



ARBOR AND ADAPTER SYSTEMS

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



pokolm

PREMIUMTOOLS. WE KNOW HOW.

CATALOGUE ON ARBOR AND ADAPTER SYSTEMS

The Catalogue on Arbor and Adapter Systems from Pokolm

Dear Customer, In this catalogue you will find up-to-date and detailed documentation about Pokolm arbor and adapter systems.

Extremely customer-friendly: this catalogue is entirely structured around the machine side connection!

Our arbor and adapter system product catalogue has been enhanced in order to meet the current industry requirements and also now includes important and interesting information.

We are sure that you will be able to quickly find our products and the necessary information in the new catalogue structure. If you have any questions, suggestions or particular 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



Imprint

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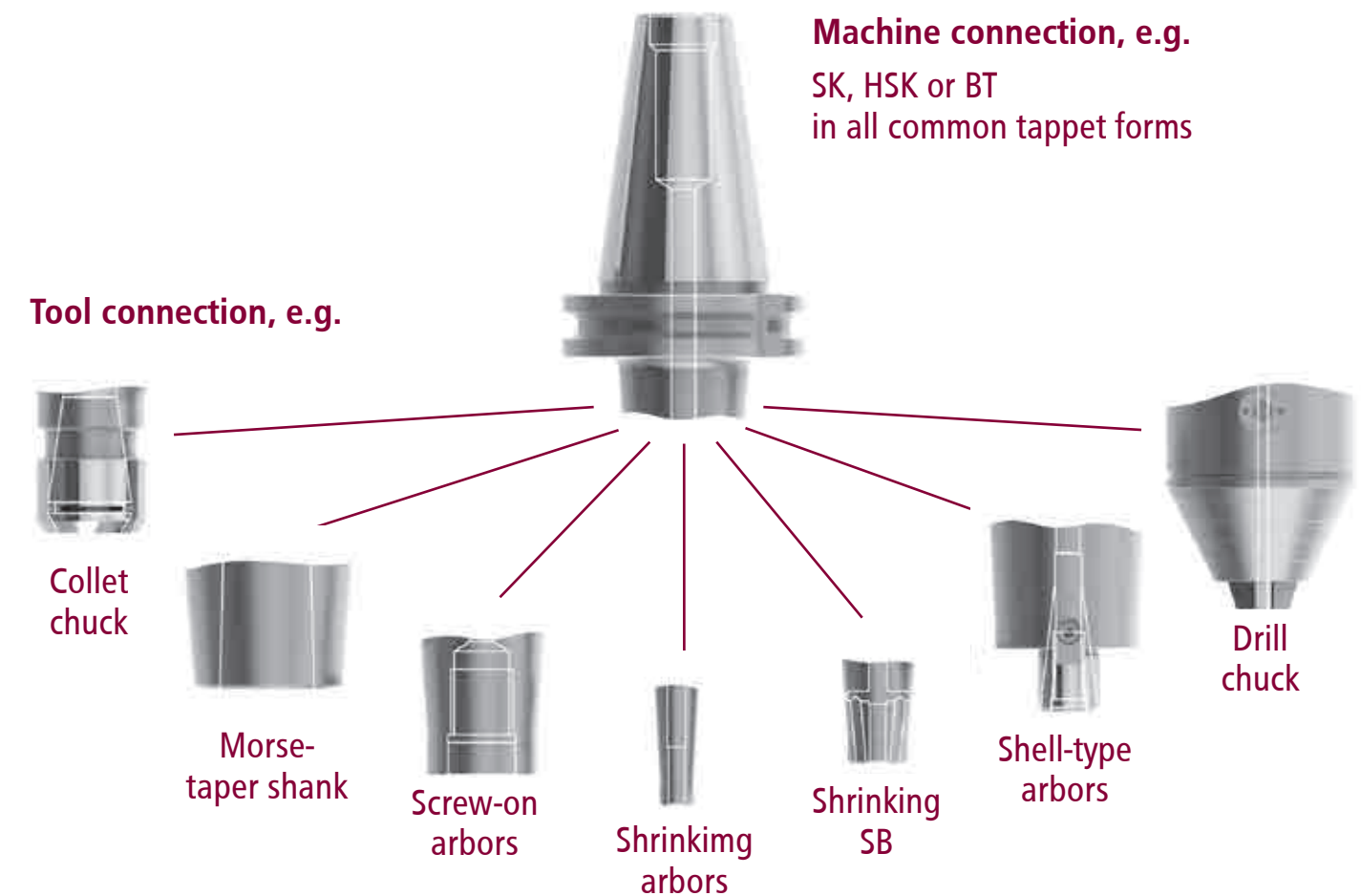
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THE STRUCTURE: 1. MACHINE , 2. TOOL

Being better means not just staying ahead of the competition but also scrutinising ones 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 that gives Pokolm customers a decisive edge over the competition 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.



The structure of the Pokolm arbor and adapter catalogue is customer-oriented. This is because it is structured around a machine-side connection. Simply choose the connection form and connection dimension in the structure for the type of machine in use and all of the corresponding tool connections will be listed thereunder. The arbors within this group are then categorised according to the connection type and size.

PURCHASE- AND INFO-HOTLINE



Pokolm
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☎ +49 5247 9361-0
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🕒 7:30 a.m. - 6:00 p.m. (on working days)

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- ➔ With links to detailed technical information

Individual consulting: QR-Codes are the quickest way to your contact person and the Pokolm website!



Office Sales

National technical field service





International technical field service

Arbor and Adapter Systems

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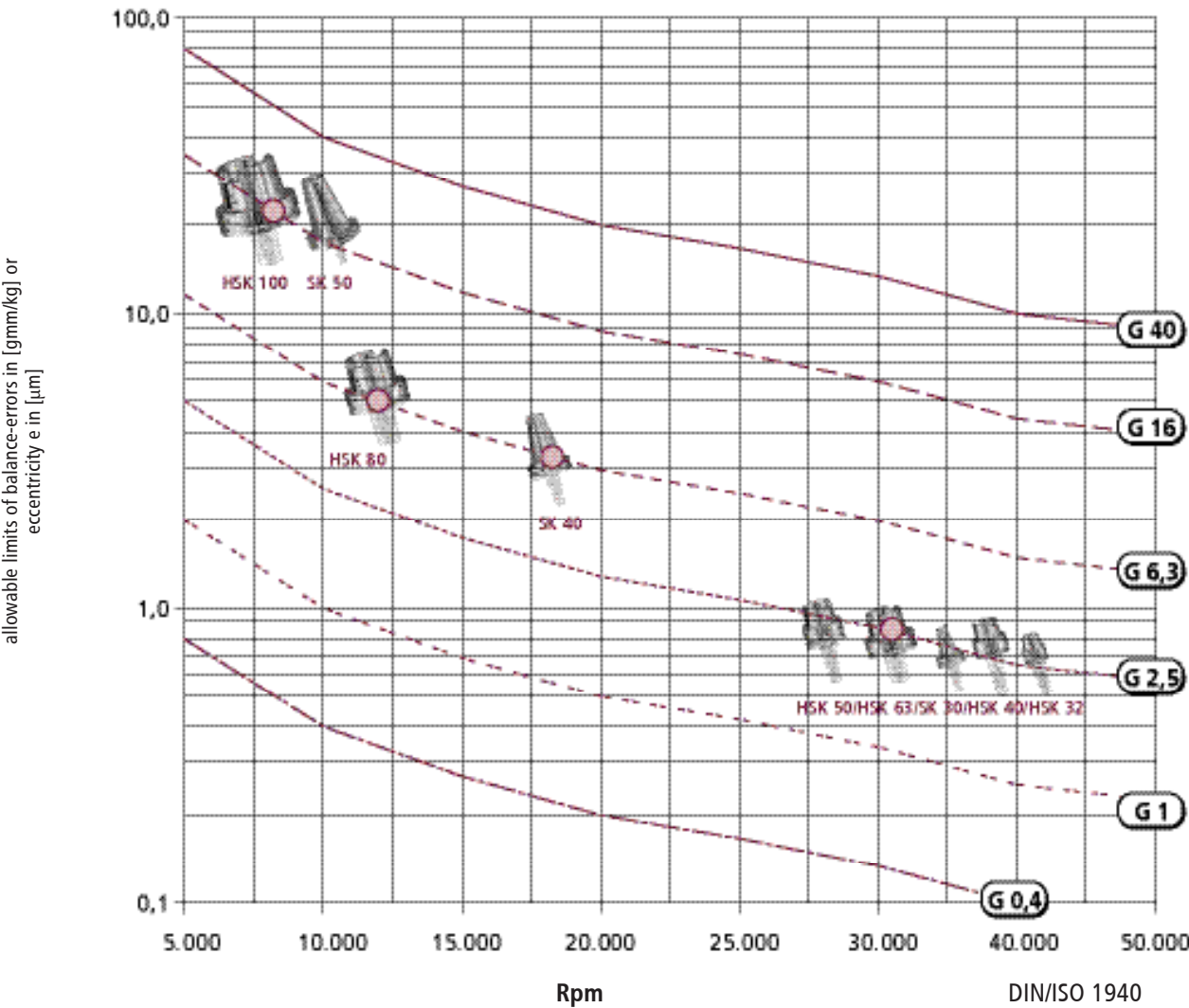
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BALANCING

Balance grades of Pokolm arbors and adapters

Kind of taper	SK/BT			HSK					
view									
size	30	40	50	32	40	50	63	80	100
form			all	all	all	all	all	all	all
grade level	2,5	6,3	16	2,5	2,5	2,5	2,5	6,3	16
rpm	30.000	18.000	8.000	30.000	30.000	30.000	30.000	12.000	8.000

Deviations from this chart are possible – please tell us what your requirements are.



Calculations and definitions

Balancing grade classifications and typical applications:

- G 0,4** e.g. microfinishing machines
- G 1** e.g. low-power motors, driving gears for grinding machines
- G 2,5** e.g. cutting tools, small arbors and adapters, electrical motors, turbines
- G 6,3** e.g. cutting tools, arbors and adapters, machine tool parts
- G 16** e.g. big arbors, cardan shafts, drive shafts
- G 40** e.g. universal shafts, automotive wheels, crank gear drives

Formulas:

Calculation of remaining balance error in [gmm/kg]	Calculation of radian frequency in [1/s]	Calculation of balancing grade levels in [mm/s]	Calculation of compensation mass
$e = \frac{U}{m}$	$\omega = \frac{2 \cdot \pi \cdot n}{60}$	$G = e \cdot \omega = \frac{U \cdot \pi \cdot n}{m \cdot 30}$	$m_r = \frac{e \cdot m}{r}$

Definitions and dimensions:

- G** = balancing grade level in [mm/s]
- e** = remaining balance error in [gmm/kg] or eccentricity of center in [µm]
- ω** = radian frequency (2 • π • f) in [1/s]
- f** = frequency (n/60) in [1/s]
- n** = rpm
- U** = balance error [m • e] in [gmm]
- m** = rotor weight in [g]
- F** = centrifugal force (U • ω) in [N]
- r** = remaining balance error in [mm]
- m_r** = remaining balance error

Balance errors and balancing

Definition of balance error



Rotational axis $\neq$ mass axis

A balance error occurs when the rotational axis of a rotor part does not correspond to its mass axis.

Rotational axis = mass axis

Reasons for Balance Errors:

- ⊕ Indexing seat for tool changer in SK and HSK
- ⊕ Driving slots in SK and BT
- ⊕ Driving slots in HSK- A, C, CE
- ⊕ any kinds of flats on tool shanks
- ⊕ Locking screws for tool shanks with flats
- ⊕ Non-uniform pitch on cutting tools
- ⊕ Collets and tightening nuts
- ⊕ Production tolerances

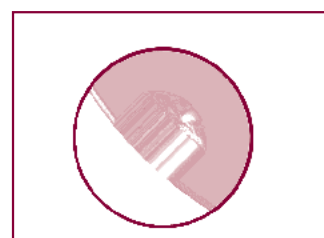
Balance errors can be eliminated either by adding material or by drilling corrective holes to remove material. See illustrations of corrective drill holes below:



Unbalanced arbor



Balanced arbor with corrective drill hole



➔ Balancing by drilling corrective holes. Sample calculations and detailed illustration, see next page.

Example of a calculation:

Shrinking Arbor HSK 63A: 50 08 A63 S

weight: 760 grams

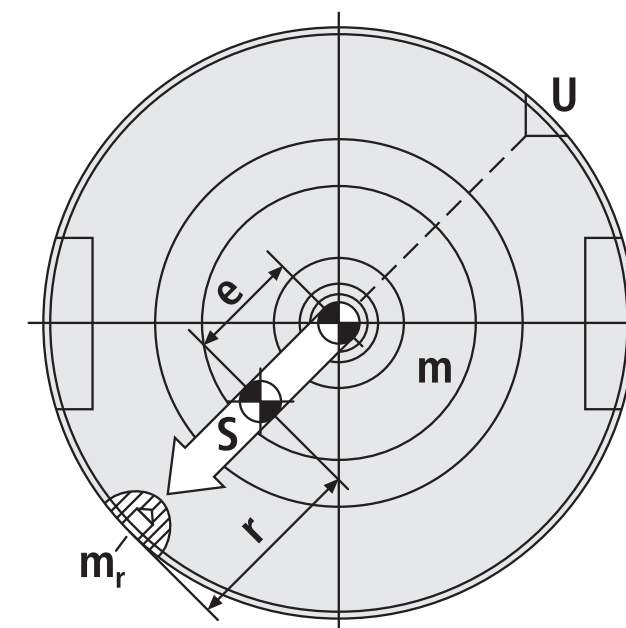
Taper radius: 31,5 mm

Balance grade: G 6.3 at 20,000 rpm

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

$$U = \frac{6,3 \cdot 760 \cdot 60}{2 \cdot \pi \cdot 20.000} \Rightarrow U = 2,286 \text{ gmm}$$

$$e = \frac{2,286}{760} \Rightarrow e = 3 \mu\text{m}$$



Note to illustration: "S" = mass axis

Calculation of remaining balance error in example above:

$$m_r = \frac{m \cdot e}{r} \Rightarrow m_r = \frac{760 \cdot 0,003}{31,5} \Rightarrow m_r = 0,072 \text{ g}$$

By means of precision balancing, the remaining balancing error has been minimized to 0.072 g (in relation to the taper radius of the arbor of 31.5 mm).

Your advantages – why this is such an important subject.



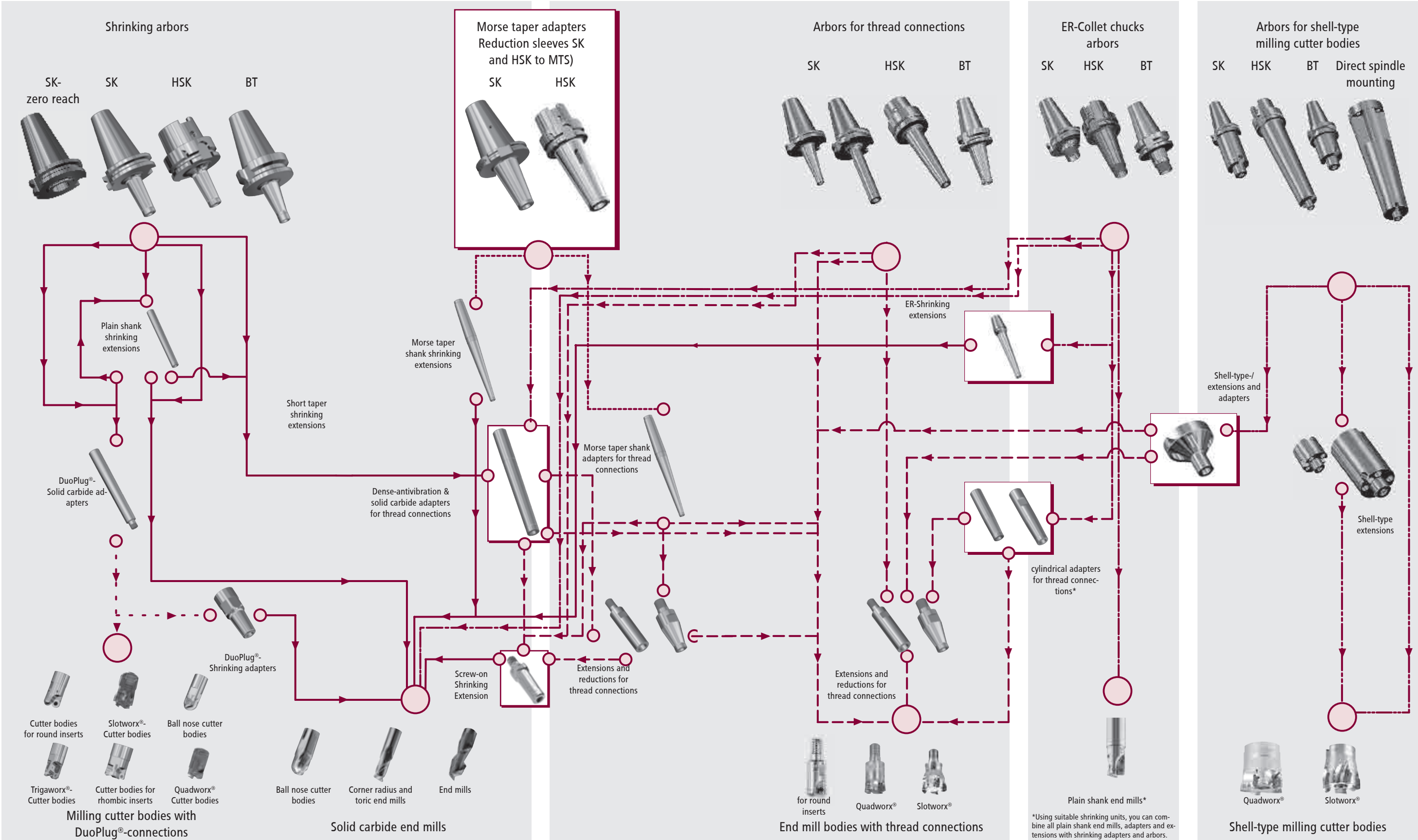
Balancing, particularly in connection with high concentricity, prevents your spindle from damage, because it decreases the centrifugal forces and reduces the formation of vibrations. This results in an extremely smooth operation, which greatly increases machining and component quality. In addition, it allows higher cutting parameters – both in high-speed milling and in conventional milling.

THE POKOLM TOOL SYSTEM

over 500000 combination possibilities

Shrinking combinations	
Morse taper combinations	
Thread connected combinations	
Shell-type combinations	
ER-Collet combinations	
DuoPlug®-combinations	

The listed options are applications examples. Do not hesitate to contact our technical field service for a huge number of further possible combinations.



*Using suitable shrinking units, you can combine all plain shank end mills, adapters and extensions with shrinking adapters and arbors.

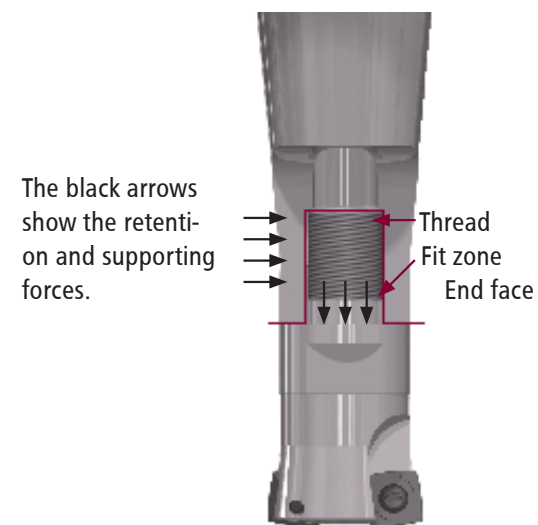
TECHNOLOGICAL COMPARISON

Thread Connection vs. Pokolm DuoPlug® Connection

WHERE THE DIFFERENCE IS:

Pokolm Thread Connection – our high-performance standard

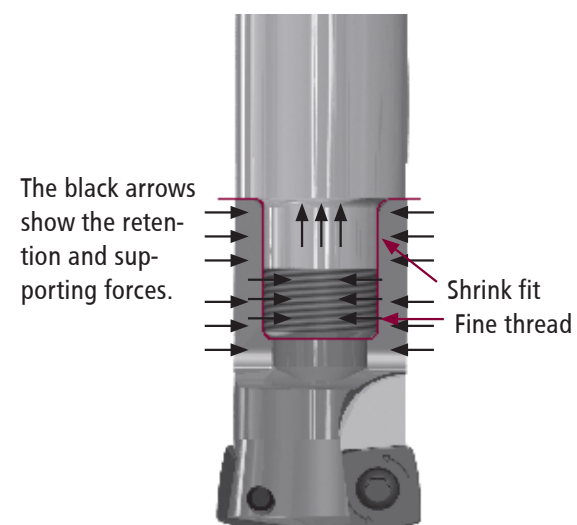
Pokolm Thread Connection



This standard thread connection is produced with the best tolerances possible using the latest technology. We maximize the efficiency of our Pokolm thread connections by optimizing our design of arbors, adapters, and milling cutter bodies.

Our patented protected DuoPlug® System – the perfect increase

Pokolm DuoPlug®= Shrink and Screw



Our Pokolm DuoPlug® system offers optimum rigidity and extremely high precision and concentricity. As a supplement to conventional thread connections, the retention and supporting forces between cutting tool and adapter act along the entire surface of the shrink fit and a large part of the shrink thread. For more information, please see the assembling and dismantling instructions for our Duo-Plug® system in the "Operation Data" chapter.

The fact is:

DuoPlug® perfects the thread connection by means of greatly increased retention forces, resulting in the highest possible precision for extremely slim dimensions.

Pokolm Thread Connection – our high-performance standard

Performance

- ⊕ no undercut, thus avoiding a rated break-point
- ⊕ extremely precise fit zone and extremely precise flange contact surface
- ⊕ better tensile strength and heat resistance because of the special materials and extra-hard coating
- ⊕ for hundreds of tool changes
- ⊕ optimized chamfers on arbors and adapters

Your Advantages

- ⊕ increased process reliability
- ⊕ universally applicable for all roughing and finishing operations
- ⊕ better fatigue strength and red hardness
- ⊕ lower tool costs because of longer tool life
- ⊕ considerable increase in stability because of larger flange contact surface

Ideal Applications

- ⊕ low-cost standard equipment for milling operations in shallow and medium-deep cavities
- ⊕ especially for deep machining applications without vertical walls

Our patent protected DuoPlug® System – the perfect increase

Performance

- ⊕ maximum precision and concentricity
- ⊕ optimum stability
- ⊕ absolutely backlash-free class of fits by screwed connection
- ⊕ extremely precise and consistent connection
- ⊕ clearly increased retention forces compared to conventional thread connection
- ⊕ better tensile strength and heat resistance because of special materials and extra-hard coating

Your Advantages

- ⊕ longer tool life
- ⊕ absolutely minimal vibrations with long overhangs
- ⊕ renders top precision in finishing operations
- ⊕ increased availability of tool system and increased process reliability
- ⊕ improved performance in roughing operations
- ⊕ better fatigue strength and red hardness

Ideal Applications

- ⊕ for maximum precision in finishing operations
- ⊕ roughing and finishing applications with long overhangs
- ⊕ ideal for applications on vertical walls because of extremely slim arbor/adapter system

AND THERE'S STILL MORE E.G. **SK/BT30** AND **HSK25**

As a Pokolm customer you are accustomed to a broad range of products and a full service with regards technical matters. „Everything from a single source,“ is our motto to ensure ease of purchase and optimum use of our products. By this we do not just mean standard products.

Special items not offered by everyone enhance the range of products for our customers - even in the area of tool arbors. This is why you will also find designs with SK30 and BT30 machine-side connections in the Pokolm catalogue of arbor and adapter systems.

SMALL CAN BE THAT BIG: **ORIGINAL SIZE!**

Pokolm Frästechnik GmbH & Co. KG has more to offer and provides a range of products that is second to none when it comes to completeness even in the area of arbor and adapter systems for tools with an HSK machine-side connection.

This means that arbor systems with an **HSK25** connection dimension are also available. And of course everything is „made by Pokolm“ and thus „made in Germany“ in order to satisfy the highest quality demands!

BT 50 SK 50



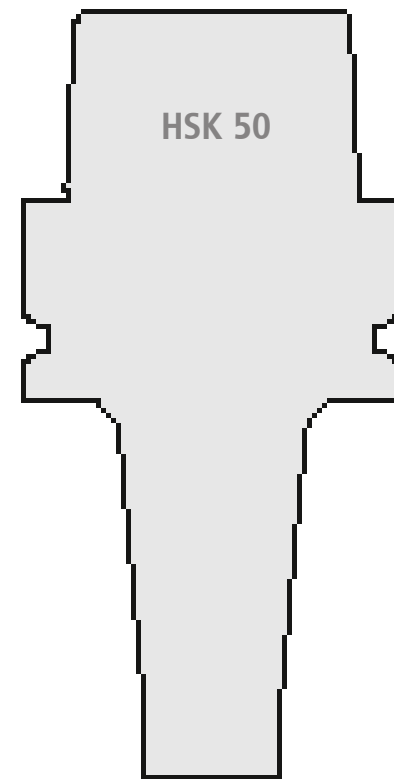
BT 30 SK 30



BT 40 SK 40



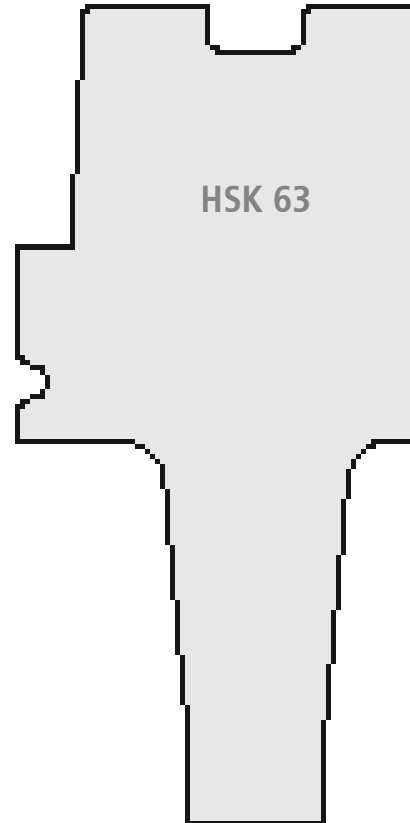
HSK 50



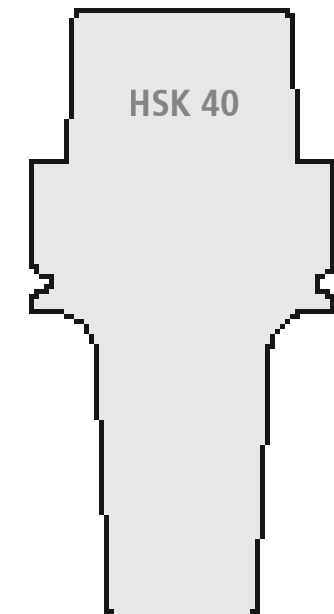
HSK 25



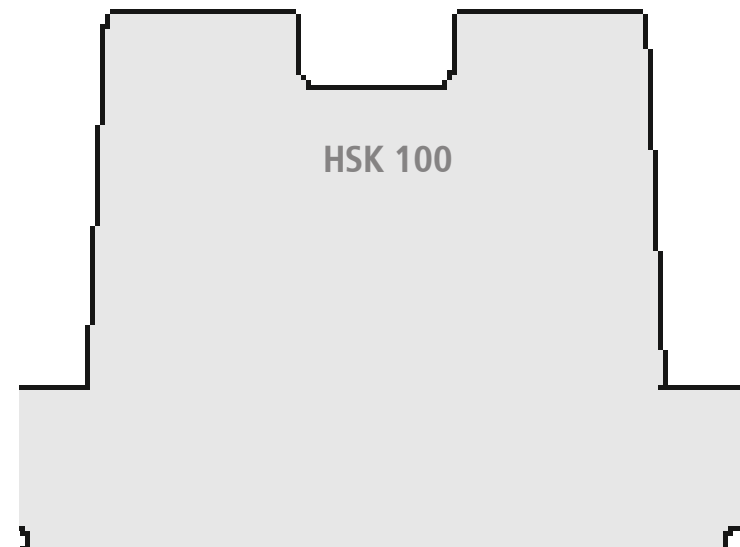
HSK 63



HSK 40



HSK 100



THE POKOLM ARBOR SYSTEM

The optimum solution for your application

Arbor System	Advantages	Recommended applications
ARBORS (TAPERED) for THREADED SHANK END MILLS	1 ⊕ rigid, low-cost standard design ⊕ large variety of types and lengths provides additional flexibility by using extensions and reductions ⊕ gaining rigidity by avoiding unnecessary interfaces	⊕ milling in shallow to deep profiles, for small milling cutter bodies up to 42 mm diam.
ARBORS for THREAD-CONNECTIONS CYLINDRICAL	2 ⊕ slim shape ⊕ additional rigidity by avoiding unnecessary interfaces ⊕ where needed: additional flexibility with extensions and reductions	⊕ medium machining depths, especially on deep vertical walls for small milling cutter bodies up to 42 mm diam.
REDUCTION SLEEVES with MORSE TAPER ADAPTERS	3 ⊕ Morse taper adapters for threaded shank end mill bodies and for shrinking processes available for solid carbide tools ⊕ fast and flexible tool change ⊕ modular design allows machining of deep slots and cavities	⊕ for standard milling operations with normal rigidity and accuracy requirements, for milling cutter bodies up to 42 mm diam.
ARBORS for SHELL TYPE MILLING CUTTER BODIES	4 ⊕ rigid variant, in particular for roughing or pre-finishing operations with large cutter diameters and a large variety of designs ⊕ additional rigidity by avoiding unnecessary interfaces	⊕ shallow to deep machining situations for pre-finishing and rough machining, for milling cutter diameters from 42 mm to 125 mm and larger
ARBORS with DIRECT SPINDLE MOUNTING	5 ⊕ extremely rigid style through direct spindle mounting ⊕ excellent machining conditions in deep slots or cavities ⊕ additional rigidity by avoiding interfaces	⊕ deep and extremely deep machining situations on SK 50 machines which require extreme rigidity, for milling cutter diameters from 52 to 125 mm
SHRINKING ARBORS STANDARD STYLE	6 ⊕ slim style with 3° draft angle in direction of collar ⊕ direct shrink-grip of solid carbide tooling ⊕ additional rigidity by avoiding unnecessary interfaces ⊕ improved concentricity ⊕ combinable with solid carbide and dense antivibration adapters (see page 25-28)	⊕ machining situations in narrow space conditions for solid carbide end mills up to 25 mm diam., and when combined with solid carbide or dense antivibration adapters even for milling cutter bodies with up to 42 mm diam.

Arbor System	Advantages	Recommended Applications
SHRINKING ARBORS, REINFORCED DESIGN	7 ⊕ 4.5° draft angle, reinforced shank ⊕ direct shrink grip of solid carbide end mills ⊕ additional rigidity by avoiding unnecessary interfaces ⊕ improved concentricity	⊕ milling with increased requirements for arbor rigidity for solid carbide end mills up to 20 mm diam.
ARBOR COMBINATIONS with DUOPLUG® ADAPTERS	8 ⊕ extremely long and slim arbor combinations ⊕ greatest possible avoidance of vibrations by using solid carbide adapters ⊕ DuoPlug® connection for maximum precision and concentricity ⊕ stronger retention forces	⊕ machining in deep cavities also with vertical walls ⊕ roughing operations with maximum retention forces ⊕ finishing operations with very high requirements for surface finish ⊕ up to cutter diam. of 25 mm
ARBOR COMBINATIONS with DENSE ANTI-VIBRATION ADAPTERS	9 ⊕ long and slim arbor combinations ⊕ minimal vibrations because of special dense antivibration material ⊕ thread connection, no shrinking process necessary	⊕ machining in deep cavities also with vertical walls ⊕ for narrow and deep moulds and dies ⊕ machining applications with normal vibration tendency ⊕ for cutter diam. of up to 42 mm
ZERO-REACH ARBORS*	10 ⊕ by directly shrinking the solid carbide end mill or dense antivibration adaptor in the arbor taper, you can machine vertical walls right up to the arbor collar. This means great increase in rigidity because of the reduced distance between the spindle and tool.	⊕ machining of extremely deep cavities with vertical walls in very limited space and with limited movement of Z-axis, and high requirements for rigidity and vibration-free milling
ER20 PRECISION COLLET CHUCKS	11 ⊕ universal and good value solution, direct grip of solid carbide end mills via collet without a shrinking device ⊕ also grips unusual shank diameters and shank diameters smaller than 3 mm	⊕ for fast changing applications ⊕ for finishing, pre-finishing, and moderate roughing operations
SHORT TAPER SYSTEM	12 ⊕ extra slim arbor combination ⊕ extremely small dimensions	⊕ especially for machining components in reduced space situations, narrow and deep slots, etc. ⊕ for solid carbide end mills with 4 and 6 mm shank diam.

*Please note: Zero-reach arbors cannot be ordered separately. We only supply them in a shrink-grip connection with a solid carbide or dense antivibration adapter. (Please indicate desired adapter on purchase order form.)

ADAPTERS, EXTENSIONS, COLLET CHUCKS
AND PRECISION DRILL CHUCKS

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POKOLM DUOPLUG®

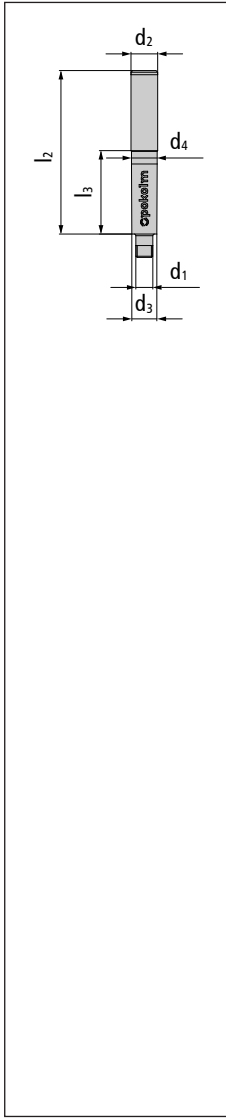
M 7 - M 16

The solid carbide adapters which are part of the POKOLM DuoPlug®-System are especially well suited for HSC and provide absolutely backlash-free fitting and extreme precision combined with the retention force required for roughing applications.

M 7 - M 16

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories		Features	
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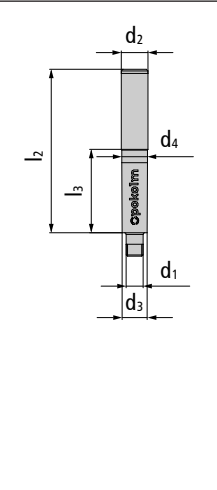


M 7														
20 07 603	M 7	20	-	10.8	11.9	diam. 12	-	68	-					
40 07 603	M 7	40	-	10.8	11.9	diam. 12	-	88	-					
60 07 603/12	M 7	60	-	10.8	11.9	diam. 12	-	108	-					
80 07 603/12	M 7	80	-	10.8	11.9	diam. 12	-	128	-					
M 10														
25 10 603	M 10	25	-	15	15.9	diam. 16	-	73	-					
50 10 603	M 10	50	-	15	15.9	diam. 16	-	98	-					
75 10 603	M 10	75	-	15	15.9	diam. 16	-	123	-					
100 10 603	M 10	100	-	15	15.9	diam. 16	-	148	-					
125 10 603	M 10	125	-	15	15.9	diam. 16	-	173	-					
150 10 603	M 10	150	-	15	15.9	diam. 16	-	200	-					
M 12														
25 12 603	M 12	25	-	18.5	19.9	diam. 20	-	75	-					
50 12 603	M 12	50	-	18.5	19.9	diam. 20	-	100	-					
75 12 603	M 12	75	-	18.5	19.9	diam. 20	-	125	-					
100 12 603	M 12	100	-	18.5	19.9	diam. 20	-	150	-					
125 12 603	M 12	125	-	18.5	19.9	diam. 20	-	175	-					
150 12 603	M 12	150	-	18.5	19.9	diam. 20	-	200	-					
175 12 603	M 12	175	-	18.5	19.9	diam. 20	-	225	-					

◀ 2 / 2

M 7 - M 16

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories		Features	
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M 16														
25 16 603	M 16	25	-	23.4	24.9	diam. 25	-	81	-					
50 16 603	M 16	50	-	23.4	24.9	diam. 25	-	106	-					
75 16 603	M 16	75	-	23.4	24.9	diam. 25	-	131	-					
100 16 603	M 16	100	-	23.4	24.4	diam. 25	-	156	-					
125 16 603	M 16	125	-	23.4	24.9	diam. 25	-	181	-					
150 16 603	M 16	150	-	23.4	24.9	diam. 25	-	206	-					
175 16 603	M 16	175	-	23.4	24.9	diam. 25	-	231	-					
200 16 603	M 16	200	-	23.4	24.9	diam. 25	-	256	-					



POKOLM DUOPLUG® SHRINKING ADAPTORS

diam. 6 - 10 mm

DuoPlug®-shrinking adaptors are the ideal solution for economic milling or contouring with solid carbide end mills in deep slots, pockets or cavities, providing an exceptional high degree of rigidity during processing.

diam. 6 - 10 mm

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

DuoPlug®

Technical drawing of a DuoPlug drill bit. The drawing shows a cross-section of the bit with various dimensions labeled. d₁ is the diameter of the cutting edge, d₂ is the diameter of the flute, d₃ is the diameter of the body, and d₄ is the diameter of the handle. l₁ is the length of the cutting edge, l₂ is the length of the flute, and l₃ is the total length of the bit.

diam. 6 mm

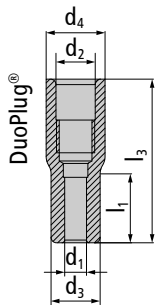
35 06 10 SG	diam. 6	35	-	12	15	M 10	-	-	-		
45 06 12 SG	diam. 6	45	-	12	18.5	M 12	-	-	-		
50 06 16 SG	diam. 6	50	-	12	23.5	M 16	-	-	-		

diam. 8 mm

45 08 12 SG	diam. 8	45	-	16	18.5	M 12	-	-	-		
50 08 16 SG	diam. 8	50	-	16	23.5	M 16	-	-	-		

diam. 10 mm

50 10 16 SG	diam. 10	50	-	20	23.5	M 16	-	-	-		
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POKOLM PLAIN SHANK SHRINKING ADAPTORS

diam. 3 - 12 mm

Pokolm plain shank shrinking adaptors are suitable for fast and economic reach of deep cavities. Shanks are produced in h5 tolerance and provide an exceptional high degree of rigidity during processing.

diam. 3 - 12 mm

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

Technical drawing of a drill bit. The drawing shows a side view of the drill bit with various dimensions labeled. d₁ is the diameter of the cutting edge. d₂ is the diameter of the body. d₃ is the diameter of the flute. d₄ is the diameter of the shank. l₁ is the length of the cutting edge. l₂ is the length of the flute. l₃ is the length of the shank. The cutting edge is labeled 'Cutting edge'.

diam. 3 mm

112 03 604 S.01	diam. 3	112	-	9	16	diam. 16	-	160	-	
115 03 604 S.01	diam. 3	115	-	9	12	diam. 12	-	160	-	

diam. 4 mm

112 04 604 S.01	diam. 4	112	-	10.5	16	diam. 16	-	160	-	
115 04 604 S.01	diam. 4	115	-	10.5	12	diam. 12	-	160	-	

diam. 6 mm

112 06 604 S	diam. 6	112	-	11	16	diam. 16	-	160	-	
115 06 604 S	diam. 6	115	-	11	12	diam. 12	-	160	-	

diam. 8 mm

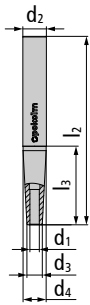
112 08 604 S	diam. 8	112	-	13	16	diam. 16	-	160	-	
110 08 604 S	diam. 8	110	-	13	20	diam. 20	-	160	-	

diam. 10 mm

110 10 604 S	diam. 10	110	-	15	20	diam. 20	-	160	-	
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diam. 12 mm

104 12 604 S	diam. 12	104	-	17	25	diam. 25	-	160	-	
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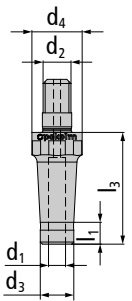


POKOLM SCREW-ON SHRINKING EXTENSIONS

diam. 6 - 12 mm

Pokolm screw-on shrinking extensions are the perfect alternative solution for machining cavities, if the corresponding shrinking arbor is not available. Hexagonal clamping flats - also suitable for use of hexagon wrenches (ring spanners) makes spanning most flexible.
The short and slim design with internal coolant supply are other positive benefits.

diam. 6 - 12 mm	Catalogue no.									Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁		



diam. 6 mm													NEW
40 06 10 784 S	diam. 6	40	-	12	18	M 10	-	-	7.8				
40 06 12 784 S	diam. 6	40	-	12	21	M 12	-	-	7.8				
40 06 16 784 S	diam. 6	40	-	12	29	M 16	-	-	7.8				

diam. 8 mm													NEW
40 08 10 784 S	diam. 8	40	-	16	18	M 10	-	-	7.8				
40 08 12 784 S	diam. 8	40	-	16	21	M 12	-	-	7.8				
40 08 16 784 S	diam. 8	40	-	16	29	M 16	-	-	7.8				

diam. 10 mm													NEW
60 10 10 784 S	diam. 10	60	-	18	18	M 10	-	-	-				
60 10 12 784 S	diam. 10	60	-	20	21	M 12	-	-	7.8				
60 10 16 784 S	diam. 10	60	-	20	29	M 16	-	-	7.8				

diam. 12 mm													NEW
60 12 12 784 S	diam. 12	60	-	21	21	M 12	-	-	-				
60 12 16 784 S	diam. 12	60	-	24	29	M 16	-	-	7.8				

SOLID CARBIDE ADAPTERS - FOR SCREW-ON END MILLS

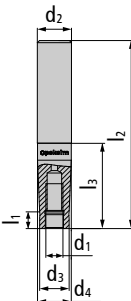
M 6 - M 16

POKOLM solid carbide adapters for screw-on end mills are well suited for HSC and with extreme precision provide the retention force required for roughening applications. All adapters have an internal coolant supply as standard.



1/2

M 6 - M 16	Catalogue no.									Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁		



M 6													NEW
20 06 606/10 ZYL	M 6	20	-	9.5	9.5	diam. 10	-	60	-				
20 06 606/12 ZYL	M 6	20	-	11.5	11.5	diam. 12	-	65	-				
40 06 606/10 ZYL	M 6	40	-	9.5	9.5	diam. 10	-	80	-				
40 06 606/12 ZYL	M 6	40	-	11.5	11.5	diam. 12	-	85	-				
60 06 606/10 ZYL	M 6	60	-	9.5	9.5	diam. 10	-	100	-				
60 06 606/12 ZYL	M 6	60	-	11.5	11.5	diam. 12	-	105	-				
80 06 606/10 ZYL	M 6	80	-	9.5	9.5	diam. 10	-	120	-				
80 06 606/12 ZYL	M 6	80	-	11.5	11.5	diam. 12	-	125	-				
100 06 606/12 ZYL	M 6	100	-	11.5	11.5	diam. 12	-	145	-				

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

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



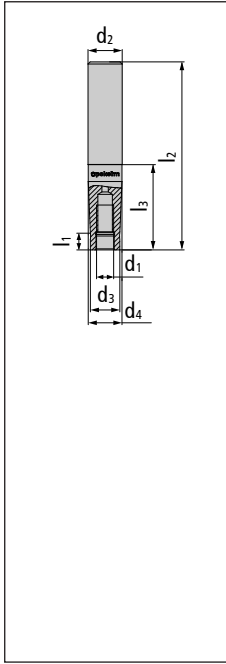
SOLID CARBIDE ADAPTERS - FOR SCREW-ON END MILLS

M 6 - M 16

POKOLM solid carbide adapters for screw-on end mills are well suited for HSC and with extreme precision provide the retention force required for roughening applications. All adapters have an internal coolant supply as standard.

2/2

M 6 - M 16		Catalogue no.										Accessories		Features	
		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁					



M 12															
80 12 606	M 12	80	-	23	24.3	diam. 25	-	136	9						
100 12 606	M 12	100	-	23	24.3	diam. 25	-	156	9						
120 12 606	M 12	120	-	23	24.3	diam. 25	-	176	9						
140 12 606	M 12	140	-	23	24.3	diam. 25	-	196	9						
160 12 606	M 12	160	-	23	24.3	diam. 25	-	216	9						
M 16															
100 16 606/32	M 16	100	-	29	31.5	diam. 32	-	160	9						
150 16 606/32	M 16	150	-	29	31.5	diam. 32	-	210	9						
200 16 606/32	M 16	200	-	29	31.5	diam. 32	-	260	9						
250 16 606/32	M 16	250	-	29	31.5	diam. 32	-	310	9						
300 16 606/32	M 16	300	-	29	31.5	diam. 32	-	360	9						

NEW

DENSE ANTIVIBRATION ADAPTERS -FOR SCREW-ON END MILLS

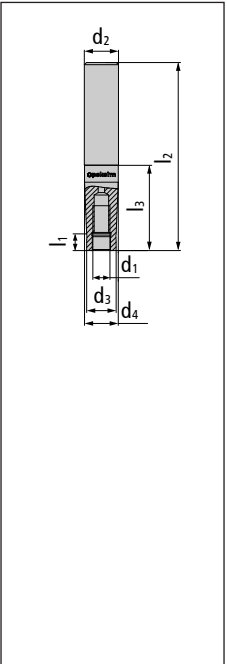
M 8 - M 16

POKOLM solid carbide adapters for screw-on end mills are characterised by their outstanding precision. These adapters are excellent for HSC finishing processes thanks to their vibration-reducing characteristics. Adapters are also available with an internal coolant supply upon request.



1/2

M 8 - M 16		Catalogue no.										Accessories		Features	
		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁					



M 8															
40 08 601	M 8	40	-	14.2	15.3	diam. 16	-	88	9						
60 08 601	M 8	60	-	14.2	15.3	diam. 16	-	108	9						
80 08 601	M 8	80	-	14.2	15.3	diam. 16	-	128	9						
100 08 601	M 8	100	-	14.2	15.3	diam. 16	-	148	9						
120 08 601	M 8	120	-	14.2	15.3	diam. 16	-	168	9						
150 08 601	M 8	150	-	14.2	15.3	diam. 16	-	198	9						
M 10															
60 10 601	M 10	60	-	18.5	19.3	diam. 20	-	110	9						
80 10 601	M 10	80	-	18.5	19.3	diam. 20	-	130	9						
100 10 601	M 10	100	-	18.5	19.3	diam. 20	-	150	9						
120 10 601	M 10	120	-	18.5	19.3	diam. 20	-	170	9						
140 10 601	M 10	140	-	18.5	19.3	diam. 20	-	190	9						
M 12															
50 12 601	M 12	50	-	23	24.3	diam. 25	-	106	9						
75 12 601	M 12	75	-	23	24.3	diam. 25	-	131	9						
100 12 601	M 12	100	-	23	24.3	diam. 25	-	156	9						
125 12 601	M 12	125	-	23	24.3	diam. 25	-	181	9						
150 12 601	M 12	150	-	23	24.3	diam. 25	-	206	9						
175 12 601	M 12	175	-	23	24.3	diam. 25	-	231	9						



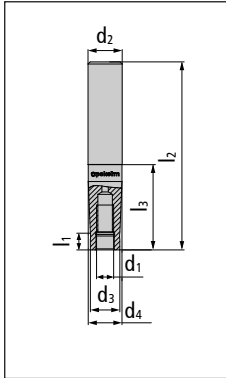
DENSE ANTIVIBRATION ADAPTERS -FOR SCREW-ON END MILLS

M 8 - M 16

POKOLM solid carbide adapters for screw-on end mills are characterised by their outstanding precision. These adapters are excellent for HSC finishing processes thanks to their vibration-reducing characteristics. Adapters are also available with an internal coolant supply upon request.

2/2

M 8 - M 16												Accessories	Features
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		



M 16												
100 16 601/32	M 16	100	-	29	31.5	diam. 32	-	160	9			✓
150 16 601/32	M 16	150	-	29	31.5	diam. 32	-	210	9			✓
200 16 601/32	M 16	200	-	29	31.5	diam. 32	-	260	9			✓
250 16 601/32	M 16	250	-	29	31.5	diam. 32	-	310	9			✓
300 16 601/32	M 16	300	-	29	31.5	diam. 32	-	360	9			✓

MTS ADAPTERS - FOR SCREW-ON END MILLS

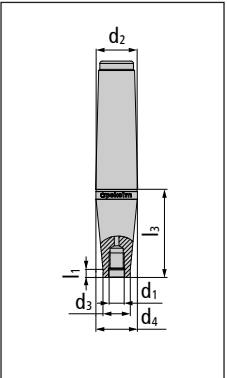
M 8 - M 16

Morse taper shank extensions for screw-on end mills. With peripheral grinded plane and fitting surfaces. For use in POKOLM morse taper shank basic arbors. Tapered shank manufactured according to DIN228A.



1/2

M 8 - M 16												Accessories	Features
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		



M 8												
20 670	M 8	20	-	13.8	18	MTS 2	-	-	-			✓
40 670	M 8	40	-	13.8	18	MTS 2	-	-	8.5			✓
60 670	M 8	60	-	13.8	18	MTS 2	-	-	8.5			✓
80 670	M 8	80	-	13.8	24	MTS 3	-	-	8.5			✓
100 670	M 8	100	-	13.8	24.1	MTS 3	-	-	8.5			✓

M 10												
20 680	M 10	20	-	18	18	MTS 2	-	-	-			✓
40 680	M 10	40	-	18	18	MTS 2	-	-	-			✓
60 680	M 10	60	-	18	18	MTS 2	-	-	-			✓
80 680	M 10	80	-	18	24	MTS 3	-	-	8.5			✓
100 680	M 10	100	-	18	23.6	MTS 3	-	-	8.5			✓

M 12												
30 610	M 12	30	-	21	23.6	MTS 3	-	-	8.5			✓
45 610	M 12	45	-	21	24.1	MTS 3	-	-	8.5			✓
60 610	M 12	60	-	21	24.1	MTS 3	-	-	8.5			✓
75 610	M 12	75	-	21	24.1	MTS 3	-	-	8.5			✓
95 610	M 12	95	-	21	24.1	MTS 3	-	-	8.5			✓
120 610	M 12	120	-	21	31.6	MTS 4	-	-	8.5			✓



MTS ADAPTERS - FOR SCREW-ON END MILLS

M 8 - M 16

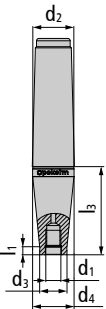
Morse taper shank extensions for screw-on end mills. With peripheral grinded plane and fitting surfaces. For use in POKOLM morse taper shank basic arbors. Tapered shank manufactured according to DIN228A.

2/2

M 8 - M 16

Catalogue no.

d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
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M 16										
35 630	M 16	35	-	29	31.5	MTS 4	-	-	8.5	✓ HSM
50 630	M 16	50	-	29	31.6	MTS 4	-	-	8.5	✓ HSM
65 630	M 16	65	-	29	31.6	MTS 4	-	-	8.5	✓ HSM
80 630	M 16	80	-	29	31.6	MTS 4	-	-	8.5	✓ HSM
95 630	M 16	95	-	29	31.5	MTS 4	-	-	8.5	✓ HSM
120 650	M 16	120	-	29	44.5	MTS 5	-	-	8.5	✓ HSM
150 650	M 16	150	-	29	44.7	MTS 5	-	-	8.5	✓ HSM
180 650	M 16	180	-	29	44	MTS 5	-	-	8.5	✓ HSM

MTS ADAPTERS - FOR SHRINKING PROCESSES

diam. 6 - 16 mm

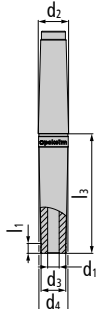
Morse taper shank extensions for shrinking processes allows highest rigidy at maximum flexibility. For use in POKOLM morse taper shank basic arbors. Tapered shank is manufactured according to DIN228A.



diam. 6 - 16 mm

Catalogue no.

d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
----------------	----------------	---	----------------	----------------	----------------	----------	----------------	----------------	-------------	----------



diam. 6 mm										
50 06 MK3 S	diam. 6	50	-	12	23.5	MTS 3	-	-	7.8	✓ HSM
100 06 MK3 S	diam. 6	100	-	12	24	MTS 3	-	-	7.8	✓ HSM
150 06 MK3 S	diam. 6	150	-	12	24	MTS 3	-	-	7.8	✓ HSM
diam. 8 mm										
50 08 MK3 S	diam. 8	50	-	16	24	MTS 3	-	-	7.8	✓ HSM
100 08 MK3 S	diam. 8	100	-	16	24	MTS 3	-	-	7.8	✓ HSM
150 08 MK3 S	diam. 8	150	-	16	24	MTS 3	-	-	7.8	✓ HSM
200 08 MK5 S	diam. 8	200	-	16	44.5	MTS 5	-	-	7.8	✓ HSM
diam. 10 mm										
50 10 MK3 S	diam. 10	50	-	20	24	MTS 3	-	-	7.8	✓ HSM
100 10 MK3 S	diam. 10	100	-	20	24	MTS 3	-	-	7.8	✓ HSM
150 10 MK4 S	diam. 10	150	-	20	32	MTS 4	-	-	7.8	✓ HSM
200 10 MK5 S	diam. 10	200	-	20	44.2	MTS 5	-	-	7.8	✓ HSM
diam. 12 mm										
50 12 MK3 S	diam. 12	50	-	24	24	MTS 3	-	-	7.8	✓ HSM
100 12 MK3 S	diam. 12	100	-	24	24	MTS 3	-	-	-	✓ HSM
150 12 MK4 S	diam. 12	150	-	24	31	MTS 4	-	-	7.8	✓ HSM
200 12 MK5 S	diam. 12	200	-	24	44.5	MTS 5	-	-	7.8	✓ HSM
diam. 16 mm										
150 16 MK4 S	diam. 16	150	-	32	32	MTS 4	-	-	7.8	✓ HSM
200 16 MK5 S	diam. 16	200	-	32	44.2	MTS 5	-	-	7.8	✓ HSM



POKOLM EXTENSIONS - FOR SCREW-ON END MILLS

M 8 - M 16

Cylindrical threaded extensions for reaching deep cavities rapidly and effectively. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces as well as an internal coolant supply.

M 8 - M 16

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

M 8

08 40 780	M 8	40	-	13.8	13.8	M 8	-	-	-	☒
08 60 780	M 8	60	-	13.8	13.8	M 8	-	-	-	☒

M 10

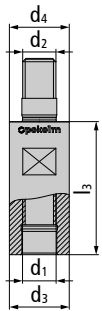
10 40 780	M 10	40	-	18	18	M 10	-	-	-	☒
10 60 780	M 10	60	-	18	18	M 10	-	-	-	☒

M 12

12 40 780	M 12	40	-	21	21	M 12	-	-	-	☒
12 60 780	M 12	60	-	21	21	M 12	-	-	-	☒

M 16

16 40 780	M 16	40	-	29	29	M 16	-	-	-	☒
16 60 780	M 16	60	-	29	29	M 16	-	-	-	☒



POKOLM REDUCTIONS - FOR SCREW-ON END MILLS

M 6 - M 12

Tapered threaded reductions for reaching deep cavities with low draft angles rapidly and effectively. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces as well as an internal coolant supply.



M 6 - M 12

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

M 6

08 20 781

M 6

20

-

9.5

13.8

M 8

-

-

7.8

M 8

10 40 781

M 8

40

-

13.8

18

M 10

-

-

6.5

12 60 781

M 8

60

-

13.8

21

M 12

-

-

7.8

M 10

12 40 781

M 10

40

-

18

21

M 12

-

-

7.8

16 60 781

M 10

60

-

18

29

M 16

-

-

7.8

M 12

16 40 781

M 12

40

-

21

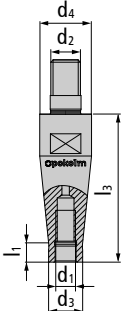
29

M 16

-

-

7.8



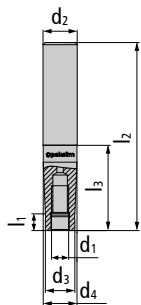


POKOLM CYL. SHAFT - DIN 1835 A

M 6 - M 16

Threaded adapters with a cylindrical shaft according to DIN 1835A. For use in collet chuck arbors or also hydraulic expansion chucks. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces and an internal coolant supply option.

M 6 - M 16		Catalogue no.										Accessories		Features	
		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁				



M 6		NEW													
20 06 600/10 G	M 6	20	-	9.5	9.5	diam. 10	-	65	7.8						
20 06 600/12 G	M 6	20	-	11.5	11.5	diam. 12	-	65	7.8						
40 06 600/10 G	M 6	40	-	9.5	9.5	diam. 10	-	85	7.8						
40 06 600/12 G	M 6	40	-	11.5	11.5	diam. 12	-	85	7.8						
M 8		20 16 600 G	M 8	20	-	13.8	15.8	diam. 16	-	68	7.8				
40 16 600 G	M 8	40	-	13.8	15.8	diam. 16	-	88	7.8						
M 10		25 20 600 G	M 10	25	-	18	19.8	diam. 20	-	75	7.8				
45 20 600 G	M 10	45	-	18	19.8	diam. 20	-	95	7.8						
M 12		30 25 600 G	M 12	30	-	21	24.9	diam. 25	-	86	7.8				
50 25 600 G	M 12	50	-	21	24.8	diam. 25	-	106	7.8						
M 16		50 32 600 G	M 16	50	-	29	31.8	diam. 32	-	110	7.8				

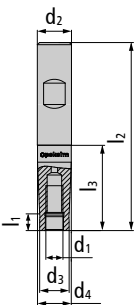
POKOLM CYL. SHAFT - DIN 1835 B

M 6 - M 16

Threaded shank adapter with a cylindrical shaft and an additional Weldon collet surface according to DIN 1835B. For use in Weldon arbors. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces and an internal coolant supply option.



M 6 - M 16		Catalogue no.										Accessories		Features	
		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁				



M 6		NEW													
20 06 600/10	M 6	20	-	9.5	9.5	diam. 10	-	65	7.8						
20 06 600/12	M 6	20	-	11.5	11.5	diam. 12	-	65	7.8						
40 06 600/10	M 6	40	-	9.5	9.5	diam. 10	-	85	7.8						
40 06 600/12	M 6	40	-	11.5	11.5	diam. 12	-	85	7.8						
M 8		20 16 600	M 8	20	-	13.8	15.8	diam. 16	-	68	7.8				
40 16 600	M 8	40	-	13.8	15.8	diam. 16	-	88	7.8						
M 10		25 20 600	M 10	25	-	18	19.8	diam. 20	-	75	7.8				
45 20 600	M 10	45	-	18	19.8	diam. 20	-	95	7.8						
M 12		30 25 600	M 12	30	-	21	24.9	diam. 25	-	86	7.8				
50 25 600	M 12	50	-	21	24.9	diam. 25	-	106	7.8						
M 16		50 32 600	M 16	50	-	29	31.8	diam. 32	-	110	7.8				



POKOLM SHELL TYPE EXTENSIONS FOR SHELL TYPE MILLING CUTTERS

bore diam. 22 - 27 mm

Pokolm shell type extensions for shell type milling cutter bodies are the most effective solution if the reach of available standard shell-type arbor is not long enough. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces as well as an internal coolant supply.

bore diam. 22 - 27 mm

bore diam. 22 - 27 mm

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

bore diam. 22 mm

50 22 782

diam.
22

50

-

48

48

diam.
22

-

-

-

A, C, E

100 22 782

diam.
22

100

-

48

48

diam.
22

-

-

-

A, C, E

bore diam. 27 mm

50 27 782

diam.
27

50

-

62

62

diam.
27

-

-

-

B, D, F

100 27 782

diam.
27

100

-

62

62

diam.
27

-

-

-

B, D, F

Accessories

M4X10
screw for drive block
10 x 8
A > Page 136

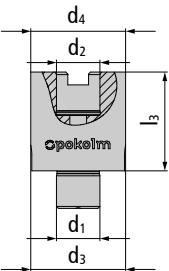
M5X16
screw for drive blocks
12 x 12 and 14 x 14
B > Page 136

M6X55
screw
C > Page 136

M8X55
screw
D > Page 136

NUTEN10X8
drive block 10 x 8
E > Page 137

NUTEN12X12/2
drive block 12 x 12
F > Page 137



POKOLM SHELL TYPE EXTENSIONS FOR SCREW ON END MILLS

for screw-on end mills M10 - M16

Pokolm shell type extensions for screw on end mills are the most effective solution if the reach of available standard screw on type arbor is not long enough or if more stability is required. Manufactured according to the POKOLM standard with smoothed plane and mating surfaces as well as an internal coolant supply.



for screw-on end mills
M10 - M16

for screw-on end mills M10 - M16												
Catalogue no.												
d ₁ l ₃ A d ₃ d ₄ d ₂ Form/DIN l ₂ l ₁												
Accessories Features												

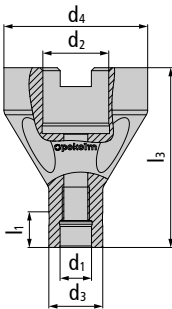
Technical drawing of a screw-on end mill. The drawing shows a cross-section of the tool with various dimensions labeled: d₁ (bottom diameter), d₂ (top diameter), d₃ (internal diameter), d₄ (outer diameter), l₁ (total length), l₂ (length of the cutting edge), and l₃ (length of the body). The word 'optalmin' is written on the side of the tool.

M 10												
60 22 M10 783	M 10	60	-	18	48	diam. 22	-	-	12	A		
100 22 M10 783	M 10	100	-	18	48	diam. 22	-	-	12	A		
60 27 M10 783	M 10	60	-	18	62	diam. 27	-	-	12	B		
100 27 M10 783	M 10	100	-	18	62	diam. 27	-	-	12	B		

M 12												
60 22 M12 783	M 12	60	-	21	48	diam. 22	-	-	12	A		
100 22 M12 783	M 12	100	-	21	48	diam. 22	-	-	12	A		
60 27 M12 783	M 12	60	-	21	62	diam. 27	-	-	12	B		
100 27 M12 783	M 12	100	-	21	62	diam. 27	-	-	12	B		

M 16												
60 22 M16 783	M 16	60	-	29	48	diam. 22	-	-	12	A		
100 22 M16 783	M 16	100	-	29	48	diam. 22	-	-	12	A		
60 27 M16 783	M 16	60	-	29	62	diam. 27	-	-	12	B		
100 27 M16 783	M 16	100	-	29	62	diam. 27	-	-	12	B		

Accessories												
 M6X25 screw A > Page 136		 M8X25 screw B > Page 136										





PRECISION COLLET CHUCKS

ER16 | for diam. 1 - diam. 10

Precision collet chucks according to DIN 6499-B

- Bi-conical - collet chucks
- slotted on both ends
- Concentricity 6 µm
- Repeat accuracy 6 µm

Collet chucks in other sizes and designs upon request.

ER16 | for diam. 1 -
diam. 10

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories
Features



ER 16

ER16 1-2	diam. 2	-	-	1	-	ER 16	-	-	-	A, B	✓
ER16 2-3	diam. 3	-	-	2	-	ER 16	-	-	-	A, B	✓
ER16 3-4	diam. 4	-	-	3	-	ER 16	-	-	-	A, B	✓
ER16 4-5	diam. 5	-	-	4	-	ER 16	-	-	-	A, B	✓
ER16 5-6	diam. 6	-	-	5	-	ER 16	-	-	-	A, B	✓
ER16 7-8	diam. 8	-	-	7	-	ER 16	-	-	-	A, B	✓
ER16 9-10	diam. 10	-	-	9	-	ER 16	-	-	-	A, B	✓

Accessories



16 501
spanner for ER 16 collet
chuck tightening nut
A > Page 136



ER16 001
tightning nut ER 16
B > Page 137

NEW



PRECISION COLLET CHUCKS

ER20 | for diam. 1 - diam. 12

Precision collet chucks according to DIN 6499-B

- Bi-conical - collet chucks
- slotted on both ends
- Concentricity 6 µm
- Repeat accuracy 6 µm

Collet chucks in other sizes and designs upon request.

ER20 | for diam. 1 -
diam. 12

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories
Features



ER 20

ER20 0,5-1	diam. 1	-	-	0.5	-	ER 20	-	-	-	A, B	✓
ER20 1-2	diam. 2	-	-	1	-	ER 20	-	-	-	A, B	✓
ER20 2-3	diam. 3	-	-	2	-	ER 20	-	-	-	A, B	✓
ER20 3-4	diam. 4	-	-	3	-	ER 20	-	-	-	A, B	✓
ER20 4-5	diam. 5	-	-	4	-	ER 20	-	-	-	A, B	✓
ER20 5-6	diam. 6	-	-	5	-	ER 20	-	-	-	A, B	✓
ER20 7-8	diam. 8	-	-	7	-	ER 20	-	-	-	A, B	✓
ER20 9-10	diam. 10	-	-	9	-	ER 20	-	-	-	A, B	✓
ER20 11-12	diam. 12	-	-	11	-	ER 20	-	-	-	A, B	✓

Accessories



20 501
spanner for ER 20 collet
chuck tightening nut
A > Page 136



ER20 001
tightening nut ER 20
B > Page 137



SCREW ON TYPE CNC PRECISION DRILL CHUCKS

M16 thread connection

Screw on type CNC precision drill chucks with M16 thread connection open up more possibilities you have ever thought before. Useable in every screw on arbor, adaptor or extension allows a maximum of flexibility.

- can be used for up to max. 7,000 rpm
- with internal coolant supply
- independent of rotating direction
- extremely short and slim design

Scope of delivery includes small and large seal ring

M16 thread connection

M16 thread connection

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

diam. 0,3 - 8 mm

BF 0,3-8 M16 IC	diam. 8	75	-	36	36	M 16	-	-	-	A, C, D, I	✓	
-----------------	---------	----	---	----	----	------	---	---	---	------------	---	--

diam. 0,5 - 13 mm

BF 0,5-13 M16 IC	diam. 13	100	-	50	50	M 16	-	-	-	B, E, F, J	✓	
------------------	----------	-----	---	----	----	------	---	---	---	------------	---	--

diam. 2,5 - 16 mm

BF 2,5-16 M16 IC	diam. 16	100	-	50	50	M 16	-	-	-	B, G, H, J	✓	
------------------	----------	-----	---	----	----	------	---	---	---	------------	---	--

Accessories

INBUS 4T
A > Page 137

INBUS 6T
B > Page 137

BF08DS04
seal gasket 08DS04
C > Page 138

BF08DS08
seal gasket 08DS08
D > Page 138

BF13DS06
seal gasket 08DS08
E > Page 138

BF13DS13
seal gasket 13DS13
F > Page 138

BF16DS06
seal gasket 16DS06
G > Page 138

BF16DS16
seal gasket 16DS16
H > Page 138

BF08MW
hexagon key 08MW
I > Page 138

BF13MW
hexagon key 13MW
J > Page 138

HOLLOW TAPER SHANKS HSK

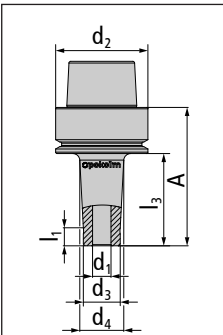
	Page
HSK 25 form E	42
for shrinking	42
HSC precision collet chucks ER16	43
HSK 32 form E	44
for shrinking	44
HSC precision collet chucks ER20	45
HSK 40 form E	46
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HSK 50 form E	51
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HSK 63 form A	56
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for shrinking	59
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HSK 100 form A	68
for screw-on end mills	68
for shrinking	70
for shell-type milling	72
Drill chuck	74



HSK 25 FORM E
for shrinking

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 40,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shrinking



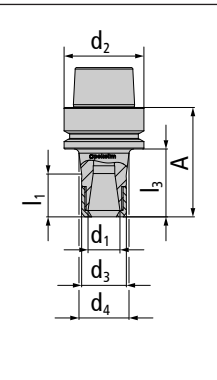
Catalogue no.										Form/DIN		Accessories		Features					
										d ₁	l ₃	A	d ₃	d ₄	d ₂	l ₂	l ₁		
for diam. 3																		NEW	
40 03 E25 S.01		diam. 3	40	50	9	14	HSK 25	form E	-	7.8	A, B								
for diam. 4																		NEW	
40 04 E25 S.01		diam. 4	40	50	10.5	13.9	HSK 25	form E	-	7.8	A, B								
for diam. 6																		NEW	
40 06 E25 S		diam. 6	40	50	12	15.4	HSK 25	form E	-	7.8	A, B								
for diam. 8																		NEW	
40 08 E25 S		diam. 8	40	50	16	19	HSK 25	form E	-	7.8	A, B								
for diam. 10																		NEW	
40 10 E25 S		diam. 10	40	50	19	19	HSK 25	form E	-	-	A, B								
Accessories																			
 KMR-25 coolant supply tube for HSK-tooling A > Page 137		 SCHLUESSELHSK25 spanner for coolant tube B > Page 138																	



HSK 25 FORM E
HSC precision collet chucks ER16

- Hollow taper schank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 40.000 rpm
- with internal coolant supply and bore hole for the coolant supply line

HSC precision collet chucks ER16



Catalogue no.										Accessories		Features		
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁						
for ER 16														NEW
40 ER16 E25	ER 16	40	50	22	20	HSK 25	form E	-	10.5	A, B, C, D			G 2.5 40.000	
Accessories														
 16 501 spanner for ER 16 collet chuck tightening nut A > Page 136		 ER16 001 tightening nut ER 16 B > Page 137		 KMR-25 coolant supply tube for HSK-tooling C > Page 137		 SCHLUESSELHSK25 spanner for coolant tube D > Page 138								



HSK 32 FORM E

for shrinking

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shrinking

for shrinking

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

Technical drawing of a coolant supply tube. The drawing shows a cross-section of the tube with various dimensions labeled. The outer diameter is d₂. The inner diameter is d₁. The length of the tube is l₁. The length of the flange is l₂. The length of the tube body is l₃. The total length is A. The drawing also shows a cross-section of the tube with a central hole of diameter d₃ and a smaller hole of diameter d₄. The text 'Dywidag' is visible on the side of the tube.

Object 147289

40 03 E32 S.01

diam.
3

40

60

9

12.4

HSK
32

form E

-

7.8

A, B

for diam. 4

40 04 E32 S.01

diam.
4

40

60

10.5

13.87

HSK
32

form E

-

7.8

A, B

for diam. 6

40 06 E32 S

diam.
6

40

60

12

15.4

HSK
32

form E

-

7.8

A, B

for diam. 8

40 08 E32 S

diam.
8

40

60

16

20

HSK
32

form E

-

7.8

A, B

for diam. 10

40 10 E32 S

diam.
10

40

60

20

24

HSK
32

form E

-

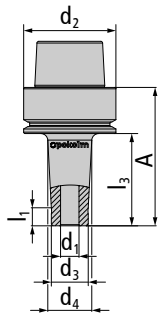
7.8

A, B

Accessories

KMR-32
coolant supply tube for
HSK-tooling
A > Page 137

SCHLUESSELHSK32
spanner for coolant tube
B > Page 138



HSK 32 FORM E

HSC precision collet chucks ER20

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



HSC precision collet chucks ER20

HSC precision collet
chucks ER20

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

Technical drawing of the HSC precision collet chuck ER20. The drawing shows the front and side views of the chuck. Dimensions are indicated as follows: d₁ is the outer diameter of the main body; d₂ is the outer diameter of the top flange; d₃ is the outer diameter of the inner sleeve; d₄ is the outer diameter of the bottom flange; l₁ is the total height; l₂ is the height of the main body; l₃ is the height of the inner sleeve; and A is the height of the bottom flange.

for ER 20

40 ER20 E32

ER 20

40

60

28

28

HSK
32

form E

-

11.8

A, B, C, D

Icons for HSK 32, G 2.5, and 20.000.

Accessories

Image of the 20 501 spanner for ER 20 collet chuck tightening nut.

20 501
spanner for ER 20 collet
chuck tightening nut
A > Page 136

Image of the ER20 001 tightening nut.

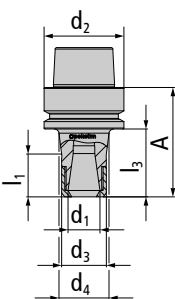
ER20 001
tightening nut ER 20
B > Page 137

Image of the KMR-32 coolant supply tube for HSK-tooling.

KMR-32
coolant supply tube for
HSK-tooling
C > Page 137

Image of the SCHLUESSELHSK32 spanner for coolant tube.

SCHLUESSELHSK32
spanner for coolant
tube
D > Page 138





HSK 40 FORM E

Drill chuck

- Hollow taper shank arbor CNC precision drill chuck according to DIN69893 form E, maximum precision
- approved for up to max. 7,000 rpm
- We can supply higher balance quality according to the balance classes upon request
- with internal coolant supply and bore hole for the coolant supply tube
- independent of rotating direction
- extremely short and slim design

Scope of delivery includes small and large seal gasket

Drill chuck	Catalogue no.											Accessories	Features		
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁					
	diam. 0.3 - 8 mm														
	BF 0,3-8 E40 IC														
	diam. 8	74	94	-	36	HSK 40	form E	-	-	A, B, C, D, E, F	 				
	Accessories														
	 INBUS 4T A > Page 137	 KMR-40A coolant supply tube for HSK-tooling B > Page 137					 SCHLUESSELHSK40 spanner for coolant tube C > Page 138			  BF08DS04 seal gasket 08DS04 D > Page 138				  BF08DS08 seal gasket 08DS08 E > Page 138	
	 BF08MW hexagon key 08MW F > Page 138														

HSK 40 FORM E

HSC precision collet chucks ER20

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



HSC precision collet chucks ER20	Catalogue no.										Accessories		Features											
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁														
	for ER 20																							
	50 ER20 E40										ER 20	50	70	28	32	HSK 40	form E	-	33.8	A, B, C, D				
	Accessories																							
	20 501 spanner for ER 20 collet chuck tightening nut A > Page 136										ER20 001 tightening nut ER 20 B > Page 137													
KMR-40A coolant supply tube for HSK-tooling C > Page 137										SCHLUESSELHSK40 spanner for coolant tube D > Page 138														



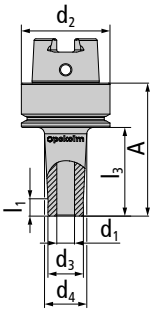
HSK 40 FORM EC

for shrinking

- Hollow taper shank arbors according to DIN69893 form E with extra drill hole in the tappet according to form C, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shrinking

for shrinking											Accessories	Features
	Catalogue no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁		



for diam. 3												
40 03 EC 40 S.01	diam. 3	40	60	9	14	HSK 40	Form E+C	-	7.8			
70 03 EC 40 S.01	diam. 3	70	90	9	18.79	HSK 40	Form E+C	-	7.8			

for diam. 4												
40 04 EC 40 S.01	diam. 4	40	60	10.5	13.87	HSK 40	Form E+C	-	7.8			
70 04 EC 40 S.01	diam. 4	70	90	10.5	17	HSK 40	Form E+C	-	7.8			

for diam. 6												
40 06 EC 40 S	diam. 6	40	60	12	15.4	HSK 40	Form E+C	-	7.8			
70 06 EC 40 S	diam. 6	70	90	12	19	HSK 40	Form E+C	-	7.8			
100 06 EC 40 S	diam. 6	100	120	12	22	HSK 40	Form E+C	-	7.8			

for diam. 8												
40 08 EC 40 S	diam. 8	40	60	16	19.4	HSK 40	Form E+C	-	7.8			
70 08 EC 40 S	diam. 8	70	90	16	22.5	HSK 40	Form E+C	-	7.8			
100 08 EC 40 S	diam. 8	100	120	16	26	HSK 40	Form E+C	-	7.8			

for diam. 10												
40 10 EC 40 S	diam. 10	40	60	20	24	HSK 40	Form E+C	-	7.8			
70 10 EC 40 S	diam. 10	70	90	20	26.5	HSK 40	Form E+C	-	7.8			
100 10 EC 40 S	diam. 10	100	120	20	29.6	HSK 40	Form E+C	-	7.8			

for diam. 12												
40 12 EC 40 S	diam. 12	40	60	24	28	HSK 40	Form E+C	-	7.8			
70 12 EC 40 S	diam. 12	70	90	24	30.5	HSK 40	Form E+C	-	7.8			

for diam. 16												
40 16 EC 40 S	diam. 16	40	60	32	32	HSK 40	Form E+C	-	-			



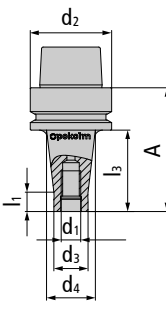
HSK 50 FORM E

for screw-on end mills

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for screw-on end mills

for screw-on end mills											
Catalogue no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features



M8												
25 08 E50	M 8	25	51	13.8	15	HSK 50	form E	-	12	A, B		
50 08 E50	M 8	50	76	13.8	23	HSK 50	form E	-	12	A, B		

M10												
25 10 E50	M 10	25	51	18	23	HSK 50	form E	-	12	A, B		
50 10 E50	M 10	50	76	18	25	HSK 50	form E	-	12	A, B		

M12												
25 12 E50	M 12	25	51	21	24	HSK 50	form E	-	12	A, B		
50 12 E50	M 12	50	76	21	30	HSK 50	form E	-	12	A, B		
100 12 E50	M 12	100	126	21	38	HSK 50	form E	-	12	A, B		

M16												
25 16 E50	M 16	25	51	29	29	HSK 50	form E	-	-	A, B		
50 16 E50	M 16	50	76	29	34	HSK 50	form E	-	12	A, B		

Accessories												



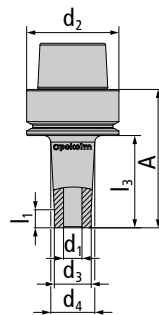
HSK 50 FORM E

for shrinking

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shrinking

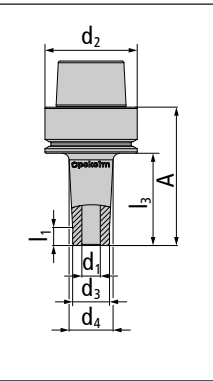
1/2



for diam. 3											
50 03 E50 S.01	diam. 3	50	76	9	15.6	HSK 50	form E	-	7.8	A, B	☒
100 03 E50 S.01	diam. 3	100	126	9	23.5	HSK 50	form E	-	7.8	A, B	☒
for diam. 4											
50 04 E50 S.01	diam. 4	50	76	10.5	14.9	HSK 50	form E	-	7.8	A, B	☒
100 04 E50 S.01	diam. 4	100	126	10.5	20.2	HSK 50	form E	-	7.8	A, B	☒
for diam. 6											
50 06 E50 S	diam. 6	50	76	12	16.4	HSK 50	form E	-	7.8	A, B	☒
100 06 E50 S	diam. 6	100	126	12	21.6	HSK 50	form E	-	7.8	A, B	☒
for diam. 8											
50 08 E50 S	diam. 8	50	76	16	20.3	HSK 50	form E	-	7.8	A, B	☒
100 08 E50 S	diam. 8	100	126	16	25.7	HSK 50	form E	-	7.8	A, B	☒
for diam. 10											
50 10 E50 S	diam. 10	50	76	20	24.4	HSK 50	form E	-	7.8	A, B	☒
100 10 E50 S	diam. 10	100	126	20	30	HSK 50	form E	-	7.8	A, B	☒
for diam. 12											
50 12 E50 S	diam. 12	50	76	24	28.4	HSK 50	form E	-	7.8	A, B	☒
100 12 E50 S	diam. 12	100	126	24	34	HSK 50	form E	-	7.8	A, B	☒
for diam. 16											
50 16 E50 S	diam. 16	50	76	32	36.4	HSK 50	form E	-	7.8	A, B	☒

for shrinking

2/2



for diam. 20											
60 20 E50 S	diam. 20	60	86	40	40	HSK 50	form E	-	-	A, B	☒
Accessories											



HSK 50 FORM E

Drill chuck

- Hollow taper shank arbor CNC precision drill chuck according to DIN69893 form E, maximum precision
- approved for up to max. 7,000 rpm
- We can supply higher balance quality according to the balance classes upon request
- with internal coolant supply and bore hole for the coolant supply tube
- independent of rotating direction
- extremely short and slim design

Scope of delivery includes small and large seal gasket

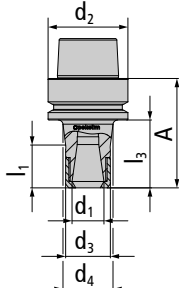
Drill chuck	Catalogue no.												Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁				
	Ø 0.3 - 8 mm													
	BF 0,3-8 E50 IC	diam. 8	72	98	-	36	HSK 50	form E	-	-	A, C, D, E, F, K			
	Ø 0.5 - 13 mm													
	BF 0,5-13 E50 IC	diam. 13	96	122	-	50	HSK 50	form E	-	-	B, C, D, G, H, L			
	Ø 2.5 - 16 mm													
	BF 2,5-16 E50 IC	diam. 16	101	127	-	57	HSK 50	form E	-	-	B, C, D, I, J, L			
Accessories														
	INBUS 4T	A > Page 137												
	INBUS 6T	B > Page 137												
	KMR-50A	coolant supply tube for HSK-tooling C > Page 137												
	SCHLUESSELHSK50	spanner for coolant tube D > Page 138												
	BF08DS04	seal gasket 08DS04 E > Page 138												
	BF08DS08	seal gasket 08DS08 F > Page 138												
	BF13DS06	seal gasket 08DS08 G > Page 138												
	BF13DS13	seal gasket13DS13 H > Page 138												
	BF16DS06	seal gasket16DS06 I > Page 138												
	BF16DS16	seal gasket 16DS16 J > Page 138												
	BF08MW	hexagon key 08MW K > Page 138												
	BF13MW	hexagon key 13MW L > Page 138												

HSK 50 FORM E

HSC precision collet chucks ER20

- Hollow taper shank arbors according to DIN69893 form E, maximum precision
- fine balanced to G 2.5 gmm at 30,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



HSC precision collet chucks ER20	Catalogue no.											Accessories	Features		
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁					
	for ER 20														
	50 ER20 E50	ER 20	50	76	28	32	HSK 50	form E	-	33.8	A, B, C, D	   			
	Accessories														
	 20 501 spanner for ER 20 collet chuck tightening nut A > Page 136	 ER20 001 tightening nut ER 20 B > Page 137					 KMR-50A coolant supply tube for HSK-tooling C > Page 137					 SCHLUESSELHSK50 spanner for coolant tube D > Page 138			



HSK 63 FORM A

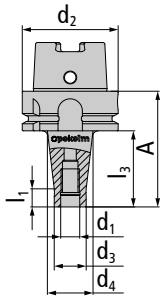
for screw-on end mills

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for screw-on end mills

Catalogue no.													Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁					

1/2



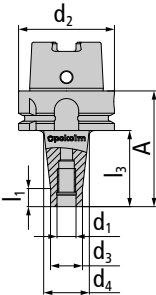
M8														
25 08 A63	M 8	25	51	13.8	15	HSK 63	form A	-	12	A, B				
50 08 A63	M 8	50	76	13.8	23	HSK 63	form A	-	12	A, B				
75 08 A63	M 8	75	101	13.8	25	HSK 63	form A	-	12	A, B				
100 08 A63	M 8	100	126	13.8	30	HSK 63	form A	-	12	A, B				

M10														
25 10 A63	M 10	25	51	18	23	HSK 63	form A	-	12	A, B				
50 10 A63	M 10	50	76	18	25	HSK 63	form A	-	12	A, B				
75 10 A63	M 10	75	101	18	30	HSK 63	form A	-	12	A, B				
100 10 A63	M 10	100	126	18	35	HSK 63	form A	-	12	A, B				
125 10 A63	M 10	125	151	18	38	HSK 63	form A	-	12	A, B				
150 10 A63	M 10	150	176	18	45	HSK 63	form A	-	12	A, B				

M12														
25 12 A63	M 12	25	51	21	24	HSK 63	form A	-	12	A, B				
50 12 A63	M 12	50	76	21	30	HSK 63	form A	-	12	A, B				
75 12 A63	M 12	75	101	21	35	HSK 63	form A	-	12	A, B				
100 12 A63	M 12	100	126	21	38	HSK 63	form A	-	12	A, B				
125 12 A63	M 12	125	151	21	43	HSK 63	form A	-	12	A, B				
150 12 A63	M 12	150	176	21	45	HSK 63	form A	-	12	A, B				

for screw-on end mills

Catalogue no.													Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁					



M16														
25 16 A63	M 16	25	51	29	29	HSK 63	form A	-	-	A, B				
50 16 A63	M 16	50	76	29	34	HSK 63	form A	-	12	A, B				
75 16 A63	M 16	75	101	29	35	HSK 63	form A	-	12	A, B				
100 16 A63	M 16	100	126	29	40	HSK 63	form A	-	12	A, B				
125 16 A63	M 16	125	151	29	44	HSK 63	form A	-	12	A, B				
150 16 A63	M 16	150	176	29	48	HSK 63	form A	-	12	A, B				
175 16 A63	M 16	175	201	29	50	HSK 63	form A	-	12	A, B				
200 16 A63	M 16	200	226	29	50	HSK 63	form A	-	12	A, B				
250 16 A63	M 16	250	276	29	50	HSK 63	form A	-	12	A, B				

Accessories				
	KMR-63A coolant supply tube for HSK-tooling A > Page 137		SCHLUESSELHSK63 spanner for coolant tube B > Page 138	

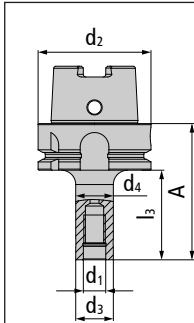


HSK 63 FORM A

for screw-on end mills | cylindrical

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for screw-on end mills | cylindrical



Catalogue no.														Form/DIN		Accessories		Features															
														d ₁	l ₃	A	d ₃	d ₄	d ₂			l ₂	l ₁										
M8																																	
50 08 A63 ZYL														M 8	50	76	13.8	13.8	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
M10																																	
50 10 A63 ZYL														M 10	50	76	18	18	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
75 10 A63 ZYL														M 10	75	101	18	18	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
100 10 A63 ZYL														M 10	100	126	18	18	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
M12																																	
50 12 A63 ZYL														M 12	50	76	21	21	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
75 12 A63 ZYL														M 12	75	101	21	21	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
100 12 A63 ZYL														M 12	100	126	21	21	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
M16																																	
50 16 A63 ZYL														M 16	50	76	29	29	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
75 16 A63 ZYL														M 16	75	101	29	29	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
100 16 A63 ZYL														M 16	100	126	29	29	HSK 63	form A	-	-	A, B			G 2.5 (25.000)							
Accessories																																	
 KMR-63A coolant supply tube for HSK-tooling A > Page 137														 SCHLUESSELHSK63 spanner for coolant tube B > Page 138																			

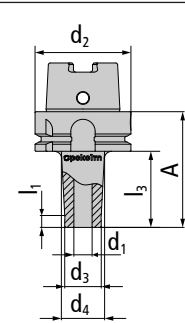
HSK 63 FORM A

for shrinking

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



for shrinking



Catalogue no.												Accessories		Features									
												d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		
for diam. 3																							
50 03 A63 S.01		diam. 3	50	76	9	15.6	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
100 03 A63 S.01		diam. 3	100	126	9	23.5	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
for diam. 4																							
50 04 A63 S.01		diam. 4	50	76	10.5	14.9	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
75 04 A63 S.01		diam. 4	75	101	10.5	17.6	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
100 04 A63 S.01		diam. 4	100	126	10.5	20.2	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
for diam. 6																							
50 06 A63 S		diam. 6	50	76	12	16.4	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
75 06 A63 S		diam. 6	75	101	12	19	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
100 06 A63 S		diam. 6	100	126	12	21.7	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
150 06 A63 S		diam. 6	150	176	12	27	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
200 06 A63 S		diam. 6	200	226	12	32.1	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
for diam. 8																							
50 08 A63 S		diam. 8	50	76	16	20.4	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
75 08 A63 S		diam. 8	75	101	16	23	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
100 08 A63 S		diam. 8	100	126	16	25.7	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
150 08 A63 S		diam. 8	150	176	16	30.9	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
200 08 A63 S		diam. 8	200	226	16	36.1	HSK 63	form A	-	7.8	A, B			G 2.5 25.000									
Accessories																							
 KMR-63A coolant supply tube for HSK-tooling A > Page 137		 SCHLUESSELHSK63 spanner for coolant tube B > Page 138																					



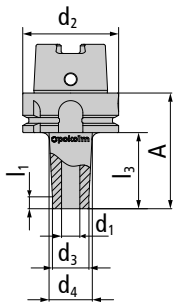
HSK 63 FORM A

for shrinking

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

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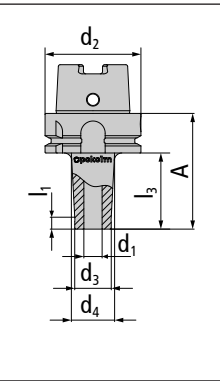
for shrinking											
Catalogue no.											
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories	Features



for diam. 10											
50 10 A63 S	diam. 10	50	76	20	24.4	HSK 63	form A	-	7.8	A, B	
75 10 A63 S	diam. 10	75	101	20	27	HSK 63	form A	-	7.8	A, B	
100 10 A63 S	diam. 10	100	126	20	30	HSK 63	form A	-	7.8	A, B	
150 10 A63 S	diam. 10	150	176	20	35	HSK 63	form A	-	7.8	A, B	
200 10 A63 S	diam. 10	200	226	20	40.1	HSK 63	form A	-	7.8	A, B	
for diam. 12											
50 12 A63 S	diam. 12	50	76	24	28.4	HSK 63	form A	-	7.8	A, B	
75 12 A63 S	diam. 12	75	101	24	31	HSK 63	form A	-	7.8	A, B	
100 12 A63 S	diam. 12	100	126	24	33.7	HSK 63	form A	-	7.8	A, B	
150 12 A63 S	diam. 12	150	176	24	39	HSK 63	form A	-	7.8	A, B	
200 12 A63 S	diam. 12	200	226	24	44.1	HSK 63	form A	-	7.8	A, B	
for diam. 16											
50 16 A63 S	diam. 16	50	76	32	36.4	HSK 63	form A	-	7.8	A, B	
75 16 A63 S	diam. 16	75	101	32	39	HSK 63	form A	-	7.8	A, B	
100 16 A63 S	diam. 16	100	126	32	41.7	HSK 63	form A	-	7.8	A, B	
150 16 A63 S	diam. 16	150	176	32	46.9	HSK 63	form A	-	7.8	A, B	
for diam. 20											
60 20 A63 S	diam. 20	60	86	40	45.5	HSK 63	form A	-	7.8	A, B	
100 20 A63 S	diam. 20	100	126	40	49.7	HSK 63	form A	-	7.8	A, B	
for diam. 25											
60 25 A63 S	diam. 25	60	86	46	46	HSK 63	form A	-	-	A, B	

3 / 3

for shrinking



Catalogue no.												Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁						
for diam. 32												NEW			
60 32 A63 S	diam. 32	60	86	44	53	HSK 63	form A	-	-					G 2.5 25.000	
Accessories															
KMR-63A coolant supply tube for HSK-tooling A > Page 137		SCHLUESSELHSK63 spanner for coolant tube B > Page 138													

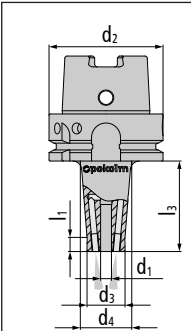


HSK 63 FORM A

for shrinking | reinforced design

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply via cone and bore hole for the coolant supply tube

for shrinking | reinforced design



Catalogue no.										Form/DIN		Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂										
for diam. 6															
50 06 A63 SB	diam. 6	50	76	21	27.6	HSK 63	form A	-	7.8	A, B					
100 06 A63 SB	diam. 6	100	126	21	35.5	HSK 63	form A	-	7.8	A, B					
for diam. 8															
50 08 A63 SB	diam. 8	50	76	21	27.6	HSK 63	form A	-	7.8	A, B					
100 08 A63 SB	diam. 8	100	126	21	35.5	HSK 63	form A	-	7.8	A, B					
for diam. 10															
50 10 A63 SB	diam. 10	50	76	24	30.6	HSK 63	form A	-	7.8	A, B					
100 10 A63 SB	diam. 10	100	126	24	38.5	HSK 63	form A	-	7.8	A, B					
Accessories															
KMR-63A coolant supply tube for HSK-tooling A > Page 137		SCHLUESSELHSK63 spanner for coolant tube B > Page 138													

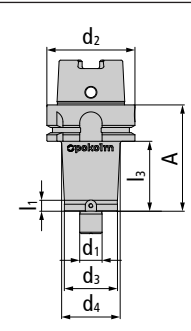
HSK 63 FORM A

for shell-type milling

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



for shell-type milling



Catalogue no.										Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁					
bore diam. 16													
25 16 A63 Z	diam. 16	25	51	38	40	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
50 16 A63 Z	diam. 16	50	76	38	42	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
75 16 A63 Z	diam. 16	75	101	38	45	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
100 16 A63 Z	diam. 16	100	126	38	50	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
125 16 A63 Z	diam. 16	125	151	38	50	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
150 16 A63 Z	diam. 16	150	176	38	50	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
200 16 A63 Z	diam. 16	200	226	38	50	HSK 63	form A	-	7.8	C, D, G, H			G 2.5 (25.000)
bore diam. 22													
25 22 A63	diam. 22	25	51	40	40	HSK 63	form A	-	-	B, E, G, H			G 2.5 (25.000)
50 22 A63	diam. 22	50	76	40	40	HSK 63	form A	-	-	B, E, G, H			G 2.5 (25.000)
75 22 A63.01	diam. 22	75	101	48	50	HSK 63	form A	-	7.8	B, E, G, H			G 2.5 (25.000)
100 22 A63.01	diam. 22	100	126	48	50	HSK 63	form A	-	7.8	B, E, G, H			G 2.5 (25.000)
150 22 A63	diam. 22	150	176	48	48	HSK 63	form A	-	-	B, E, G, H			G 2.5 (25.000)
200 22 A63	diam. 22	200	226	48	49	HSK 63	form A	-	7.8	B, E, G, H			G 2.5 (25.000)
Accessories													
M5X12 screw for drive block 12 x 8 A > Page 136		M4X10 screw for drive block 10 x 8 B > Page 136		M3X10 screws for drive block 8 x 8 C > Page 136		NUTEN8X8 drive block 8 x 8 D > Page 137		NUTEN10X8 drive block 10 x 8 E > Page 137					
NUTEN12X8 drive block 12 x 8 F > Page 137		KMR-63A coolant supply tube for HSK-tooling G > Page 137		SCHLUESSELHSK63 spanner for coolant tube H > Page 138									



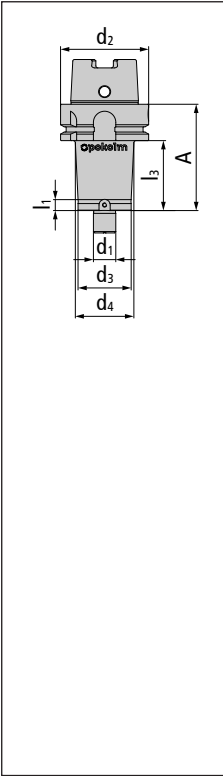
HSK 63 FORM A

for shell-type milling

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

2/2

for shell-type milling										
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		Accessories
								l ₂	l ₁	Features



bore diam. 27											
25 27 A63	diam. 27	25	51	48	48	HSK 63	form A	-	-	A, F, G, H	
50 27 A63	diam. 27	50	76	48	48	HSK 63	form A	-	-	A, F, G, H	
75 27 A63	diam. 27	75	101	48	48	HSK 63	form A	-	-	A, F, G, H	
100 27 A63	diam. 27	100	126	48	48	HSK 63	form A	-	-	A, F, G, H	
150 27 A63	diam. 27	150	176	48	48	HSK 63	form A	-	-	A, F, G, H	
200 27 A63	diam. 27	200	226	48	50	HSK 63	form A	-	7.8	A, F, G, H	
Accessories											
 M5X12 screw for drive block 12 x 8 A > Page 136		 M4X10 screw for drive block 10 x 8 B > Page 136		 M3X10 screws for drive block 8 x 8 C > Page 136		 NUTEN8X8 drive block 8 x 8 D > Page 137		 NUTEN10X8 drive block 10 x 8 E > Page 137			
 NUTEN12X8 drive block 12 x 8 F > Page 137		 KMR-63A coolant supply tube for HSK-tooling G > Page 137		 SCHLUESSELHSK63 spanner for coolant tube H > Page 138							

HSK 63 FORM A

Drill chuck



- Hollow taper shank arbor CNC precision drill chuck according to DIN69893 form E, maximum precision
 - approved for up to max. 7,000 rpm
 - We can supply higher balance quality according to the balance classes on request
 - with internal coolant supply and bore hole for the coolant supply tube
 - independent of rotating direction
 - extremely short and slim design
- Scope of delivery includes small and large seal gasket

Drill chuck										
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		Accessories
								l ₂	l ₁	Features



diam. 0.3 - 8 mm											
BF 0,3-8 A63 IC	diam. 8	73	99	-	36	HSK 63	form A	-	-	A, C, D, E, F, K	 
diam. 0.5 - 13 mm											
BF 0,5-13 A63 IC	diam. 13	84	110	-	50	HSK 63	form A	-	-	B, C, D, G, H, L	 
diam. 2.5 - 16 mm											
BF 2,5-16 A63 IC	diam. 16	89	115	-	57	HSK 63	form A	-	-	B, C, D, I, J, L	 
Accessories											
 INBUS 4T A > Page 137	 INBUS 6T B > Page 137			 KMR-63A coolant supply tube for HSK-tooling C > Page 137			 SCHLUESSELHSK63 spanner for coolant tube D > Page 138		 BF08DS04 seal gasket 08DS04 E > Page 138		
 BF08DS08 seal gasket 08DS08 F > Page 138	 BF13DS06 seal gasket 08DS08 G > Page 138			 BF13DS13 seal gasket13DS13 H > Page 138			 BF16DS06 seal gasket16DS06 I > Page 138		 BF16DS16 seal gasket 16DS16 J > Page 138		
 BF08MW hexagon key 08MW K > Page 138	 BF13MW hexagon key 13MW L > Page 138										



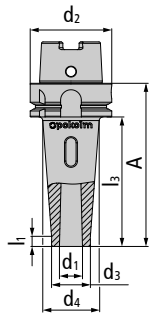
HSK 63 FORM A

for morse taper shanks

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for morse taper shanks

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
MTS 2												
100 MK2 AL A63	MTS 2	100	126	30	44	HSK 63	form A	-	7.8	A, B		
MTS 3												
120 MK3 AL A63	MTS 3	120	146	35	46	HSK 63	form A	-	7.8	A, B		
Accessories												
 KMR-63A coolant supply tube for HSK-tooling A > Page 137	 SCHLUESSELHSK63 spanner for coolant tube B > Page 138											



HSK 63 FORM A

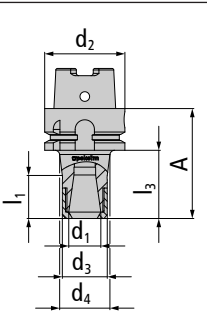
HSC precision collet chucks ER20

- Hollow taper shank arbors according to DIN69893 form A, maximum precision
- fine balanced to G 2.5 gmm at 25,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube



HSC precision collet
chucks ER20

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
for ER 20												
50 ER20 A63	ER 20	50	76	28	32	HSK 63	form A	-	33.8	A, B, C, D		
100 ER20 A63	ER 20	100	126	28	40	HSK 63	form A	-	33.8	A, B, C, D		
Accessories												
 20 501 spanner for ER 20 collet chuck tightening nut A > Page 136	 ER20 001 tightening nut ER 20 B > Page 137	 KMR-63A coolant supply tube for HSK-tooling C > Page 137	 SCHLUESSELHSK63 spanner for coolant tube D > Page 138									

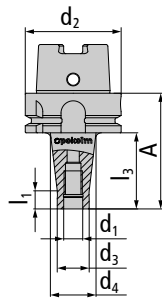


for screw-on end mills

- Hollow taper shaft arbors according to DIN69893 form A, maximum precision
- fine balanced to G 6.3 gmm at 12,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

1 / 2 ▶

for screw-on end mills



M8												
50 08 A100	M 8	50	79	13.8	23	HSK 100	form A	-	12	A, B	   	
100 08 A100	M 8	100	129	13.8	30	HSK 100	form A	-	12	A, B	   	

M10												
50 10 A100	M 10	50	79	18	25	HSK 100	form A	-	12	A, B	   	
75 10 A100	M 10	75	104	18	30	HSK 100	form A	-	12	A, B	   	
100 10 A100	M 10	100	129	18	35	HSK 100	form A	-	12	A, B	   	
150 10 A100	M 10	150	179	18	45	HSK 100	form A	-	12	A, B	   	

M12												
50 12 A100	M 12	50	79	21	30	HSK 100	form A	-	12	A, B	   	
100 12 A100	M 12	100	129	21	38	HSK 100	form A	-	12	A, B	   	
150 12 A100	M 12	150	179	21	52	HSK 100	form A	-	12	A, B	   	
200 12 A100	M 12	200	229	21	58	HSK 100	form A	-	12	A, B	   	
250 12 A100	M 12	250	279	21	62	HSK 100	form A	-	12	A, B	   	
300 12 A100	M 12	300	329	21	68	HSK 100	form A	-	12	A, B	   	

NEW latest items!

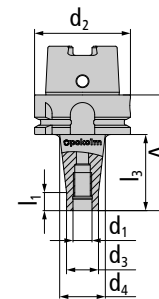
 available as long as stock lasts  on request

☒ stock item, subject to confirmation

68

69

for screw-on end mills



M16											
50 16 A100	M 16	50	79	29	34	HSK 100	form A	-	12	A, B	   
100 16 A100	M 16	100	129	29	40	HSK 100	form A	-	12	A, B	   
150 16 A100	M 16	150	179	29	58	HSK 100	form A	-	12	A, B	   
200 16 A100	M 16	200	229	29	58	HSK 100	form A	-	12	A, B	   
250 16 A100	M 16	250	279	29	66	HSK 100	form A	-	12	A, B	   
300 16 A100	M 16	300	329	29	66	HSK 100	form A	-	12	A, B	   

Accessories	
 KMR-100A coolant supply tube for HSK-tooling A > Page 137	 SCHLUESSELHSK100 spanner for coolant tube B > Page 138



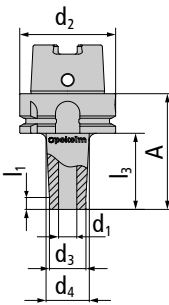
HSK 100 FORM A

for shrinking

- Hollow taper shaft arbors according to DIN69893 form A, maximum precision
- fine balanced to G 6.3 gmm at 12,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shrinking

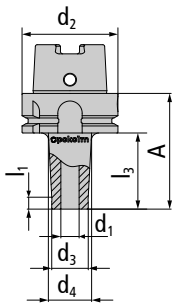
1/2



for diam. 6												NEW	
100 06 A100 S	diam. 6	100	129	12	22	HSK 100	form A	-	7.8	A, B	  		
150 06 A100 S	diam. 6	150	179	12	26.9	HSK 100	form A	-	7.8	A, B	  		
for diam. 8												NEW	
100 08 A100 S	diam. 8	100	129	16	25.7	HSK 100	form A	-	7.8	A, B	  		
150 08 A100 S	diam. 8	150	179	16	30.9	HSK 100	form A	-	7.8	A, B	  		
for diam. 10												NEW	
100 10 A100 S	diam. 10	100	129	20	29.7	HSK 100	form A	-	7.8	A, B	  		
150 10 A100 S	diam. 10	150	179	20	35	HSK 100	form A	-	7.8	A, B	  		
for diam. 12												NEW	
100 12 A100 S	diam. 12	100	129	24	33.7	HSK 100	form A	-	7.8	A, B	  		
150 12 A100 S	diam. 12	150	179	24	39	HSK 100	form A	-	7.8	A, B	  		
for diam. 16												NEW	
60 16 A100 S	diam. 16	60	89	32	37.5	HSK 100	form A	-	7.8	A, B	  		
100 16 A100 S	diam. 16	100	129	32	41.7	HSK 100	form A	-	7.8	A, B	  		
150 16 A100 S	diam. 16	150	179	32	46.9	HSK 100	form A	-	7.8	A, B	  		
for diam. 20												NEW	
60 20 A100 S	diam. 20	60	89	40	40	HSK 100	form A	-	-	A, B	  		
for diam. 25												NEW	
60 25 A100 S	diam. 25	60	89	46	46	HSK 100	form A	-	7.8	A, B	  		

2/2

for shrinking



for diam. 32											NEW	
70 32 A100 S	diam. 32	70	99	44	53	HSK 100	form A	-	7.8	A, B	  	
Accessories												
 KMR-100A coolant supply tube for HSK-tooling A > Page 137		 SCHLUESSELHSK100 spanner for coolant tube B > Page 138										



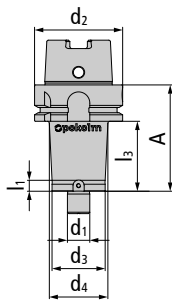
HSK 100 FORM A

for shell-type milling

- Hollow taper shaft arbors according to DIN69893 form A, maximum precision
- fine balanced to G 6.3 gmm at 12,000 rpm
- with internal coolant supply and bore hole for the coolant supply tube

for shell-type milling

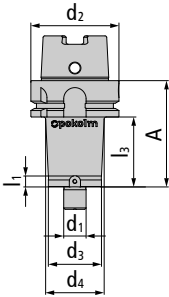
1/2



bore diam. 22												
50 22 A100	diam. 22	50	79	40	40	HSK 100	form A	-	-	A, C, F, G	  	
75 22 A100	diam. 22	75	104	48	48	HSK 100	form A	-	-	A, C, F, G	  	
100 22 A100	diam. 22	100	129	48	50	HSK 100	form A	-	7.8	A, C, F, G	  	
150 22 A100	diam. 22	150	179	48	50	HSK 100	form A	-	7.8	A, C, F, G	  	
200 22 A100	diam. 22	200	229	48	50	HSK 100	form A	-	7.8	A, C, F, G	  	
bore diam. 27												
50 27 A100	diam. 27	50	79	62	62	HSK 100	form A	-	-	B, D, F, G	  	
75 27 A100	diam. 27	75	104	62	62	HSK 100	form A	-	-	B, D, F, G	  	
100 27 A100	diam. 27	100	129	62	71	HSK 100	form A	-	7.8	B, D, F, G	  	
150 27 A100	diam. 27	150	179	62	80	HSK 100	form A	-	7.8	B, D, F, G	  	
200 27 A100	diam. 27	200	229	62	80	HSK 100	form A	-	7.8	B, D, F, G	  	
bore diam. 32												
50 32 A100	diam. 32	50	79	85	85	HSK 100	form A	-	-	B, E, F, G	  	
100 32 A100	diam. 32	100	129	85	85	HSK 100	form A	-	-	B, E, F, G	  	
150 32 A100	diam. 32	150	179	85	85	HSK 100	form A	-	-	B, E, F, G	  	

for shell-type milling

2/2



bore diam. 40													
50 40 A100	diam. 40	50	79	100	88	HSK 100	form A	-	-	B, E, F, G			
Accessories													
 M4X10 screw for drive block 10 x 8 A > Page 136	 M5X16 screw for drive blocks 12 x 12 and 14 x 14 B > Page 136	 NUTEN10X8 drive block 10 x 8 C > Page 137	 NUTEN12X12/2 drive block 12 x 12 D > Page 137	 NUTEN14X14 drive block 14 x 14 E > Page 137									
 KMR-100A coolant supply tube for HSK-tooling F > Page 137	 SCHLUESSELHSK100 spanner for coolant tube G > Page 138												



HSK 100 FORM A

Drill chuck

- Hollow taper shank arbor CNC precision drill chuck according to DIN69893 form E, maximum precision
- approved for up to max. 7,000 rpm
- We can supply higher balance quality according to the balance classes upon request
- with internal coolant supply and bore hole for the coolant supply tube
- independent of rotating direction
- extremely short and slim design

Scope of delivery includes small and large seal gasket

Drill chuck

Drill chuck

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

The diagram shows a side view of a drill chuck. Dimension d₂ is the outer diameter of the top flange. d₁ is the diameter of the central bore. d₃/d₄ is the diameter of the bottom flange. l₁ is the length of the top flange. l₂ is the length of the central body. l₃ is the length of the bottom flange. A is the total length of the chuck.

diam. 0.5 - 13 mm

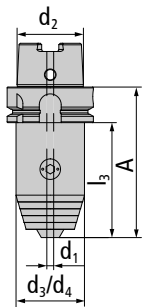
BF 0,5-13 A100 IC	diam. 13	89	118	-	50	HSK 100	form A	-	-	A, B, C, D, E, H	☒	
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diam. 2.5 - 16 mm

BF 2,5-16 A100 IC	diam. 16	83	112	-	57	HSK 100	form A	-	-	A, B, C, F, G, H	☒	
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Accessories

 INBUS 6T A > Page 137	 KMR-100A coolant supply tube for HSK-tooling B > Page 137	 SCHLUESSELHSK100 spanner for coolant tube C > Page 138	 BF13DS06 seal gasket 08DS08 D > Page 138	 BF13DS13 seal gasket 13DS13 E > Page 138
 BF16DS06 seal gasket 16DS06 F > Page 138	 BF16DS16 seal gasket 16DS16 G > Page 138	 BF13MW hexagon key 13MW H > Page 138		



STEEP TAPER SHANKS SK / BT

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SK 30 DIN 69871 AD

for screw-on end mills

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm

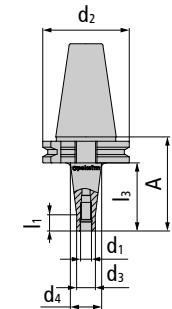
for screw-on end mills

for screw-on end mills

Catalogue no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
---------------	----------------	----------------	---	----------------	----------------	----------------	----------	----------------	----------------	-------------	----------

Technical drawing of a screw-on end mill. The drawing shows a side view of the tool with various dimensions labeled: d₁ (inner diameter), d₂ (outer diameter), d₃ (inner diameter at the base), d₄ (outer diameter at the base), l₁ (height of the inner diameter section), l₂ (height of the outer diameter section), l₃ (height of the base section), and A (total height).

M8	25 08 730	M 8	25	44.1	13.8	15	SK 30	DIN 69871 AD	-	12	A, B	
M10	25 10 730	M 10	25	44.1	18	23	SK 30	DIN 69871 AD	-	12	A, B	
M12	25 12 730	M 12	25	44.1	21	24	SK 30	DIN 69871 AD	-	12	A, B	
M16	25 16 730	M 16	25	44.1	29	29	SK 30	DIN 69871 AD	-	-	A, B	
Accessories												
KBSK30-69872A retention knob with through hole A > Page 138	KBSK30-69872B retention knob without through hole B > Page 138											



SK 30 DIN 69871 AD

for shrinking

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm

for shrinking

for shrinking

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

for diam. 3

50 03 730 S.01

diam.
3

50

69.1

9

15.7

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 4

50 04 730 S.01

diam.
4

50

69.1

10.5

14.9

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 6

50 06 730 S

diam.
6

50

69.1

12

16.4

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 8

50 08 730 S

diam.
8

50

69.1

16

20.4

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 10

50 10 730 S

diam.
10

50

69.1

20

24.4

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 12

50 12 730 S

diam.
12

50

69.1

24

28.4

SK 30

DIN 69871
AD

-

7.8

A, B

for diam. 16

50 16 730 S

diam.
16

50

69.1

32

36.4

SK 30

DIN 69871
AD

-

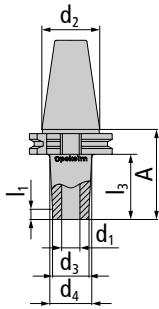
7.8

A, B

Accessories

KBSK30-69872A
retention knob with
through hole
A > Page 138

KBSK30-69872B
retention knob without
through hole
B > Page 138





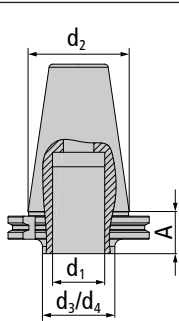
SK 30 DIN 69871 AD

for shrinking | zero reach adapters

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 1/min

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter. (starting on page 19)

for shrinking zero reach arbors											
Catalogue no.											
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
for diam. 16											
15 16 730 S	diam. 16	15	34.1	32	32	SK 30	DIN 69871 AD	-	-	A, B	
for diam. 20											
15 20 730 S	diam. 20	15	34.1	40	40	SK 30	DIN 69871 AD	-	-	A, B	
Accessories											
KBSK30-69872A retention knob with through hole A > Page 138		KBSK30-69872B retention knob without through hole B > Page 138									

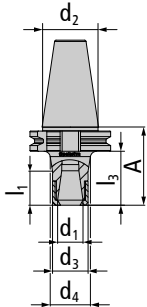


SK 30 DIN 69871 AD

HSC precision collet chucks ER20

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm

HSC precision collet chucks ER20											
Catalogue no.											
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
for ER 20											
50 ER20 730	ER 20	50	69.1	28	32	SK 30	DIN 69871 AD	-	19.3	A, B, C, D	
Accessories											
20 501 spanner for ER 20 collet chuck tightening nut A > Page 136		ER20 001 tightening nut ER 20 B > Page 137		KBSK30-69872A retention knob with through hole C > Page 138		KBSK30-69872B retention knob without through hole D > Page 138					





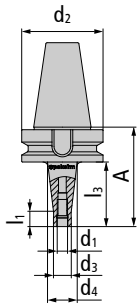
BT 30 JIS B 6339 AD

for screw-on end mills

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm

for screw-on end mills

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
M8												
25 08 734	M 8	25	47	13.8	15	BT 30	JIS B 6339 AD	-	12			
M10												
25 10 734	M 10	25	47	18	23	BT 30	JIS B 6339 AD	-	12			
M12												
25 12 734	M 12	25	47	21	24	BT 30	JIS B 6339 AD	-	12			
M16												
25 16 734	M 16	25	47	29	29	BT 30	JIS B 6339 AD	-	12			



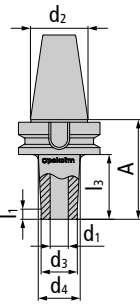
BT 30 JIS B 6339 AD

for shrinking

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm

for shrinking

Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
for diam. 3												
50 03 734 S.01	diam. 3	50	72	9	15.6	BT 30	JIS B 6339 AD	-	7.8			
for diam. 4												
50 04 734 S.01	diam. 4	50	72	10.5	14.9	BT 30	JIS B 6339 AD	-	7.8			
for diam. 6												
50 06 734 S	diam. 6	50	72	12	16	BT 30	JIS B 6339 AD	-	7.8			
for diam. 8												
50 08 734 S	diam. 8	50	72	16	21	BT 30	JIS B 6339 AD	-	7.8			
for diam. 10												
50 10 734 S	diam. 10	50	72	20	24.4	BT 30	JIS B 6339 AD	-	7.8			
for diam. 12												
50 12 734 S	diam. 12	50	72	24	29	BT 30	JIS B 6339 AD	-	7.8			
fordiam. 16												
50 16 734 S	diam. 16	50	72	32	36.4	BT 30	JIS B 6339 AD	-	7.8			



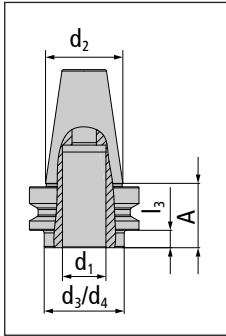


BT 30 JIS B 6339 AD
for shrinking | zero reach adapters

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 1/min

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter. (starting page 19)

for shrinking | zero reach arbors



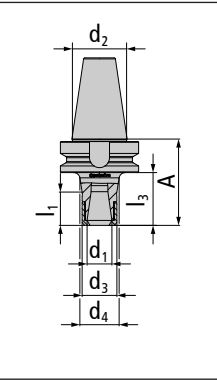
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories	Features
for diam. 16													
10 16 734 S	diam. 16	10	32	32	32	BT 30	JIS B 6339 AD	-	-				
for diam. 20													
15 20 734 S	diam. 20	15	37	40	40	BT 30	JIS B 6339 AD	-	-				

BT 30 JIS B 6339 AD
HSC precision collet chucks ER20

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 2.5 gmm at 30,000 rpm



HSC precision collet chucks ER20



Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories	Features
for ER 20													
50 ER20 734	ER 20	50	72	28	32	BT 30	JIS B 6339 AD	-	19.3	A, B			
Accessories													
20 501 spanner for ER 20 collet chuck tightening nut A > Page 136		ER20 001 tightening nut ER 20 B > Page 137											



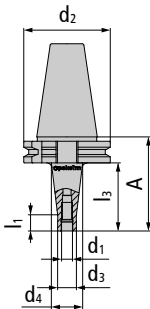
SK 40 DIN 69 871 AD
for screw-on end mills

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

1/2

for screw-on end mills

for screw-on end mills											
Catalogue no.											
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories	Features



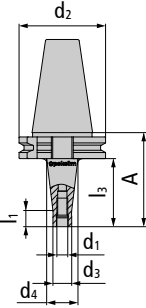
M8													
25 08 750	M 8	25	44.1	13.8	15	SK 40	DIN 69871 AD	-	12	A, B			
50 08 750	M 8	50	69.1	13.8	23	SK 40	DIN 69871 AD	-	12	A, B			
75 08 750	M 8	75	94.1	13.8	25	SK 40	DIN 69871 AD	-	12	A, B			
100 08 750	M 8	100	119.1	13.8	30	SK 40	DIN 69871 AD	-	12	A, B			

M10													
25 10 750	M 10	25	44.1	18	23	SK 40	DIN 69871 AD	-	12	A, B			
50 10 750	M 10	50	69.1	18	25	SK 40	DIN 69871 AD	-	12	A, B			
75 10 750	M 10	75	94.1	18	30	SK 40	DIN 69871 AD	-	12	A, B			
100 10 750	M 10	100	119.1	18	35	SK 40	DIN 69871 AD	-	12	A, B			
125 10 750	M 10	125	144.1	18	40	SK 40	DIN 69871 AD	-	12	A, B			
150 10 750	M 10	150	169.1	18	45	SK 40	DIN 69871 AD	-	12	A, B			

M12													
25 12 750	M 12	25	44.1	21	24	SK 40	DIN 69871 AD	-	12	A, B			
50 12 750	M 12	50	69.1	21	30	SK 40	DIN 69871 AD	-	12	A, B			
75 12 750	M 12	75	94.1	21	35	SK 40	DIN 69871 AD	-	12	A, B			
100 12 750	M 12	100	119.1	21	38	SK 40	DIN 69871 AD	-	12	A, B			
125 12 750	M 12	125	144.1	21	44	SK 40	DIN 69871 AD	-	12	A, B			
150 12 750	M 12	150	169.1	21	48	SK 40	DIN 69871 AD	-	12	A, B			

for screw-on end mills

for screw-on end mills											
Catalogue no.											
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories	Features



M16													
	25 16 750	M 16	25	44.1	29	29	SK 40	DIN 69871 AD	-	-	A, B	  	
	50 16 750	M 16	50	69.1	29	34	SK 40	DIN 69871 AD	-	12	A, B	  	
	75 16 750	M 16	75	94.1	29	35	SK 40	DIN 69871 AD	-	12	A, B	  	
	100 16 750	M 16	100	119.1	29	40	SK 40	DIN 69871 AD	-	12	A, B	  	
	125 16 750	M 16	125	144.1	29	44	SK 40	DIN 69871 AD	-	12	A, B	  	
	150 16 750	M 16	150	169.1	29	48	SK 40	DIN 69871 AD	-	12	A, B	  	
	200 16 750	M 16	200	219.1	29	48	SK 40	DIN 69871 AD	-	12	A, B	  	
	250 16 750	M 16	250	269.1	29	48	SK 40	DIN 69871 AD	-	12	A, B	  	

Accessories				



SK 40 DIN 69 871 AD
for screw-on end mills | cylindrical

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

for screw-on end mills |
cylindrical

Catalogue no.

d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
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M8											
50 08 750 ZYL	M 8	50	69.1	13.8	13.8	SK 40	DIN 69871 AD	-	-	A, B	  

M10											
50 10 750 ZYL	M 10	50	69.1	18	18	SK 40	DIN 69871 AD	-	-	A, B	  
75 10 750 ZYL	M 10	75	94.1	18	18	SK 40	DIN 69871 AD	-	-	A, B	  
100 10 750 ZYL	M 10	100	119.1	18	18	SK 40	DIN 69871 AD	-	-	A, B	  

M12											
50 12 750 ZYL	M 12	50	69.1	21	21	SK 40	DIN 69871 AD	-	-	A, B	  
75 12 750 ZYL	M 12	75	94.1	21	21	SK 40	DIN 69871 AD	-	-	A, B	  
100 12 750 ZYL	M 12	100	119.1	21	21	SK 40	DIN 69871 AD	-	-	A, B	  

M16											
50 16 750 ZYL	M 16	50	69.1	29	29	SK 40	DIN 69871 AD	-	-	A, B	  
75 16 750 ZYL	M 16	75	94.1	29	29	SK 40	DIN 69871 AD	-	-	A, B	  
100 16 750 ZYL	M 16	100	119.1	29	29	SK 40	DIN 69871 AD	-	-	A, B	  

Accessories				

SK 40 DIN 69 871 AD
for shrinking

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm



for shrinking

Catalogue no.

d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
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for diam. 3											
50 03 750 S.01	diam. 3	50	69.1	9	15.6	SK 40	DIN 69871 AD	-	7.8	A, B	  
100 03 750 S.01	diam. 3	100	119.1	9	23.5	SK 40	DIN 69871 AD	-	7.8	A, B	  

for diam. 4											
50 04 750 S.01	diam. 4	50	69.1	10.5	14.9	SK 40	DIN 69871 AD	-	7.8	A, B	
75 04 750 S.01	diam. 4	75	94.1	10.5	17.54	SK 40	DIN 69871 AD	-	7.8	A, B	
100 04 750 S.01	diam. 4	100	119.1	10.5	20.16	SK 40	DIN 69871 AD	-	7.8	A, B	

for diam. 6											
50 06 750 S	diam. 6	50	69.1	12	16.4	SK 40	DIN 69871 AD	-	7.8	A, B	    
75 06 750 S	diam. 6	75	94.1	12	19	SK 40	DIN 69871 AD	-	7.8	A, B	    
100 06 750 S	diam. 6	100	119.1	12	21.7	SK 40	DIN 69871 AD	-	7.8	A, B	    
150 06 750 S	diam. 6	150	169.1	12	27	SK 40	DIN 69871 AD	-	7.8	A, B	    

for diam. 8											
50 08 750 S	diam. 8	50	69.1	16	20.4	SK 40	DIN 69871 AD	-	7.8	A, B	   
75 08 750 S	diam. 8	75	94.1	16	23	SK 40	DIN 69871 AD	-	7.8	A, B	   
100 08 750 S	diam. 8	100	119.1	16	25.7	SK 40	DIN 69871 AD	-	7.8	A, B	   

for diam. 10											
50 10 750 S	diam. 10	50	69.1	20	24.4	SK 40	DIN 69871 AD	-	7.8	A, B	  
75 10 750 S	diam. 10	75	94.1	20	27	SK 40	DIN 69871 AD	-	7.8	A, B	  
100 10 750 S	diam. 10	100	119.1	20	29.7	SK 40	DIN 69871 AD	-	7.8	A, B	  

Accessories				



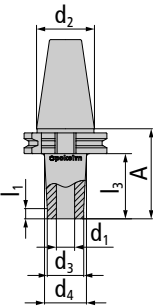
SK 40 DIN 69 871 AD

for shrinking

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

2/2

for shrinking													
Catalogue no.			d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features



for diam. 12													
50 12 750 S	diam. 12	50	69.1	24	28.4	SK 40	DIN 69871 AD	-	7.8	A, B			
75 12 750 S	diam. 12	75	94.1	24	31	SK 40	DIN 69871 AD	-	7.8	A, B			
100 12 750 S	diam. 12	100	119.1	24	33.6	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 16													
50 16 750 S	diam. 16	50	69.1	32	36.4	SK 40	DIN 69871 AD	-	7.8	A, B			
75 16 750 S	diam. 16	75	94.1	32	39	SK 40	DIN 69871 AD	-	7.8	A, B			
100 16 750 S	diam. 16	100	119.1	32	41.7	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 20													
50 20 750 S	diam. 20	50	69.1	40	44.4	SK 40	DIN 69871 AD	-	7.8	A, B			
75 20 750 S	diam. 20	75	94.1	40	47	SK 40	DIN 69871 AD	-	7.8	A, B			
100 20 750 S	diam. 20	100	119.1	40	49	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 25													
60 25 750 S	diam. 25	60	79.1	45	45	SK 40	DIN 69871 AD	-	-	A, B			

Accessories													
	KBSK40-69872A retention knob with through hole A > Page 138		KBSK40-69872B retention knob without through hole B > Page 138										

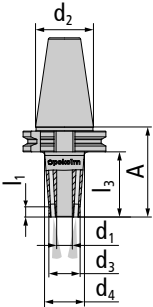


SK 40 DIN 69 871 AD

for shrinking | reinforced design

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm
- internal coolant supply via cone

for shrinking rein- forced design													
Catalogue no.			d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features



for diam. 6													
50 06 750 SB	diam. 6	50	69.1	21	27.6	SK 40	DIN 69871 AD	-	7.8	A, B			
100 06 750 SB	diam. 6	100	119.1	21	35.5	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 8													
50 08 750 SB	diam. 8	50	69.1	21	27.6	SK 40	DIN 69871 AD	-	7.8	A, B			
100 08 750 SB	diam. 8	100	119.1	21	35.5	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 10													
50 10 750 SB	diam. 10	50	69.1	24	30.6	SK 40	DIN 69871 AD	-	7.8	A, B			
100 10 750 SB	diam. 10	100	119.1	24	38.5	SK 40	DIN 69871 AD	-	7.8	A, B			

for diam. 12													
50 12 750 SB	diam. 12	50	69.1	24	30.6	SK 40	DIN 69871 AD	-	7.8	A, B			
100 12 750 SB	diam. 12	100	119.1	24	38.5	SK 40	DIN 69871 AD	-	7.8	A, B			

Accessories													
	KBSK40-69872A retention knob with through hole A > Page 138		KBSK40-69872B retention knob without through hole B > Page 138										



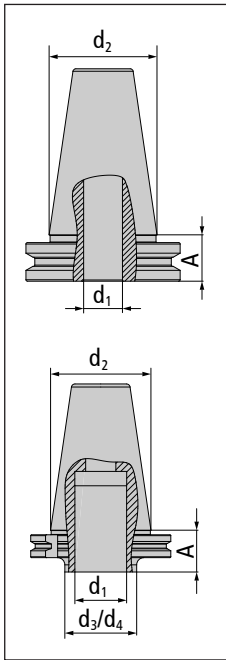
SK 40 DIN 69 871 AD

for shrinking | zero reach adapters

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 1/min

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter. (starting page 19)

for shrinking | zero reach arbors



for diam. 16											
00 16 750 S	diam. 16	0	19.1	-	-	SK 40	DIN 69871 AD	-	-	A, B	  
for diam. 20											
00 20 750 S	diam. 20	0	19.1	-	-	SK 40	DIN 69871 AD	-	-	A, B	  
for diam. 25											
00 25 750 S	diam. 25	10	29.1	44	44	SK 40	DIN 69871 AD	-	-	A, B	  
Accessories											
 KBSK40-69872A retention knob with through hole A > Page 138	 KBSK40-69872B retention knob without through hole B > Page 138										

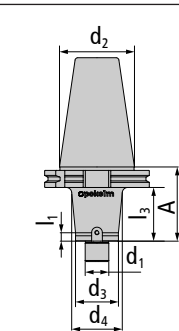
SK 40 DIN 69 871 AD

for shell-type milling

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm



for shell-type milling



Catalogue no.														Form/DIN		Accessories		Features							
														d ₁	l ₃	A	d ₃	d ₄	d ₂	l ₂	l ₁				
bore diam. 16																									
25 16 750 Z		diam. 16	25	44.1	38	40	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
50 16 750 Z		diam. 16	50	69.1	38	42	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
75 16 750 Z		diam. 16	75	94.1	38	45	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
100 16 750 Z		diam. 16	100	119.1	38	48	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
125 16 750 Z		diam. 16	125	144.1	38	50	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
150 16 750 Z		diam. 16	150	169.1	38	50	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
200 16 750 Z		diam. 16	200	219.1	38	50	SK 40	DIN 69871 AD	-	7.8	C, D, G, H			G 6.3 18.000											
bore diam. 22																									
25 22 750		diam. 22	25	44.1	40	40	SK 40	DIN 69871 AD	-	-	B, E, G, H			G 6.3 18.000											
50 22 750		diam. 22	50	69.1	40	48	SK 40	DIN 69871 AD	-	7.8	B, E, G, H			G 6.3 18.000											
75 22 750		diam. 22	75	94.1	48	48	SK 40	DIN 69871 AD	-	-	B, E, G, H			G 6.3 18.000											
100 22 750		diam. 22	100	119.1	48	48	SK 40	DIN 69871 AD	-	-	B, E, G, H			G 6.3 18.000											
150 22 750		diam. 22	150	169.1	48	48	SK 40	DIN 69871 AD	-	-	B, E, G, H			G 6.3 18.000											
200 22 750		diam. 22	200	219.1	48	48	SK 40	DIN 69871 AD	-	-	B, E, G, H			G 6.3 18.000											
Accessories																									
M5X12 screw for drive block 12 x 8 A > Page 136		M4X10 screw for drive block 10 x 8 B > Page 136		M3X10 screws for drive block 8 x 8 C > Page 136		NUTEN8X8 drive block 8 x 8 D > Page 137		NUTEN10X8 drive block 10 x 8 E > Page 137																	
NUTEN12X8 drive block 12 x 8 F > Page 137		KBSK40-69872A retention knob with through hole G > Page 138		KBSK40-69872B retention knob without through hole H > Page 138																					



SK 40 DIN 69 871 AD

for shell-type milling

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

2/2

for shell-type milling

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

bore diam. 27

15 27 750	diam. 27	15	34.1	48	48	SK 40	DIN 69871 AD	-	-	A, F, G, H		
50 27 750	diam. 27	50	69.1	48	48	SK 40	DIN 69871 AD	-	-	A, F, G, H		
75 27 750	diam. 27	75	94.1	48	48	SK 40	DIN 69871 AD	-	-	A, F, G, H		
100 27 750	diam. 27	100	119.1	48	48	SK 40	DIN 69871 AD	-	-	A, F, G, H		

Accessories

 M5X12 screw for drive block 12 x 8 A > Page 136	 M4X10 screw for drive block 10 x 8 B > Page 136	 M3X10 screws for drive block 8 x 8 C > Page 136	 NUTEN8X8 drive block 8 x 8 D > Page 137	 NUTEN10X8 drive block 10 x 8 E > Page 137
 NUTEN12X8 drive block 12 x 8 F > Page 137	 KBSK40-69872A retention knob with through hole G > Page 138	 KBSK40-69872B retention knob without through hole H > Page 138		

SK 40 DIN 69 871 AD

Drill chuck



- Steep taper shanks DIN 69871 AD, maximum precision
- approved for up to max. 7,000 rpm
- We can supply higher balance quality according to the balance classes on request
- with internal coolant supply and bore hole for the coolant supply tube
- independent of rotating direction
- extremely short and slim design

Scope of delivery includes small and large seal gasket

Drill chuck												Catalogue no.										Accessories		Features			
												d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁						
												diam. 0.3 - 8 mm															
												BF 0,3-8 750 IC	diam. 8	57	76.1	-	36	SK 40	DIN 69871 AD	-	-	A, C, D, E, F, K					
												diam. 0.5 - 13 mm															
												BF 0,5-13 750 IC	diam. 13	97	116.1	-	50	SK 40	DIN 69871 AD	-	-	B, C, D, G, H, L					
												diam. 2.5 - 16 mm															
BF 2,5-16 750 IC	diam. 16	82	101.1	-	57	SK 40	DIN 69871 AD	-	-	B, C, D, I, J, L																	
Accessories																											
 INBUS 4T A > Page 137				 INBUS 6T B > Page 137				 KBSK40-69872A retention knob with through hole C > Page 138				 KBSK40-69872B retention knob without through hole D > Page 138				 BF08DS04 seal gasket 08DS04 E > Page 138											
 BF08DS08 seal gasket 08DS08 F > Page 138				 BF13DS06 seal gasket 08DS08 G > Page 138				 BF13DS13 seal gasket 13DS13 H > Page 138				 BF16DS06 seal gasket 16DS06 I > Page 138				 BF16DS16 seal gasket 16DS16 J > Page 138											
 BF08MW hexagon key 08MW K > Page 138				 BF13MW hexagon key 13MW L > Page 138																							



SK 40 DIN 69 871 AD

HSC precision collet chucks ER20

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

HSC precision collet
chucks ER20

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

for ER 20

50 ER20 750	ER 20	50	69.1	28	33	SK 40	DIN 69871 AD	-	33.8	A, B, C, D	 
100 ER20 750	ER 20	100	119.1	28	40	SK 40	DIN 69871 AD	-	33.8	A, B, C, D	 

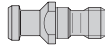
Accessories



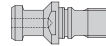
20 501
spanner for ER 20 collet
chuck tightening nut
A > Page 136



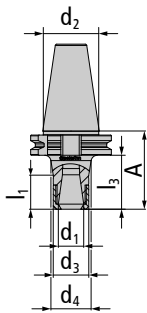
ER20 001
tightening nut ER 20
B > Page 137



KBSK40-69872A
retention knob with
through hole
C > Page 138



KBSK40-69872B
retention knob without
through hole
D > Page 138



SK 40 DIN 69 871 AD

for rotary transmission leadthrough

- Steep taper rotary transmission leadthrough DIN 69871 AD
- approved for up to max. 6,000 rpm
- suitable for oiled compressed air and minimum quantity lubrication
- independent of rotating direction

for rotary transmission
leadthrough

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

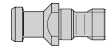
for threaded shank milling

30 12 750 DDLS	M 12	30	49.1	21	25	SK 40	DIN 69871 AD	-	8	A, B	
30 16 750 DDLS	M 16	30	49.1	29	32	SK 40	DIN 69871 AD	-	8	A, B	

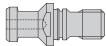
for shell-type milling

30 22 750 DDLS	diam. 22	30	49.1	48	50	SK 40	DIN 69871 AD	-	-	A, B	
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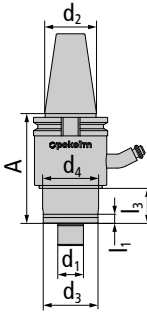
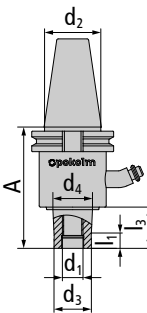
Accessories



KBSK40-69872A
retention knob with
through hole
A > Page 138



KBSK40-69872B
retention knob without
through hole
B > Page 138





BT 40 JIS B 6339 AD

for screw-on end mills

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

BT 40 JIS B 6339 AD

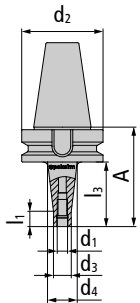
for screw-on end mills | cylindrical

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm



for screw-on end mills

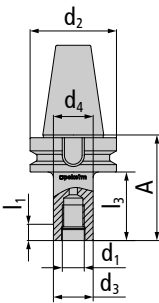
Catalogue no.											Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		



M8													
25 08 754	M 8	25	52	13.8	15	BT 40	JIS B 6339 AD	-	12				
50 08 754	M 8	50	77	13.8	23	BT 40	JIS B 6339 AD	-	12				
75 08 754	M 8	75	102	13.8	25	BT 40	JIS B 6339 AD	-	12				
100 08 754	M 8	100	127	13.8	30	BT 40	JIS B 6339 AD	-	12				
M10													
25 10 754	M 10	25	52	18	23	BT 40	JIS B 6339 AD	-	12				
50 10 754	M 10	50	77	18	25	BT 40	JIS B 6339 AD	-	12				
75 10 754	M 10	75	102	18	30	BT 40	JIS B 6339 AD	-	12				
100 10 754	M 10	100	127	18	35	BT 40	JIS B 6339 AD	-	12				
M12													
25 12 754	M 12	25	52	21	24	BT 40	JIS B 6339 AD	-	12				
50 12 754	M 12	50	77	21	30	BT 40	JIS B 6339 AD	-	12				
75 12 754	M 12	75	102	21	35	BT 40	JIS B 6339 AD	-	12				
100 12 754	M 12	100	127	21	38	BT 40	JIS B 6339 AD	-	12				
M16													
25 16 754	M 16	25	52	29	29	BT 40	JIS B 6339 AD	-	-				
50 16 754	M 16	50	77	29	34	BT 40	JIS B 6339 AD	-	12				
75 16 754	M 16	75	102	29	35	BT 40	JIS B 6339 AD	-	12				
100 16 754	M 16	100	127	29	40	BT 40	JIS B 6339 AD	-	12				
150 16 754	M 16	150	177	29	48	BT 40	JIS B 6339 AD	-	12				

for screw-on end mills | cylindrical

Catalogue no.											Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		



M8													
50 08 754 ZYL	M 8	50	77	13.8	13.8	BT 40	JIS B 6339 AD	-	-				
M10													
50 10 754 ZYL	M 10	50	77	18	18	BT 40	JIS B 6339 AD	-	-				
75 10 754 ZYL	M 10	75	102	18	18	BT 40	JIS B 6339 AD	-	-				
100 10 754 ZYL	M 10	100	127	18	18	BT 40	JIS B 6339 AD	-	-				
M12													
50 12 754 ZYL	M 12	50	77	21	21	BT 40	JIS B 6339 AD	-	-				
75 12 754 ZYL	M 12	75	102	21	21	BT 40	JIS B 6339 AD	-	-				
100 12 754 ZYL	M 12	100	127	21	21	BT 40	JIS B 6339 AD	-	-				
M16													
50 16 754 ZYL	M 16	50	77	29	29	BT 40	JIS B 6339 AD	-	-				
75 16 754 ZYL	M 16	75	102	29	29	BT 40	JIS B 6339 AD	-	-				
100 16 754 ZYL	M 16	100	127	29	29	BT 40	JIS B 6339 AD	-	-				



BT 40 JIS B 6339 AD

for shrinking

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

1/2

for shrinking

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

l₁

Accessories

Features

for diam. 3

50 03 754 S.01	diam. 3	50	77	9	15.6	BT 40	JIS B 6339 AD	-	7.8				
100 03 754 S.01	diam. 3	100	127	9	23.5	BT 40	JIS B 6339 AD	-	7.8				

for diam. 4

50 04 754 S.01	diam. 4	50	77	10.5	14.9	BT 40	JIS B 6339 AD	-	7.8				
100 04 754 S.01	diam. 4	100	127	10.5	20.2	BT 40	JIS B 6339 AD	-	7.8				

for diam. 6

50 06 754 S	diam. 6	50	77	12	16	BT 40	JIS B 6339 AD	-	7.8				
100 06 754 S	diam. 6	100	127	12	21.7	BT 40	JIS B 6339 AD	-	7.8				

for diam. 8

50 08 754 S	diam. 8	50	77	16	21	BT 40	JIS B 6339 AD	-	7.8				
100 08 754 S	diam. 8	100	127	16	25.7	BT 40	JIS B 6339 AD	-	7.8				

for diam. 10

50 10 754 S	diam. 10	50	77	20	24.4	BT 40	JIS B 6339 AD	-	7.8				
100 10 754 S	diam. 10	100	127	20	29.7	BT 40	JIS B 6339 AD	-	7.8				

for diam. 12

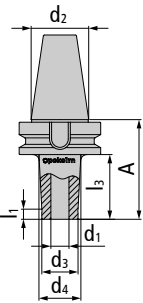
50 12 754 S	diam. 12	50	77	24	29	BT 40	JIS B 6339 AD	-	7.8				
100 12 754 S	diam. 12	100	127	24	33.7	BT 40	JIS B 6339 AD	-	7.8				

for diam. 16

50 16 754 S	diam. 16	50	77	32	36.4	BT 40	JIS B 6339 AD	-	7.8				
100 16 754 S	diam. 16	100	127	32	41.7	BT 40	JIS B 6339 AD	-	7.8				

for diam. 20

50 20 754 S	diam. 20	50	77	40	44.4	BT 40	JIS B 6339 AD	-	7.8				
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for shrinking

Catalogue no.

d₁

l₃

A

d₃

d₄

d₂

Form/DIN

l₂

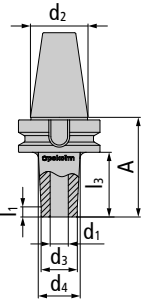
l₁

Accessories

Features

for diam. 25

60 25 754 S	diam. 25	60	87	46	46	BT 40	JIS B 6339 AD	-	-				
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2/2

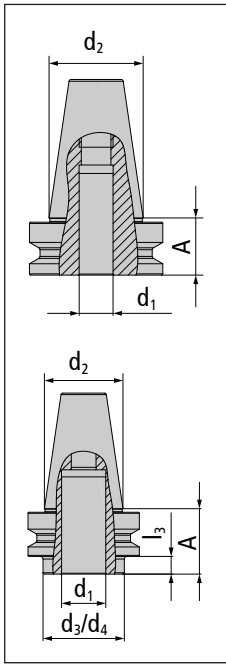


BT 40 JIS B 6339 AD
for shrinking | zero reach adapters

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter. (starting page 19)

for shrinking | zero reach arbors



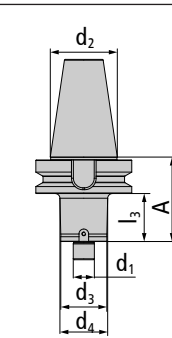
for diam. 16												
00 16 754 S	diam. 16	0	27	-	-	BT 40	JIS B 6339 AD	-	-		  	 
for diam. 20												
00 20 754 S	diam. 20	0	27	-	-	BT 40	JIS B 6339 AD	-	-		  	 
for diam. 25												
00 25 754 S	diam. 25	10	37	46	46	BT 40	JIS B 6339 AD	-	-		  	 

BT 40 JIS B 6339 AD
for shell-type milling

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm



for shell-type milling



Catalogue no.													Accessories		Features									
													d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁		
bore diam. 16																								
25 16 754 Z	diam. 16	25	52	38	40	BT 40	JIS B 6339 AD	-	7.8	C, D														
50 16 754 Z	diam. 16	50	77	38	42	BT 40	JIS B 6339 AD	-	7.8	C, D														
75 16 754 Z	diam. 16	75	102	38	45	BT 40	JIS B 6339 AD	-	7.8	C, D														
100 16 754 Z	diam. 16	100	127	38	48	BT 40	JIS B 6339 AD	-	7.8	C, D														
150 16 754 Z	diam. 16	150	177	38	50	BT 40	JIS B 6339 AD	-	7.8	C, D														
bore diam. 22																								
25 22 754	diam. 22	25	52	40	40	BT 40	JIS B 6339 AD	-	7.8	B, E														
50 22 754	diam. 22	50	77	40	40	BT 40	JIS B 6339 AD	-	7.8	B, E														
75 22 754	diam. 22	75	102	48	48	BT 40	JIS B 6339 AD	-	7.8	B, E														
100 22 754	diam. 22	100	127	48	48	BT 40	JIS B 6339 AD	-	7.8	B, E														
150 22 754	diam. 22	150	177	48	48	BT 40	JIS B 6339 AD	-	7.8	B, E														
200 22 754	diam. 22	200	227	48	48	BT 40	JIS B 6339 AD	-	7.8	B, E														
Accessories																								
M5X12 screw for drive block 12 x 8 A > Page 136		M4X10 screw for drive block 10 x 8 B > Page 136		M3X10 screws for drive block 8 x 8 C > Page 136		NUTEN8X8 drive block 8 x 8 D > Page 137		NUTEN10X8 drive block 10 x 8 E > Page 137																
NUTEN12X8 drive block 12 x 8 F > Page 137																								



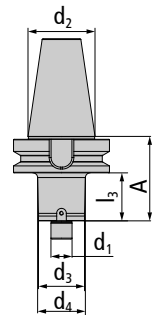
BT 40 JIS B 6339 AD

for shell-type milling

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

2/2

for shell-type milling											Accessories	Features
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂		



bore diam. 27											
15 27 754	diam. 27	15	42	48	48	BT 40	JIS B 6339 AD	-	-	A, F	
50 27 754	diam. 27	50	77	48	48	BT 40	JIS B 6339 AD	-	-	A, F	
75 27 754	diam. 27	75	102	48	48	BT 40	JIS B 6339 AD	-	-	A, F	
100 27 754	diam. 27	100	127	48	48	BT 40	JIS B 6339 AD	-	-	A, F	
150 27 754	diam. 27	150	177	48	48	BT 40	JIS B 6339 AD	-	-	A, F	

Accessories				
M5X12 screw for drive block 12 x 8 A > Page 136	M4X10 screw for drive block 10 x 8 B > Page 136	M3X10 screws for drive block 8 x 8 C > Page 136	NUTEN8X8 drive block 8 x 8 D > Page 137	NUTEN10X8 drive block 10 x 8 E > Page 137
NUTEN12X8 drive block 12 x 8 F > Page 137				

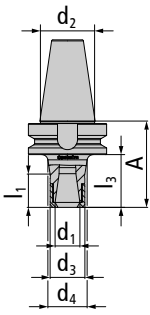


BT 40 JIS B 6339 AD

HSC precision collet chucks ER20

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 6.3 gmm at 18,000 rpm

HSC precision collet chucks ER20											Accessories	Features
Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂		



for ER 20											
50 ER20 754	ER 20	50	77	28	32	BT 40	JIS B 6339 AD	-	33.8	A, B	
100 ER20 754	ER 20	100	127	28	40	BT 40	JIS B 6339 AD	-	33.8	A, B	

Accessories				
20 501 spanner for ER 20 collet chuck tightening nut A > Page 136	ER20 001 tightening nut ER 20 B > Page 137			



BT 40 JIS B 6339 AD
for rotary transmission leadthrough

- Steep taper rotary transmission leadthrough JIS B 6339
- approved for up to max. 6,000 rpm
- suitable for oiled compressed air and minimum quantity lubrication
- independent of rotating direction

for rotary transmission
leadthrough

Catalogue no.

d₁ l₃ A d₃ d₄ d₂ Form/DIN l₂ l₁

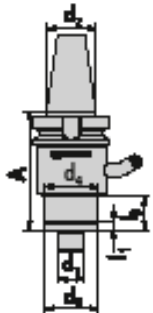
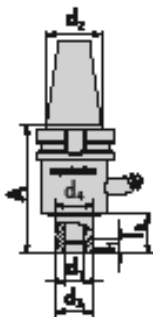
Accessories
Features

for threaded shank milling

30 12 754 DDLS	M 12	30	57	21	25	BT 40	JIS B 6339 AD	-	8		
30 16 754 DDLS	M 16	30	57	29	30	BT 40	JIS B 6339 AD	-	8		

for shell-type milling

30 22 754 DDLS	diam. 22	30	57	48	50	BT 40	JIS B 6339 AD	-	-		
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SK 50 DIN 69 871 AD
for screw-on end mills

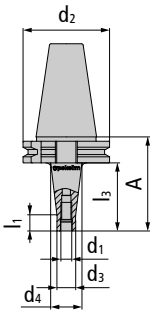
- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

for screw-on end mills

Catalogue no.

d₁ l₃ A d₃ d₄ d₂ Form/DIN l₂ l₁

Accessories
Features



M10

50 10 710	M 10	50	69.1	18	25	SK 50	DIN 69871 AD	-	12	A, B	
75 10 710	M 10	75	94.1	18	30	SK 50	DIN 69871 AD	-	12	A, B	
100 10 710	M 10	100	119.1	18	35	SK 50	DIN 69871 AD	-	12	A, B	
150 10 710	M 10	150	169.1	18	45	SK 50	DIN 69871 AD	-	12	A, B	

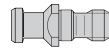
M12

50 12 710	M 12	50	69.1	21	30	SK 50	DIN 69871 AD	-	12	A, B	
100 12 710	M 12	100	119.1	21	38	SK 50	DIN 69871 AD	-	12	A, B	
150 12 710	M 12	150	169.1	21	52	SK 50	DIN 69871 AD	-	12	A, B	
200 12 710	M 12	200	219.1	21	68	SK 50	DIN 69871 AD	-	12	A, B	
250 12 710	M 12	250	269.1	21	63	SK 50	DIN 69871 AD	-	12	A, B	
300 12 710	M 12	300	319.1	21	68	SK 50	DIN 69871 AD	-	12	A, B	

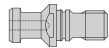
M16

50 16 710	M 16	50	69.1	29	34	SK 50	DIN 69871 AD	-	12	A, B	
100 16 710	M 16	100	119.1	29	40	SK 50	DIN 69871 AD	-	12	A, B	
150 16 710	M 16	150	169.1	29	48	SK 50	DIN 69871 AD	-	12	A, B	
200 16 710	M 16	200	219.1	29	50	SK 50	DIN 69871 AD	-	12	A, B	
250 16 710	M 16	250	269.1	29	62	SK 50	DIN 69871 AD	-	12	A, B	
300 16 710	M 16	300	319.1	29	68	SK 50	DIN 69871 AD	-	12	A, B	

Accessories



KBSK50-69872A
retention knob with
through hole
A > Page 138



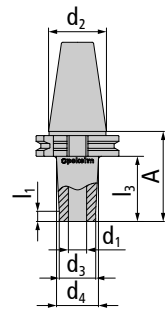
KBSK50-69872B
retention knob without
through hole
B > Page 138

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm



Catalogue no.

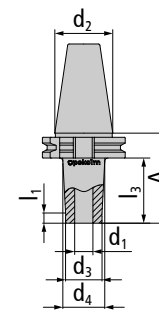


50 06 710 S	diam. 6	50	69.1	12	17	SK 50	DIN 69871 AD	-	7.8	A, B	
100 06 710 S	diam. 6	100	119.1	12	21.7	SK 50	DIN 69871 AD	-	7.8	A, B	
150 06 710 S	diam. 6	150	169.1	12	27	SK 50	DIN 69871 AD	-	7.8	A, B	
200 06 710 S	diam. 6	200	219.1	12	32	SK 50	DIN 69871 AD	-	7.8	A, B	

50 08 710 S	diam. 8	50	69.1	16	21	SK 50	DIN 69871 AD	-	7.8	A, B	
100 08 710 S	diam. 8	100	119.1	16	26	SK 50	DIN 69871 AD	-	7.8	A, B	
150 08 710 S	diam. 8	150	169.1	16	30.9	SK 50	DIN 69871 AD	-	7.8	A, B	
200 08 710 S	diam. 8	200	219.1	16	36	SK 50	DIN 69871 AD	-	7.8	A, B	

50 10 710 S	diam. 10	50	69.1	20	25	SK 50	DIN 69871 AD	-	7.8	A, B	
100 10 710 S	diam. 10	100	119.1	20	30	SK 50	DIN 69871 AD	-	7.8	A, B	
150 10 710 S	diam. 10	150	169.1	20	35	SK 50	DIN 69871 AD	-	7.8	A, B	
200 10 710 S	diam. 10	200	219.1	20	40	SK 50	DIN 69871 AD	-	7.8	A, B	

50 12 710 S	diam. 12	50	69.1	24	28.4	SK 50	DIN 69871 AD	-	7.8	A, B	
100 12 710 S	diam. 12	100	119.1	24	33.7	SK 50	DIN 69871 AD	-	7.8	A, B	
150 12 710 S	diam. 12	150	169.1	24	39	SK 50	DIN 69871 AD	-	7.8	A, B	
200 12 710 S	diam. 12	200	219.1	24	44	SK 50	DIN 69871 AD	-	7.8	A, B	



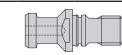
50 16 710 S	diam. 16	50	69.1	32	36.4	SK 50	DIN 69871 AD	-	7.8	A, B	
100 16 710 S	diam. 16	100	119.1	32	41.7	SK 50	DIN 69871 AD	-	7.8	A, B	
150 16 710 S	diam. 16	150	169.1	32	46.9	SK 50	DIN 69871 AD	-	7.8	A, B	
200 16 710 S	diam. 16	200	219.1	32	52	SK 50	DIN 69871 AD	-	7.8	A, B	

50 20 710 S	diam. 20	50	69.1	40	44.4	SK 50	DIN 69871 AD	-	7.8	A, B	
100 20 710 S	diam. 20	100	119.1	40	50	SK 50	DIN 69871 AD	-	7.8	A, B	
150 20 710 S	diam. 20	150	169.1	40	55	SK 50	DIN 69871 AD	-	7.8	A, B	

60 25 710 S	diam. 25	60	79.1	46	46	SK 50	DIN 69871 AD	-	-	A, B	
100 25 710 S	diam. 25	100	119.1	46	56	SK 50	DIN 69871 AD	-	7.8	A, B	

60 32 710 S	diam. 32	60	79.1	44	53	SK 50	DIN 69871 AD	-	-	A, B	
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KBSK50-69872A
retention knob with
through hole
A > Page 138



KBSK50-69872B
retention knob without
through hole
B > Page 138



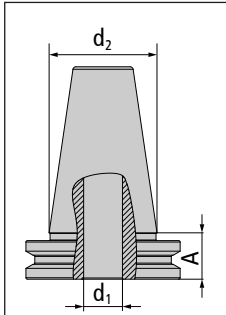
SK 50 DIN 69 871 AD

for shrinking | zero reach adapters

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 1/min

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter (starting page 19).

for shrinking | zero reach arbors



Catalogue no.											Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁					
for diam. 20														
00 20 710 S	diam. 20	0	19.1	-	-	SK 50	DIN 69871 AD	-	-	A, B				
for diam. 25														
00 25 710 S	diam. 25	0	19.1	-	-	SK 50	DIN 69871 AD	-	-	A, B				
for diam. 32														
00 32 710 S	diam. 32	0	19.1	0	0	SK 50	DIN 69871 AD	-	-	A, B				
Accessories														
KBSK50-69872A retention knob with through hole A > Page 138		KBSK50-69872B retention knob without through hole B > Page 138												

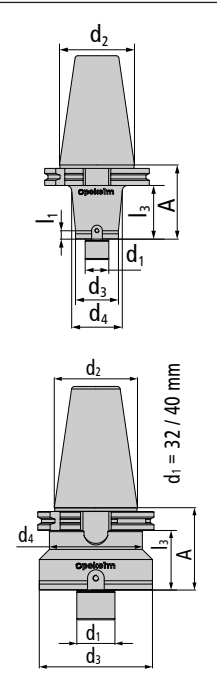
SK 50 DIN 69 871 AD

for shell-type milling

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm



for shell-type milling



Catalogue no.													Accessories			Features									
													d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁			
bore diam. 16																									
50 16 710 Z		diam. 16	50	69.1	38	42	SK 50	DIN 69871 AD	-	7.8	C, E, J, K														
100 16 710 Z		diam. 16	100	119.1	38	50	SK 50	DIN 69871 AD	-	7.8	C, E, J, K														
150 16 710 Z		diam. 16	150	169.1	38	50	SK 50	DIN 69871 AD	-	7.8	C, E, J, K														
200 16 710 Z		diam. 16	200	219.1	38	50	SK 50	DIN 69871 AD	-	7.8	C, E, J, K														
250 16 710 Z		diam. 16	250	269.1	38	50	SK 50	DIN 69871 AD	-	7.8	C, E, J, K														
bore diam. 22																									
50 22 710		diam. 22	50	69.1	40	40	SK 50	DIN 69871 AD	-	-	B, F, J, K														
100 22 710.01		diam. 22	100	119.1	48	50	SK 50	DIN 69871 AD	-	7.8	B, F, J, K														
150 22 710		diam. 22	150	169.1	48	62	SK 50	DIN 69871 AD	-	7.8	B, F, J, K														
200 22 710		diam. 22	200	219.1	48	78	SK 50	DIN 69871 AD	-	7.8	B, F, J, K														
250 22 710		diam. 22	250	269.1	48	78	SK 50	DIN 69871 AD	-	7.8	B, F, J, K														
Accessories																									
M6X16 screw for drive block 16 x 16 A > Page 136		M4X10 screw for drive block 10 x 8 B > Page 136			M3X10 screws for drive block 8 x 8 C > Page 136			M5X16 screw for drive blocks 12 x 12 and 14 x 14 D > Page 136			NUTEN8X8 drive block 8 x 8 E > Page 137														
NUTEN10X8 drive block 10 x 8 F > Page 137		NUTEN12X12/2 drive block 12 x 12 G > Page 137			NUTEN14X14 drive block 14 x 14 H > Page 137			NUTEN16X16 drive block 16 x 16 I > Page 137			KBSK50-69872A retention knob with through hole J > Page 138														
KBSK50-69872B retention knob without through hole K > Page 138																									



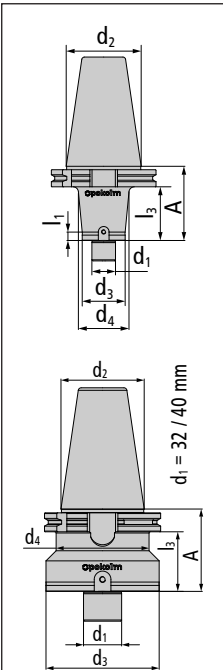
SK 50 DIN 69 871 AD

for shell-type milling

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

2/2

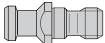
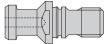
for shell-type milling



bore diam. 27																			
50 27 710	diam. 27	50	69.1	62	62	SK 50	DIN 69871 AD	-	-	D, G, J, K									
100 27 710	diam. 27	100	119.1	62	70	SK 50	DIN 69871 AD	-	7.8	D, G, J, K									
150 27 710	diam. 27	150	169.1	62	76	SK 50	DIN 69871 AD	-	7.8	D, G, J, K									
200 27 710	diam. 27	200	219.1	62	76	SK 50	DIN 69871 AD	-	7.8	D, G, J, K									
250 27 710	diam. 27	250	269.1	62	76	SK 50	DIN 69871 AD	-	7.8	D, G, J, K									

bore diam. 32														
50 32 710	diam. 32	50	69.1	95	78	SK 50	DIN 69871 AD	-	7.8	D, H, J, K			G 16	8.000
100 32 710	diam. 32	100	119.1	95	78	SK 50	DIN 69871 AD	-	7.8	D, H, J, K			G 16	8.000
150 32 710	diam. 32	150	169.1	95	78	SK 50	DIN 69871 AD	-	7.8	D, H, J, K			G 16	8.000
200 32 710	diam. 32	200	219.1	95	78	SK 50	DIN 69871 AD	-	7.8	D, H, J, K			G 16	8.000

bore diam. 40											NEW			
50 40 710 Z	diam. 40	50	69.1	100	78	SK 50	DIN 69871 AD	-	-	A, I, J, K			G 16 8.000	
100 40 710 Z	diam. 40	100	119.1	100	78	SK 50	DIN 69871 AD	-	-	A, I, J, K			G 16 8.000	

Accessories				
 M6X16 screw for drive block 16 x 16 A > Page 136	 M4X10 screw for drive block 10 x 8 B > Page 136	 M3X10 screws for drive block 8 x 8 C > Page 136	 M5X16 screw for drive blocks 12 x 12 and 14 x 14 D > Page 136	 NUTEN8X8 drive block 8 x 8 E > Page 137
 NUTEN10X8 drive block 10 x 8 F > Page 137	 NUTEN12X12/2 drive block 12 x 12 G > Page 137	 NUTEN14X14 drive block 14 x 14 H > Page 137	 NUTEN16X16 drive block 16 x 16 I > Page 137	 KBSK50-69872A retention knob with through hole J > Page 138
 KBSK50-69872B retention knob without through hole K > Page 138				

SK 50 DIN 69 871 AD

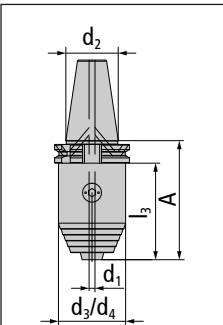
Drill chucks



- Steep taper shanks DIN 69871 AD, maximum precision
- approved for up to max. 7,000 rpm
- We can supply higher balance quality according to the balance classes on request
- with internal coolant supply and bore hole for the coolant supply tube
- independent of rotating direction
- extremely short and slim design

delivery extent includes small and large seal gasket

Drill chucks



diam. 0.5 - 13 mm														
BF 0,5-13 710 IC	diam. 13	93	112.1	-	50	SK 50	DIN 69871 AD	-	-	A, B, C, D, E, H				

diam. 2.5 - 16 mm														
BF 2,5-16 710 IC	diam. 16	98	117.1	-	57	SK 50	DIN 69871 AD	-	-	A, B, C, F, G, H				

Accessories									
	INBUS 6T A > Page 137		KBSK50-69872A retention knob with through hole B > Page 138		KBSK50-69872B retention knob without through hole C > Page 138		BF13DS06 seal gasket 08DS08 D > Page 138		BF13DS13 seal gasket13DS13 E > Page 138
	BF16DS06 seal gasket16DS06 F > Page 138		BF16DS16 seal gasket 16DS16 G > Page 138		BF13MW hexagon key 13MW H > Page 138				



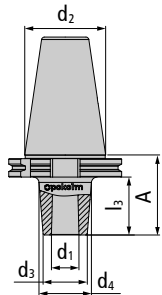
SK 50 DIN 69 871 AD

for morse taper shanks

- Steep taper shanks DIN 69871 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

1/2

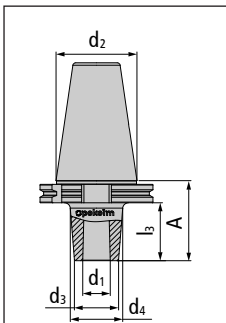
for morse taper shanks													
Catalogue no.			d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features



MTS 2												
40 2 710	MTS 2	50	69.1	30	36	SK 50	DIN 69871 AD	-	-	A, I, J, M, N, O		
90 2 710	MTS 2	90	109.1	30	46	SK 50	DIN 69871 AD	-	-	B, I, J, M, N, O		
MTS 3												
50 3 710	MTS 3	50	69.1	38	46	SK 50	DIN 69871 AD	-	-	C, I, J, M, N, O		
100 3 710	MTS 3	100	119.1	38	56	SK 50	DIN 69871 AD	-	-	D, I, J, M, N, O		
150 3 710	MTS 3	150	169.1	38	62	SK 50	DIN 69871 AD	-	-	E, I, J, M, N, O		
200 3 710	MTS 3	200	219.1	38	70	SK 50	DIN 69871 AD	-	-	F, I, J, M, N, O		
MTS 4												
80 4 710	MTS 4	80	99.1	44	56	SK 50	DIN 69871 AD	-	-	G, I, K, M, N, P		
130 4 710	MTS 4	130	149.1	44	70	SK 50	DIN 69871 AD	-	-	G, I, K, M, N, P		
180 4 710	MTS 4	180	199.1	44	70	SK 50	DIN 69871 AD	-	-	G, I, K, M, N, P		

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for morse taper shanks



Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁	Accessories		Features	
MTS 5															
100 5 710	MTS 5	100	119.1	56	70	SK 50	DIN 69871 AD	-	-	H, I, L, M, N, Q					
150 5 710	MTS 5	150	169.1	56	70	SK 50	DIN 69871 AD	-	-	H, I, L, M, N, Q					
200 5 710	MTS 5	200	219.1	56	75	SK 50	DIN 69871 AD	-	-	H, I, L, M, N, Q					
Accessories															
M10X40 screws for MTS-reduc- tion sleeve A > Page 136		M10X90 screws for MTS-reduc- tion sleeve B > Page 136		M12X40 screws for MTS-reduc- tion sleeve C > Page 136		M12X90 screws for MTS-reduc- tion sleeve D > Page 136		M12X135 screws for MTS-reduc- tion sleeve E > Page 136							
M12X185 screws for MTS-reduc- tion sleeve F > Page 136		M16X50 screws for MTS-reduc- tion sleeve G > Page 136		M20X50 screws for MTS-reduc- tion sleeve H > Page 136		GWST-M5X8-914 setscrew DIN551 with hole I > Page 136		1003 spanner for reduc- tion sleeve J > Page 137							
1004 spanner for reduction sleeve K > Page 137		1005 spanner for reduction sleeve L > Page 137		KBSK50-69872A retention knob with through hole M > Page 138		KBSK50-69872B retention knob without through hole N > Page 138		ZGHM2414 threaded bush, right hand thread O > Page 138							
ZGHM2414L threaded bush, left hand thread P > Page 138		ZGHM3316L threaded bush, left hand thread Q > Page 138													

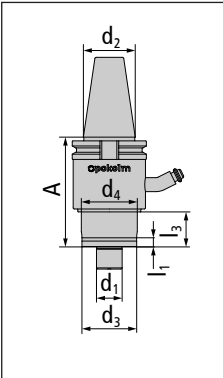


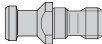
SK 50 DIN 69 871 AD

for rotary transmission leadthrough

- Steep taper rotary transmission leadthrough DIN 69871 AD
- approved for up to max. 6,000 rpm
- suitable for oiled compressed air and minimum quantity lubrication
- independent of rotating direction

for rotary transmission leadthrough



Catalogue no.											Form/DIN		Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁							
for shell-type milling																
50 27 710 DDL5	diam. 27	50	69.1	62	65	SK 50	DIN 69871 AD	-	-	A, B						
Accessories																
																
KBSK50-69872A retention knob with through hole A > Page 138		KBSK50-69872B retention knob without through hole B > Page 138														

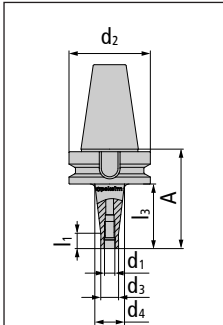
BT 50 JIS B 6339 AD

for screw-on end mills

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm



for screw-on end mills



Catalogue no.												Form/DIN		Accessories		Features	
d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN		l ₂	l ₁								
M12																	
50 12 714	M 12	50	88	21	30	BT 50	JIS B 6339 AD	-	12								
100 12 714	M 12	100	138	21	38	BT 50	JIS B 6339 AD	-	12								
150 12 714	M 12	150	188	21	52	BT 50	JIS B 6339 AD	-	12								
200 12 714	M 12	200	238	21	58	BT 50	JIS B 6339 AD	-	12								
250 12 714	M 12	250	288	21	63	BT 50	JIS B 6339 AD	-	12								
300 12 714	M 12	300	338	21	68	BT 50	JIS B 6339 AD	-	12								
M16																	
50 16 714	M 16	50	88	29	34	BT 50	JIS B 6339 AD	-	12								
100 16 714	M 16	100	138	29	40	BT 50	JIS B 6339 AD	-	12								
150 16 714	M 16	150	188	29	48	BT 50	JIS B 6339 AD	-	12								
200 16 714	M 16	200	238	29	58	BT 50	JIS B 6339 AD	-	12								
250 16 714	M 16	250	288	29	62	BT 50	JIS B 6339 AD	-	12								
300 16 714	M 16	300	338	29	68	BT 50	JIS B 6339 AD	-	12								



BT 50 JIS B 6339 AD

for shrinking

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

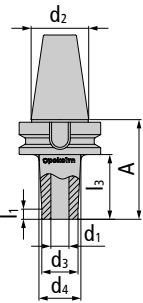
1/2

for shrinking

Catalogue no.

d₁ l₃ A d₃ d₄ d₂ Form/DIN l₂ l₁

Accessories Features



for diam. 6

50 06 714 S	diam. 6	50	88	12	17	BT 50	JIS B 6339 AD	-	7.8				
100 06 714 S	diam. 6	100	138	12	21.7	BT 50	JIS B 6339 AD	-	7.8				
150 06 714 S	diam. 6	150	188	12	27	BT 50	JIS B 6339 AD	-	7.8				
200 06 714 S	diam. 6	200	238	12	32	BT 50	JIS B 6339 AD	-	7.8				

for diam. 8

50 08 714 S	diam. 8	50	88	16	21	BT 50	JIS B 6339 AD	-	7.8				
100 08 714 S	diam. 8	100	138	16	26	BT 50	JIS B 6339 AD	-	7.8				
150 08 714 S	diam. 8	150	188	16	30.9	BT 50	JIS B 6339 AD	-	7.8				
200 08 714 S	diam. 8	200	238	16	36	BT 50	JIS B 6339 AD	-	7.8				

for diam. 10

50 10 714 S	diam. 10	50	88	20	25	BT 50	JIS B 6339 AD	-	7.8				
100 10 714 S	diam. 10	100	138	20	30	BT 50	JIS B 6339 AD	-	7.8				
150 10 714 S	diam. 10	150	188	20	35	BT 50	JIS B 6339 AD	-	7.8				
200 10 714 S	diam. 10	200	238	20	40	BT 50	JIS B 6339 AD	-	7.8				

for diam. 12

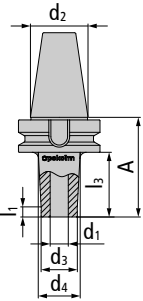
50 12 714 S	diam. 12	50	88	24	28.4	BT 50	JIS B 6339 AD	-	7.8				
100 12 714 S	diam. 12	100	138	24	33.7	BT 50	JIS B 6339 AD	-	7.8				
150 12 714 S	diam. 12	150	188	24	39	BT 50	JIS B 6339 AD	-	7.8				
200 12 714 S	diam. 12	200	238	24	44	BT 50	JIS B 6339 AD	-	7.8				

for shrinking

Catalogue no.

d₁ l₃ A d₃ d₄ d₂ Form/DIN l₂ l₁

Accessories Features



for diam. 16

50 16 714 S	diam. 16	50	88	32	36.4	BT 50	JIS B 6339 AD	-	7.8				
100 16 714 S	diam. 16	100	138	32	41.7	BT 50	JIS B 6339 AD	-	7.8				
150 16 714 S	diam. 16	150	188	32	46.9	BT 50	JIS B 6339 AD	-	7.8				
200 16 714 S	diam. 16	200	238	32	52	BT 50	JIS B 6339 AD	-	7.8				

for diam. 20

50 20 714 S	diam. 20	50	88	40	44.4	BT 50	JIS B 6339 AD	-	7.8				
100 20 714 S	diam. 20	100	138	40	50	BT 50	JIS B 6339 AD	-	7.8				

for diam. 25

60 25 714 S	diam. 25	60	98	46	46	BT 50	JIS B 6339 AD	-	-				
100 25 714 S	diam. 25	100	138	46	56	BT 50	JIS B 6339 AD	-	7.8				

for diam. 32

60 32 714 S	diam. 32	60	98	44	53	BT 50	JIS B 6339 AD	-	-				
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NEW

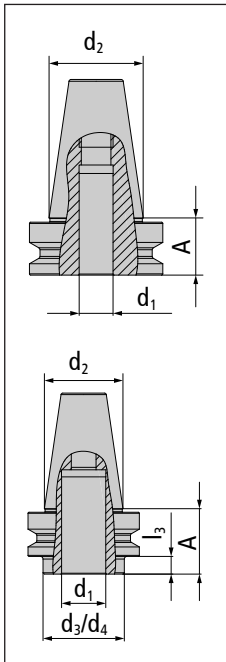


BT 50 JIS B 6339 AD
for shrinking | zero reach adapters

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 16 gmm at 8,000 1/min

Please note: Zero reach adapters cannot be ordered separately. We only supply in a shrink-grip connection with a solid carbide or dense antivibration adapter. (starting page 19)

for shrinking | zero reach arbors



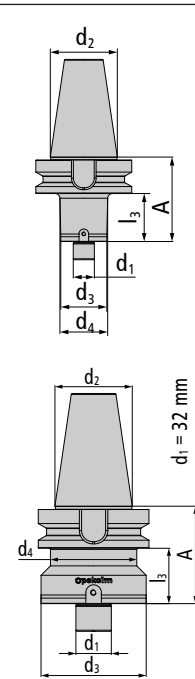
for diam. 20											
00 20 714 S	diam. 20	0	38	-	-	BT 50	JIS B 6339 AD	-	-		   
for diam. 25											
00 25 714 S	diam. 25	0	38	-	-	BT 50	JIS B 6339 AD	-	-		   
for diam. 32											
00 32 714 S	diam. 32	0	38	-	-	BT 50	JIS B 6339 AD	-	-		   

BT 50 JIS B 6339 AD
for shell-type milling

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm



for shell-type milling



bore diam. 16											
50 16 714 Z	diam. 16	50	88	38	42	BT 50	JIS B 6339 AD	-	7.8	C, E	 
100 16 714 Z	diam. 16	100	138	38	50	BT 50	JIS B 6339 AD	-	7.8	C, E	 
150 16 714 Z	diam. 16	150	188	38	50	BT 50	JIS B 6339 AD	-	7.8	C, E	 

bore diam. 22												
50 22 714	diam. 22	50	88	40	40	BT 50	JIS B 6339 AD	-	7.8	B, F	  	
100 22 714	diam. 22	100	138	48	50	BT 50	JIS B 6339 AD	-	7.8	B, F	  	
150 22 714	diam. 22	150	188	48	62	BT 50	JIS B 6339 AD	-	7.8	B, F	  	
200 22 714	diam. 22	200	238	48	78	BT 50	JIS B 6339 AD	-	7.8	B, F	  	

bore diam. 27															
50 27 714	diam. 27	50	88	62	62	BT 50	JIS B 6339 AD	-	7.8	A, G			G 16 8.000		
100 27 714	diam. 27	100	138	62	70	BT 50	JIS B 6339 AD	-	7.8	A, G			G 16 8.000		
150 27 714	diam. 27	150	188	62	76	BT 50	JIS B 6339 AD	-	7.8	A, G			G 16 8.000		
200 27 714	diam. 22	200	238	62	76	BT 50	JIS B 6339 AD	-	7.8	A, G			G 16 8.000		

Accessories				
 M5X12 screw for drive block 12 x 8 A > Page 136	 M4X10 screw for drive block 10 x 8 B > Page 136	 M3X10 screws for drive block 8 x 8 C > Page 136	 M5X16 screw for drive blocks 12 x 12 and 14 x 14 D > Page 136	 NUTEN8X8 drive block 8 x 8 E > Page 137
 NUTEN10X8 drive block 10 x 8 F > Page 137	 NUTEN12X12/2 drive block 12 x 12 G > Page 137	 NUTEN14X14 drive block 14 x 14 H > Page 137		



BT 50 JIS B 6339 AD
for shell-type milling

- Steep taper shanks form BT / JIS B 6339 AD, maximum precision
- balanced to G 16 gmm at 8,000 rpm

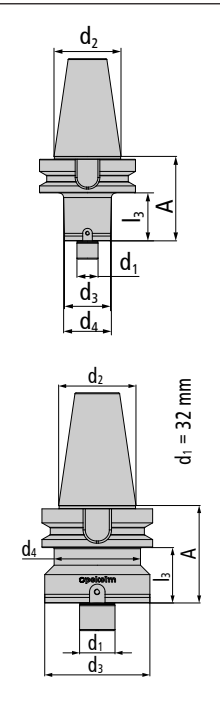
BT 50 JIS B 6339 AD
for rotary transmission leadthrough

- steep taper rotary transmission leadthrough JIS B 6339
- approved for up to max. 6,000 rpm
- suitable for oiled compressed air and minimum quantity lubrication
- independent of rotating direction



2/2

for shell-type milling

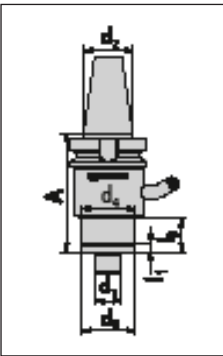


Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
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bore diam. 32												
50 32 714	diam. 32	50	88	95	78	BT 50	JIS B 6339 AD	-	7.8	D, H		
100 32 714	diam. 32	100	138	95	78	BT 50	JIS B 6339 AD	-	7.8	D, H		
150 32 714	diam. 32	150	188	95	78	BT 50	JIS B 6339 AD	-	7.8	D, H		
200 32 714	diam. 32	200	238	95	78	BT 50	JIS B 6339 AD	-	7.8	D, H		

Accessories				
 M5X12 screw for drive block 12 x 8 A > Page 136	 M4X10 screw for drive block 10 x 8 B > Page 136	 M3X10 screws for drive block 8 x 8 C > Page 136	 M5X16 screw for drive blocks 12 x 12 and 14 x 14 D > Page 136	 NUTEN8X8 drive block 8 x 8 E > Page 137
 NUTEN10X8 drive block 10 x 8 F > Page 137	 NUTEN12X12/2 drive block 12 x 12 G > Page 137	 NUTEN14X14 drive block 14 x 14 H > Page 137		

for rotary transmission leadthrough



Catalogue no.		d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
---------------	--	----------------	----------------	---	----------------	----------------	----------------	----------	----------------	----------------	-------------	----------

for shell-type milling												
50 27 714 DDLS	diam. 27	50	88	62	65	BT 50	JIS B 6339 AD	-	-			



DIRECT SPINDLE MOUNTING

	Page
SK 50	
for shell-type milling	124
centering arbor/ adapter	126



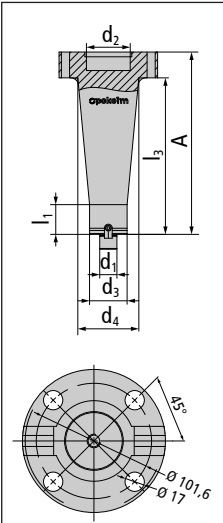
SK 50

for shell-type milling

- flange contact surfaces for direct mounting on the machine spindle
- anchor points made according to DIN 1830 for attaching to milling spindle heads according to DIN 2079
- highest degree of stability and rigidity with long projections or difficult machining tasks
- centering arbors / adapter on the following pages

for shell-type milling

Catalogue no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
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bore diam. -Ø 22											
200 22 740	diam. 22	200	233	48	78	diam. 50	direct spindle mounting	-	38	B, D, H	
250 22 740	diam. 22	250	283	48	82	diam. 50	direct spindle mounting	-	38	B, D, H	
300 22 740	diam. 22	300	333	48	86	diam. 50	direct spindle mounting	-	38	B, D, H	
350 22 740	diam. 22	350	383	48	90	diam. 50	direct spindle mounting	-	38	B, D, H	
400 22 740	diam. 22	400	433	48	95	diam. 50	direct spindle mounting	-	38	B, D, H	

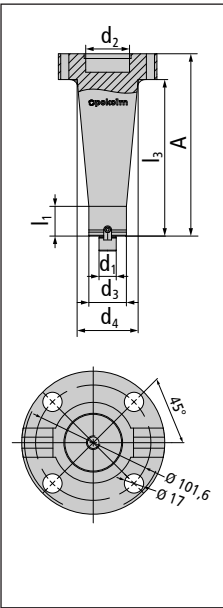
bore diam. -Ø 27											
200 27 740	diam. 27	200	233	62	78	diam. 50	direct spindle mounting	-	38	C, E, H	
250 27 740	diam. 27	250	283	62	82	diam. 50	direct spindle mounting	-	38	C, E, H	
300 27 740	diam. 27	300	333	62	86	diam. 50	direct spindle mounting	-	38	C, E, H	
350 27 740	diam. 27	350	383	62	90	diam. 50	direct spindle mounting	-	38	C, E, H	
400 27 740	diam. 27	400	433	62	95	diam. 50	direct spindle mounting	-	38	C, E, H	

bore diam. -Ø 32											
150 32 740	diam. 32	150	183	85	98	diam. 50	direct spindle mounting	-	38	C, F, H	
200 32 740	diam. 32	200	233	85	98	diam. 50	direct spindle mounting	-	38	C, F, H	
250 32 740	diam. 32	250	283	90	105	diam. 50	direct spindle mounting	-	38	C, F, H	
300 32 740	diam. 32	300	333	90	110	diam. 50	direct spindle mounting	-	38	C, F, H	
350 32 740	diam. 32	350	383	90	117	diam. 50	direct spindle mounting	-	38	C, F, H	
400 32 740	diam. 32	400	433	90	124	diam. 50	direct spindle mounting	-	38	C, F, H	

1/2

for shell-type milling

Catalogue no.	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁	Accessories	Features
---------------	----------------	----------------	---	----------------	----------------	----------------	----------	----------------	----------------	-------------	----------



bore diam. -Ø 40											
100 40 740	diam. 40	100	133	100	124	diam. 50	direct spindle mounting	-	38	A, G, H	
150 40 740	diam. 40	150	183	100	124	diam. 50	direct spindle mounting	-	38	A, G, H	
200 40 740	diam. 40	200	233	100	124	diam. 50	direct spindle mounting	-	38	A, G, H	

Accessories				
 M6X16 screw for drive block 16 x 16 A > Page 136	 M4X10 screw for drive block 10 x 8 B > Page 136	 M5X16 screw for drive blocks 12 x 12 and 14 x 14 C > Page 136	 NUTEN10X8 drive block 10 x 8 D > Page 137	 NUTEN12X12/2 drive block 12 x 12 E > Page 137
 NUTEN14X14 drive block 14 x 14 F > Page 137	 NUTEN16X16 drive block 16 x 16 G > Page 137	 Z 00038 Tightening bolt for direct spindle mounting H > Page 138		



SK 50
centering arbor/ adapter

- flange contact surfaces for direct mounting on the machine spindle
- anchor points made according to DIN 1830 for attaching to milling spindle heads according to DIN 2079
- highest degree of stability and rigidity with long projections or difficult machining tasks
- flange contact surfaces see previous pages



centering arbor/ adapter	Catalogue no.											Accessories	Features
	d ₁	l ₃	A	d ₃	d ₄	d ₂	Form/DIN	l ₂	l ₁				
	SK 50 DIN 2080												
	50 742	diam. 50	-	-	-	-	SK 50	DIN 2080	-	-	G	☒	
	SK 50 DIN 69 871 AD												
	50 743	diam. 50	-	-	-	-	SK 50	DIN 69871 AD	-	-	E, F, G	☒	
	HSK 100 form A												
	40 740 A100	diam. 50	14.5	43.5	126	126	HSK 100	form A	-	-	A, B, C, D	☒	NEW
Accessories													
	 M12X35 screw A > Page 136		 GWST-M6X10-914 setscrew B > Page 136		 KMR-100A coolant supply tube for HSK-tooling C > Page 137		 SCHLUESSELHSK100 spanner for coolant tube D > Page 138		 KBSK50-69872A retention knob with through hole E > Page 138				
	 KBSK50-69872B retention knob without through hole F > Page 138		 Z 00038 Tightening bolt for direct spindle mounting G > Page 138										



HIGH-SPEED SPINDLE SYSTEMS



MODERN SPINDLE UNITS FOR EFFECTIVE MILLINGS RESULTS

Many milling machines – both old and new – have a relatively low maximum speed. Low maximum speed does have advantages in roughing operations, but are a big drawback for achieving effective feed rates. Low speed also greatly limits the advantages of modern CNC applications. The results: much longer machining times and loss of valuable production capacities.

We offer a convincing solution for this situation: Pokolm high-speed spindle systems for the most profitable machining results.

BETTER SURFACE FINISH RESULTS AND GREATLY IMPROVED CYCLE TIME

The advantages are impressive: higher cutting speeds, utilization of maximum feed rates – even with the smallest end mills – better surface finish and a great reduction in the need for EDM. Results: much shorter machining times and full utilization of the CNC advantages.

Pokolm provides various spindle systems for individual adaptation to existing machines and operation requirements. When you mill with an action angle of the A + C axes, you increase the variety of applications of your milling machine with our swivel device.

Get the maximum speed from your machines with Pokolm spindle systems. The result: You save time!



Ask our service centre about spindles:

- ⊕ spare parts
- ⊕ repairs
- ⊕ inspection
- ⊕ maintenance
- ⊕ swivel devices
- ⊕ CNC machine connection

Please contact us!

INDUCTIVE SHRINKING TECHNOLOGY

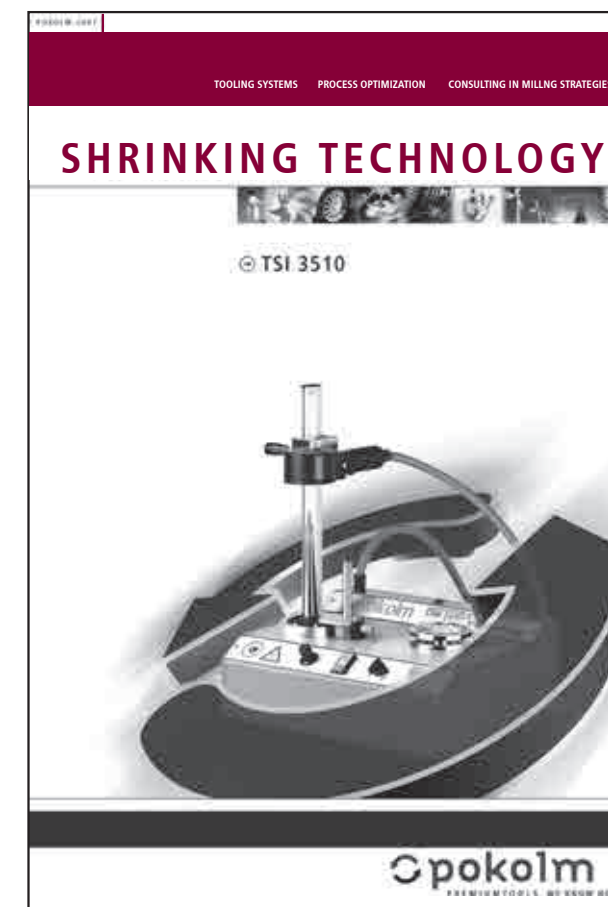


FIRST OPERATION: SHRINKING, THEN MILLING

Shrinking Technology convinces everybody compared with conventional chucking methods from the past. What counts? Absolute concentricity and highest precision with extensive extended tool life. Shrinking technology offers a safe friction-locked connection between tool and tool holder and provides an increased transferable torque. And the qualification for maximum revolutions is the best precondition for an optimum surface finish and for reducing costs for expensive finishing processes.

Compared to conventional milling chucks, shrinking arbors allow the use of distinctly slim adaptors for machining components with narrow situations, which would be unexecutable with other tool-holding systems.

Pokolm offers a substantial range of tooling for shrinking technology: several top-class Induction Shrinking Units, shrinking arbors for all possible machine connections and our patent-protected connection system DuoPlug® in combination with our „zero-reach“-shrinking arbors. (Additional information about the Pokolm DuoPlug® System can be found in the catalogue about „Milling Cutter Bodies“.)



PURCHASE/INQUIRY FORM
Customized Arbors

(please copy prior to completion)



Please fax to:
+49 5247 9361-99

Inquiry No./P.O. No.: _____ Date: _____

Company: _____

Address: _____

Department: _____ person in charge: _____

Phone: _____ Fax: _____ Email: _____

Arbor for threaded shank end mill bodies

Requested delivery date angle

Surface treatment Nickel browned

SK (size) (DIN)

HSK (size) (form)

Internal Coolant Supply
 central bore
 through the collar

HRC
 Qty.
 balance grade required

Manufactured from material

Arbor for Shell-type Milling
Cutter Bodies

angle

Surface treatment Nickel browned

SK (size) (DIN)

HSK (size) (form)

Internal Coolant Supply
 central bore
 through the collar

HRC
 Qty.
 balance grade required

Manufactured from material

Shrinking Arbor

angle

Surface treatment Nickel brüniert

SK (size) (DIN)

HSK (size) (form)

Internal Coolant Supply
 central bore
 through the collar

HRC
 Qty.
 balance grade required

Manufactured from material

Note: For cylindrical design please fill in d3 and d4. 4 calendar weeks delivery time with browned surface.

Field service _____ indoor service _____

PURCHASE/INQUIRY FORM
Customized Adapters

(please copy prior to completion)



Please fax to:
+49 5247 9361-99

Inquiry No./P.O. No.: _____ Date: _____

Company: _____

Address: _____

Department: _____ Person in charge: _____

Phone: _____ Fax: _____ Email: _____

Solid Carbide and Dense Antivibration Adapters for Threaded Shank End Mill Bodies

Requested delivery date d₄

Qty.

with clamping flats
 Internal Coolant Supply

Solid Carbide Adapters for DuoPlug® System

Requested delivery date d₄

Qty.

Internal Coolant Supply

Morse Taper Adapters for Threaded Shank End Mill Bodies

Surface treatment Nickel browned

Requested delivery date d₄

HRC
 Material: Qty.

MK Internal Coolant Supply
 Internal Coolant Supply

Note: For cylindrical design please fill in d3 and d4. 4 Calendar weeks delivery time with browned surface.

Indoor service _____ Field service _____

PURCHASE



Your purchase order by fax
(please copy prior to completion)



Please fax to:
+49 5247 9361-99

You can of course also place your order
with one of our applications engineers.

Catalogue no.	Description of item	Quantity	Price per item	Total price
Total				

Address:

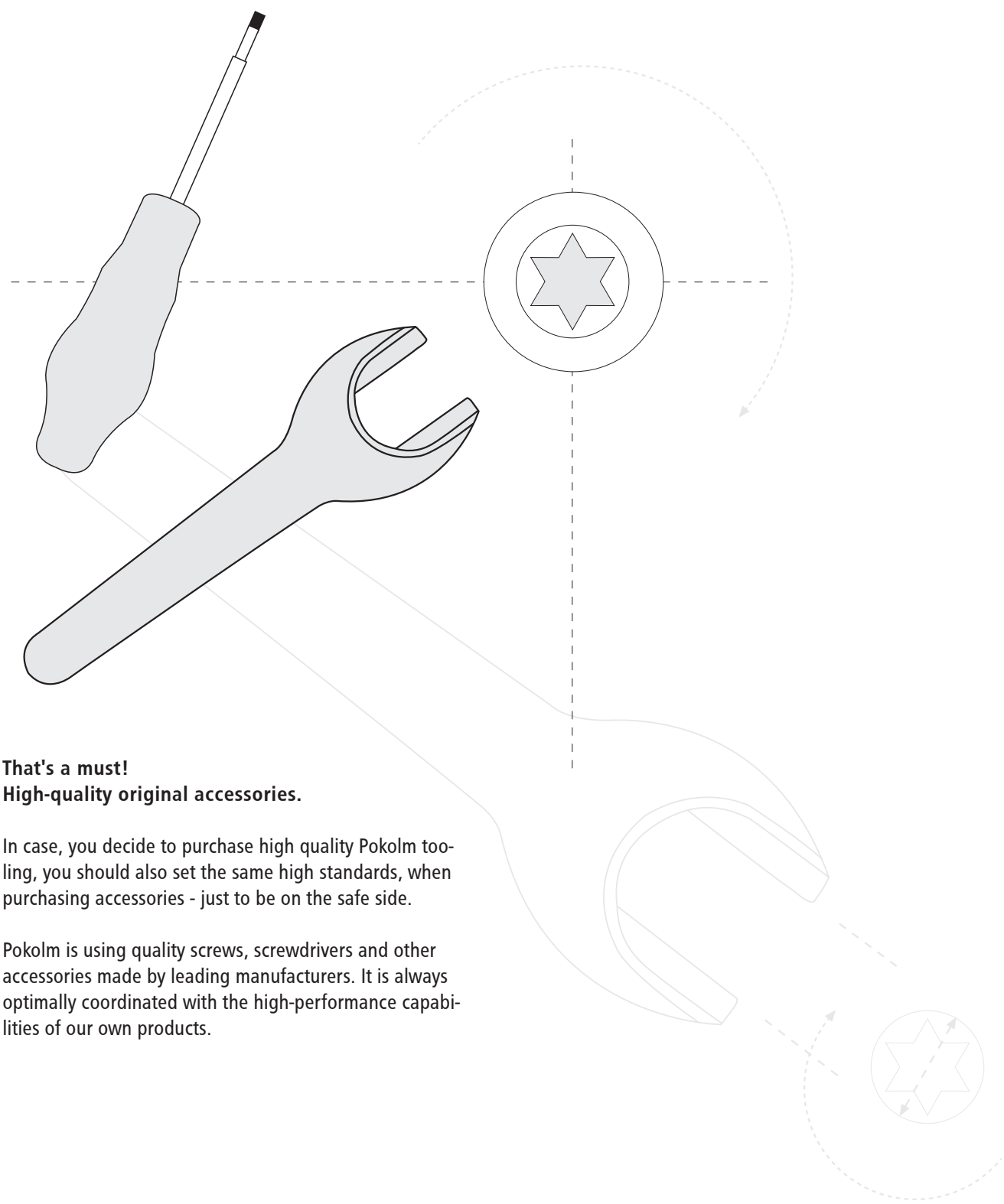
Different delivery address

Company:	customer number (if known)	Company:
Department:	street	street
name	zip code, city	zip code, city

Our terms of sale are valid for this faxed purchase order.



ACCESSORIES



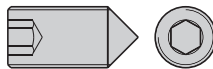
That's a must!
High-quality original accessories.

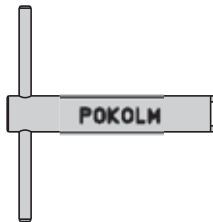
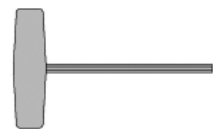
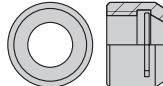
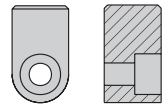
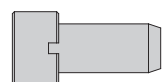
In case, you decide to purchase high quality Pokolm tooling, you should also set the same high standards, when purchasing accessories - just to be on the safe side.

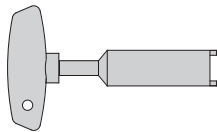
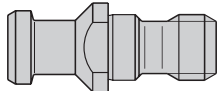
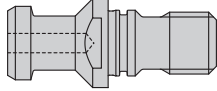
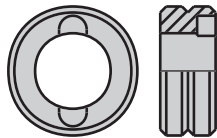
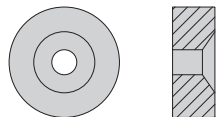
Pokolm is using quality screws, screwdrivers and other accessories made by leading manufacturers. It is always optimally coordinated with the high-performance capabilities of our own products.

ACCESSORIES

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Cylindrical screws with hexagon socket	for drive blocks	136
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Accessories	Catalogue no.		Description	Dimensions			
Cylindrical screws with hexagon socket for drive blocks							
	M6X16	screw for drive block 16 x 16 M 6 L 16 DIN 912	M 6	L 16	DIN 912		
	M5X12	screw for drive block 12 x 8 M 5 L 12 DIN 912	M 5	L 12	DIN 912		
	M4X10	screw for drive block 10 x 8 M 4 L 10 DIN 912	M 4	L 10	DIN 912		
	M3X10	screws for drive block 8 x 8 M 3 L 10 DIN 912	M 3	L 10	DIN 912		
	M5X16	screw for drive blocks 12 x 12 and 14 x 14 M 5 L 16 DIN 912	M 5	L 16	DIN 912		
	M12X35	screw M 12 L 20 DIN 912	M 12	L 20	DIN 912		
Cylindrical screws with hexagon socket for MTS-reduction sleeves							
	M10X40	screws for MTS-reduction sleeve M 10 L 40 DIN 912	M 10	L 40	DIN 912		
	M10X90	screws for MTS-reduction sleeve M 10 L 90 DIN 912	M 10	L 90	DIN 912		
	M12X40	screws for MTS-reduction sleeve M 12 L 40 DIN 912	M 12	L 40	DIN 912		
	M12X90	screws for MTS-reduction sleeve M 12 L 90 DIN 912	M 12	L 90	DIN 912		
	M12X135	screws for MTS-reduction sleeve M 12 L 135 DIN 912	M 12	L 135	DIN 912		
	M12X185	screws for MTS-reduction sleeve M 12 L 185 DIN 912	M 12	L 185	DIN 912		
	M16X50	screws for MTS-reduction sleeve M 16 L 50 DIN 912	M 16	L 50	DIN 912		
	M20X50	screws for MTS-reduction sleeve M 20 L 50 DIN 912	M 20	L 50	DIN 912		
Cylindrical screws with hexagon socket for shell-type and threaded shank adapters							
	M6X25	screw M 6 L 25 DIN 912 12.9	M 6	L 25	DIN 912	12.9	
	M6X55	screw M 6 L 55 DIN 912 12.9	M 6	L 55	DIN 912	12.9	
	M8X25	screw M 8 L 25 DIN 912 12.9	M 8	L 25	DIN 912	12.9	
	M8X55	screw M 8 L 55 DIN 912 12.9	M 8	L 55	DIN 912	12.9	
Additional screws and washers setscrew							
	GWST-M5X8-914	setscrew DIN551 with hole M 5 L 8 hexa. size 2.5 DIN 914	M 5	L 8	hexa. size 2.5	DIN 914	
	GWST-M6X10-914	setscrew M 6 L 10 hexa. size 3 DIN 914	M 6	L 10	hexa. size 3	DIN 914	
Spanners / screwdrivers Spanner for tightening nut of ER16/ER20-collet chucks							
	16 501	spanner for ER 16 collet chuck tightening nut M 19x1	M 19x1				
	20 501	spanner for ER 20 collet chuck tightening nut for M 24	for M 24				

Accessories	Catalogue no.	Description	Dimensions			
Spanners / screwdrivers Spanners for reduction sleeves						
	1003	spanner for reduction sleeve for MTS 2 for MTS 3	for MTS 2	for MTS 3		
	1004	spanner for reduction sleeve for MTS 4	for MTS 4			
	1005	spanner for reduction sleeve for MTS 5	for MTS 5			
Spanners / screwdrivers Spanners for drill chucks						
	INBUS 4T	INBUS 4T SW4	SW4			
	INBUS 6T	INBUS 6T SW6	SW6			
Union nuts						
	ER16 001	tightening nut ER 16 M19 1,0	M19	1,0		
	ER20 001	tightening nut ER 20 M 24 1.0	M 24	1.0		
Drive blocks						
	NUTEN8X8	drive block 8 x 8 8 8 L 12	8	8	L 12	
	NUTEN10X8	drive block 10 x 8 10 8 L 18	10	8	L 18	
	NUTEN12X8	drive block 12 x 8 12 8 L 20	12	8	L 20	
	NUTEN12X12/2	drive block 12 x 12 12 12 L 20	12	12	L 20	
	NUTEN14X14	drive block 14 x 14 14 14 L 24	14	14	L 24	
	NUTEN16X16	drive block 16 x 16 16 16 L 24	16	16	L 24	
accessories for HSK tooling Coolant supply tube for HSK tooling						
	KMR-25	coolant supply tube for HSK-tooling for HSK 25 form A + E	for HSK 25	form A + E		
	KMR-32	coolant supply tube for HSK-tooling for HSK 32 form A + E	for HSK 32	form A + E		
	KMR-40A	coolant supply tube for HSK-tooling for HSK 40 form A + E	for HSK 40	form A + E		
	KMR-50A	coolant supply tube for HSK-tooling for HSK 50 form A + E	for HSK 50	form A + E		
	KMR-63A	coolant supply tube for HSK-tooling for HSK 63 form A + E	for HSK 63	form A + E		
	KMR-100A	coolant supply tube for HSK-tooling for HSK 100 form A	for HSK 100	form A		

Accessories	Catalogue no.	Description	Dimensions			
accessories for HSK tooling Spanners for coolant supply tube						
	SCHLUESSELHSK25	spanner for coolant tube HSK 25	HSK 25			
	SCHLUESSELHSK32	spanner for coolant tube HSK 32	HSK 32			
	SCHLUESSELHSK40	spanner for coolant tube HSK 40	HSK 40			
	SCHLUESSELHSK50	spanner for coolant tube HSK 50	HSK 50			
	SCHLUESSELHSK63	spanner for coolant tube HSK 63	HSK 63			
	SCHLUESSELHSK100	spanner for coolant tube HSK 100	HSK 100			
Retention knobs without seal ring groove						
	KBSK30-69872A	retention knob with through hole SK 30 DIN 69 872 A without seal ring groove	SK 30	DIN 69 872 A	without seal ring groove	
	KBSK40-69872A	retention knob with through hole SK 40 DIN 69 872 A without seal ring groove	SK 40	DIN 69 872 A	without seal ring groove	
	KBSK50-69872A	retention knob with through hole SK 50 DIN 69 872 A without seal ring groove	SK 50	DIN 69 872 A	without seal ring groove	
Retention knobs with seal ring groove						
	KBSK30-69872B	retention knob without through hole SK 30 DIN 69 872 B with seal ring groove	SK 30	DIN 69 872 B - with seal ring groove	with seal ring groove	
	KBSK40-69872B	retention knob without through hole SK 40 DIN 69 872 B with seal ring groove	SK 40	DIN 69 872 B - with seal ring groove	with seal ring groove	
	KBSK50-69872B	retention knob without through hole SK 50 DIN 69 872 B with seal ring groove	SK 50	DIN 69 872 B - with seal ring groove	with seal ring groove	
Threaded bushes						
	ZGHM2414	threaded bush, right hand thread M 24	M 24			
	ZGHM2414L	threaded bush, left hand thread M 24	M 24			
	ZGHM3316L	threaded bush, left hand thread M 33	M 33			
Drill chuck accessoires seal gasket						
	BF08DS04	seal gasket 08DS04				
	BF08DS08	seal gasket 08DS08				
	BF13DS06	seal gasket 08DS08				
	BF13DS13	seal gasket13DS13				
	BF16DS06	seal gasket16DS06				
	BF16DS16	seal gasket 16DS16				
Drill chuck accessoires hexagon key						
	BF08MW	hexagon key 08MW				
	BF13MW	hexagon key 13MW				
Tightening bolt for direct spindle mounting						
	Z 00038	Tightening bolt for direct spindle mounting M12	M12			

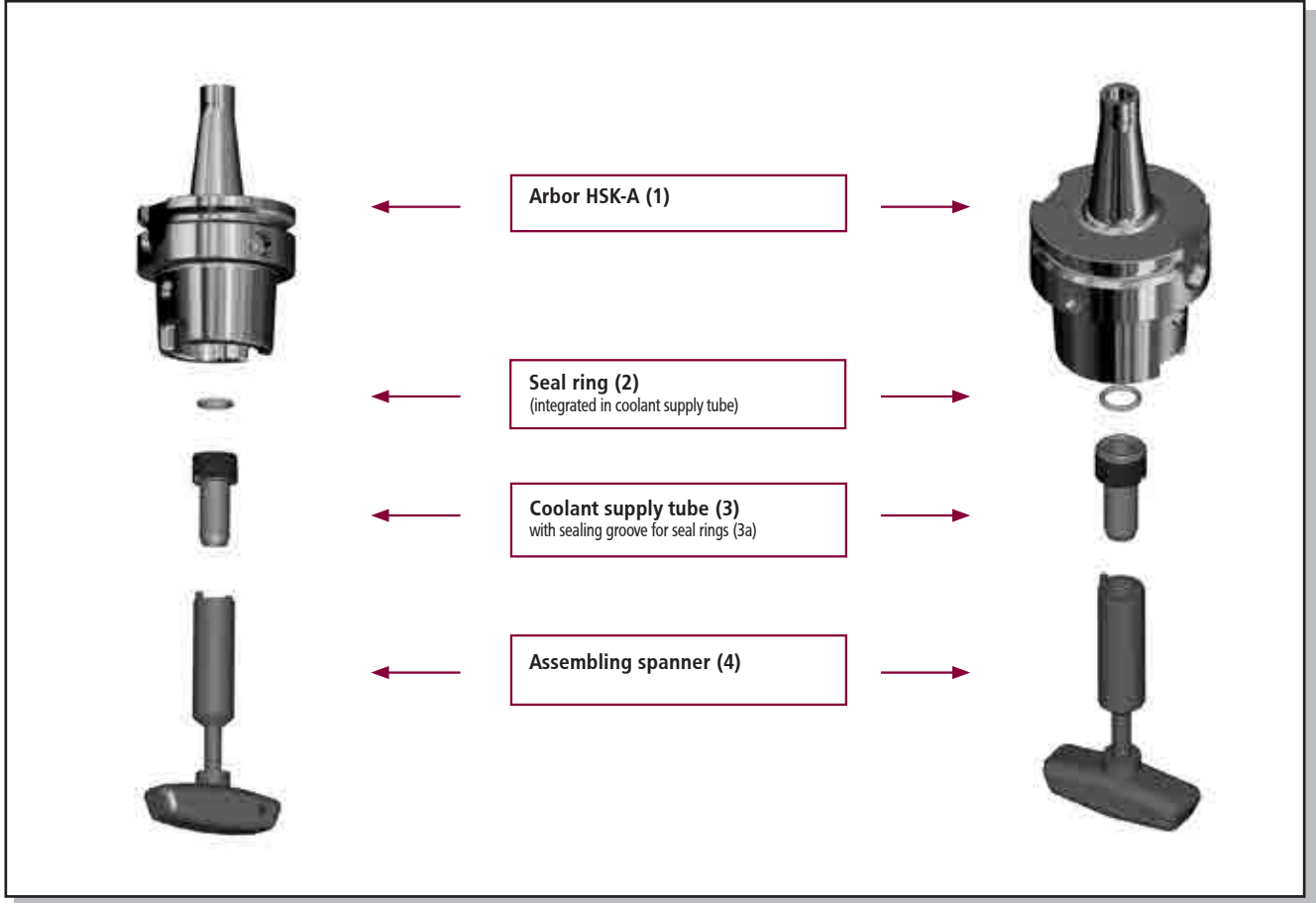
NEW



ASSEMBLING INSTRUCTIONS

for Coolant supply tubes for HSK Form A

When using HSK-A arbors with internal coolant supply, it is necessary to assemble these arbors with a coolant supply tube. To assemble, please follow the instructions below. The required accessories are mentioned for every arbor size.



Step 1

Usually, the seal ring (2) is already assembled in the coolant supply tube (3). If it has come loose, please put it back to the sealing groove (3a) of the supply tube (3).

Step 2

Insert the narrow end of the tube (3) into the spanner (4).

Step 3

Screw the tube (3) into the arbor (1) from the bottom up and make sure that the seal ring (2) is not off-centre or squeezed. Otherwise it loses its sealing function.

OUR POKOLM BAG OF TRICKS

Shell-type Extensions
Reduction adapters - shell type to thread connections

You have to machine an extensive deep component? The requested arbor-extension is not available as a standard item? The production of customized arbors is too expensive? There is no time left for any special action?

SPECIAL SITUATIONS REQUIRE SPECIAL SOLUTIONS.

Our latest shell-type extensions and the thread-connections/shell-type combi adapters allow to achieve a possibility of assembling tool beyond our standard range.

- 1. an existing standard arbor has to be equipped with supplement bore holes according to our adjoining sketch.
- 2. screw on your selected adapter.
- 3. start your job.

THIS RESULTS IN EXTENSIONS BETWEEN 50 AND 100 MM



Catalogue No.	Tool	Diameter of Spigot	Extensions length	A	B	C	Screws*
							M x length
60 22 Mxx 783	Thread connection – Shell-type Combi Adapters	Ø 22	60	Ø 35	20	25	M 6 x 25
100 22 Mxx 783	Thread connection – Shell-type Combi Adapters	Ø 22	100	Ø 35	20	25	M 6 x 25
60 27 Mxx 783	Thread connection – Shell-type Combi Adapters	Ø 27	60	Ø 44,5	20	25	M 8 x 25
100 27 Mxx 783	Thread connection – Shell-type Combi Adapters	Ø 27	100	Ø 44,5	20	25	M 8 x 25
50 22 782	Shell-type Extensions	Ø 22	50	Ø 35	20	25	M 6 x 55
100 22 782	Shell-type Extensions	Ø 22	100	Ø 35	20	25	M 6 x 55
50 27 782	Shell-type Extensions	Ø 27	50	Ø 44,5	20	25	M 8 x 55
100 27 782	Shell-type Extensions	Ø 27	100	Ø 44,5	20	25	M 8 x 55

*for fixing an adapter, you need 4 screws each, included in extent of supply.

ASSEMBLING INSTRUCTIONS

DuoPlug®

To guarantee optimum results and safe operation of our DuoPlug® system, please follow the instructions below carefully.

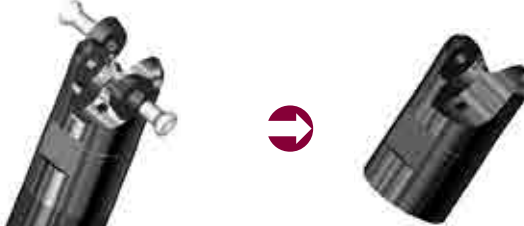
Assembling:

Preparations

Get all the accessories and equipment ready at the workstation before starting heating procedure! (appropriate spanner, safety glasses, protective gloves)

Step 1

Remove inserts and their screws from the milling cutter body.



Step 2

Attention: All surfaces carrying special fits must be absolutely grease-free and dust-free. Please screw the DuoPlug® milling cutter body onto the DuoPlug® adaptor by hand up to the fit zone. Do not use a tool or too much strength.



Step 3

Heat this connection now with the Pokolm Inductive Shrinking Unit TSI 3510 for 6 to 15 seconds, depending on diameter, then start Step 4 immediately.

Attention: Adaptor and milling cutter body are very hot after this process! Danger of burning hands or fingers! Protective gloves MUST be worn!



Step 4

Inductive heating expands the fitted bore in the cutter body. Only then can you totally screw the body onto the end face of your adaptor with the appropriate spanner. This step must be possible without using too much strength. If there is still some resistance, please heat the DuoPlug® cutter body once more for a few seconds and try again.



Step 5

Attention: Make sure that the body and adaptor fit together perfectly. There should be no gap.

Perform these steps with only moderate strength.



Step 6

Do not shock cool your shrunk combination; use the air-cooling equipment of your Shrinking Unit TSI 3510 to cool it evenly. During cooling, the DuoPlug® cutter body contracts and you get a safe load transmission.



Step 7

Mount the desired inserts onto the body with their screws. After checking the diameter and length of your tool, you can start your operation.



Dismantling:

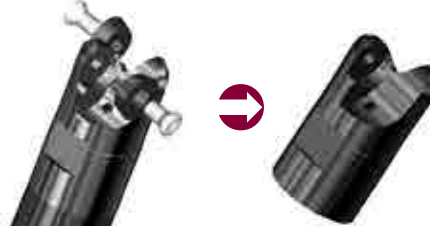
Preparations

Get all the necessary accessories and equipment together at the workstation before starting heating procedure! (appropriate spanner, safety glasses, protective gloves)

Attention: You absolutely MUST wear your safety glasses when dismantling! Used tools carry swarf and cooling fluid residues which could spray out during operation!

Step 1

Remove inserts and screws from milling cutter body.



Step 2

Heat your used combination with the Pokolm Inductive Shrinking Unit TSI 3510 for 6 to 15 seconds, depending on diameter.

Attention: Adaptor and milling cutter body are still very hot! Danger of burning hands or fingers! Protective gloves MUST be worn!



Step 3

Inductive heating expands the fitted bore in your cutter body. Only after heating should you unscrew your cutter body from your adaptor using an appropriate spanner. This step must be possible to perform without strength. If there is still some resistance, please heat the cutter body once more for a few seconds and try again.



Step 4

Do not shock cool your unshrunk dismantled parts; use the air-cooling equipment of your shrinking unit TSI 3510 to cool it slowly, or use the deposit box.

Attention: Adaptor and milling cutter body are still very hot! Danger of burning hands or fingers! Protective gloves MUST be worn!



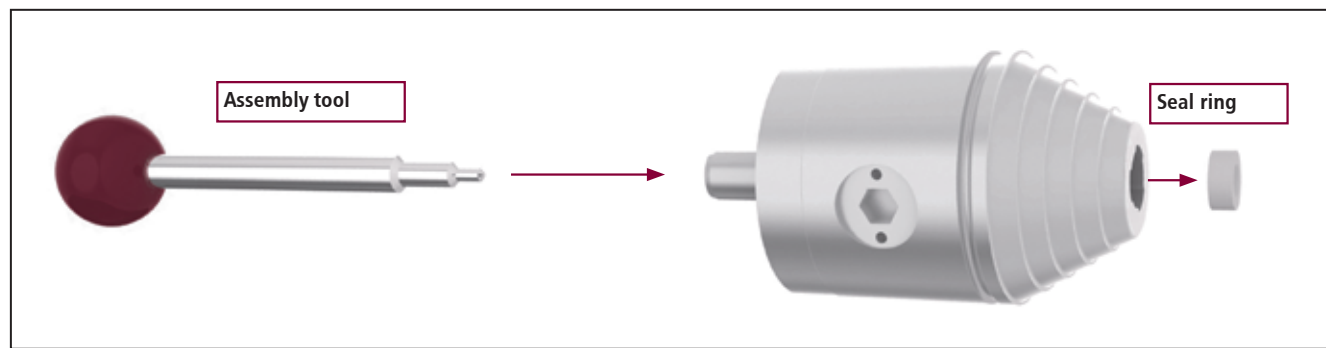
For further inquiries concerning the DuoPlug® system, please do not hesitate to contact us.

ASSEMBLING 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:



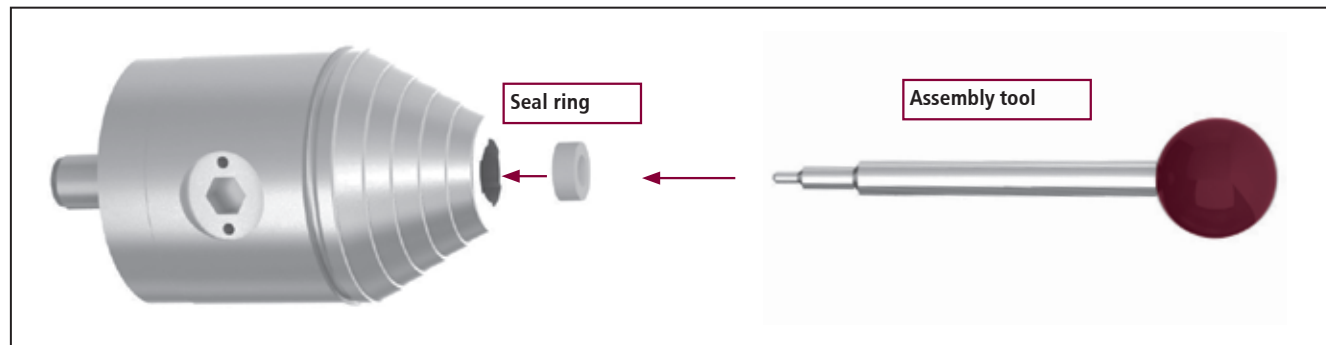
Step 1

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

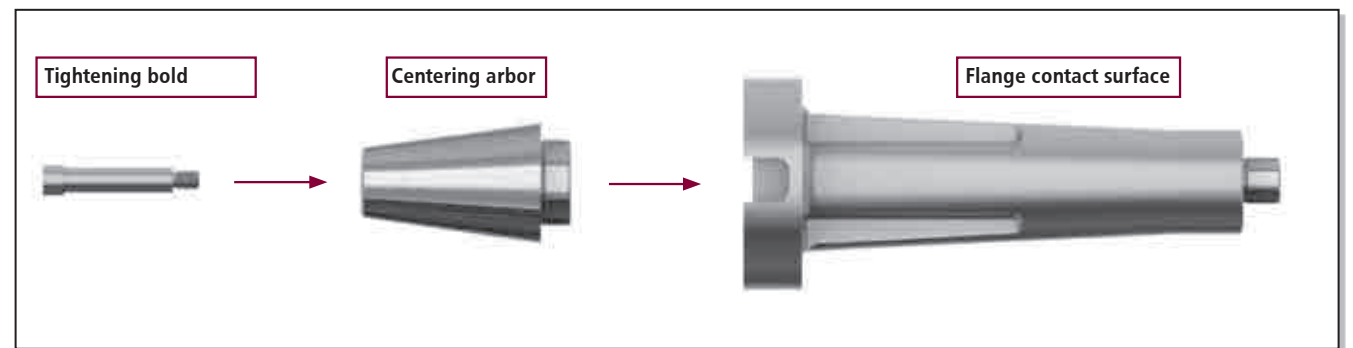
Place the new seal ring with the hollow side facing the tool onto the assembly tool and insert from the front through the clamping jaw up to the seat of the seal ring. The seal ring is held in place with an O-ring.

ASSEMBLING INSTRUCTIONS

Centering arbor and flange contact surface

In order to ensure a trouble-free insertion into the machine during centering and screwing-on the flange contact surface make sure that the centering arbor and the flange 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 flange contact surface from becoming tightly screwed together. Please observe the following instructions:

Assembly of the centering arbor:



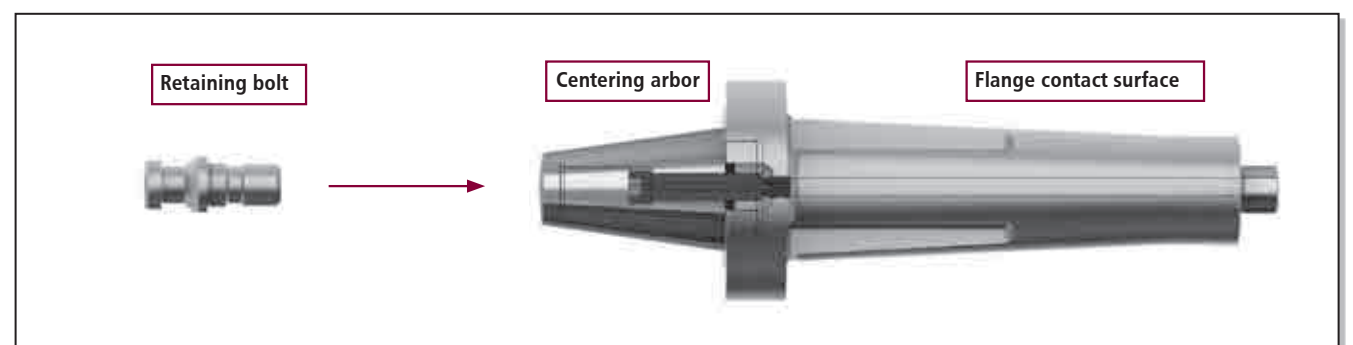
Step 1

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

Step 2

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

Assembly of the retaining bolt:



Step 1

Screw the retaining bolt into the inside thread of the centering arbor and tighten by hand. The flange contact surface can now be inserted and screwed to the machine.

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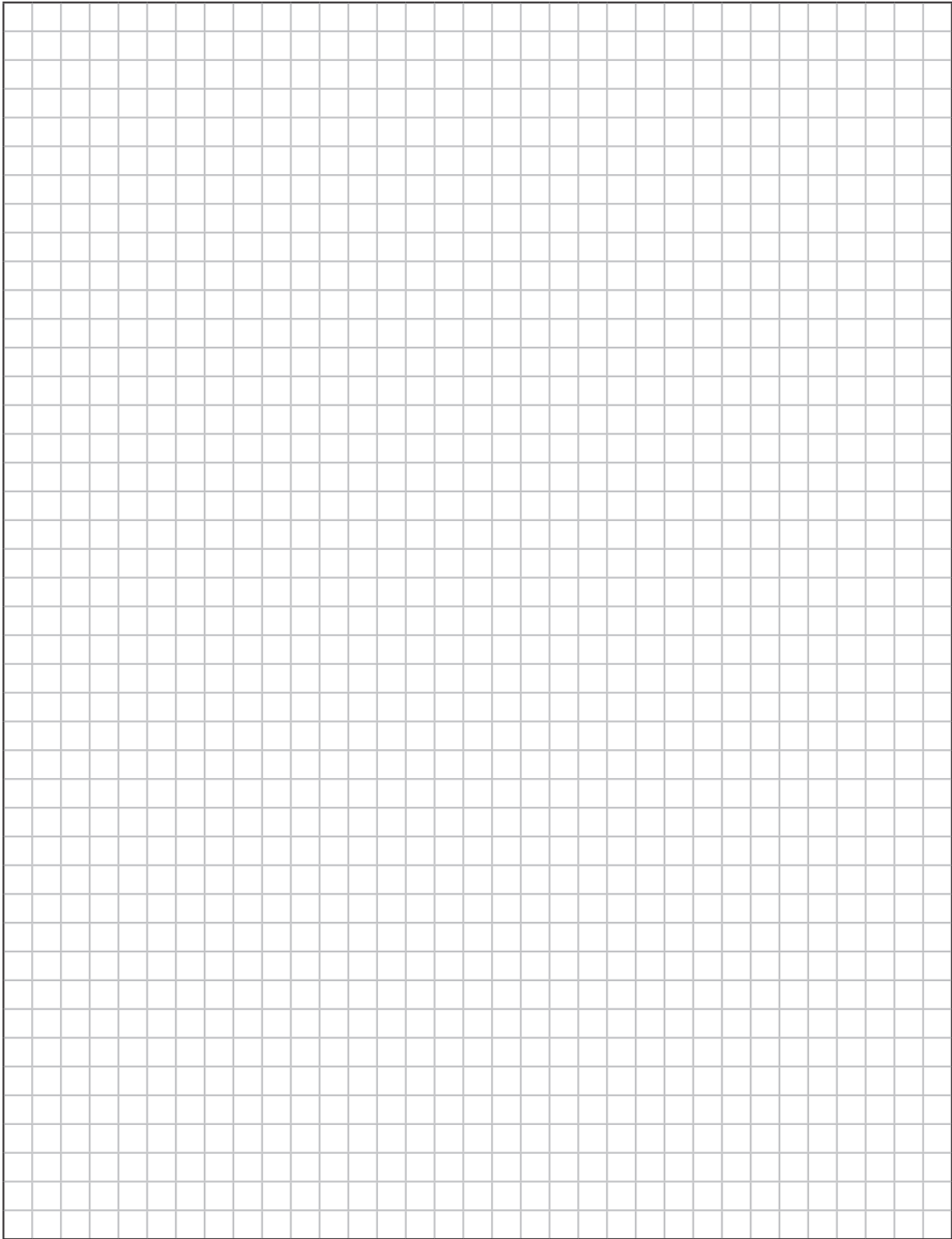
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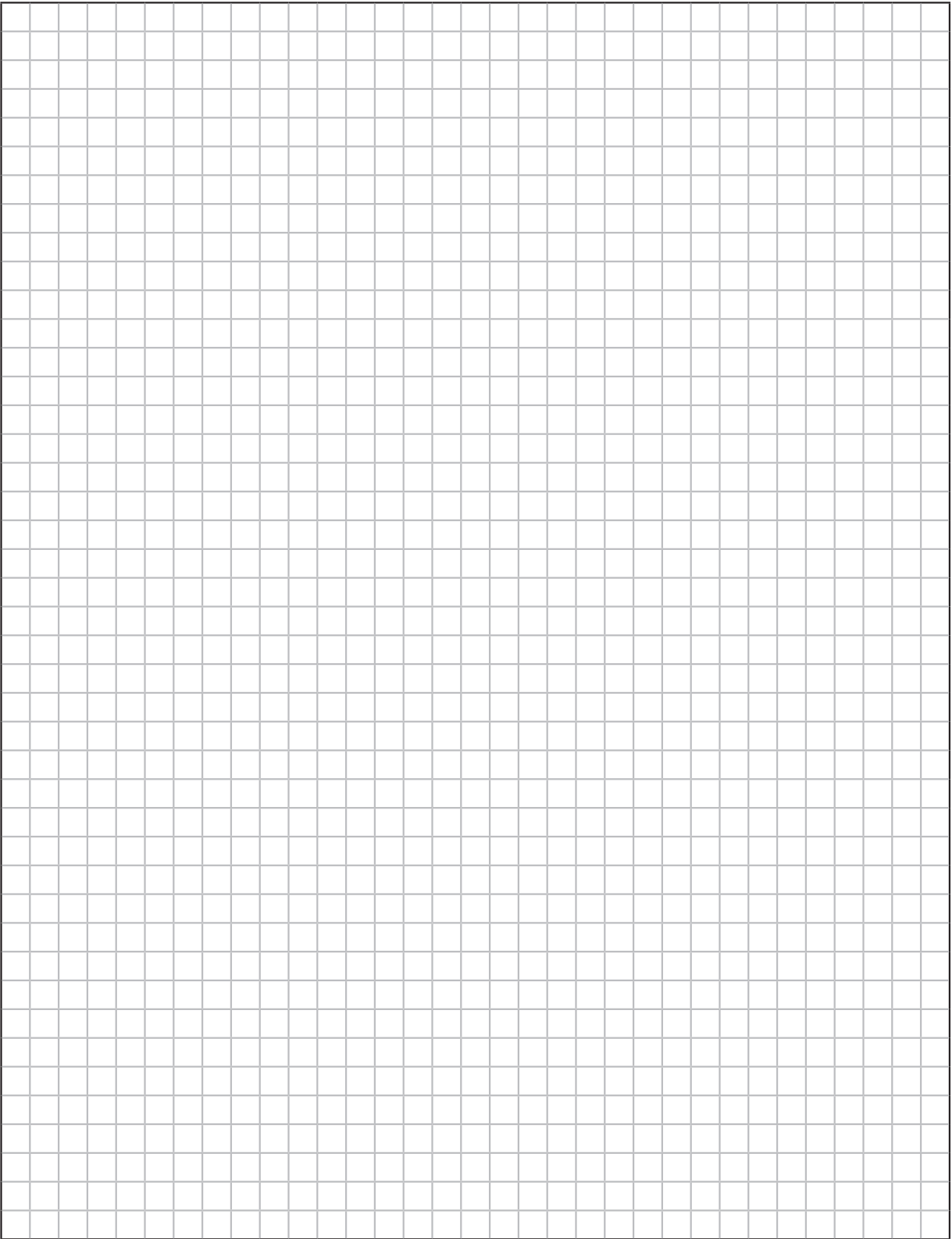
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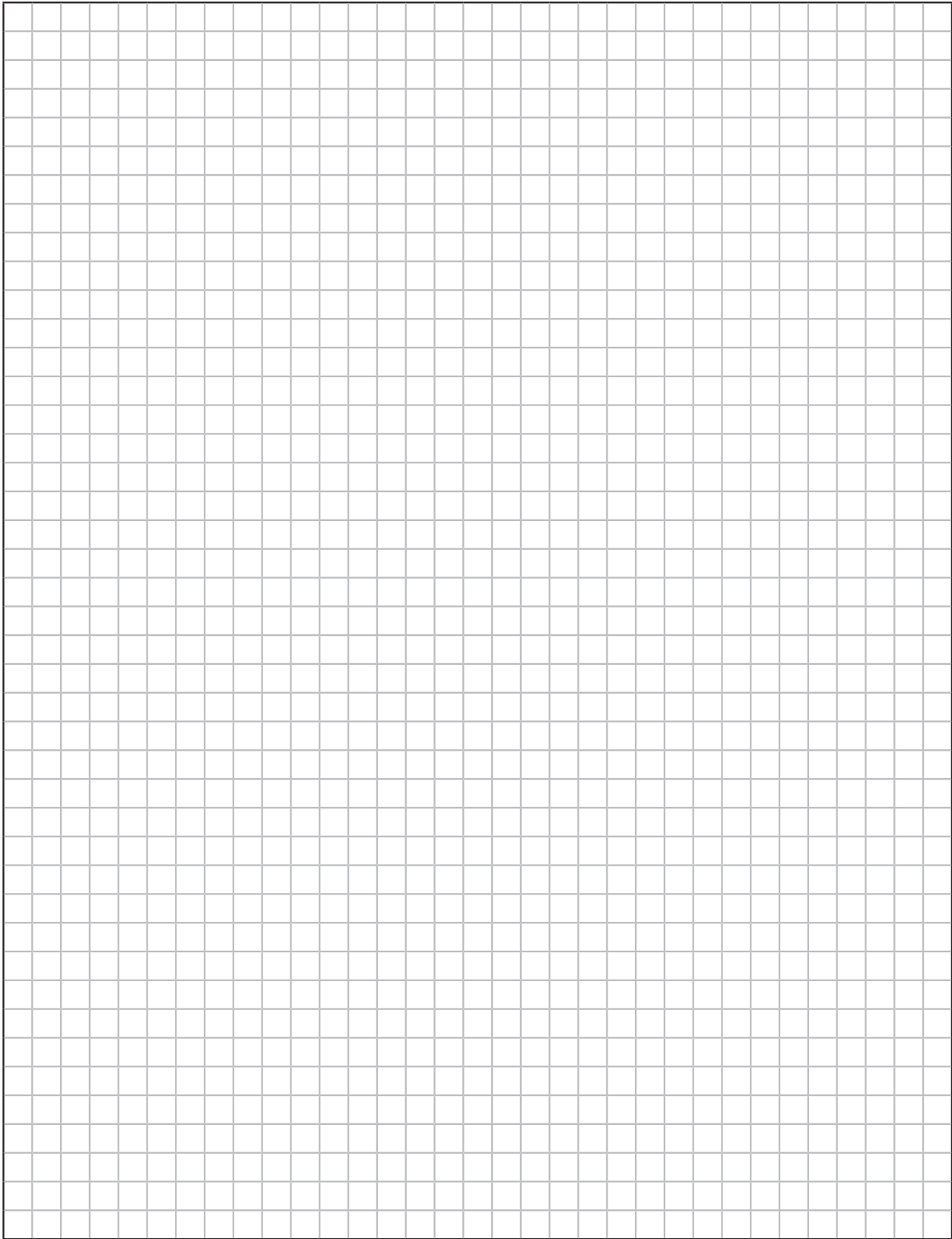
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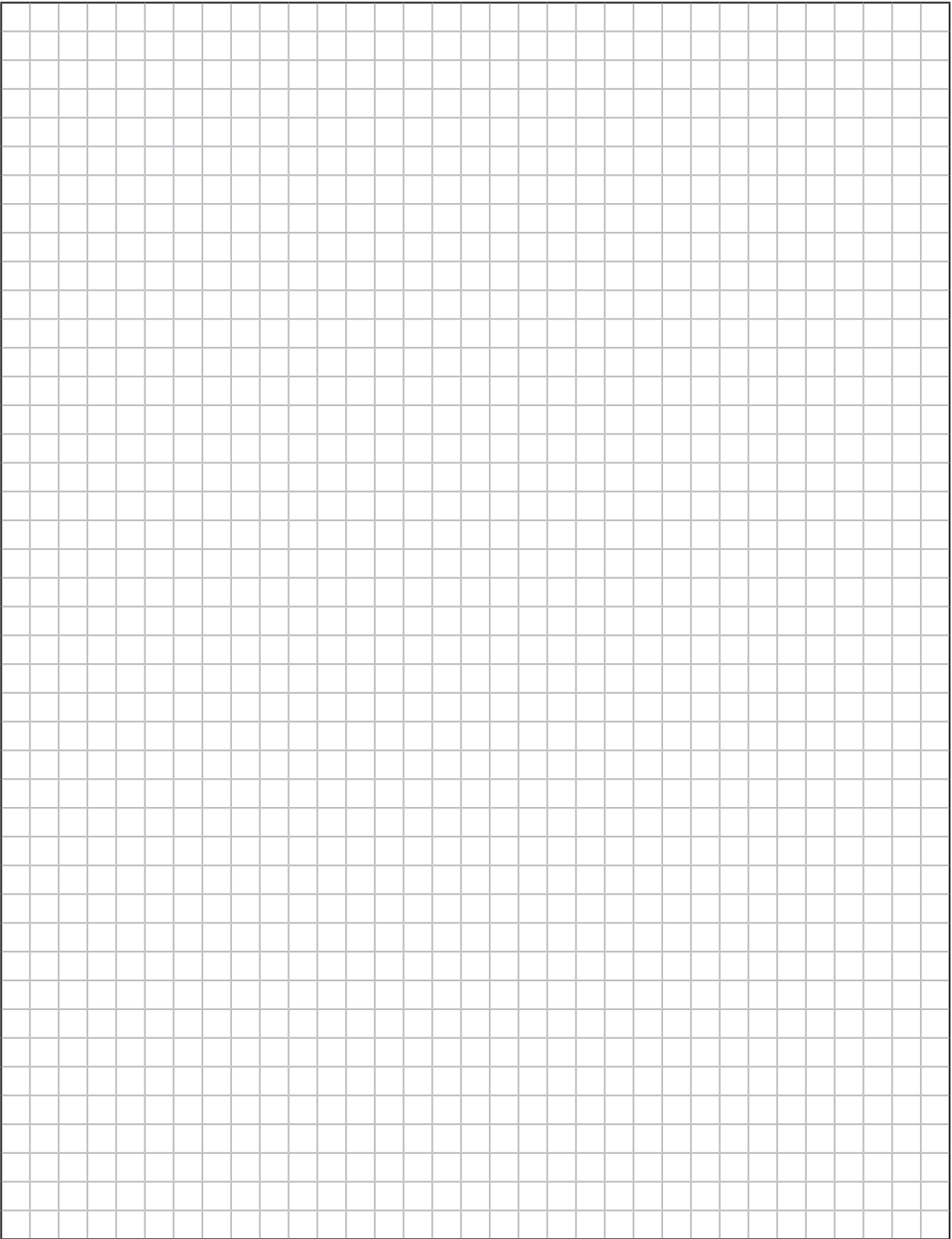
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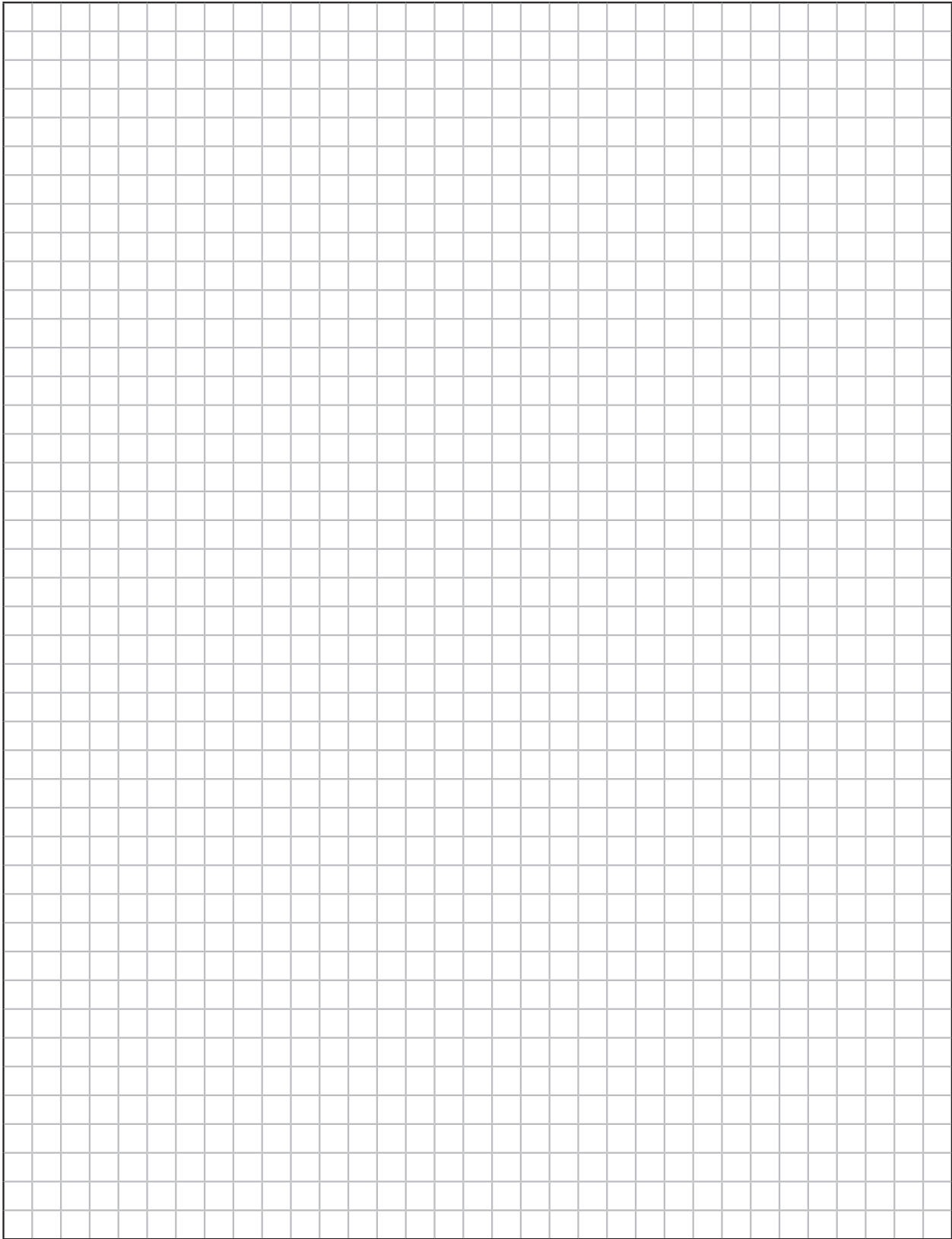
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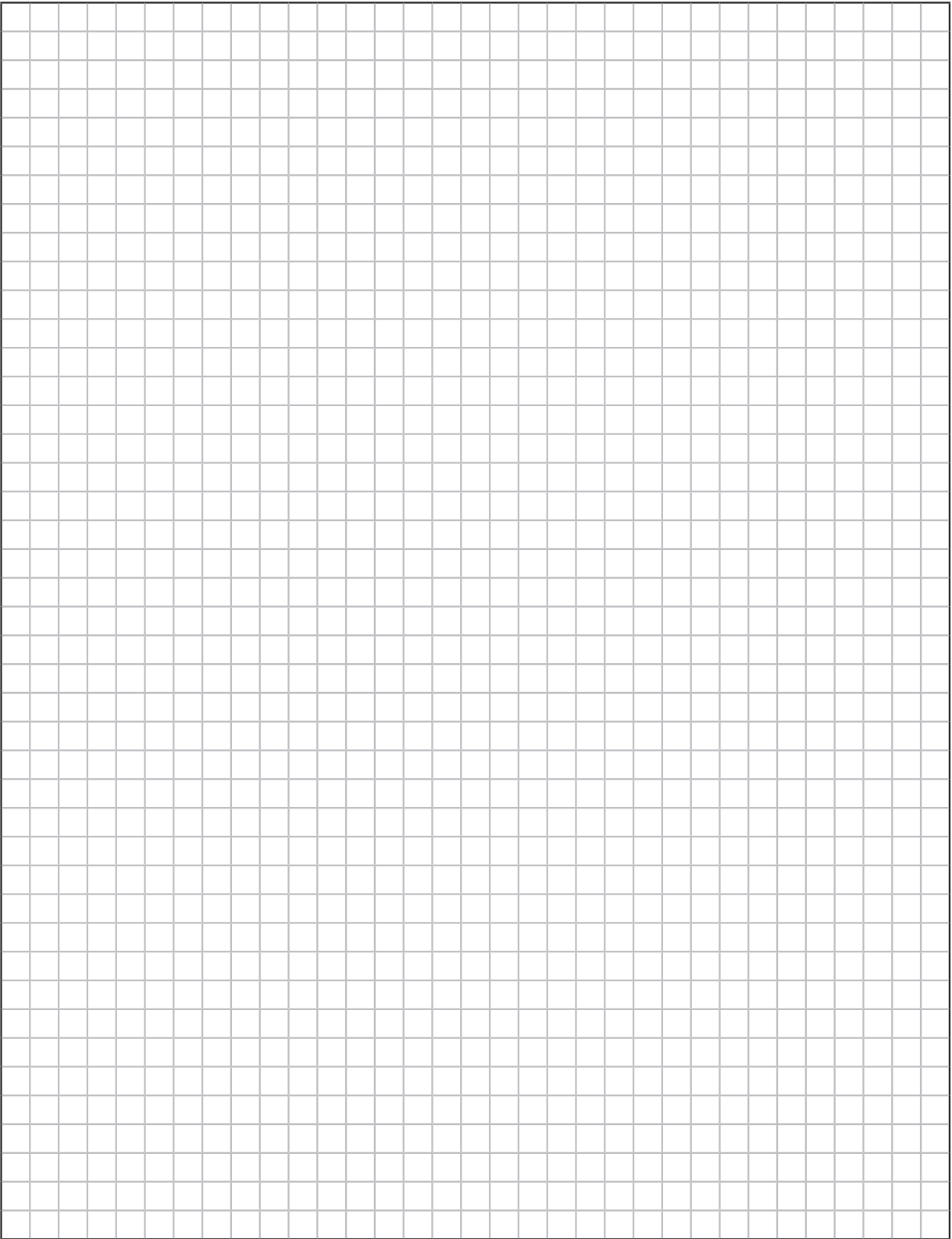
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QUICKFINDER

Fit zone diam. of threaded shank end mill bodies:					
Thread size	M 5	M 8	M 10	M 12	M 16
Length fit zone in mm	5,5	8,5	10,5	12,5	17,0
Starting torque in Nm	7	15	30	50	100

Thread sizes for Shell-type arbors:					
Pilot diameter in mm	16	22	27	32	40
Fixing screw	M 8	M 10	M 12	M 16	M 20

Please take the radius R (5-8 mm depending on arbor type) into account for practical use.

Theoretical usable end mill length of Solid carbide end mills in mm*:						
	diam. of shank (DIN 6535) d2 h6	2 - 5	6 + 8	10	12 + 14	16 + 18
	length of shank (DIN 6535) l2 $\begin{smallmatrix} +2 \\ -0 \end{smallmatrix}$	28	36	40	45	48
	diam. of shank (DIN 6535) d2 h6	20	25	32 + 36		
	length of shank (DIN 6535) l2 $\begin{smallmatrix} +2 \\ -0 \end{smallmatrix}$	50	56	60		
*this usable length appears through deduction of the DIN-shank-length (l2 according to DIN 6535) from the overall length l1 of the end mill or of the solid carbide adapters. See table above.						

	toric tool		incorporated insert		arbors with zero reach
	7° positive axial rake angle		clamping flat		DuoPlug®
	12° positive axial rake angle		concave moulding		shim
	17° positive axial rake angle		working depth		internal coolant supply
	Solid Carbide		suitable for high-speed machining		especially suitable f. non-ferr. materials
	chamfer		wet machining possible		on request
	2-point contact milling		dry machining possible		stock item, subject to confirmation
	wet machining required		for direct spindle mounting		available as long as stock lasts
	dry machining required		long series		stainless- acid- and heat resistant
	balance grade		dense antivibration material		



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