 > Page 162								
		SR1 A12 SW27	CoolCap® screw-on cap diam. 12 > Page 163								
	Diameter 16 mm	100 16 A100 SR1	16	100	129	31.5	47.3	100	Form A	–	–
	Accessories	SR1 S16 SW32	CoolCap® screw-on cap diam. 16 > Page 162								
		SR1 A16 SW32	CoolCap® screw-on cap diam. 16 > Page 163								
	Diameter 20 mm	100 20 A100 SR1	20	100	129	35.5	51.3	100	Form A	–	–
	Accessories	SR1 S20 SW36	CoolCap® screw-on cap diam. 20 > Page 162								
		SR1 A20 SW36	CoolCap® screw-on cap diam. 20 > Page 163								

The accessories shown here must be used for all sizes!

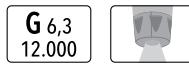
Accessories	KMR-100A	Coolant supply tube for HSK tooling	> Page 162
	WRENCHHSK100	Wrench for coolant tubes	> Page 162
	SR1 ZSW 002	CoolCap® application tool	> Page 163
	DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

HSK 100 form A

for Weldon shank | CoolCap®

Characteristics:



for Weldon shank CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 10 mm	100 10 A100 SR1 W	10	100	129	22.5	38.3	100	Form A	–	–			
	Accessories		SR1 S10 SW22	CoolCap® screw-on cap diam. 10										> Page 162
	Accessories		SR1 A10 SW22	CoolCap® screw-on cap diam. 10										> Page 163
	Accessories		M10X9 SR1 W	Weldon diam. 10 straining screw										> Page 160
Diameter 12 mm		100 12 A100 SR1 W	12	100	129	26.5	42.3	100	Form A	–	–			
Accessories		SR1 S12 SW27	CoolCap® screw-on cap diam. 12										> Page 162	
Accessories		SR1 A12 SW27	CoolCap® screw-on cap diam. 12										> Page 163	
Accessories		M12X10 SR1 W	Weldon diam. 12 straining screw										> Page 160	
Diameter 16 mm		100 16 A100 SR1 W	16	100	129	31.5	47.3	100	Form A	–	–			
Accessories		SR1 S16 SW32	SR1 S16 SW32 - CoolCap® screw-on cap diam. 16										> Page 162	
Accessories		SR1 A16 SW32	SR1 A16 SW32 - CoolCap® screw-on cap diam. 16										> Page 163	
Accessories		M14X11 SR1 W	Weldon diam. 16 straining screw										> Page 160	
Diameter 20 mm		100 20 A100 SR1 W	20	100	129	35.5	51.3	100	Form A	–	–			
Accessories		SR1 S20 SW36	CoolCap® screw-on cap diam. 20										> Page 162	
Accessories		SR1 A20 SW36	CoolCap® screw-on cap diam. 20										> Page 163	
Accessories		M16X10 SR1 W	Weldon diam. 20 straining screw										> Page 160	

The accessories shown here must be used for all sizes!	Accessories	KMR-100A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHHSK100	Wrench for coolant tubes	> Page 162
		SR1 ZSW 002	CoolCap® application tool	> Page 163
		DMS 3/8 8-60 NM	Torque wrench 3/8"	> Page 163

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

HSK 100 form A

for shell-type milling cutters

Characteristics:



for shell-type milling cutter body	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Pilots Diameter 22 mm	50 22 A100	22	50	79	40	40	100	Form A	-	-
		75 22 A100	22	75	104	48	48	100	Form A	-	-
		100 22 A100	22	100	129	48	50	100	Form A	-	7.8
		150 22 A100	22	150	179	48	50	100	Form A	-	7.8
		200 22 A100	22	200	229	48	50	100	Form A	-	7.8
	Accessories	DRIVING10X8	Driving block 10 x 8						> Page 161		
		M4X10	Screw for driving block 10 x 8						> Page 160		
		M10X35	Screw M10X35						> Page 161		

Pilots Diameter 27 mm	50 27 A100	27	50	79	62	62	100	Form A	-	-
	75 27 A100	27	75	104	62	62	100	Form A	-	-
	100 27 A100	27	100	129	62	71	100	Form A	-	7.8
	150 27 A100	27	150	179	62	80	100	Form A	-	7.8
	200 27 A100	27	200	229	62	80	100	Form A	-	7.8
	Accessories	DRIVING12X12/2	Driving block 12 x 12						> Page 161	
		M5X16	Screw for driving block 12 x 12						> Page 160	
		M12X35	Screw M12X35						> Page 161	

The accessories shown here must be used for all sizes!	Accessories	KMR-100A	Coolant supply tube for HSK tooling					> Page 162			
		WRENCHHSK100	Wrench for coolant tubes					> Page 162			
		4XGEO-AUF	Threaded bores for adapter					> Page 164			

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF

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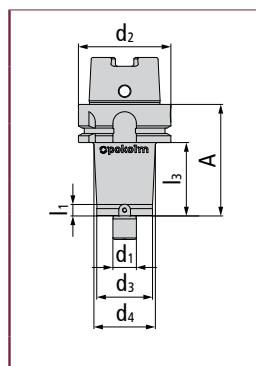
HSK 100 form A

for shell-type milling cutters

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Pilots Diameter 32 mm	50 32 A100	32	50	79	85	85	100	Form A	—	—
	100 32 A100	32	100	129	85	85	100	Form A	—	—
	150 32 A100	32	150	179	85	85	100	Form A	—	—
Accessories	M16X26 Screw M16X26								> Page 161	

Pilots Diameter 40 mm	50 40 A100	40	50	79	100	88	100	Form A	—	—
	Accessories	M20X30 Screw M20X30								> Page 161

The accessories shown here must be used for all sizes!	Accessories	DRIVING14X14	Driving block 14 x 14						> Page 161	
		M5X16	Screw for driving block 14 x 14						> Page 160	
		KMR-100A	Coolant supply tube for HSK tooling						> Page 162	
		WRENCHHHSK100	Wrench for coolant tubes						> Page 162	

HSK 100 form A

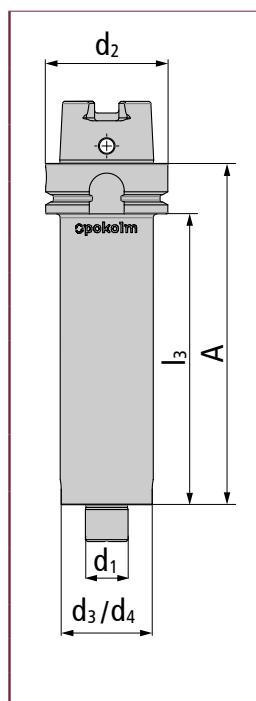
for shell-type milling cutters (vibration-dampened)

New


Characteristics:



for shell-type milling cutter body	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Bore diam. 16 mm	A300 16 A100 VD	16	271	300	38	38	63	Form A	-	-
	Driving block 8 x 8 Screw for driving block 8 x 8 Screw M8x30									

Bore diam. 22 mm	A200 22 A100 VD	22	171	200	48	48	63	Form A	-	-
	Driving block 10 x 8 Screw for driving block 10 x 8 Screw M10X35									

The accessories shown here must be used for all sizes!	Accesso- ries	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

1/2>

HSK 100 form A

for shell-type milling cutters (vibration-dampened)

New



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Bore diam. 27 mm</p>	A200 27 A100 VD	27	171	200	58	58	100	Form A	-	-
	A300 27 A100 VD	27	271	300	58	58	100	Form A	-	-
Accessories	DRIVING12X8			Driving block 12 x 8				> Page 161		
	M5X12			Screw for driving block 12 x 8				> Page 160		
	M12X35			Screw M12 x 35				> Page 161		

The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling	> Page 162
		WRENCHHSK63	Wrench for coolant tubes	> Page 162

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HSK 100 form A

Drill chucks



Characteristics:



Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diam. 0.5 to 13 mm	BF 0.5-13 A100 IC	13	89	118	50	50	100	Form A	–	–
Accessories	BF13DS06	Gasket 1306								> Page 163	
	BF13DS13	Gasket 1313								> Page 163	
	Diam. 2.5 to 16 mm	BF 2.5-16 A100 IC	16	83	112	57	57	100	Form A	–	–
Accessories	BF16DS06	Gasket 1606								> Page 163	
	BF16DS16	Gasket 1616								> Page 163	

The accessories shown here must be used for all sizes!	Accessories	HEXA 6T	HEXA 6T	> Page 161						
		KMR-100A	Coolant supply tube for HSK tooling	> Page 162						
		WRENCHHSK100	Wrench for coolant tubes	> Page 162						
		BF13MW	Wrench 13/16	> Page 163						

The scope of delivery includes a hex key and gasket

PRODUCT VARIETY WITH THE HIGHEST PRECISION

Steep tapers SK | BT

At a glance

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STEEP TAPERS SK / BT



Pokolm steep tapers

Features and advantages:

- Wide range of varieties available from stock
- SK 30-SK 50 and BT 30-BT 50 arbors available
- Thanks to complete in-house production,
custom designs can even be created for your application.
- Shank tolerance H6
- High balancing precision
- Suitable for HSS and solid carbide tools
- Suitable for coolants and MMS
- Extended shrink adjustment for optimal holding forces
- Hardness 52-54 HRC
- Arbors made of high temperature-resistant material

SK 30 ISO 7388-1 (formerly DIN 69871 AD)

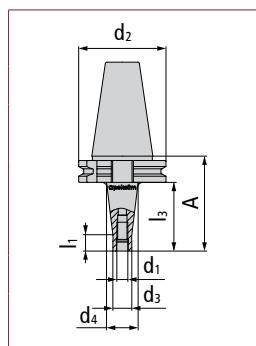
for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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M 8	25 08 730	8	25	44.1	13.8	15	30	ISO 7388-1	-	12
M 10	25 10 730	10	25	44.1	18	23	30	ISO 7388-1	-	12
M 12	25 12 730	12	25	44.1	21	24	30	ISO 7388-1	-	12
M 16	25 16 730	16	25	44.1	29	29	30	ISO 7388-1	-	-

The accessories shown here must be used for all sizes!	Accessories	KBSK30-69872A KBSK30-69872B	retention knob with through-hole retention knob without through-hole	> Page 162 > Page 162
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SK 30 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 730 S.01	3	50	69.1	9	15.7	30	ISO 7388-1	-	7.8
	Diameter 4 mm	50 04 730 S.01	4	50	69.1	10.5	14.9	30	ISO 7388-1	-	7.8
	Diameter 6 mm	50 06 730 S	6	50	69.1	12	16.4	30	ISO 7388-1	-	7.8
	Diameter 8 mm	50 08 730 S	8	50	69.1	16	20.4	30	ISO 7388-1	-	7.8
	Diameter 10 mm	50 10 730 S	10	50	69.1	20	24.4	30	ISO 7388-1	-	7.8
	Diameter 12 mm	50 12 730 S	12	50	69.1	24	28.4	30	ISO 7388-1	-	7.8
	Diameter 16 mm	50 16 730 S	16	50	69.1	32	36.4	30	ISO 7388-1	-	7.8

The accessories shown here must be used for all sizes!	Accesso-ries	KBSK30-69872A	retention knob with through-hole	> Page 162
		KBSK30-69872B	retention knob without through-hole	> Page 162

SK 30 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking | zero reach adapters



Characteristics:

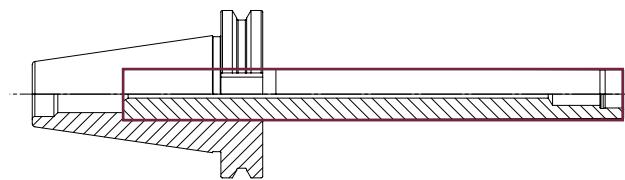


for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 16 mm	15 16 730 S	16	15	34.1	32	32	30	ISO 7388-1	-	-
	Diameter 20 mm	15 20 730 S	20	15	34.1	40	40	30	ISO 7388-1	-	-

The accessories shown here must be used for all sizes!	Accessories	KBSK30-69872A	retention knob with through-hole	> Page 162
		KBSK30-69872B	retention knob without through-hole	> Page 162

Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



SK 30 ISO 7388-1 (formerly DIN 69871 AD)

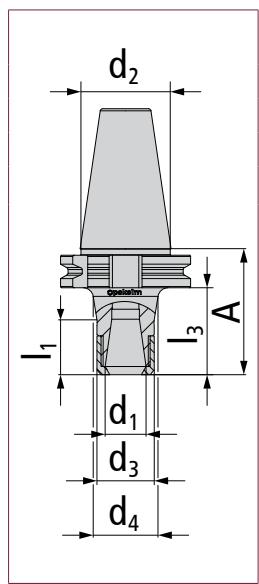
HSC precision collet chucks ER 20



Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20	50 ER20 730	20	50	69.1	28	32	30	ISO 7388-1	-	19.3
Accesso-	ER20 001 Tightning nut								> Page 161	
rries	KBSK30-69872A retention knob with through-hole								> Page 162	
	KBSK30-69872B retention knob without through-hole								> Page 162	
	20 501 Collet chuck wrench for ER 20 tightning nut								> Page 161	

BT 30 ISO 7388-2 (formerly JIS B 6339 AD)

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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M 8	25 08 734	M 8	25	47	13.8	15	30	ISO 7388-2	-	12
M 10	25 10 734	M 10	25	47	18	23	30	ISO 7388-2	-	12
M 12	25 12 734	M 12	25	47	21	24	30	ISO 7388-2	-	12
M 16	25 16 734	M 16	25	47	29	29	30	ISO 7388-2	-	12

BT 30 ISO 7388-2 (formerly JIS B 6339 AD)

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 734 S.01	3	50	72	9	15.6	30	ISO 7388-2	-	7.8
	Diameter 4 mm	50 04 734 S.01	4	50	72	10.5	14.9	30	ISO 7388-2	-	7.8
	Diameter 6 mm	50 06 734 S	6	50	72	12	16	30	ISO 7388-2	-	7.8
	Diameter 8 mm	50 08 734 S	8	50	72	16	21	30	ISO 7388-2	-	7.8
	Diameter 10 mm	50 10 734 S	10	50	72	20	24.4	30	ISO 7388-2	-	7.8
	Diameter 12 mm	50 12 734 S	12	50	72	24	29	30	ISO 7388-2	-	7.8
	Diameter 16 mm	50 16 734 S	16	50	72	32	36.4	30	ISO 7388-2	-	7.8

BT 30 ISO 7388-2 (formerly JIS B 6339 AD)

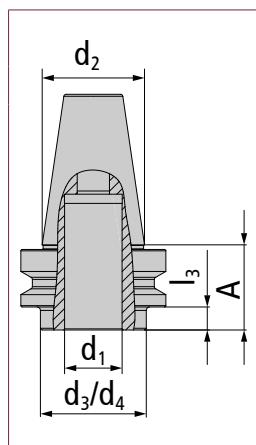
for shrinking | zero reach adapters



Characteristics:



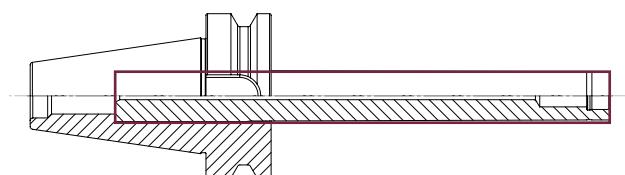
for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 16 mm	10 16 734 S	16	10	32	32	32	30	ISO 7388-2	-	-
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Diameter 20 mm	15 20 734 S	20	15	37	40	40	30	ISO 7388-2	-	-
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Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



BT 30 ISO 7388-2 (formerly JIS B 6339 AD)

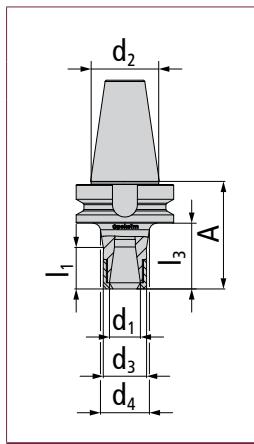
HSC precision collet chucks ER 20



Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20 mm	50 ER20 734	ER 20	50	72	28	32	30	ISO 7388-2	-	19.3
Accesso- ries	ER20 001 Tightning nut								> Page 161	
	20 501 Collet chuck wrench for ER 20 tightning nut								> Page 161	

Scope of delivery includes a tightning nut, which is approved up to $n = 80,000$ 1/min

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	M 8	25 08 750	8	25	44.1	13.8	15	40	ISO 7388-1	-	12
		50 08 750	8	50	69.1	13.8	23	40	ISO 7388-1	-	12
	M 10	75 08 750	8	75	94.1	13.8	25	40	ISO 7388-1	-	12
		100 08 750	8	100	119.1	13.8	30	40	ISO 7388-1	-	12
	M 12	25 12 750	12	25	44.1	18	23	40	ISO 7388-1	-	12
		50 12 750	12	50	69.1	21	30	40	ISO 7388-1	-	12
		75 12 750	12	75	94.1	21	35	40	ISO 7388-1	-	12
		100 12 750	12	100	119.1	21	38	40	ISO 7388-1	-	12
		125 12 750	12	125	144.1	21	44	40	ISO 7388-1	-	12
		150 12 750	12	150	169.1	21	48	40	ISO 7388-1	-	12

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A	retention knob with through-hole	> Page 162
		KBSK40-69872B	retention knob without through-hole	> Page 162

Characteristics:


 Adapters, extensions,
collars, drill chucks

Hollow shank taper HSK

for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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 M 16	25 16 750	16	25	44.1	29	29	40	ISO 7388-1	-	-
	50 16 750	16	50	69.1	29	34	40	ISO 7388-1	-	12
	75 16 750	16	75	94.1	29	35	40	ISO 7388-1	-	12
	100 16 750	16	100	119.1	29	40	40	ISO 7388-1	-	12
	125 16 750	16	125	144.1	29	44	40	ISO 7388-1	-	12
	150 16 750	16	150	169.1	29	48	40	ISO 7388-1	-	12
	200 16 750	16	200	219.1	29	48	40	ISO 7388-1	-	12
	250 16 750	16	250	269.1	29	48	40	ISO 7388-1	-	12
Accessories	KBSK40-69872A	retention knob with through-hole						> Page 162		
	KBSK40-69872B	retention knob without through-hole						> Page 162		

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Order / request forms

Spindle systems / shrink technology

Assembly instructions

Index

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for threaded shank milling | cylindrical



Characteristics:



for threaded shank milling cylindrical	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 8	50 08 750 ZYL	8	50	69.1	13.8	13.8	40	ISO 7388-1	—	—
	M 10	50 10 750 ZYL	10	50	69.1	18	18	40	ISO 7388-1	—	—
		75 10 750 ZYL	10	75	94.1	18	18	40	ISO 7388-1	—	—
		100 10 750 ZYL	10	100	119.1	18	18	40	ISO 7388-1	—	—
M 12	50 12 750 ZYL	12	50	69.1	21	21	40	ISO 7388-1	—	—	
	75 12 750 ZYL	12	75	94.1	21	21	40	ISO 7388-1	—	—	
	100 12 750 ZYL	12	100	119.1	21	21	40	ISO 7388-1	—	—	
M 16	50 16 750 ZYL	16	50	69.1	29	29	40	ISO 7388-1	—	—	
	75 16 750 ZYL	16	75	94.1	29	29	40	ISO 7388-1	—	—	
	100 16 750 ZYL	16	100	119.1	29	29	40	ISO 7388-1	—	—	

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A KBSK40-69872B	retention knob with through-hole retention knob without through-hole	> Page 162
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SK 40 ISO 7388-1 (formerly DIN 69871 AD) for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 750 S.01	3	50	69.1	9	15.6	40	ISO 7388-1	-	7.8
		100 03 750 S.01	3	100	119.1	9	23.5	40	ISO 7388-1	-	7.8
	Diameter 4 mm	50 04 750 S.01	4	50	69.1	10.5	14.9	40	ISO 7388-1	-	7.8
		75 04 750 S.01	4	75	94.1	10.5	17.54	40	ISO 7388-1	-	7.8
		100 04 750 S.01	4	100	119.1	10.5	20.16	40	ISO 7388-1	-	7.8
	Diameter 6 mm	50 06 750 S	6	50	69.1	12	16.4	40	ISO 7388-1	-	7.8
		75 06 750 S	6	75	94.1	12	19	40	ISO 7388-1	-	7.8
		100 06 750 S	6	100	119.1	12	21.7	40	ISO 7388-1	-	7.8
		150 06 750 S	6	150	169.1	12	27	40	ISO 7388-1	-	7.8
	Diameter 8 mm	50 08 750 S	8	50	69.1	16	20.4	40	ISO 7388-1	-	7.8
		75 08 750 S	8	75	94.1	16	23	40	ISO 7388-1	-	7.8
		100 08 750 S	8	100	119.1	16	25.7	40	ISO 7388-1	-	7.8
	Diameter 10 mm	50 10 750 S	10	50	69.1	20	24.4	40	ISO 7388-1	-	7.8
		75 10 750 S	10	75	94.1	20	27	40	ISO 7388-1	-	7.8
		100 10 750 S	10	100	119.1	20	29.7	40	ISO 7388-1	-	7.8

The accessories shown here must be used for all sizes!
--

Accessories

KBSK40-69872A	retention knob with through-hole
KBSK40-69872B	retention knob without through-hole

> Page 162

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SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 12	50 12 750 S	12	50	69.1	24	28.4	40	ISO 7388-1	—	7.8
		75 12 750 S	12	75	94.1	24	31	40	ISO 7388-1	—	7.8
		100 12 750 S	12	100	119.1	24	33.6	40	ISO 7388-1	—	7.8
	Diameter 16	50 16 750 S	16	50	69.1	32	36.4	40	ISO 7388-1	—	7.8
		75 16 750 S	16	75	94.1	32	39	40	ISO 7388-1	—	7.8
		100 16 750 S	16	100	119.1	32	41.7	40	ISO 7388-1	—	7.8
	Diameter 20	50 20 750 S	20	50	69.1	40	44.4	40	ISO 7388-1	—	7.8
		75 20 750 S	20	75	94.1	40	47	40	ISO 7388-1	—	7.8
		100 20 750 S	20	100	119.1	40	49	40	ISO 7388-1	—	7.8
	Diameter 25	60 25 750 S	25	60	79.1	45	45	40	ISO 7388-1	—	—

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A KBSK40-69872B	retention knob with through-hole retention knob without through-hole	> Page 162 > Page 162
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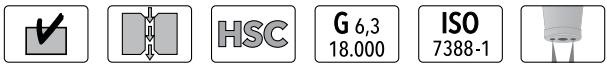
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SK 40 ISO 7388-1 (formerly DIN 69871 AD)

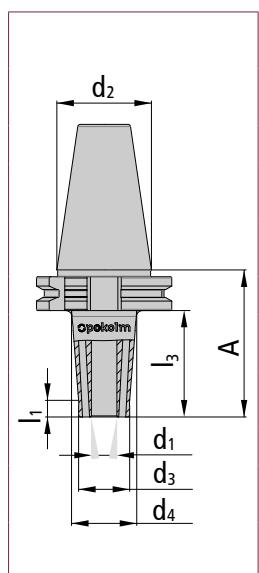
for shrinking | reinforced design



Characteristics:



for shrinking reinforced design	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 6 mm	50 06 750 SB	6	50	69.1	21	27.6	40	ISO 7388-1	-	7.8
	100 06 750 SB	6	100	119.1	21	35.5	40	ISO 7388-1	-	7.8
Diameter 8 mm	50 08 750 SB	8	50	69.1	21	27.6	40	ISO 7388-1	-	7.8
	100 08 750 SB	8	100	119.1	21	35.5	40	ISO 7388-1	-	7.8
Diameter 10 mm	50 10 750 SB	10	50	69.1	24	30.6	40	ISO 7388-1	-	7.8
	100 10 750 SB	10	100	119.1	24	38.5	40	ISO 7388-1	-	7.8
Diameter 12 mm	50 12 750 SB	12	50	69.1	24	30.6	40	ISO 7388-1	-	7.8
	100 12 750 SB	12	100	119.1	24	38.5	40	ISO 7388-1	-	7.8

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A retention knob with through-hole	> Page 162
		KBSK40-69872B retention knob without through-hole	> Page 162

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking | zero reach adapters



Characteristics:



for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 16 mm	00 16 750 S	16	0	19.1	-	-	40	ISO 7388-1	-	-
	Diameter 20 mm	00 20 750 S	20	0	19.1	-	-	40	ISO 7388-1	-	-
	Diameter 25 mm	00 25 750 S	25	10	29.1	44	44	40	ISO 7388-1	-	-

The accessories shown here must be used for all sizes!

Accessories

KBSK40-69872A

retention knob with through-hole

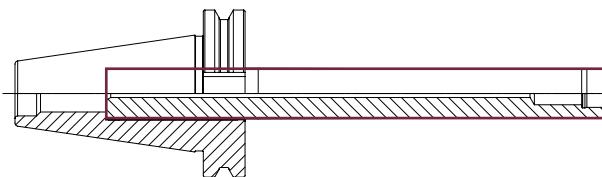
> Page 162

KBSK40-69872B

retention knob without through-hole

> Page 162

Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shrink gripping | CoolCap®



Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 4 mm	50 04 750 SR1	4	50	69.1	15	23.4	40	ISO 7388-1	-	-
	75 04 750 SR1	4	75	94.1	15	27.3	40	ISO 7388-1	-	-	
	100 04 750 SR1	4	100	119.1	15	31.3	40	ISO 7388-1	-	-	
	Accessories	SR1 S04 SW15 CoolCap® screw-on cap diam. 4 > Page 162									
	SR1 A04 SW15 CoolCap® screw-on cap diam. 4 > Page 163										
	Diameter 6 mm	50 06 750 SR1	6	50	69.1	16.5	24.4	40	ISO 7388-1	-	-
	100 06 750 SR1	6	100	119.1	16.5	32.3	40	ISO 7388-1	-	-	
	Accessories	SR1 S06 SW17 CoolCap® screw-on cap diam. 6 > Page 162									
	SR1 A06 SW17 CoolCap® screw-on cap diam. 6 > Page 163										
	Diameter 8 mm	50 08 750 SR1	8	50	69.1	20.5	28.4	40	ISO 7388-1	-	-
	100 08 750 SR1	8	100	119.1	20.5	36.3	40	ISO 7388-1	-	-	
	Accessories	SR1 S08 SW21 CoolCap® screw-on cap diam. 8 > Page 162									
	SR1 A08 SW21 CoolCap® screw-on cap diam. 8 > Page 163										
	Diameter 10 mm	50 10 750 SR1	10	50	69.1	22.5	30.4	40	ISO 7388-1	-	-
	100 10 750 SR1	10	100	119.1	22.5	38.3	40	ISO 7388-1	-	-	
	Accessories	SR1 S10 SW22 CoolCap® screw-on cap diam. 10 > Page 162									
	SR1 A10 SW22 CoolCap® screw-on cap diam. 10 > Page 163										
The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A retention knob with through-hole > Page 162									
		SR1 ZSW 002 CoolCap® application tool > Page 163									
		DMS 3/8 8-60 NM Torque wrench 3/8" > Page 163									

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

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SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shrink gripping | CoolCap®



Characteristics:



for shrink gripping CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
--------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	Diameter 12 mm	60 12 750 SR1	12	60	79.1	26.5	36	40	ISO 7388-1	-	-
		100 12 750 SR1	12	100	119.1	26.5	42.3	40	ISO 7388-1	-	-
	Accessories	SR1 S12 SW27 CoolCap® screw-on cap diam. 12									
		SR1 A12 SW27 CoolCap® screw-on cap diam. 12									
	Diameter 16 mm	60 16 750 SR1	16	60	79.1	31.5	41	40	ISO 7388-1	-	-
		100 16 750 SR1	16	100	119.1	31.5	47.3	40	ISO 7388-1	-	-
	Accessories	SR1 S16 SW32 CoolCap® screw-on cap diam. 16									
		SR1 A16 SW32 CoolCap® screw-on cap diam. 16									
	Diameter 20 mm	60 20 750 SR1	20	60	79.1	36	45	40	ISO 7388-1	-	-
		100 20 750 SR1	20	100	119.1	36	47	40	ISO 7388-1	-	-
	Accessories	SR1 S20 SW36 CoolCap® screw-on cap diam. 20									
		SR1 A20 SW36 CoolCap® screw-on cap diam. 20									

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A retention knob with through-hole	> Page 162
		SR1 ZSW 002 CoolCap® application tool	> Page 163
		DMS 3/8 8-60 NM Torque wrench 3/8"	> Page 163

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

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SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for Weldon shank | CoolCap®



Characteristics:



for Weldon shank CoolCap®	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
-----------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	Diameter 10 mm	50 10 750 SR1 W	10	50	69.1	22.5	30.4	40	ISO 7388-1	-	-
	Accessories	SR1 S10 SW22	CoolCap® screw-on cap diam. 10						> Page 162		
		SR1 A10 SW22	CoolCap® screw-on cap diam. 10						> Page 163		
		M10X9 SR1 W	Weldon diam. 10 straining screw						> Page 160		
	Diameter 12 mm	60 12 750 SR1 W	12	60	79.1	26.5	36	40	ISO 7388-1	-	-
	Accessories	SR1 S12 SW27	CoolCap® screw-on cap diam. 12						> Page 162		
		SR1 A12 SW27	CoolCap® screw-on cap diam. 12						> Page 163		
		M12X10 SR1 W	Weldon diam. 20 straining screw						> Page 160		
	Diameter 16 mm	60 16 750 SR1 W	16	60	79.1	31.5	41	40	ISO 7388-1	-	-
	Accessories	SR1 S16 SW32	CoolCap® screw-on cap diam. 16						> Page 162		
		SR1 A16 SW32	CoolCap® screw-on cap diam. 16						> Page 163		
		M14X11 SR1 W	Weldon diam. 16 straining screw						> Page 160		
	Diameter 20 mm	60 20 750 SR1 W	20	60	79.1	36	45	40	ISO 7388-1	-	-
	Accessories	SR1 S20 SW36	CoolCap® screw-on cap diam. 20						> Page 162		
		SR1 A20 SW36	CoolCap® screw-on cap diam. 20						> Page 163		
		M16X10 SR1 W	Weldon diam. 20 straining screw						> Page 160		

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A	retention knob with through-hole					> Page 162			
		SR1 ZSW 002	CoolCap® application tool					> Page 163			
		DMS 3/8 8-60 NM	Torque wrench 3/8"					> Page 163			

The scope of delivery for each CoolCap® cooling arbor includes one cap. In your order, please indicate whether you would like a cap for air/MMS or a cap for emulsion/coolant. Other caps can be ordered separately. Only tighten and loosen caps using the application tool or ring wrench!

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shell-type milling cutters



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	25 16 750 Z	16	25	44.1	38	40	40	ISO 7388-1	-	7.8
		50 16 750 Z	16	50	69.1	38	42	40	ISO 7388-1	-	7.8
		75 16 750 Z	16	75	94.1	38	45	40	ISO 7388-1	-	7.8
		125 16 750 Z	16	125	144.1	38	50	40	ISO 7388-1	-	7.8
		150 16 750 Z	16	150	169.1	38	50	40	ISO 7388-1	-	7.8
		200 16 750 Z	16	200	219.1	38	50	40	ISO 7388-1	-	7.8
	Accessories	DRIVING8X8 Driving block 8 x 8								> Page 161	
		M3X8 Screw for driving block 8 x 8								> Page 160	
		M8X30 Screw M8x30								> Page 161	
	Bore diam. 22 mm	25 22 750.01	22	25	44.1	48	48	40	ISO 7388-1	-	-
		50 22 750.01	22	50	69.1	48	48	40	ISO 7388-1	-	-
		75 22 750	22	75	94.1	48	48	40	ISO 7388-1	-	-
		100 22 750	22	100	119.1	48	48	40	ISO 7388-1	-	-
		150 22 750	22	150	169.1	48	48	40	ISO 7388-1	-	-
		200 22 750	22	200	219.1	48	48	40	ISO 7388-1	-	-
	Accessories	DRIVING10X8 Driving block 10 x 8								> Page 161	
		M4X10 Screw for driving block 10 x 8								> Page 160	
		M10X35 Screw M10X35								> Page 161	
		4XGEO-AUF Threaded bores for adapter								> Page 164	

The accessories shown here must be used for all sizes!

Accessories	KBSK40-69872A	retention knob with through-hole	> Page 162
	KBSK40-69872B	retention knob without through-hole	> Page 162

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Bore diam. 27 mm</p>	15 27 750	27	15	34.1	48	48	40	ISO 7388-1	-	-
	50 27 750	27	50	69.1	48	48	40	ISO 7388-1	-	-
	75 27 750	27	75	94.1	48	48	40	ISO 7388-1	-	-
	100 27 750	27	100	119.1	48	48	40	ISO 7388-1	-	-
Accessories	DRIVING12X8	Driving block 12 x 8						> Page 161		
	M5X12	Screw for driving block 12 x 8						> Page 160		
	M12X35	Screw M12X35						> Page 160		

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A	retention knob with through-hole	> Page 162
		KBSK40-69872B	retention knob without through-hole	> Page 162
		4XGEO-B-AUF	Threaded bores for adapter	> Page 164

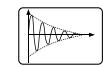
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SK 40 ISO 7388-1 (formerly DIN 69871 AD)

for shell-type milling cutters (vibration-dampened)

New

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	A200 16 750 VD	16	180.9	200	38	38	40	ISO 7388-1	—	—
		A300 16 750 VD	16	280.9	300	38	38	40	ISO 7388-1	—	—
	Accessories	DRIVING8X8 Driving block 8 x 8 > Page 161									
		M3X10 Screw for driving block 8 x 8 > Page 160									
		M8X30 Screw M8X30 > Page 161									
	Bore diam. 22 mm	A200 22 750 VD	22	180.9	200	48	48	40	ISO 7388-1	—	—
		A300 22 750 VD	22	280.9	300	48	48	40	ISO 7388-1	—	—
	Accessories	DRIVING10X8 Driving block 10 x 8 > Page 161									
		M4X10 Screw for driving block 10 x 8 > Page 160									
		M10X35 Screw M10X35 > Page 161									
The accessories shown here must be used for all sizes!	Accessories	KMR-63A	Coolant supply tube for HSK tooling > Page 162								
		WRENCHHHSK63	Wrench for coolant tubes > Page 162								

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

HSC precision collet chucks ER 20



Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	ER 20	50 ER20 750	20	50	69.1	28	36	40	ISO 7388-1	—	34.3
		100 ER20 750	20	100	119.1	28	40	40	ISO 7388-1	—	34.3
	Accessories	ER20 001 Tightning nut > Page 161									
		20 501 Collet chuck wrench for ER 20 tightning nut > Page 161									
		KBSK40-69872A retention knob with through-hole > Page 162									
		KBSK40-69872B retention knob without through-hole > Page 162									

Scope of delivery includes a tightning nut, which is approved up to n = 80,000 1/min

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

Drill chucks

Characteristics:



Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diam. 0.3 to 8 mm	BF 0.3-8 750 IC	8	57	76.1	36	36	40	ISO 7388-1	-	-
	Accessories	HEXA 4T			HEXA 4T					> Page 161	

Diam. 0.5 to 13 mm	BF 0.5-13 750 IC	13	97	116.1	50	50	40	ISO 7388-1	-	-
Accessories										
	HEXA 6T			HEXA 6T					> Page 161	
	BF13DS04			Gasket 1304					> Page 163	
	BF13DS08			Gasket 1308					> Page 163	
	BF13MW			Wrench 13/16					> Page 163	

Diam. 2.5 to 16 mm	BF 2.5-16 750 IC	16	82	101.1	57	57	40	ISO 7388-1	-	-
Accessories										
	HEXA 6T			HEXA 6T					> Page 161	
	BF16DS06			Gasket 1606					> Page 163	
	BF16DS16			Gasket 1616					> Page 163	
	BF13MW			Wrench 13/16					> Page 163	

The accessories shown here must be used for all sizes!	Accessories	KBSK40-69872A	retention knob with through-hole	> Page 162
		KBSK40-69872B	retention knob without through-hole	> Page 162

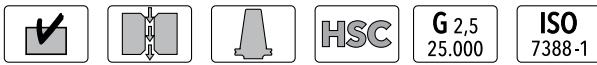
Scope of delivery includes wrench and gasket

SK 40 ISO 7388-1 (formerly DIN 69871 AD)

Hydro expansion zero reach adapter



Characteristics:



Hydro expansion zero reach adapter	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Accessories</p>	SK 40 diam. 20 mm	00 20 750 HDF	20	5.4	24.5	34	48	40	ISO 7388-1	-	-
	KBSK40-69872A	retention knob with through-hole								> Page 162	
	KBSK40-69872B	retention knob without through-hole								> Page 162	
	PHK20 6	Reduction to 6 mm diam. (not coolant-tight)								> Page 164	
	PHK20 8	Reduction to 8 mm diam. (not coolant-tight)								> Page 164	
	PHK20 10	Reduction to 10 mm diam. (not coolant-tight)								> Page 164	
	PHK20 12	Reduction to 12 mm diam. (not coolant-tight)								> Page 164	
	PHK20 14	Reduction to 14 mm diam. (not coolant-tight)								> Page 164	
	PHK20 16	Reduction to 16 mm diam. (not coolant-tight)								> Page 164	
	PHK20 3 IC	Reduction to 3 mm diam. (not coolant-tight)								> Page 164	
	PHK20 4 IC	Reduction to 4 mm diam. (not coolant-tight)								> Page 164	
	PHK20 5 IC	Reduction to 5 mm diam. (not coolant-tight)								> Page 164	
	PHK20 6 IC	Reduction to 6 mm diam. (not coolant-tight)								> Page 164	
	PHK20 8 IC	Reduction to 8 mm diam. (not coolant-tight)								> Page 164	
	PHK20 10 IC	Reduction to 10 mm diam. (not coolant-tight)								> Page 164	
	PHK20 12 IC	Reduction to 12 mm diam. (not coolant-tight)								> Page 164	
	PHK20 14 IC	Reduction to 14 mm diam. (not coolant-tight)								> Page 164	
	PHK20 16 IC	Reduction to 16 mm diam. (not coolant-tight)								> Page 164	

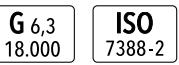
Scope of delivery includes Allen wrench

BT 40 ISO 7388-2 (JIS B 6339 AD)

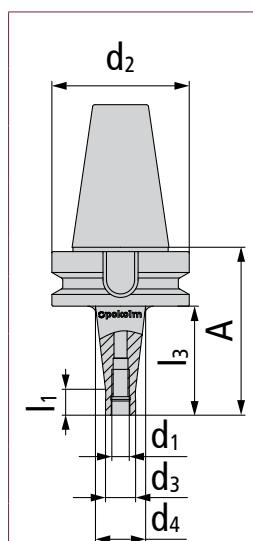
for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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M 8	25 08 754	M 8	25	52	13.8	15	40	ISO 7388-2	-	12
	50 08 754	M 8	50	77	13.8	23	40	ISO 7388-2	-	12
	75 08 754	M 8	75	102	13.8	25	40	ISO 7388-2	-	12
	100 08 754	M 8	100	127	13.8	30	40	ISO 7388-2	-	12

M 10	25 10 754	M 10	25	52	18	23	40	ISO 7388-2	-	12
	50 10 754	M 10	50	77	18	25	40	ISO 7388-2	-	12
	75 10 754	M 10	75	102	18	30	40	ISO 7388-2	-	12
	100 10 754	M 10	100	127	18	35	40	ISO 7388-2	-	12

M 12	25 12 754	M 12	25	52	21	24	40	ISO 7388-2	-	12
	50 12 754	M 12	50	77	21	30	40	ISO 7388-2	-	12
	75 12 754	M 12	75	102	21	35	40	ISO 7388-2	-	12
	100 12 754	M 12	100	127	21	38	40	ISO 7388-2	-	12

M 16	25 16 754	M 16	25	52	29	29	40	ISO 7388-2	-	-
	50 16 754	M 16	50	77	29	34	40	ISO 7388-2	-	12
	75 16 754	M 16	75	102	29	35	40	ISO 7388-2	-	12
	100 16 754	M 16	100	127	29	40	40	ISO 7388-2	-	12
	150 16 754	M 16	150	177	29	48	40	ISO 7388-2	-	12

BT 40 ISO 7388-2 (JIS B 6339 AD)

for threaded shank milling | cylindrical



Characteristics:



for threaded shank milling cylindrical	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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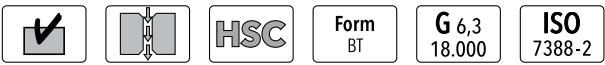
	M 8	50 08 754 ZYL	M 8	50	77	13.8	13.8	40	ISO 7388-2	-	-
	M 10	50 10 754 ZYL	M 10	50	77	18	18	40	ISO 7388-2	-	-
		75 10 754 ZYL	M 10	75	102	18	18	40	ISO 7388-2	-	-
		100 10 754 ZYL	M 10	100	127	18	18	40	ISO 7388-2	-	-
	M 12	50 12 754 ZYL	M 12	50	77	21	21	40	ISO 7388-2	-	-
		75 12 754 ZYL	M 12	75	102	21	21	40	ISO 7388-2	-	-
		100 12 754 ZYL	M 12	100	127	21	21	40	ISO 7388-2	-	-
	M 16	50 16 754 ZYL	M 16	50	77	29	29	40	ISO 7388-2	-	-
		75 16 754 ZYL	M 16	75	102	29	29	40	ISO 7388-2	-	-
		100 16 754 ZYL	M 16	100	127	29	29	40	ISO 7388-2	-	-

BT 40 ISO 7388-2 (JIS B 6339 AD)

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 3 mm	50 03 754 S.01	3	50	77	9	15.6	40	ISO 7388-2	-	7.8
		100 03 754 S.01	3	100	127	9	23.5	40	ISO 7388-2	-	7.8
	Diameter 4 mm	50 04 754 S.01	4	50	77	10.5	14.9	40	ISO 7388-2	-	7.8
		100 04 754 S.01	4	100	127	10.5	20.2	40	ISO 7388-2	-	7.8
	Diameter 6 mm	50 06 754 S	6	50	77	12	16	40	ISO 7388-2	-	7.8
		100 06 754 S	6	100	127	12	21.7	40	ISO 7388-2	-	7.8
	Diameter 8 mm	50 08 754 S	8	50	77	16	21	40	ISO 7388-2	-	7.8
		100 08 754 S	8	100	127	16	25.7	40	ISO 7388-2	-	7.8
	Diameter 10 mm	50 10 754 S	10	50	77	20	24.4	40	ISO 7388-2	-	7.8
		100 10 754 S	10	100	127	20	29.7	40	ISO 7388-2	-	7.8
	Diameter 12 mm	50 12 754 S	12	50	77	24	29	40	ISO 7388-2	-	7.8
		100 12 754 S	12	100	127	24	33.7	40	ISO 7388-2	-	7.8
	Diameter 16 mm	50 16 754 S	16	50	77	32	36.4	40	ISO 7388-2	-	7.8
		100 16 754 S	16	100	127	32	41.7	40	ISO 7388-2	-	7.8
	Diameter 20 mm	50 20 754 S	20	50	77	40	44.4	40	ISO 7388-2	-	7.8

1/2>

BT 40 ISO 7388-2 (JIS B 6339 AD)

for shrinking



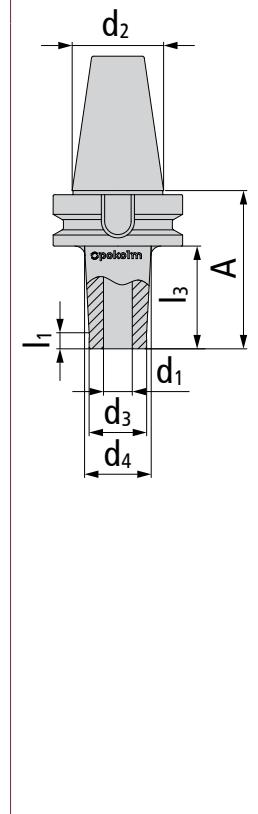
Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 25 mm	60 25 754 S	25	60	87	46	46	40	ISO 7388-2	-	7.8
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BT 40 ISO 7388-2 (JIS B 6339 AD)

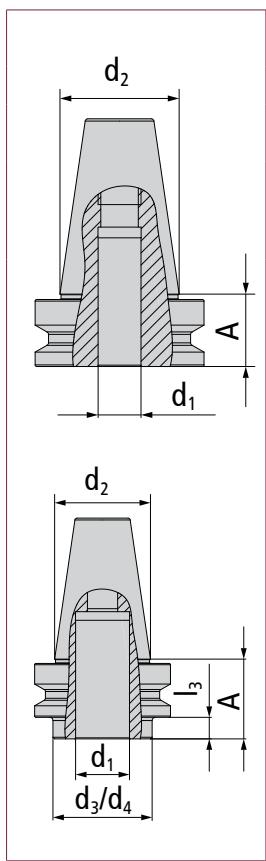
for shrinking | zero reach adapters



Characteristics:

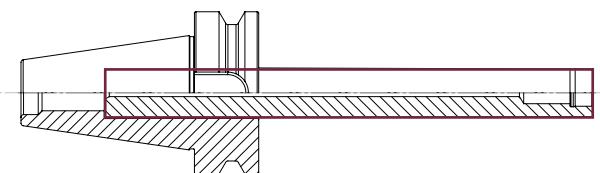


for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 16 mm	00 16 754 S	16	0	27	-	-	40	ISO 7388-2	-	-
Diameter 20 mm	00 20 754 S	20	0	27	-	-	40	ISO 7388-2	-	-
Diameter 25 mm	00 25 754 S	25	10	37	46	46	40	ISO 7388-2	-	-

Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



BT 40 ISO 7388-2 (JIS B 6339 AD)

for shell-type milling cutters



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	25 16 754 Z	16	25	52	38	40	40	ISO 7388-2	-	7.8
		50 16 754 Z	16	50	77	38	42	40	ISO 7388-2	-	7.8
		75 16 754 Z	16	75	102	38	45	40	ISO 7388-2	-	7.8
		100 16 754 Z	16	100	127	38	48	40	ISO 7388-2	-	7.8
		150 16 754 Z	16	150	177	38	50	40	ISO 7388-2	-	7.8
	Accessories	DRIVING8X8	Driving block 8 x 8							> Page 161	
		M3X10	Screw for driving block 8 x 8							> Page 160	
		M8X30	Screw M8x30							> Page 161	
	Bore diam. 22 mm	25 22 754.01	22	25	52	48	48	40	ISO 7388-2	-	-
		50 22 754.01	22	50	77	48	48	40	ISO 7388-2	-	7.8
		75 22 754	22	75	102	48	48	40	ISO 7388-2	-	7.8
		100 22 754	22	100	127	48	48	40	ISO 7388-2	-	7.8
		150 22 754	22	150	177	48	48	40	ISO 7388-2	-	7.8
		200 22 754	22	200	227	48	48	40	ISO 7388-2	-	7.8
	Accessories	DRIVING10X8	Driving block 10 x 8							> Page 161	
		M4X10	Screw for driving block 10 x 8							> Page 160	
		M10X35	Screw M10X35							> Page 161	
		4XGEO-AUF	Threaded bores for adapter							> Page 164	

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF

Characteristics:


for shell-type milling cutters

Order no.

 d₁

 l₃

A

 d₃

 d₄

 d₂

DIN / shape

 l₂

 l₁

Bore diam. 27 mm	

Order no.	15 27 754	27	15	42	48	48	40	ISO 7388-2	–	–
	50 27 754	27	50	77	48	48	40	ISO 7388-2	–	–
	75 27 754	27	75	102	48	48	40	ISO 7388-2	–	–
	100 27 754	27	100	127	48	48	40	ISO 7388-2	–	–
	150 27 754	27	150	177	48	48	40	ISO 7388-2	–	–
Accesso- ries	DRIVING12X8 Driving block 12 x 8								> Page 161	
	M5X12 Screw for driving block 12 x 8								> Page 160	
	M12X35 Screw M12X35								> Page 161	
	4XGEO-AUF Threaded bores for adapter								> Page 164	

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF

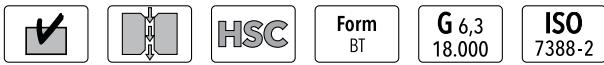
<2/2

BT 40 ISO 7388-2 (JIS B 6339 AD)

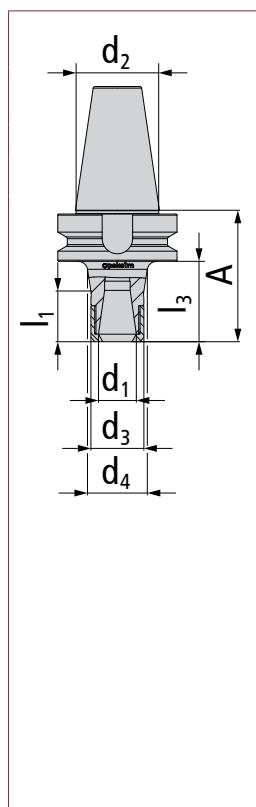
HSC precision collet chucks ER 20



Characteristics:



HSC precision collet chucks ER 20	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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ER 20	50 ER20 754	ER 20	50	77	28	32	40	ISO 7388-2	-	34.3
	100 ER20 754	ER 20	100	127	28	40	40	ISO 7388-2	-	34.3
Accessories	ER20 001 Tightning nut > Page 161									
	20 501 Collet chuck wrench for ER 20 tightning nut > Page 161									

Scope of delivery includes a tightning nut, which is approved up to n = 80,000 1/min

BT 40 ISO 7388-2 (JIS B 6339 AD)

Hydro expansion zero reach adapter



Characteristics:



Hydro expansion zero reach adapter	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Accessories</p>	BT 40 Diameter 20 mm	00 20 754 HDF	20	5.5	32.5	34	48	40	ISO 7388-2	-	-
	PHK20 6	Reduction to 6 mm diam. (not coolant-tight)								> Page 164	
	PHK20 8	Reduction to 8 mm diam. (not coolant-tight)								> Page 164	
	PHK20 10	Reduction to 10 mm diam. (not coolant-tight)								> Page 164	
	PHK20 12	Reduction to 12 mm diam. (not coolant-tight)								> Page 164	
	PHK20 14	Reduction to 14 mm diam. (not coolant-tight)								> Page 164	
	PHK20 16	Reduction to 16 mm diam. (not coolant-tight)								> Page 164	
	PHK20 3 IC	Reduction to 3 mm diam. (not coolant-tight)								> Page 164	
	PHK20 4 IC	Reduction to 4 mm diam. (not coolant-tight)								> Page 164	
	PHK20 5 IC	Reduction to 5 mm diam. (not coolant-tight)								> Page 164	
	PHK20 6 IC	Reduction to 6 mm diam. (not coolant-tight)								> Page 164	
	PHK20 8 IC	Reduction to 8 mm diam. (not coolant-tight)								> Page 164	
	PHK20 10 IC	Reduction to 10 mm diam. (not coolant-tight)								> Page 164	
	PHK20 12 IC	Reduction to 12 mm diam. (not coolant-tight)								> Page 164	
	PHK20 14 IC	Reduction to 14 mm diam. (not coolant-tight)								> Page 164	
	PHK20 16 IC	Reduction to 16 mm diam. (not coolant-tight)								> Page 164	

Scope of delivery includes Allen wrench

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 10	50 10 710	10	50	69.1	18	25	50	ISO 7388-1	-	12
		75 10 710	10	75	94.1	18	30	50	ISO 7388-1	-	12
		100 10 710	10	100	119.1	18	35	50	ISO 7388-1	-	12
		150 10 710	10	150	169.1	18	45	50	ISO 7388-1	-	12
	M 12	50 12 710	12	50	69.1	21	30	50	ISO 7388-1	-	12
		100 12 710	12	100	119.1	21	38	50	ISO 7388-1	-	12
		150 12 710	12	150	169.1	21	52	50	ISO 7388-1	-	12
		200 12 710	12	200	219.1	21	68	50	ISO 7388-1	-	12
		250 12 710	12	250	269.1	21	63	50	ISO 7388-1	-	12
		300 12 710	12	300	319.1	21	68	50	ISO 7388-1	-	12
	M 16	50 16 710	16	50	69.1	29	34	50	ISO 7388-1	-	12
		100 16 710	16	100	119.1	29	40	50	ISO 7388-1	-	12
		150 16 710	16	150	169.1	29	48	50	ISO 7388-1	-	12
		200 16 710	16	200	219.1	29	50	50	ISO 7388-1	-	12
		250 16 710	16	250	269.1	29	62	50	ISO 7388-1	-	12
		300 16 710	16	300	319.1	29	68	50	ISO 7388-1	-	12

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
		KBSK50-69872B	retention knob without through-hole	> Page 162

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 6 mm	50 06 710 S	6	50	69.1	12	17	50	ISO 7388-1	-	7.8
		100 06 710 S	6	100	119.1	12	21.7	50	ISO 7388-1	-	7.8
		150 06 710 S	6	150	169.1	12	27	50	ISO 7388-1	-	7.8
		200 06 710 S	6	200	219.1	12	32	50	ISO 7388-1	-	7.8
	Diameter 8 mm	50 08 710 S	8	50	69.1	16	21	50	ISO 7388-1	-	7.8
		100 08 710 S	8	100	119.1	16	26	50	ISO 7388-1	-	7.8
		150 08 710 S	8	150	169.1	16	30.9	50	ISO 7388-1	-	7.8
		200 08 710 S	8	200	219.1	16	36	50	ISO 7388-1	-	7.8
	Diameter 10 mm	50 10 710 S	10	50	69.1	20	25	50	ISO 7388-1	-	7.8
		100 10 710 S	10	100	119.1	20	30	50	ISO 7388-1	-	7.8
		150 10 710 S	10	150	169.1	20	35	50	ISO 7388-1	-	7.8
		200 10 710 S	10	200	219.1	20	40	50	ISO 7388-1	-	7.8
	Diameter 12 mm	50 12 710 S	12	50	69.1	24	28.4	50	ISO 7388-1	-	7.8
		100 12 710 S	12	100	119.1	24	33.7	50	ISO 7388-1	-	7.8
		150 12 710 S	12	150	169.1	24	39	50	ISO 7388-1	-	7.8
		200 12 710 S	12	200	219.1	24	44	50	ISO 7388-1	-	7.8

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
		KBSK50-69872B	retention knob without through-hole	> Page 162

1/2 >

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking

Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 16 mm	50 16 710 S	16	50	69.1	32	36.4	50	ISO 7388-1	-	7.8
	100 16 710 S	16	100	119.1	32	41.7	50	ISO 7388-1	-	7.8	
	150 16 710 S	16	150	169.1	32	46.9	50	ISO 7388-1	-	7.8	
	200 16 710 S	16	200	219.1	32	52	50	ISO 7388-1	-	7.8	
	Diameter 20 mm	50 20 710 S	20	50	69.1	40	44.4	50	ISO 7388-1	-	7.8
	100 20 710 S	20	100	119.1	40	50	50	ISO 7388-1	-	7.8	
	150 20 710 S	20	150	169.1	40	55	50	ISO 7388-1	-	7.8	
	Diameter 25 mm	60 25 710 S	25	60	79.1	46	46	50	ISO 7388-1	-	-
	100 25 710 S	25	100	119.1	46	56	50	ISO 7388-1	-	7.8	
	Diameter 32 mm	60 32 710 S	32	60	79.1	44	53	50	ISO 7388-1	-	-

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A KBSK50-69872B	retention knob with through-hole retention knob without through-hole	> Page 162 > Page 162
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<2/2

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for shrinking | zero reach adapters



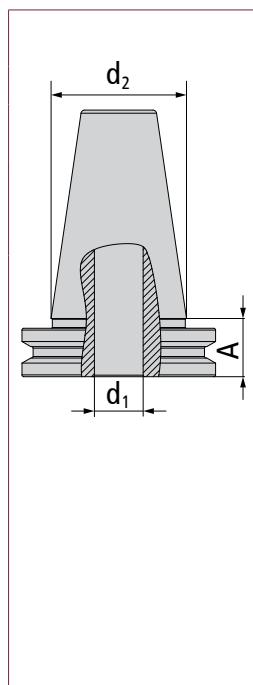
Characteristics:



G 6,3
12.000

ISO
7388-1

for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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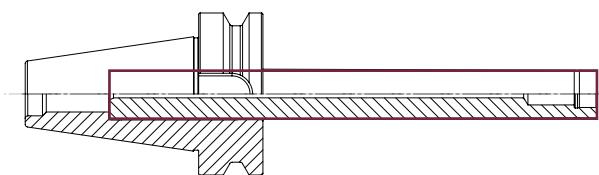
Diameter 20 mm	00 20 710 S	20	0	19.1	-	-	50	ISO 7388-1	-	-
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Diameter 25 mm	00 25 710 S	25	0	19.1	-	-	50	ISO 7388-1	-	-
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Diameter 32 mm	00 32 710 S	32	0	19.1	-	-	50	ISO 7388-1	-	-
-----------------------	-------------	----	---	------	---	---	----	------------	---	---

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
		KBSK50-69872B	retention knob without through-hole	> Page 162

Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for shell-type milling cutters



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
--------------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	Bore diam. 16 mm	50 16 710 Z	16	50	69.1	38	42	50	ISO 7388-1	-	7.8
		100 16 710 Z	16	100	119.1	38	50	50	ISO 7388-1	-	7.8
		150 16 710 Z	16	150	169.1	38	50	50	ISO 7388-1	-	7.8
		200 16 710 Z	16	200	219.1	38	50	50	ISO 7388-1	-	7.8
		250 16 710 Z	16	250	269.1	38	50	50	ISO 7388-1	-	7.8
Accessories		DRIVING8X8 Driving block 8 x 8							> Page 161		
		M3X10 Screw for driving block 8 x 8							> Page 161		
		M8X30 Screw M8x30							> Page 161		
	Bore diam. 22 mm	50 22 710	22	50	69.1	40	40	50	ISO 7388-1	-	7.8
		50 22 710.01	22	50	69.1	48	48	50	ISO 7388-1	-	7.8
		100 22 710	22	100	119.1	40	50	50	ISO 7388-1	-	7.8
		150 22 710	22	150	169.1	48	62	50	ISO 7388-1	-	7.8
		200 22 710	22	200	219.1	48	78	50	ISO 7388-1	-	7.8
		250 22 710	22	250	269.1	48	78	50	ISO 7388-1	-	7.8
Accessories		DRIVING10X8 Driving block 10 x 8							> Page 161		
		M4X10 Screw for driving block 10 x 8							> Page 161		
		M10X35 Screw M10X35							> Page 161		
		4XGEOB-AUF Threaded bores for adapter							> Page 164		
	Bore diam. 27 mm	50 27 710	27	50	69.1	62	62	50	ISO 7388-1	-	-
		100 27 710	27	100	119.1	62	70	50	ISO 7388-1	-	7.8
		150 27 710	27	150	169.1	62	76	50	ISO 7388-1	-	7.8
		200 27 710	27	200	219.1	62	76	50	ISO 7388-1	-	7.8
		250 27 710	27	250	269.1	62	76	50	ISO 7388-1	-	7.8
		DRIVING12X12/2 Driving block 12 x 12							> Page 161		
Accessories		M5X12 Screw for driving block 12 x 8							> Page 160		
		M12X35 Screw M12X35							> Page 161		
		4XGEOB-AUF Threaded bores for adapter							> Page 164		

The accessories shown here must be used for all sizes!

Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
	KBSK50-69872B	retention knob without through-hole	> Page 162

Characteristics:


G 6,3
12.000

ISO
7388-1

for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 32 mm	50 32 710	32	50	69.1	95	78	50	ISO 7388-1	-	7.8
		100 32 710	32	100	119.1	95	78	50	ISO 7388-1	-	7.8
		150 32 710	32	150	169.1	95	78	50	ISO 7388-1	-	7.8
		200 32 710	32	200	219.1	95	78	50	ISO 7388-1	-	7.8
	Accessories	DRIVING14X14 Driving block 14 x 14 > Page 161									
		M5X16 Screw for driving block 12 x 12 and 14 x 14 > Page 160									
		M16X26 Screw M16X26 > Page 161									
	Bore diam. 40 mm	50 40 710 Z	40	50	69.1	100	78	50	ISO 7388-1	-	-
		100 40 710 Z	40	100	119.1	100	78	50	ISO 7388-1	-	-
	Accessories	DRIVING16X16 Driving block 16 x 16 > Page 161									
		M6X16 Screw for driving block 16 x 16 > Page 160									
		M20X30 Screw M20X30 > Page 161									
	Bore diam. 60 mm	50 60 710 Z	60	50	69.1	129	78	50	ISO 7388-1	-	-
	Accessories	DRIVING25X26 Driving block 25 x 26 > Page 161									
		M12X25 Screw > Page 160									
		M16X50 Screw M16X50 > Page 160									

The accessories shown here must be used for all sizes!

Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
	KBSK50-69872B	retention knob without through-hole	> Page 152

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF

2/2

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for shell-type milling cutters (vibration-dampened)

New

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	A200 16 710 VD	16	180.9	200	38	38	50	ISO 7388-1	—	—	
		A300 16 710 VD	16	280.9	300	38	38	50	ISO 7388-1	—	—	
Accessories		DRIVING8X8 Driving block 8 x 8 > Page 161										
		M3X10 Screw for driving block 8 x 8 > Page 160										
		M8X30 Screw M8X30 > Page 161										
<hr/>												
		Bore diam. 22 mm	A200 22 710 VD	22	180.9	200	48	48	50	ISO 7388-1	—	—
			A300 22 710 VD	22	280.9	300	48	48	50	ISO 7388-1	—	—
Accessories		DRIVING10X8 Driving block 10 x 8 > Page 161										
		M4X10 Screw for driving block 10 x 8 > Page 160										
		M10X35 Screw M10X35 > Page 161										
<hr/>												
The accessories shown here must be used for all sizes!		Accessories	KMR-63A	Coolant supply tube for HSK tooling > Page 162								
			WRENCHHHSK63	Wrench for coolant tubes > Page 162								

Characteristics:


ISO
7388-1

G 6,3
8.000

**for shell-type
milling cutters**

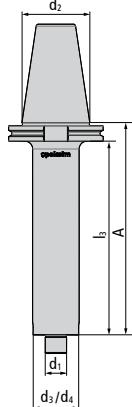
Order no.

 d_1 l_3

A

 d_3 d_4 d_2

DIN / shape

 l_2 l_1 

Bore diam. 27 mm	A200 27 710 VD	27	180.9	200	58	58	50	ISO 7388-1	-	-
	A300 27 710 VD	27	280.9	300	58	58	50	ISO 7388-1	-	-
Accessories	DRIVING12X8 Driving block 12 x 8								> Page 161	
	M5X12 Screw for driving block 12 x 8								> Page 160	
	M12X35 Screw M12X35								> Page 161	

The accessories shown here must be used for all sizes!

Accessories

KMR-63A Coolant supply tube for HSK tooling

> Page 162

WRENCHHSK63 Wrench for coolant tubes

> Page 162

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 Adapters, extensions,
collars, drill chucks

Hollow shank taper HSK

Steep taper SK / BT

Flat contact surface

Accessories

Order / request forms

Spindle systems / shrink technology

Assembly instructions

Index

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

Drill chucks



Characteristics:

**G 6,3**
25.000**ISO**
7388-1

Drill chucks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diam. 0.5 to 13 mm	BF 0.5-13 710 IC	13	93	112.1	50	50	50	ISO 7388-1	-	-
Accessories	BF13DS06 Gasket 1306 > Page 163										
	BF13DS13 Gasket 1313 > Page 163										
	Diam. 2.5 to 16 mm	BF 2.5-16 710 IC	16	98	117.1	57	57	50	ISO 7388-1	-	-
Accessories	BF16DS06 Gasket 1606 > Page 163										
	BF16DS16 Gasket 1616 > Page 163										

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A	retention knob with through-hole						> Page 162		
		KBSK50-69872B	retention knob without through-hole						> Page 162		
		HEXA 6T	HEXA 6T						> Page 161		
		BF13MW	Wrench 13/16						> Page 163		

Scope of delivery includes wrench and gasket

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for Morse taper shanks



Characteristics:



G 6,3
12.000

ISO
7388-1

for Morse taper shanks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
------------------------	-----------	-------	-------	---	-------	-------	-------	-------------	-------	-------

	MK 2	40 2 710	2	40	69.1	30	36	50	ISO 7388-1	-	-
	Accessories	M10X40 Screw for MK reduction sleeve > Page 160									
	MK 2	90 2 710	2	90	109.1	30	46	50	ISO 7388-1	-	-
	Accessories	M10X90 Screw for MK reduction sleeve > Page 160									
	MK 3	50 3 710	3	50	69.1	38	46	50	ISO 7388-1	-	-
	Accessories	M12X40 Screw for MK reduction sleeve > Page 160									
	MK 3	100 3 710	3	100	119.1	38	56	50	ISO 7388-1	-	-
	Accessories	M12X90 Screw for MK reduction sleeve > Page 160									
	MK 3	150 3 710	3	150	169.1	38	62	50	ISO 7388-1	-	-
	Accessories	Z 00104 Setscrew > Page 160									
	MK 3	200 3 710	3	200	219.1	38	70	50	ISO 7388-1	-	-
	Accessories	M12X135 Screw for MK reduction sleeve > Page 160									

<p>The accessories shown here must be used for all sizes!</p>	Accessories	KBSK50-69872A	retention knob with through-hole	> Page 160
		KBSK50-69872B	retention knob without through-hole	> Page 160
		ZGHM2414	Threaded bush, right-hand thread	> Page 163
		GWST-M5X8-914	Setscrew	> Page 160
		1003	Wrench for MK reduction sleeve	> Page 161

1/2>

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

for Morse taper shanks



Characteristics:



G 6,3
12.000

ISO
7388-1

for Morse taper shanks	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	MK 4	80 4 710	4	80	99.1	44	56	50	ISO 7388-1	-	-
		130 4 710	4	130	149.1	44	70	50	ISO 7388-1	-	-
		180 4 710	4	180	199.1	44	70	50	ISO 7388-1	-	-
	Accessories	M16X50 IC Screw for MK reduction sleeve > Page 160									
		1004 Wrench for MK reduction sleeve > Page 161									
		ZGHM2414L Threaded bush, left-hand thread > Page 163									
	MK 5	100 5 710	5	100	119.1	56	70	50	ISO 7388-1	-	-
		150 5 710	5	150	169.1	56	70	50	ISO 7388-1	-	-
		200 5 710	5	200	219.1	56	75	50	ISO 7388-1	-	-
	Accessories	M20X50 Screw for MK reduction sleeve > Page 160									
		1005 Wrench for MK reduction sleeve > Page 161									

The accessories shown here must be used for all sizes!	Accessories	KBSK50-69872A	retention knob with through-hole	> Page 162
		KBSK50-69872B	retention knob without through-hole	> Page 162
		Z 00104	Setscrew	> Page 160
		ZGHM2414	Threaded bush, right-hand thread	> Page 163

SK 50 ISO 7388-1 (formerly DIN 69871 AD)

Hydro expansion zero reach adapter



Characteristics:



Hydro expansion zero reach adapter	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Accessories</p>	SK 50 Diameter 32 mm	15 32 710 HDF	32	11.4	30.5	44.5	70.5	50	ISO 7388-1	-	-
	KBSK50-69872A										> Page 162
	KBSK50-69872B										> Page 162
	PHK32 6										> Page 165
	PHK32 8										> Page 165
	PHK32 10										> Page 165
	PHK32 12										> Page 165
	PHK32 14										> Page 165
	PHK32 16										> Page 165
	PHK32 18										> Page 165
	PHK32 20										> Page 165
	PHK32 25										> Page 165
	PHK32 3 IC										> Page 165
	PHK32 4 IC										> Page 165
	PHK32 5 IC										> Page 165
	PHK32 6 IC										> Page 165
	PHK32 8 IC										> Page 165
	PHK32 10 IC										> Page 165
	PHK32 12 IC										> Page 165
	PHK32 14 IC										> Page 165
	PHK32 16 IC										> Page 165
	PHK32 18 IC										> Page 165
	PHK32 20 IC										> Page 165
	PHK32 25 IC										> Page 165

Scope of delivery includes Allen wrench

BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

for threaded shank end mills



Characteristics:



for threaded shank end mills	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	M 12	50 12 714	M 12	50	88	21	30	50	ISO 7388-2	-	12
		100 12 714	M 12	100	138	21	38	50	ISO 7388-2	-	12
	M 16	150 12 714	M 12	150	188	21	52	50	ISO 7388-2	-	12
		200 12 714	M 12	200	238	21	58	50	ISO 7388-2	-	12
	M 16	250 12 714	M 12	250	288	21	63	50	ISO 7388-2	-	12
		300 12 714	M 12	300	338	21	68	50	ISO 7388-2	-	12
	M 16	50 16 714	M 16	50	88	29	34	50	ISO 7388-2	-	12
		100 16 714	M 16	100	138	29	40	50	ISO 7388-2	-	12
	M 16	150 16 714	M 16	150	188	29	48	50	ISO 7388-2	-	12
		200 16 714	M 16	200	238	29	58	50	ISO 7388-2	-	12
	M 16	250 16 714	M 16	250	288	29	62	50	ISO 7388-2	-	12
		300 16 714	M 16	300	338	29	68	50	ISO 7388-2	-	12
		360 16 714	M 16	360	398	29	68	50	ISO 7388-2	-	12

BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 6 mm	50 06 714 S	6	50	88	12	17	50	ISO 7388-2	-	7.8
		100 06 714 S	6	100	138	12	21.7	50	ISO 7388-2	-	7.8
		150 06 714 S	6	150	188	12	27	50	ISO 7388-2	-	7.8
		200 06 714 S	6	200	238	12	32	50	ISO 7388-2	-	7.8
	Diameter 8 mm	50 08 714 S	8	50	88	16	21	50	ISO 7388-2	-	7.8
		100 08 714 S	8	100	138	16	26	50	ISO 7388-2	-	7.8
		150 08 714 S	8	150	188	16	30.9	50	ISO 7388-2	-	7.8
		200 08 714 S	8	200	238	16	36	50	ISO 7388-2	-	7.8
	Diameter 10 mm	50 10 714 S	10	50	88	20	25	50	ISO 7388-2	-	7.8
		100 10 714 S	10	100	138	20	30	50	ISO 7388-2	-	7.8
		150 10 714 S	10	150	188	20	35	50	ISO 7388-2	-	7.8
		200 10 714 S	10	200	238	20	40	50	ISO 7388-2	-	7.8
	Diameter 12 mm	50 12 714 S	12	50	88	24	28.4	50	ISO 7388-2	-	7.8
		100 12 714 S	12	100	138	24	33.7	50	ISO 7388-2	-	7.8
		150 12 714 S	12	150	188	24	39	50	ISO 7388-2	-	7.8
		200 12 714 S	12	200	238	24	44	50	ISO 7388-2	-	7.8

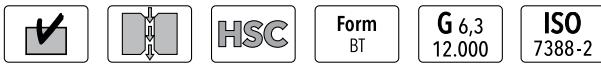
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BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

for shrinking



Characteristics:



for shrinking	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Diameter 16 mm	50 16 714 S	16	50	88	32	36.4	50	ISO 7388-2	-	7.8
	100 16 714 S	16	100	138	32	41.7	50	ISO 7388-2	-	7.8	
	150 16 714 S	16	150	188	32	46.9	50	ISO 7388-2	-	7.8	
	Diameter 20 mm	50 20 714 S	20	50	88	40	44.4	50	ISO 7388-2	-	7.8
	100 20 714 S	20	100	138	40	50	50	ISO 7388-2	-	7.8	
	Diameter 25 mm	60 25 714 S	25	60	98	46	46	50	ISO 7388-2	-	-
	100 25 714 S	25	100	138	46	56	50	ISO 7388-2	-	7.8	
	Diameter 32 mm	60 32 714 S	32	60	98	44	53	50	ISO 7388-2	-	-

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BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

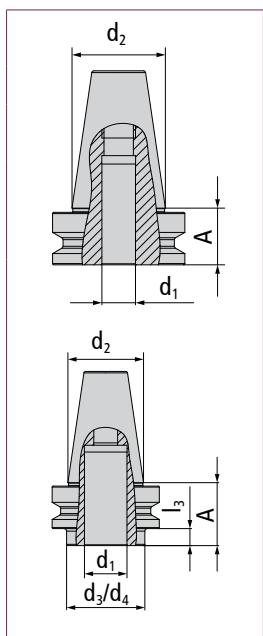
for shrinking | zero reach adapters



Characteristics:

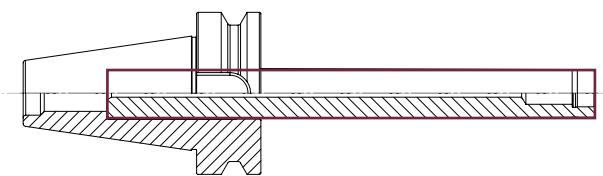


for shrinking zero reach adapters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Diameter 20 mm	00 20 714 S	20	0	38	-	-	50	ISO 7388-2	-	-
Diameter 25 mm	00 25 714 S	25	0	38	-	-	50	ISO 7388-2	-	-
Diameter 32 mm	00 32 714 S	32	0	38	-	-	50	ISO 7388-2	-	-

Zero reach arbors cannot be ordered separately. They are shrunk at the factory with the corresponding solid carbide or dense antivibration material adapter (Please indicate the required adapter when placing your order!) and delivered ready for use. Relevant items are available in the section "Adapters, extensions and collet chucks" starting on page 26.



BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

for shell-type milling cutters



Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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	Bore diam. 16 mm	50 16 714 Z	16	50	88	38	42	50	ISO 7388-2	-	7.8
	100 16 714 Z	16	100	138	38	50	50	ISO 7388-2	-	7.8	
	150 16 714 Z	16	150	188	38	50	50	ISO 7388-2	-	7.8	
	Accessories	DRIVING8X8 Driving block 8 x 8 > Page 161 M3X10 Screw for driving block 8 x 8 > Page 161 M8X30 Screw M8x30 > Page 161									
	Bore diam. 22 mm	50 22 714.01	22	50	88	48	48	50	ISO 7388-2	-	7.8
	100 22 714	22	100	138	48	50	50	ISO 7388-2	-	7.8	
	150 22 714	22	150	188	48	62	50	ISO 7388-2	-	7.8	
	200 22 714	22	200	238	48	78	50	ISO 7388-2	-	7.8	
	Accessories	DRIVING10X8 Driving block 10 x 8 > Page 161 M4X10 Screw for driving block 10 x 8 > Page 160 M10X35 Screw M10X35 > Page 161 4XGEOB-AUF Threaded bores for adapter > Page 164									
	Bore diam. 27 mm	50 27 714	27	50	88	62	62	50	ISO 7388-2	-	7.8
	100 27 714	27	100	138	62	70	50	ISO 7388-2	-	7.8	
	150 27 714	27	150	188	62	76	50	ISO 7388-2	-	7.8	
	200 27 714	27	200	238	62	76	50	ISO 7388-2	-	7.8	
	Accessories	DRIVING12X12/2 Driving block 12 x 12 > Page 161 M5X12 Screw for driving block 12 x 8 > Page 160 M12X35 Screw M12X35 > Page 161 4XGEOB-AUF Threaded bores for adapter > Page 164									
	Bore diam. 32 mm	50 32 714	32	50	88	95	78	50	ISO 7388-2	-	7.8
	100 32 714	32	100	138	95	78	50	ISO 7388-2	-	7.8	
	150 32 714	32	150	188	95	78	50	ISO 7388-2	-	7.8	
	200 32 714	32	200	238	95	78	50	ISO 7388-2	-	7.8	
	Accessories	DRIVING14X14 Driving block 14 x 14 > Page 161 M5X16 Screw for driving block 12 x 12 and 14 x 14 > Page 160 M16X26 Screw M16X26 > Page 161									

Characteristics:



for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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For figures, see table at left	Bore diam. 40 mm	50 40 714 Z	40	50	88	100	78	50	ISO 7388-2	-	-
	Accessories	M20X30			Screw M20X30					> Page 161	
	Bore diam. 60 mm	50 60 714 Z*	60	50	88	129	78	50	ISO 7388-2	-	-
	Accessories	DRIVING25X26			Driving block 25 x 26					> Page 161	
		M12X25			Screw					> Page 160	
		M16X50			Screw M16X50					> Page 160	

Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEBO-AUF <2/2

* no internal coolant supply available

BT 50 ISO 7388-2 (formerly JIS B 6339 AD)

Hydro expansion zero reach adapter



Characteristics:



Hydro expansion zero reach adapter	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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<p>Accessories</p>	BT 50 Diameter 32 mm	15 32 714 HDF	32	11.4	49.4	44.5	70.5	50	ISO 7388-2	-	-
	PHK32 6	Reduction to 6 mm diam. (not coolant-tight)								> Page 165	
	PHK32 8	Reduction to 8 mm diam. (not coolant-tight)								> Page 165	
	PHK32 10	Reduction to 10 mm diam. (not coolant-tight)								> Page 165	
	PHK32 12	Reduction to 12 mm diam. (not coolant-tight)								> Page 165	
	PHK32 14	Reduction to 14 mm diam. (not coolant-tight)								> Page 165	
	PHK32 16	Reduction to 16 mm diam. (not coolant-tight)								> Page 165	
	PHK32 20	Reduction to 20 mm diam. (not coolant-tight)								> Page 165	
	PHK32 25	Reduction to 25 mm diam. (not coolant-tight)								> Page 165	
	PHK32 3 IC	Reduction to 3 mm diam. (not coolant-tight)								> Page 165	
	PHK32 4 IC	Reduction to 4 mm diam. (not coolant-tight)								> Page 165	
	PHK32 5 IC	Reduction to 5 mm diam. (not coolant-tight)								> Page 165	
	PHK32 6 IC	Reduction to 6 mm diam. (not coolant-tight)								> Page 165	
	PHK32 8 IC	Reduction to 8 mm diam. (not coolant-tight)								> Page 165	
	PHK32 10 IC	Reduction 10 mm diam. (not coolant-tight)								> Page 165	
	PHK32 12 IC	Reduction 12 mm diam. (not coolant-tight)								> Page 165	
	PHK32 14 IC	Reduction 14 mm diam. (not coolant-tight)								> Page 165	
	PHK32 16 IC	Reduction 16 mm diam. (not coolant-tight)								> Page 165	
	PHK32 18 IC	Reduction 18 mm diam. (not coolant-tight)								> Page 165	
	PHK32 20 IC	Reduction 20 mm diam. (not coolant-tight)								> Page 165	
	PHK32 25 IC	Reduction 15 mm diam. (not coolant-tight)								> Page 165	

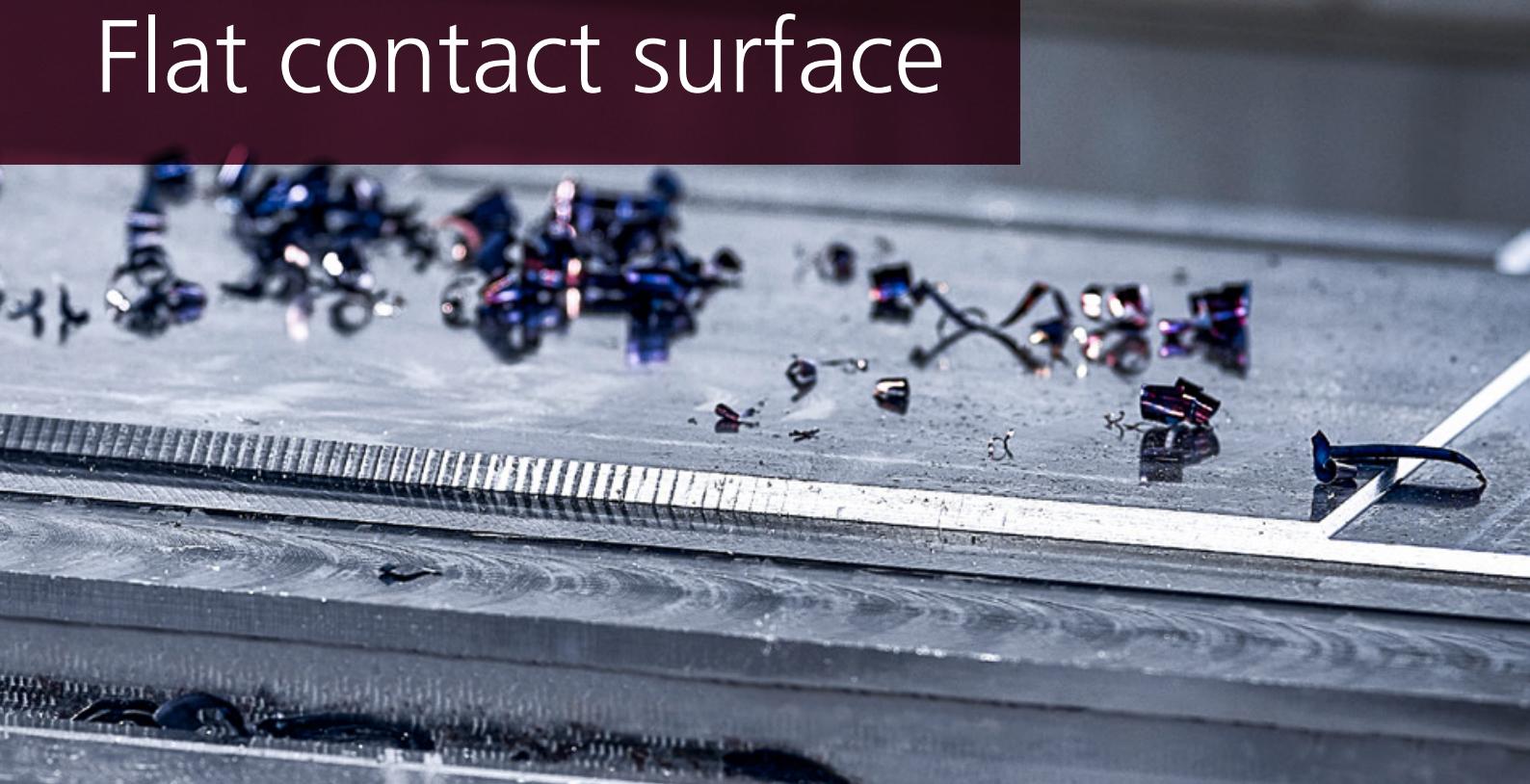
Scope of delivery includes Allen wrench

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PRODUCT VARIETY WITH THE HIGHEST PRECISION



Flat contact surface



At a glance

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SK 50 for shell-type milling cutters	154
SK 50 / HSK 100 – centering arbor / adapter	156

PRODUCT VARIETY WITH THE HIGHEST PRECISION



Pokolm flat contact surfaces

Features and advantages:

- For direct mounting on the machine spindle
- Mounting bore in accordance with DIN 1830 to attach to milling spindle heads according to DIN 2079
- Maximum stability and rigidity with long overhangs or difficult cutting tasks
- Arbors made of high temperature-resistant material
- Hardness 52 - 54 HRC

SK 50

for shell-type milling cutters

Characteristics:

DIN
1830DIN
2079

for shell-type milling cutters	Order no.	d_1	l_3^*	A	d_3	d_4	d_2	DIN / shape	l_2	l_1																																																																																																																																																																																																																																																																					
	Bore diam. 22 mm <table border="1"> <tr> <td>200 22 740</td><td>22</td><td>200</td><td>233</td><td>48</td><td>78</td><td>50</td><td>Flat contact surface</td><td>-</td><td>38</td></tr> <tr> <td>250 22 740</td><td>22</td><td>250</td><td>283</td><td>48</td><td>82</td><td>50</td><td>Flat contact surface</td><td>-</td><td>38</td></tr> <tr> <td>300 22 740</td><td>22</td><td>300</td><td>333</td><td>48</td><td>86</td><td>50</td><td>Flat contact surface</td><td>-</td><td>38</td></tr> <tr> <td>350 22 740</td><td>22</td><td>350</td><td>383</td><td>48</td><td>90</td><td>50</td><td>Flat contact surface</td><td>-</td><td>38</td></tr> <tr> <td>400 22 740</td><td>22</td><td>400</td><td>433</td><td>48</td><td>95</td><td>50</td><td>Flat contact surface</td><td>-</td><td>38</td></tr> </table> Accessories <table border="1"> <tr> <td>DRIVING10X8</td><td colspan="6">Driving block 10 x 8</td><td colspan="3">> Page 161</td></tr> <tr> <td>M4X10</td><td colspan="6">Screw for driving block 10 x 8</td><td 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surface	-	38	400 22 740	22	400	433	48	95	50	Flat contact surface	-	38	DRIVING10X8	Driving block 10 x 8						> Page 161			M4X10	Screw for driving block 10 x 8						> Page 160			M10X35	Screw M10X35						> Page 161			4XGEO-AUF	Threaded bores for adapter						> Page 164			200 27 740	27	200	233	62	78	50	Flat contact surface	-	38	250 27 740	27	250	283	62	82	50	Flat contact surface	-	38	300 27 740	27	300	333	62	86	50	Flat contact surface	-	38	350 27 740	27	350	383	62	90	50	Flat contact surface	-	38	400 27 740	27	400	433	62	95	50	Flat contact surface	-	38	DRIVING12X12/2	Driving block 12 x 12						> Page 161			M5X16	Screw for driving block 12 x 12						> Page 160			M12X35	Screw M12X35						> Page 161			4XGEO-AUF	Threaded bores for adapter						> Page 164			150 32 740	32	150	183	85	98	50	Flat contact surface	-	38	200 32 740	32	200	233	85	98	50	Flat contact surface	-	38	250 32 740	32	250	283	90	105	50	Flat contact surface	-	38	300 32 740	32	300	333	90	110	50	Flat contact surface	-	38	350 32 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The accessories shown here must be used for all sizes!	Accessories	Z 00038	Retaining bolt flat contact surface						> Page 163																																																																																																																																																																																																																																																																						
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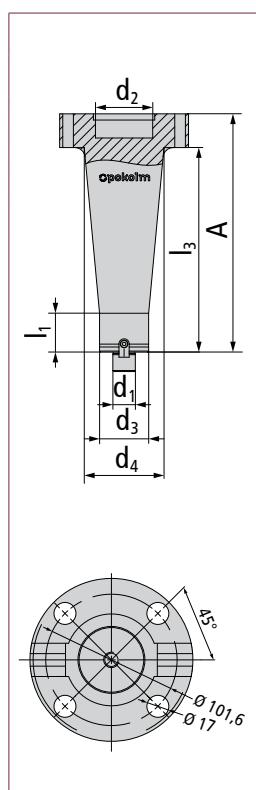
*Dimension minus screw head height

Characteristics:

DIN
1830

DIN
2079


for shell-type milling cutters	Order no.	d_1	l_3	A	d_3	d_4	d_2	DIN / shape	l_2	l_1
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Bore diam. 40 mm	100 40 740	40	100	133	100	124	50	Flat contact surface	–	38
	150 40 740	40	150	183	100	124	50	Flat contact surface	–	38
	200 40 740	40	200	233	100	124	50	Flat contact surface	–	38
Accesso- ries	DRIVING16X16 Driving block 16 x 16 > Page 161									
	M6X16 Screw for driving block 16 x 16 > Page 160									
	M20X30 Screw M20X30 > Page 161									

The accessories shown here must be used for all sizes!	Accesso- ries	Z 00038	Retaining bolt flat contact surface	> Page 159
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Note: To use the Pokolm shell-type adapter, the base arbors must be fitted with 4 threaded bores! This must be included in the order, and is implemented by additionally ordering the bores under the item number: 4XGEO-AUF

<2/2

 Adapters, extensions,
collars, drill chucks

Hollow shank taper HSK

Steep taper SK / BT

Flat contact surface

Accessories

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Spindle systems / shrink technology

Assembly instructions

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SK 50 / HSK 100

Centering arbor | adapter (HSK 100 for flat contact surfaces)



Characteristics:



DIN
2080

ISO
7388-1

G 16
8.000

Centering arbor adapter	Order no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	DIN / shape	l ₂	l ₁
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	SK 50	50 742	50	—	—	—	—	50	DIN 2080	—
	Accessories	Z 00038	Retaining bolt flat contact surface					> Page 163		
	SK 50	50 743	50	—	—	—	—	50	ISO 7388-1	—
	Accessories	KBSK50-69872A	retention knob with through-hole					> Page 162		
		KBSK50-69872B	retention knob without through-hole					> Page 162		
		Z 00038	Retaining bolt flat contact surface					> Page 163		

Scope of delivery includes retaining bolt Z 00038

	HSK 100 Form A	40 740 A100	50	14.5	43.5	126	126	100	Form A	—
	Accessories	DRIVING25X26	Driving block 25 x 26					> Page 161		
		M16X60	Screw for MK reduction sleeve					> Page 160		
		GWST-M6X10-914	Setscrew					> Page 160		
		M12X35	Screw M12X35					> Page 161		
		KMR-100A	Coolant supply tube for HSK tooling					> Page 162		
		WRENCHHSK100	Wrench for coolant tubes					> Page 162		



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PRODUCT VARIETY IN THE HIGHEST QUALITY

Accessories



At a glance

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Other screws and washers	Setscrew 160
Spacer	Cutter retaining bolts 161 for arbors with tangs 161
Wrench	Collet chuck wrench 161 Wrench for MK reduction sleeve 161 Wrench for drill chuck 161
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Threaded sleeves	Threaded sleeves 163
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Retaining bolt	Retaining bolt flat contact surface 163
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Sure to fit: high-quality original accessories.

If you choose high-quality milling tools from Pokolm, stay on the safe side and set high standards when choosing accessories.

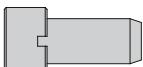
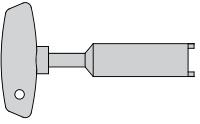
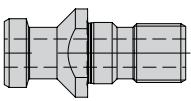
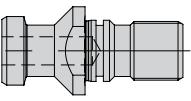
Pokolm uses high-quality screws, screwdrivers, and accessories from leading manufacturers, optimally tailored to the performance capabilities of our products.

Pokolm original accessories

Accessories	Order no.	Designation	Dimensions			
Cheese-head screws with hexagon socket for driving blocks						
	M12X25	Screw for driving block 12 x 25	M 12	L 25	DIN 912	–
	M6X16	Screw for driving block 16 x 16	M 6	L 16	DIN 912	–
	M5X12	Screw for driving block 12 x 8	M 5	L 12	DIN 912	–
	M4X10	Screw for driving block 10 x 8	M 4	L 10	DIN 912	–
	M3X10	Screw for driving block 8 x 8	M 3	L 10	DIN 912	–
	M5X16	Screw for driving block 12 x 12 and 14 x 14	M 5	L 16	DIN 912	–
Cheese-head screws with hexagon socket MK reduction sleeve						
	M10X40	Screw for MK reduction sleeve	M 10	L 40	DIN 912	–
	M10X45 IC	Screw for 100 MK2 AL A63 for 100 MK2 AL A63 with IC	M 10	L 45	–	with IC
	M10X90	Screw for MK reduction sleeve	M 10	L 90	DIN 912	–
	M12X40	Screw for MK reduction sleeve	M 12	L 40	DIN 912	–
	M12X50 IC	Screw for 120 MK3 AL A63	M 12	L 50	–	with IC
	M12X90	Screw for MK reduction sleeve	M 12	L 90	DIN 912	–
	M12X135	Screw for MK reduction sleeve	M 12	L 135	DIN 912	–
	M12X185	Screw for MK reduction sleeve	M 12	L 185	DIN 912	–
	M16X50	Screw for MK reduction sleeve	M 16	L 50	DIN 912	–
	M16X50 IC	Screw for MK reduction sleeve	M 16	L 50	DIN 912	with IC
	M16X60	Screw for MK reduction sleeve	M 16	L 60	DIN 912	–
	M20X50	Screw for MK reduction sleeve	M 20	L 50	DIN 912	–
Cheese-head screws with hexagon socket for shell-type and threaded adapters						
	M6X25	Cheese-head screw	M 6	L 25	DIN 912	12.9
	M6X55	Cheese-head screw	M 6	L 55	DIN 912	12.9
	M8X25	Cheese-head screw	M 8	L 25	DIN 912	12.9
	M8X55	Cheese-head screw	M 8	L 55	DIN 912	12.9
other screws and washers setscrew						
	M10X10	Straining screw	M 10	L 10	DIN 914	–
	M12X10	Straining screw	M 12	L 10	DIN 914	–
	M14X12	Straining screw	M 14	L 12	DIN 914	–
	M10X9 SR1 W	Straining screw	M 10	L 9	DIN 1835-2	–
	M12X10 SR1 W	Straining screw	M 12	L 10	DIN 1835-2	–
	M14X11 SR1 W	Straining screw	M 14	L 11	DIN 1835-2	–
	M16X10 SR1 W	Straining screw	M 16	L 10	DIN 1835-2	–
	GWST-M5X8-914	Setscrew	M 5	L 8	hexa. size 2.5	DIN 914
	GWST-M6X10-914	Setscrew	M 6	L 10	hexa. size 2.5	DIN 914
	Z 00104	Setscrew	M 5	L 7	hexa. size 2.5	hexa. size 2.5

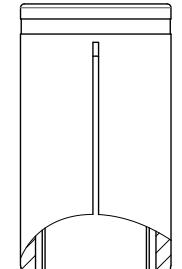
Accessories	Order no.	Designation	Dimensions			
Other screws and washers cutter retaining bolts						
	M3X10	Screw for driving block 8 x 8	M 3	L 10	DIN 912	–
	M8X30	Screw	M 8	L 30	DIN 912	10.9
	M10X35	Screw	M 10	L 35	DIN 912	10.9
	M12X35	Screw	M 12	L 35	DIN 912	10.9
	M16X26	Screw	M 16	L 26	DIN 6367	–
	M20X30	Screw	M 20	L 30	DIN 6367	–
Spacer						
	Z 00142	Spacer for arbors with tangs	Diam. 16	S = 1.5	Diam. 5	–
Wrench collet chuck wrench						
	16 501	Collet chuck wrench for ER 16 tightning nut	M 19x1	–	–	–
	20 501	Collet chuck wrench for ER 20 tightning nut	M 24x1	–	–	–
Wrench Wrench for MK reduction sleeve						
	1003	Wrench for MK reduction sleeve	MK 2	MK 3	–	–
	1004	Wrench for MK reduction sleeve	MK 4	–	–	–
	1005	Wrench for MK reduction sleeve	MK 5	–	–	–
Wrench Wrench for drill chuck						
	HEXA 4T	HEXA 4T	SW4	–	–	–
	NBUS 6T	HEXA 6T	SW6	–	–	–
Tightning nuts						
	ER16 001	Tightning nut ER 16	M 19 x 1	–	–	–
	ER20 001	Tightning nut	M 24 x 1	–	–	–
Driving blocks						
	NUTEN8X8	Driving block 8 x 8	B 8	H 8	L 12	–
	NUTEN10X8	Driving block 10 x 8	B 10	H 8	L 18	–
	NUTEN12X8	Driving block 12 x 8	B 12	H 8	L 20	–
	NUTEN12X12/2	Driving block 12 x 12	B 12	H 12	L 20	–
	NUTEN14X14	Driving block 14 x 14	B 14	H 14	L 24	–
	NUTEN16X16	Driving block 16 x 16	B 16	H 16	L 24	–
	NUTEN25X26	Driving block 25 x 26	B 25	H 25	L 26	–

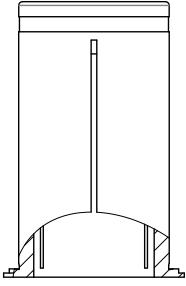
Pokolm original accessories

Accessories	Order no.	Designation	Dimensions			
HSK accessories coolant supply tubes						
	KMR-25	Coolant supply tube for HSK tooling	for HSK 25	Form A+ E	-	-
	KMR-32	Coolant supply tube for HSK tooling	for HSK 32	Form A+ E	-	-
	KMR-40A	Coolant supply tube for HSK tooling	for HSK 40	Form A+ E	-	-
	KMR-50A	Coolant supply tube for HSK tooling	for HSK 50	Form A+ E	-	-
	KMR-63A	Coolant supply tube for HSK tooling	for HSK 63	Form A+ E	-	-
	KMR-100A	Coolant supply tube for HSK tooling	for HSK 100	Form A	-	-
HSK accessories Wrench for coolant supply tubes						
	WRENCHHSK25	Wrench for coolant tubes	HSK 25	-	-	-
	WRENCHHSK32	Wrench for coolant tubes	HSK 32	-	-	-
	WRENCHHSK40	Wrench for coolant tubes	HSK 40	-	-	-
	WRENCHHSK50	Wrench for coolant tubes	HSK 50	-	-	-
	WRENCHHSK63	Wrench for coolant tubes	HSK 60	-	-	-
	WRENCHHSK100	Wrench for coolant tubes	HSK 100	-	-	-
Retention knobs without seal ring groove						
	KBSK30-69872A	Retention knob with through-hole	SK 30	DIN 69872 A	without seal ring groove	-
	KBSK40-69872A	Retention knob with through-hole	SK 40	DIN 69872 A	without seal ring groove	-
	KBSK50-69872A	Retention knob with through-hole	SK 50	DIN 69872 A	without seal ring groove	-
Retention knobs with seal ring groove						
	KBSK30-69872B	Retention knob without through-hole	SK 30	DIN 69872 A	with seal ring groove	-
	KBSK40-69872B	Retention knob without through-hole	SK 40	DIN 69872 A	with seal ring groove	-
	KBSK50-69872B	Retention knob without through-hole	SK 50	DIN 69872 A	with seal ring groove	-
CoolCap®						
	CoolCap® for water/emulsion					
	SR1 S04 SW15	CoolCap® screw-on cap diam. 4 for water cooling	-	-		
	SR1 S06 SW17	CoolCap® screw-on cap diam. 6 for water cooling	-	-		
	SR1 S08 SW21	CoolCap® screw-on cap diam. 8 for water cooling	-	-		
	SR1 S10 SW22	CoolCap® screw-on cap diam. 10 for water cooling	-	-		
	SR1 S12 SW27	CoolCap® screw-on cap diam. 12 for water cooling	-	-		
	SR1 S16 SW32	CoolCap® screw-on cap diam. 16 for water cooling	-	-		
	SR1 S20 SW36		-	-		

Accessories	Order no.	Designation	Dimensions		
CoolCap®					
	SR1 A04 SW17	CoolCap® screw-on cap diam. 4 for air cooling and MMS	–	–	–
	SR1 A06 SW17	CoolCap® screw-on cap diam. 6 for air cooling and MMS	–	–	–
	SR1 A08 SW21	CoolCap® screw-on cap diam. 8 for air cooling and MMS	–	–	–
	SR1 A10 SW22	CoolCap® screw-on cap diam. 10 for air cooling and MMS	–	–	–
	SR1 A12 SW27	CoolCap® screw-on cap diam. 12 for air cooling and MMS	–	–	–
	SR1 A16 SW32	CoolCap® screw-on cap diam. 16 for air cooling and MMS	–	–	–
	SR1 A20 SW36	CoolCap® screw-on cap diam. 20 for air cooling and MMS	–	–	–
CoolCap® CoolCap® application tool					
	SR1 ZSW 002	CoolCap®-application tool SR1 universal wrench	–	–	–
CoolCap® CoolCap® torque wrench					
	DMS 3/8 8-60 NM	Torque wrench 3/8"	for SR1 ZSW 002	–	–
Threaded bushes					
	ZGHM2414	Threaded bush, right-hand thread	M 24	–	–
	ZGHM2414L	Threaded bush, left-hand thread	M 24	–	–
	ZGHM3316L	Threaded bush, left-hand thread	M 33	–	–
Drill chuck accessories gaskets					
	BF08DS04	Gasket 0804	–	–	–
	BF08DS08	Gasket 0808	–	–	–
	BF13DS06	Gasket 1306	–	–	–
	BF13DS13	Gasket 1313	–	–	–
	BF16DS06	Gasket 1606	–	–	–
	BF16DS16	Gasket 0804	–	–	–
Drill chuck accessories wrench					
	BF08MW	Wrench 08	–	–	–
	BF13MW	Wrench 13/16	–	–	–
Retaining bolt flat contact surface					
	Z 00038	Retaining bolt flat contact surface	M12	–	–

Pokolm original accessories

Accessories	Order no.	Designation	Dimensions
Threaded bores			
	4XGEB0-AUF	Threaded bores for adapter	–
PHK reductions			
	PHK20 6	Reduction to 6 mm diam. (not coolant-tight)	–
	PHK20 8	Reduction to 8 mm diam. (not coolant-tight)	–
	PHK20 10	Reduction to 10 mm diam. (not coolant-tight)	–
	PHK20 12	Reduction to 12 mm diam. (not coolant-tight)	–
	PHK20 14	Reduction to 14 mm diam. (not coolant-tight)	–
	PHK20 16	Reduction to 16 mm diam. (not coolant-tight)	–
	PHK20 3 IC	Reduction to 3 mm diam. (not coolant-tight)	–
	PHK20 4 IC	Reduction to 4 mm diam. (not coolant-tight)	–
	PHK20 5 IC	Reduction to 5 mm diam. (not coolant-tight)	–
	PHK20 6 IC	Reduction to 6 mm diam. (not coolant-tight)	–
	PHK20 8 IC	Reduction to 8 mm diam. (not coolant-tight)	–
	PHK20 10 IC	Reduction to 10 mm diam. (not coolant-tight)	–
	PHK20 12 IC	Reduction to 12 mm diam. (not coolant-tight)	–
	PHK20 14 IC	Reduction to 14 mm diam. (not coolant-tight)	–
	PHK20 16 IC	Reduction to 16 mm diam. (not coolant-tight)	–

Accessories	Order no.	Designation	Dimensions
PHK reductions			
	PHK32 6	Reduction to 6 mm diam. (not coolant-tight)	–
	PHK32 8	Reduction to 8 mm diam. (not coolant-tight)	–
	PHK32 10	Reduction to 10 mm diam. (not coolant-tight)	–
	PHK32 12	Reduction to 12 mm diam. (not coolant-tight)	–
	PHK32 14	Reduction to 14 mm diam. (not coolant-tight)	–
	PHK32 16	Reduction to 16 mm diam. (not coolant-tight)	–
	PHK32 18	Reduction to 18 mm diam. (not coolant-tight)	–
	PHK32 20	Reduction to 20 mm diam. (not coolant-tight)	–
	PHK32 25	Reduction to 25 mm diam. (not coolant-tight)	–
	PHK32 3 IC	Reduction to 3 mm diam. (not coolant-tight)	–
	PHK32 4 IC	Reduction to 4 mm diam. (not coolant-tight)	–
	PHK32 5 IC	Reduction to 5 mm diam. (not coolant-tight)	–
	PHK32 6 IC	Reduction to 6 mm diam. (not coolant-tight)	–
	PHK32 8 IC	Reduction to 8 mm diam. (not coolant-tight)	–
	PHK3210 IC	Reduction 10 mm diam. (not coolant-tight)	–
	PHK32 12 IC	Reduction 12 mm diam. (not coolant-tight)	–
	PHK32 14 IC	Reduction 14 mm diam. (not coolant-tight)	–
	PHK32 16 IC	Reduction 16 mm diam. (not coolant-tight)	–
	PHK32 18 IC	Reduction 18 mm diam. (not coolant-tight)	–
	PHK32 20 IC	Reduction 20 mm diam. (not coolant-tight)	–
PHK32 25 IC	Reduction 25 mm diam. (not coolant-tight)	–	

PRODUCT VARIETY WITH THE HIGHEST PRECISION



Order / request forms



Order / request form

Custom design milling arbors

Please copy first, then fill out!

Inquiry no. / order no.: _____ Date: _____

Company: _____

Address: _____

Department: _____ Administrator: _____

Telephone: _____ Fax: _____ E-mail: _____

Arbor for threaded shank end mills

<input type="checkbox"/>	Desired delivery date	<input type="checkbox"/>	Bracket	Surface treatment	<input type="checkbox"/>	Nickel	<input type="checkbox"/>	Burnished
<input type="checkbox"/>				SK	<input type="checkbox"/>	(Size)	<input type="checkbox"/>	(DIN)
<input type="checkbox"/>	d_4	d_3	d_1	HSK	<input type="checkbox"/>	(Size)	<input type="checkbox"/>	(Form)
<input type="checkbox"/>	HRC			Coolant feed	<input type="checkbox"/>	Central bore		
<input type="checkbox"/>	Piece	l_1	r	Made of material	<input type="checkbox"/>	Through the arbor collar		
<input type="checkbox"/>	Required balancing grade	l_3						

Note: Please fill out $d_3 = d_4$ for cylindrical design. 4 calendar weeks shorter delivery time for burnished surface.

Back office: _____ Sales representative: _____

Order / request form

Custom design milling arbors

Please copy first, then fill out!

Inquiry no. / order no.: _____ Date: _____

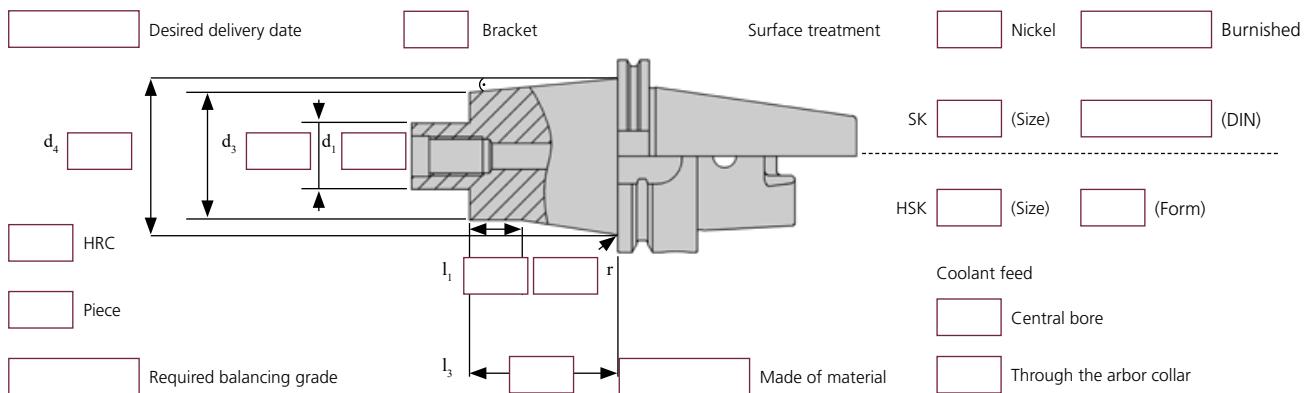
Company: _____

Address: _____

Department: _____ Administrator: _____

Telephone: _____ Fax: _____ E-mail: _____

Arbor for shell-type milling cutters



Note: Please fill out $d_3 = d_4$ for cylindrical design. 4 calendar weeks shorter delivery time for burnished surface.

Back office: _____ Sales representative: _____

Order / request form

Custom design milling arbors

Please copy first, then fill out!

Inquiry no. / order no.: _____ Date: _____

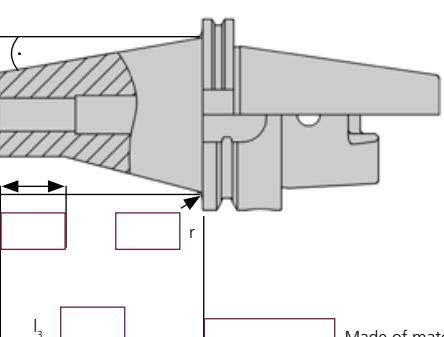
Company: _____

Address: _____

Department: _____ Administrator: _____

Telephone: _____ Fax: _____ E-mail: _____

Shrink fit arbor

<input type="checkbox"/>	Desired delivery date	<input type="checkbox"/>	Bracket	Surface treatment	<input type="checkbox"/>	Nickel	<input type="checkbox"/>	Burnished	
<input type="checkbox"/>	d_4	d_3	d_1	SK	<input type="checkbox"/>	(Size)	<input type="checkbox"/>	(DIN)	
<input type="checkbox"/>	HRC				HSK	<input type="checkbox"/>	(Size)	<input type="checkbox"/>	(Form)
<input type="checkbox"/>	Piece				Coolant feed	<input type="checkbox"/>	Central bore		
<input type="checkbox"/>	Required balancing grade				Made of material	<input type="checkbox"/>	Through the arbor collar		

Note: Please fill out $d_3 = d_4$ for cylindrical design. 4 calendar weeks shorter delivery time for burnished surface.

Back office: _____ Sales representative: _____

Order/request form

Custom design adapters

Please copy first, then fill out!

Inquiry no. / order no.: _____ Date: _____

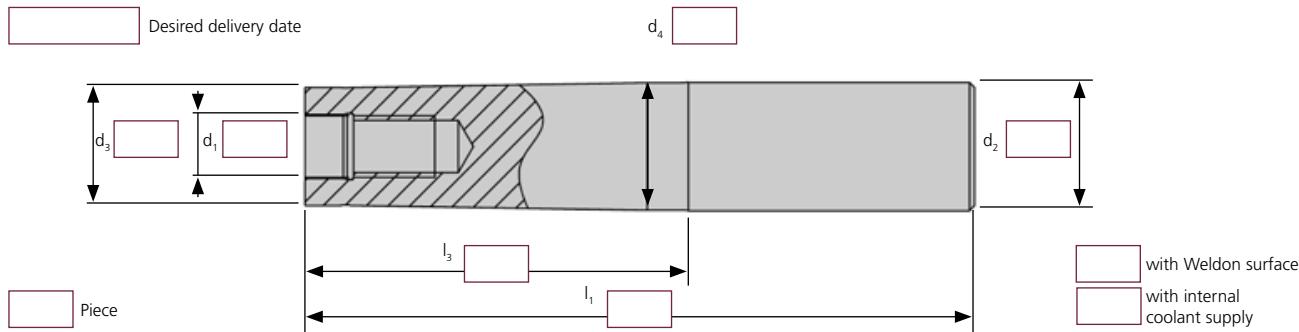
Company: _____

Address: _____

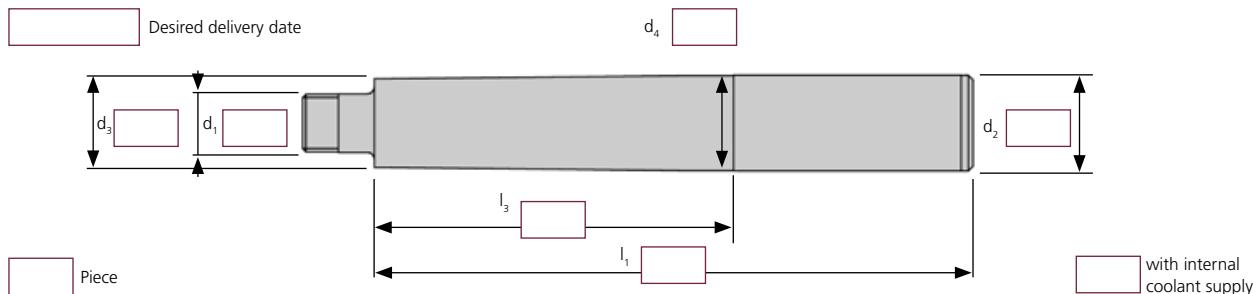
Department: _____ Administrator: _____

Telephone: _____ Fax: _____ E-mail: _____

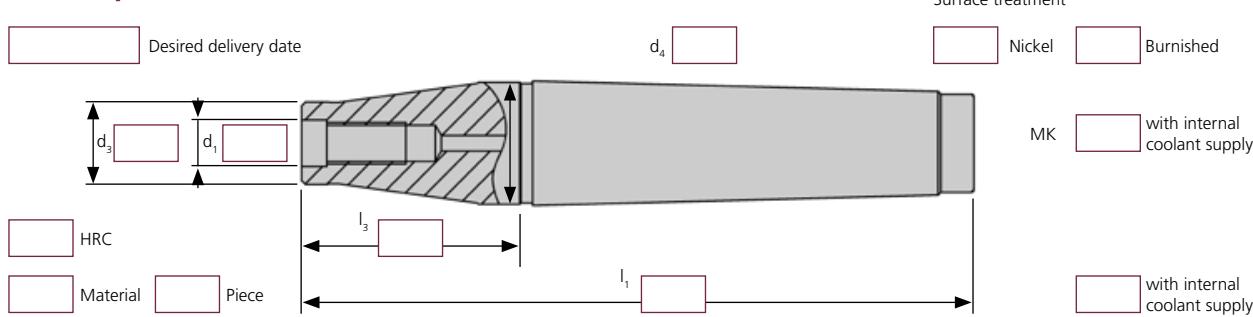
Solid carbide and dense antivibration material extension for threaded shank end mills



Solid carbide adapters for Pokolm DuoPlug®



MK adapters for threaded shank end mills



Note: Please fill out d₃ = d₄ for cylindrical design. 4 calendar weeks shorter delivery time for burnished surface.

Back office: _____ Sales representative: _____



Index

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Adapters, extensions, collets, drill chucks

Tips and practical information

PRODUCT VARIETY WITH THE HIGHEST PRECISION



Spindle systems /
shrink technology

Pokolm high-frequency spindles

Features and advantages

- Spindle powers from 0.8 kW to 13.5 kW
- Speeds from 5,000 1/min to 80,000 1/min
- Interfaces
- Improved surfaces and significant reduction in eroding work.
- Significantly shorter machining times.

Pokolm shrink grip technology

Features and advantages

- Extremely high concentricity
- The highest precision, with significantly longer tool lives
- Shrinking technology creates an optimal frictional connection between the tool and arbor, ensuring high torque transmission.
- The ability to work at maximum speed is the best prerequisite for achieving an ideal surface grade and avoiding expensive ultrafine machining processes.

High-frequency spindles

Modern spindle systems for effective milling performance.

Many milling machines – both newer machines and older models – have a relatively low maximum speed. A low maximum speed, of course, delivers advantages in roughing, but is the biggest brake on achieving effective feed rates. Low speeds likewise greatly restrict the advantages of modern CNC applications. The consequence are significantly longer machining times, and a loss of profitable capacity.

Pokolm offers impressive solutions for just this problem: modern spindle systems for effective milling results.



Better surfaces and significant time savings.

The advantages are impressive: higher cutting speeds and utilizing the maximum feed rate – even for the smallest cutters. For improved surfaces and significant reduction in eroding work. This results in significantly shorter machining times and full utilization of the advantages of CNC.

Get the maximum speed from your machines with Pokolm spindles and save time as a result.

Ask about our spindle service, including:

- Replacement parts
- Maintenance
- Repairs
- Swivel devices
- Inspection
- CNC machine connection

Get in touch with us!

Shrinking technology

First shrink, then mill

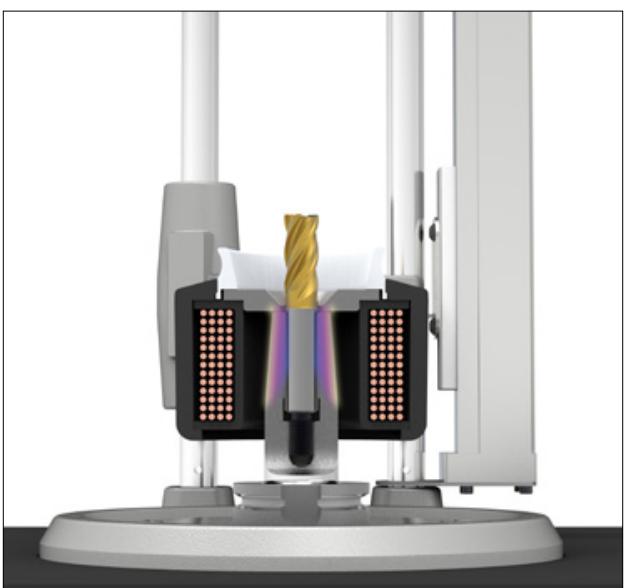
More and more users are switching to shrinking technology, thanks to the advantages it offers over common clamping methods. The biggest of these is extremely good concentricity, which guarantees the highest precision with significantly longer tool lives.

In addition, shrinking technology creates an optimal frictional connection between the tool and arbor, ensuring high torque transmission. And suitability for maximum speed is the best prerequisite for achieving an ideal surface grade thereby avoiding expensive ultrafine machining processes.

In comparison to traditional tool arbors, shrink fit arbors have a slimmer design, making it possible to use even the smallest tools at the greatest depths, something impossible with a collet chuck.

Pokolm offers a comprehensive range of shrinking technology products: a high-quality, well-engineered induction shrinking device, shrink fit arbors for all common machine connections, and the patented Pokolm DuoPlug® connection system.

More information on Pokolm DuoPlug® is available on the relevant catalog pages (see index).



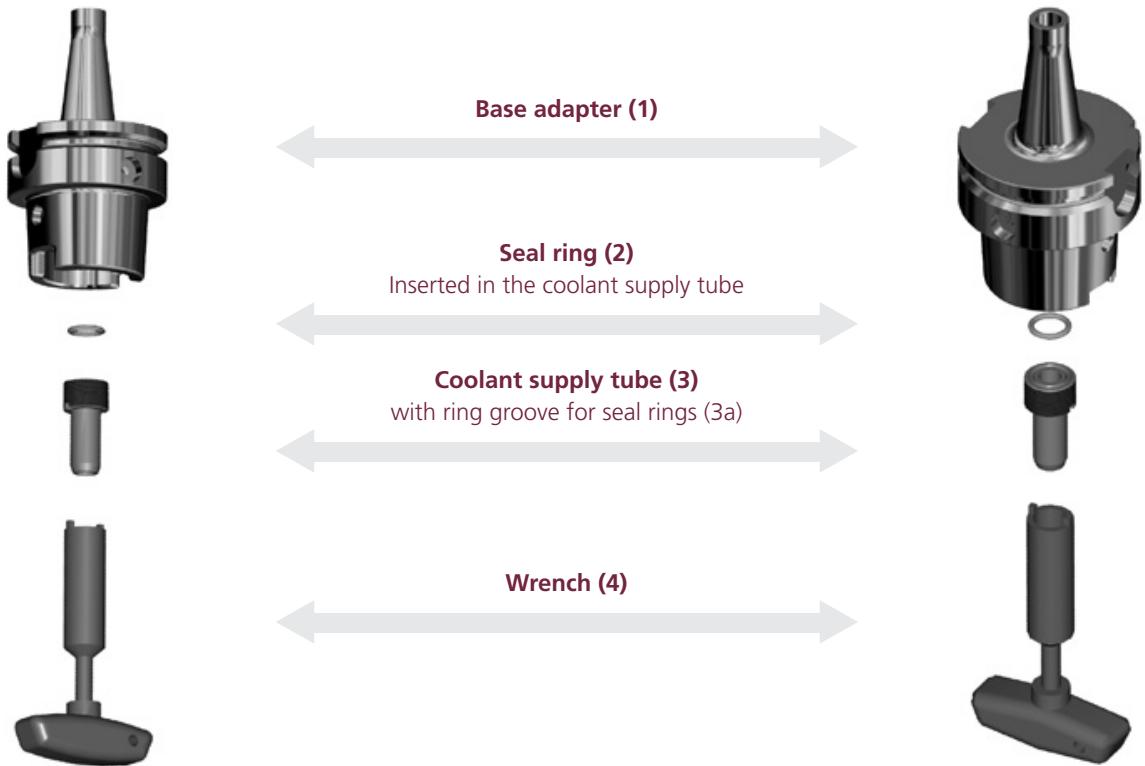
PRODUCT VARIETY WITH THE HIGHEST PRECISION

Assembly instructions

Assembly instructions

Coolant supply tubes for HSK Form A and Form E

To use adapters with interior cooling, they must be fitted with a coolant supply tube. For assembly, please follow the instructions. The required accessories are indicated for each adapter.



Step 1

Normally, the seal ring is already mounted in the supply tube. If it comes loose, please insert the seal ring (2) at the top of the ring groove (3a) of the supply tube (3).

Step 2

Insert the tube (3) with the narrow side in the wrench (4).

Step 3

Now, screw the tube into the adapter from below. Mount the adapter from the bottom to the top, ensuring that the seal ring does not slip or become crushed, in order to maintain its sealing function.

Assembly instructions

Pokolm DuoPlug®

To ensure optimal, secure fit of the DuoPlug® system, please observe the following instructions.

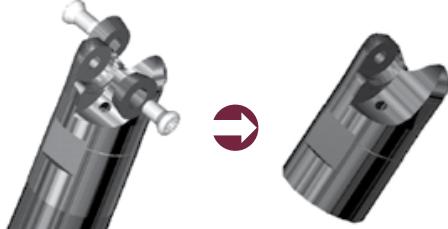
Assembly:

Preparations

Keep accessory tools (wrench, protective glasses, gloves) ready before warming up the work station.

Step 1

Remove the indexable inserts and their fastening screws.



Step 2

Warning! The fit surfaces of the tool and arbor system must be absolutely free from dirt or grease. The DuoPlug® milling body must be screwed into the fit zone manually.

Do not use tools!



Step 3

Inductive heating with Pokolm induction shrinking unit for 6 to 15 seconds depending on the diameter. Then, start immediately with step 4.

Caution! Arbor and tool will be very hot afterwards!

Danger of burning!

Always wear gloves!



Step 4

The fitted bore of the tool will expand when heated. Only then can the tool be tightened to the stop surface of the adapter using an appropriate wrench. It should be possible to complete this step without excess force. If not, heat the DuoPlug®-mill body once again for a few seconds.



Step 5

Ensure that the tool and arbor are flat against one another. There may be no remaining gap.

Only complete these steps with moderate force.



Step 6

The shrink fit tool adapter unit may not be quenched, but should be cooled evenly using the cooling unit on the shrinking unit. Cooling the tool will cause the DuoPlug® milling body to draw back together. A frictional and positive-locking connection will be formed.



Step 7

Now, fit the tool with the desired indexable inserts. After measuring, you can start machining.



Disassembly:

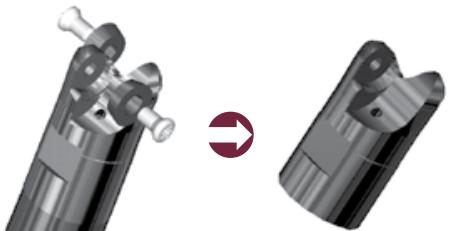
Preparations

Keep accessory tools (wrench, protective glasses, gloves) ready before warming up the work station.

Always wear safety glasses during disassembly, since there is a risk of spray when coolant and lubricant residues are heated up.

Step 1

First, remove the indexable inserts and their fastening screws again.



Step 2

Inductive heating with Pokolm induction shrinking unit for 6 to 15 seconds depending on the diameter.

Caution! Arbor and tool will be very hot afterwards!

Danger of burning!

Always wear gloves!



Of course, we are also happy to assist you with further questions on the DuoPlug® system.

Step 3

Inductive heating will cause the fitted bore of the tool to expand.

Only then can the milling body be unscrewed from the adapter with an appropriate screw. It should be possible to complete this step without excess **force**.

If not, heat the **DuoPlug®-mill** body once again for a few seconds.



Step 4

The unshrunk components may not be quenched. Instead, cool them down slowly using the cooling device on the shrinking unit, or use the storage station.

Caution! Arbor and tool will still be very hot!

Danger of burning!

Always wear gloves!



Recommendation

For shrink gripping, we recommend our convenient TSI11000WK induction shrinking station, with a variety of innovative properties. Optimally designed to work with POKOLM products, the shrinking and liquid-supported cooling process is carried out semi-automatically in one position on the device. The operating concept is very user-friendly.

For further information, please request the brochure from Pokolm shrink grip technology. It is also available in the download area of our website, or simply scan the QR code:



SCAN ME

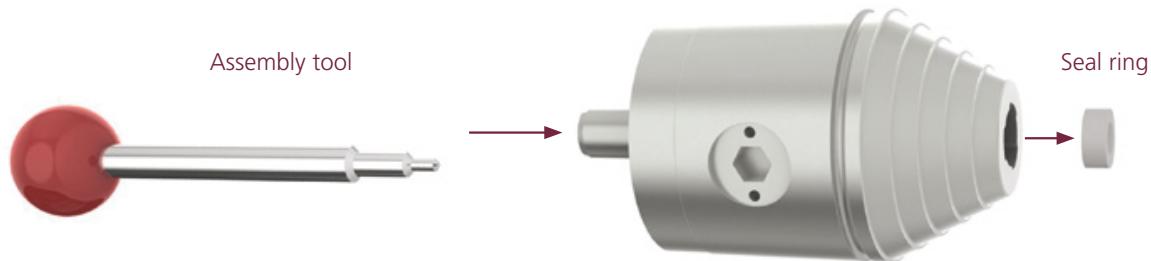


Assembly instructions

Seal ring for CNC precision drill chuck

Two seal rings for different drill diameters are generally included in the scope of delivery of all Pokolm CNC precision drill chucks. Please observe the instructions when exchanging the seal rings or replacing them with a corresponding spare part.

Disassembly:



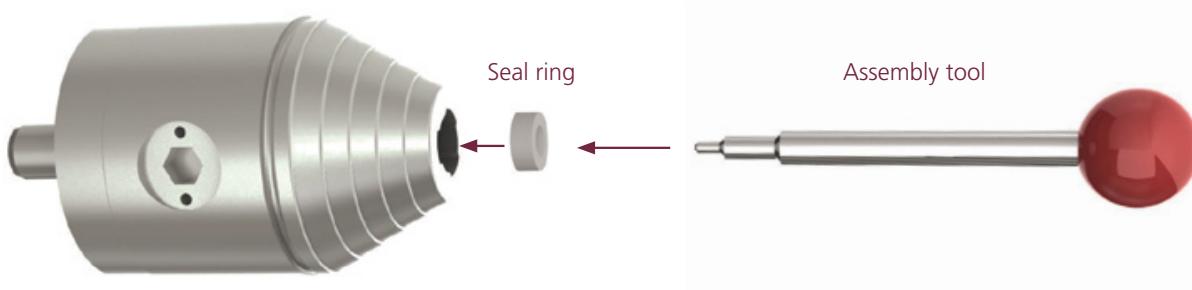
Step 1

Open the clamping jaws of the drill chuck with an Allen key. Dismantle the drill chuck on the machine side until the spindle can be freely accessed.

Step 2

Insert the assembly tool in the middle of the drill chuck on the side of the spindle until it meets resistance from the seal ring. By applying light pressure the seal ring can now be removed by pushing it forward and out through the clamping jaws.

Assembly:



Step 1

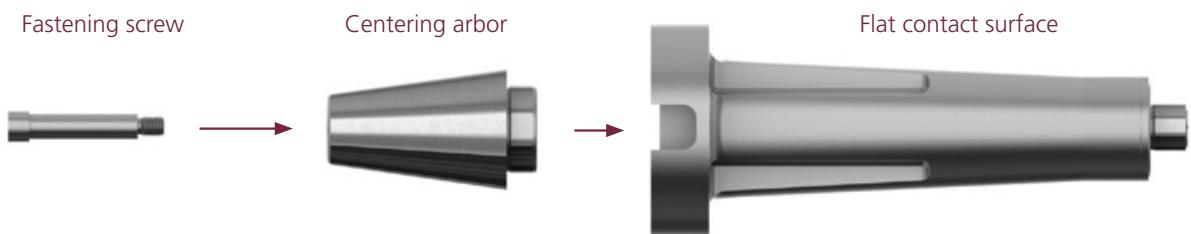
Place the new seal ring with the hollow side facing the tool onto the assembly tool and insert from the front through the clamping jaw up to the seat of the seal ring. The seal ring is held in place with an O-ring.

Assembly instructions

Centering arbor and flat contact surface

In order to ensure a trouble-free insertion into the machine during centering and screwing-on the flat contact surface make sure that the centering arbor and the flat contact surface are not screwed together tightly. The fastening screw that is provided is constructed in such a way that it prevents the centering arbor and the flat contact surface from becoming tightly screwed together. Please observe the following instructions:

Assembly of the centering arbor:



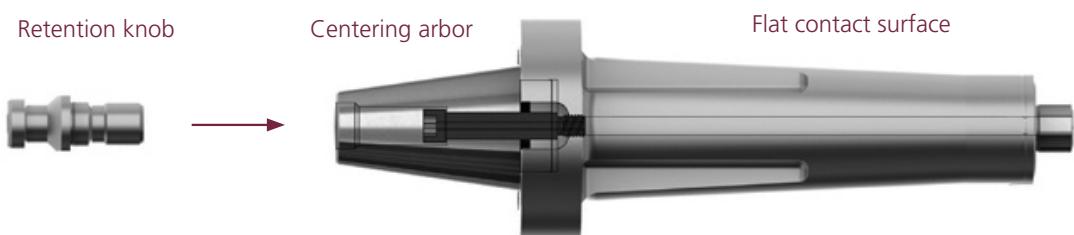
Step 1

Insert the centering arbor into the corresponding fitting of the flat contact surface.

Step 2

Insert the fastening screw that is provided into the centering arbor and screw into the threading of the flat contact surface with an Allen key (10 mm) and then tighten by hand. Now the centering arbor and the flat contact surface are connected to each other.

Assembling the retention knob:



Step 1

Screw the retention knob into the inside thread of the centering arbor and tighten by hand. The flat contact surface can now be inserted and screwed to the machine.

PRODUCT VARIETY WITH THE HIGHEST PRECISION



The Pokolm toolbox
for every case

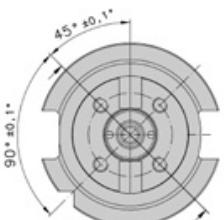
Shell-type extension and threaded shell-type adapter

Need to machine a particularly deep component? The required adapter length is non-standard? Producing a custom adapter is too complex? Short on time?

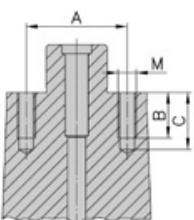
Special machining situations require special solutions.

Shell-type extensions and threaded shell-type adapters make it possible to easily achieve great processing depths, even in non-standard situations. An existing standard adapter is simply fit with the mounting bores indicated in the following diagram and table, then thread on, and you're done! This allows you to achieve extensions between 50 and 100 mm.

Of course, we are also happy to add the bores for you as a service.



Image, top view



Image, side view

Order no.	Type	Pilot diameter	Adapter length	A	B	C	Screws*
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60 22 Mxx 783	Threaded shell-type adapter	Diam. 22	60	Diam. 35	20	25	M 6 x 25
100 22 Mxx 783	Threaded shell-type adapter	Diam. 22	100	Diam. 35	20	25	M 6 x 25

60 27 Mxx 783	Threaded shell-type adapter	Diam. 27	60	Diam. 44.5	20	25	M 8 x 25
100 27 Mxx 783	Threaded shell-type adapter	Diam. 27	100	Diam. 44.5	20	25	M 8 x 25

50 22 782	Shell-type extension	Diam. 22	50	Diam. 35	20	25	M 6 x 55
100 22 782	Shell-type extension	Diam. 22	100	Diam. 35	20	25	M 6 x 55

50 27 782	Shell-type extension	Diam. 27	50	Diam. 44.5	20	25	M 8 x 55
100 27 782	Shell-type extension	Diam. 27	100	Diam. 44.5	20	25	M 8 x 55

*Four screws are required per adapter or extension. The screws are included in the scope of delivery.

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00 20 714 S		145	100 07 603		26	100 10 MK3 S		37
00 20 750 HDF		120	100 08 601		33	100 10 MK3		35
00 20 750 S		112	100 08 606		31	100 12 601		33
00 20 754 HDF		129	100 08 710		131	100 12 603		26
00 20 754 S		125	100 08 714 S		143	100 12 606		32
00 25 710 S		133	100 08 750 S		109	100 12 710 S		131
00 25 714 S		145	100 08 750 SB		111	100 12 710		130
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00 32 710 S		133	100 08 754 S		123	100 12 750 S		110
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Quick finder

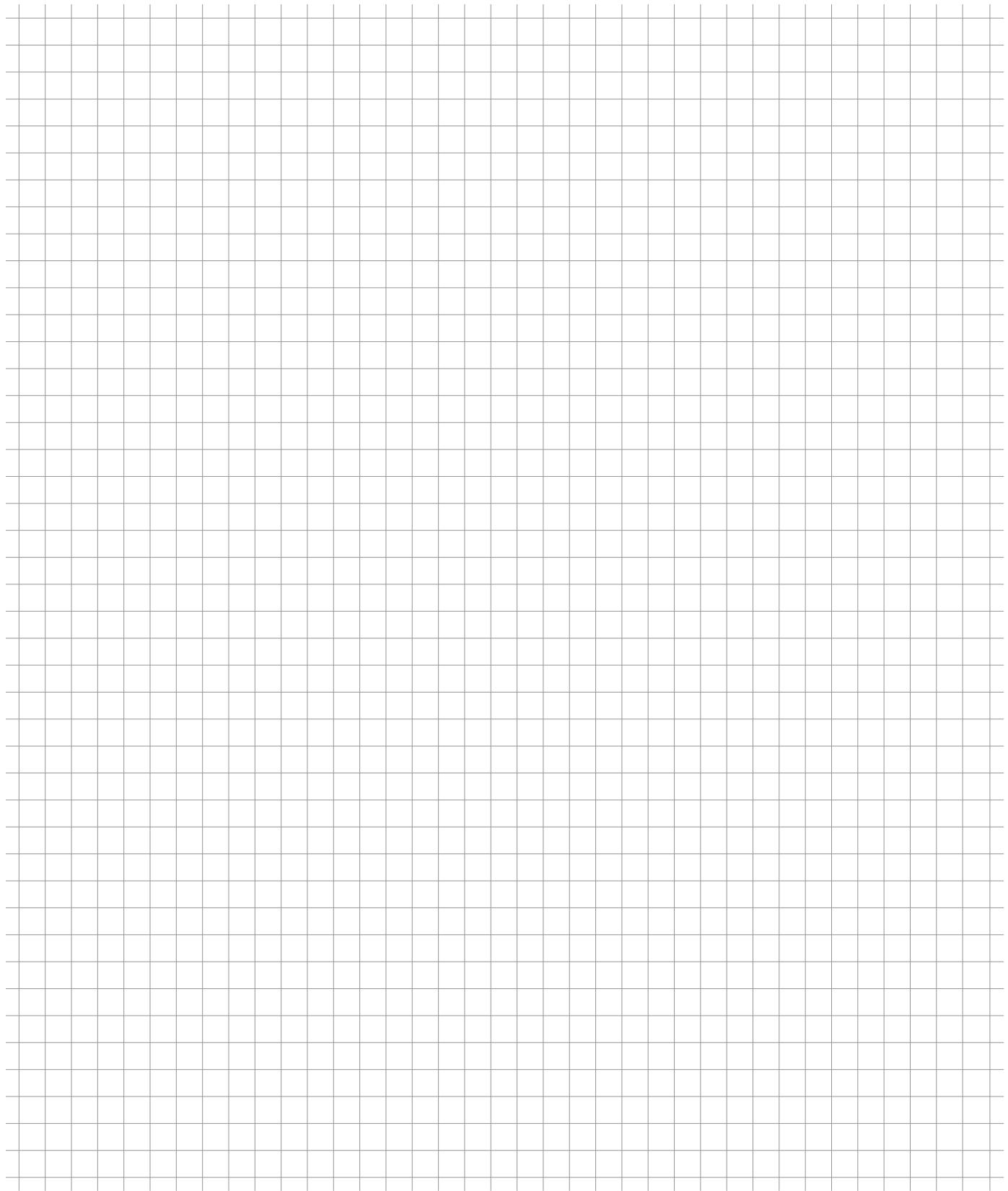
Fit dimensions for threaded shank end mills

Thread	M 5	M 6	M 8	M 10	M 12	M 16
Fit dimension diameter in mm	5.5	6.5	8.5	10.5	12.5	17.0
Tightening torque in Nm	7	10	15	30	50	100

Thread sizes of arbors for shell type milling cutters:

Pilot diameter in mm	16	22	27	32	40
Fastening screw	M 8	M 10	M 12	M 16	M 20

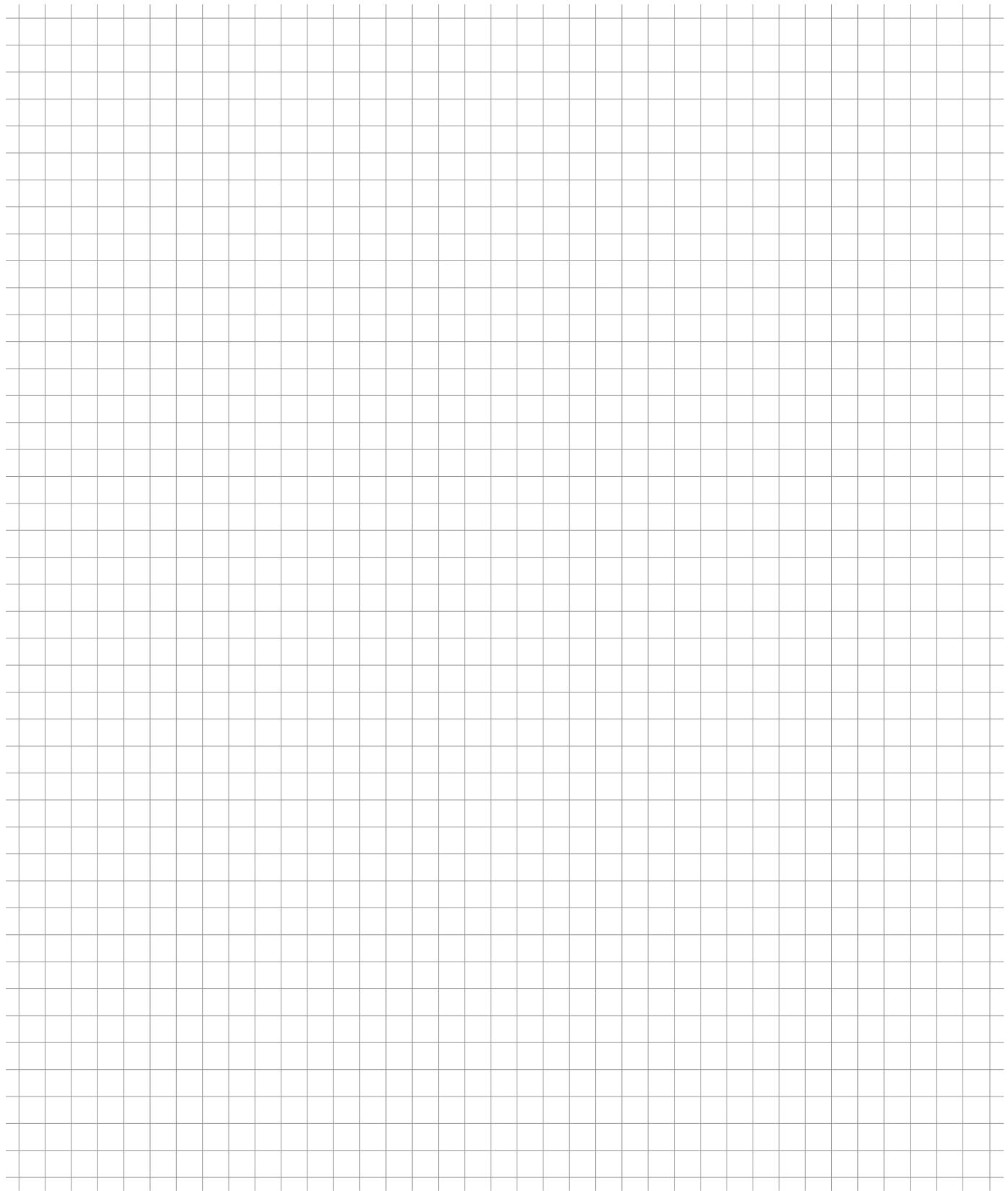
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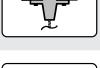
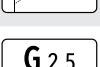
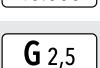
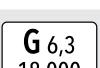
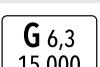
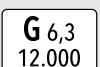
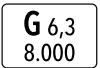
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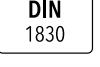
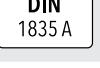
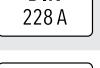
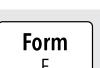
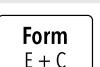
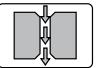
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Notes



At a glance

Product features	
	ISO 7388-1
	JIS B 6339 A
	Max. speed 7000
	Max. speed 6000
	Zero length mount
	Flange contact surface
	Heavy metal
	Solid carbide
	Weldon surface
	Vibration-dampened
	Balance quality G 2.5 40,000
	Balance quality G 2.5 30,000
	Balance quality G 2.5 25,000
	Balance quality G 6.3 18,000
	Balance quality G 6.3 15,000
	Balance quality G 6.3 12,000
	Balance quality G 6.3 8,000

Product features	
	Available from stock
	CoolCap
	DIN 1830
	DIN 1835 A
	DIN 1835 B
	DIN 228 A
	DIN 2079
	DIN 6499-B
	DIN 69871 AD
	DIN 69893
	DuoPlug®
	Form A
	Form BT
	Form E
	Form E+C
	Suitable for HSC processing
	Internal coolant supply

We are here for you!

If you have questions or need individual advice, our technical support team will be happy to assist you.

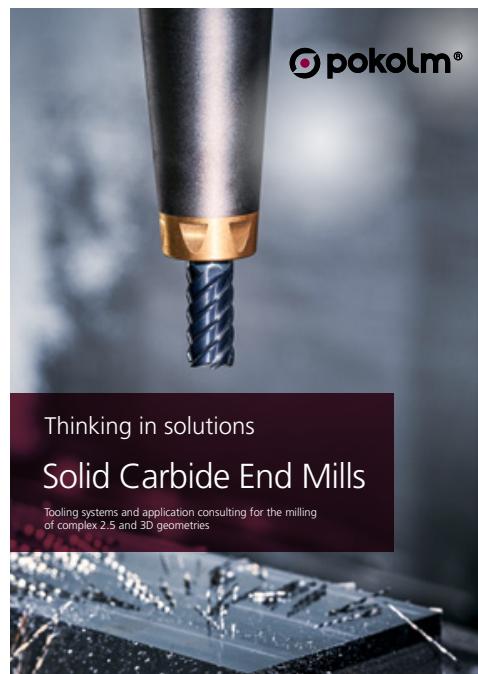


Service Hotline: +49 5247 9361-0

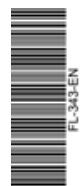
For further information, request our other catalogues:



Milling Cutter Bodies



Solid Carbide End Mills



Pokolm Frästechnik GmbH & Co. KG

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