



ER System

The pioneering toolholding system

Product catalog

REGO-FIX 

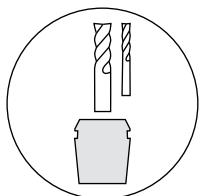


ER System

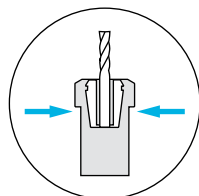
Defining toolholding standards

When REGO-FIX first introduced the ER System in 1972, it took the machining world by storm. With the DIN 6499 standardization twenty years later, the REGO-FIX ER collet became the industry standard. Today, the ER System is still the most used toolholding system worldwide.

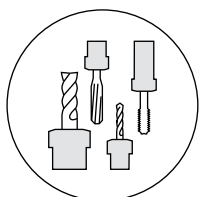
Key advantages



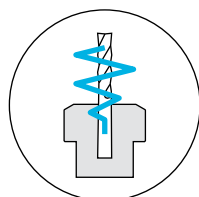
The widest ER product range: clamps all diameters from 0.2 mm – 36 mm.



Safe and accurate toolholding of all shank types and materials.



Outstanding flexibility for use with all tool types.

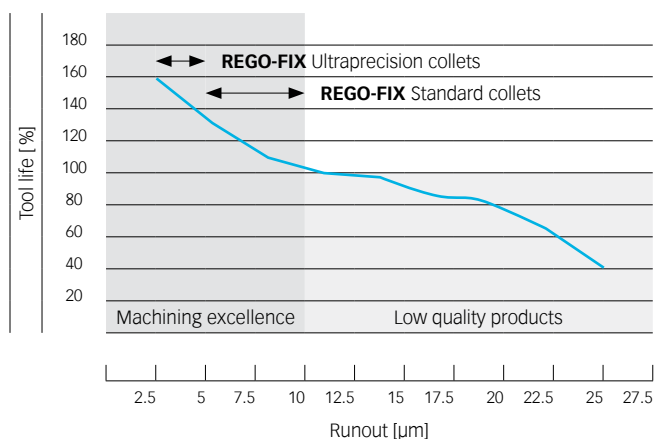


High vibration-dampening results in longer tool life and best surface finish.

High quality matters An outstanding tool runout is one of the most positive influences on enhancing your tool life.

Extend tool life with the REGO-FIX ER range

Influence of tool runout on tool life / Source: In-house testing



Three systems – one brand

Our brand unites three different toolholding systems. Each system has different strengths to fit your machining needs, but at the heart of each system lies our aim for toolholding excellence.

powRgrip® System

For high-end machining with a total system **TIR ≤3 µm at 3xD**

PG colletholders

Taper accuracy AT3

Surface finish
max. Ra 0.25

High transferable torque
up to 1,100 Nm

PG collets

Clamping range
from 0.2 up to 25.4 mm

Special surface treatment
ensures longevity

Clamps all shanks
with tolerance h6

Vibration dampening
for high RPM

A holistic system approach

All parts are designed for exclusive fit to ensure toolholding excellence.

ER System

Our ideal system for standard machining

ER colletholders

Runout TIR ≤3 µm

Taper accuracy AT3

Surface finish max. Ra 0.25

Factory balanced

ER collets

Wide clamping range: from ER 8 up to ER 50 and
for diameters from 0.2 mm up to 36 mm

Clamping capacity 0.5 mm to 2.0 mm

Runout TIR ≤10 µm at 3xD for ER standard

Runout TIR ≤5 µm at 3xD for ER-UP

ER clamping nuts

Collet-locking system

Balanced by design

Special surface treatment improves transferable torque
and protects against corrosion

micRun® System

Total system **TIR $\leq 3 \mu\text{m}$ at 3xD**

MR colletholders

Taper accuracy AT3

Polished surface for improved performance

Balanced for high RPM

Vibration dampening

MR collets

Clamping range from 1.0 mm to 20.0 mm

Nominal diameter shanks h11

MR clamping nuts

Collet-locking system

Balanced by design

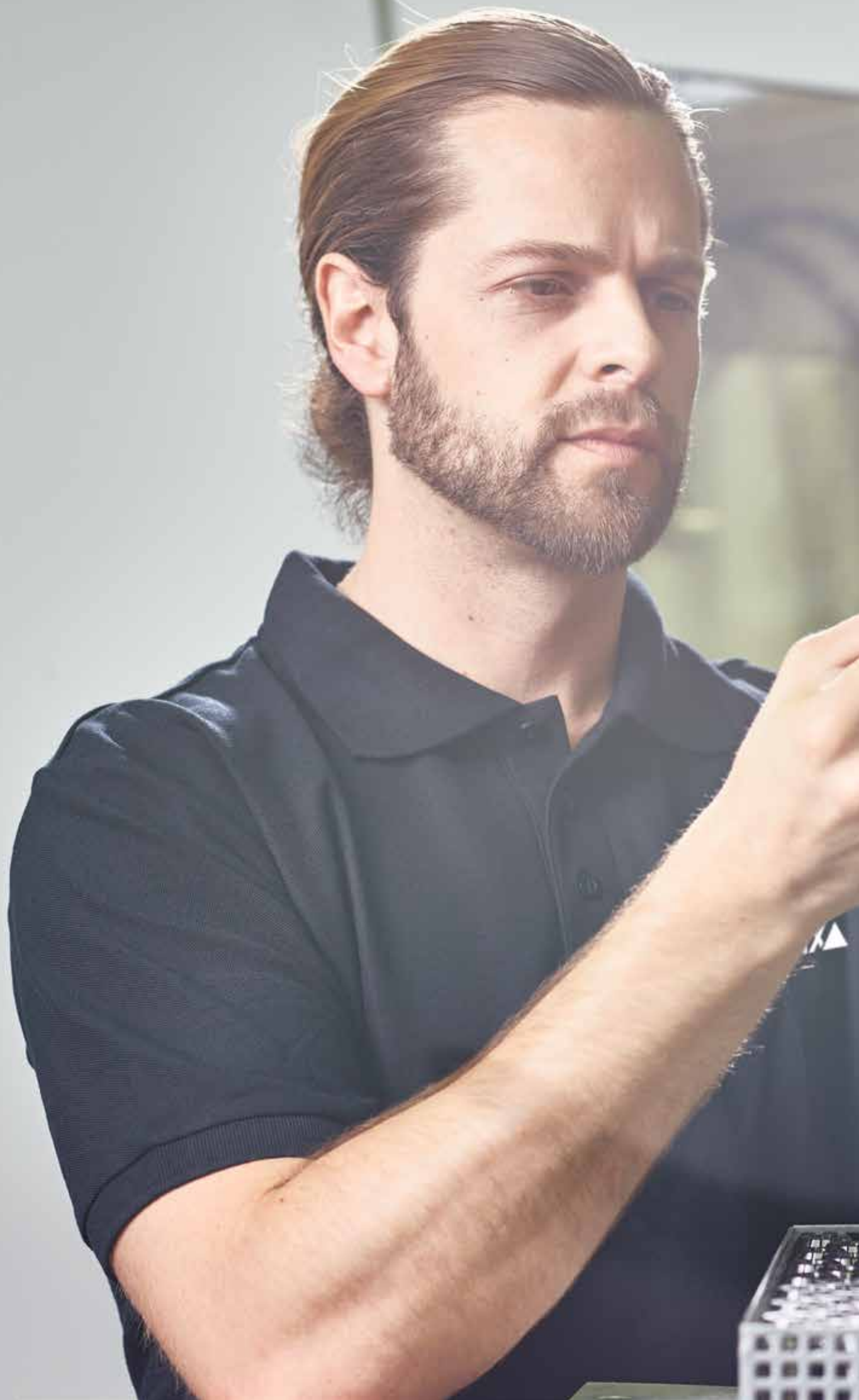
Grooveless design for higher RPM

Freewheel wrench head

A holistic system approach

All parts are designed for exclusive fit to ensure toolholding excellence.

Broad ER product range covers most toolholding needs.



**We believe in what we do.
We design and manufacture products
that meet our passion for precision,
high quality and design.**

Passion for precision



Master both wet and dry applications

We offer efficient solutions for specific machining techniques and different work materials to maximize your machining.

Dry machining



Dry machining is mainly used for specific machining techniques and work materials, such as carbon, high-tensile plastics or wood.

Pros

- // Reduced initial machine investment costs
- // Simple and easy cleaning
- // Clear sight on point of action between tool and workpiece

Cons

- // Inadequate heat dissipation can lead to a reduced tool life
- // Increased tooling costs due to earlier wear and tear
- // Extended production cycles due to slower possible production speed

Wet machining



The cutting edge is subject to thermal strains. Wet machining thus helps to regulate the impact of high heat that occurs during milling, ultimately protecting the tool against total tool failure.

Pros

- // Fast and effective heat dissipation
- // Improved surfaces thanks to lubrication of cutting edge
- // Clean and easy chip removal
- // Production cycles can be increased leading to an overall increase of productivity
- // Lowered tool costs

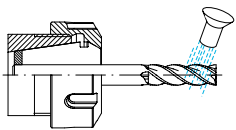
Cons

- // Additional costs for the acquisition of a pump
- // Limited view on point of action
- // Wet surroundings may present as an ideal bacteria breeding ground

Supplying the right amount of coolant to where it matters

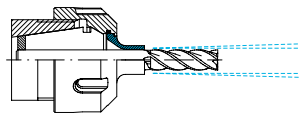


Key features of external flood cooling



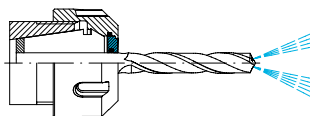
- // Universal application possibilities
- // Problems may arise with deep cavities
- // Reduction of tool life because cooling is not right on the cutting edge
- // Suboptimal chip deflection
- // Limited adjustment of nozzles due to different tool lengths and diameters

Key features of peripheral cooling



- // Achieve peripheral cooling with reCool® and the use of our coolant flush disk KS / ER
- // Coolant is fed along the side of the tool to the cutting edge
- // Can be used for moderate cavities

Key features of internal cooling



- // Achieve internal cooling with reCool® and the use of our sealing disk DS / ER
- // Precise cooling at the cutting edge and improved chip removal
- // Particularly suitable for deep cavities
- // Lubrication of cutting edge and cooling
- // Best surface quality

Low-cost retrofitting to internal cooling

Retrofit flood cooling to internal cooling in two minutes with reCool®. Available for both driven tools and static tooling systems.

Key features of reCool® static RCS for use with static holders

- // Cost-friendly conversion of existing static tooling systems to through coolant in only two minutes
- // For ER collets (DIN 6499 / ISO 15488) in stationary collet holders with external fine threads*
- // Coolant pressures of up to 150 bar**
- // RCS / ERMX for emulsion and oil coolants
- // Low-maintenance design
- // For coolant through tools (with sealing disks DS / ER) and for peripheral cooling (with coolant flush disks KS / ER)

* reCool® static can also be used for internal threading with the corresponding adapter.

** With high-pressure hoses RHS-HP. 100 bar with standard hose.

Key features of reCool® rotary RCR for use with spindles

- // Cost-friendly conversion of existing driven tooling systems to through coolant in only two minutes
- // For ER and ERM thread in driven tools and turning machines and for ER collets to DIN 6499 / ISO 15488
- // Speeds up to 12,000 rpm*
- // Coolant pressures up to 150 bar with high-pressure hose, standard hose max. 100 bar
- // Low-maintenance coolant lubricated bearings
- // For coolant through tools (with sealing disks DS / ER) and for peripheral cooling (with coolant flush disks KS / ER)
- // RCR / ER(M) for emulsion and oil coolants
- // Convert inner-threaded driven tools to outer-threaded, using the reCool® adapter. Thus, successfully prepare different types of driven tooling for the use of reCool®
- // Not for use with sealed collets DM

* 6,000 rpm with RCR / ER 40.

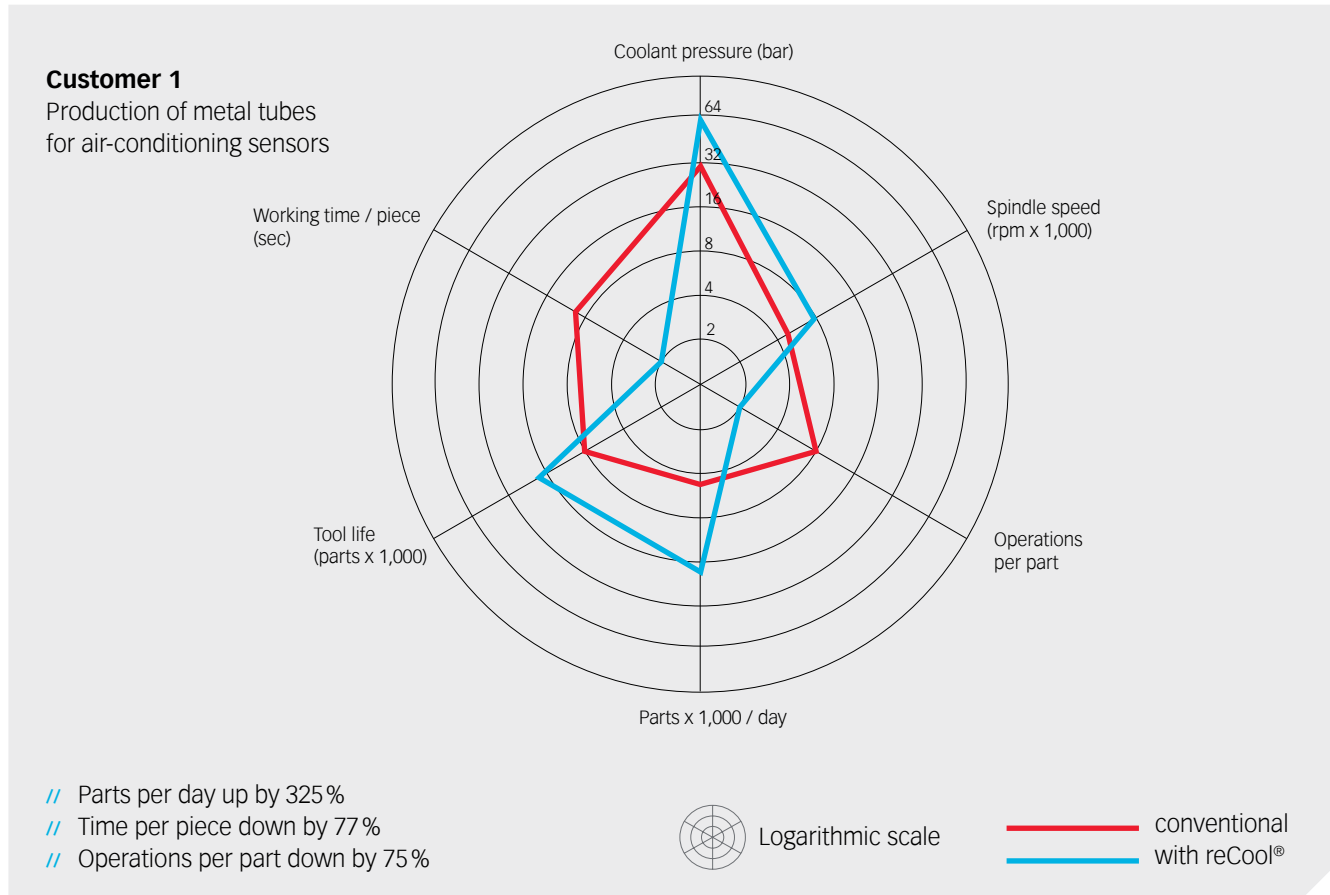


Advantages of internal cooling with reCool®

- // Optimized coolant supply to the cutting edge: increases tool life and reduces cycletime
- // Best chip removal
- // No scattering or spray losses

reCool® gets you more for less

Achieve operational excellence in reducing manufacturing time and securing production chains.



Automotive industry Automotive manufacturers and suppliers are confronted with increasing process complexity, shorter technology cycles and steady pressure to innovate.

Benefits of reCool® reCool® enables customers to produce high-quality parts in less time with lowered costs. Our cooling solution is retrofittable for any turning machines and lathes. This is why reCool® offers great potential for almost all manufacturers.

Productivity is key for customers in the automotive industry. With beaming eyes, we tell you that our customer doubled his productivity thanks to reCool®.

Our products generate competitive advantages



Discover the reCool® universe

Maximum cooling possibilities

reCool® is made for static and rotary applications and offers cooling possibilities for peripheral and internal cooling, while making best use of your existing toolholding equipment.

Recommended torque wrench



TORCO-FIX for reCool® RCS and reCool® RCR

Matching wrenches and wrench heads



E MX for reCool® RCS



E AX for reCool® RCR



reCool® RCS for static applications



reCool® RCR for rotary applications

Peripheral cooling

Internal cooling



Coolant flush disk KS / ER



Sealing disk DS / ER

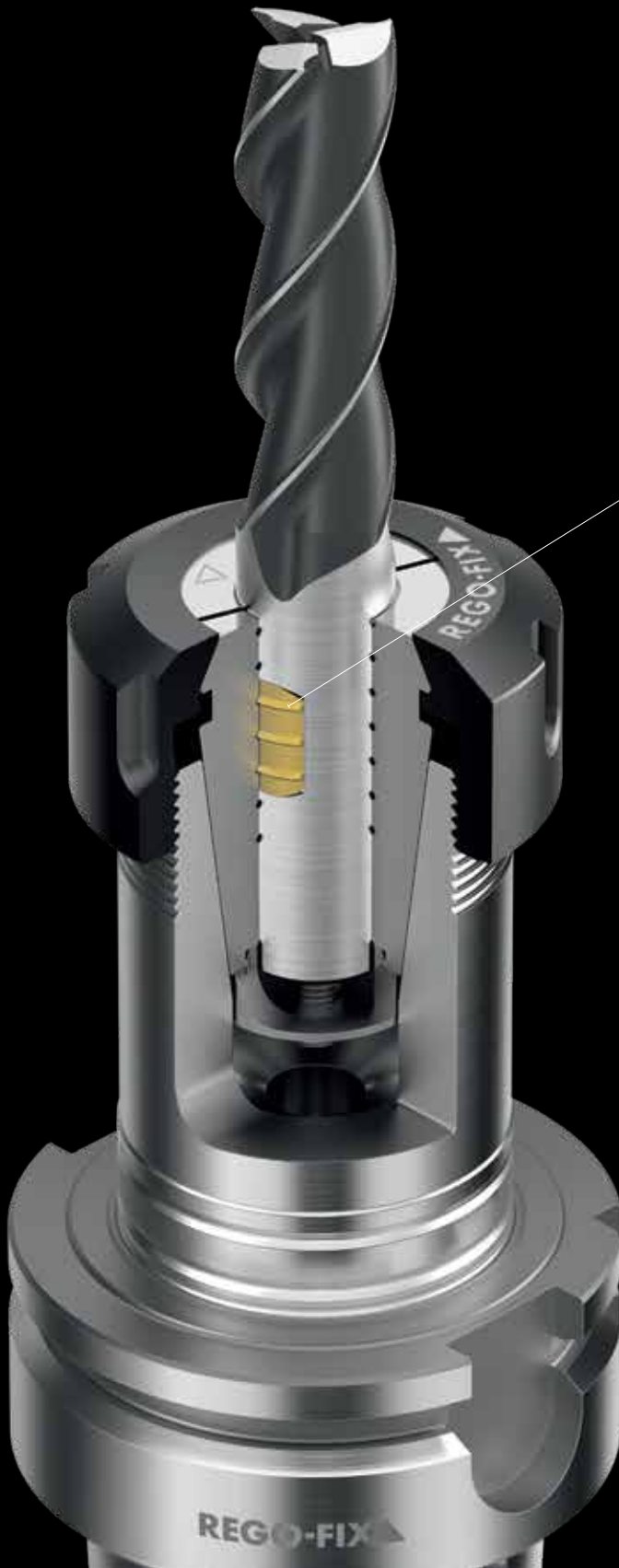
Standard ER or ER-UP collet

Standard ER and ER mini cylindrical toolholders or driven tools

Special solutions: ER secuRgrip®

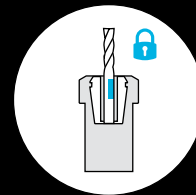
Form-fit for 100% pullout protection

With our innovative secuRgrip® solution, we offer a total tool pullout protection for the ER System.

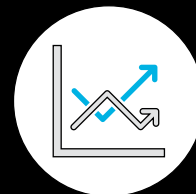


Threaded insert for end mill flat

Key advantages



ER secuRgrip® is available for all standard tools with Weldon flat (10 – 25,4 mm), without additional modifications.

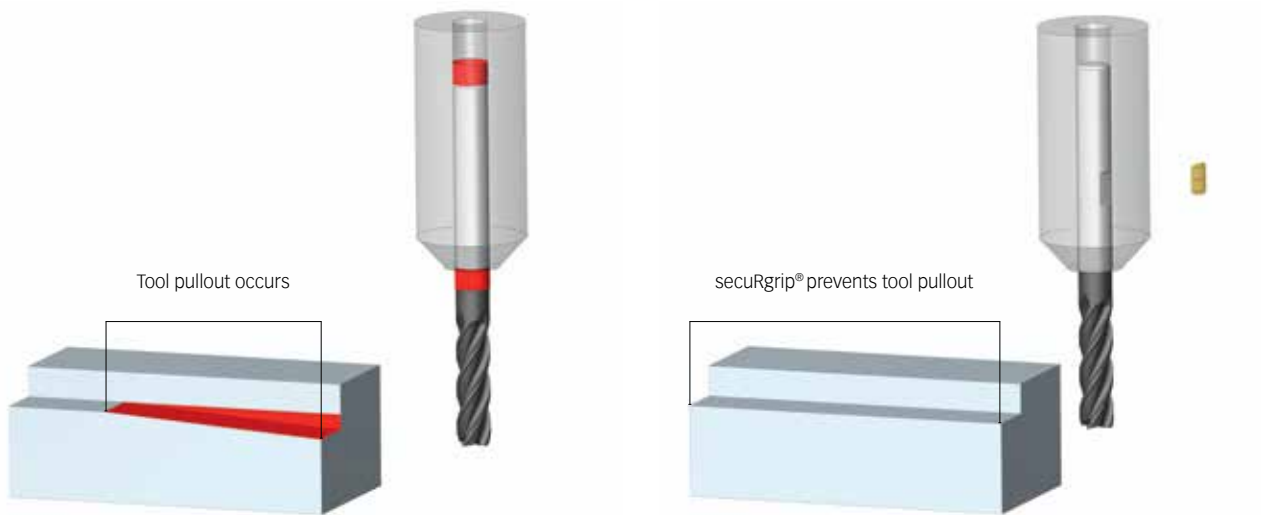


Increase productivity through process reliability.

Fitted to REGO-FIX ER standards:

Use your existing REGO-FIX ER collets and ER nuts.

Safe machining even for difficult-to-handle workpieces



Length alterations can lead to damage of the workpiece.

Prevent workpiece damage by using REGO-FIX secuRgrip®.

Full protection where you need it The secuRgrip® threaded insert is designed to fit in any tool with a Weldon flat. This way you can use the tool of your choice. In combination with our ER secuRgrip® collet, we offer the ultimate tool pullout protection at a competitive price. Avoiding length alterations caused by tool pullout results in improved process reliability and ultimately improves your overall machining productivity. Our secuRgrip® solution is available for ER 32 and ER 40 – just the right sizes when it comes to rough machining.

- // No additional costs for replacing damaged tools, thanks to ER secuRgrip®
- // No modification of the tool shank is required
- // Extra protection for worry-free machining, especially with expensive work pieces

Get your ER secuRgrip®

Go to page 97 for all ER secuRgrip® product part numbers.

Prevent work injuries caused by slip-off's

The Hi-Q®/ERMX intRlox® and Hi-Q®/ERMXC intRlox® mini clamping nuts have a specially designed profile to fit the wrench. This special profile prevents from slipping-off when tightening or loosening the nut.

Key features of Hi-Q® / ERMX intRlox®

- // Slip-off proof with self-locking profile
- // Special surface treatment for higher clamping force
- // Corrosion-resistant surface
- // Hi-Q®/ERMXC intRlox® suitable for our sealing disks (DS/ER) and coolant flush disks (KS/ER), suited for coolant pressures up to 150 bar
- // For ER collets in accordance with DIN 6499 / ISO 15488 (REGO-FIX ER standard and ER-UP), with microbore (ER-MB), metallic-sealed type collets (ER-DM), tapping collets (ER-GB and PCM ET1)
- // Suitable for mini nut thread pitch colletholders with fine thread
- // Square-socket drive on V-E MX extension available

Benefits

- // Safe handling with slip-off proof design thanks to the patented intRlox® profile
- // Slip-off proof design with all advantages of the regular mini clamping nuts
- // Easy and safe clamping with MX wrench, wrench head extensions for applications with little room for wrenches
- // Design is ideally suited for lathes and Swiss turning machines
- // Matching accessories available: wrench and extension combinations prevent slipping-off when changing tools in the machine
- // Very slim sizing proofs suitable for machines where space is limited

Get your Hi-Q® / ERMX intRlox®

Go to page 116 for all Hi-Q® / ERMX intRlox® products. Slip-off proof extensions V-E MX are on page 146.

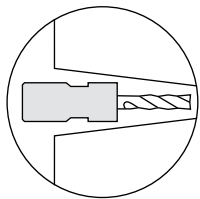


XL vibration dampening

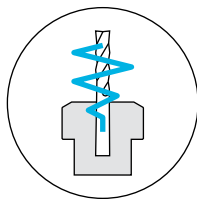
Optimize your surface finishes and extend tool life by minimizing occurring vibrations during machining.

Minimize tool vibrations The MICRO-FRICTION DAMPENING™ (MFD) technology (pat. pend.) by REGO-FIX allows our XL colletholders to dissipate vibrations faster than standard long-reach colletholders. Dampening the vibrations faster means that your cutting tool, part and spindle will see less vibrations resulting in better surface finishes, longer tool life and less spindle wear. All REGO-FIX XL colletholders are designed for use of max 5,000 rpm.

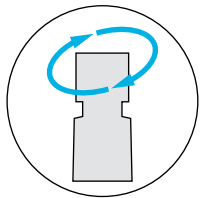
Key advantages



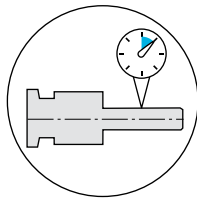
Minimal outside dimensions:
long and slim design.



Exclusive vibration-
dampening design.



Balanced by design.

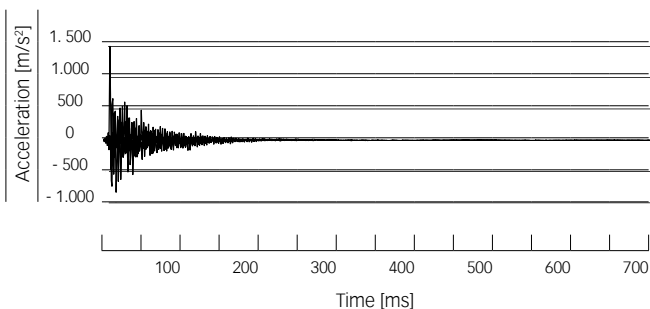


TIR I.D. to O.D. $\leq 10 \mu\text{m}$.



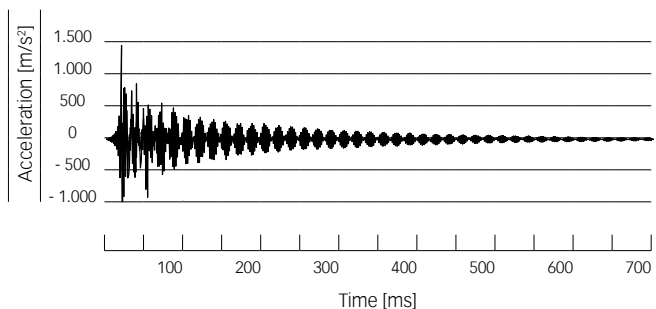
Vibration chart

Decay of REGO-FIX XL colletholder with vibration-dampening design
Source: In-house testing



Vibration chart

Monoblock standard colletholder without vibration-dampening design
Source: In-house testing

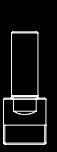






**We engineer and manufacture our products
at our headquarters. From Tenniken, we
deliver our innovative Swiss-made
toolholding systems worldwide.**

True Swiss quality

Standard				Cylindrical collets				Collets for tapping				Floating chucks		Collet reductions	
SK/ ER	BT/ ER	HSK/ ER	REGO-FIX- CAPTO/ER licensed by Sandvik Coromant	CYL/ ER	CYL/ ERM(X) CYLF/ ERM(X)	CYL/ ER NC	CYDF/ ERM CYDF/ ERM(X)	MK/ ER	SH/ ER	ISO 20/ ER	HSK-A SSY	CYL SSY CYL GSF	PH/ER PHC/ER PHC-C/ER	MPH/ ERM(X)	ER(M)/ ERM ER(MX)/ ERM(X)
															
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Minimize runout – boost productivity

Experience outstanding quality We at REGO-FIX know how to minimize your runout and boost your productivity. This is why we designed our ER colletholders to fulfill diverse criteria all crucial for achieving machining excellence.

The outstanding design paired with our experienced engineering make the ER products some of our most successful toolholding options. REGO-FIX ER collets exceed the DIN requirements and convince with a collet TIR of 5 µm or better. Further increases in machining productivity is possible by incorporating our matching items. The ER colletholder, collet and Hi-Q® nut together make

the ER System a solid option for traditional machining applications. What you see is what you get: all our products bear the REGO-FIX triangle – our seal for outstanding Swiss quality.



Swiss quality standard

Our products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

Steep taper collets SK

Universally suitable for different machining applications.

DIN 69871 / DIN ISO 7388-1

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Taper accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100 % balanced to G 2.5 @ 25,000 rpm / <1gmm.

XL collets

100 % balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper <10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All collets with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q® / ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

ID chip hole

In accordance with DIN 69873 for 10 mm diameter.





SK / ER and SK / ER XL collets

Applications

These collets are designed for CNC-machining centers with an automatic tool changer. They are universally suitable for different machining applications. Their vibration dampening reduces spindle wear and extends tool life.

Balancing

REGO-FIX SK/ER collets are balanced to G 2.5 @ 25,000 rpm/<1gmm. Type H collets are ready to accept Hi-Q® balancing rings which allow precision balancing of the system including cutting tool up to 80,000 rpm depending on the balancing rings used.

SK / ER XL available

Due to their good vibration dampening installation, SK / ER XL holders are ideally suited in all machining processes where the standard length collets cannot be used.

For more details on our XL collets, please refer to page 17.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend using our friction-bearing clamping nuts Hi-Q®/ERB and Hi-Q®/ERBC.

Matched tooling system for best fit

For highest precision and best results the entire machining system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life, please refer to page 3.



SK / ERA collets

Applications

These collets are specially designed for mill-turning machines, multitasking machines and small vertical machining centers. They have the well-known REGO-FIX surface finish and are manufactured to meet our high-precision standards. Thanks to their shortness they possess a superior stiffness. ERA Zero-Z® collets have the shortest possible projection to increase the Z axis travel of the machine and to allow larger workpieces to be machined.

Features

REGO-FIX SK/ERA collets are balanced to G 2.5 @ 25,000 rpm/<1gmm. The Hi-Q®/ERAX clamping nut has been specially designed for applications where space is scarce.

For the influence of runout on tool life, please refer to the graph on page 3.

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.

SK colletholders

ERA Zero-Z® colletholder

SK

DIN 69871

DIN ISO 7388-1

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
SK 30							
SK 30 / ER 16 x 070 H	4230.11630	28	–	70	–	285	E 16 P
SK 30 / ER 16 x 100 H	4230.11650	28	–	100	–	285	E 16 P
SK 30 / ER 25 x 060 H	4230.12520	42	–	60	–	325	E 25
SK 30 / ER 32 x 065	2230.13220	50	–	65	–	–	E 32
SK 40							
SK 40 / ER 11 x 100 H	4240.11150	19	–	100	–	325	E 11 P
SK 40 / ER 11 x 160 H	4240.11180	19	–	160	–	325	E 11 P
SK 40 / ER 16 x 070 H	4240.11630	28	–	70	–	405	E 16 P
SK 40 / ER 16 x 100 H	4240.11650	28	–	100	–	405	E 16 P
SK 40 / ER 16 x 160 H	4240.11680	28	–	160	–	405 / 225	E 16 P
SK 40 / ER 16 x 200 H	4240.11690	28	–	200	–	405 / 225	E 16 P
SK 40 / ER 16 x 260 XL	8842.13090	28	46	260	140	–	E 16 P
SK 40 / ER 16 x 300 XL	8842.13130	28	46	300	140	–	E 16 P
SK 40 / ER 16 x 320 XL	8842.13150	28	46	320	240	–	E 16 P
SK 40 / ER 16 x 360 XL	8842.13190	28	46	360	240	–	E 16 P
SK 40 / ER 16 x 400 XL	8842.13230	28	46	400	240	–	E 16 P
SK 40 / ER 20 x 070 H	4240.12030	34	–	70	–	325	E 20 P
SK 40 / ER 20 x 100 H	4240.12050	34	–	100	–	325	E 20 P
SK 40 / ER 25 x 070 H	4240.12530	42	–	70	–	405	E 25
SK 40 / ER 25 x 100 H	4240.12550	42	–	100	–	405	E 25
SK 40 / ER 25 x 160 H	4240.12580	42	–	160	–	405 / 325	E 25
SK 40 / ER 25 x 200 H	4240.12590	42	–	200	–	405 / 325	E 25
SK 40 / ERA 32 x 019	2240.13207	–	–	19	–	–	E 32 AX
SK 40 / ER 32 x 070 H	4240.13230	50	–	70	–	405	E 32
SK 40 / ER 32 x 100 H	4240.13250	50	–	100	–	405	E 32
SK 40 / ER 32 x 160 H	4240.13280	50	–	160	–	405 / 405	E 32
SK 40 / ER 32 x 200 H	4240.13290	50	–	200	–	405 / 405	E 32
SK 40 / ER 32 x 320 XL	8842.16150	50	55	320	240	–	E 32
SK 40 / ER 40 x 080	2240.14040	63	–	80	–	–	E 40
SK 40 / ER 40 x 100 H	4240.14050	63	–	100	–	405	E 40
SK 40 / ER 40 x 160 H	4240.14080	63	–	160	–	505 / 505	E 40

* Balancing rings

Included in delivery: ER colletholders come with HI-Q® / ER clamping nut. ERA colletholders come with HI-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

Accessories are not included in delivery. Other XL sizes available on request.

SK-B colletholders

SK-B

DIN 69871

DIN ISO 7388-1

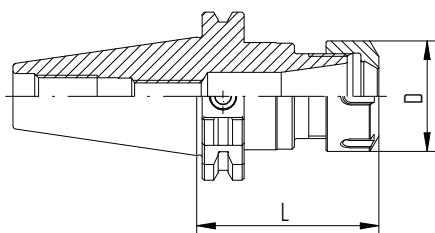
Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
SK-B 40							
SK-B 40 / ER 11 x 100 H	4240.11153	19	–	100	–	325	E 11 P
SK-B 40 / ER 11 x 160 H	4240.11183	19	–	160	–	325	E 11 P
SK-B 40 / ER 16 x 070 H	4240.11633	28	–	70	–	405	E 16 P
SK-B 40 / ER 16 x 100 H	4240.11653	28	–	100	–	405	E 16 P
SK-B 40 / ER 16 x 160 H	4240.11683	28	–	160	–	405 / 225	E 16 P
SK-B 40 / ER 16 x 200 H	4240.11693	28	–	200	–	405 / 225	E 16 P
SK-B 40 / ER 20 x 070 H	4240.12033	34	–	70	–	325	E 20 P
SK-B 40 / ER 20 x 100 H	4240.12053	34	–	100	–	325	E 20 P
SK-B 40 / ER 25 x 070 H	4240.12533	42	–	70	–	405	E 25
SK-B 40 / ER 25 x 100 H	4240.12553	42	–	100	–	405	E 25
SK-B 40 / ER 25 x 160 H	4240.12583	42	–	160	–	405 / 325	E 25
SK-B 40 / ER 25 x 200 H	4240.12593	42	–	200	–	405 / 325	E 25
SK-B 40 / ER 32 x 070 H	4240.13233	50	–	70	–	405	E 32
SK-B 40 / ER 32 x 100 H	4240.13253	50	–	100	–	405	E 32
SK-B 40 / ER 32 x 160 H	4240.13283	50	–	160	–	405 / 405	E 32
SK-B 40 / ER 32 x 200 H	4240.13293	50	–	200	–	405 / 405	E 32
SK-B 40 / ER 40 x 080	2240.14043	63	–	80	–	–	E 40
SK-B 40 / ER 40 x 100 H	4240.14053	63	–	100	–	505	E 40
SK-B 40 / ER 40 x 160 H	4240.14083	63	–	160	–	505 / 505	E 40

* Balancing rings

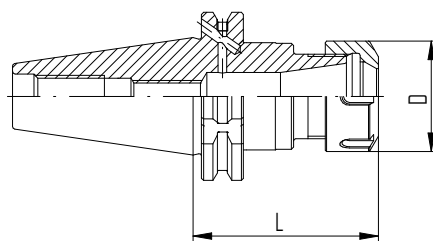
Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

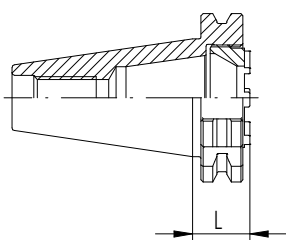
Accessories are not included in delivery.



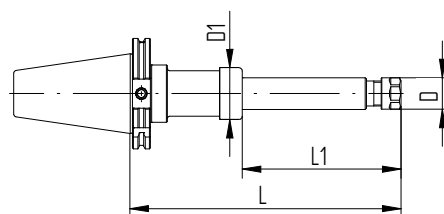
SK / ER (form A+AD)



SK-B / ER (form AD+B)



SK / ERA



SK / ER XL (form A+AD)

SK colletholders

SK-B colletholders

SK	SK-B
DIN 69871	DIN 69871
DIN ISO 7388-1	DIN ISO 7388-1

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
SK 50							
SK 50 / ER 16 x 100 H	4250.11650	28	–	100	–	505	E 16 P
SK 50 / ER 16 x 160 H	4250.11680	28	–	160	–	505 / 225	E 16 P
SK 50 / ER 16 x 200 H	4250.11690	28	–	200	–	505 / 225	E 16 P
SK 50 / ER 16 x 240 XL	8852.13070	28	46	240	140	–	E 16 P
SK 50 / ER 16 x 300 XL	8852.13130	28	46	300	140	–	E 16 P
SK 50 / ER 16 x 340 XL	8852.13170	28	46	340	240	–	E 16 P
SK 50 / ER 16 x 400 XL	8852.13230	28	46	400	240	–	E 16 P
SK 50 / ER 20 x 070 H	4250.12030	34	–	70	–	325	E 20 P
SK 50 / ER 20 x 100 H	4250.12050	34	–	100	–	325	E 20 P
SK 50 / ER 25 x 070 H	4250.12530	42	–	70	–	405	E 25
SK 50 / ER 25 x 100 H	4250.12550	42	–	100	–	405	E 25
SK 50 / ER 25 x 160 H	4250.12580	42	–	160	–	405 / 325	E 25
SK 50 / ER 25 x 200 H	4250.12590	42	–	200	–	405 / 325	E 25
SK 50 / ER 32 x 100 H	4250.13250	50	–	100	–	505	E 32
SK 50 / ER 32 x 160 H	4250.13280	50	–	160	–	505 / 405	E 32
SK 50 / ER 32 x 200 H	4250.13290	50	–	200	–	505 / 405	E 32
SK 50 / ER 32 x 320 XL	8852.16150	50	55	320	240	–	E 32
SK 50 / ER 40 x 100 H	4250.14050	63	–	100	–	505	E 40
SK 50 / ER 40 x 160 H	4250.14080	63	–	160	–	505 / 505	E 40
SK 50 / ER 40 x 200 H	4250.14090	63	–	200	–	505 / 505	E 40
SK 50 / ER 50 x 100	2250.15050	78	–	100	–	–	E 50
SK-B 50							
SK-B 50 / ER 16 x 100 H	4250.11653	28	–	100	–	505	E 16 P
SK-B 50 / ER 16 x 160 H	4250.11683	28	–	160	–	505 / 225	E 16 P
SK-B 50 / ER 16 x 200 H	4250.11693	28	–	200	–	505 / 225	E 16 P
SK-B 50 / ER 20 x 070 H	4250.12033	34	–	70	–	325	E 20 P
SK-B 50 / ER 20 x 100 H	4250.12053	34	–	100	–	325	E 20 P
SK-B 50 / ER 25 x 070 H	4250.12533	42	–	70	–	405	E 25
SK-B 50 / ER 25 x 100 H	4250.12553	42	–	100	–	405	E 25
SK-B 50 / ER 25 x 160 H	4250.12583	42	–	160	–	405 / 325	E 25
SK-B 50 / ER 25 x 200 H	4250.12593	42	–	200	–	405 / 325	E 25
SK-B 50 / ER 32 x 100 H	4250.13253	50	–	100	–	505	E 32
SK-B 50 / ER 32 x 160 H	4250.13283	50	–	160	–	505 / 405	E 32
SK-B 50 / ER 32 x 200 H	4250.13293	50	–	200	–	505 / 405	E 32
SK-B 50 / ER 40 x 100 H	4250.14053	63	–	100	–	505	E 40
SK-B 50 / ER 40 x 160 H	4250.14083	63	–	160	–	505 / 505	E 40
SK-B 50 / ER 40 x 200 H	4250.14093	63	–	200	–	505 / 505	E 40

* Balancing rings

Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

Accessories are not included in delivery. Other XL sizes available on request.



We manufacture products we can be proud of. Together we aim for excellence in every step we take: from the inspiring idea to the finished product.

Passion for precision

Steep taper colletholders BT

Universally suitable for different machining applications, the BT interface colletholders cater for different machining needs.

MAS 403 / JIS B 6339 / DIN ISO 7388-2

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Taper accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100 % balanced to G 2.5 @ 25,000 rpm / < 1gmm.

XL colletholders

100 % balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper < 10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All colletholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q® / ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.





BT / ER and BT / ER XL collets

Applications

These collets are designed for CNC-machining centers with an automatic tool changer. They are universally suitable for different machining applications. Their vibration dampening reduces spindle wear and extends tool life.

Balancing

REGO-FIX BT / ER collets are balanced to G 2.5 @ 25,000 rpm / <1gmm. Type H collets are ready to accept Hi-Q® balancing rings which allow precision balancing of the system including cutting tool up to 80,000 rpm depending on the balancing rings used.

SK / ER XL available

Due to their good vibration dampening installation, BT / ER XL holders are ideally suited in all machining processes where the standard length collets cannot be used.

For more details on our XL collets, please refer to page 17.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend using our friction-bearing clamping nuts Hi-Q® / ERB and Hi-Q® / ERBC.

Matched tooling system for best fit

For highest precision and best results the entire machining system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life, please refer to page 3.



BT / ERA collets

Applications

These collets are specially designed for mill-turning machines, multitasking machines and small vertical machining centers. They have the well-known REGO-FIX surface finish and are manufactured to meet our high-precision standards. Thanks to their shortness they possess a superior stiffness. ERA Zero-Z® collets have the shortest possible projection to increase the Z axis travel of the machine and to allow larger workpieces to be machined.

Balancing

REGO-FIX BT/ERA collets are balanced to G 2.5 @ 25,000 rpm / <1gmm. The Hi-Q® / ERAX clamping nut has been specially designed for applications where space is scarce.

For the influence of runout on tool life, please refer to the graph on page 3.

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.

BT colletholders

ERA Zero-Z® colletholder

BT

MAS 403

JIS B 6339

DIN ISO 7388-2

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT 30							
BT 30/ER 11 x 050	2130.11110	19	–	50	–	–	E 11 P
BT 30/ER 11 x 100 H	4130.11150	19	–	100	–	225	E 11 P
BT 30/ER 16 x 050	2130.11610	28	–	50	–	–	E 16 P
BT 30/ER 16 x 080 H	4130.11640	28	–	80	–	285	E 16 P
BT 30/ER 16 x 100 H	4130.11650	28	–	100	–	285	E 16 P
BT 30/ERA 20 x 022	2130.12007	–	–	22	–	–	E 20 AX
BT 30/ER 20 x 050	2130.12010	34	–	50	–	–	E 20 P
BT 30/ER 20 x 070 H	4130.12030	34	–	70	–	325	E 20 P
BT 30/ER 20 x 100 H	4130.12050	34	–	100	–	325	E 20 P
BT 30/ER 25 x 060 H	4130.12520	42	–	60	–	325	E 25
BT 30/ER 25 x 100 H	4130.12550	42	–	100	–	325	E 25
BT 30/ER 32 x 060	2130.13220	50	–	60	–	–	E 32
BT 30/ER 32 x 100 H	4130.13250	50	–	100	–	405	E 32

* Balancing rings

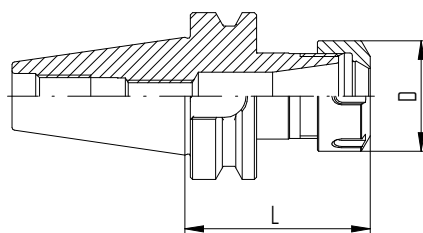
Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

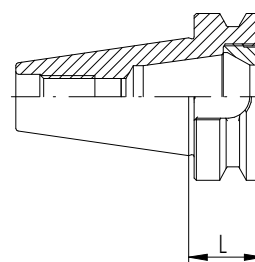
Accessories are not included in delivery.



BT / ER



BT / ER (form A+AD)



BT / ERA

BT colletholders

ERA Zero-Z® colletholder

BT

MAS 403

JIS B 6339

DIN ISO 7388-2

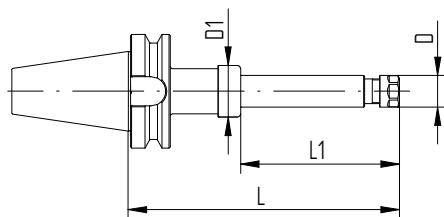
Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT 40							
BT 40 / ER 11 x 100 H	4140.11150	19	–	100	–	285	E 11 P
BT 40 / ER 11 x 160 H	4140.11180	19	–	160	–	285	E 11 P
BT 40 / ER 16 x 070 H	4140.11630	28	–	70	–	285	E 16 P
BT 40 / ER 16 x 100 H	4140.11650	28	–	100	–	285	E 16 P
BT 40 / ER 16 x 160 H	4140.11680	28	–	160	–	285 / 225	E 16 P
BT 40 / ER 16 x 220 XL	8841.13050	28	46	220	140	–	E 16 P
BT 40 / ER 16 x 260 XL	8841.13090	28	46	260	140	–	E 16 P
BT 40 / ER 16 x 300 XL	8841.13130	28	46	300	140	–	E 16 P
BT 40 / ER 16 x 320 XL	8841.13150	28	46	320	240	–	E 16 P
BT 40 / ER 16 x 360 XL	8841.13190	28	46	360	240	–	E 16 P
BT 40 / ER 16 x 400 XL	8841.13230	28	46	400	240	–	E 16 P
BT 40 / ER 20 x 070 H	4140.12030	34	–	70	–	325	E 20 P
BT 40 / ER 20 x 100 H	4140.12050	34	–	100	–	285	E 20 P
BT 40 / ER 20 x 160 H	4140.12080	34	–	160	–	405 / 285	E 20 P
BT 40 / ER 25 x 070 H	4140.12530	42	–	70	–	325	E 25
BT 40 / ER 25 x 100 H	4140.12550	42	–	100	–	405	E 25
BT 40 / ER 25 x 160 H	4140.12580	42	–	160	–	405 / 325	E 25
BT 40 / ERA 32 x 27	2140.13207	–	–	27	–	–	E 32 AX
BT 40 / ER 32 x 070 H	4140.13230	50	–	70	–	405	E 32
BT 40 / ER 32 x 100 H	4140.13250	50	–	100	–	405	E 32
BT 40 / ER 32 x 160 H	4140.13280	50	–	160	–	405 / 405	E 32
BT 40 / ER 32 x 226 XL	8841.16050	50	55	226	140	–	E 32
BT 40 / ER 32 x 326 XL	8841.16150	50	55	326	240	–	E 32
BT 40 / ER 40 x 080	2140.14040	63	–	80	–	–	E 40
BT 40 / ER 40 x 100 H	4140.14050	63	–	100	–	505	E 40
BT 40 / ER 40 x 160 H	4140.14080	63	–	160	–	505 / 505	E 40

* Balancing rings

Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

Accessories are not included in delivery. Other XL sizes available on request.



BT / ER XL

BT / BT-B colletholders

BT

BT-B

MAS 403

JIS B 6339

DIN ISO 7388-2

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT-B 40							
BT-B 40 / ER 16 x 070 H	4140.11633	28	–	70	–	285	E 16 P
BT-B 40 / ER 16 x 100 H	4140.11653	28	–	100	–	285	E 16 P
BT-B 40 / ER 16 x 160 H	4140.11683	28	–	160	–	285 / 225	E 16 P
BT-B 40 / ER 20 x 070 H	4140.12033	34	–	70	–	325	E 20 P
BT-B 40 / ER 20 x 100 H	4140.12053	34	–	100	–	285	E 20 P
BT-B 40 / ER 20 x 160 H	4140.12083	34	–	160	–	405 / 285	E 20 P
BT-B 40 / ER 25 x 070 H	4140.12533	42	–	70	–	325	E 25
BT-B 40 / ER 25 x 100 H	4140.12553	42	–	100	–	405	E 25
BT-B 40 / ER 25 x 160 H	4140.12583	42	–	160	–	405 / 325	E 25
BT-B 40 / ER 32 x 070 H	4140.13233	50	–	70	–	405	E 32
BT-B 40 / ER 32 x 100 H	4140.13253	50	–	100	–	405	E 32
BT-B 40 / ER 32 x 160 H	4140.13283	50	–	160	–	405 / 405	E 32
BT-B 40 / ER 40 x 080	2140.14043	63	–	80	–	–	E 40
BT-B 40 / ER 40 x 100 H	4140.14053	63	–	100	–	505	E 40
BT-B 40 / ER 40 x 160 H	4140.14083	63	–	160	–	505 / 505	E 40

BT 50							
BT 50 / ER 16 x 100 H	4150.11650	28	–	100	–	505	E 16 P
BT 50 / ER 16 x 160 H	4150.11680	28	–	160	–	505 / 225	E 16 P
BT 50 / ER 16 x 240 XL	8851.13070	28	46	240	140	–	E 16 P
BT 50 / ER 16 x 260 XL	8851.13090	28	46	260	140	–	E 16 P
BT 50 / ER 16 x 300 XL	8851.13130	28	46	300	140	–	E 16 P
BT 50 / ER 16 x 340 XL	8851.13170	28	46	340	240	–	E 16 P
BT 50 / ER 16 x 360 XL	8851.13190	28	46	360	240	–	E 16 P
BT 50 / ER 16 x 400 XL	8851.13230	28	46	400	240	–	E 16 P
BT 50 / ER 20 x 070	2150.12030	34	–	70	–	–	E 20 P
BT 50 / ER 20 x 100 H	4150.12050	34	–	100	–	325	E 20 P
BT 50 / ER 25 x 070	2150.12530	42	–	70	–	–	E 25
BT 50 / ER 25 x 100 H	4150.12550	42	–	100	–	405	E 25
BT 50 / ER 25 x 160 H	4150.12580	42	–	160	–	405 / 325	E 25
BT 50 / ER 32 x 100 H	4150.13250	50	–	100	–	505	E 32
BT 50 / ER 32 x 160 H	4150.13280	50	–	160	–	505 / 405	E 32
BT 50 / ER 32 x 200 H	4150.13290	50	–	200	–	505 / 405	E 32
BT 50 / ER 32 x 240 XL	8851.16070	50	55	240	140	–	E 32
BT 50 / ER 32 x 340 XL	8851.16170	50	55	340	240	–	E 32
BT 50 / ER 40 x 100 H	4150.14050	63	–	100	–	505	E 40
BT 50 / ER 40 x 160 H	4150.14080	63	–	160	–	505 / 505	E 40
BT 50 / ER 50 x 100	2150.15050	78	–	100	–	–	E 50

* Balancing rings

Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

Accessories are not included in delivery. Other XL sizes available on request.

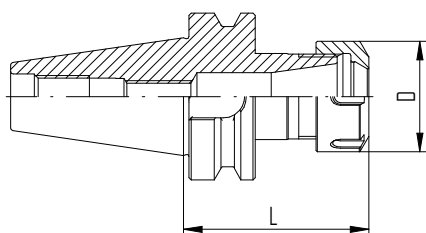
Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT-B 50							
BT-B 50 / ER 16 x 100 H	4150.11653	28	–	100	–	505	E 16 P
BT-B 50 / ER 16 x 160 H	4150.11683	28	–	160	–	505 / 225	E 16 P
BT-B 50 / ER 20 x 070	2150.12033	34	–	70	–	–	E 20 P
BT-B 50 / ER 20 x 100 H	4150.12053	34	–	100	–	325	E 20 P
BT-B 50 / ER 25 x 070	2150.12533	42	–	70	–	–	E 25
BT-B 50 / ER 25 x 100 H	4150.12553	42	–	100	–	405	E 25
BT-B 50 / ER 25 x 160 H	4150.12583	42	–	160	–	405 / 325	E 25
BT-B 50 / ER 32 x 100 H	4150.13253	50	–	100	–	505	E 32
BT-B 50 / ER 32 x 160 H	4150.13283	50	–	160	–	505 / 405	E 32
BT-B 50 / ER 40 x 100 H	4150.14053	63	–	100	–	505	E 40
BT-B 50 / ER 40 x 160 H	4150.14083	63	–	160	–	505 / 505	E 40

* Balancing rings

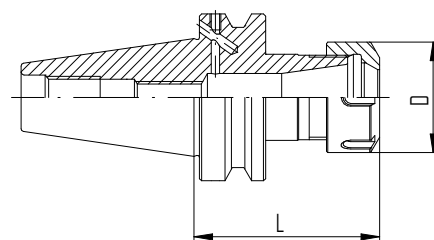
Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

Accessories are not included in delivery. Other XL sizes available on request.



BT / ER (form A+AD)



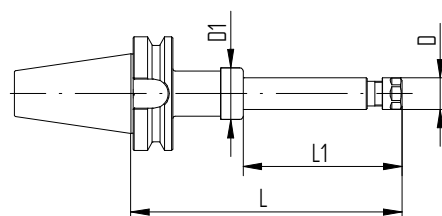
BT-B / ER (form AD+B)

Expert advice

What is the difference between form A+AD and AD+B?

Form A+AD: coolant supply through the taper

Form AD+B: coolant supply through the flange



BT / ER XL

BT-OM colletholders

ERA Zero-Z® colletholder

BT-OM

HAAS

HURCO

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT-OM							
BT-OM 30 / ER 16 x 080 H	4130.11648	28	–	80	–	285	E 16 P
BT-OM 30 / ER 25 x 060 H	4130.12528	42	–	60	–	325	E 25
BT-OM 30 / ER 32 x 060	2130.13228	50	–	60	–	–	E 32
BT-OM 30 / ERA 20 x 022	2130.12008	–	–	22	–	–	E 20 AX

* Balancing rings

Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nut.

H: Ready to accept balancing rings

Accessories are not included in delivery.

Information

BT-OM / ER colletholders without drive slots

Applications

This special colletholder without drive slots is designed for use on HAAS and HURCO CNC-machining centers.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend to use our friction-bearing clamping nuts Hi-Q® / ERB* and Hi-Q® / ERBC*.

* Not for use with ERA colletholders.

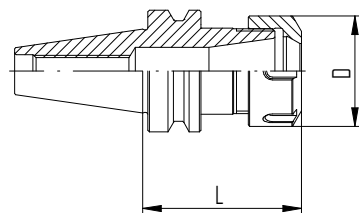
Balancing

REGO-FIX BT-OM / ER(A) colletholders are balanced to G 2.5 @ 25,000 rpm / <1gmm. Type H colletholders are compatible with Hi-Q® balancing rings which allow precision balancing of the entire system including cutting tool up to 80,000 rpm depending on the balancing rings used.

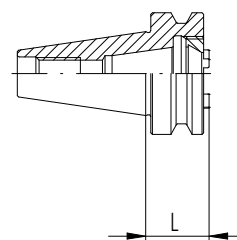
Matched tooling system for best fit

For highest precision and best results the entire machining system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

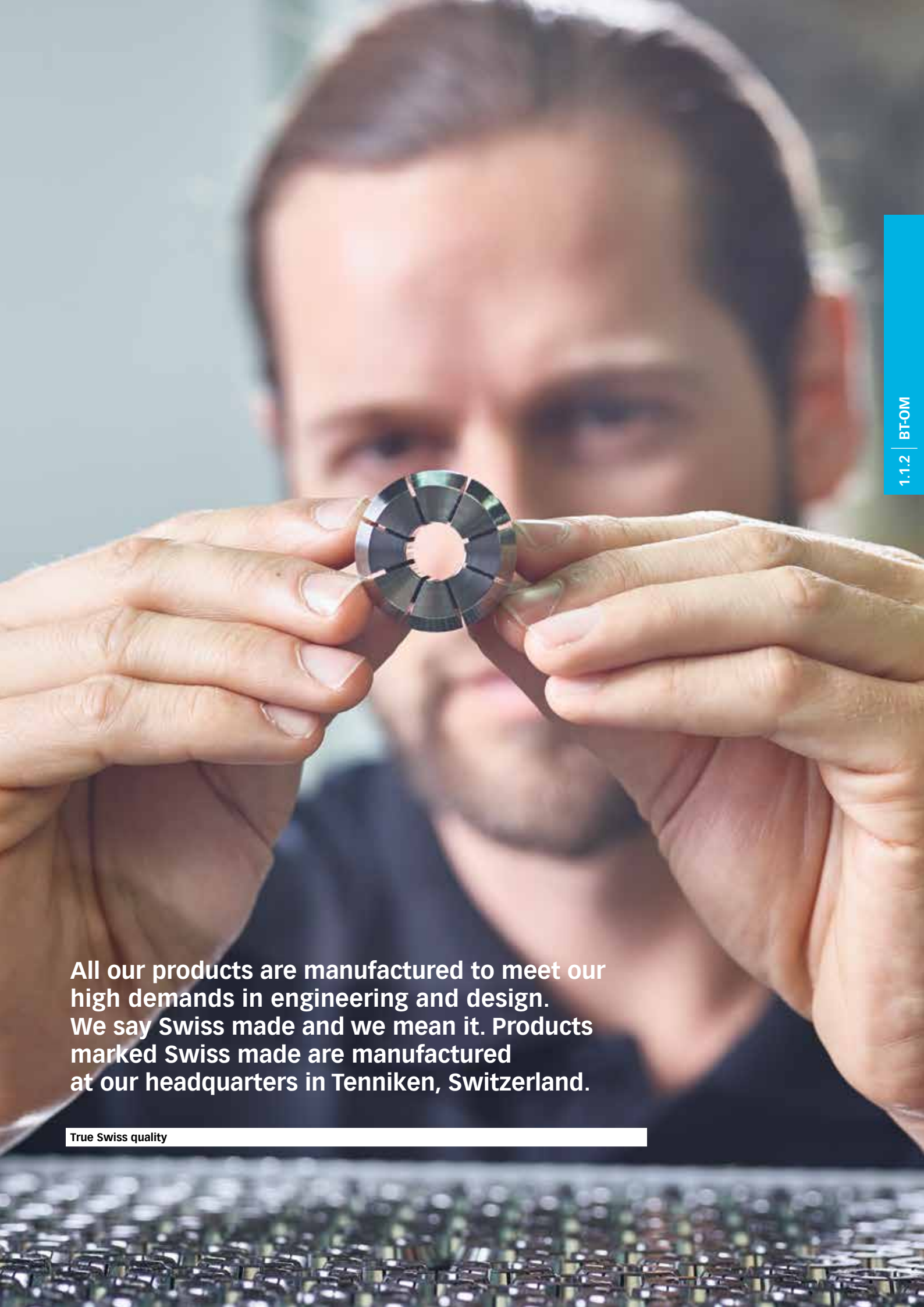
For the influence of runout on tool life, please refer to page 3.



BT-OM / ER



BT-OM / ERA



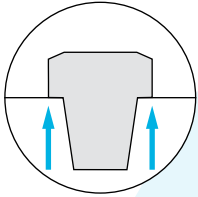
All our products are manufactured to meet our high demands in engineering and design. We say Swiss made and we mean it. Products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

True Swiss quality

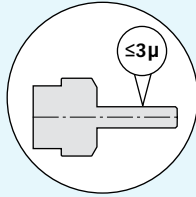
BT+ REGO PLUS dual contact colletholders

Certified The BIG PLUS SYSTEM – licensed by BIG Daishowa – is manufactured at REGO-FIX in Switzerland under license according to BIG PLUS specifications.

Key advantages



Higher collet holder stiffness due to taper (AT1) and face contact.



Improved machining accuracy and better surface finish.



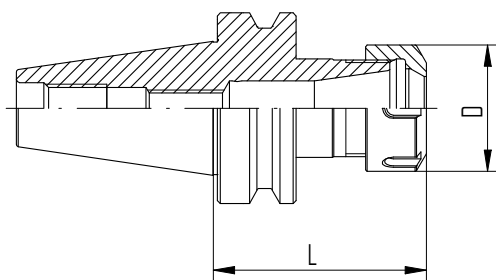
Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
BT+ 30							
BT+ 30/ER 11 x 100 H	4130.11156	19	–	100	–	225	E 11 P
BT+ 30/ER 16 x 050	2130.11616	28	–	50	–	–	E 16 P
BT+ 30/ER 16 x 080 H	4130.11646	28	–	80	–	285	E 16 P
BT+ 30/ER 20 x 050	2130.12016	34	–	50	–	–	E 20 P
BT+ 30/ER 20 x 070 H	4130.12036	34	–	70	–	325	E 20 P
BT+ 30/ER 25 x 060 H	4130.12526	42	–	60	–	325	E 25
BT+ 30/ER 32 x 060	2130.13226	50	–	60	–	–	E 32
BT+ 40							
BT+ 40/ER 16 x 070 H	4140.11636	28	–	70	–	285	E 16 P
BT+ 40/ER 16 x 100 H	4140.11656	28	–	100	–	285	E 16 P
BT+ 40/ER 20 x 070 H	4140.12036	34	–	70	–	325	E 20 P
BT+ 40/ER 25 x 070 H	4140.12536	42	–	70	–	325	E 25
BT+ 40/ER 32 x 070 H	4140.13236	50	–	70	–	405	E 32
BT+ 40/ER 32 x 100 H	4140.13256	50	–	100	–	405	E 32
BT+ 40/ER 32 x 160 H	4140.13286	50	–	160	–	405 / 405	E 32
BT+ 50							
BT+ 50/ER 32 x 100 H	4150.13256	50	–	100	–	505	E 32
BT+ 50/ER 32 x 160 H	4150.13286	50	–	160	–	505 / 405	E 32

* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholders come with Hi-Q® / ER clamping nut.

Accessories are not included in delivery.

Form B available on request.



BT+ / ER (A+AD)

HSK colletholders

Designed for rotating applications, all our HSK colletholders are suited for high-speed applications where consistent performance is key.

DIN 69893 / ISO 12164

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100 % balanced to G 2.5 @ 25,000 rpm / < 1 mm.

XL colletholders

100 % balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper < 10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All colletholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q® / ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer a good vibration dampening to sustain a high surface finish and can prevent cutting force alterations.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend to use our friction-bearing clamping nuts Hi-Q® / ERB and Hi-Q® / ERBC.

Matched tooling system for best fit

For highest precision and best results the entire machining system counts. Therefore our components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

ID chip hole (only HSK form A)

In accordance with DIN 69873 for 10 mm diameter. Available on request.

Expert advice

For all HSK-A and HSK-E form colletholders a range of coolant tubes (KSR) is available.

For KSR part numbers please refer to page 149.

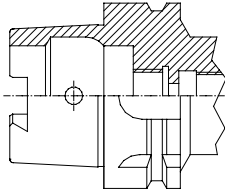


HSK forms and their key characteristics

HSK

DIN 69893

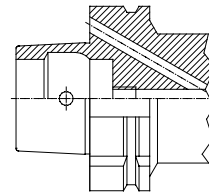
ISO 12164



Form A*

- // Standard type for machining centers and milling machines
- // For automatic tool change
- // Coolant supply through center via coolant tube
- // Drive keys at the end of HSK taper
- // Hole for data carrier DIN STD 69873 in the flange is available on request

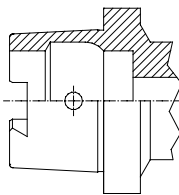
* Also usable in form C applications with side hole for manual tool change.



Form B

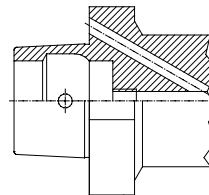
- // For machining centers, milling and turning machines
- // With enlarged flange size for higher radial rigidity
- // For automatic tool change
- // Coolant supply through the flange
- // Drive keys at the flange

Available on request.



Form C

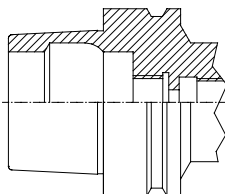
- // For transfer lines, special machines and modular tooling systems
- // For manual tool change
- // Drive keys at the end of HSK taper



Form D

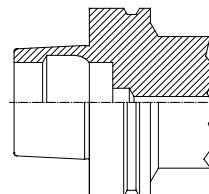
- // For special machines
- // With enlarged flange size for higher radial rigidity
- // For manual tool change
- // Coolant supply through the flange
- // Drive keys at the flange

Available on request.



Form E

- // For high-speed applications
- // For automatic tool change
- // Coolant supply through center via coolant tube
- // Without any drive keys for absolute symmetry



Form F

- // For high-speed applications
- // For automatic tool change
- // With enlarged flange size for higher radial rigidity
- // Without any drive keys for absolute symmetry

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
HSK-A 32							
HSK-A 32 / ER 11 x 050	2532.11110	19	–	50	–	–	E 11 P
HSK-A 32 / ER 16 x 060	2532.11620	28	–	60	–	–	E 16 P
HSK-A 32 / ER 20 x 060	2532.12020	34	–	60	–	–	E 20 P
HSK-A 32 / ER 25 x 065	2532.12520	42	–	65	–	–	E 25
HSK-A 40							
HSK-A 40 / ER 16 x 080 H	4540.11640	28	–	80	–	225	E 16 P
HSK-A 40 / ER 25 x 080 H	4540.12540	42	–	80	–	325	E 25
HSK-A 50							
HSK-A 50 / ER 16 x 100 H	4550.11650	28	–	100	–	325	E 16 P
HSK-A 50 / ER 25 x 080 H	4550.12540	42	–	80	–	325	E 25
HSK-A 50 / ER 25 x 100 H	4550.12550	42	–	100	–	325	E 25
HSK-A 50 / ER 32 x 100 H	4550.13250	50	–	100	–	405	E 32
HSK-A 63							
HSK-A 63 / ER 11 x 100 H	4563.11150	19	–	100	–	325	E 11 P
HSK-A 63 / ER 16 x 080 H	4563.11640	28	–	80	–	325	E 16 P
HSK-A 63 / ER 16 x 100 H	4563.11650	28	–	100	–	325	E 16 P
HSK-A 63 / ER 16 x 160 H	4563.11680	28	–	160	–	325 / 225	E 16 P
HSK-A 63 / ER 16 x 240 XL	8865.13070	28	46	240	140	–	E 16 P
HSK-A 63 / ER 16 x 260 XL	8865.13090	28	46	260	140	–	E 16 P
HSK-A 63 / ER 16 x 300 XL	8865.13130	28	46	300	140	–	E 16 P
HSK-A 63 / ER 16 x 340 XL	8865.13170	28	46	340	240	–	E 16 P
HSK-A 63 / ER 16 x 360 XL	8865.13190	28	46	360	240	–	E 16 P
HSK-A 63 / ER 16 x 400 XL	8865.13230	28	46	400	240	–	E 16 P
HSK-A 63 / ER 20 x 075	2563.12030	34	–	75	–	–	E 20 P
HSK-A 63 / ER 25 x 080 H	4563.12540	42	–	80	–	325	E 25
HSK-A 63 / ER 25 x 100 H	4563.12550	42	–	100	–	325	E 25
HSK-A 63 / ER 25 x 160 H	4563.12580	42	–	160	–	325	E 25
HSK-A 63 / ER 25 x 200 H	4563.12590	42	–	200	–	405 / 325	E 25
HSK-A 63 / ER 32 x 080 H	4563.13240	50	–	80	–	405	E 32
HSK-A 63 / ER 32 x 100 H	4563.13250	50	–	100	–	405	E 32
HSK-A 63 / ER 32 x 160 H	4563.13280	50	–	160	–	405	E 32
HSK-A 63 / ER 32 x 200 H	4563.13290	50	–	200	–	405 / 405	E 32
HSK-A 63 / ER 32 x 240 XL	8865.16070	50	55	240	140	–	E 32
HSK-A 63 / ER 32 x 260 XL	8865.16090	50	55	260	140	–	E 32
HSK-A 63 / ER 32 x 340 XL	8865.16170	50	55	340	240	–	E 32
HSK-A 63 / ER 32 x 360 XL	8865.16190	50	55	360	240	–	E 32

* Balancing rings H: Ready to accept balancing rings

Accessories are not included in delivery.

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
HSK-A 63 / ER 40 x 080	2563.14040	63	–	80	–	–	E 40
HSK-A 63 / ER 40 x 120 H	4563.14060	63	–	120	–	505	E 40
HSK-A 63 / ER 40 x 160 H	4563.14080	63	–	160	–	505	E 40

HSK-A 80

HSK-A 80 / ER 16 x 100 H	4580.11650	28	–	100	–	325	E 16 P
HSK-A 80 / ER 16 x 160 H	4580.11680	28	–	160	–	325 / 225	E 16 P
HSK-A 80 / ER 32 x 100 H	4580.13250	50	–	100	–	405	E 32
HSK-A 80 / ER 40 x 120 H	4580.14060	63	–	120	–	505	E 40

HSK-A 100

HSK-A 100 / ER 16 x 100 H	4500.11650	28	–	100	–	405	E 16 P
HSK-A 100 / ER 16 x 160 H	4500.11680	28	–	160	–	405 / 225	E 16 P
HSK-A 100 / ER 16 x 200 H	4500.11690	28	–	200	–	405 / 225	E 16 P
HSK-A 100 / ER 16 x 240 XL	8885.13070	28	46	240	140	–	E 16 P
HSK-A 100 / ER 16 x 300 XL	8885.13130	28	46	300	140	–	E 16 P
HSK-A 100 / ER 16 x 340 XL	8885.13170	28	46	340	240	–	E 16 P
HSK-A 100 / ER 16 x 400 XL	8885.13230	28	46	400	240	–	E 16 P
HSK-A 100 / ER 25 x 100 H	4500.12550	42	–	100	–	405	E 25
HSK-A 100 / ER 25 x 160 H	4500.12580	42	–	160	–	405 / 325	E 25
HSK-A 100 / ER 25 x 200 H	4500.12590	42	–	200	–	405 / 325	E 25
HSK-A 100 / ER 32 x 100 H	4500.13250	50	–	100	–	405	E 32
HSK-A 100 / ER 32 x 160 H	4500.13280	50	–	160	–	405	E 32
HSK-A 100 / ER 32 x 246 XL	8885.16070	50	55	246	140	–	E 32
HSK-A 100 / ER 32 x 346 XL	8885.16170	50	55	346	240	–	E 32
HSK-A 100 / ER 40 x 120 H	4500.14060	63	–	120	–	505	E 40
HSK-A 100 / ER 40 x 200 H	4500.14090	63	–	200	–	505 / 505	E 40

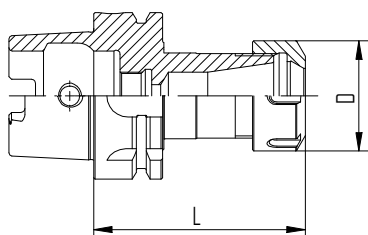
* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholders with Hi-Q®/ER clamping nut and back-up screw.

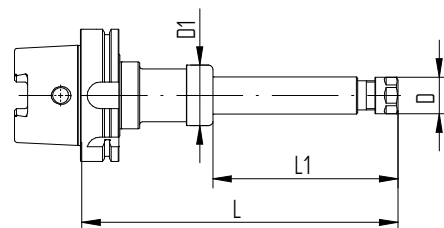
HSK-A: Hole for data carrier DIN STD 69873 in the flange available on request.

Accessories are not included in delivery.

HSK-A 125 available on request. Other XL sizes available on request.



HSK-A/ER



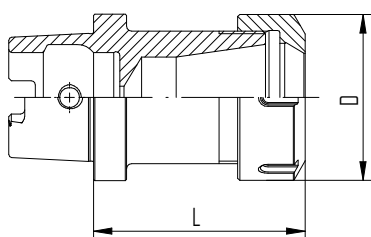
HSK-A/ER XL

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
HSK-C 32							
HSK-C 32 / ER 16 x 060	2532.11622	28	–	60	–	–	E 16 P
HSK-C 32 / ER 20 x 060	2532.12022	34	–	60	–	–	E 20 P
HSK-C 32 / ER 25 x 070	2532.12532	42	–	70	–	–	E 25
HSK-C 40							
HSK-C 40 / ER 20 x 060	2540.12022	34	–	60	–	–	E 20 P
HSK-C 40 / ER 25 x 070	2540.12532	42	–	70	–	–	E 25
HSK-C 40 / ER 32 x 075	2540.13232	50	–	75	–	–	E 32
HSK-C 50							
HSK-C 50 / ER 25 x 070	2550.12532	42	–	70	–	–	E 25
HSK-C 50 / ER 32 x 075	2550.13232	50	–	75	–	–	E 32
HSK-C 50 / ER 40 x 080	2550.14042	63	–	80	–	–	E 40
HSK-C 63							
HSK-C 63 / ER 32 x 075	2563.13232	50	–	75	–	–	E 32
HSK-C 63 / ER 40 x 080	2563.14042	63	–	80	–	–	E 40

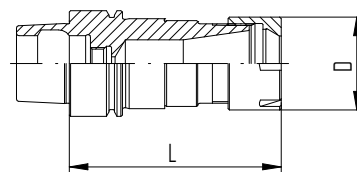
* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholders with Hi-Q® / ER clamping nut and back-up screw.

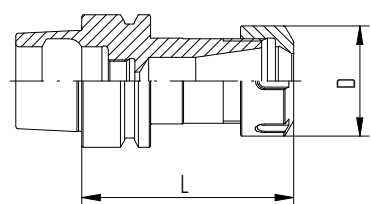
Accessories are not included in delivery.



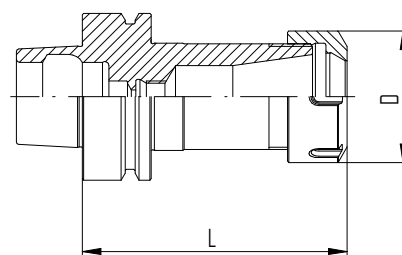
HSK-C / ER



HSK-E / ER M



HSK-E / ER



HSK-F / ER

HSK-E colletholders

HSK-F colletholders

HSK-E	HSK-F
DIN 69893	DIN 69893
ISO 12164	ISO 12164

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
HSK-E 25							
HSK-E 25 / ERM 16 x 048	2525.11618	22	–	48	–	–	E 16 M
HSK-E 32							
HSK-E 32 / ERM 16 x 060	2532.11628	22	–	60	–	–	E 16 M
HSK-E 32 / ERM 20 x 060	2532.12028	28	–	60	–	–	E 20 M
HSK-E 40							
HSK-E 40 / ER 11 x 060 H	4540.11124	19	–	60	–	225	E 11 P
HSK-E 40 / ER 16 x 060 H	4540.11624	28	–	60	–	225	E 16 P
HSK-E 40 / ER 16 x 080 H	4540.11644	28	–	80	–	225	E 16 P
HSK-E 40 / ERM 20 x 075 H	4540.12038	28	–	75	–	285	E 20 M
HSK-E 40 / ERM 25 x 080 H	4540.12548	35	–	80	–	325	E 25 M
HSK-E 50							
HSK-E 50 / ER 16 x 060	2550.11624	28	–	60	–	–	E 16 P
HSK-E 50 / ER 16 x 100 H	4550.11654	28	–	100	–	325	E 16 P
HSK-E 50 / ER 16 x 160 H	4550.11684	28	–	160	–	325 / 225	E 16 P
HSK-E 50 / ER 20 x 070 H	4550.12034	34	–	70	–	325	E 20 P
HSK-E 50 / ER 25 x 080 H	4550.12544	42	–	80	–	325	E 25
HSK-E 50 / ER 25 x 100 H	4550.12554	42	–	100	–	325	E 25
HSK-E 50 / ER 32 x 100 H	4550.13254	50	–	100	–	405	E 32
HSK-E 50 / ER 32 x 160 H	4550.13284	50	–	160	–	405	E 32
HSK-E 63							
HSK-E 63 / ER 32 x 090 H	4563.13244	50	–	90	–	405	E 32
HSK-E 63 / ER 40 x 080	2563.14044	63	–	80	–	–	E 40
HSK-E 63 / ER 40 x 120 H	4563.14064	63	–	120	–	505	E 40
HSK-F 63							
HSK-F 63 / ER 16 x 100 H	4563.11655	28	–	100	–	325	E 16 P
HSK-F 63 / ER 25 x 100 H	4563.12555	42	–	100	–	325	E 25
HSK-F 63 / ER 32 x 100 H	4563.13255	50	–	100	–	405	E 32
HSK-F 63 / ER 40 x 120 H	4563.14065	63	–	120	–	505	E 40

* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholders with HI-Q® / ER clamping nut and back-up screw.

Accessories are not included in delivery. HSK-E 20 available on request. Other XL sizes available on request.

REGO-FIX CAPTO colletholders

These self-centering and balanced colletholders enable high-torque transmission and show a high-bending strength.

ISO 12164

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100 % balanced to G 2.5 @ 25,000 rpm / < 1gmm.

XL colletholders

100 % balanced to G 2.5 @ 5,000 rpm.

TIR from inner to outer taper < 10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All colletholders with the additional type information "H" in the article name are designed for balancing rings.

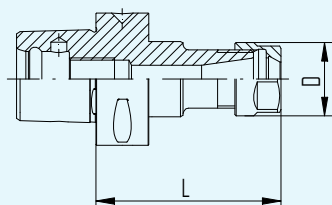
Hi-Q® / ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

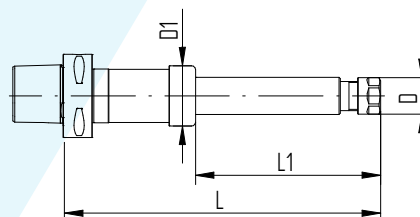
Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can prevent cutting force alterations.

Certified REGO-FIX CAPTO – licensed by Sandvik Coromant – is manufactured at REGO-FIX Switzerland under license according to CAPTO specifications.



C / ER



C / ER XL

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
C3							
C3/ER 16 x 045	2803.11610	28	–	45	–	–	E 16 P
C3/ER 20 x 045	2803.12010	34	–	45	–	–	E 20 P
C4							
C4/ER 16 x 070	2804.11630	28	–	70	–	–	E 16 P
C4/ER 20 x 052	2804.12010	34	–	52	–	–	E 20 P
C4/ER 25 x 052	2804.12510	42	–	52	–	–	E 25
C4/ER 32 x 054	2804.13210	50	–	54	–	–	E 32
C5							
C5/ER 16 x 070 H	4805.11630	28	–	70	–	285	E 16 P
C5/ER 16 x 100 H	4805.11650	28	–	100	–	285	E 16 P
C5/ER 20 x 055	2805.12010	34	–	55	–	–	E 20 P
C5/ER 20 x 100 H	4805.12050	34	–	100	–	325	E 20 P
C5/ER 25 x 055	2805.12510	42	–	55	–	–	E 25
C5/ER 25 x 100 H	4805.12550	42	–	100	–	405	E 25
C5/ER 32 x 057	2805.13210	50	–	57	–	–	E 32
C5/ER 32 x 070 H	4805.13230	50	–	70	–	405	E 32
C5/ER 32 x 100H	4805.13250	50	–	100	–	405	E 32
C6							
C6/ER 11 x 150 H	4806.11170	19	–	150	–	325	E 11 P
C6/ER 16 x 070 H	4806.11630	28	–	70	–	325	E 16 P
C6/ER 16 x 100 H	4806.11650	28	–	100	–	325	E 16 P
C6/ER 16 x 150 H	4806.11670	28	–	150	–	325	E 16 P
C6/ER 16 x 225 XL	8886.13050	28	46	225	140	–	E 16 P
C6/ER 16 x 240 XL	8886.13070	28	46	240	140	–	E 16 P
C6/ER 16 x 260 XL	8886.13090	28	46	260	140	–	E 16 P
C6/ER 16 x 300 XL	8886.13130	28	46	300	140	–	E 16 P
C6/ER 16 x 325 XL	8886.13150	28	46	325	240	–	E 16 P
C6/ER 16 x 340 XL	8886.13170	28	46	340	240	–	E 16 P
C6/ER 16 x 360 XL	8886.13190	28	46	360	240	–	E 16 P
C6/ER 16 x 400 XL	8886.13230	28	46	400	240	–	E 16 P
C6/ER 20 x 060	2806.12020	34	–	60	–	–	E 20 P

* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholder with Hi-Q®/ER clamping nut. Accessories are not included in delivery.

Other XL sizes available on request. All REGO-FIX CAPTO holders are also available with an ID chip hole on request.

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR ...*	Wrench
C6 continued							
C6 / ER 25 x 060	2806.12520	42	–	60	–	–	E 25
C6 / ER 25 x 100 H	4806.12550	42	–	100	–	405	E 25
C6 / ER 25 x 130 H	4806.12560	42	–	130	–	405	E 25
C6 / ER 32 x 060	2806.13220	50	–	60	–	–	E 32
C6 / ER 32 x 070 H	4806.13230	50	–	70	–	405	E 32
C6 / ER 32 x 100 H	4806.13250	50	–	100	–	505	E 32
C6 / ER 32 x 230 XL	8886.16060	50	55	230	140	–	E 32
C6 / ER 32 x 330 XL	8886.16160	50	55	330	240	–	E 32
C6 / ER 40 x 065	2806.14020	63	–	65	–	–	E 40

C8							
C8 / ER 16 x 232 XL	8888.13060	28	46	232	140	–	E 16 P
C8 / ER 16 x 332 XL	8888.13160	28	46	332	240	–	E 16 P
C8 / ER 25 x 070	2808.12530	42	–	70	–	–	E 25
C8 / ER 32 x 070	2808.13230	50	–	70	–	–	E 32
C8 / ER 32 x 230 XL	8888.16060	50	55	230	140	–	E 32
C8 / ER 32 x 330 XL	8888.16160	50	55	330	240	–	E 32
C8 / ER 40 x 070	2808.14030	63	–	70	–	–	E 40
C8 / ER 50 x 080	2808.15040	78	–	80	–	–	E 50

* Balancing rings H: Ready to accept balancing rings

Included in delivery: Colletholder with Hi-Q®/ER clamping nut. Accessories are not included in delivery.

Other XL sizes available on request. All REGO-FIX CAPTO holders are also available with an ID chip hole on request.



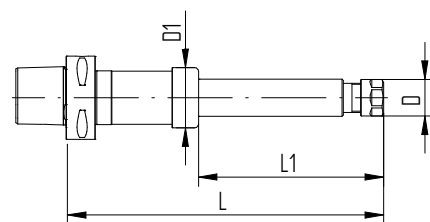
C / ER

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152.

For tightening torque recommendations, please refer to page 161.



C / ER XL



Cylindrical shank collets CYL



CYL / CYLF / CYDF

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$ for CYL / ERM and CYL / ERMX

Measured from inner taper to outer shank.

Runout TIR $\leq 5 \mu\text{m}$ for CYLF / ERM and CYLF / ERMX

Measured from inner taper to outer shank.

Runout TIR $\leq 5 \mu\text{m}$ for CYDF / ERM and CYDF / ERMX

Measured from inner taper to outer shank.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Sizes

ER 8 – ER 40

h6 tolerance on shanks.

Types

Cylindrical, flat- or double-ended collets.

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

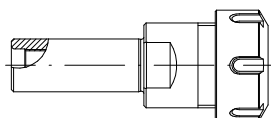
For tightening torque recommendations, please refer to page 161.

Available CYL colletholders and their key characteristics

Cylindrical REGO-FIX colletholders are designed for automatic turning machines and can also be utilized as extensions.

We offer many different product types to fit your machining needs.

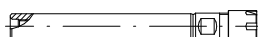
CYL / ER



CYL / ER The short versions are particularly used on turret lathes, where a short overhang is often required.

For technical dimensions, please refer to page 50ff.

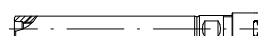
CYL / ERM



CYL / ERM This type is suited for Swiss automatic machines, machining centers and conventional machines. Can be used as extension.

For technical dimensions, please refer to page 52ff.

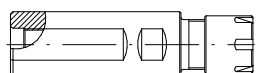
CYL / ERMX



CYL / ERMX This type is suited for Swiss automatic machines, machining centers and conventional machines. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Can be used as extension.

For technical dimensions, please refer to page 52ff.

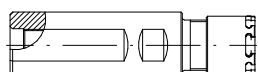
CYLF / ERM



CYLF / ERM The line of cylindrical colletholders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. Cannot be used as extension.

For technical dimensions, please refer to page 54ff.

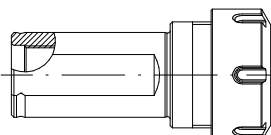
CYLF / ERMX



CYLF / ERMX The line of cylindrical colletholders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Cannot be used as extension.

For technical dimensions, please refer to page 54ff.

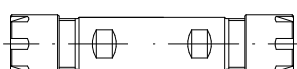
CYL / ER NC



CYL / ER NC These colletholders are particularly suitable on Swiss automatic CNC turning machines, but can also be used on other turning machines.

For technical dimensions, please refer to page 57.

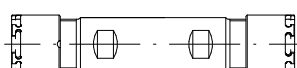
CYDF / ERM



CYDF / ERM The line of double colletholders with clamping flat has been designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos and offers the possibility to hold two cutting tools on the same colletholder.

For technical dimensions, please refer to page 58ff.

CYDF / ERMX



CYDF / ERMX The line of double colletholders with clamping flat has been designed for Swiss Automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos, and offers the possibility to hold two cutting tools on the same colletholder. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut.

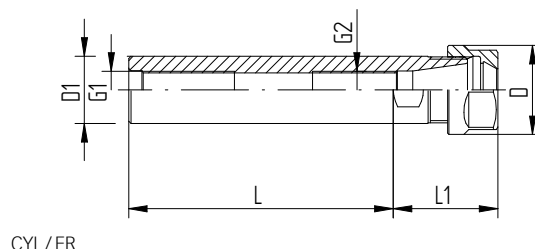
For technical dimensions, please refer to page 58ff.

Type	Part no.	Dimensions [mm]				G1	G2	Accessory
		D	D1 h6	L	L1			Wrench
CYL 1/2 [inch]								
CYL 1/2" x 070 / ER 11	2613.11141	19	12.7	70	28.5	M 6	–	E 11 P
CYL 1/2" x 100 / ER 16	2613.11661	28	12.7	100	36	M 6	–	E 16 P
CYL 1/2" x 100 / ER 20	2613.12061	34	12.7	100	44.5	M 6	–	E 20 P
CYL 14 [mm]								
CYL 14 x 060 / ER 16	2614.11630	28	14	60	36.5	M 6	–	E 16 P
CYL 16 [mm]								
CYL 16 x 060 / ER 16	2616.11630	28	16	60	36.5	M 8 x 1	–	E 20 P
CYL 5/8 [inch]								
CYL 5/8" x 060 / ER 16	2616.11631	28	15.875	60	36.5	M 8 x 1	–	E 16 P
CYL 5/8" x 100 / ER 20	2616.12061	34	15.875	100	44.5	M 8 x 1	–	E 20 P
CYL 3/4 [inch]								
CYL 3/4" x 050 / ER 16	2619.11621	28	19.05	50	30.5	M 12 x 1	–	E 16 P
CYL 3/4" x 100 / ER 16	2619.11661	28	19.05	100	30.5	M 12 x 1	M 11 x 1	E 16 P
CYL 3/4" x 060 / ER 20	2619.12031	34	19.05	60	36.5	M 12 x 1	–	E 20 P
CYL 3/4" x 050 / ER 25	2619.12521	42	19.05	50	47	M 12 x 1	–	E 25
CYL 20 [mm]								
CYL 20 x 050 / ER 16	2620.11620	28	20	50	30.5	M 12 x 1	–	E 16 P
CYL 20 x 100 / ER 16	2620.11660	28	20	100	30.5	M 12 x 1	M 11 x 1	E 16 P
CYL 20 x 030 / ER 20	2620.12010	34	20	30	36.5	M 12 x 1	–	E 20 P
CYL 20 x 060 / ER 20	2620.12030	34	20	60	36.5	M 12 x 1	–	E 20 P
CYL 20 x 050 / ER 25	2620.12520	42	20	50	47	M 12 x 1	–	E 25
CYL 20 x 100 / ER 25	2620.12560	42	20	100	47	M 12 x 1	–	E 25
CYL 20 x 050 / ER 32	2620.13220	50	20	50	54	M 12 x 1	–	E 32
CYL 20 x 100 / ER 32	2620.13260	50	20	100	54	M 12 x 1	–	E 32
CYL 25 [mm]								
CYL 25 x 050 / ER 25	2625.12520	42	25	50	47	M 18 x 1.5	–	E 25
CYL 25 x 100 / ER 25	2625.12560	42	25	100	47	M 18 x 1.5	–	E 25
CYL 25 x 050 / ER 32	2625.13220	50	25	50	54	M 18 x 1.5	–	E 32
CYL 25 x 050 / ER 40	2625.14020	63	25	50	60	M 18 x 1.5	–	E 40

Included in delivery: Colletholder, Hi-Q® / ER clamping nut and back-up screw. Accessories are not included in delivery.

Type	Part no.	Dimensions [mm]				G1	G2	Accessory
		D	D1 h6	L	L1			Wrench
CYL 1 [inch]								
CYL 1" x 100 / ER 20	2625.12061	34	25.4	100	39.5	M 14 x 1	–	E 20 P
CYL 1" x 050 / ER 25	2625.12521	42	25.4	50	47	M 18 x 1.5	–	E 25
CYL 1" x 100 / ER 25	2625.12561	42	25.4	100	47	M 18 x 1.5	–	E 25
CYL 1" x 050 / ER 32	2625.13221	50	25.4	50	53	M 18 x 1.5	–	E 32
CYL 1" x 050 / ER 40	2625.14021	63	25.4	50	60	M 18 x 1.5	–	E 40
CYL 30 [mm]								
CYL 30 x 050 / ER 25	2630.12520	42	30	50	42	M 18 x 1.5	–	E 25
CYL 1 1/4 [inch]								
CYL 1 1/4" x 060 / ER 32	2632.13231	50	31.75	60	53	M 22 x 1.5	–	E 32

Included in delivery: Colletholder, Hi-Q® / ER clamping nut and back-up screw. Accessories are not included in delivery.



CYL / ERM colletholders (mini nut)

CYL

CYL / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYL 6 [mm]									
CYL 6 x 045 / ERM 11	2606.21120	16	6	45	26.5	–	–	–	E 11 M
CYL 6 x 045 / ERMX 11	4606.21120	16	6	45	26.5	–	–	•	E 11 MX
CYL 7 [mm]									
CYL 7 x 045 / ERM 11	2607.21120	16	7	45	26.5	–	–	–	E 11 M
CYL 7 x 045 / ERMX 11	4607.21120	16	7	45	26.5	–	–	•	E 11 MX
CYL 8 [mm]									
CYL 8 x 080 / ERM 8	2608.20850	12	8	80	26	M 5	–	–	E 8 M
CYL 8 x 080 / ERMX 8	4608.20850	12	8	80	26	M 5	–	•	E 8 MX
CYL 8 x 056 / ERM 11	2608.21130	16	8	56	26.5	M 5	–	–	E 11 M
CYL 8 x 056 / ERMX 11	4608.21130	16	8	56	26,5	M 5	–	–	E 11 MX
CYL 3/8 [inch]									
CYL 3/8" x 070 / ERM 8	2609.20841	12	9.525	70	23	M 5	–	–	E 8 M
CYL 3/8" x 070 / ERMX 8	4609.20841	12	9.525	70	23	M 5	–	•	E 8 MX
CYL 10 [mm]									
CYL 10 x 060 / ERM 16	2610.21630	22	10	60	38.5	M 5	–	–	E 16 M
CYL 10 x 060 / ERMX 16	4610.21630	22	10	60	38.5	M 5	–	•	E 16 MX
CYL 12 [mm]									
CYL 12 x 080 / ERM 8	2612.20850	12	12	80	17	M 5	–	–	E 8 M
CYL 12 x 080 / ERMX 8	4612.20850	12	12	80	17	M 5	–	•	E 8 MX
CYL 12 x 080 / ERM 16	2612.21650	22	12	80	38.5	M 5	–	–	E 16 M
CYL 12 x 080 / ERMX 16	4612.21650	22	12	80	38.5	M 5	–	•	E 16 MX
CYL 1/2 [inch]									
CYL 1/2" x 140 / ERM 11	2613.21191	16	12.7	140	29.5	M 6	–	–	E 11 M
CYL 1/2" x 140 / ERMX 11	4613.21191	16	12.7	140	29.5	M 6	–	•	E 11 MX
CYL 1/2" x 140 / ERM 16	2613.21691	22	12.7	140	37	M 6	–	–	E 16 M
CYL 1/2" x 140 / ERMX 16	4613.21691	22	12.7	140	37	M 6	–	•	E 16 MX
CYL 16 [mm]									
CYL 16 x 150 / ERM 11	2616.21190	16	16	150	21	M 8 x 1	–	–	E 11 M
CYL 16 x 150 / ERMX 11	4616.21190	16	16	150	21	M 8 x 1	–	•	E 11 MX
CYL 16 x 100 / ERM 20	2616.22060	28	16	100	42.5	M 8 x 1	–	–	E 20 M
CYL 16 x 100 / ERMX 20	4616.22060	28	16	100	42.5	M 8 x 1	–	•	E 20 MX

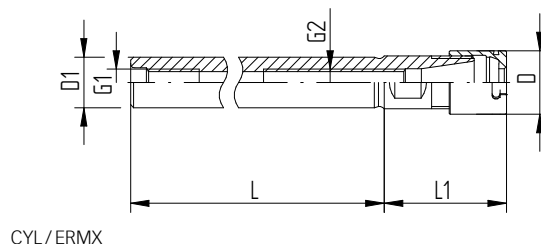
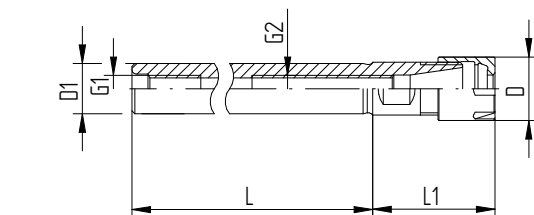
CYL / ERM colletholders (mini nut)

CYL

CYL / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory
		D	D1 h6	L	L1				Wrench
CYL 5/8 [inch]									
CYL 5/8" x 150 /ERM 11	2616.21191	16	15.875	150	19.5	M 8 x 1	–	–	E 11 M
CYL 5/8" x 150 /ERMX 11	4616.21191	16	15.875	150	19.5	M 8 x 1	–	•	E 11 MX
CYL 3/4 [inch]									
CYL 3/4" x 100 /ERM 25	2619.22561	35	19.05	100	47	M 12 x 1	–	–	E 25 M
CYL 3/4" x 100 /ERMX 25	4619.22561	35	19.05	100	47	M 12 x 1	–	•	E 25 MX
CYL 3/4" x 155 /ERM 16	2619.21691	22	19.05	155	26.5	M 12 x 1	–	–	E 16 M
CYL 3/4" x 155 /ERMX 16	4619.21691	22	19.05	155	26.5	M 12 x 1	–	•	E 16 MX
CYL 20 [mm]									
CYL 20 x 155 /ERM 16	2620.21690	22	20	155	25.5	M 12 x 1	M 11 x 1	–	E 16 M
CYL 20 x 155 /ERMX 16	4620.21690	22	20	155	25.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYL 25 [mm]									
CYL 25 x 155 /ERM 20	2625.22090	28	25	155	27	M 14 x 1	–	–	E 20 M
CYL 25 x 155 /ERMX 20	4625.22090	28	25	155	27	M 14 x 1	–	•	E 20 MX
CYL 1 [inch]									
CYL 1" x 155 /ERM 20	2625.22091	28	25.4	155	27	M 14 x 1	–	–	E 20 M
CYL 1" x 155 /ERMX 20	4625.22091	28	25.4	155	27	M 14 x 1	–	•	E 20 MX

Included in delivery: Colletholder, Hi-Q® / ERM or Hi-Q® / ERMX clamping nut and back-up screw. Accessories are not included in delivery.



CYLF / ERM colletholders (mini nut)

CYLF

CYLF / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYLF 12 [mm]									
CYLF 12 x 043 / ERM 8	2612.20822	12	12	43	17	M 5	–	–	E 8 M
CYLF 12 x 043 / ERMX 8	4612.20822	12	12	43	17	M 5	–	•	E 8 MX
CYLF 5/8 [inch]									
CYLF 5/8" x 043 / ERM 8	2616.20811	12	15.875	43	15.5	M 5	–	–	E 8 M
CYLF 5/8" x 043 / ERMX 8	4616.20811	12	15.875	43	15.5	M 5	–	•	E 8 MX
CYLF 16 [mm]									
CYLF 16 x 038 / ERM 11	2616.21112	16	16	38	19.5	M 8 x 1	–	–	E 11 M
CYLF 16 x 038 / ERMX 11	4616.21112	16	16	50	16	M 8 x 1	–	•	E 11 MX
CYLF 16 x 050 / ERM 11	2616.21122	16	16	50	16	M 8 x 1	–	–	E 11 M
CYLF 16 x 050 / ERMX 11	4616.21122	16	16	50	16	M 8 x 1	–	•	E 11 MX
CYFL 16 x 140 / ERM 11	2616.21192	16	16	140	19.5	M 8 x 1	–	–	E 11 M
CYFL 16 x 140 / ERMX 11	4616.21192	16	16	140	19.5	M 8 x 1	–	•	E 11 MX
CYLF 16 x 035 / ERM 16	2616.21612	22	16	35	36	M 8 x 1	–	–	E 16 M
CYLF 16 x 035 / ERMX 16	4616.21612	22	16	35	36	M 8 x 1	–	•	E 16 MX
CYLF 3/4 [inch]									
CYLF 3/4" x 115 / ERM 11	2619.21173	16	19.05	115	19.5	M 8 x 1	–	–	E 11 M
CYLF 3/4" x 115 / ERMX 11	4619.21173	16	19.05	115	19.5	M 8 x 1	–	•	E 11 MX
CYLF 3/4" x 038 / ERM 16	2619.21613	22	19.05	38	27.5	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 038 / ERMX 16	4619.21613	22	19.05	38	27.5	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 050 / ERM 16	2619.21623	22	19.05	50	25	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 050 / ERMX 16	4619.21623	22	19.05	50	25	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 070 / ERM 16	2619.21643	22	19.05	70	29.5	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 070 / ERMX 16	4619.21643	22	19.05	70	29.5	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 120 / ERM 16	2619.21683	22	19.05	120	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 3/4" x 120 / ERMX 16	4619.21683	22	19.05	120	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 3/4" x 140 / ERM 16	2619.21693	22	19.05	140	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 3/4" x 140 / ERMX 16	4619.21693	22	19.05	140	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 3/4" x 155 / ERM 16	2619.21691	22	19.05	155	26.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 3/4" x 155 / ERMX 16	4619.21691	22	19.05	155	26.5	M 12 x 1	M 11 x 1	–	E 16 MX

Included in delivery: Colletholder, Hi-Q® / ERM or Hi-Q® / ERMX clamping nut and back-up screw. Accessories are not included in delivery.

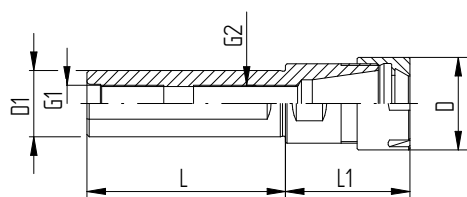
CYLF / ERM colletholders (mini nut)

CYLF

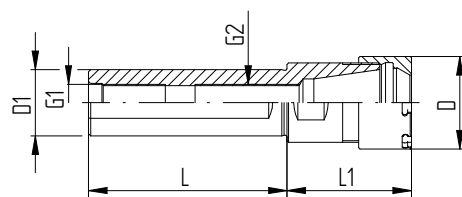
CYLF / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYLF 20 [mm]									
CYLF 20 x 060 / ERM 11	2620.21132	16	20	60	19.5	M 8 x 1	–	–	E 11 M
CYLF 20 x 060 / ERMX 11	4620.21132	16	20	60	19.5	M 8 x 1	–	•	E 11 MX
CYLF 20 x 038 / ERM 16	2620.21612	22	20	38	26.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 038 / ERMX 16	4620.21612	22	20	38	26.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 050 / ERM 16	2620.21622	22	20	50	27.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 050 / ERMX 16	4620.21622	22	20	50	27.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 070 / ERM 16	2620.21642	22	20	70	27.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 070 / ERMX 16	4620.21642	22	20	70	27.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 120 / ERM 16	2620.21682	22	20	120	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 20 x 120 / ERMX 16	4620.21682	22	20	120	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 20 x 140 / ERM 16	2620.21692	22	20	140	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 20 x 140 / ERMX 16	4620.21692	22	20	140	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 22 [mm]									
CYLF 22 x 038 / ERM 16	2622.21612	22	22	38	27.5	M 12 x 1	–	–	E 16 M
CYLF 22 x 038 / ERMX 16	4622.21612	22	22	38	27.5	M 12 x 1	–	–	E 16 MX
CYLF 22 x 070 / ERM 16	2622.21642	22	22	70	27.5	M 12 x 1	–	–	E 16 M
CYLF 22 x 070 / ERMX 16	4622.21642	22	22	70	27.5	M 12 x 1	–	–	E 16 MX
CYLF 22 x 100 / ERM 16	2622.21662	22	22	100	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 22 x 100 / ERMX 16	4622.21662	22	22	100	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 22 x 080 / ERM 20	2622.22052	28	22	80	39	M 12 x 1	–	–	E 20 M
CYLF 22 x 080 / ERMX 20	4622.22052	28	22	80	39	M 12 x 1	–	•	E 20 MX
CYLF 22 x 070 / ERM 25	2622.22542	35	22	70	47	M 12 x 1	–	–	E 25 M

Included in delivery: Colletholder, Hi-Q® / ERM or Hi-Q® / ERMX clamping nut and sealing back-up screw. Accessories are not included in delivery.



CYLF / ERM



CYLF / ERMX

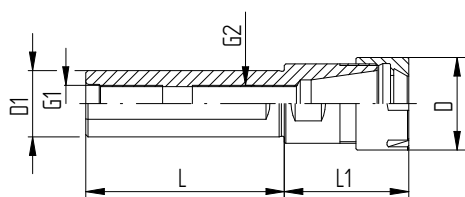
CYLF / ERM colletholders (mini nut)

CYLF

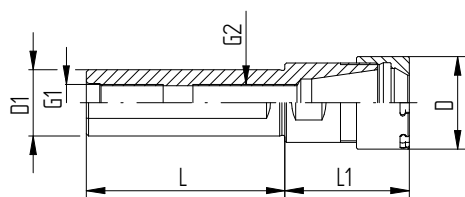
CYLF / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory
		D	D1 h6	L	L1				Wrench
CYLF 25 [mm]									
CYLF 25 x 065 / ERM 16	2625.21642	22	25	65	27.5	M 12 x 1	–	–	E 16 M
CYLF 25 x 065 / ERMX 16	4625.21642	22	25	65	27.5	M 12 x 1	–	•	E 16 MX
CYLF 25 x 100 / ERM 20	2625.22062	28	25	100	28	M 14 x 1	–	–	E 20 M
CYLF 25 x 100 / ERMX 20	4625.22062	28	25	100	28	M 14 x 1	–	•	E 20 MX
CYLF 25 x 154 / ERM 20	2625.22002	28	25	154	28	M 14 x 1	–	–	E 20 M
CYLF 25 x 154 / ERMX 20	4625.22002	28	25	154	28	M 14 x 1	–	•	E 20 MX
CYLF 25 x 075 / ERM 25	2625.22552	35	25	75	47	M 14 x 1	–	–	E 25 M
CYLF 25 x 075 / ERMX 25	4625.22552	35	25	75	47	M 14 x 1	–	•	E 25 MX
CYLF 25 x 145 / ERM 25	2625.22592	35	25	145	36	M 14 x 1	–	–	E 25 M
CYLF 25 x 145 / ERMX 25	4625.22592	35	25	145	36	M 14 x 1	–	•	E 25 MX
CYLF 1 [inch]									
CYLF 1" x 033 / ERM 16	2625.21613	22	25.4	33	28	M 12 x 1	–	–	E 16 M
CYLF 1" x 033 / ERMX 16	4625.21613	22	25.4	33	28	M 12 x 1	–	•	E 16 MX
CYLF 1" x 065 / ERM 16	2625.21643	22	25.4	65	27.5	M 12 x 1	–	–	E 16 M
CYLF 1" x 065 / ERMX 16	4625.21643	22	25.4	65	27.5	M 12 x 1	–	•	E 16 MX
CYLF 1" x 075 / ERM 16	2625.21653	22	25.4	75	27.5	M 12 x 1	–	–	E 16 M
CYLF 1" x 075 / ERMX 16	4625.21653	22	25.4	75	27.5	M 12 x 1	–	•	E 16 MX
CYLF 1" x 100 / ERM 16	2625.21663	22	25.4	100	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 1" x 100 / ERMX 16	4625.21663	22	25.4	100	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 1" x 100 / ERM 20	2625.22063	28	25.4	100	27.5	M 14 x 1	–	–	E 20 M
CYLF 1" x 100 / ERMX 20	4625.22063	28	25.4	100	27.5	M 14 x 1	–	•	E 20 MX
CYLF 1" x 140 / ERM 20	2625.22093	28	25.4	140	27.5	M 14 x 1	–	–	E 20 M
CYLF 1" x 140 / ERMX 20	4625.22093	28	25.4	140	27.5	M 14 x 1	–	•	E 20 MX
CYLF 32 [mm]									
CYLF 32 x 070 / ERM 25	2632.22542	35	32	70	30	M 18 x 1.5	–	–	E 25 M
CYLF 32 x 070 / ERMX 25	4632.22542	35	32	70	30	M 18 x 1.5	–	•	E 25 MX

Included in delivery: Colletholder, Hi-Q® / ERM or Hi-Q® / ERMX clamping nut and back-up screw. Accessories are not included in delivery.



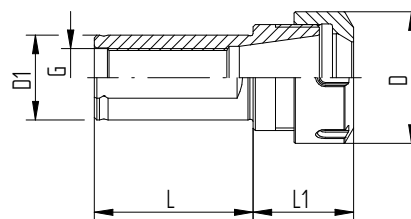
CYLF / ERM



CYLF / ERMX

Type	Part no.	Dimensions [mm]				Accessory	
		D	D1 h6	L	L1	G	Wrench
CYL 1 1/4 [inch]							
CYL 1 1/4" x 060 / ER NC 25	2632.12533	42	31.75	60	32	M 18 x 1.5	E 25
CYL 1 1/4" x 060 / ER NC 32	2632.13233	50	31.75	60	38	M 22 x 1.5	E 32
CYL 32 [mm]							
CYL 32 x 060 / ER NC 25	2632.12532	42	32	60	32	M 18 x 1.5	E 25
CYL 32 x 060 / ER NC 32	2632.13232	50	32	60	38	M 22 x 1.5	E 32
CYL 1 1/2 [inch]							
CYL 1 1/2" x 080 / ER NC 32	2638.13253	50	38.1	80	33	M 22 x 1.5	E 32
CYL 1 1/2" x 075 / ER NC 40	2638.14053	63	38.1	75	55	M 22 x 1.5	E 40
CYL 40 [mm]							
CYL 40 x 080 / ER NC 32	2640.13252	50	40	80	39	M 22 x 1.5	E 32
CYL 40 x 075 / ER NC 40	2640.14052	63	40	75	55	M 22 x 1.5	E 40

Included in delivery: Colletholder, HI-Q® / ER clamping nut and backup screw. Accessories are not included in delivery.



CYDF/ERM colletholders (mini nut)

CYDF

CYDF / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1			
CYDF 12 [mm]								
CYDF 12 x 015 / ERM 8	2612.20804	12	12	15	46	–	–	E 8 M
CYDF 12 x 015 / ERMX 8	4612.20804	12	12	15	46	–	•	E 8 MX
CYDF 12 x 025 / ERM 8	2612.20814	12	12	25	56	–	–	E 8 M
CYDF 12 x 025 / ERMX 8	4612.20814	12	12	25	56	–	•	E 8 MX
CYDF 5/8 [inch]								
CYDF 5/8" x 015 / ERM 8	2616.20805	12	15.875	15	46	–	–	E 8 M
CYDF 5/8" x 025 / ERM 8	2616.20895	12	15.875	25	56	–	–	E 8 M
CYDF 5/8" x 025 / ERMX 8	4616.20895	12	15.875	25	56	–	•	E 8 MX
CYDF 16 [mm]								
CYDF 16 x 040 / ERM 11	2616.21114	16	16	40	79	–	–	E 11 M
CYDF 16 x 040 / ERMX 11	4616.21114	16	16	40	79	–	•	E 11 MX
CYDF 16 x 050 / ERM 11	2616.21124	16	16	50	89	–	–	E 11 M
CYDF 16 x 050 / ERMX 11	4616.21124	16	16	50	89	–	•	E 11 MX
CYDF 3/4 [inch]								
CYDF 3/4" x 040 / ERM 11	2619.21125	16	19.05	40	79	–	–	E 11 M
CYDF 3/4" x 040 / ERMX 11	4619.21125	16	19.05	40	79	–	•	E 11 MX
CYDF 3/4" x 070 / ERM 11	2619.21145	16	19.05	70	109	–	–	E 11 M
CYDF 3/4" x 070 / ERMX 11	4619.21145	16	19.05	70	109	–	•	E 11 MX
CYDF 3/4" x 090 / ERM 11	2619.21165	16	19.05	90	129	–	–	E 11 M
CYDF 3/4" x 090 / ERMX 11	4619.21165	16	19.05	90	129	–	•	E 11 MX
CYDF 3/4" x 055 / ERM 16	2619.21635	22	19.05	55	107	–	–	E 16 M
CYDF 3/4" x 055 / ERMX 16	4619.21635	22	19.05	55	107	–	•	E 16 MX
CYDF 20 [mm]								
CYDF 20 x 030 / ERM 11	2620.21114	16	20	30	69	–	–	E 11 M
CYDF 20 x 030 / ERMX 11	4620.21114	16	20	30	69	–	•	E 11 MX
CYDF 20 x 050 / ERM 11	2620.21124	16	20	50	89	–	–	E 11 M
CYDF 20 x 050 / ERMX 11	4620.21124	16	20	50	89	–	•	E 11 MX
CYDF 20 x 055 / ERM 16	2620.21634	22	20	55	107	–	–	E 16 M
CYDF 20 x 055 / ERMX 16	4620.21634	22	20	55	107	–	•	E 16 MX

Included in delivery: Colletholder and two Hi-Q® / ERM or Hi-Q® / ERMX clamping nuts. Accessories are not included in delivery.

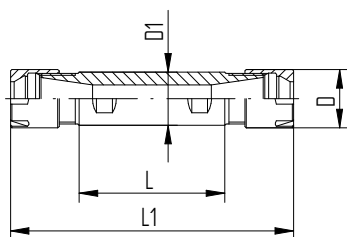
CYDF / ERM colletholders (mini nut)

CYDF

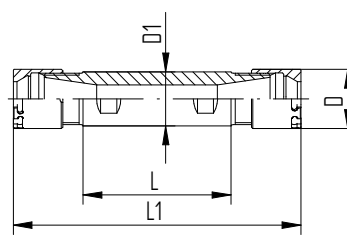
CYDF / ERMX colletholders with intRlox® (slip-off proof mini nut)

Type	Part no.	Dimensions [mm]				G	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1			
CYDF 22 [mm]								
CYDF 22 x 150 /ERM 11	2622.21194	16	22	150	189	–	–	E 11 M
CYDF 22 x 040 /ERM 16	2622.21624	22	22	40	80	–	–	E 16 M
CYDF 22 x 055 /ERM 16	2622.21634	22	22	55	110	–	–	E 16 M
CYDF 22 x 055 /ERMX 16	4622.21634	22	22	55	110	–	•	E 16 MX
CYDF 22 x 075 /ERM 16	2622.21654	22	22	75	130	–	–	E 16 M
CYDF 22 x 075 /ERMX 16	4622.21654	22	22	75	130	–	•	E 16 MX
CYDF 25 [mm]								
CYDF 25 x 062 /ERM 16	2625.21634	22	25	62	117	–	–	E 16 M
CYDF 25 x 062 /ERMX 16	4625.21634	22	25	62	117	–	•	E 16 MX
CYDF 1 [inch]								
CYDF 1" x 030 /ERM 16	2625.21615	22	25.4	30	86	–	–	E 16 M
CYDF 1" x 030 /ERMX 16	4625.21615	22	25.4	30	86	–	•	E 16 MX
CYDF 1" x 062 /ERM 16	2625.21635	22	25.4	62	117	–	–	E 16 M
CYDF 1" x 062 /ERMX 16	4625.21635	22	25.4	62	117	–	•	E 16 MX
CYDF 32 [mm]								
CYDF 32 x 055 /ERM 20	2632.22034	28	32	55	110	–	–	E 20 M
CYDF 32 x 055 /ERMX 20	4632.22034	28	32	55	110	–	•	E 20 MX
CYDF 32 x 075 /ERM 20	2632.22054	28	32	75	130	–	–	E 20 M
CYDF 32 x 075 /ERMX 20	4632.22054	28	32	75	130	–	•	E 20 MX

Included in delivery: Colletholder and two Hi-Q® / ERM or Hi-Q® / ERMX clamping nuts. Accessories are not included in delivery.



CYDF / ERM



CYDF / ERMX

Morse taper collets holders MK



Applications Morse taper collets holders are designed for drawbar thread application. They can be used on milling or combined drilling-milling machines as well as on boring machines. For drilling machines we supply the corresponding tangs (ATL) on request.

Special applications When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend the use of our friction-bearing clamping nuts Hi-Q® / ERB and Hi-Q® / ERBC.

Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance. *For the influence of runout on tool life see the graph page 3.*

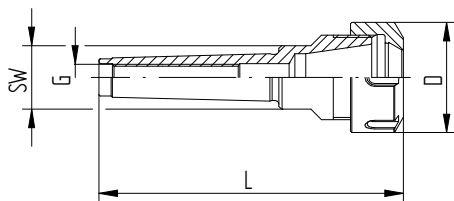
Expert advice

We recommend tightening the clamping nuts with our torque wrench.

For tightening torque recommendations, please refer to page 161.

Type	Part no.	Dimensions [mm]		G	SW	Accessory
		D	L			Wrench
MK 1						
MK 1 / ER 16 x 041	2701.11600	28	93.5	M 6	17	E 16 P
MK 2						
MK 2 / ER 20 x 049	2702.12000	34	111.5	M 10	22	E 20 P
MK 2 / ER 25 x 052	2702.12500	42	115	M 10	27	E 25
MK 2 / ER 32 x 060	2702.13200	50	123	M 10	32	E 32
MK 3						
MK 3 / ER 25 x 052	2703.12500	42	132	M 12	27	E 25
MK 3 / ER 32 x 070	2703.13200	50	150	M 12	32	E 32
MK 4						
MK 4 / ER 32 x 060	2704.13200	50	161.5	M 16	32	E 32
MK 4 / ER 40 x 082	2704.14000	63	183	M 16	41	E 40
MK 5						
MK 5 / ER 40 x 064	2705.14000	63	192	M 20	41	E 40
MK 5 / ER 50 x 086	2705.15900	78	214	M 20	50	E 50

Included in delivery: Collet holder, Hi-Q® / ER clamping nut and back-up screw. Accessories are not included in delivery.



MK / ER

Expert advice

We also offer tangs for use with morse taper MK collets holders.

For tang part numbers, please refer to page 148.

Automotive shank colletholders SH



Applications Automotive shank colletholders with trapezoidal thread are supplied with a setting nut. With this type of collet holder, ER, ER-GB and PCM ET1 collets can be used.

Special applications A quick-change setting nut according to system BILZ is available as an option. This option must be ordered separately. When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend the use of our friction-bearing clamping nuts Hi-Q®/ERB and Hi-Q®/ERBC.

Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance. *For the influence of runout on tool life see the graph on page 3.*

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

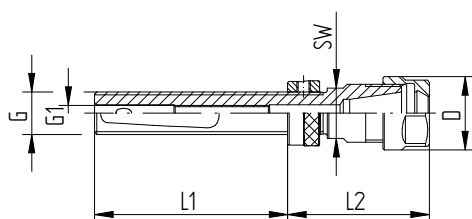
For tightening torque recommendations, please refer to page 161.

Type	Part no.	Dimensions [mm]			G	G1	SW	Accessory
		D	L1	L2				Wrench
SH 12								
SH 12 x 050 / ER 11	2612.11104	19	50	46.6	Tr 12 x 1.5	M 5	12	E 11 P
SH 16								
SH 16 x 073 / ER 16	2616.11604	28	73	53.5	Tr 16 x 1.5	M 6	19	E 16 P
SH 20								
SH 20 x 076 / ER 20	2620.12004	34	76	59.5	Tr 20 x 2	M 8	22	E 20 P
SH 28								
SH 28 x 083 / ER 25	2628.12504	42	83	57	Tr 28 x 2	M 18 x 2	28	E 25

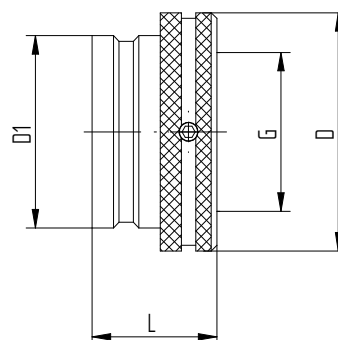
Included in delivery: Collet holder, Hi-Q® / ER clamping nut, back-up screw, setting nut and Woodruff-key. Accessories are not included in delivery.

Save time with our quick-change setting nut.

Type	Part no.	Dimensions [mm]			G
		D	D1	L	
Quick-change setting nut (System BILZ)					
SSM 12	7238.12000	22	16.4	18	Tr 12 x 1.5
SSM 16	7238.16000	26	19.9	18.5	Tr 16 x 1.5
SSM 20	7238.20000	33	25.4	20	Tr 20 x 2
SSM 28	7238.28000	42	33.9	22	Tr 28 x 2



SH / ER



SSM

ISO 20 colletholders



Applications The REGO-FIX ISO 20 colletholders are designed to work with the HAAS Office Mill. To utilize the full potential of your machine, use the REGO-FIX brand of holders and collets to see the difference quality can achieve in your machining operations.

Balancing

// 100 % balanced to @ 40,000 rpm.

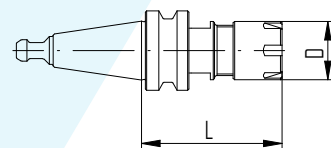
Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life see the graph on page 3.

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

For tightening torque recommendations, please refer to page 161.



ISO / ERM HAAS

Type	Part no.	Dimensions [mm]		Accessory
		D	L	Wrench
ISO 20				
ISO 20 / ERM 11 x 048 HAAS	2420.11116	16	48	E 11 M
ISO 20 / ERM 16 x 053 HAAS	2420.11616	22	53	E 16 M
ISO 20 / ERM 20 x 055 HAAS	2420.12016	28	55	E 20 M

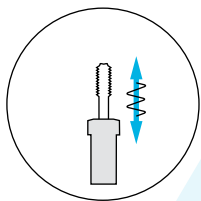
Included in delivery: ISO colletholder with HI-Q® / ERM mini clamping nut and integral pull stud.
Accessories are not included in delivery.



ER thread-cutting solutions

CYL SSY / HSK-A SSY Softsynchro® tapping holder

- // With minimum length compensation
- // Eliminates small synchronization errors of machines

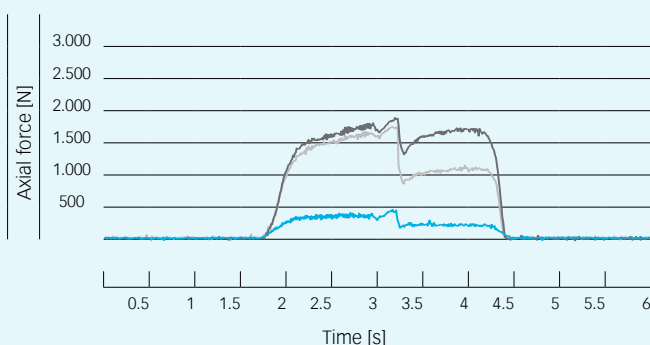


Applications

- // Machines for direct thread cutting
- // For all tapping tools with h9 shanks
- // The turning movement of the spindles can be offset with the feed axis and thus synchronized
- // Synchronization errors are created by the dynamics of the spindle and linear drives. The tapping holder is equipped with the minimum length compensation and compensates the synchronization errors
- // Guides coolant with up to 50 bar of pressure to the tap, without compromising length compensation
- // Depending on the application, the service life for the customer can be increased by up to 150 %

Comparative axial force testing

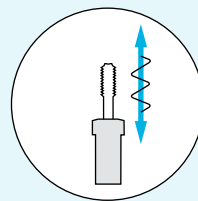
Occurring axial forces with thread forms M10 in St37. Speed 500 rpm
Source: In-house testing



Summary The axial forces increase with increasing speed. With a rigid collet holder, the forces occurring when forming threads are considerably higher than with the Softsynchro® tapping holder. This allows for the optimum use of the synchronous spindle with the best possible service life and thread surface quality.

CYL GSF tapping holder

- // With length compensation
- // For machines without a tapping option

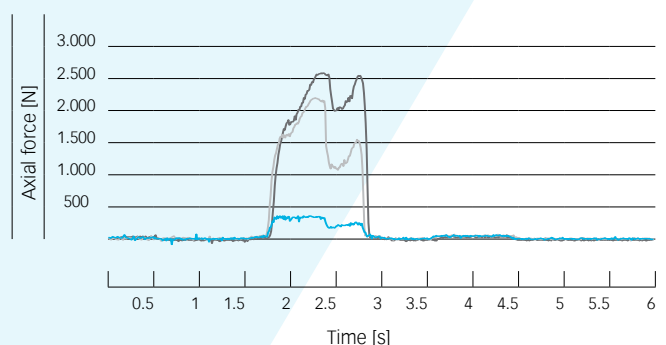


Applications

- // Used on machines in which the feed movement is not synchronized with the thread pitch during processing
- // Ensures the compensation of differences between the thread pitch and spindle feed
- // Features a pressure-point mechanism
- // Safe tap cutting
- // Uniform, reproducible thread depths
- // Guides coolant with up to 50 bar of pressure to the tap, without compromising length compensation
- // Universal use thanks to its compact design and low gauge length

Comparative axial force testing

Occurring axial forces with thread forms M10 in St37. Speed 2,000 rpm
Source: In-house testing



- REGO-FIX Softsynchro® tapping holders
- Competitor synchronous collet holder
- Rigid synchronous collet holder

ER tapping holders

HSK-A SSY

CYL SSY

CYL GSF

69893-A

DIN 1835 B+E

DIN 1835 B+E

ISO 12164

Type	Part no.	Dimensions [mm]		Compression	Tension	SW	Accessory
		D	L	[mm]	[mm]		Wrench
HSK-A 63 SSY							
HSK-A 63 SSY / ERC 20	2563.62000	34	95.5	0.5	0.5	19	E 20 P
HSK-A 63 SSY / ERC 32	2563.63200	50	108.8	0.5	0.5	32	E 32

Included in delivery: Tapping holder with Hi-Q®/ERC clamping nut.

Type	Part no.	Dimensions [mm]				Compression	Tension	SW	Accessory
		D	D1	L	L1	[mm]	[mm]		Wrench
CYL 25 SSY									
CYL 25 SSY / ERC 20	2625.62000	34	25	73	57	0.5	0.5	19	E 20 P
CYL 25 SSY / ERC 32	2625.63200	50	25	87.5	57	0.5	0.5	32	E 32

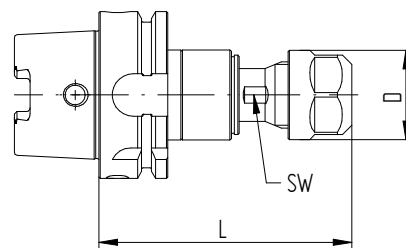
Included in delivery: Tapping holder with Hi-Q®/ERC clamping nut.

Type	Part no.	Dimensions [mm]				Compression	Tension	SW	Accessory
		D	D1	L	L1	[mm]	[mm]		Wrench
CYL 25 GSF									
CYL 25 GSF / ERM C 20	2625.62001	28	25	85	57	5	7.5	28	E 20 M
CYL 25 GSF / ERC 32	2625.63201	50	25	115	57	7	10	34	E 32

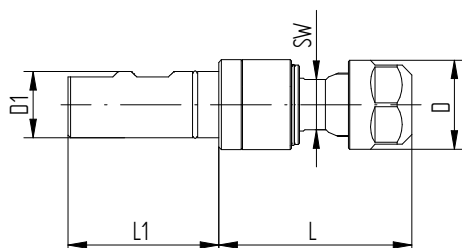
Included in delivery: Tapping holder with Hi-Q®/ERC or Hi-Q®/ERM clamping nut.



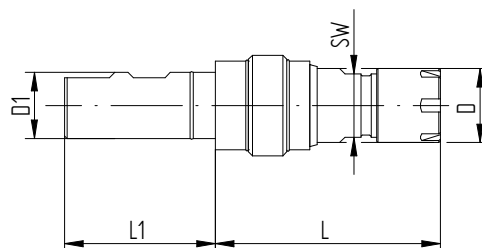
HSK-A SSY / CYL SSY / CYL GSF



HSK-A 63 SSY / ERC



CYL 25 SSY / ERC



CYL 25 GSF

ER floating chucks

When using reamers on lathes it is often necessary to compensate for axis error between the chuck and the bore to be machined. This error can be corrected by using a self-centering floating chuck.

PH / PHC / PHC-C / MPH

Features and benefits

Adjustable floating resistance

Continuously adjustable between auto-centering and free-floating. No restriction of the floating movement.

Adjustment for tool weight

Optimal setup by adjustment of floating resistance is possible.

Vertical and horizontal application

Adjustable self-centering keeps the tool at the center of the floating chuck, even in the horizontal position. Prevents chatter marks and extends tool life.

Combined ball- and friction-bearing

Combined ball and friction-bearing for easy floating:

- // Ball bearing for smooth reaming at low load applications
- // Friction-bearing to withstand high pressures at high load applications

Double sealing against dirt

Prevents coolant and chips from entering the floating chuck.

Excellent bore quality

Only parallel floatation of tool possible.

Floating chuck PH / ER

Features REGO-FIX floating chucks are excellent tools for reaming and tapping:

- // They are specially designed so the tool is self-centering in a vertical and horizontal position
- // The self-centering feature allows very precise positioning of the reaming or tapping tool. This is especially important in horizontal applications, where on ordinary floating chucks the weight of the tool tends to dislocate the tool from the rotational axis
- // The float is always parallel to the rotational axis and the rotation is both clockwise and counter clockwise

Floating chuck PHC / ER for coolant through tools

Features Floating chucks PHC / ER for coolant through tools are especially designed for internal cooling and have the same advantages as the PH / ER floating chucks.

Floating chuck PHC-C / ER REGO-FIX CAPTO

Features These REGO-FIX CAPTO floating chucks are manufactured with polygon interface – licensed by Sandvik Coromant.

Floating chuck MPH / ERMX for tight spaces

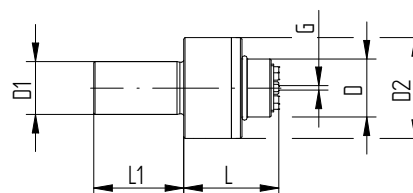
Application REGO-FIX MPH / ERMX floating chucks are an efficient solution for tight space applications.

PH floating chucks for non coolant through tools

PH

Type	Part no.	Dimensions [mm]					G	Accessory
		D	D1 h6	D2	L	L1		Wrench
PH 5/8 [inch]								
PH 5/8" / ER 11	2616.91102	22	15.88	38	36	34	0.8	E 11 AX
PH 16 [mm]								
PH 16/ER 11	2616.91100	22	16	38	36	34	0.8	E 11 AX
PH 3/4 [inch]								
PH 3/4" / ER 11	2619.91102	22	19.05	38	36	34	0.8	E 11 AX
PH 20 [mm]								
PH 20/ER 11	2620.91100	22	20	38	36	34	0.8	E 11 AX
PH 22 [mm]								
PH 22/ER 11	2622.91100	22	22	38	36	34	0.8	E 11 AX

Included in delivery: Floating holder, HI-Q®/ER clamping nut and wrench.



PH/ER

Type	Part no.	Dimensions [mm]					Accessory	
		D	D1 h6	D2	L	L1	G	Wrench
PHC 5/8 [inch]								
PHC 5/8" / ER 20	2616.92004	33	15.88	56	53.5	38	1	E 20 AX
PHC 16								
PHC 16 / ER 20	2616.92003	33	16	56	53.5	38	1	E 20 AX
PHC 3/4 [inch]								
PHC 3/4" / ER 20	2619.92004	33	19.05	56	53.5	38	1	E 20 AX
PHC 3/4" / ER 32	2619.93204	46	19.05	70	64.5	46	1.5	E 32 AX
PHC 20 [mm]								
PHC 20 / ER 20	2620.92003	33	20	56	53.5	38	1	E 20 AX
PHC 20 / ER 32	2620.93203	46	20	70	64.5	46	1.5	E 32 AX
PHC 22 [mm]								
PHC 22 / ER 20	2622.92003	33	22	56	53.5	38	1	E 20 AX
PHC 22 / ER 32	2622.93203	46	22	70	64.5	46	1.5	E 32 AX
PHC 25 [mm]								
PHC 25 / ER 20	2625.92003	33	25	56	53.5	38	1	E 20 AX
PHC 25 / ER 32	2625.93203	46	25	70	64.5	46	1.5	E 32 AX
PHC 1 [inch]								
PHC 1" / ER 20	2625.92004	33	25.4	56	53.5	38	1	E 20 AX
PHC 1" / ER 32	2625.93204	46	25.4	70	64.5	46	1.5	E 32 AX
PHC 1 1/4 [inch]								
PHC 1 1/4" / ER 32	2632.93204	46	31.75	70	64.5	46	1.5	E 32 AX
PHC 32 [mm]								
PHC 32 / ER 32	2632.93203	46	32	70	64.5	46	1.5	E 32 AX
PHC 1 3/4 [inch]								
PHC 1 3/4" / ER 32	2644.93204	46	44.45	70	64.5	46	1.5	E 32 AX

Included in delivery: Floating holder, Hi-Q® / ERAX clamping nut, wrench and adjusting key.

Expert advice

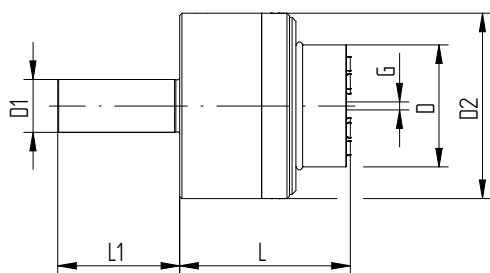
When using coolant through tools please order Hi-Q® / ERAXC clamping nuts and the corresponding sealing disks.

PHC-C floating chucks for coolant through tools with REGO-FIX CAPTO interface

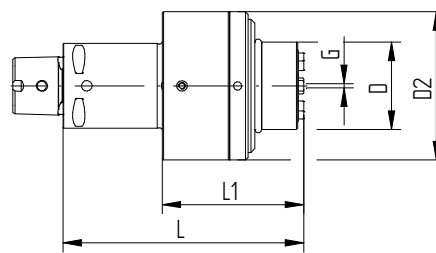
PHC-C

Type	Part no.	Dimensions [mm]				G	Accessory
		D	D2	L	L1		Wrench
PHC-C3							
PHC-C3 / ER 20	2803.92003	33	56	91	53.5	0.8	E 20 AX
PHC-C4							
PHC-C4 / ER 20	2804.92003	33	56	91	56.5	0.8	E 20 AX
PHC-C4 / ER 32	2804.93203	46	70	100	64	0.8	E 32 AX

Included in delivery: Floating holder, Hi-Q®/ERAX clamping nut and wrench.



PHC/ER



PHC-C/ER

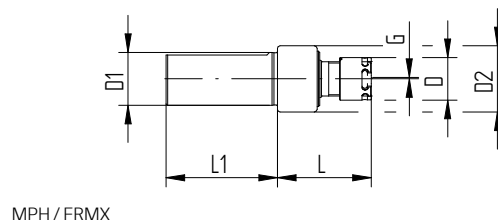
Certified REGO-FIX CAPTO – licensed by Sandvik Coromant – is manufactured at REGO-FIX Switzerland under license according to CAPTO specifications.

MPH mini floating chucks with intRlox® (slip-off proof mini nut)

MPH

Type	Part no.	Dimensions [mm]					G	Accessory
		D	D1 h6	D2	L	L1		Wrench
MPH 8 [mm]								
MPH 8 / ERMX 11	4608.91107	16	8	25	35.5	42	0.5	E 11 MX
MPH 10 [mm]								
MPH 10 / ERMX 11	4610.91107	16	10	25	35.5	42	0.5	E 11 MX
MPH 16 [mm]								
MPH 16 / ERMX 11	4616.91107	16	16	25	35.5	42	0.5	E 11 MX
MPH 3/4"								
MPH 3/4" / ERMX 11	4619.91108	16	19.05	25	35.5	70	0.5	E 11 MX
MPH 20 [mm]								
MPH 20 / ERMX 11	4620.91107	16	20	25	35.5	42	0.5	E 11 MX
MPH 22 [mm]								
MPH 22 / ERMX 11	4622.91107	16	22	25	35.5	42	0.5	E 11 MX
MPH 25 [mm]								
MPH 25 / ERMX 11	4625.91107	16	25	25	35.5	42	0.5	E 11 MX
MPH 1 [inch]								
MPH 1" / ERMX 11	4625.91108	16	25.4	25	35.5	42	0.5	E 11 MX

Included in delivery: Floating holder, Hi-Q®/ERMX clamping nut and wrench.





Collet reductions



ER / ERM ERM / ERM ER / ERMX ERMX / ERMX

Features and benefits

Surface finish max. Ra 0.25

Higher clamping force and higher transferable torque.

Applications

The collet reductions are mainly used on Swiss machines with live tooling.

Quick change system

Best suited for quick tool change as the cutting tools can be preinstalled.

Length presetting

Tools can be preset outside of the machine.

Minimal external dimensions

Achieve minimal external dimensions by using Hi-Q® / ERM or Hi-Q® / ERMX clamping nuts.

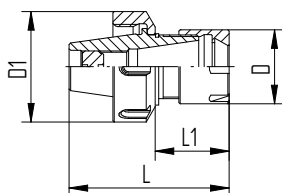
Expert advice

We recommend tightening the clamping nuts with our torque wrench.

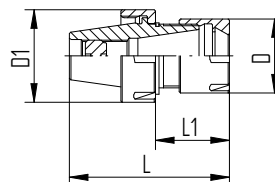
For tightening torque recommendations, please refer to page 161.

Type	Part no.	Dimensions [mm]				Accessory
		D	D1	L	L1	Wrenches
ER 11						
ER 11/ERM 8	7162.11080	12	19	33	16.5	E 11 P/E 8 M
ER 16						
ER 16/ERM 11	7162.16110	16	28	42.5	18.5	E 16 P/E 11 M
ER 20						
ER 20/ERM 16	7162.20160	22	34	55.5	28	E 20 P/E 16 M
ER 25						
ER 25/ERM 16	7162.25160	22	42	60.5	28	E 25 / E 16 M
ER 25/ERM 20	7162.25200	28	42	60.5	28	E 25 / E 20 M
ERM 11						
ERM 11/ERM 8	7161.11080	12	16	33	16.5	E 11 M/E 8 M
ERM 16						
ERM 16/ERM 11	7161.16110	16	23	42.5	18.5	E 16 M/E 11 M
ERM 20						
ERM 20/ERM 16	7161.20160	22	28	55.5	28	E 20 M/E 16 M
ERM 25						
ERM 25/ERM 16	7161.25160	22	35	60.5	28	E 25 M/E 16 M
ERM 25/ERM 20	7161.25200	28	35	60.5	28	E 25 M/E 20 M

Accessories are not included in delivery.



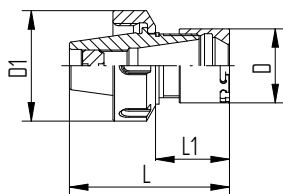
ER / ERM



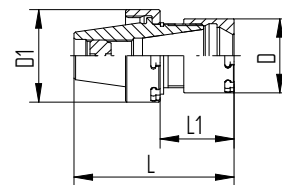
ERM / ERM

Type	Part no.	Dimensions [mm]				Accessory
		D	D1	L	L1	Wrenches
ER 11						
ER 11 / ERMX 8	7165.11080	12	19	33	16.5	E 11 P / E 8 MX
ER 16						
ER 16 / ERMX 11	7165.16110	16	28	42.5	18.5	E 16 P / E 11 MX
ER 20						
ER 20 / ERMX 16	7165.20160	22	34	55.5	28	E 20 P / E 16 MX
ER 25						
ER 25 / ERMX 16	7165.25160	22	42	60.5	28	E 25 / E 16 MX
ER 25 / ERMX 20	7165.25200	28	42	60.5	28	E 25 / E 20 MX
ERMX 11						
ERMX 11 / ERMX 8	7164.11080	12	16	33	16.5	E 11 MX / E 8 MX
ERMX 16						
ERMX 16 / ERMX 11	7164.16110	16	23	42.5	18.5	E 16 MX / E 11 MX
ERMX 20						
ERMX 20 / ERMX 16	7164.20160	22	28	55.5	28	E 20 MX / E 16 MX
ERMX 25						
ERMX 25 / ERMX 16	7164.25160	22	35	60.5	28	E 25 MX / E 16 MX

Accessories are not included in delivery.



ER / ERMX



ERMX / ERMX



Micro-machining	Standard and ultraprecision	Metallic sealed	Pullout protection secuRgrip®	Collets for tapping	
ER-MB	ER standard/ ER-UP	ER-DM	ER-SG	ER-GB	PCM ET1
					
page 82	page 83	page 92	page 97	page 98	page 102

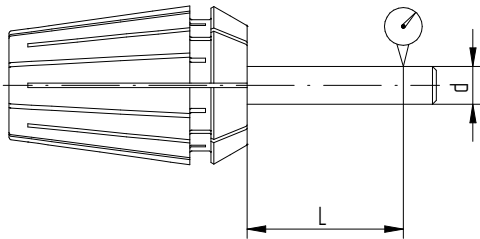


Successful clamping since 1972

Combine our ER colletholders with our ER collets to ensure maximum precision and balance to maximize your tool life.

Experience the quality of the triangle The outstanding design paired with our experienced engineering make the ER products one of our most successful toolholding options. What you see is what you get: all our products bear the REGO-FIX triangle – our seal for outstanding Swiss quality.

Runout TIR of ER standard and ER-UP collets



Clamping diameter d [mm]			TIR max. [mm]		
>	≤	L	DIN 6499		
			ISO 15488 B	Δ ER std.	Δ ER-UP
1	1.6	6	0.015	0.01	0.005
1.6	3	10	0.015	0.01	0.005
3	6	16	0.015	0.01	0.005
6	10	25	0.015	0.01	0.005
10	18	40	0.02	0.01	0.005
18	26	50	0.02	0.01	0.005
26	36	60	0.025	0.01	0.005

Key advantages

Rely on the original

Wide clamping range

The slot design allows for a wide clamping range with a continuing best runout TIR.

Broad range of products

We offer sizes from ER 8 up to ER 50 and diameters from 0.2 mm up to 36 mm.

Up to 20 % more clamping length

Improve your runout with up to 20 % more clamping length in smaller diameters.

Matched tooling system for best fit

The compatibility of the entire system results in maximum precision, balance and tool life.



Swiss quality standard

Our products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

Swiss quality collets for your production

Our wide product range offers the perfect collet for every application.



	MB	std.	UP	DM	SG	GB	PCM ET1
	microbore	standard	ultra-precision	metallic sealed	secuRgrip®	tapping collet	tapping collet
Main machining use	micro-machining	all	high precision	internal cooling	heavy machining	rigid tapping	rigid tapping with length compensation
DIN ISO 15488: form ...	A	B	B	B	B	A	A
ER size	8 – 16	8 – 50	8 – 50	11 – 40	32 – 40	11 – 50	11 – 40
Shaft diameter range	0.2 – 0.9	1.0 – 36.0	1.0 – 36.0	3.0 – 26.0	10.0 – 25.4	2.5 – 32.0	1.4 – 17.0
Clamping range (mm) or tolerance	h7	1	1	0.5*	h6	h9	h9
Runout (TIR)	6 µm	10 µm	5 µm	6 µm	5 µm	10 µm	10 µm
Anti-corrosion coating	–	available on request	available on request	available on request	–	available on request	–
Metallic sealed	–	–	–	•	–	–	–
Internal square	–	–	–	–	–	•	•
Length compensation	–	–	–	–	–	–	•
secuRgrip® thread to prevent tool pullout	–	–	–	–	•	–	–
Collet-locking system	–	•	•	•*	•	•	–
More information on	page 82	page 83	page 83	page 92	page 97	page 98	page 102

* Does not apply for ER-DM collets with counterbore.

Expert advice

Please note that DM collets are not compatible with Weldon or Whistle notch shafts. To achieve internal cooling with Weldon or Whistle notch shafts, use the REGO-FIX sealing disks ER/DS with your REGO-FIX ER collet.

Need even better runout? With a total system runout TIR of $\leq 3 \mu\text{m}$, our other system solutions powRgrip® and micRun® achieve even better runout results.

Learn more on page 4 and 5 or on www.rego-fix.com.

Finest quality deserves best treatment

Correct assembly increases your collet life and ensures low runout TIR.

Assembly instructions for ER and ER-UP collets

- // Insert collet groove into the eccentric ring of the clamping nut at the mark on the bottom of the nut
- // Push the collet in the direction of the arrow until it clicks in place
- // Screw the nut with the collet onto the colletholder
- // We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152.

For tightening torque recommendations, please refer to page 161.

Disassembly instructions After the nut is unscrewed from the colletholder, press on the face of the collet while simultaneously pushing sideways on the back of the collet opposite the mark, until it disengages from the clamping nut.

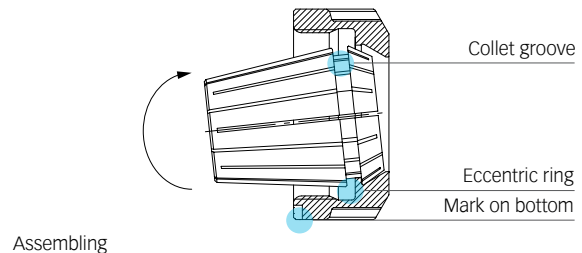
General advice Never clamp oversized tool shanks. For example, never use a Ø 12 mm to 11 mm collet to clamp a Ø 12.2 mm shank. Rather use the next bigger collet (in this case a Ø 12.5 mm – 11.5 mm or 13 mm – 12 mm collet). Insert tool to the full length of the collet for best results if possible.

Also, never insert the tool less than $\frac{2}{3}$ of the collet length. Improper tool insertion can permanently deform the collet and will result in poor runout.

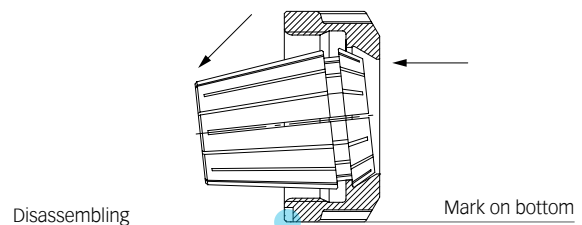
Improper assembly can permanently damage the runout TIR of the collet and may result in the destruction of the clamping nut. Only mount clamping nuts with correctly assembled collets.

Expert advice

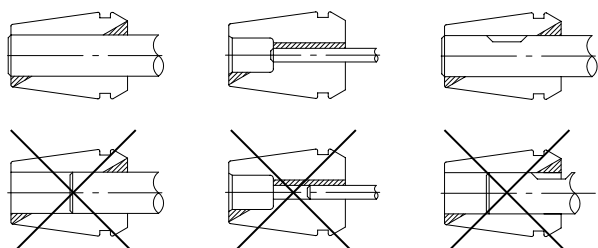
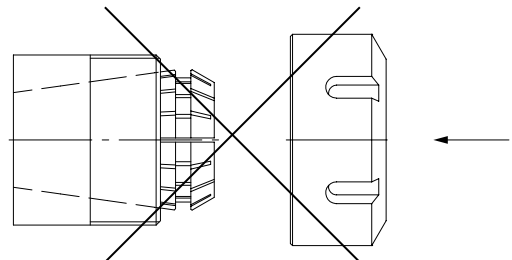
Please only set back-up screw to the tool shank **after** clamping the tool. Disregarding this will result in bad run out and reduced clamping force. The back-up screw only serves as protection against a push-back of the tool and must not be used for presetting.



Assembling



Disassembling



Type	Part no.	Clamping capacity h7	
		[mm]	[decimal inch]
ER 8-MB			
Ø 0.2 mm	1308.00200	0.2	0.0079
Ø 0.3 mm	1308.00300	0.3	0.0118
Ø 0.4 mm	1308.00400	0.4	0.0157
Ø 0.5 mm	1308.00500	0.5	0.0197
Ø 0.6 mm	1308.00600	0.6	0.0236
Ø 0.7 mm	1308.00700	0.7	0.0276
Ø 0.8 mm	1308.00800	0.8	0.0315
Ø 0.9 mm	1308.00900	0.9	0.0354
ER 11-MB			
Ø 0.2 mm	1311.00200	0.2	0.0079
Ø 0.3 mm	1311.00300	0.3	0.0118
Ø 0.4 mm	1311.00400	0.4	0.0157
Ø 0.5 mm	1311.00500	0.5	0.0197
Ø 0.6 mm	1311.00600	0.6	0.0236
Ø 0.7 mm	1311.00700	0.7	0.0276
Ø 0.8 mm	1311.00800	0.8	0.0315
Ø 0.9 mm	1311.00900	0.9	0.0354
ER 16-MB			
Ø 0.2 mm	1316.00200	0.2	0.0079
Ø 0.3 mm	1316.00300	0.3	0.0118
Ø 0.4 mm	1316.00400	0.4	0.0157
Ø 0.5 mm	1316.00500	0.5	0.0197
Ø 0.6 mm	1316.00600	0.6	0.0236
Ø 0.7 mm	1316.00700	0.7	0.0276
Ø 0.8 mm	1316.00800	0.8	0.0315
Ø 0.9 mm	1316.00900	0.9	0.0354

For further technical information, please refer to page 163.

Expert advice

Microbore collets have a runout of $\leq 6 \mu\text{m}$. They have been developed by REGO-FIX especially for smallest tool shank diameters.

For tool shanks with nominal diameter h7 tolerance only.



ER 16-MB

ER standard collets and ultraprecision collets ER-UP

ER std.

DIN 6499-B

ISO 15488

ER-UP

DIN 6499-B

ISO 15488

	Part no.		Clamping range			
Type	ER standard	ER-UP	[mm]	[decimal inch]	Ø [inch]	Included in set
ER 8 [mm]						
SET ER 8	1108.00000	1108.00001	0.5–5.0	0.0197–0.1969	–	–
Ø 1.0 mm	1108.01000	1108.01001	1.0–0.5	0.0394–0.0197	1/32"	•
Ø 1.5 mm	1108.01500	1108.01501	1.5–1.0	0.0591–0.0394	–	•
Ø 2.0 mm	1108.02000	1108.02001	2.0–1.5	0.0787–0.0591	1/16"*	•
Ø 2.5 mm	1108.02500	1108.02501	2.5–2.0	0.0984–0.0787	3/32"	•
Ø 3.0 mm	1108.03000	1108.03001	3.0–2.5	0.1181–0.0984	–	•
Ø 3.5 mm	1108.03500	1108.03501	3.5–3.0	0.1378–0.1181	1/8"*	•
Ø 4.0 mm	1108.04000	1108.04001	4.0–3.5	0.1575–0.1378	5/32"	•
Ø 4.5 mm	1108.04500	1108.04501	4.5–4.0	0.1772–0.1575	–	•
Ø 5.0 mm	1108.05000	1108.05001	5.0–4.5	0.1969–0.1772	3/16"*	•
ER 8 [inch]						
INCH SET ER 8	1108.00002	1108.00003	1.09–4.76	0.0429–0.1875		–
Ø 1/16"	1108.01592	1108.01593	1.59–1.09	0.0625–0.0429		•
Ø 1/8"	1108.03182	1108.03183	3.18–2.68	0.125–0.1055		•
Ø 3/16"	1108.04762	1108.04763	4.76–4.25	0.1875–0.1675		•
ER 11 [mm]						
SET ER 11	1111.00000	1111.00001	0.5–7.0	0.0197–0.2756	–	–
Ø 1.0 mm	1111.01000	1111.01001	1.0–0.5	0.0394–0.0197	1/32"	•
Ø 1.5 mm	1111.01500	1111.01501	1.5–1.0	0.0591–0.0394	–	•
Ø 2.0 mm	1111.02000	1111.02001	2.0–1.5	0.0787–0.0591	1/16"*	•
Ø 2.5 mm	1111.02500	1111.02501	2.5–2.0	0.0984–0.0787	3/32"*	•
Ø 3.0 mm	1111.03000	1111.03001	3.0–2.5	0.1181–0.0984	–	•
Ø 3.5 mm	1111.03500	1111.03501	3.5–3.0	0.1378–0.1181	1/8"*	•
Ø 4.0 mm	1111.04000	1111.04001	4.0–3.5	0.1575–0.1378	5/32"*	•
Ø 4.5 mm	1111.04500	1111.04501	4.5–4.0	0.1772–0.1575	–	•
Ø 5.0 mm	1111.05000	1111.05001	5.0–4.5	0.1969–0.1772	3/16"*	•
Ø 5.5 mm	1111.05500	1111.05501	5.5–5.0	0.2165–0.1969	–	•
Ø 6.0 mm	1111.06000	1111.06001	6.0–5.5	0.2362–0.2165	7/32"*	•
Ø 6.5 mm	1111.06500	1111.06501	6.5–6.0	0.2559–0.2362	1/4"*	•
Ø 7.0 mm	1111.07000	1111.07001	7.0–6.5	0.2756–0.2559	–	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

For further technical information, please refer to page 159.

* Approx. inch sizing

Expert advice

Various ER standard collets and ultraprecision collets ER-UP are available with an anti-corrosion coating for improved collet lifetime on request.

ER standard collets and ultraprecision collets ER-UP

ER std.	ER-UP
DIN 6499-B	DIN 6499-B
ISO 15488	ISO 15488

	Part no.		Clamping range			
Type	ER standard	ER-UP	[mm]	[decimal inch]	Ø [inch]	Included in set
ER 11 [inch]						
INCH SET ER 11	1111.00002	1111.00003	1.09–6.35	0.0429–0.25	–	–
Ø 1/16"	1111.01592	1111.01593	1.59–1.09	0.0625–0.0429	1/16"	•
Ø 3/32"	1111.02382	1111.02383	2.38–1.87	0.0938–0.0738	3/32"	•
Ø 1/8"	1111.03182	1111.03183	3.18–2.67	0.125–0.105	1/8"	•
Ø 5/32"	1111.03972	1111.03973	3.97–3.46	0.1563–0.1363	5/32"	•
Ø 3/16"	1111.04762	1111.04763	4.76–4.25	0.1875–0.1675	3/16"	•
Ø 7/32"	1111.05562	1111.05563	5.56–5.04	0.2188–0.1988	7/32"	•
Ø 1/4"	1111.06352	1111.06353	6.35–5.84	0.25–0.23	1/4"	•
ER 16 [mm]						
SET ER 16	1116.00000	1116.00001	0.5–10.0	0.0197–0.3937	–	–
Ø 1.0 mm	1116.01000	1116.01001	1.0–0.5	0.0394–0.0197	1/32"	•
Ø 1.5 mm	1116.01500	1116.01501	1.5–1.0	0.0591–0.0394	–	–
Ø 2.0 mm	1116.02000	1116.02001	2.0–1.0	0.0787–0.0394	1/16"*	•
Ø 2.5 mm	1116.02500	1116.02501	2.5–1.5	0.0984–0.0591	3/32"*	–
Ø 3.0 mm	1116.03000	1116.03001	3.0–2.0	0.1181–0.0787	–	•
Ø 3.5 mm	1116.03500	1116.03501	3.5–2.5	0.1378–0.0984	1/8"*	–
Ø 4.0 mm	1116.04000	1116.04001	4.0–3.0	0.1575–0.1181	5/32"*	•
Ø 4.5 mm	1116.04500	1116.04501	4.5–3.5	0.1772–0.1378	–	–
Ø 5.0 mm	1116.05000	1116.05001	5.0–4.0	0.1969–0.1575	3/16"*	•
Ø 5.5 mm	1116.05500	1116.05501	5.5–4.5	0.2165–0.1772	–	–
Ø 6.0 mm	1116.06000	1116.06001	6.0–5.0	0.2362–0.1969	7/32"*	•
Ø 6.5 mm	1116.06500	1116.06501	6.5–5.5	0.2559–0.2165	1/4"*	–
Ø 7.0 mm	1116.07000	1116.07001	7.0–6.0	0.2756–0.2362	–	•
Ø 7.5 mm	1116.07500	1116.07501	7.5–6.5	0.2953–0.2559	9/32"*	–
Ø 8.0 mm	1116.08000	1116.08001	8.0–7.0	0.315–0.2756	5/16"*	•
Ø 8.5 mm	1116.08500	1116.08501	8.5–7.5	0.3346–0.2953	–	–
Ø 9.0 mm	1116.09000	1116.09001	9.0–8.0	0.3543–0.315	11/32"*	•
Ø 9.5 mm	1116.09500	1116.09501	9.5–8.5	0.374–0.3346	–	–
Ø 10.0 mm	1116.10000	1116.10001	10.0–9.0	0.3937–0.3543	3/8"*	•
ER 16 [inch]						
INCH SET ER 16	1116.00002	1116.00003	1.09–10.32	0.0429–0.4063	–	–
Ø 1/16"	1116.01592	1116.01593	1.59–1.09	0.0625–0.0429	1/16"	•
Ø 3/32"	1116.02382	1116.02383	2.38–1.87	0.0938–0.0738	3/32"	•
Ø 1/8"	1116.03182	1116.03183	3.18–2.16	0.125–0.085	1/8"	•
Ø 5/32"	1116.03972	1116.03973	3.97–2.95	0.1563–0.1163	5/32"	•
Ø 3/16"	1116.04762	1116.04763	4.76–3.75	0.1875–0.1475	3/16"	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.

ER-UP

DIN 6499-B

DIN 6499-B

ISO 15488

ISO 15488

Type	Part no.		Clamping range		Ø [inch]	Included in set
	ER standard	ER-UP	[mm]	[decimal inch]		
Ø 7/32"	1116.05562	1116.05563	5.56 – 4.54	0.2188 – 0.1788	7/32"	•
Ø 1/4"	1116.06352	1116.06353	6.35 – 5.33	0.25 – 0.21	1/4"	•
Ø 9/32"	1116.07142	1116.07143	7.15 – 6.13	0.2813 – 0.2413	9/32"	•
Ø 5/16"	1116.07942	1116.07943	7.94 – 6.92	0.3125 – 0.2725	5/16"	•
Ø 11/32"	1116.08732	1116.08733	8.73 – 7.72	0.3438 – 0.3038	11/32"	•
Ø 3/8"	1116.09532	1116.09533	9.53 – 8.51	0.375 – 0.335	3/8"	•
Ø 13/32"	1116.10322	1116.10323	10.32 – 9.3	0.4063 – 0.3663	13/32"	•

ER 20 [mm]

SET ER 20	1120.00000	1120.00001	1.0 – 13.0	0.0394 – 0.5118	–	–
Ø 1.0 mm	1120.01000	1120.01001	1.0 – 0.5	0.0394 – 0.0197	1/32"	–
Ø 1.5 mm	1120.01500	1120.01501	1.5 – 1.0	0.0591 – 0.0394	–	–
Ø 2.0 mm	1120.02000	1120.02001	2.0 – 1.0	0.0787 – 0.0394	1/16"	•
Ø 2.5 mm	1120.02500	1120.02501	2.5 – 1.5	0.0984 – 0.0591	3/32"	–
Ø 3.0 mm	1120.03000	1120.03001	3.0 – 2.0	0.1181 – 0.0787	–	•
Ø 3.5 mm	1120.03500	1120.03501	3.5 – 2.5	0.1378 – 0.0984	1/8"	–
Ø 4.0 mm	1120.04000	1120.04001	4.0 – 3.0	0.1575 – 0.1181	5/32"	•
Ø 4.5 mm	1120.04500	1120.04501	4.5 – 3.5	0.1772 – 0.1378	–	–
Ø 5.0 mm	1120.05000	1120.05001	5.0 – 4.0	0.1969 – 0.1575	3/16"	•
Ø 5.5 mm	1120.05500	1120.05501	5.5 – 4.5	0.2165 – 0.1772	–	–
Ø 6.0 mm	1120.06000	1120.06001	6.0 – 5.0	0.2362 – 0.1969	7/32"	•
Ø 6.5 mm	1120.06500	1120.06501	6.5 – 5.5	0.2559 – 0.2165	1/4"	–
Ø 7.0 mm	1120.07000	1120.07001	7.0 – 6.0	0.2756 – 0.2362	–	•
Ø 7.5 mm	1120.07500	1120.07501	7.5 – 6.5	0.2953 – 0.2559	9/32"	–
Ø 8.0 mm	1120.08000	1120.08001	8.0 – 7.0	0.315 – 0.2756	5/16"	•
Ø 8.5 mm	1120.08500	1120.08501	8.5 – 7.5	0.3346 – 0.2953	–	–
Ø 9.0 mm	1120.09000	1120.09001	9.0 – 8.0	0.3543 – 0.315	11/32"	•
Ø 9.5 mm	1120.09500	1120.09501	9.5 – 8.5	0.374 – 0.3346	–	–
Ø 10.0 mm	1120.10000	1120.10001	10.0 – 9.0	0.3937 – 0.3543	3/8"	•
Ø 10.5 mm	1120.10500	1120.10501	10.5 – 9.5	0.4134 – 0.374	13/32"	–
Ø 11.0 mm	1120.11000	1120.11001	11.0 – 10.0	0.4331 – 0.3937	–	•
Ø 11.5 mm	1120.11500	1120.11501	11.5 – 10.5	0.4528 – 0.4134	7/16"	–
Ø 12.0 mm	1120.12000	1120.12001	12.0 – 11.0	0.4724 – 0.433	15/32"	•
Ø 12.5 mm	1120.12500	1120.12501	12.5 – 11.5	0.4921 – 0.4528	–	–
Ø 13.0 mm	1120.13000	1120.13001	13.0 – 12.0	0.5118 – 0.4724	1/2"	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

For further technical information, please refer to page 159.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.	ER-UP
DIN 6499-B	DIN 6499-B
ISO 15488	ISO 15488

	Part no.		Clamping range			
Type	ER standard	ER-UP	[mm]	[decimal inch]	Ø [inch]	Included in set
ER 20 [inch]						
INCH SET ER 20	1120.00002	1120.00003	2.16 – 12.7	0.085 – 0.5	–	–
Ø 1/8"	1120.03182	1120.03183	3.18 – 2.18	0.125 – 0.085	1/8"	•
Ø 3/16"	1120.04762	1120.04763	4.76 – 3.76	0.1875 – 0.1475	3/16"	•
Ø 1/4"	1120.06352	1120.06353	6.35 – 5.35	0.25 – 0.21	1/4"	•
Ø 5/16"	1120.07942	1120.07943	7.94 – 6.94	0.3125 – 0.2725	5/16"	•
Ø 3/8"	1120.09532	1120.09533	9.53 – 8.53	0.375 – 0.335	3/8"	•
Ø 7/16"	1120.11112	1120.11113	11.11 – 10.11	0.4375 – 0.3975	7/16"	•
Ø 1/2"	1120.12702	1120.12703	12.7 – 11.7	0.5 – 0.46	1/2"	•
ER 25 [mm]						
SET ER 25	1125.00000	1125.00001	2.0 – 16.0	0.0787 – 0.6299	–	–
Ø 1.0 mm	1125.01000	1125.01001	1.0 – 0.5	0.0394 – 0.0197	1/32"	–
Ø 1.5 mm	1125.01500	1125.01501	1.5 – 1.0	0.0591 – 0.0394	–	–
Ø 2.0 mm	1125.02000	1125.02001	2.0 – 1.0	0.0787 – 0.0394	1/16"	•
Ø 2.5 mm	1125.02500	1125.02501	2.5 – 1.5	0.0984 – 0.0591	3/32"	–
Ø 3.0 mm	1125.03000	1125.03001	3.0 – 2.0	0.1181 – 0.0787	–	•
Ø 3.5 mm	1125.03500	1125.03501	3.5 – 2.5	0.1378 – 0.0984	1/8"*	–
Ø 4.0 mm	1125.04000	1125.04001	4.0 – 3.0	0.1575 – 0.1181	5/32"	•
Ø 4.5 mm	1125.04500	1125.04501	4.5 – 3.5	0.1772 – 0.1378	–	–
Ø 5.0 mm	1125.05000	1125.05001	5.0 – 4.0	0.1969 – 0.1575	3/16"*	•
Ø 5.5 mm	1125.05500	1125.05501	5.5 – 4.5	0.2165 – 0.1772	–	–
Ø 6.0 mm	1125.06000	1125.06001	6.0 – 5.0	0.2362 – 0.1969	7/32"	•
Ø 6.5 mm	1125.06500	1125.06501	6.5 – 5.5	0.2559 – 0.2165	1/4"*	–
Ø 7.0 mm	1125.07000	1125.07001	7.0 – 6.0	0.2756 – 0.2362	–	•
Ø 7.5 mm	1125.07500	1125.07501	7.5 – 6.5	0.2953 – 0.2559	9/32"	–
Ø 8.0 mm	1125.08000	1125.08001	8.0 – 7.0	0.315 – 0.2756	5/16"*	•
Ø 8.5 mm	1125.08500	1125.08501	8.5 – 7.5	0.3346 – 0.2953	–	–
Ø 9.0 mm	1125.09000	1125.09001	9.0 – 8.0	0.3543 – 0.315	11/32"	•
Ø 9.5 mm	1125.09500	1125.09501	9.5 – 8.5	0.374 – 0.3346	–	–
Ø 10.0 mm	1125.10000	1125.10001	10.0 – 9.0	0.3937 – 0.3543	3/8"*	•
Ø 10.5 mm	1125.10500	1125.10501	10.5 – 9.5	0.4134 – 0.374	13/32"	–
Ø 11.0 mm	1125.11000	1125.11001	11.0 – 10.0	0.4331 – 0.3937	–	•
Ø 11.5 mm	1125.11500	1125.11501	11.5 – 10.5	0.4528 – 0.4134	7/16"*	–
Ø 12.0 mm	1125.12000	1125.12001	12.0 – 11.0	0.4724 – 0.4331	15/32"	•
Ø 12.5 mm	1125.12500	1125.12501	12.5 – 11.5	0.4921 – 0.4528	–	–
Ø 13.0 mm	1125.13000	1125.13001	13.0 – 12.0	0.5118 – 0.4724	1/2"*	•
Ø 13.5 mm	1125.13500	1125.13501	13.5 – 12.5	0.5315 – 0.4921	17/32"	–
Ø 14.0 mm	1125.14000	1125.14001	14.0 – 13.0	0.5512 – 0.5118	–	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.

DIN 6499-B

ISO 15488

ER-UP

DIN 6499-B

ISO 15488

Type	Part no.		Clamping range		Ø [inch]	Included in set
	ER standard	ER-UP	[mm]	[inch]		
Ø 14.5 mm	1125.14500	1125.14501	14.5 – 13.5	0.5709 – 0.5315	9/16"*	–
Ø 15.0 mm	1125.15000	1125.15001	15.0 – 14.0	0.5906 – 0.5512	–	•
Ø 15.5 mm	1125.15500	1125.15501	15.5 – 14.5	0.6102 – 0.5709	19/32"	–
Ø 16.0 mm	1125.16000	1125.16001	16.0 – 15.0	0.6299 – 0.5905	5/8"*	•
Ø 17.0 mm	1125.17000	1125.17001	17.0 – 16.0	0.6693 – 0.6299	21/32"	–

ER 25 [inch]

INCH SET ER 25	1125.00002	1125.00003	2.16 – 15.88	0.085 – 0.625	–	–
Ø 1/8"	1125.03182	1125.03183	3.18 – 2.16	0.125 – 0.085	1/8"	•
Ø 3/16"	1125.04762	1125.04763	4.76 – 3.75	0.1875 – 0.1475	3/16"	•
Ø 1/4"	1125.06352	1125.06353	6.35 – 5.33	0.25 – 0.21	1/4"	•
Ø 5/16"	1125.07942	1125.07943	7.94 – 6.92	0.3125 – 0.2725	5/16"	•
Ø 3/8"	1125.09532	1125.09533	9.53 – 8.51	0.375 – 0.335	3/8"	•
Ø 7/16"	1125.11112	1125.11113	11.11 – 10.11	0.4375 – 0.3975	7/16"	•
Ø 1/2"	1125.12702	1125.12703	12.70 – 11.68	0.5 – 0.46	1/2"	•
Ø 9/16"	1125.14292	1125.14293	14.29 – 13.27	0.5625 – 0.5225	9/16"	•
Ø 5/8"	1125.15882	1125.15883	15.88 – 14.78	0.625 – 0.582	5/8"	•

ER 32 [mm]

SET ER 32	1132.00000	1132.00001	2.0 – 20.0	0.0787 – 0.7874	–	–
Ø 2.0 mm	1132.02000	1132.02001	2.0 – 1.0	0.0787 – 0.0394	1/16"	–
Ø 2.5 mm	1132.02500	1132.02501	2.5 – 1.5	0.0984 – 0.0591	3/32"	–
Ø 3.0 mm	1132.03000	1132.03001	3.0 – 2.0	0.1181 – 0.0787	–	•
Ø 3.5 mm	1132.03500	1132.03501	3.5 – 2.5	0.1378 – 0.0984	1/8"*	–
Ø 4.0 mm	1132.04000	1132.04001	4.0 – 3.0	0.1575 – 0.1181	5/32"	•
Ø 4.5 mm	1132.04500	1132.04501	4.5 – 3.5	0.1772 – 0.1378	–	–
Ø 5.0 mm	1132.05000	1132.05001	5.0 – 4.0	0.1969 – 0.1575	3/16"*	•
Ø 5.5 mm	1132.05500	1132.05501	5.5 – 4.5	0.2165 – 0.1772	–	–
Ø 6.0 mm	1132.06000	1132.06001	6.0 – 5.0	0.2362 – 0.1969	7/32"	•
Ø 6.5 mm	1132.06500	1132.06501	6.5 – 5.5	0.2559 – 0.2165	1/4"*	–
Ø 7.0 mm	1132.07000	1132.07001	7.0 – 6.0	0.2756 – 0.2362	–	•
Ø 7.5 mm	1132.07500	1132.07501	7.5 – 6.5	0.2953 – 0.2559	9/32"	–
Ø 8.0 mm	1132.08000	1132.08001	8.0 – 7.0	0.315 – 0.2756	5/16"*	•
Ø 8.5 mm	1132.08500	1132.08501	8.5 – 7.5	0.3346 – 0.2953	–	–
Ø 9.0 mm	1132.09000	1132.09001	9.0 – 8.0	0.3543 – 0.315	11/32"	•
Ø 9.5 mm	1132.09500	1132.09501	9.5 – 8.5	0.374 – 0.3346	–	–
Ø 10.0 mm	1132.10000	1132.10001	10.0 – 9.0	0.3937 – 0.3543	3/8"*	•
Ø 10.5 mm	1132.10500	1132.10501	10.5 – 9.5	0.4134 – 0.374	13/32"	–
Ø 11.0 mm	1132.11000	1132.11001	11.0 – 10.0	0.4331 – 0.3937	–	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

For further technical information, please refer to page 159.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.	ER-UP
DIN 6499-B	DIN 6499-B
ISO 15488	ISO 15488

	Part no.		Clamping range			
Type	ER standard	ER-UP	[mm]	[decimal inch]	Ø [inch]	Included in set
ER 32 [mm] continued						
Ø 11.5 mm	1132.11500	1132.11501	11.5 – 10.5	0.4528 – 0.4134	7/16"*	–
Ø 12.0 mm	1132.12000	1132.12001	12.0 – 11.0	0.4724 – 0.4331	15/32"	•
Ø 12.5 mm	1132.12500	1132.12501	12.5 – 11.5	0.4921 – 0.4528	–	–
Ø 13.0 mm	1132.13000	1132.13001	13.0 – 12.0	0.5118 – 0.4724	1/2"*	•
Ø 13.5 mm	1132.13500	1132.13501	13.5 – 12.5	0.5315 – 0.4921	17/32"	–
Ø 14.0 mm	1132.14000	1132.14001	14.0 – 13.0	0.5512 – 0.5118	–	•
Ø 14.5 mm	1132.14500	1132.14501	14.5 – 13.5	0.5709 – 0.5315	9/16"*	–
Ø 15.0 mm	1132.15000	1132.15001	15.0 – 14.0	0.5906 – 0.5512	–	•
Ø 15.5 mm	1132.15500	1132.15501	15.5 – 14.5	0.6102 – 0.5709	19/32"	–
Ø 16.0 mm	1132.16000	1132.16001	16.0 – 15.0	0.63299 – 0.5906	5/8"*	•
Ø 16.5 mm	1132.16500	1132.16501	16.5 – 15.5	0.6496 – 0.6102	–	–
Ø 17.0 mm	1132.17000	1132.17001	17.0 – 16.0	0.6693 – 0.6299	21/32"	•
Ø 17.5 mm	1132.17500	1132.17501	17.5 – 16.5	0.689 – 0.6496	11/16"*	–
Ø 18.0 mm	1132.18000	1132.18001	18.0 – 17.0	0.7087 – 0.6693	–	•
Ø 18.5 mm	1132.18500	1132.18501	18.5 – 17.5	0.7283 – 0.689	23/32"	–
Ø 19.0 mm	1132.19000	1132.19001	19.0 – 18.0	0.748 – 0.7078	–	•
Ø 19.5 mm	1132.19500	1132.19501	19.5 – 18.5	0.7677 – 0.7284	3/4"*	–
Ø 20.0 mm	1132.20000	1132.20001	20.0 – 19.0	0.7874 – 0.748	25/32"	•
Ø 21.0 mm	1132.21000	1132.21001	21.0 – 20.0	0.8268 – 0.7874	13/16"*	–
Ø 22.0 mm	1132.22000	1132.22001	22.0 – 21.0	0.8661 – 0.8268	–	–

ER 32 [inch]						
INCH SET ER 32	1132.00002	1132.00003	2.16 – 20.64	0.085 – 0.8125	–	–
Ø 1/8"	1132.03182	1132.03183	3.18 – 2.16	0.125 – 0.085	1/8"	•
Ø 3/16"	1132.04762	1132.04763	4.76 – 3.75	0.1875 – 0.1475	3/16"	•
Ø 1/4"	1132.06352	1132.06353	6.35 – 5.33	0.25 – 0.21	1/4"	•
Ø 5/16"	1132.07942	1132.07943	7.94 – 6.92	0.3125 – 0.2725	5/16"	•
Ø 3/8"	1132.09532	1132.09533	9.53 – 8.51	0.375 – 0.335	3/8"	•
Ø 7/16"	1132.11112	1132.11113	11.11 – 10.1	0.4375 – 0.3975	7/16"	•
Ø 1/2"	1132.12702	1132.12703	12.7 – 11.68	0.5 – 0.46	1/2"	•
Ø 9/16"	1132.14292	1132.14293	14.29 – 13.27	0.5625 – 0.5225	9/16"	•
Ø 5/8"	1132.15882	1132.15883	15.88 – 14.86	0.625 – 0.585	5/8"	•
Ø 11/16"	1132.17462	1132.17463	17.46 – 16.45	0.6875 – 0.6475	11/16"	•
Ø 3/4"	1132.19052	1132.19053	19.05 – 18.03	0.75 – 0.71	3/4"	•
Ø 13/16"	1132.20642	1132.20643	20.64 – 19.62	0.8125 – 0.7725	13/16"	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.	ER-UP
DIN 6499-B	DIN 6499-B
ISO 15488	ISO 15488

	Part no.		Clamping range			
Type	ER standard	ER-UP	[mm]	[decimal inch]	Ø [inch]	Included in set
ER 40 [mm]						
SET ER 40	1140.00000	1140.00001	3.0 – 26.0	0.1181 – 1.0236	–	–
Ø 3.0 mm	1140.03000	1140.03001	3.0 – 2.0	0.1181 – 0.0787	3/32"	–
Ø 3.5 mm	1140.03500	1140.03501	3.5 – 2.5	0.1378 – 0.0984	1/8"*	–
Ø 4.0 mm	1140.04000	1140.04001	4.0 – 3.0	0.1575 – 0.1181	5/32"	•
Ø 4.5 mm	1140.04500	1140.04501	4.5 – 3.5	0.1772 – 0.1378	–	–
Ø 5.0 mm	1140.05000	1140.05001	5.0 – 4.0	0.1969 – 0.1575	3/16"*	•
Ø 5.5 mm	1140.05500	1140.05501	5.5 – 4.5	0.2165 – 0.1772	–	–
Ø 6.0 mm	1140.06000	1140.06001	6.0 – 5.0	0.2362 – 0.1969	7/32"	•
Ø 6.5 mm	1140.06500	1140.06501	6.5 – 5.5	0.2559 – 0.2165	1/4"*	–
Ø 7.0 mm	1140.07000	1140.07001	7.0 – 6.0	0.2756 – 0.2362	–	•
Ø 7.5 mm	1140.07500	1140.07501	7.5 – 6.5	0.2953 – 0.2559	9/32"	–
Ø 8.0 mm	1140.08000	1140.08001	8.0 – 7.0	0.315 – 0.2756	5/16"*	•
Ø 8.5 mm	1140.08500	1140.08501	8.5 – 7.5	0.3346 – 0.2953	–	–
Ø 9.0 mm	1140.09000	1140.09001	9.0 – 8.0	0.3543 – 0.315	–	•
Ø 9.5 mm	1140.09500	1140.09501	9.5 – 8.5	0.374 – 0.3346	11/32"	–
Ø 10.0 mm	1140.10000	1140.10001	10.0 – 9.0	0.3937 – 0.3543	3/8"*	•
Ø 10.5 mm	1140.10500	1140.10501	10.5 – 9.5	0.4134 – 0.374	13/32"	–
Ø 11.0 mm	1140.11000	1140.11001	11.0 – 10.0	0.4331 – 0.3937	–	•
Ø 11.5 mm	1140.11500	1140.11501	11.5 – 10.5	0.4528 – 0.4134	7/16"*	–
Ø 12.0 mm	1140.12000	1140.12001	12.0 – 11.0	0.4724 – 0.4331	15/32"	•
Ø 12.5 mm	1140.12500	1140.12501	12.5 – 11.5	0.4921 – 0.4528	–	–
Ø 13.0 mm	1140.13000	1140.13001	13.0 – 12.0	0.5118 – 0.4724	1/2"*	•
Ø 13.5 mm	1140.13500	1140.13501	13.5 – 12.5	0.5315 – 0.4921	17/32"	–
Ø 14.0 mm	1140.14000	1140.14001	14.0 – 13.0	0.5512 – 0.5118	–	•
Ø 14.5 mm	1140.14500	1140.14501	14.5 – 13.5	0.5709 – 0.5315	9/16"*	–
Ø 15.0 mm	1140.15000	1140.15001	15.0 – 14.0	0.5906 – 0.5512	–	•
Ø 15.5 mm	1140.15500	1140.15501	15.5 – 14.5	0.6102 – 0.5709	19/32"	–
Ø 16.0 mm	1140.16000	1140.16001	16.0 – 15.0	0.6299 – 0.5906	5/8"*	•
Ø 16.5 mm	1140.16500	1140.16501	16.5 – 15.5	0.6496 – 0.6102	–	–
Ø 17.0 mm	1140.17000	1140.17001	17.0 – 16.0	0.6693 – 0.6299	21/32"	•
Ø 17.5 mm	1140.17500	1140.17501	17.5 – 16.5	0.689 – 0.6496	11/16"*	–
Ø 18.0 mm	1140.18000	1140.18001	18.0 – 17.0	0.7078 – 0.6693	–	•
Ø 18.5 mm	1140.18500	1140.18501	18.5 – 17.5	0.7283 – 0.689	23/32"	–
Ø 19.0 mm	1140.19000	1140.19001	19.0 – 18.0	0.748 – 0.7078	–	•
Ø 19.5 mm	1140.19500	1140.19501	19.5 – 18.5	0.7677 – 0.7283	3/4"*	–
Ø 20.0 mm	1140.20000	1140.20001	20.0 – 19.0	0.7874 – 0.748	25/32"	•
Ø 20.5 mm	1140.20500	1140.20501	20.5 – 19.5	0.8071 – 0.7677	–	–
Ø 21.0 mm	1140.21000	1140.21001	21.0 – 20.0	0.8268 – 0.7874	13/16"*	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

For further technical information, please refer to page 159.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.	ER-UP
DIN 6499-B	DIN 6499-B
ISO 15488	ISO 15488

Type	Part no.		Clamping range		Ø [inch]	Included in set
	ER standard	ER-UP	[mm]	[decimal inch]		
ER 40 [mm] continued						
Ø 21.5 mm	1140.21500	1140.21501	21.5 – 20.5	0.8465 – 0.8071	27/32"	–
Ø 22.0 mm	1140.22000	1140.22001	22.0 – 21.0	0.8661 – 0.8268	–	•
Ø 22.5 mm	1140.22500	1140.22501	22.5 – 21.5	0.8858 – 0.8465	7/8"*	–
Ø 23.0 mm	1140.23000	1140.23001	23.0 – 22.0	0.9055 – 0.8661	–	•
Ø 23.5 mm	1140.23500	1140.23501	23.5 – 22.5	0.9252 – 0.8858	29/32"	–
Ø 24.0 mm	1140.24000	1140.24001	24.0 – 23.0	0.9449 – 0.9055	15/16"	•
Ø 24.5 mm	1140.24500	1140.24501	24.5 – 23.5	0.9646 – 0.9252	–	–
Ø 25.0 mm	1140.25000	1140.25001	25.0 – 24.0	0.9843 – 0.9449	31/32"	•
Ø 25.5 mm	1140.25500	1140.25501	25.5 – 24.5	1.0039 – 0.9646	1"*	–
Ø 26.0 mm	1140.26000	1140.26001	26.0 – 25.0	1.0236 – 0.9843	–	•
Ø 27.0 mm	1140.27000	1140.27001	27.0 – 26.0	1.063 – 1.0236	1 1/16"	–
Ø 28.0 mm	1140.28000	1140.28001	28.0 – 27.0	1.1024 – 1.063	1 3/32"	–
Ø 29.0 mm	1140.29000	1140.29001	29.0 – 28.0	1.1417 – 1.1024	1 1/8"	–
Ø 30.0 mm	1140.30000	1140.30001	30.0 – 29.0	1.1811 – 1.1417	1 5/32"	–

ER 40 [inch]						
INCH SET ER 40	1140.00002	1140.00003	2.16 – 25.4	0.085 – 1.0	–	–
Ø 1/8"	1140.03182	1140.03183	3.18 – 2.16	0.125 – 0.085	1/8"	•
Ø 3/16"	1140.04762	1140.04763	4.76 – 3.75	0.1875 – 0.1475	3/16"	•
Ø 1/4"	1140.06352	1140.06353	6.35 – 5.33	0.25 – 0.21	1/4"	•
Ø 5/16"	1140.07942	1140.07943	7.94 – 6.92	0.3125 – 0.2725	5/16"	•
Ø 3/8"	1140.09532	1140.09533	9.53 – 8.51	0.375 – 0.335	3/8"	•
Ø 7/16"	1140.11112	1140.11113	11.11 – 10.1	0.4375 – 0.3975	7/16"	•
Ø 1/2"	1140.12702	1140.12703	12.70 – 11.68	0.5 – 0.46	1/2"	•
Ø 9/16"	1140.14292	1140.14293	14.29 – 13.27	0.5625 – 0.5225	9/16"	•
Ø 5/8"	1140.15882	1140.15883	15.88 – 14.86	0.625 – 0.585	5/8"	•
Ø 11/16"	1140.17462	1140.17463	17.46 – 16.45	0.6875 – 0.6475	11/16"	•
Ø 3/4"	1140.19052	1140.19053	19.05 – 18.03	0.75 – 0.71	3/4"	•
Ø 13/16"	1140.20642	1140.20643	20.64 – 19.62	0.8125 – 0.7725	13/16"	•
Ø 7/8"	1140.22232	1140.22233	22.23 – 21.21	0.875 – 0.835	7/8"	•
Ø 1"	1140.25402	1140.25403	25.40 – 24.38	1.0 – 0.96	1"	•

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

* Approx. inch sizing

ER standard collets and ultraprecision collets ER-UP

ER std.

DIN 6499-B

ISO 15488

ER-UP

DIN 6499-B

ISO 15488

Type	Part no.		Clamping range		Ø [inch]	Included in set
	ER standard	ER-UP	[mm]	[decimal inch]		
ER 50 [mm]						
SET ER 50	1150.00000	1150.00001	10.0–34.0	0.2362–1.3386	–	–
Ø 6.0 mm	1150.06000	1150.06001	6.0–4.0	0.2362–0.1575	3/16"	–
Ø 8.0 mm	1150.08000	1150.08001	8.0–6.0	0.315–0.2362	1/4"	–
Ø 10.0 mm	1150.10000	1150.10001	10.0–8.0	0.3937–0.315	3/8"	–
Ø 12.0 mm	1150.12000	1150.12001	12.0–10.0	0.4724–0.3937	7/16"	•
Ø 14.0 mm	1150.14000	1150.14001	14.0–12.0	0.5512–0.4724	1/2"	•
Ø 16.0 mm	1150.16000	1150.16001	16.0–14.0	0.63–0.5512	5/8"	•
Ø 18.0 mm	1150.18000	1150.18001	18.0–16.0	0.7087–0.6299	11/16"	•
Ø 20.0 mm	1150.20000	1150.20001	20.0–18.0	0.7874–0.7087	3/4"	•
Ø 22.0 mm	1150.22000	1150.22001	22.0–20.0	0.8661–0.7874	13/16"	•
Ø 24.0 mm	1150.24000	1150.24001	24.0–22.0	0.9449–0.8661	7/8"	•
Ø 25.0 mm	1150.25000	1150.25001	25.0–23.0	0.9843–0.9055	31/32"	–
Ø 26.0 mm	1150.26000	1150.26001	26.0–24.0	1.0236–0.9449	1"	•
Ø 28.0 mm	1150.28000	1150.28001	28.0–26.0	1.1024–1.0236	1 1/16"	•
Ø 30.0 mm	1150.30000	1150.30001	30.0–28.0	1.1811–1.1024	1 1/8"	•
Ø 32.0 mm	1150.32000	1150.32001	32.0–30.0	1.2598–1.1811	1 1/4"	•
Ø 34.0 mm	1150.34000	1150.34001	34.0–32.0	1.3386–1.2598	1 5/16"	•
Ø 36.0 mm	1150.36000	1150.36001	36.0–34.0	1.4173–1.3386	1 3/8"	–

Included in the ER sets are all marked collets within that size and the matching collet tray ZWT.

For further technical information, please refer to page 159.



ER standard and ER-UP

Type	Part no.	Clamping range		Ø [inch]	Incl. in set
		[mm]	[decimal inch]		
ER 11-DM [mm]					
Ø 3.0 mm	1211.03000	3.0–2.75	0.1181–0.1083	–	–
Ø 4.0 mm	1211.04000	4.0–3.75	0.1575–0.1476	–	–
Ø 5.0 mm	1211.05000	5.0–4.75	0.1969–0.187	–	–
Ø 6.0 mm	1211.06000	6.0–5.75	0.2362–0.2264	–	–
Ø 7.0 mm	1211.07000	7.0–6.75	0.2756–0.2657	–	–
ER 11-DM [inch]					
Ø 1/8"	1211.03182	3.18–2.93	0.125–0.1154	1/8"	–
Ø 3/16"	1211.04762	4.76–4.51	0.1875–0.1776	3/16"	–
Ø 7/32"	1211.05562	5.56–5.31	0.2188–0.2091	7/32"	–
Ø 1/4"	1211.06352	6.35–6.1	0.25–0.2402	1/4"	–
ER 16-DM [mm]					
SET ER 16-DM	1216.00000	3.0–10.0	0.1181–0.3937	–	–
Ø 3.0 mm	1216.03000	3.0 h9	0.1181 h9	–	•
Ø 4.0 mm	1216.04000	4.0 h9	0.1575 h9	–	•
Ø 5.0 mm	1216.05000	5.0–4.5	0.1969–0.1772	–	•
Ø 6.0 mm	1216.06000	6.0–5.5	0.2362–0.2165	–	•
Ø 7.0 mm	1216.07000	7.0–6.5	0.2756–0.2559	–	•
Ø 8.0 mm	1216.08000	8.0–7.5	0.315–0.2953	–	•
Ø 9.0 mm	1216.09000	9.0–8.5	0.3543–0.3346	–	•
Ø 10.0 mm	1216.10000	10.0–9.5	0.3937–0.374	–	•

For further technical information, please refer to page 159.



ER-DM

Expert advice

Please note that the ER-DM collets are not suitable for use with reCool®.

Type	Part no.	Clamping range		Ø [inch]	Incl. in set
		[mm]	[decimal inch]		
ER 16-DM [inch]					
INCH SET ER 16-DM	1216.00002	3.18 – 10.32	0.125 – 0.4063	–	–
Ø 1/8"	1216.03182	3.18 h9	0.125 h9	1/8"	•
Ø 5/32"	1216.03972	3.97 h9	0.1563 h9	5/32"	–
Ø 3/16"	1216.04762	4.76 h9	0.1875 h9	3/16"	•
Ø 7/32"	1216.05562	5.56 – 5.06	0.2188 – 0.1991	7/32"	–
Ø 1/4"	1216.06352	6.35 – 5.85	0.25 – 0.2303	1/4"	•
Ø 9/32"	1216.07142	7.14 – 6.64	0.2813 – 0.2616	9/32"	–
Ø 5/16"	1216.07942	7.94 – 7.44	0.3125 – 0.2928	5/16"	•
Ø 11/32"	1216.08732	8.73 – 8.23	0.3438 – 0.3241	11/32"	–
Ø 3/8"	1216.09532	9.53 – 9.02	0.375 – 0.3553	3/8"	•
Ø 13/32"	1216.10322	10.32 – 9.82	0.4063 – 0.3866	13/32"	–
ER 20-DM [mm]					
SET ER 20-DM	1220.00000	3.0 – 13.0	0.1181 – 0.5118	–	–
Ø 3.0 mm	1220.03000	3.0 h9	0.1181 h9	–	•
Ø 4.0 mm	1220.04000	4.0 h9	0.1575 h9	–	•
Ø 5.0 mm	1220.05000	5.0 h9	0.1969 h9	–	•
Ø 6.0 mm	1220.06000	6.0 h9	0.2362 h9	–	•
Ø 7.0 mm	1220.07000	7.0 – 6.5	0.2756 – 0.2559	–	•
Ø 8.0 mm	1220.08000	8.0 – 7.5	0.315 – 0.2953	–	•
Ø 9.0 mm	1220.09000	9.0 – 8.5	0.3543 – 0.3346	–	•
Ø 10.0 mm	1220.10000	10.0 – 9.5	0.3937 – 0.374	–	•
Ø 11.0 mm	1220.11000	11.0 – 10.5	0.4331 – 0.4134	–	•
Ø 12.0 mm	1220.12000	12.0 – 11.5	0.4724 – 0.4528	–	•
Ø 13.0 mm	1220.13000	13.0 – 12.5	0.5118 – 0.4921	–	•
ER 20-DM [inch]					
INCH SET ER 20-DM	1220.00002	3.18 – 12.7	0.125 – 0.5	–	–
Ø 1/8"	1220.03182	3.18 h9	0.125 h9	1/8"	•
Ø 5/32"	1220.03972	3.97 h9	0.1563 h9	5/32"	–
Ø 3/16"	1220.04762	4.76 h9	0.1875 h9	3/16"	•
Ø 7/32"	1220.05562	5.56 h9	0.2188 h9	7/32"	–
Ø 1/4"	1220.06352	6.35 h9	0.25 h9	1/4"	•
Ø 9/32"	1220.07142	7.14 – 6.64	0.2813 – 0.2616	9/32"	–
Ø 5/16"	1220.07942	7.94 – 7.44	0.3125 – 0.2928	5/16"	•
Ø 11/32"	1220.08732	8.73 – 8.23	0.3438 – 0.3241	11/32"	–
Ø 3/8"	1220.09532	9.53 – 9.02	0.375 – 0.3553	3/8"	•
Ø 13/32"	1220.10322	10.32 – 9.82	0.4063 – 0.3866	13/32"	–
Ø 7/16"	1220.11112	11.11 – 10.61	0.4375 – 0.4178	7/16"	•
Ø 15/32"	1220.11912	11.91 – 11.41	0.4687 – 0.4491	15/32"	–
Ø 1/2"	1220.12702	12.7 – 12.2	0.5 – 0.4803	1/2"	•

Type	Part no.	Clamping range		Ø [inch]	Incl. in set
		[mm]	[decimal inch]		
ER 25-DM [mm]					
SET ER 25-DM	1225.00000	6.0 – 16.0	0.2362 – 0.6299	–	–
Ø 6.0 mm	1225.06000	6.0 h9	0.2362 h9	–	•
Ø 7.0 mm	1225.07000	7.0 h9	0.2756 h9	–	–
Ø 8.0 mm	1225.08000	8.0 – 7.5	0.315 – 0.2953	–	•
Ø 9.0 mm	1225.09000	9.0 – 8.5	0.3543 – 0.3347	–	–
Ø 10.0 mm	1225.10000	10.0 – 9.5	0.3937 – 0.374	–	•
Ø 11.0 mm	1225.11000	11.0 – 10.5	0.4331 – 0.4134	–	–
Ø 12.0 mm	1225.12000	12.0 – 11.5	0.4724 – 0.4528	–	•
Ø 13.0 mm	1225.13000	13.0 – 12.5	0.5118 – 0.4921	–	–
Ø 14.0 mm	1225.14000	14.0 – 13.5	0.5512 – 0.5315	–	•
Ø 15.0 mm	1225.15000	15.0 – 14.5	0.5906 – 0.5709	–	–
Ø 16.0 mm	1225.16000	16.0 – 15.5	0.6299 – 0.6102	–	•
ER 25-DM [inch]					
INCH SET ER 25-DM	1225.00002	6.35 – 15.88	0.25 – 0.625	–	–
Ø 7/32"	1225.05562	5.56 h9	0.2188 h9	7/32"	–
Ø 1/4"	1225.06352	6.35 h9	0.2500 h9	1/4"	•
Ø 9/32"	1225.07142	7.14 h9	0.2813 h9	9/32"	–
Ø 5/16"	1225.07942	7.94 – 7.44	0.3125 – 0.2928	5/16"	•
Ø 11/32"	1225.08732	8.73 – 8.23	0.3438 – 0.3241	11/32"	–
Ø 3/8"	1225.09532	9.53 – 9.02	0.375 – 0.3553	3/8"	•
Ø 13/32"	1225.10322	10.32 – 9.82	0.4063 – 0.3866	13/32"	–
Ø 7/16"	1225.11112	11.11 – 10.61	0.4375 – 0.4178	7/16"	•
Ø 15/32"	1225.11912	11.91 – 11.41	0.4687 – 0.4491	15/32"	–
Ø 1/2"	1225.12702	12.7 – 12.2	0.5 – 0.4803	1/2"	•
Ø 17/32"	1225.13492	13.49 – 12.99	0.5313 – 0.5116	17/32"	–
Ø 9/16"	1225.14292	14.29 – 13.79	0.5625 – 0.5428	9/16"	•
Ø 19/32"	1225.15082	15.08 – 14.58	0.5934 – 0.5741	19/32"	–
Ø 5/8"	1225.15882	15.88 – 15.38	0.625 – 0.6055	5/8"	•
ER 32-DM [mm]					
SET ER 32-DM	1232.00000	6.0 – 20.0	0.2362 – 0.7874	–	–
Ø 6.0 mm	1232.06000	6.0 h9	0.2362 h9	–	•
Ø 7.0 mm	1232.07000	7.0 h9	0.2756 h9	–	–
Ø 8.0 mm	1232.08000	8.0 – 7.5	0.315 – 0.2953	–	•
Ø 9.0 mm	1232.09000	9.0 – 8.5	0.3543 – 0.3346	–	–
Ø 10.0 mm	1232.10000	10.0 – 9.5	0.3937 – 0.374	–	•
Ø 11.0 mm	1232.11000	11.0 – 10.5	0.4331 – 0.4134	–	–

Type	Part no.	Clamping range		Ø [inch]	Incl. in set
		[mm]	[decimal inch]		
Ø 12.0 mm	1232.12000	12.0 – 11.5	0.4724 – 0.4528	–	•
Ø 13.0 mm	1232.13000	13.0 – 12.5	0.5118 – 0.4921	–	–
Ø 14.0 mm	1232.14000	14.0 – 13.5	0.5512 – 0.5315	–	•
Ø 15.0 mm	1232.15000	15.0 – 14.5	0.5906 – 0.5709	–	–
Ø 16.0 mm	1232.16000	16.0 – 15.5	0.6299 – 0.6102	–	•
Ø 17.0 mm	1232.17000	17.0 – 16.5	0.6693 – 0.6496	–	–
Ø 18.0 mm	1232.18000	18.0 – 17.5	0.7087 – 0.689	–	•
Ø 19.0 mm	1232.19000	19.0 – 18.5	0.748 – 0.7283	–	–
Ø 20.0 mm	1232.20000	20.0 – 19.5	0.7874 – 0.7677	–	•

ER 32-DM [inch]					
INCH SET ER 32-DM	1232.00002	6.35 – 19.05	0.25 – 0.75	–	–
Ø 1/4"	1232.06352	6.35 h9	0.25 h9	1/4"	•
Ø 9/32"	1232.07142	7.15 h9	0.2813 h9	9/32"	–
Ø 5/16"	1232.07942	7.94 – 7.44	0.3125 – 0.2928	5/16"	•
Ø 11/32"	1232.08732	8.73 – 8.23	0.3438 – 0.3241	11/32"	–
Ø 3/8"	1232.09532	9.53 – 9.02	0.375 – 0.3553	3/8"	•
Ø 13/32"	1232.10322	10.32 – 9.82	0.4063 – 0.3866	13/32"	–
Ø 7/16"	1232.11112	11.11 – 10.61	0.4375 – 0.4178	7/16"	•
Ø 15/32"	1232.11912	11.91 – 11.41	0.4687 – 0.4491	15/32"	–
Ø 1/2"	1232.12702	12.7 – 12.2	0.5 – 0.4803	1/2"	•
Ø 17/32"	1232.13492	13.5 – 12.99	0.5313 – 0.5116	17/32"	–
Ø 9/16"	1232.14292	14.29 – 13.79	0.5625 – 0.5428	9/16"	•
Ø 19/32"	1232.15082	15.07 – 14.58	0.5934 – 0.5741	19/32"	–
Ø 5/8"	1232.15882	15.88 – 15.38	0.625 – 0.6055	5/8"	•
Ø 21/32"	1232.16672	16.67 – 16.17	0.6563 – 0.6366	21/32"	–
Ø 11/16"	1232.17462	17.46 – 16.96	0.6875 – 0.6678	11/16"	•
Ø 23/32"	1232.18262	18.26 – 17.76	0.7188 – 0.6991	23/32"	–
Ø 3/4"	1232.19052	19.05 – 18.55	0.75 – 0.7303	3/4"	•

ER 40-DM [mm]					
Ø 6.0 mm	1240.06000	6.0 h9	0.2362 h9	–	–
Ø 8.0 mm	1240.08000	8.0 h9	0.3150 h9	–	–
Ø 10.0 mm	1240.10000	10.0 – 9.5	0.3937 – 0.374	–	–
Ø 11.0 mm	1240.11000	11.0 – 10.5	0.4331 – 0.4134	–	–
Ø 12.0 mm	1240.12000	12.0 – 11.5	0.4724 – 0.4528	–	–
Ø 13.0 mm	1240.13000	13.0 – 12.5	0.5118 – 0.4921	–	–
Ø 14.0 mm	1240.14000	14.0 – 13.5	0.5512 – 0.5315	–	–
Ø 15.0 mm	1240.15000	15.0 – 14.5	0.5906 – 0.5709	–	–

For further technical information, please refer to page 159.

Type	Part no.	Clamping range		Ø [inch]	Incl. in set
		[mm]	[decimal inch]		
ER 40-DM [mm] continued					
Ø 16.0 mm	1240.16000	16.0 – 15.5	0.6299 – 0.6102	–	–
Ø 17.0 mm	1240.17000	17.0 – 16.5	0.6693 – 0.6496	–	–
Ø 18.0 mm	1240.18000	18.0 – 17.5	0.7087 – 0.689	–	–
Ø 19.0 mm	1240.19000	19.0 – 18.5	0.748 – 0.7283	–	–
Ø 20.0 mm	1240.20000	20.0 – 19.5	0.7874 – 0.7677	–	–
Ø 21.0 mm	1240.21000	21.0 – 20.5	0.8268 – 0.8071	–	–
Ø 22.0 mm	1240.22000	22.0 – 21.5	0.8661 – 0.8465	–	–
Ø 23.0 mm	1240.23000	23.0 – 22.5	0.9055 – 0.8858	–	–
Ø 24.0 mm	1240.24000	24.0 – 23.5	0.9449 – 0.9252	–	–
Ø 25.0 mm	1240.25000	25.0 – 24.5	0.9843 – 0.9646	–	–
Ø 26.0 mm	1240.26000	26.0 – 25.5	1.0236 – 1.0039	–	–
ER 40-DM [inch]					
Ø 1/4"	1240.06352	6.35 h9	0.25 h9	1/4"	–
Ø 5/16"	1240.07942	7.94 h9	0.3125 h9	5/16"	–
Ø 3/8"	1240.09532	9.53 – 9.02	0.375 – 0.3553	3/8"	–
Ø 7/16"	1240.11112	11.11 – 10.61	0.4375 – 0.4178	7/16"	–
Ø 1/2"	1240.12702	12.7 – 12.2	0.5 – 0.4803	1/2"	–
Ø 9/16"	1240.14292	14.29 – 13.79	0.5625 – 0.5428	9/16"	–
Ø 5/8"	1240.15882	15.88 – 15.38	0.62 – 0.6055	5/8"	–
Ø 11/16"	1240.17462	17.46 – 16.96	0.6875 – 0.6678	11/16"	–
Ø 3/4"	1240.19052	19.05 – 18.55	0.75 – 0.7303	3/4"	–
Ø 13/16"	1240.20642	20.64 – 20.14	0.8123 – 0.7928	13/16"	–
Ø 7/8"	1240.22232	22.23 – 21.72	0.875 – 0.8553	7/8"	–
Ø 1"	1240.25402	25.4 – 24.9	1.0 – 0.9803	1"	–

For further technical information, please refer to page 159.

Expert advice

Please note that DM collets are not compatible with Weldon or Whistle notch shafts. To achieve internal cooling with Weldon or Whistle notch shafts, use the REGO-FIX sealing disks ER/DS with your REGO-FIX ER collet.

Type	Part no.	Ø [mm]	Ø [inch]
ER 32-SG [mm]			
Ø 10.0 mm	1332.10004	10	–
Ø 12.0 mm	1332.12004	12	–
Ø 16.0 mm	1332.16004	16	–

ER 32-SG [inch]			
Ø 1/2"	1332.12704	12.7	1/2"
Ø 5/8"	1332.15884	15.88	5/8"

ER 40-SG [mm]			
Ø 16.0 mm	1340.16004	16	–
Ø 20.0 mm	1340.20004	20	–
Ø 25.0 mm	1340.25004	25	–

ER 40-SG [inch]			
Ø 5/8"	1340.15884	15.88	5/8"
Ø 3/4"	1340.19054	19.05	3/4"
Ø 1"	1340.25404	25.4	1"

Threaded insert SGI [mm]	
Ø 10.0 mm	7694.10000
Ø 12.0 mm	7694.12000
Ø 14.0 mm	7694.14000
Ø 16.0 mm	7694.16000
Ø 18.0 mm	7694.18000
Ø 20.0 mm	7694.20000
Ø 25.0 mm	7694.25000

Threaded insert SGI [inch]	
Ø 1/2"	7694.12700
Ø 5/8"	7694.15880
Ø 3/4"	7694.19050
Ø 1"	7694.25404

[Learn more](#)

For further information on secuRgrip®, please refer to page 14 and 15.



ER tapping collets ER-GB

Manufactured with a form-fitting internal square, the ER-GB collets successfully prevent the tap from slipping.

Key features

Tapping collets without axial compensation

Swiss quality

Made in Switzerland to ISO 9001 / ISO 14001.

Marking

Type and size (reduced collet selection errors).

Traceability

Lot number marking on all products for traceability through the entire manufacturing process.

Original REGO-FIX

Our long-lasting machining experience results in a well-engineered system. When buying REGO-FIX products pay attention to our quality seal: The triangle is our seal for outstanding quality made in Switzerland.

Interchangeable

With standard ER collet DIN 6499 / ISO 15488. No additional coletholders and clamping nuts necessary.

Wide product range

Sizes: ER-GB 11 to 50.
Standards: DIN, ISO, JIS (ANSI on request).

Strength: Square for tight grip of tap

Eliminates tap slippage in collets.

Matched tooling system for best fit

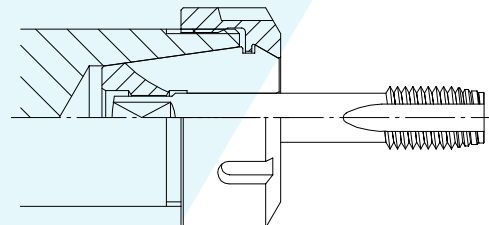
The compatibility of the entire system results in maximum precision, balance and tool life.

Tapping collets ER-GB These rigid tapping collets are compatible with taps per DIN, ISO, JIS and ANSI standards. The REGO-FIX ER-GB tapping collets are manufactured with an internal square. They are intended for use on CNC machines that have synchronized machine spindle speed and feed rate. Machines that have such rigid tapping capabilities require only minimal compensation. We recommend the use of our SSY Softsynchro® tapping holders. They compensate minimal synchronizing differences of CNC machines.

For machines without tapping option we recommend the use of our axial compensating GSF tapping holders. Please refer to page 66 for more information. For additional technical information and dimensions of taps on ER-GB, please refer to pages 162 and 165.



ER-GB

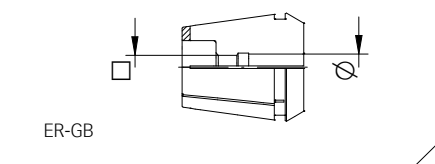


ER-GB

ER tapping collets

ER-GB

ER-GB [mm]

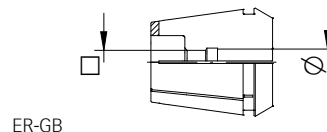


Dimensions [mm]		ER ... -GB							Standard
Ø	□	11	16	20	25	32	40	50	
2.5	2.1/2.0	1411.02500	–	–	–	–	–	–	DIN / ISO
2.8	2.1	1411.02800	1416.02800	–	–	–	–	–	DIN
3.5	2.7	1411.03500	1416.03500	1420.03500	–	–	–	–	DIN
4.0	3.0	1411.04000	–	–	–	–	–	–	DIN
4.0	3.15/3.2	1411.04002	1416.04002	1420.04002	1425.04002	1432.04002	–	–	ISO / JIS
4.5	3.4	1411.04500	1416.04500	1420.04500	1425.04500	1432.04500	–	–	DIN
5.0	4.0	1411.05002	1416.05002	1420.05002	1425.05002	1432.05002	–	–	ISO / JIS
5.5	4.3	–	1416.05500	1420.05500	1425.05500	1432.05500	–	–	DIN
5.5	4.5	–	1416.05501	1420.05501	1425.05501	1432.05501	–	–	JIS
6.0	4.5	–	1416.06001	1420.06001	1425.06001	1432.06001	1440.06001	–	JIS
6.0	4.9	1411.06000	1416.06000	1420.06000	1425.06000	1432.06000	1440.06000	–	DIN
6.2	5.0	–	1416.06201	1420.06201	1425.06201	1432.06201	1440.06201	–	JIS
6.3	5.0	–	1416.06302	1420.06302	1425.06302	1432.06302	1440.06302	–	ISO
7.0	5.5	–	1416.07000	1420.07000	1425.07000	1432.07000	1440.07000	–	DIN / JIS
7.1	5.6	–	1416.07102	1420.07102	1425.07102	1432.07102	1440.07102	–	ISO
8.0	6.2/6.3	–	1416.08000	1420.08000	1425.08000	1432.08000	1440.08000	–	DIN / ISO
8.5	6.5	–	1416.08501	1420.08501	1425.08501	1432.08501	1440.08501	–	JIS
9.0	7.0/7.1	–	1416.09000	1420.09000	1425.09000	1432.09000	1440.09000	–	DIN / ISO
10.0	8.0	–	–	1420.10000	1425.10000	1432.10000	1440.10000	–	DIN / ISO
10.5	8.0	–	–	1420.10501	1425.10501	1432.10501	1440.10501	–	JIS
11.0	9.0	–	–	1420.11000	1425.11000	1432.11000	1440.11000	–	DIN
11.2	9.0	–	–	1420.11202	1425.11202	1432.11202	1440.11202	–	ISO
12.0	9.0	–	–	1420.12000	1425.12000	1432.12000	1440.12000	–	DIN
12.5	10.0	–	–	–	1425.12502	1432.12502	1440.12502	–	ISO / JIS
14.0	11.0/11.2	–	–	–	1425.14000	1432.14000	1440.14000	–	DIN / ISO / JIS
15.0	12.0	–	–	–	1425.15001	1432.15001	1440.15001	–	JIS
16.0	12.0/12.5	–	–	–	1425.16000	1432.16000	1440.16000	–	DIN / ISO
17.0	13.0	–	–	–	–	1432.17001	1440.17001	–	JIS
18.0	14.0/14.5	–	–	–	–	1432.18000	1440.18000	–	DIN / ISO
20.0	16.0	–	–	–	–	1432.20000	1440.20000	–	DIN / ISO
22.0	18.0	–	–	–	–	–	1440.22000	1450.22000	DIN
25.0	20.0	–	–	–	–	–	–	1450.25000	DIN
28.0	22.0	–	–	–	–	–	–	1450.28000	DIN
32.0	24.0	–	–	–	–	–	–	1450.32000	DIN

ER tapping collets

ER-GB

ER-GB [inch]



Dimensions [decimal inch]		ER ... -GB						Standard
Ø	□	11	16	20	25	32	40	
0.141"	0.11"	1411.03585	1416.03585	—	—	—	—	ANSI
0.168"	0.131"	1411.04275	1416.04275	1420.04275	1425.04275	1432.04275	—	ANSI
0.194"	0.152"	1411.04935	1416.04935	1420.04935	1425.04935	1432.04935	—	ANSI
0.22"	0.165"	—	1416.05595	1420.05595	1425.05595	1432.05595	—	ANSI
0.255"	0.191"	—	1416.06485	1420.06485	1425.06485	1432.06485	1440.06485	ANSI
0.318"	0.238"	—	1416.08085	1420.08085	1425.08085	1432.08085	1440.08085	ANSI
0.323"	0.242"	—	—	1420.08215	1425.08215	1432.08215	1440.08215	ANSI
0.367"	0.275"	—	—	1420.09325	1425.09325	1432.09325	1440.09325	ANSI
0.381"	0.286"	—	—	1420.09685	1425.09685	1432.09685	1440.09685	ANSI
0.429"	0.322"	—	—	—	1425.10905	1432.10905	1440.10905	ANSI
0.437"	0.328"	—	—	—	1425.11104	1432.11104	1440.11104	ANSI
0.48"	0.36"	—	—	—	1425.12195	1432.12195	1440.12195	ANSI
0.542"	0.406"	—	—	—	—	1432.13775	1440.13775	ANSI
0.562"	0.421"	—	—	—	—	1432.14274	1440.14274	ANSI
0.59"	0.442"	—	—	—	1425.14995	1432.14995	1440.14995	ANSI
0.652"	0.489"	—	—	—	—	1432.16565	1440.16565	ANSI
0.687"	0.515"	—	—	—	—	—	1440.17454	ANSI
0.697"	0.523"	—	—	—	—	—	1440.17705	ANSI
0.7"	0.531"	—	—	—	—	—	1440.17784	ANSI
0.76"	0.57"	—	—	—	—	—	1440.19305	ANSI
0.8"	0.6"	—	—	—	—	—	1440.20325	ANSI



ER tapping collets PCM ET1

PCM ET1 tapping collets with axial compensation offer a smart and cost-effective toolholding option for machines which need axial compensation for tapping.

Key features

Tapping collets with axial compensation

Interchangeable

With REGO-FIX standard ER collet DIN 6499 / ISO 15488.

Compatibility

PCM ET1-12 is compatible with ER11 colletholders.

Cost saving

No expensive tapping tools necessary.

Spring tension

Adapted to tap size.

Compact

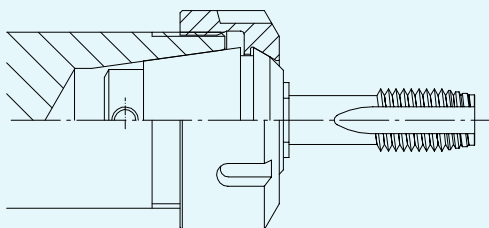
Very robust design with smallest space requirement.

Directions for use The following tapping process is recommended for tapping collets PCM ET1: Fast approach, then tapping feed with approximately 95 % of the pitch value, which uses 20 to 30 % of the compensation stroke when the spindle rotation and the feed movement are simultaneously reversed.

Return feed must be made with 100 % of the pitch, which maintains the sleeve of the tapping collet in the compensation stroke up to the tap disengagement; quick return can then be programmed with usual stroke security. The relatively long axial compensation assists easy programming.

When tapping with very high speed, an appropriate programming compensation may be necessary to balance the differences of inertia between the spindle and the feed movement on reverse. In order to not disturb the axial compensation, use external coolant supply only.

Please refer to page 66 for additional information on REGO-FIX tapping holders. For additional technical information and dimensions of taps on PCM ET1, please refer to pages 163.



PCM ET1



PCM ET1

Expert advice

Not for coolant through tools and not for applications with sealing disks.

PCM ET1

Shank Ø	PCM ET1- ...						Standard
[mm]	12	16	20	25	32	40	
1.4	1512.01400	1516.01400	–	–	–	–	DIN / ISO
1.6	1512.01600	1516.01600	–	–	–	–	DIN
1.8	1512.01800	1516.01800	–	–	–	–	DIN
2.0	1512.02000	1516.02000	–	–	–	–	DIN
2.2	1512.02200	1516.02200	1520.02200	–	–	–	ISO / JIS
2.24	1512.02240	1516.02240	1520.02240	–	–	–	DIN
2.5	1512.02500	1516.02500	1520.02500	1525.02500	–	–	ISO / JIS
2.8	1512.02800	1516.02800	1520.02800	1525.02800	–	–	DIN
3.0	1512.03000	1516.03000	1520.03000	1525.03000	–	–	JIS
3.15	1512.03150	1516.03150	1520.03150	1525.03150	–	–	JIS
3.5	1512.03500	1516.03500	1520.03500	1525.03500	–	–	DIN
3.55	1512.03550	1516.03550	1520.03550	1525.03550	–	–	JIS
4.0	–	1516.04000	1520.04000	1525.04000	–	–	ISO
4.5	–	1516.04500	1520.04500	1525.04500	1532.04500	–	DIN / JIS
5.0	–	1516.05000	1520.05000	1525.05000	1532.05000	–	ISO
5.5	–	1516.05500	1520.05500	1525.05500	1532.05500	–	DIN / ISO
5.6	–	1516.05600	1520.05600	1525.05600	1532.05600	–	JIS
6.0	–	1516.06000	1520.06000	1525.06000	1532.06000	1540.06000	DIN / ISO
6.2	–	1516.06200	1520.06200	1525.06200	1532.06200	1540.06200	DIN / ISO
6.3	–	1516.06300	1520.06300	1525.06300	1532.06300	1540.06300	JIS
7.0	–	–	1520.07000	1525.07000	1532.07000	1540.07000	DIN
7.1	–	–	–	1525.07100	1532.07100	1540.07100	ISO
8.0	–	–	–	1525.08000	1532.08000	1540.08000	DIN
8.5	–	–	–	1525.08500	1532.08500	1540.08500	ISO / JIS
9.0	–	–	–	1525.09000	1532.09000	1540.09000	DIN / ISO / JIS
10.0	–	–	–	1525.10000	1532.10000	1540.10000	JIS
10.5	–	–	–	–	1532.10500	1540.10500	DIN / ISO
11.0	–	–	–	–	1532.11000	1540.11000	JIS
11.2	–	–	–	–	1532.11200	1540.11200	DIN / ISO
12.0	–	–	–	–	1532.12000	1540.12000	DIN / ISO
12.5	–	–	–	–	1532.12500	1540.12500	DIN
14.0	–	–	–	–	–	1540.14000	DIN
15.0	–	–	–	–	–	1540.15000	DIN
16.0	–	–	–	–	–	1540.16000	DIN
17.0	–	–	–	–	–	1540.17000	JIS

PCM ET1-ER 12 is technically identical to ER 11 and fits all ER11 collets.



Standard		Standard with bearing		Mini nut		Slip-off proof mini nut			External thread		Sealing and coolant flush disks		
Hi-Q®/ ER	Hi-Q®/ ERC	Hi-Q®/ ERB	Hi-Q®/ ERBC	Hi-Q®/ ERM	Hi-Q®/ ERM C	Hi-Q®/ ERM X intRlox®	Hi-Q®/ ERM XC intRlox®	ER MS	Hi-Q®/ ERAX	Hi-Q®/ ERAXC	reCool® RCR/RCS	DS/ER	KS/ER
													
page 108	page 110	page 112	page 112	page 114	page 114	page 116	page 116	page 118	page 120	page 120	page 122	page 128	page 136

B: bearing C: cooling M: mini thread X: slip-off proof

DS: sealing disk KS: coolant flush disk

Innovative products fitting your needs

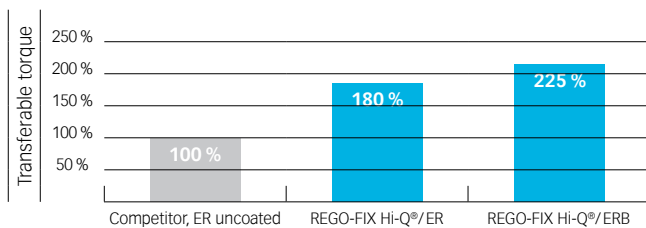
We offer a wide selection of ER clamping nuts for virtually any application.

Wide selection available

- // Includes friction-bearing for higher clamping force
- // Available with sealing disk for coolant through tools
- // Mini nut with minimal external diameter
- // Clamping nut for high rpm
- // Externally threaded clamping nut for floating chucks, ERA Zero-Z® collet holder and live tooling
- // Slip-off proof mini clamping nut intRlox® for safe assembling

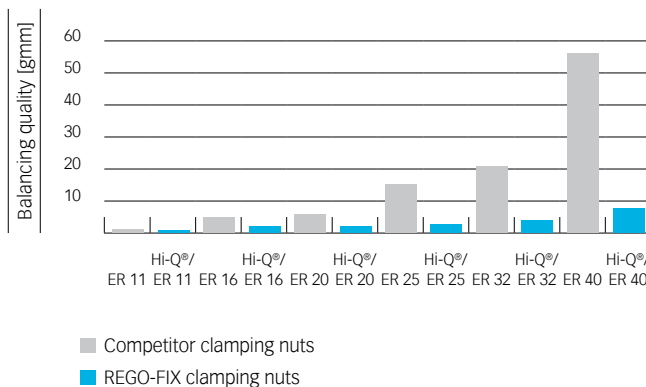
Torque comparison of different clamping nuts

REGO-FIX Hi-Q®/ER and Hi-Q®/ERB vs. competitor nuts / Source: In-house testing



Balancing quality overview

REGO-FIX clamping nuts vs. competitor nuts / Source: In-house testing



■ Competitor clamping nuts
■ REGO-FIX clamping nuts



Swiss quality standard

Our products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

Key advantages

Rely on the original

Collet locking-system (pat. pend.)

Retains collet in nut for easier assembly.

Balancing

Ideal for high-speed applications.

Higher transferable torque

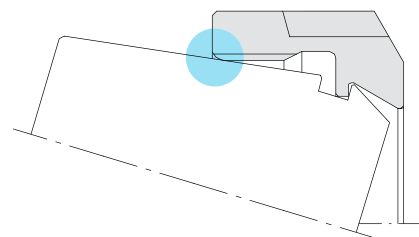
Lower frictional forces resulting in up to 80 % higher gripping force over standard non-treated clamping nuts.

Protection against corrosion

With a special surface treatment for longer life.

Optimal contour

Rounded thread start prevents damaging of collets on tool changes.



Highest quality standards for ER nuts

ER nuts						
	Hi-Q®/ER	Hi-Q®/ERB	Hi-Q®/ERM	Hi-Q®/ERMX intRlox®	Hi-Q®/ERAX	ER MS
Main feature	standard nut	with friction-bearing for higher clamping force	mini nut	slip-off proof mini nut	external thread and slip-off proof	up to 80,000 rpm
Sizes	ER 11 – ER 50	ER 16 – ER 50	ER 8 – ER 25	ER 8 – ER 25	ER 11 – ER 40	ER 8 – ER 20
Compatibility	compatible with all REGO-FIX ER collets					
Minimal outer diameter	–	–	•	•	–	•
Slip-off proof	–	–	–	•	•	–
Surface protection	•	•	•	•	•	–
Suitable wrench	A-E, E P, E, A-E P	A-E, E P, E, A-E P	A-E M, E M	A-E MX, E MX	A-E AX, E AX	A-E MS, E MS
More information on	page 108	page 112	page 114	page 116	page 120	page 118

A: external thread B: bearing M: mini thread X: slip-off proof

ER nuts Type C for cooling applications					
	Hi-Q®/ERC	Hi-Q®/ERBC	Hi-Q®/ERMC	Hi-Q®/ERMXC intRlox®	Hi-Q®/ERAXC
Main feature	standard nut	with friction-bearing for higher clamping force	mini nut	slip-off proof mini nut	external thread and slip-off proof
Cooling option	internal cooling with DS disks and peripheral cooling with KS disks to 150 bar				
Sizes	ER 11 – ER 50	ER 16 – ER 50	ER 11 – ER 25	ER 11 – ER 25	ER 11 – ER 40
Compatibility	compatible with all REGO-FIX ER collets, except PCM ET1 collets				
Minimal outer diameter	–	–	•	•	–
Slip-off proof	–	–	–	•	•
Surface protection	•	•	•	•	•
Suitable wrench	A-E, E P, E, A-E P	A-E, E P, E, A-E P	A-E M, E M	A-E MX, E MX	A-E AX, E AX
More information on	page 110	page 112	page 114	page 116	page 120

A: external thread B: bearing C: cooling M: mini thread X: slip-off proof

Proper assembly protects your runout TIR

High standards for all Hi-Q®/ER clamping nuts Hi-Q®/ER clamping nuts with corrosion-resistant surface are standard on all REGO-FIX ER collet holders.

Assembling collet Insert groove of the collet into eccentric ring of the clamping nut at the mark on the bottom of the nut. Push collet in the direction of the arrow until it clicks in. Insert tool. Screw nut with collet onto toolholder.

Removing collet After the nut is unscrewed from the toolholder, press on the face of the collet while simultaneously pushing sideways on the back of the collet opposite the mark until it disengages from the clamping nut.

Correct assembling Improper assembly can permanently damage the runout TIR of the collet and may result in the destruction of the clamping nut. Only mount nuts with correctly inserted collets. Never place the collet into the holder without first assembling into the nut.

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152.

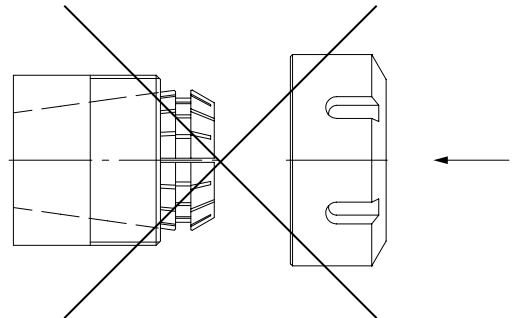
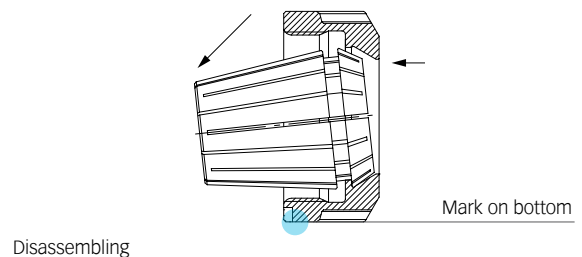
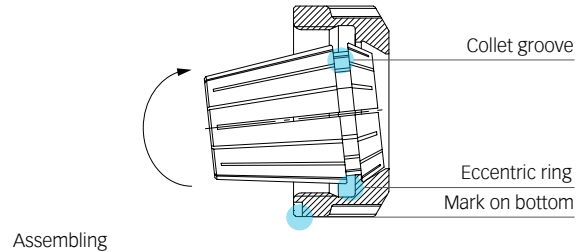
For tightening torque recommendations, please refer to page 161.

Expert advice

Please only set back-up screw to the tool shank **after** clamping the tool. Disregarding this will result in bad run out and reduced clamping force.

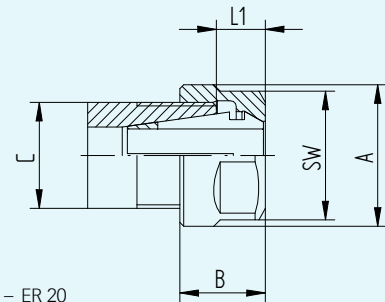
Expert advice

For best clamping results REGO-FIX advises to lightly oil the threads and the 30 degree face in the nut, this will avoid unwanted friction and significantly improve TIR, transferable torque and product lifetime.

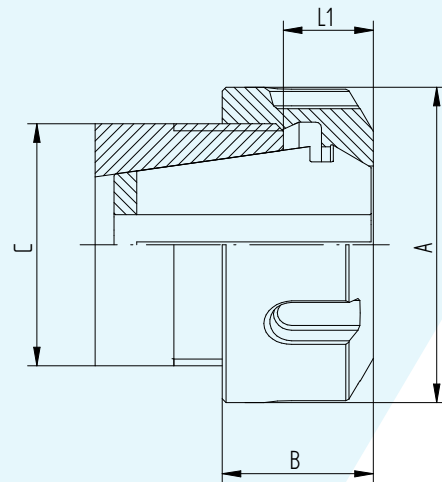


Hi-Q®/ER standard clamping nuts

Standard Hi-Q®/ER clamping nuts with corrosion-resistant surface are the standard nuts on all REGO-FIX ER collets.



Hi-Q®/ER 11 – ER 20



Hi-Q®/ER 25 – ER 50

Expert advice

Higher clamping force of the clamping nut at the same time means higher stress on the toolholder. We recommend the use of REGO-FIX torque wrench. REGO-FIX will not be responsible for damages to toolholders or spindles of other manufacturers.

Type	Part no.	Dimensions [mm]				C	Accessory
		A	B	L1	SW		Wrench
Hi-Q® / ER 11							
Hi-Q®/ER 11	3411.00000	19	11.3	4.9–6.6	17	M 14 x 0.75	E 11 P
Hi-Q® / ER 16							
Hi-Q®/ER 16	3416.00000	28	17.5	7.0–10.5	25	M 22 x 1.5	E 16 P
Hi-Q® / ER 20							
Hi-Q®/ER 20	3420.00000	34	19	8.0–11.5	30	M 25 x 1.5	E 20 P
Hi-Q® / ER 25							
Hi-Q®/ER 25	3425.00000	42	20	8.5–12.0	–	M 32 x 1.5	E 25
Hi-Q® / ER 32							
Hi-Q®/ER 32	3432.00000	50	22.5	9.5–13.0	–	M 40 x 1.5	E 32
Hi-Q® / ER 40							
Hi-Q®/ER 40	3440.00000	63	25.5	11.5–15.0	–	M 50 x 1.5	E 40
Hi-Q® / ER 50							
Hi-Q®/ER 50	3450.00000	78	35.3	14.0–21.0	–	M 64 x 2	E 50

Left-threaded nuts available on request.

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.

Hi-Q®/ERC for coolant through tools

Application with sealing disk / coolant flush disk The Hi-Q®/ERC clamping nut is intended for use with the sealing disk system DS / ER and the cool flush system KS / ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS / ER. Please refer to page 136ff.

Hi-Q®/ERC 11 This clamping nut is recommended for use where minimal external diameters are important. The Hi-Q®/ERC 11 clamping nut for coolant through tools is the internal cooling version of the Hi-Q®/ER 11 clamping nut

Hi-Q®/ERC 11 does not require sealing disks The sealing system is built into the clamping nut.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

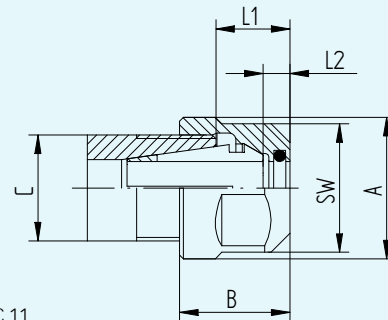


Expert advice

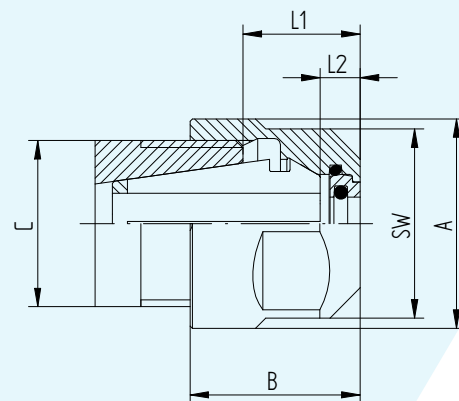
We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152.

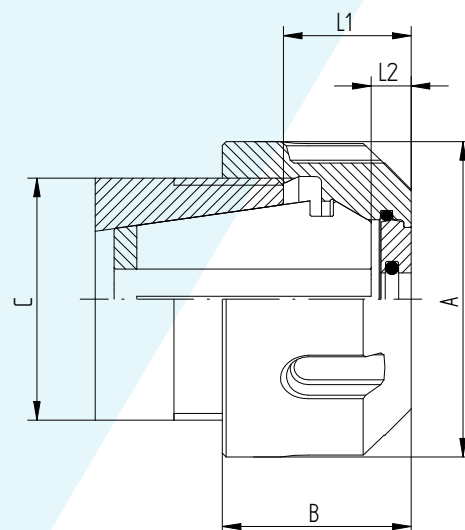
For tightening torque recommendations, please refer to page 161.



Hi-Q®/ERC 11



Hi-Q®/ERC 16 – ERC 20



Hi-Q®/ERC 25 – ERC 50

Type	Part no.	Dimensions [mm]						Bore Ø		Accessory
		A	B	L1	L2	SW	C	[mm]	[inch]	Wrench
Hi-Q®/ERC 11										
Hi-Q®/ERC 11, Ø 3.0 mm	3411.20300	19	15	8.1–9.8	3.5	17	M 14 x 0.75	3.0–2.5	3/32"	E 11 P
Hi-Q®/ERC 11, Ø 3.5 mm	3411.20350	19	15	8.1–9.8	3.5	17	M 14 x 0.75	3.5–3.0	1/8"	E 11 P
Hi-Q®/ERC 11, Ø 4.0 mm	3411.20400	19	15	8.1–9.8	3.5	17	M 14 x 0.75	4.0–3.5	5/32"	E 11 P
Hi-Q®/ERC 11, Ø 4.5 mm	3411.20450	19	15	8.1–9.8	3.5	17	M 14 x 0.75	4.5–4.0	–	E 11 P
Hi-Q®/ERC 11, Ø 5.0 mm	3411.20500	19	15	8.1–9.8	3.5	17	M 14 x 0.75	5.0–4.5	3/16"	E 11 P
Hi-Q®/ERC 11, Ø 5.5 mm	3411.20550	19	15	8.1–9.8	3.5	17	M 14 x 0.75	5.5–5.0	7/32"	E 11 P
Hi-Q®/ERC 11, Ø 6.0 mm	3411.20600	19	15	8.1–9.8	3.5	17	M 14 x 0.75	6.0–5.5	–	E 11 P
Hi-Q®/ERC 11, Ø 6.5 mm	3411.20650	19	15	8.1–9.8	3.5	17	M 14 x 0.75	6.5–6.0	1/4"	E 11 P
Hi-Q®/ERC 11, Ø 7.0 mm	3411.20700	19	15	8.1–9.8	3.5	17	M 14 x 0.75	7.0–6.5	–	E 11 P
Hi-Q®/ERC 16										
Hi-Q®/ERC 16	3416.20000	16	28	12.0–15.5	5	25	M 22 x 1.5	22.5	–	E 16 P
Hi-Q®/ERC 20										
Hi-Q®/ERC 20	3420.20000	24	34	13.0–16.5	5	30	M 25 x 1.5	24	–	E 20 P
Hi-Q®/ERC 25										
Hi-Q®/ERC 25	3425.20000	25	42	13.5–17.0	5	–	M 32 x 1.5	25	–	E 25
Hi-Q®/ERC 32										
Hi-Q®/ERC 32	3432.20000	28	50	14.5–18.0	5	–	M 40 x 1.5	27.5	–	E 32
Hi-Q®/ERC 40										
Hi-Q®/ERC 40	3440.20000	31	63	16.5–20.0	5	–	M 50 x 1.5	30.5	–	E 40
Hi-Q®/ERC 50										
Hi-Q®/ERC 50	3450.20000	39	78	19.0–26.0	5	–	M 64 x 2	40.3	–	E 50

Accessories are not included in delivery.

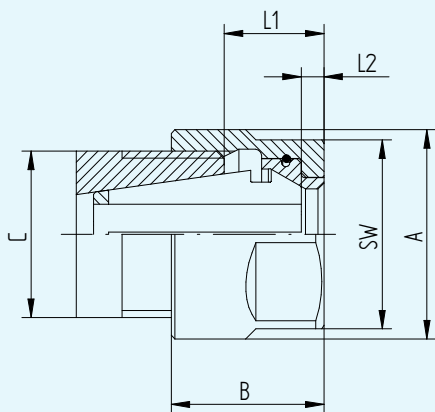
Hi-Q®/ERB friction-bearing Hi-Q®/ERBC for coolant through tools

Application The Hi-Q®/ERB is a friction-bearing nut that offers the highest clamping force available. It is interchangeable with all other nuts per DIN 6499.

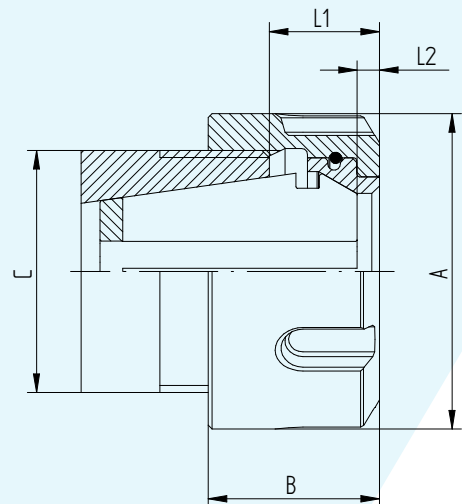
Application with sealing disk / coolant flush disk The Hi-Q®/ERBC clamping nut is intended for use with the sealing disk system DS/ER and the cool flush system KS/ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

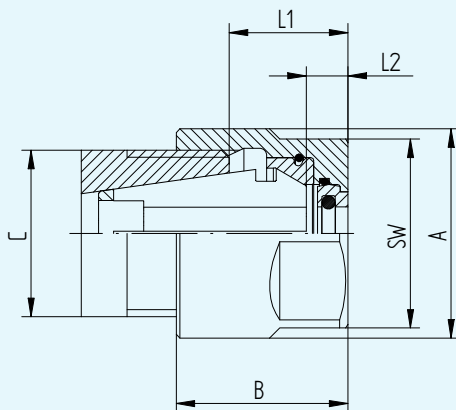
For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS/ER. Please refer to page 136ff.



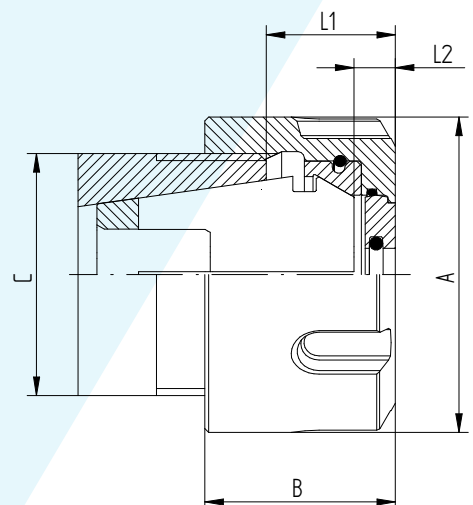
Hi-Q®/ERB 16 – ERB 20



Hi-Q®/ERB 25 – ERB 50



Hi-Q®/ERBC 16 – ERBC 20



Hi-Q®/ERBC 25 – ERBC 50

Hi-Q®/ERB

Hi-Q®/ERBC

ERB

ERBC

Type	Part no.	Dimensions [mm]					C	Accessory
		A	B	L1	L2	SW		Wrench
Hi-Q®/ERB 16								
Hi-Q®/ERB 16	3416.30000	28	20.2	10.0 – 13.6	3	25	M 22 x 1.5	E 16 P
Hi-Q®/ERB 20								
Hi-Q®/ERB 20	3420.30000	34	21.7	11.0 – 14.5	3	30	M 25 x 1.5	E 20 P
Hi-Q®/ERB 25								
Hi-Q®/ERB 25	3425.30000	42	22.6	11.5 – 15.0	3	–	M 32 x 1.5	E 25
Hi-Q®/ERB 32								
Hi-Q®/ERB 32	3432.30000	50	25	12.5 – 16.0	3	–	M 40 x 1.5	E 32
Hi-Q®/ERB 40								
Hi-Q®/ERB 40	3440.30000	63	28.2	14.5 – 18.0	3	–	M 50 x 1.5	E 40
Hi-Q®/ERB 50								
Hi-Q®/ERB 50	3450.30000	78	38.1	17.0 – 24.0	3	–	M 64 x 2	E 50

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.

Type	Part no.	Dimensions [mm]					C	Accessory
		A	B	L1	L2	SW		Wrench
Hi-Q®/ERBC 16								
Hi-Q®/ERBC 16	3416.40000	28	22.7	12.5 – 16.0	5.5	25	M 22 x 1.5	E 16 P
Hi-Q®/ERBC 20								
Hi-Q®/ERBC 20	3420.40000	34	24	13.5 – 17.0	5.5	30	M 25 x 1.5	E 20 P
Hi-Q®/ERBC 25								
Hi-Q®/ERBC 25	3425.40000	42	25.2	14.0 – 17.5	5.5	–	M 32 x 1.5	E 25
Hi-Q®/ERBC 32								
Hi-Q®/ERBC 32	3432.40000	50	27.4	15.0 – 18.5	5.5	–	M 40 x 1.5	E 32
Hi-Q®/ERBC 40								
Hi-Q®/ERBC 40	3440.40000	63	30.7	17.0 – 20.5	5.5	–	M 50 x 1.5	E 40

Accessories are not included in delivery.

Hi-Q®/ERM minimal external diameter Hi-Q®/ERMC for coolant through tools

Application The mini clamping nut Hi-Q®/ERM is recommended for use where minimal external diameters are essential (e.g., machining space is very limited). Thus, it is ideally suitable for multispindle drilling heads and collet holder extensions. The corresponding wrenches have the same external dimensions as the clamping nuts.

Application with sealing disk / coolant flush disk The Hi-Q®/ERMC clamping nut is intended for use with the sealing disk system DS/ER and the coolant flush system KS/ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

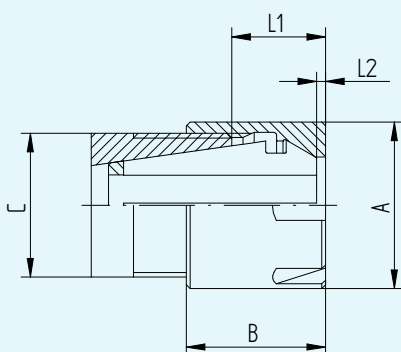
- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS/ER. Please refer to page 136ff.

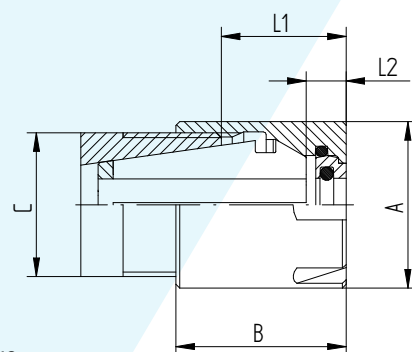
Hi-Q®/ERMC 11 This clamping nut is recommended for use where minimal external diameters are important. It is the coolant through tools version of the Hi-Q®/ERM 11 clamping nut.

Hi-Q®/ERM 11 does not require sealing disks The sealing system is built into the clamping nut.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet
- // Not interchangeable with nuts according to DIN 6499/ISO 15488



Hi-Q®/ERMC



Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.

Hi-Q®/ERM

Hi-Q®/ERMC

ERM

ERMC

Type	Part no.	Dimensions [mm]				C	Bore Ø		Accessory
		A	B	L1	L2		[inch]	[mm]	Wrench
Hi-Q®/ERM 8									
Hi-Q®/ERM 8	3508.00000	12	10.8	4.3–6.1	1.5	M 10 x 0.75	–	–	E 8 M
Hi-Q®/ERM 11									
Hi-Q®/ERM 11	3511.00000	16	12	5.7–7.5	0.4	M 13 x 0.75	–	–	E 11 M
Hi-Q®/ERM 16									
Hi-Q®/ERM 16	3516.00000	22	18.4	8.0–11.5	0.9	M 19 x 1	–	–	E 16 M
Hi-Q®/ERM 20									
Hi-Q®/ERM 20	3520.00000	28	19	8.0–11.5	–	M 24 x 1	–	–	E 20 M
Hi-Q®/ERM 25									
Hi-Q®/ERM 25	3525.00000	35	20	8.5–12.0	–	M 30 x 1	–	–	E 25 M

Left-threaded nuts available on request.

Type	Part no.	Dimensions [mm]				C	Bore Ø		Accessory
		A	B	L1	L2		[mm]	[inch]	Wrench
Hi-Q®/ERMC 11									
Hi-Q®/ERMC 11, Ø 3.0 mm	3511.20300	16	14.6	8.1–9.8	3.5	M 13 x 0.75	3.0–2.5	3/32"	E 11 M
Hi-Q®/ERMC 11, Ø 3.5 mm	3511.20350	16	14.6	8.1–9.8	3.5	M 13 x 0.75	3.5–3.0	1/8"	E 11 M
Hi-Q®/ERMC 11, Ø 4.0 mm	3511.20400	16	14.6	8.1–9.8	3.5	M 13 x 0.75	4.0–3.5	5/32"	E 11 M
Hi-Q®/ERMC 11, Ø 4.5 mm	3511.20450	16	14.6	8.1–9.8	3.5	M 13 x 0.75	4.5–4.0	–	E 11 M
Hi-Q®/ERMC 11, Ø 5.0 mm	3511.20500	16	14.6	8.1–9.8	3.5	M 13 x 0.75	5.0–4.5	3/16"	E 11 M
Hi-Q®/ERMC 11, Ø 5.5 mm	3511.20550	16	14.6	8.1–9.8	3.5	M 13 x 0.75	5.5–5.0	7/32"	E 11 M
Hi-Q®/ERMC 11, Ø 6.0 mm	3511.20600	16	14.6	8.1–9.8	3.5	M 13 x 0.75	6.0–5.5	–	E 11 M
Hi-Q®/ERMC 11, Ø 6.5 mm	3511.20650	16	14.6	8.1–9.8	3.5	M 13 x 0.75	6.5–6.0	1/4"	E 11 M
Hi-Q®/ERMC 11, Ø 7.0 mm	3511.20700	16	14.6	8.1–9.8	3.5	M 13 x 0.75	7.0–6.5	–	E 11 M
Hi-Q®/ERMC 16									
Hi-Q®/ERMC 16	3516.20000	22	22	11.5–15.0	4.5	M 19 x 1	–	–	E 16 M
Hi-Q®/ERMC 20									
Hi-Q®/ERMC 20	3520.20000	28	24	13–16.5	5	M 24 x 1	–	–	E 20 M
Hi-Q®/ERMC 25									
Hi-Q®/ERMC 25	3525.20000	35	25	13.5–17.0	5	M 30 x 1	–	–	E 25 M

Accessories are not included in delivery.

Hi-Q®/ERMX and Hi-Q®/ERMXC intRlox® Slip-off proof mini clamping nuts

Application

For REGO-FIX ER collets with mini thread and cylindrical holders.

Key advantages

- // Design is ideally suited for lathes and Swiss turning machines
- // Very slim sizing proofs suitable for machines where space is limited
- // Safe handling thanks to the patented intRlox® profile
- // Slip-off proof design with all advantages of the regular mini clamping nuts
- // Easy and safe clamping with the MX wrench

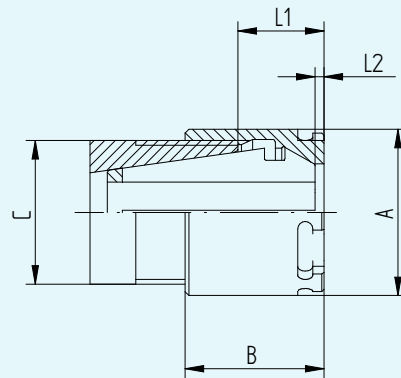
Application with sealing disk / coolant flush disk The Hi-Q® / ERMXC clamping nut is intended for use with the sealing disk system DS / ER and the coolant flush system KS / ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS / ER. Please refer to page 136ff.



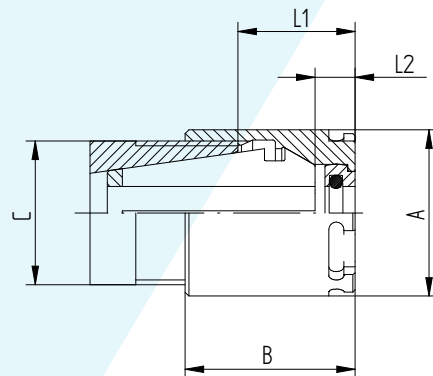
Hi-Q® / ERMX



Hi-Q® / ERMX



Hi-Q® / ERMXC



Hi-Q® / ERMXC

Type	Part no.	Dimensions [mm]				C	Accessory
		A	B	L1	L2		Wrench
Hi-Q®/ERMX 8							
Hi-Q®/ERMX 8	3508.60000	12	11	4.3–6.1	0.4	M 10 x 0.75	E 8 MX
Hi-Q®/ERMX 11							
Hi-Q®/ERMX 11	3511.60000	16	12	5.7–7.5	0.4	M 13 x 0.75	E 11 MX
Hi-Q®/ERMX 16							
Hi-Q®/ERMX 16	3516.60000	22	18.4	8.0–11.5	0.9	M 19 x 1	E 16 MX
Hi-Q®/ERMX 20							
Hi-Q®/ERMX 20	3520.60000	28	19	8.0–11.5	–	M 24 x 1	E 20 MX
Hi-Q®/ERMX 25							
Hi-Q®/ERMX 25	3525.60000	35	20	8.5–12.0	–	M 30 x 1	E 25 MX

Type	Part no.	Dimensions [mm]				C	Accessory
		A	B	L1	L2		Wrench
Hi-Q®/ERMXC 16							
Hi-Q®/ERMXC 16	3516.70000	22	22	11.5–15.0	4.5	M 19 x 1	E 16 MX
Hi-Q®/ERMXC 20							
Hi-Q®/ERMXC 20	3520.70000	28	24	13.0–16.5	5	M 24 x 1	E 20 MX
Hi-Q®/ERMXC 25							
Hi-Q®/ERMXC 25	3525.70000	35	25	13.0–17.0	5	M 30 x 1	E 25 MX

Accessories are not included in delivery.

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench.
We also recommend to use our REGO-FIX wrench heads and wrenches.

For more information on TORCO-BLOCK, see page 152. For tightening torque recommendations, please refer to page 161.
For matching wrenches and wrench heads, please refer to page 144ff.

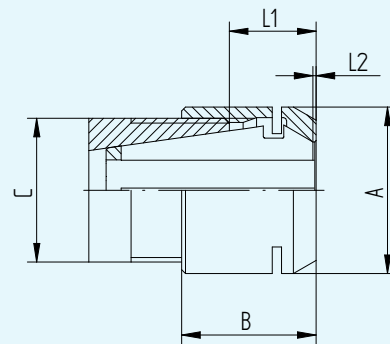
ER MS clamping nuts for highest RPM

Application The ER MS clamping nut for highest RPM with minimal external diameter does not have the collet-locking system and all the contours are ground. This provides best balancing for critical high-speed machining applications.

The collet is released with the corresponding E MS wrench. ER MS nuts are also interchangeable with the Hi-Q® / ERM and Hi-Q® / ERM C nuts. With the ER MS clamping nuts we recommend using ER-UP (ultra-precision) collets to achieve the highest runout TIR.

Key advantages

- // Precision-machined contours on all sides
- // Minimal residual unbalance
- // For high rpm up to 80,000



ER MS

Type	Part no.	Dimensions [mm]				C	Accessory
		A	B	L1	L2		Wrench
ER 8 MS							
ER 8 MS	3208.50000	12	10.8	4.3–6.1	1.5	M 10 x 0.75	E 8 MS
ER 11 MS							
ER 11 MS	3211.50000	16	11.5	4.6–6.8	0.4	M 13 x 0.75	E 11 MS
ER 16 MS							
ER 16 MS	3216.50000	22	17.8	6.1–10.5	0.3	M 19 x 1	E 16 MS
ER 20 MS							
ER 20 MS	3220.50000	28	19	7.1–11.5	0.3	M 24 x 1	E 20 MS

Accessories are not included in delivery.

Hi-Q®/ERAX with external thread Hi-Q®/ERAXC for coolant through tools

Application For REGO-FIX floating chucks and other ER coletholders with internal thread, e.g., ERA holders. These nuts can also be used on driven tools with internal threads.

*Please refer to page 24 for the SK / ERA Zero-Z® coletholder.
Please refer to page 30 for BT / ERA Zero-Z® coletholder.*

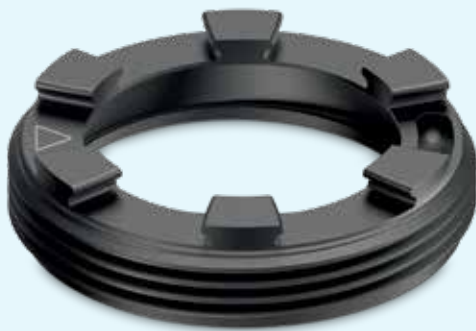
Key advantages

- // Space-saving design for ideal use on long-turning machines
- // S-profile wrench is self-centering on the nut and prevents slipping off while tightening the nut

Application with sealing disk / coolant flush disk The Hi-Q® / ERAXC clamping nut is intended for use with the sealing disk system DS / ER and the coolant flush system KS / ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

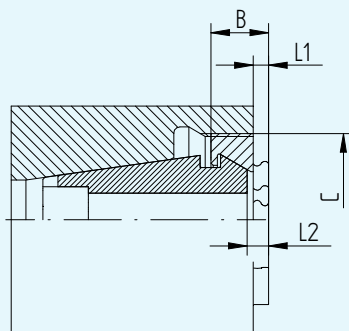
For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS / ER. Please refer to page 136ff.



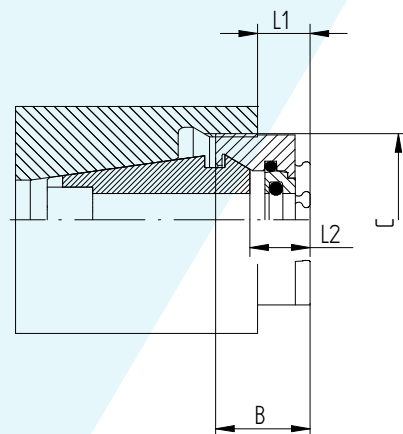
Hi-Q® / ERAX



Hi-Q® / ERAXC



Hi-Q® / ERAX



Hi-Q® / ERAXC

Hi-Q®/ERAX

Hi-Q®/ERAXC

ERAX

ERAXC

Type	Part no.	Dimensions [mm]			C	Accessory
		B	L1	L2		Wrench
Hi-Q®/ERAX 11						
Hi-Q®/ERAX 11	3311.60000	7.5	1.0–3.2	3.9	M 18 x 1	E 11 AX
Hi-Q®/ERAX 16						
Hi-Q®/ERAX 16	3316.60000	7.6	0–2.6	2.3	M 24 x 1	E 16 AX
Hi-Q®/ERAX 20						
Hi-Q®/ERAX 20	3320.60000	8.5	0–2.5	2.3	M 28 x 1.5	E 20 AX
Hi-Q®/ERAX 25						
Hi-Q®/ERAX 25	3325.60000	8.8	0–1.9	2.3	M 32 x 1.5	E 25 AX
Hi-Q®/ERAX 32						
Hi-Q®/ERAX 32	3332.60000	9.8	0–1.1	2.5	M 40 x 1.5	E 32 AX
Hi-Q®/ERAX 40						
Hi-Q®/ERAX 40	3340.60000	11.7	0–1.0	2.4	M 50 x 1.5	E 40 AX

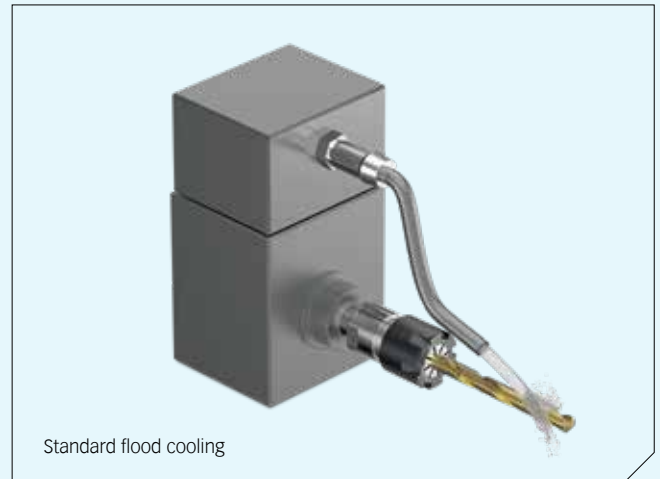
Type	Part no.	Dimensions [mm]			C	Accessory
		B	L1	L2		Wrench
Hi-Q®/ERAXC 16						
Hi-Q®/ERAXC 16	3316.70000	12.5	3.1–7.5	7.2	M 24 x 1	E 16 AX
Hi-Q®/ERAXC 20						
Hi-Q®/ERAXC 20	3320.70000	13.5	3.1–7.5	7.3	M 28 x 1.5	E 20 AX
Hi-Q®/ERAXC 25						
Hi-Q®/ERAXC 25	3325.70000	13.8	2.5–6.9	7.3	M 32 x 1.5	E 25 AX
Hi-Q®/ERAXC 32						
Hi-Q®/ERAXC 32	3332.70000	14.9	1.8–6.2	7.6	M 40 x 1.5	E 32 AX
Hi-Q®/ERAXC 40						
Hi-Q®/ERAXC 40	3340.70000	16.6	1.5–5.9	7.3	M 50 x 1.5	E 40 AX

Accessories are not included in delivery.

Fast and easy retrofitting: From external flood cooling to internal cooling



Retrofitted reCool® static RCS



Standard flood cooling

Key features of reCool® static RCS for use with static holders

- // Cost-friendly conversion of existing static tooling systems to through coolant in only two minutes
- // For ER collets (DIN 6499 / ISO 15488) in stationary collet holders with external fine threads*
- // Coolant pressures of up to 150 bar**
- // RCS / ERMX for emulsion and oil coolants
- // Low-maintenance design
- // For coolant through tools (with sealing disks DS) and for peripheral cooling (with coolant flush disks KS)

* reCool® static can also be used for internal threading with the corresponding adapter.

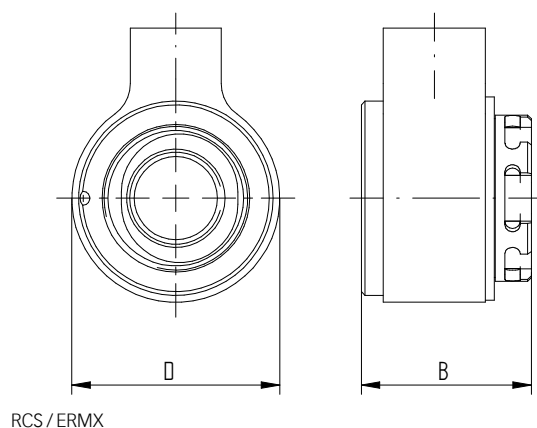
** With high-pressure hoses RHS-HP. 100 bar with standard hose.

Advantages of internal cooling with reCool®

- // Optimized coolant supply to the cutting edge: increases tool life and reduces cycle time
- // Best chip removal
- // No scattering or spray losses

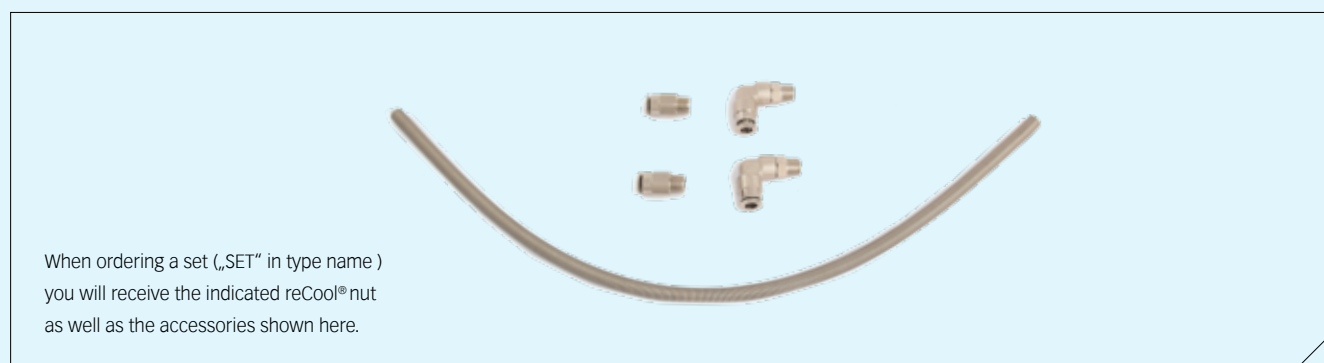
Type	Part no.	Dimensions [mm]		Thread	Accessory	Included in set RCS	
		B	D		Wrench	Type	Qty.
Set RCS (for emulsion- and oil-based coolants)						RCS / ERMX 16/20	1
SET RCS / ERMX 16	3716.50000	22.5	27.5	M 19 x 1	E 16 MX	SET RHS-100	1
SET RCS / ERMX 20	3720.50000	24	34.5	M 24 x 1	E 20 MX	SET RVG-100 1/8" – 0°	2
						SET RVA-100 1/8" – 90°	2
RCS / ERMX nut (for emulsion- and oil-based coolants)							
RCS / ERMX 16	3716.59000	22.5	27.5	M 19 x 1	E 16 MX		
RCS / ERMX 20	3720.59000	24	34.5	M 24 x 1	E 20 MX		

Accessories are not included in delivery.



reCool® sets overview

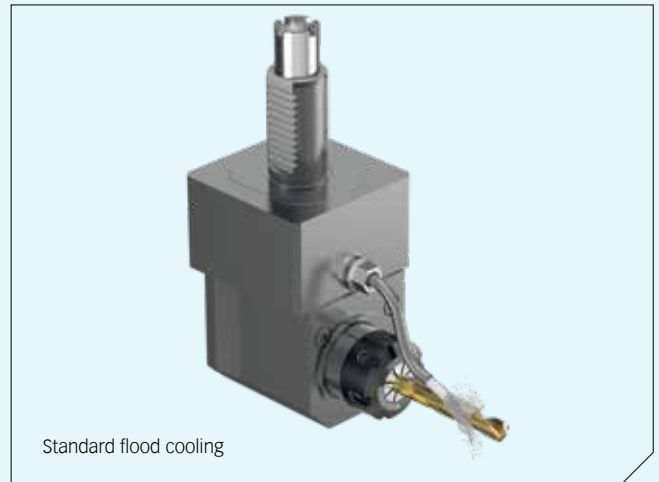
reCool® RCS and reCool® RCR sets



Retrofit driven tools and turning machines to internal cooling with reCool®



Retrofitted reCool® rotary RCR / ER, RCR / ERM



Standard flood cooling

Key features of reCool® rotary RCR for use with spindles

- // Cost-friendly conversion of existing driven tooling systems to through coolant in only two minutes
- // For ER and ERM thread in driven tools and turning machines and for ER collets to DIN 6499 / ISO 15488
- // Speeds up to 12,000 rpm*
- // Coolant pressures up to 150 bar with high-pressure hose, standard hose max. 100 bar
- // Low-maintenance coolant lubricated bearings
- // For coolant through tools (with sealing disks DS / ER) and for peripheral cooling (with coolant flush disks KS / ER)
- // RCR / ER(M) for emulsion and oil coolants
- // Convert inner-threaded driven tools to outer-threaded, using the reCool® adapter. Thus, successfully prepare different types of driven tooling for the use of reCool®
- // Not for use with sealed collets DM
- // Only clamp the nominal collet diameter

* 6,000 rpm with RCR / ER 40.

Expert advice

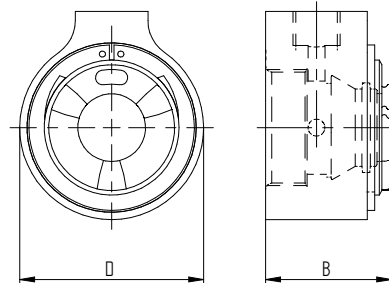
reCool® RCR is designed for standard covered machines due to the constant loss of coolant of the wet-bearing system. The amount of coolant loss may be influenced and enlarged due to pressure, throughput, viscosity, RPM, tool length and tool diameter.

Please contact your REGO-FIX specialist to learn more about working with reCool®.

Type	Part no.	Dimensions [mm]		Thread	Accessory	Included in set RCR/ER	
		B	D		Wrench	Type	Qty.
Set RCR-E&O / ER (for emulsion- and oil-based coolants)						RCR / ER 11 – 40	1
SET RCR-E&O / ER 11	3711.10000	16,6	21,75	M 14 x 0,75	E 11 AX	SET RHS-100	1
SET RCR-E&O / ER 16	3716.10000	24,5	34	M 22 x 1,5	E 16 AX	SET RVG-100 1/8" – 0°	2
SET RCR-E&O / ER 20	3720.10000	26	40	M 25 x 1,5	E 20 AX	SET RVA-100 1/8" – 90°	2
SET RCR-E&O / ER 25	3725.10000	27	50	M 32 x 1,5	E 25 AX		
SET RCR-E&O / ER 32	3732.10000	29,5	62,5	M 40 x 1,5	E 32 AX		
SET RCR-E&O / ER 40	3740.10000	32,5	72,5	M 50 x 1,5	E 40 AX		

Type	Part no.	Dimensions [mm]		Thread	Accessory
		B	D		Wrench
RCR-E&O / ER nut (for emulsion- and oil-based coolants)					
RCR-E&O / ER 11	3711.19000	16,6	21,75	M 14 x 0,75	E 11 AX
RCR-E&O / ER 16	3716.19000	24,5	34	M 22 x 1,5	E 16 AX
RCR-E&O / ER 20	3720.19000	26	40	M 25 x 1,5	E 20 AX
RCR-E&O / ER 25	3725.19000	27	50	M 32 x 1,5	E 25 AX
RCR-E&O / ER 32	3732.19000	29,5	62,5	M 40 x 1,5	E 32 AX
RCR-E&O / ER 40	3740.19000	32,5	72,5	M 50 x 1,5	E 40 AX

Accessories are not included in delivery.



RCR / ER, RCR / ERM

Type	Part no.	Dimensions [mm]		Thread	Accessory	Included in set RCR/ERM	
		B	D		Wrench	Type	Qty.
Set RCR / ERM (for emulsion- and oil-based coolants)						RCR / ERM 11 – 25	1
SET RCR / ERM 11	3711.30000	16,6	21,75	M 13 x 0,75	E 11 AX	SET RHS-100	1
SET RCR / ERM 16	3716.30000	24,5	31	M 19 x 1	E 16 AX	SET RVG-100 1/8" – 0°	2
SET RCR / ERM 20	3720.30000	26	38	M 24 x 1	E 20 AX	SET RVA-100 1/8" – 90°	2
SET RCR / ERM 25	3725.30000	27	46	M 30 x 1	E 25 AX		

RCR / ERM nut (for emulsion- and oil-based coolants)					
RCR / ERM 11	3711.39000	16,6	21,75	M 13 x 0,75	E 11 AX
RCR / ERM 16	3716.39000	24,5	31	M 19 x 1	E 16 AX
RCR / ERM 20	3720.39000	26	38	M 24 x 1	E 20 AX
RCR / ERM 25	3725.39000	27	46	M 30 x 1	E 25 AX

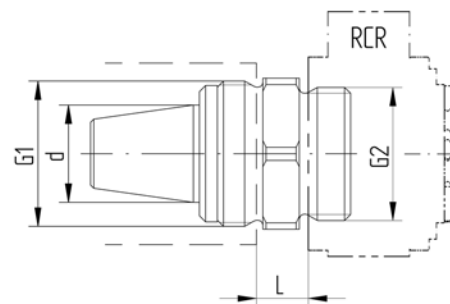
Accessories are not included in delivery.

Matching accessories for your reCool®

Type	Part no.	Dimensions [mm]		Thread G1	Thread G2	Accessory
		d	L			Wrench
reCool® adapters						
RC-ADP 16	3799.81600	16	8.7	M 24 x 1	M 22 x 1.5	E 16 P
RC-ADP 20	3799.82000	20	8.2	M 28 x 1.5	M 25 x 1.5	E 20 P
RC-ADP 25	3799.82500	25	7.9	M 32 x 1.5	M 32 x 1.5	E 25
RC-ADP 32	3799.83200	32	8.7	M 40 x 1.5	M 40 x 1.5	E 32
RC-ADP 40	3799.84000	40	9.6	M 50 x 1.5	M 50 x 1.5	E 40

reCool® adapter The reCool® adapter RC-ADP easily converts inner-threaded driven tools to outer-threaded ones which enables the use of the reCool® rotary coolant supply system RCR with different types of driven tooling.

How to use? Just screw the adapter with advised tightening torque into the driven tool, use the correctly installed reCool® rotary coolant supply system RCR and clamp the tool.



RC-ADP

Expert advice

reCool® is only applicable with the use of our sealing DS/ER and Coolant flush disks KS/ER. Please note, that neither DS/ER nor KS/ER are included in the reCool® sets.

Please refer to page 128ff for sealing disks and to page 136ff for coolant flush disks.

Type	Part no.	Length [mm]
High-pressure hoses (≤150 bar) with threaded 1/8" ends		
SET RHS-HP L100	3799.97100	100
SET RHS-HP L200	3799.97200	200
SET RHS-HP L300	3799.97300	300
SET RHS-HP L400	3799.97400	400

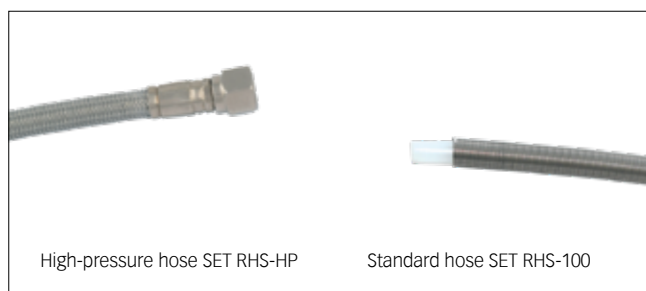
Standard hose set (≤100 bar)		
SET RHS-100	3799.95000	400*

*The length can be shortened individually between 50 - 400 mm.

Fitting sets (2 pieces each)		
SET RVG-100 1/8" – 0°	3799.96180	–
SET RVA-100 1/8" – 90°	3799.96189	–
SET RVG-100 M8 x 1 -0°	3799.96810	–

Type	Part no.	Ø [mm]	Length [mm]
Ball adapters RBA (1/8" BSP)			
RBA 10	3799.93100	10	–
RBA 11	3799.93110	11	–
RBA 12	3799.93120	12	–
RBA 13	3799.93130	13	–
RBA 14	3799.93140	14	–
RBA 15	3799.93150	15	–
RBA 16	3799.93160	16	–

Aluminum ring adapters RRA (1/8" BSP)			
RRA 10	3799.94100	10	–
RRA 11	3799.94110	11	–
RRA 12	3799.94120	12	–
RRA 13	3799.94130	13	–
RRA 14	3799.94140	14	–
RRA 15	3799.94150	15	–
RRA 16	3799.94160	16	–



Expert advice

The ball adapter **RBA** is used when the driven tool has a ball connection. The fitting can then be used on the hose.

The aluminum ring adapter **RRA** can be used when the driven tool cooling connection uses the "press-in" principle.



Affordable solution for internal cooling

Our sealing disks allow you to use your regular nonsealed collet for internal cooling, saving you acquisition costs for new collets.

Key advantages

Swiss quality product

Sealing range (excl. ER 11)

0.5 mm

High pressure

For applications up to 150 bar.

Protection

Protects against all kind of dirt and chips entering the slots of the collet.

Coolant resistant

O-ring for aggressive coolant (VITON®-quality).

Interchangeable

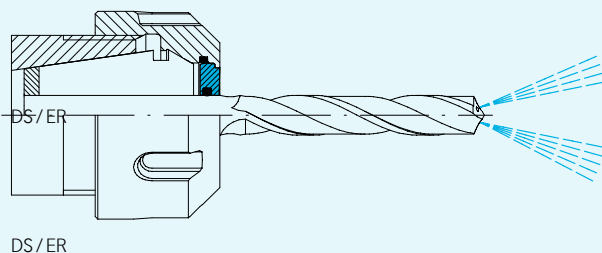
Quick change of sealing disks according to required tool shank diameter.

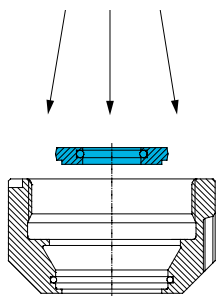
Coolant through

For better cooling and lubrication. Extends tool life and supports chip removal.

Matched tooling system for best fit

Our long-lasting machining experience results in a well-engineered system. All components are fitted together to one system to maximize your machining potential.



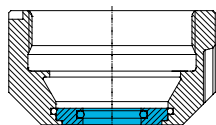


Assembling

Assembling Insert the small diameter of the disk into the center of the coolant nut. Apply an even pressure until the disk is properly seated into the nut.

The disk must be flush with the outside of the nut and the marking on the disk must be visible inside of the nut.

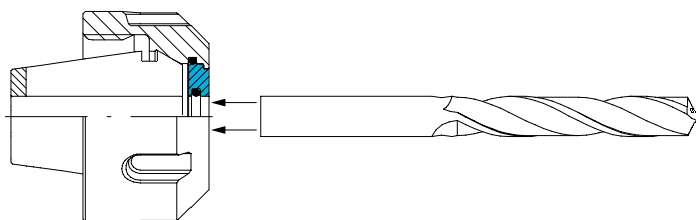
Removing To remove the disk, simply press on the outside of the disk evenly until it snaps out.



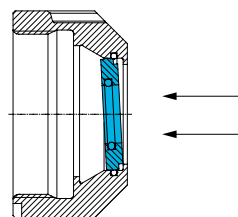
Inserted DS / ER

Expert advice

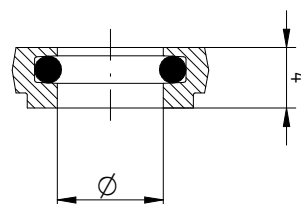
Insert tool with the shank side first. O-ring might be damaged if cutting tool is inserted from the back with the cutting edge side.



Insert tool



Disk removal



DS / ER

Type	Part no.	Tool Ø			Incl. in set
		Ø [inch]	[mm]	[decimal inch]	
DS / ER 11					
Ø 3.0 mm	3911.00300	–	3,0	–	–
Ø 1/8"	3911.00318	1/8"	–	–	–
Ø 4.0 mm	3911.00400	5/32"	4,0	–	–
Ø 3/16"	3911.00476	3/16"	–	–	–
Ø 5.0 mm	3911.00500	–	5,0	–	–
Ø 6.0 mm	3911.00600	–	6,0	–	–
Ø 1/4"	3911.00635	1/4"	–	–	–
BLANK DS / ER 11	3911.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR. ER 11 has no sealing area, only for nominal use.

DS / ER 16					
DS / ER 16 SET (14 Stk. / pcs.)	3916.00000	–	3,0 – 10,0	0,1378 – 0,3937	–
Ø 3.0 mm	3916.00300	3/32"	3,0 – 2,5	0,1181 – 0,0984	–
Ø 3.5 mm	3916.00350	1/8"	3,5 – 3,0	0,1378 – 0,1181	•
Ø 4.0 mm	3916.00400	5/32"	4,0 – 3,5	0,1575 – 0,1378	•
Ø 4.5 mm	3916.00450	–	4,5 – 4,0	0,1772 – 0,1575	•
Ø 5.0 mm	3916.00500	3/16"	5,0 – 4,5	0,1969 – 0,1772	•
Ø 5.5 mm	3916.00550	7/32"	5,5 – 5,0	0,2165 – 0,1969	•
Ø 6.0 mm	3916.00600	–	6,0 – 5,5	0,2362 – 0,2165	•
Ø 6.5 mm	3916.00650	1/4"	6,5 – 6,0	0,2559 – 0,2362	•
Ø 7.0 mm	3916.00700	–	7,0 – 6,5	0,2756 – 0,2559	•
Ø 7.5 mm	3916.00750	9/32"	7,5 – 7,0	0,2953 – 0,2756	•
Ø 8.0 mm	3916.00800	5/16"	8,0 – 7,5	0,315 – 0,2953	•
Ø 8.5 mm	3916.00850	–	8,5 – 8,0	0,3346 – 0,315	•
Ø 9.0 mm	3916.00900	11/32"	9,0 – 8,5	0,3543 – 0,3346	•
Ø 9.5 mm	3916.00950	3/8"	9,5 – 9,0	0,374 – 0,3543	•
Ø 10.0 mm	3916.01000	–	10,0 – 9,5	0,3937 – 0,374	•
BLANK DS / ER 16	3916.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR.

DS / ER 20					
SET DS / ER 20 (20 Stk. / pcs.)	3920.00000	–	3,0 – 13,0	0,1378 – 0,5118	–
Ø 3.0 mm	3920.00300	3/32"	3,0 – 2,5	0,1181 – 0,0984	–
Ø 3.5 mm	3920.00350	1/8"	3,5 – 3,0	0,1378 – 0,1181	•
Ø 4.0 mm	3920.00400	5/32"	4,0 – 3,5	0,1575 – 0,1378	•
Ø 4.5 mm	3920.00450	–	4,5 – 4,0	0,1772 – 0,1575	•
Ø 5.0 mm	3920.00500	3/16"	5,0 – 4,5	0,1969 – 0,1772	•
Ø 5.5 mm	3920.00550	7/32"	5,5 – 5,0	0,2165 – 0,1969	•
Ø 6.0 mm	3920.00600	–	6,0 – 5,5	0,2362 – 0,2165	•
Ø 6.5 mm	3920.00650	1/4"	6,5 – 6,0	0,2559 – 0,2362	•
Ø 7.0 mm	3920.00700	–	7,0 – 6,5	0,2756 – 0,2559	•
Ø 7.5 mm	3920.00750	9/32"	7,5 – 7,0	0,2953 – 0,2756	•
Ø 8.0 mm	3920.00800	5/16"	8,0 – 7,5	0,315 – 0,2953	•
Ø 8.5 mm	3920.00850	–	8,5 – 8,0	0,3346 – 0,315	•
Ø 9.0 mm	3920.00900	11/32"	9,0 – 8,5	0,3543 – 0,3346	•

Type	Part no.	Tool Ø			Incl. in set
		Ø [inch]	[mm]	[decimal inch]	
Ø 9.5 mm	3920.00950	3/8"	9,5–9,0	0,374–0,3543	•
Ø 10.0 mm	3920.01000	–	10,0–9,5	0,3937–0,374	•
Ø 10.5 mm	3920.01050	13/32"	10,5–10,0	0,4134–0,3937	•
Ø 11.0 mm	3920.01100	–	11,0–10,5	0,433–0,4134	•
Ø 11.5 mm	3920.01150	7/16"	11,5–11,0	0,4528–0,4331	•
Ø 12.0 mm	3920.01200	15/32"	12,0–11,5	0,4724–0,4528	•
Ø 12.5 mm	3920.01250	–	12,5–12,0	0,4921–0,4724	•
Ø 13.0 mm	3920.01300	1/2"	13,0–12,5	0,5118–0,4921	•
BLANK DS / ER 20	3920.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR.

DS / ER 25

SET DS / ER 25 (26 Stk. / pcs.)	3925.00000	–	3,0–16,0	0,1181–0,6299	–
Ø 3.0 mm	3925.00300	3/32"	3,0–2,5	0,1181–0,0984	–
Ø 3.5 mm	3925.00350	1/8"	3,5–3,0	0,1378–0,1181	•
Ø 4.0 mm	3925.00400	5/32"	4,0–3,5	0,1575–0,1378	•
Ø 4.5 mm	3925.00450	–	4,5–4,0	0,1772–0,1575	•
Ø 5.0 mm	3925.00500	3/16"	5,0–4,5	0,1969–0,1772	•
Ø 5.5 mm	3925.00550	7/32"	5,5–5,0	0,2165–0,1969	•
Ø 6.0 mm	3925.00600	–	6,0–5,5	0,2362–0,2165	•
Ø 6.5 mm	3925.00650	1/4"	6,5–6,0	0,2559–0,2362	•
Ø 7.0 mm	3925.00700	–	7,0–6,5	0,2756–0,2559	•
Ø 7.5 mm	3925.00750	9/32"	7,5–7,0	0,2953–0,2756	•
Ø 8.0 mm	3925.00800	5/16"	8,0–7,5	0,315–0,2953	•
Ø 8.5 mm	3925.00850	–	8,5–8,0	0,3346–0,315	•
Ø 9.0 mm	3925.00900	11/32"	9,0–8,5	0,3543–0,3347	•
Ø 9.5 mm	3925.00950	3/8"	9,5–9,0	0,374–0,3543	•
Ø 10.0 mm	3925.01000	–	10,0–9,5	0,3937–0,374	•
Ø 10.5 mm	3925.01050	13/32"	10,5–10,0	0,4134–0,3937	•
Ø 11.0 mm	3925.01100	–	11,0–10,5	0,433–0,4134	•
Ø 11.5 mm	3925.01150	7/16"	11,5–11,0	0,4528–0,433	•
Ø 12.0 mm	3925.01200	15/32"	12,0–11,5	0,4724–0,4528	•
Ø 12.5 mm	3925.01250	–	12,5–12,0	0,4921–0,4724	•
Ø 13.0 mm	3925.01300	1/2"	13,0–12,5	0,5118–0,4921	•
Ø 13.5 mm	3925.01350	17/32"	13,5–13,0	0,5315–0,5118	•
Ø 14.0 mm	3925.01400	–	14,0–13,5	0,5512–0,5315	•
Ø 14.5 mm	3925.01450	9/16"	14,5–14,0	0,5709–0,5512	•
Ø 15.0 mm	3925.01500	–	15,0–14,5	0,5906–0,5709	•
Ø 15.5 mm	3925.01550	19/32"	15,5–15,0	0,6102–0,5906	•
Ø 16.0 mm	3925.01600	5/8"	16,0–15,5	0,6299–0,6102	•
BLANK DS / ER 25	3925.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR.

Type	Part no.	Tool Ø			Incl. in set
		Ø [inch]	[mm]	[decimal inch]	
DS / ER 32					
DS / ER 32 SET (34 Stk. / pcs.)	3932.00000	–	3,0–20,0	0,1181–0,7874	–
Ø 3.0 mm	3932.00300	3/32"	3,0–2,5	0,1181–0,0984	–
Ø 3.5 mm	3932.00350	1/8"	3,5–3,0	0,1378–0,1181	•
Ø 4.0 mm	3932.00400	5/32"	4,0–3,5	0,1575–0,1378	•
Ø 4.5 mm	3932.00450	–	4,5–4,0	0,1772–0,1575	•
Ø 5.0 mm	3932.00500	3/16"	5,0–4,5	0,1969–0,1772	•
Ø 5.5 mm	3932.00550	7/32"	5,5–5,0	0,2165–0,1969	•
Ø 6.0 mm	3932.00600	–	6,0–5,5	0,2362–0,2165	•
Ø 6.5 mm	3932.00650	1/4"	6,5–6,0	0,2559–0,2362	•
Ø 7.0 mm	3932.00700	–	7,0–6,5	0,2756–0,2559	•
Ø 7.5 mm	3932.00750	9/32"	7,5–7,0	0,2953–0,2756	•
Ø 8.0 mm	3932.00800	5/16"	8,0–7,5	0,315–0,2953	•
Ø 8.5 mm	3932.00850	–	8,5–8,0	0,3346–0,315	•
Ø 9.0 mm	3932.00900	11/32"	9,0–8,5	0,3543–0,3346	•
Ø 9.5 mm	3932.00950	3/8"	9,5–9,0	0,374–0,3543	•
Ø 10.0 mm	3932.01000	–	10,0–9,5	0,3937–0,374	•
Ø 10.5 mm	3932.01050	13/32"	10,5–10,0	0,4134–0,3937	•
Ø 11.0 mm	3932.01100	–	11,0–10,5	0,4331–0,4134	•
Ø 11.5 mm	3932.01150	7/16"	11,5–11,0	0,4528–0,4331	•
Ø 12.0 mm	3932.01200	15/32"	12,0–11,5	0,4724–0,4528	•
Ø 12.5 mm	3932.01250	–	12,5–12,0	0,4921–0,4724	•
Ø 13.0 mm	3932.01300	1/2"	13,0–12,5	0,5118–0,4921	•
Ø 13.5 mm	3932.01350	17/32"	13,5–13,0	0,5315–0,5118	•
Ø 14.0 mm	3932.01400	–	14,0–13,5	0,5512–0,5315	•
Ø 14.5 mm	3932.01450	9/16"	14,5–14,0	0,5709–0,5512	•
Ø 15.0 mm	3932.01500	–	15,0–14,5	0,5905–0,5709	•
Ø 15.5 mm	3932.01550	19/32"	15,5–15,0	0,6102–0,5906	•
Ø 16.0 mm	3932.01600	5/8"	16,0–15,5	0,6299–0,6102	•
Ø 16.5 mm	3932.01650	–	16,5–16,0	0,6496–0,6299	•
Ø 17.0 mm	3932.01700	21/32"	17,0–16,5	0,6693–0,6496	•
Ø 17.5 mm	3932.01750	11/16"	17,5–17,0	0,689–0,6693	•
Ø 18.0 mm	3932.01800	–	18,0–17,5	0,7087–0,689	•
Ø 18.5 mm	3932.01850	23/32"	18,5–18,0	0,7283–0,7087	•
Ø 19.0 mm	3932.01900	3/4"	19,0–18,5	0,748–0,7283	•
Ø 19.5 mm	3932.01950	–	19,5–19,0	0,7677–0,748	•
Ø 20.0 mm	3932.02000	25/32"	20,0–19,5	0,7874–0,7677	•
BLANK DS / ER 32	3932.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR.

Type	Part no.	Tool Ø			Incl. in set
		Ø [inch]	[mm]	[decimal inch]	
DS / ER 40					
DS / ER 40 SET (46 Stk. / pcs.)	3940.00000	–	3,0–26,0	0,1181–1,0236	–
Ø 3.0 mm	3940.00300	3/32"	3,0–2,5	0,1181–0,0984	–
Ø 3.5 mm	3940.00350	1/8"	3,5–3,0	0,1378–0,1181	•
Ø 4.0 mm	3940.00400	5/32"	4,0–3,5	0,1575–0,1378	•
Ø 4.5 mm	3940.00450	–	4,5–4,0	0,1772–0,1575	•
Ø 5.0 mm	3940.00500	3/16"	5,0–4,5	0,1969–0,1772	•
Ø 5.5 mm	3940.00550	7/32"	5,5–5,0	0,2165–0,1969	•
Ø 6.0 mm	3940.00600	–	6,0–5,5	0,2362–0,2165	•
Ø 6.5 mm	3940.00650	1/4"	6,5–6,0	0,2559–0,2362	•
Ø 7.0 mm	3940.00700	–	7,0–6,5	0,2756–0,2559	•
Ø 7.5 mm	3940.00750	9/32"	7,5–7,0	0,2953–0,2756	•
Ø 8.0 mm	3940.00800	5/16"	8,0–7,5	0,315–0,2953	•
Ø 8.5 mm	3940.00850	–	8,5–8,0	0,3347–0,315	•
Ø 9.0 mm	3940.00900	11/32"	9,0–8,5	0,3543–0,3347	•
Ø 9.5 mm	3940.00950	3/8"	9,5–9,0	0,374–0,3543	•
Ø 10.0 mm	3940.01000	–	10,0–9,5	0,3937–0,374	•
Ø 10.5 mm	3940.01050	13/32"	10,5–10,0	0,4134–0,3937	•
Ø 11.0 mm	3940.01100	–	11,0–10,5	0,433–0,4134	•
Ø 11.5 mm	3940.01150	7/16"	11,5–11,0	0,4528–0,433	•
Ø 12.0 mm	3940.01200	15/32"	12,0–11,5	0,4724–0,4528	•
Ø 12.5 mm	3940.01250	–	12,5–12,0	0,4921–0,4724	•
Ø 13.0 mm	3940.01300	1/2"	13,0–12,5	0,5118–0,4921	•
Ø 13.5 mm	3940.01350	17/32"	13,5–13,0	0,5315–0,5118	•
Ø 14.0 mm	3940.01400	–	14,0–13,5	0,5512–0,5315	•
Ø 14.5 mm	3940.01450	9/16"	14,5–14,0	0,5709–0,5512	•
Ø 15.0 mm	3940.01500	–	15,0–14,5	0,5905–0,5709	•
Ø 15.5 mm	3940.01550	19/32"	15,5–15,0	0,6102–0,5905	•
Ø 16.0 mm	3940.01600	5/8"	16,0–15,5	0,6299–0,6102	•
Ø 16.5 mm	3940.01650	–	16,5–16,0	0,6496–0,6299	•
Ø 17.0 mm	3940.01700	21/32"	17,0–16,5	0,6693–0,6496	•
Ø 17.5 mm	3940.01750	11/16"	17,5–17,0	0,689–0,6693	•
Ø 18.0 mm	3940.01800	–	18,0–17,5	0,7087–0,689	•
Ø 18.5 mm	3940.01850	23/32"	18,5–18,0	0,7283–0,7087	•
Ø 19.0 mm	3940.01900	3/4"	19,0–18,5	0,748–0,7283	•
Ø 19.5 mm	3940.01950	–	19,5–19,0	0,7677–0,748	•
Ø 20.0 mm	3940.02000	23/32"	20,0–19,5	0,7874–0,7677	•
Ø 20.5 mm	3940.02050	–	20,5–20,0	0,8071–0,7874	•
Ø 21.0 mm	3940.02100	13/16"	21,0–20,5	0,8268–0,8071	•
Ø 21.5 mm	3940.02150	25/32"	21,5–21,0	0,8465–0,8268	•

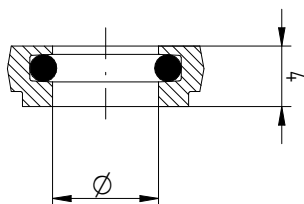
Type	Part no.	Tool Ø			Incl. in set
		Ø [inch]	[mm]	[decimal inch]	
Ø 22.0 mm	3940.02200	–	22,0–21,5	0,8661–0,8465	•
Ø 22.5 mm	3940.02250	7/8"	22,5–22,0	0,8858–0,8268	•
Ø 23.0 mm	3940.02300	29/32"	23,0–22,5	0,9055–0,8858	•
Ø 23.5 mm	3940.02350	–	23,5–23,0	0,9252–0,9055	•
Ø 24.0 mm	3940.02400	15/16"	24,0–23,5	0,9449–0,9252	•
Ø 24.5 mm	3940.02450	–	24,5–24,0	0,9646–0,9449	•
Ø 25.0 mm	3940.02500	31/32"	25,0–24,5	0,9843–0,9646	•
Ø 25.5 mm	3940.02550	1"	25,5–25,0	1,0039–0,9843	•
Ø 26.0 mm	3940.02600	–	26,0–25,5	1,0236–1,0039	•
BLANK DS / ER 40	3940.09999	–	–	–	–

Included in the DS/ER sets are all marked disks within that ER size and the matching disk try DSR.

DS / ER 50

ADP ER 50–DS / ER 40*	3950.40000	–	3,0–26,0	0,1181–1,0236	–
Ø 22.0 mm	3950.02200	–	22,0–21,5	0,8661–0,8465	–
Ø 25.0 mm	3950.02500	–	25,0–24,5	0,9842–0,9645	–
Ø 28.0 mm	3950.02800	–	28,0–27,5	1,1023–1,0827	–
Ø 32.0 mm	3950.03200	–	32,0–31,5	1,2598–1,2402	–
Ø 36.0 mm	3950.03600	–	36,0–35,5	1,4173–1,3976	–

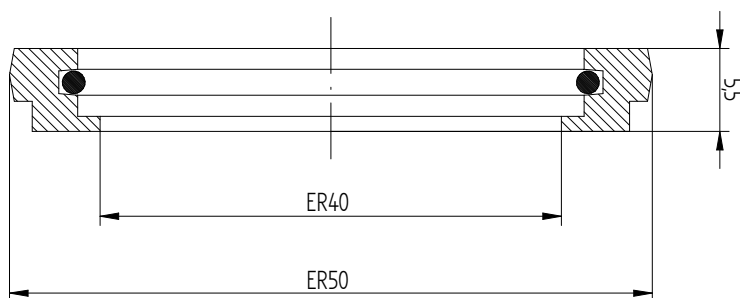
* The ADP ER 50-DS/ER 40 only works in combination with a sealing disk DS/ER 40. DS/ER 40 is not included in delivery.



DS / ER

Expert advice

The BLANK DS/ER can be used as a blank for specific diameters or as a seal for double-sided driven tools.



ADP ER 50–DS / ER 40

Expert advice

The adapter ADP ER 50–DS / ER 40 allows the use of DS / ER 40 sealing disks in ER 50 clamping nuts.



Our solution for peripheral cooling

The design of our coolant flush disks leads the coolant along the edge of the cutting tool, providing you with an easy way to achieve peripheral cooling.

Key advantages

Swiss quality product

Universal use

For all REGO-FIX collets and coolant nuts with interchangeable disk.

Interchangeable

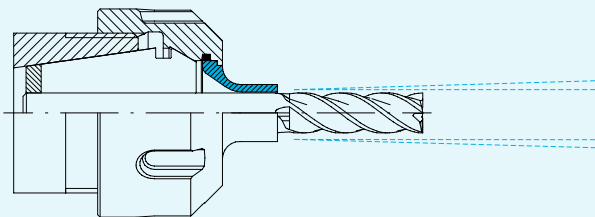
Quick change of coolant flush disks according to required tool shank diameter.

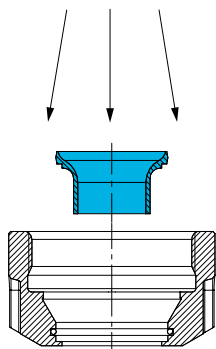
Peripheral cooling

For better cooling and lubrication.
Extends tool life and supports chip removal.

Original REGO-FIX

Our long-lasting machining experience results in a well-engineered system. When buying ER coolant flush disks please pay attention to the REGO-FIX quality seal on the coolant flush disk: The triangle is our seal for outstanding quality made in Switzerland.



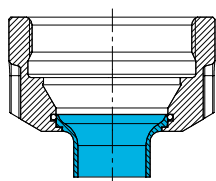


Assembling

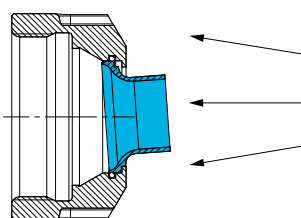
Assembling Insert the small diameter of the disk into the center of the coolant nut. Apply an even pressure until the disk is properly seated into the nut.

The disk must be flush with the outside of the nut and the marking on the disk must be visible inside of the nut.

Removing To remove the disk, simply press on the outside of the disk evenly until it snaps out.



Inserted KS / ER



Removing

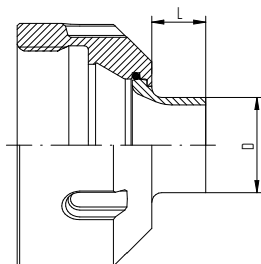
Type	Part no.	Dimensions [mm]		Ø	
		D	L	[mm]	[inch]
KS / ER 11 [mm]					
Ø 3.0 mm / 1/8"	3911.30318	5,6	5,5	3	1/8"
Ø 4.0 mm	3911.20400	6,4	5,5	4	–
Ø 5.0 mm / 3/16"	3911.20500	7,5	5,5	5	3/16"
Ø 6.0 mm / 1/4"	3911.30635	7,5	5,5	6	1/4"

KS / ER 16 [mm]					
Ø 3.0 mm	3916.20300	6.4	11	3	–
Ø 4.0 mm	3916.20400	7.4	11	4	–
Ø 5.0 mm	3916.20500	8.4	11	5	–
Ø 6.0 mm	3916.20600	9.4	11	6	–
Ø 7.0 mm	3916.20700	11	11	7	–
Ø 8.0 mm	3916.20800	11	11	8	–
Ø 9.0 mm	3916.20900	11	2	9	–
Ø 10.0 mm	3916.21000	11	2	10	–
BLANK KS / ER 16 Ø 11 x 12*	3916.29999	11	12	–	–

KS / ER 16 [inch]					
Ø 1/8"	3916.30318	6.6	11	3.175	1/8"
Ø 3/16"	3916.30476	8.2	11	4.763	3/16"
Ø 1/4"	3916.30635	9.7	11	6.35	1/4"
Ø 5/16"	3916.30794	11	11	7.938	5/16"
Ø 3/8"	3916.30953	11	2	9.525	3/8"

KS / ER 20 [mm]					
Ø 3.0 mm	3920.20300	6.4	11	3	–
Ø 4.0 mm	3920.20400	7.4	11	4	–
Ø 5.0 mm	3920.20500	8.4	11	5	–
Ø 6.0 mm	3920.20600	9.4	11	6	–
Ø 7.0 mm	3920.20700	10.4	11	7	–
Ø 8.0 mm	3920.20800	11.4	11	8	–
Ø 9.0 mm	3920.20900	12.4	11	9	–
Ø 10.0 mm	3920.21000	14	11	10	–
Ø 12.0 mm	3920.21200	14	3	12	–
BLANK KS / ER 20 Ø 14 x 12*	3920.29999	14	12	–	–

* Work material: 42CrMoS4 (1.7227).



KS / ER

Type	Part no.	Dimensions [mm]		Ø	
		D	L	[mm]	[inch]
KS / ER 20 [inch]					
Ø 1/8"	3920.30318	6.6	11	3.175	1/8"
Ø 3/16"	3920.30476	8.2	11	4.763	3/16"
Ø 1/4"	3920.30635	9.7	11	6.35	1/4"
Ø 5/16"	3920.30794	11.3	11	7.983	5/16"
Ø 3/8"	3920.30953	14	11	9.525	3/8"
Ø 7/16"	3920.31111	14	11	11.113	7/16"
Ø 1/2"	3920.31270	14	3	12.7	1/2"

KS / ER 25 [mm]					
Ø 3.0 mm	3925.20300	6.4	11	3	–
Ø 4.0 mm	3925.20400	7.4	11	4	–
Ø 5.0 mm	3925.20500	8.4	11	5	–
Ø 6.0 mm	3925.20600	9.4	11	6	–
Ø 7.0 mm	3925.20700	10.4	11	7	–
Ø 8.0 mm	3925.20800	11.4	11	8	–
Ø 9.0 mm	3925.20900	12.4	11	9	–
Ø 10.0 mm	3925.21000	13.4	11	10	–
Ø 12.0 mm	3925.21200	15.4	11	12	–
Ø 14.0 mm	3925.21400	17.4	11	14	–
Ø 16.0 mm	3925.21600	19	11	16	–
BLANK KS / ER 25 Ø 19 x 12*	3925.29999	19	12	–	–

KS / ER 25 [inch]					
Ø 1/8"	3925.30318	6.6	11	3.175	1/8"
Ø 3/16"	3925.30476	8.2	11	4.763	3/16"
Ø 1/4"	3925.30635	9.7	11	6.35	1/4"
Ø 5/16"	3925.30794	11.3	11	7.938	5/16"
Ø 3/8"	3925.30953	12.9	11	9.525	3/8"
Ø 7/16"	3925.31111	14.5	11	11.113	7/16"
Ø 1/2"	3925.31270	16.1	11	12.7	1/2"
Ø 9/16"	3925.31429	17.7	11	14.288	9/16"
Ø 5/8"	3925.31588	19	11	15.875	5/8"

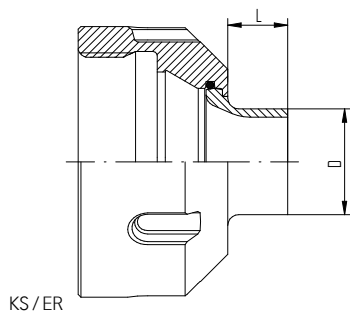
* Work material: 42CrMoS4 (1.7227).

Type	Part no.	Dimensions [mm]		Ø	
		D	L	[mm]	[inch]
KS / ER 32 [mm]					
Ø 3.0 mm	3932.20300	6.4	11	3	–
Ø 4.0 mm	3932.20400	7.4	11	4	–
Ø 5.0 mm	3932.20500	8.4	11	5	–
Ø 6.0 mm	3932.20600	9.4	11	6	–
Ø 7.0 mm	3932.20700	10.4	11	7	–
Ø 8.0 mm	3932.20800	11.4	11	8	–
Ø 9.0 mm	3932.20900	12.4	11	9	–
Ø 10.0 mm	3932.21000	13.4	11	10	–
Ø 12.0 mm	3932.21200	15.4	11	12	–
Ø 14.0 mm	3932.21400	17.4	11	14	–
Ø 16.0 mm	3932.21600	19.4	11	16	–
Ø 18.0 mm	3932.21800	21.4	11	18	–
Ø 20.0 mm	3932.22000	24	11	20	–
BLANK KS / ER 32 Ø 24 x 12*	3932.29999	24	12	–	–

KS / ER 32 [inch]					
Ø 1/8"	3932.30318	6.6	11	3.175	1/8"
Ø 3/16"	3932.30476	8.2	11	4.763	3/16"
Ø 1/4"	3932.30635	9.7	11	6.35	1/4"
Ø 5/16"	3932.30794	11.3	11	7.938	5/16"
Ø 3/8"	3932.30953	12.9	11	9.525	3/8"
Ø 7/16"	3932.31111	14.5	11	11.113	7/16"
Ø 1/2"	3932.31270	16.1	11	12.7	1/2"
Ø 9/16"	3932.31429	17.7	11	14.288	9/16"
Ø 5/8"	3932.31588	19.3	11	15.875	5/8"
Ø 3/4"	3932.31905	24	11	19.05	3/4"

* Work material: 42CrMoS4 (1.7227).

KS / ER 40					
ADP ER 40 KS / ER 32	3940.32000	–	–	3-20	1/8" - 3/4"





REGO-FIX▲



Contents

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Enhance your tool life with the proper accessories for safe toolholding.

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Wrenches

E

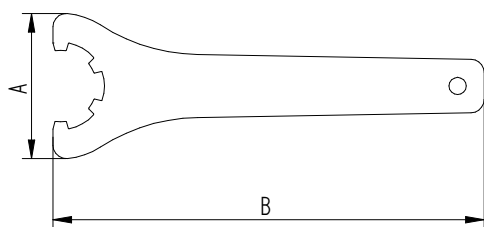
E P

E M

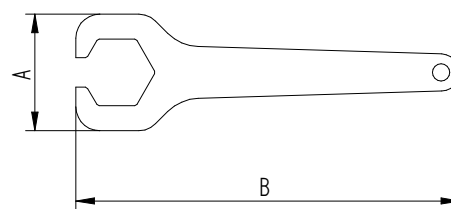
E MX

Suited wrench for Hi-Q®

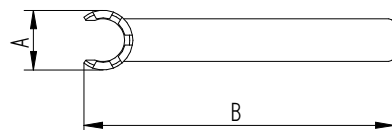
Type	Part no.	A [mm]	B [mm]	ER	ERC	ERB	ERBC	ERM	ERMC	ERMX	ERMXC
E											
E 16	7111.16000	55	163	—	—	—	—	—	—	—	—
E 20	7111.20000	60	183	—	—	—	—	—	—	—	—
E 25	7111.25000	70	203	•	•	•	•	—	—	—	—
E 32	7111.32000	80	253	•	•	•	•	—	—	—	—
E 40	7111.40000	96	283	•	•	•	•	—	—	—	—
E 50	7111.50000	111	350	•	—	•	—	—	—	—	—
E P											
E 11 P	7112.11010	32	95	•	•	—	—	—	—	—	—
E 16 P	7112.16010	44	145	•	•	•	•	—	—	—	—
E 20 P	7112.20010	52	170	•	•	•	•	—	—	—	—
E M											
E 8 M	7113.08000	12	74	—	—	—	—	•	—	—	—
E 11 M	7113.11000	17	95	—	—	—	—	•	•	—	—
E 16 M	7113.16000	22	117	—	—	—	—	•	•	—	—
E 20 M	7113.20000	29	129	—	—	—	—	•	•	—	—
E 25 M	7113.25000	36	141	—	—	—	—	•	•	—	—
E MX											
E 8 MX	7118.08000	12	74	—	—	—	—	—	—	•	—
E 11 MX	7118.11000	17	95	—	—	—	—	—	—	•	•
E 16 MX	7118.16000	22.5	117	—	—	—	—	—	—	•	•
E 20 MX	7118.20000	29	129	—	—	—	—	—	—	•	•
E 25 MX	7118.25000	36	141	—	—	—	—	—	—	•	•



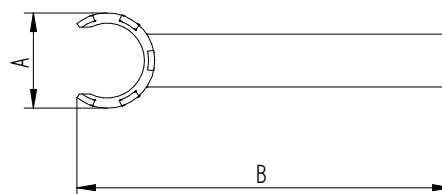
E



E P

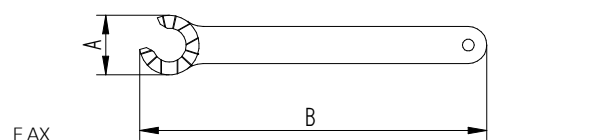
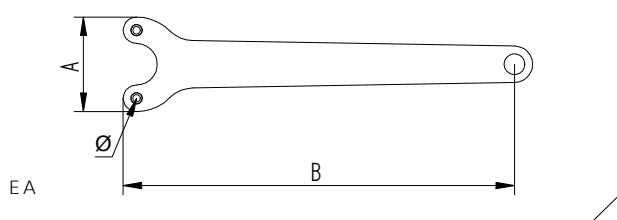
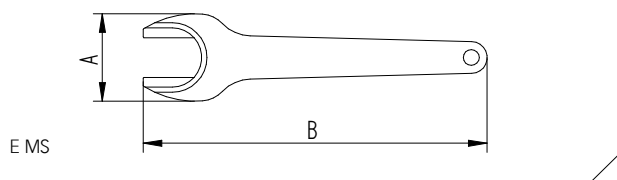


E M



E MX

Type	Part no.	A [mm]	B [mm]	Suited wrench for Hi-Q®			
				ER MS	ERAX	ERAXC	
E MS							
E 8 MS	7114.08000	19	76	•	–	–	
E 11 MS	7114.11000	22	100	•	–	–	
E 16 MS	7114.16000	33	130	•	–	–	
E 20 MS	7114.20000	42	140	•	–	–	
							Ø [mm]
E A							
E 11 A	7115.11000	18.6	96	–	–	–	3
E 16 A	7115.16000	25	108	–	–	–	3
E 20 A	7115.20000	28	123	–	–	–	3
E 25 A	7115.25000	30.5	139	–	–	–	4
E 32 A	7115.32000	42	182	–	–	–	4
E AX							
E 11 AX	7117.11000	16	108	–	•	–	
E 16 AX	7117.16000	22	131	–	•	•	
E 20 AX	7117.20000	26	148	–	•	•	
E 25 AX	7117.25000	30	165	–	•	•	
E 32 AX	7117.32000	37	196	–	•	•	
E 40 AX	7117.40000	47	220	–	•	•	



Torque wrenches TORCO-FIX

Grip bar for wrench heads G-A

Slip-off proof extension V-E AX for E AX and A-E AX

Slip-off proof extension V-E MX for E MX and A-E MX

TORCO-FIX

V-E AX

V-E MX

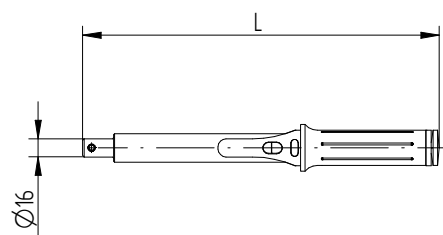
Type	Part no.	L [mm]	Range [Nm]
TORCO-FIX / TSD			
TORCO-FIX 0	7150.02025	290	5 – 25
TORCO-FIX I	7150.05050	335	10 – 50
TORCO-FIX II	7150.20200	465	40 – 200
TORCO-FIX III	7150.60300	565	60 – 300

Grip bar for wrench heads G-A

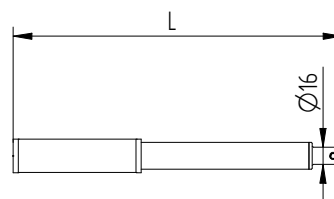
G-A	7655.99900	308	–
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Type	Part no.	D [mm]	L [mm]	[mm]	[inch]
V-E AX					
V-E 11 AX	7155.11000	16.5	60	6.35	1/4"
V-E 16 AX	7155.16000	22.5	80	6.35	1/4"
V-E 20 AX	7155.20000	26	95	9.525	3/8"
V-E 25 AX	7155.25000	29.5	105	12.7	1/2"
V-E 32 AX	7155.32000	37.5	115	12.7	1/2"

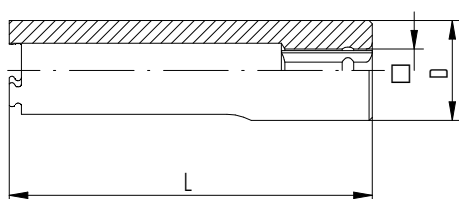
Type	Part no.	D [mm]	L [mm]	[mm]	[inch]
V-E MX					
V-E 8 MX	7159.08000	17	60	6.35	1/4"
V-E 11 MX	7159.11000	17	60	6.35	1/4"
V-E 16 MX	7159.16000	22.5	80	6.35	1/4"
V-E 20 MX	7159.20000	29	95	12.7	1/2"
V-E 25 MX	7159.25000	35	105	19.05	3/4"



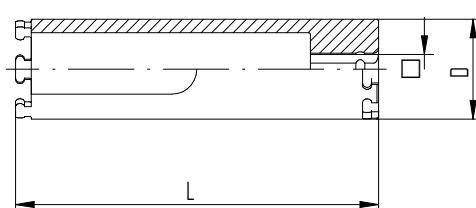
TORCO-FIX



G-A



V-E AX



V-E MX

Wrench heads

A-E

A-E P

A-E M

A-E MS

A-E AX

Type	Part no.	A [mm]	B [mm]
A-E			
A-E 16	7151.16000	55	62
A-E 20	7151.20000	60	62
A-E 25	7151.25000	70	72
A-E 32	7151.32000	80	72
A-E 40	7151.40000	96	82
A-E 50	7151.50000	111	94

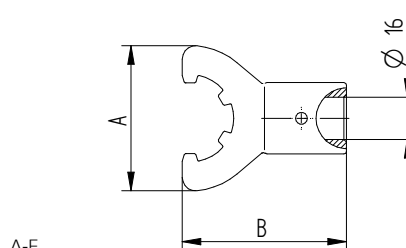
A-E P			
A-E 11 P	7152.11010	32	57
A-E 16 P	7152.16010	44	70
A-E 20 P	7152.20010	52	80

A-E M			
A-E 8 M	7153.08000	12	53
A-E 11 M	7153.11000	17	54
A-E 16 M	7153.16000	22	56
A-E 20 M	7153.20000	29	68
A-E 25 M	7153.25000	36	70

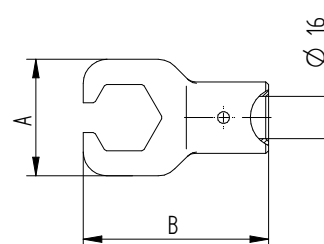
A-E MX			
A-E 8 MX	7158.08000	12	53
A-E 11 MX	7158.11000	17	54
A-E 16 MX	7158.16000	22	56
A-E 20 MX	7158.20000	29	68
A-E 25 MX	7158.25000	36	70

A-E MS			
A-E 8 MS	7154.08000	19	51
A-E 11 MS	7154.11000	22	57
A-E 16 MS	7154.16000	33	60
A-E 20 MS	7154.20000	42	73

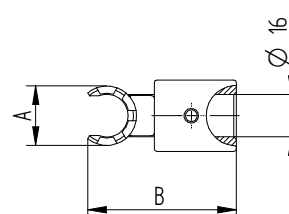
A-E AX			
A-E 11 AX	7157.11000	16	62
A-E 16 AX	7157.16000	22	63
A-E 20 AX	7157.20000	26	64
A-E 25 AX	7157.25000	29	93
A-E 32 AX	7157.32000	37	95
A-E 40 AX	7157.40000	47	99



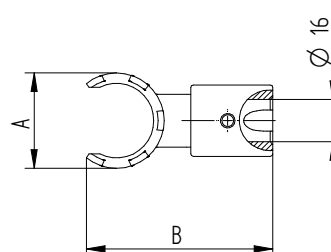
A-E



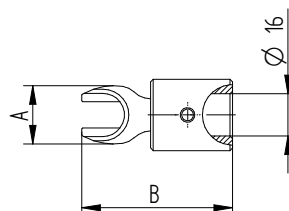
A-E P



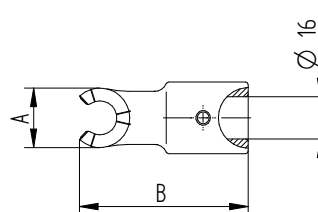
A-E M



A-E MX



A-E MS



A-E AX

Trays for ER collet sets ZWT

ZWT

DSR

ATL

Trays for sealing disk sets DSR

Assembly tool for sealing discs DS/ER 11

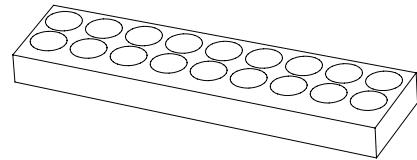
Tangs ATL

Type	Part no.	Fits ... items
Trays for ER collet sets ZWT*		
ZWT 8	7121.08000	9
ZWT 11	7121.11000	13
ZWT 16	7121.16000	10
ZWT 20	7121.20000	12
ZWT 25	7121.25000	15
ZWT 32	7121.32000	18
ZWT 40	7121.40000	23
ZWT 50	7121.50000	12

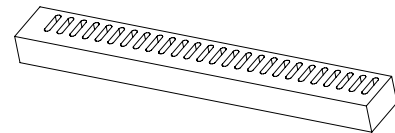
*Made of high quality foam PE10.

Trays for sealing disk sets DSR*		
DSR 16	7122.16000	14
DSR 20	7122.20000	20
DSR 25	7122.25000	26
DSR 32	7122.32000	34
DSR 40	7122.40000	46

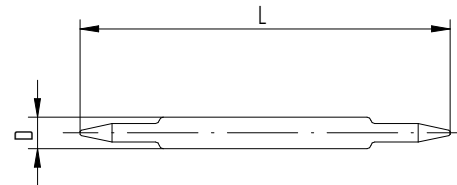
*Made of high quality foam PE10.



ZWT



DSR



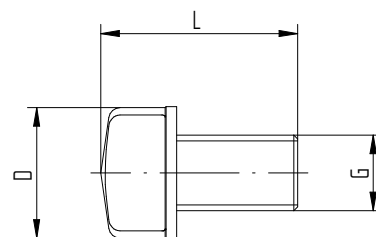
MWZ 11

Type	Part no.	D [mm]	L [mm]
Assembly tool for sealing discs DS/ER 11			
MWZ 11	3911.88888	12	140

Type	Part no.	G	Dimensions [mm]	
			D	L
Tangs ATL				
ATL 6 / MK 1	7221.01000	M 6	8.5	21.5
ATL 10 / MK 2	7221.02000	M 10	13.5	30.5
ATL 12 / MK 3	7221.03000	M 12	18.5	35
ATL 16 / MK 4	7221.04000	M 16	24.5	41
ATL 20 / MK 5	7221.05000	M 20	35	52

Expert advice

To ensure a clearly arranged display and easy handling, the sealing disk bore diameters or collet diameters are marked on the tray.



ATL / MK

Coolant tubes KSR

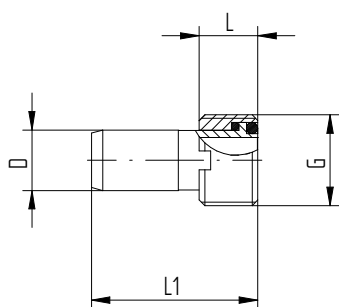
KSR

SKR

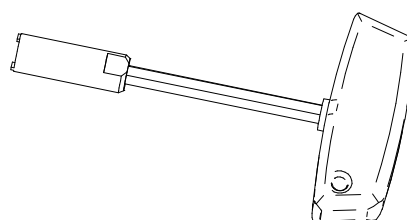
Wrenches for coolant tubes SKR

Type	Part no.	Dimensions [mm]			G
		D	L	L1	
Coolant tubes KSR					
KSR 25	7211.25000	5	4.5	17	M 8 x 1
KSR 32	7211.32000	6	5.5	25.7	M 10 x 1
KSR 40	7211.40000	8	7.5	29.2	M 12 x 1
KSR 50	7211.50000	10	9.5	32.7	M 16 x 1
KSR 63	7211.63000	12	11.5	36.2	M 18 x 1
KSR 80	7211.80000	14	13.5	39.7	M 20 x 1.5
KSR 100	7211.00000	16	15.5	43.6	M 24 x 1.5
KSR 125	7211.12500	16	15.5	43.6	M 24 x 1.5

Type	Part no.
Wrenches SKR	
SKR 25	7212.25000
SKR 32	7212.32000
SKR 40	7212.40000
SKR 50	7212.50000
SKR 63	7212.63000
SKR 80	7212.80000
SKR 100	7212.00000
SKR 125	7212.12500



KSR



SKR

Hi-Q® balancing rings FWR

Torque screwdriver TSD

FWR

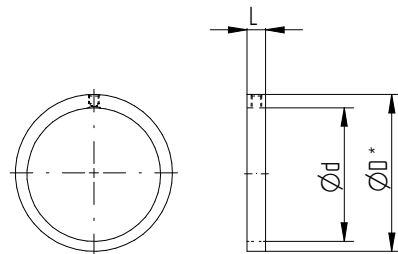
TSD

Type	Part no.	Dimensions [mm]			Balancing capacity [gmm]		
		D	d	L	FWR SET	single FWR	max. rpm
Hi-Q® balancing rings FWR							
SET FWR 225	7490.22500	30.5	22.5	6	16	8	80.000
SET FWR 285	7490.28500	36.5	28.5	6	32	16	70.000
SET FWR 325	7490.32500	40.5	32.5	6	44	22	60.000
SET FWR 405	7490.40500	48.5	40.5	6	52	26	50.000
SET FWR 505	7490.50500	60.5	50.5	7	130	65	42.000

Included in set: Two Hi-Q® balancing rings per set.



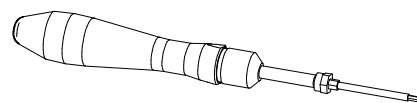
Balancing rings SET FWR



Single balancing ring

* Rotational diameter

Type	Part no.
TSD TORX 8 for balancing rings	
TSD 0.9 Nm	7159.09000



TSD

Expert advice

The torque screwdriver is a special TORX style wrench that is preset to the recommended torque rating of 0.9 Nm for tightening the REGO-FIX Hi-Q® balancing rings.

Toolholding fixtures

WMH

WA / SK

WA / HSK

WA / C

Type	Part no.	Fits this interface
Tool assembly WMH		
WMH-AC 45°	7813.00000	–
WMH-AC 90°	7813.00100	–

Tool adapter WA / SK		
WA / SK 30	7814.30100	BT / CAT / SK 30
WA / SK 40	7814.40100	BT / CAT / SK 40
WA / SK 50	7814.50100	BT / CAT / SK 50

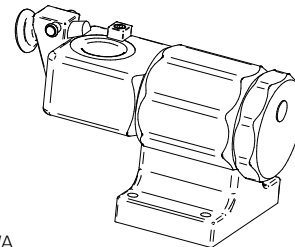
Tool adapter WA / HSK-A / C / E		
WA / HSK-A / C / E 25	7814.25300	HSK-A / C / E 25

Tool adapter WA / HSK-A		
WA / HSK-A 32	7814.32200	HSK-A 32
WA / HSK-A 40	7814.40200	HSK-A 40
WA / HSK-A 50	7814.50200	HSK-A 50
WA / HSK-A 63	7814.63200	HSK-A 63
WA / HSK-A 80	7814.80200	HSK-A 80
WA / HSK-A 100	7814.00200	HSK-A 100

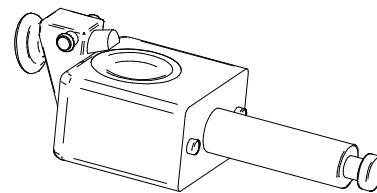
Tool adapter WA / HSK-C / E		
WA / HSK-C / E 32	7814.32500	HSK-C / E 32
WA / HSK-C / E 40	7814.40500	HSK-C / E 40
WA / HSK-C / E 50	7814.50500	HSK-C / E 50
WA / HSK-C / E 63	7814.63500	HSK-C / E 63

Tool adapter WA / HSK-B / D / F		
WA / HSK-B / D / F 63	7814.63400	HSK-B / D / F 63

Tool adapter WA / C		
WA / C3	7814.03700	CAPTO C3
WA / C4	7814.04700	CAPTO C4
WA / C5	7814.05700	CAPTO C5
WA / C6	7814.06700	CAPTO C6
WA / C8	7814.08700	CAPTO C8



WMH / WA



WA

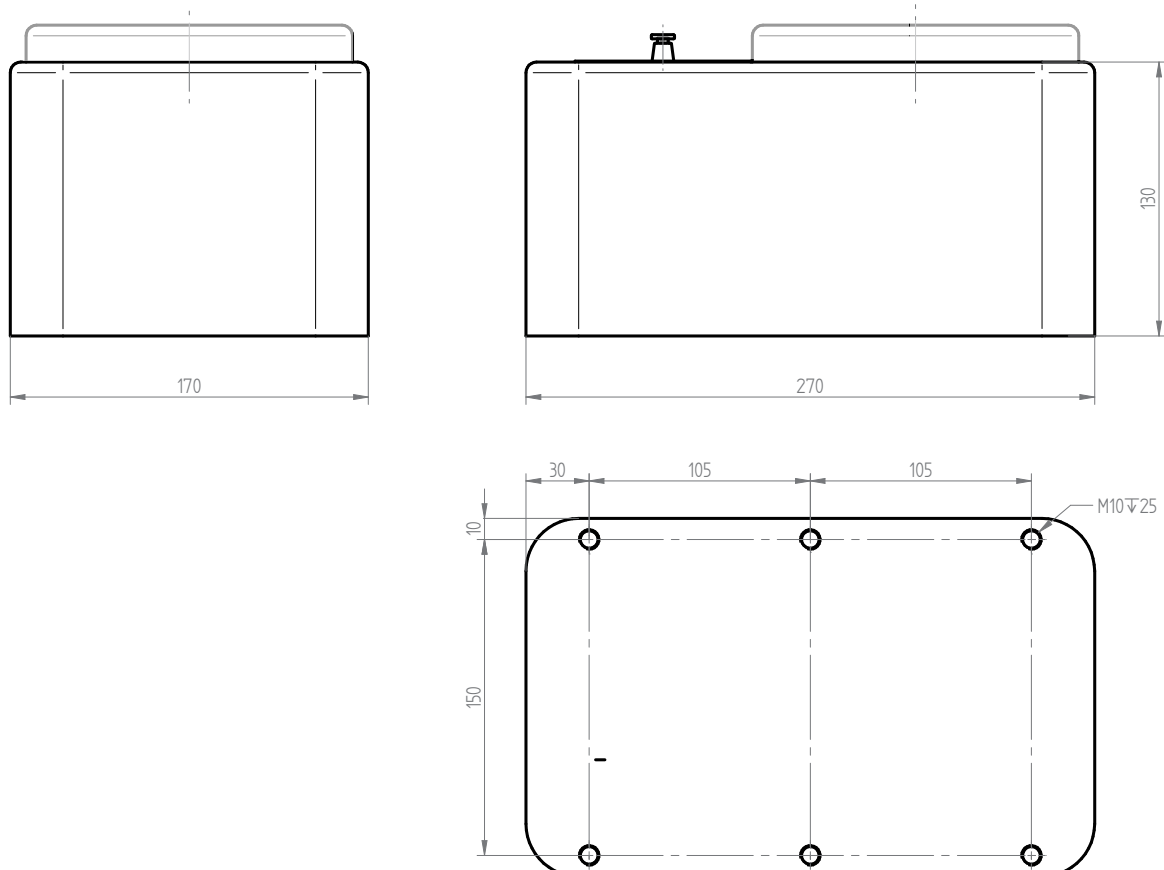
Achieve perfect torque with any wrench

TORCO-BLOCK The only tool assembly device in the market that is comfortable and safe to use with integrated torque measuring. Usability ranges from ER 11 to ER 32, shank diameter from 1 to 22 mm and available for all standard machine interfaces.

TORCO-BLOCK provides

- // Use any wrench and still be able to correctly measure tightening torque
- // Minimal effort for toolclamping needed
- // Toolholder will not be overtorqued
- // Correct tightening torque guaranteed, no bad runout due to overtorquing
- // Quick-change function for different taper interfaces with only one 4 mm Allen-key within seconds
- // Safe assembling of cutting tools
- // Easy and quick toolholder and adapter handling
- // Required footprint 170 x 270 mm
- // Correct installation of pull studs with standard wrenches
- // Full or overhang mounting on a workbench possible
- // TORCO-BLOCK supplied inclusive indicator rings TB / IR

Unit needs a stable workbench to be attached to with at least four M10 screws.



TORCO-BLOCK tool assembly and components

Type	Part no.
Tool assembly with torque measurement	
TORCO-BLOCK	7815.00000

Included in delivery: TORCO-BLOCK, indicator ring set (no tool adapters)

Indicator ring set / 5 rings for ER/MR 11 - ER/MR 32	
TB / IR SET	7816.99999

Tool adapter for CAT & BT spindle interfaces	
TB / BT 30 & CAT 30	7816.30100
TB / SK 40 & CAT 40	7816.40200
TB / CAT 50	7816.50300

Tool adapter for SK spindle interface	
TB / SK 30	7816.30200
TB / SK 40 & CAT 40	7816.40200
TB / SK 50	7816.50200

Tool adapter for BT spindle interface	
TB / BT 30 & CAT 30	7816.30100
TB / HSK 63 & C6 & BT 40	7816.63500
TB / HSK 100 & BT 50	7816.00500

Type	Part no.
Tool adapter for HSK & REGO-FIX CAPTO	
TB / HSK 25	7816.25500
TB / HSK 32 & C3	7816.32500
TB / HSK 40 & C4	7816.40500
TB / HSK 50 & C5	7816.50500
TB / HSK 63 & C6 & BT 40	7816.63500
TB / HSK 100 & BT 50	7816.00500

REGO-FIX CAPTO - licensed by Sandvik Coromant





REGO-FIX ▲



A close-up photograph of a precision metal tool holder assembly. The assembly consists of a cylindrical base with a flange, a central shaft, and a top cap. The base is mounted on a blue machine component. The top cap has a central hole and a flange with four screws. The central shaft is visible through the hole. The assembly is mounted on a blue machine component with a black plate. The plate has the text "HSK63/C6/BT40" printed on it.

HSK63/C6/BT40



Contents

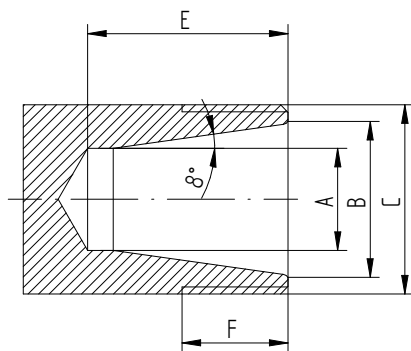
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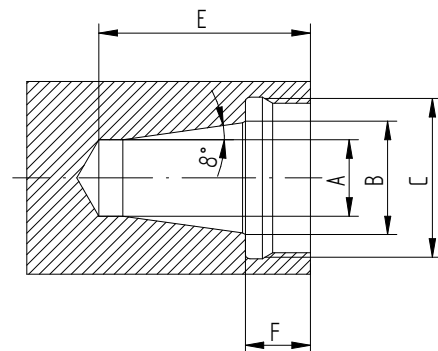


Dimensions for ER collet cavities in machine spindles and matching clamping nuts

ER size	Diameter range [mm]	Hi-Q®										Measurements [mm]				
		ER	ERC	ERB	ERBC	ERM	ERMC	ERMx	ERMxC	AX	AXC	A	B	C	E	F
11	0.5–7.0	•	•	–	–	–	–	–	–	–	–	7.5	11	M 14 x 0.75	17	10
16	0.5–10.0	•	•	•	•	–	–	–	–	–	–	10.5	16	M 22 x 1.5	22	13
20	0.5–13.0	•	•	•	•	–	–	–	–	–	–	13.5	20	M 25 x 1.5	26.5	13.5
25	0.5–17.0	•	•	•	•	–	–	–	–	–	–	18.0	25	M 32 x 1.5	29	14
32	1.0–22.0	•	•	•	•	–	–	–	–	–	–	23.5	32	M 40 x 1.5	34	16
40	2.0–30.0	•	•	•	•	–	–	–	–	–	–	30.5	40	M 50 x 1.5	38	17
50	4.0–36.0	•	•	•	•	–	–	–	–	–	–	38	50	M 64 x 2	48	24
8	0.5–5.0	–	–	–	–	•	–	•	–	–	–	5.2	8	M 10 x 0.75	13	8
11	0.5–7.0	–	–	–	–	•	•	•	•	–	–	7.5	11	M 13 x 0.75	17	8.5
16	0.5–10.0	–	–	–	–	•	•	•	•	–	–	10.5	16	M 19 x 1	22	13
20	0.5–13.0	–	–	–	–	•	•	•	•	–	–	13.5	20	M 24 x 1	26.5	13.5
25	0.5–17.0	–	–	–	–	•	•	•	•	–	–	18	25	M 30 x 1	29	14
11	0.5–7.0	–	–	–	–	–	–	–	–	•	–	7.5	11	M 18 x 1	23	7
16	0.5–10.0	–	–	–	–	–	–	–	–	•	•	10.5	16	M 24 x 1	32	10
20	0.5–13.0	–	–	–	–	–	–	–	–	•	•	13.5	20	M 28 x 1.5	37.5	11
25	0.5–17.0	–	–	–	–	–	–	–	–	•	•	18	25	M 32 x 1.5	41	12
32	1.0–22.0	–	–	–	–	–	–	–	–	•	•	23.5	32	M 40 x 1.5	48	12
40	2.0–30.0	–	–	–	–	–	–	–	–	•	•	30.5	40	M 50 x 1.5	54	16



All other standard ER cavities

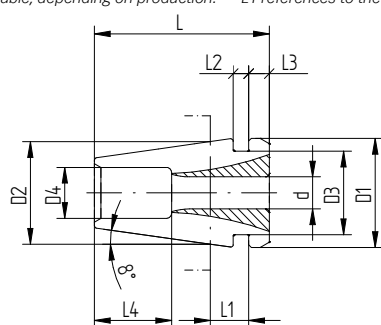


ER AX and ER AXC cavities

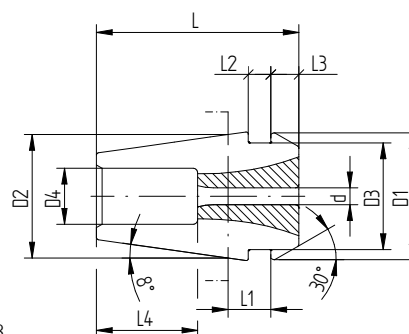
ER collets dimensions

Size [mm]		Measurements [mm]									Drawing
D2	d	D1	D2	D3	D4	L	L1**	L2	L3	L4	
ER 8	1.0–2.5	8.5	8	6.5	4	13.6	2.98	1.2	1.5	6.	1
ER 8	3.0–5.0	8.5	8	6.5	–	13.6	2.98	1.2	1.5	–	2
ER 11	1.0–2.5	11.5	11	9.5	5	18	3.8	2	2.5	9	3
ER 11	3.0–7.0	11.5	11	9.5	–	18	3.8	2	2.5	–	4
ER 16	1.0–1.59	17	16	13.8	7.5	27.5	6.26	2.7	4	13	3
ER 16	2.0–4.76	17	16	13.8	7.5	27.5	6.26	2.7	4	10	3
ER 16	5.0–10.0	17	16	13.8	–	27.5	6.26	2.7	4	–	4
ER 16	9.5–10.0	17	16	13.8	–	26*	6.26	2.7	4	–	4
ER 20	1.0–1.59	21	20	17.4	9	31.5	6.36	2.8	4.8	16	3
ER 20	2.0–6.50	21	20	17.4	9	31.5	6.36	2.8	4.8	13	3
ER 20	7.0–13.0	21	20	17.4	–	31.5	6.36	2.8	4.8	–	4
ER 25	1.0–1.59	26	25	22	12	34	6.66	3.1	5	18	3
ER 25	2.0–7.50	26	25	22	12	34	6.66	3.1	5	15	3
ER 25	8.0–17.0	26	25	22	–	34	6.66	3.1	5	–	4
ER 32	2.0–4.76	33	32	29.2	15	40	7.16	3.6	5.5	20	3
ER 32	5.0–7.5	33	32	29.2	15	40	7.16	3.6	5.5	15	3
ER 32	8.0–22.0	33	32	29.2	–	40	7.16	3.6	5.5	–	4
ER 40	3.0–4.76	41	40	36.2	20	46	7.66	4.1	7	24	3
ER 40	5.0–8.5	41	40	36.2	20	46	7.66	4.1	7	18	3
ER 40	9.0–30.0	41	40	36.2	–	46	7.66	4.1	7	–	4
ER 50	6.0–10.0	52	50	46	20	60	12.6	5.5	8.5	32	3
ER 50	12.0–36.0	52	50	46	–	60	12.6	5.5	8.5	–	4

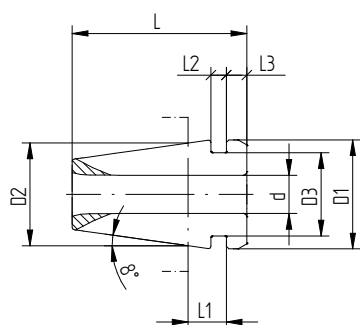
* Up to 27.5 available, depending on production. ** L1 references to the top plane of the collehther.



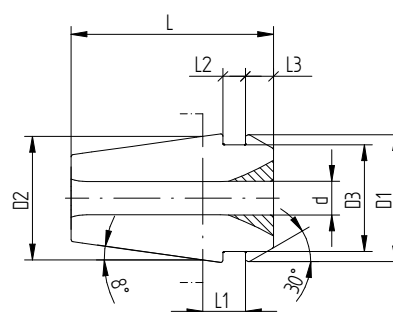
Drawing 1



Drawing 3



Drawing 2



Drawing 4

Increase collet and tool life

Optimize your surface finishes and extend tool life by minimizing occurring vibrations during machining.

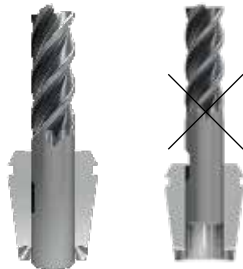
Always assemble correctly

First, clip the collet in the nut. Second, insert the tool shank more than $\frac{2}{3}$ into the collet.

1.



2.



Listen to the click

Do not tighten the torque wrench further after the first click is heard.



Get your TORCO-FIX. Check page 146 for order details.

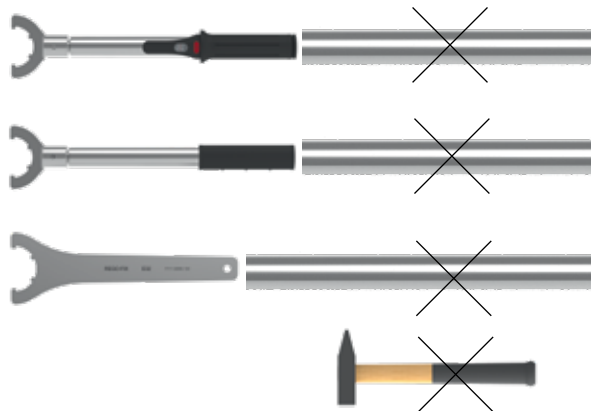
Only use REGO-FIX wrenches

To mount the collet in the toolholder please use one of these special wrenches. Preferably the torque wrench, as they display the amount of applied force.



Regular wrenches can also be used. Be aware that only the torque wrench will display the exact amount of applied force, making it the most exact tool to mount collets professionally.

Never use any extensions nor hammers



Recommended tightening torque for ER clamping nuts

			Hi-Q®/ER clamping nuts												TORCO-FIX		
			ER/ERC		ERB/ERBC		ERM/ERMC		ERMx/ERMxC		ERAx/ERAXC		ER MS				
													Collets [Nm]			Collets [Nm]	
			ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB		ER*	
Collet size	Ø [mm]	Ø [inch]	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*	ER-GB	ER*				
ER 8 MB	0.2–0.9	0.0078–0.035	–	–	–	–	6	–	6	–	–	–	6	0			
ER 8	1.0–5.0	0.039–0.196	–	–	–	–	6	–	6	–	–	–	6	0			
ER 11 MB	0.2–0.9	0.0078–0.035	8	–	–	–	8	–	8	–	8	–	8	0, I			
ER 11	1.0–2.9	0.039–0.098	8	8	–	–	8	8	8	8	8	8	10	0, I			
	3.0–7.0	0.118–0.256	24	16	–	–	16	13	16	13	24	21	10	0, I			
ER 16 MB	0.2–0.9	0.0078–0.035	8	–	–	–	8	–	8	–	8	–	12	0, I			
ER 16	1.0	0.039	8	–	6.4	–	8	–	8	–	8	–	12	0, I			
	1.5–3.5	0.059–0.138	20	–	16	–	20	–	20	–	20	–	20	0, I			
	4.0–4.5	0.157–0.177	40	40	32	32	24	–	24	–	40	40	20	I, II			
	5.0–10.0	0.197–0.394	56	44	56	44	24	–	24	–	40	40	–	II			
ER 20	1.0	0.039	16	–	12	–	16	–	16	–	16	–	12	0, I			
	1.5–6.5	0.059–0.256	32	32	24	24	28	28	28	28	52	35	18.4	I, II			
	7.0–13.0	0.276–0.512	80	35	80	24	28	28	28	28	52	35	18.4	I, II			
	1.0–3.5	0.059–0.138	24	–	20	–	24	–	24	–	24	–	–	I, II			
ER 25	4.0–4.5	0.157–0.177	56	56	48	48	32	32	32	32	56	56	–	I, II			
	5.0–7.5	0.196–0.295	80	80	72	72	32	32	32	32	80	80	–	II, III			
	8.0–17.0	0.315–0.669	104	80	104	79	32	32	32	32	80	80	–	II, III			
	2.0–2.5	0.078–0.098	24	24	20	–	–	–	–	–	24	–	–	I, II			
ER 32	3.0–7.5	0.118–0.291	136	136	128	90	–	–	–	–	104	90	–	II, III			
	8.0–22.0	0.315–0.787	136	136	136	90	–	–	–	–	104	90	–	II, III			
	3.0–26.0	0.118–1.023	176	176	176	176	–	–	–	–	128	128	–	II, III			
ER 40	6.0–36.0	0.236–1.417	240	300	240	300	–	–	–	–	–	–	–	III			

* Includes ER standard and ER-UP.

Expert advice

For best clamping results REGO-FIX advises to lightly oil the threads and the 30 degree face in the nut, this will avoid unwanted friction and significantly improve TIR, transferable torque and product lifetime.

Technical information for tapping collets ER-GB

ER-GB

x = not available
– = does not exist

			ER 11-GB		ER 16-GB		ER 20-GB		ER 25-GB		ER 32-GB		ER 40-GB		ER 50-GB	
<i>x</i> = not available – = does not exist			L = 18.0 L1 = 2.0 D1 = 11.3 D2 = 11.0		L = 27.5 L1 = 2.7 D1 = 16.8 D2 = 16.0		L = 31.5 L1 = 2.8 D1 = 20.8 D2 = 20.0		L = 34.0 L1 = 3.1 D1 = 25.8 D2 = 25.0		L = 40.0 L1 = 3.6 D1 = 32.8 D2 = 32.0		L = 46.0 L1 = 4.1 D1 = 40.8 D2 = 40.0		L = 60.0 L1 = 8.75 D1 = 51.8 D2 = 51.0	
d	SW	L2	L3	D3	L3	D3	L3	D3	L3	D3	L3	D3	L3	D3	L3	D3
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
2.8	2.1	12	–	–	x	x	x	x	x	x	x	x	x	x	x	x
3.5	2.7	14	–	–	x	x	x	x	x	x	x	x	x	x	x	x
4	3	14	–	–	x	x	x	x	x	x	x	x	x	x	x	x
4	3.15 / 3.2	ER 11=14 ER 16–32 =15	–	–	4.8	7.5	9.8	9	11.8	12	17.8	15	x	x	x	x
4.5	3.4	ER 11=14 ER 16–32 =15	–	–	4.8	7.5	9.8	9	11.8	12	17.8	15	x	x	x	x
5	4	ER 11=14 ER 16–32 =18	–	–	4.8	7.5	9.8	9	11.8	12	17.8	15	x	x	x	x
5.5	4.3	18	–	–	4.8	7.5	9.8	9	11.8	12	17.8	15	x	x	x	x
5.5	4.5	18	–	–	4.8	7.5	9.8	9	11.8	12	17.8	15	x	x	x	x
6	4.5	18	–	–	4.8	7.5	8.8	9	10.8	12	16.8	15	22.8	20	x	x
6	4.9	ER 11=14 ER 16–40 =18	–	–	4.8	7.5	8.8	9	10.8	12	16.8	15	22.8	20	x	x
6.2	5	18	x	x	4.8	7.5	8.8	9	10.8	12	16.8	15	22.8	20	x	x
6.3	5	18	x	x	4.8	7.5	8.8	9	10.8	12	16.8	15	22.8	20	x	x
7	5.5	18	x	x	3.8	8.0	7.8	9	9.8	12	15.8	15	21.8	20	x	x
7.1	5.6	18	x	x	3.8	8.0	7.8	9	9.8	12	15.8	15	21.8	20	x	x
8	6.2 / 6.3	22	x	x	–	–	2.8	10	4.8	12	10.8	15	16.8	20	x	x
8.5	6.5	22	x	x	–	–	2.8	10	4.8	12	10.8	15	16.8	20	x	x
9	7 / 7.1	22	x	x	–	–	2.8	10	3.8	12	9.8	15	15.8	20	x	x
10	8	25	x	x	x	x	–	–	–	–	6.8	15	12.8	20	x	x
10.5	8	25	x	x	x	x	–	–	–	–	6.8	15	12.8	20	x	x
11	9	25	x	x	x	x	–	–	–	–	5.8	15	11.8	20	x	x
11.2	9	25	x	x	x	x	–	–	–	–	5.8	15	11.8	20	x	x
12	9	25	x	x	x	x	–	–	–	–	5.8	15	11.8	20	x	x
12.5	10	25	x	x	x	x	x	x	–	–	4.8	15	10.8	20	x	x
14	11 / 11.2	25	x	x	x	x	x	x	–	–	3.8	17	9.8	20	x	x
15	12	25	x	x	x	x	x	x	–	–	3.8	17	9.8	20	x	x
16	12 / 12.5	25	x	x	x	x	x	x	–	–	2.8	18	8.8	20	x	x
17	13	25	x	x	x	x	x	x	x	x	2.8	19.5	8.8	20	x	x
18	14.5	25	x	x	x	x	x	x	x	x	2.8	21	7.8	21	x	x
20	16	28	x	x	x	x	x	x	x	x	2.8	21.5	3.8	22	x	x
22	18	ER 40 = 28 ER 50 = 41	x	x	x	x	x	x	x	x	–	–	3.8	24	x	x
25	20	41	x	x	x	x	x	x	x	x	x	x	–	–	–	–
28	22	41	x	x	x	x	x	x	x	x	x	x	x	x	–	–
32	24	41	x	x	x	x	x	x	x	x	x	x	x	x	–	–

Type	Measurements [mm]							
	d	D1	D2	L	L1	L2	L3	L4
PCM ET1-12	3.55	7	11.5	18	16.5	2.5	5	5.5
PCM ET1-16	6.3	11	17	22	20	2.8	7	7
PCM ET1-20	7.1	14	21	24	23	2.8	8	7
PCM ET1-25	10	19	26	26	24	3	10	8
PCM ET1-32	12.5	23	33	33	32	3	1	10
PCM ET1-40	17	28	41	42	42	3	12	13

Expert advice

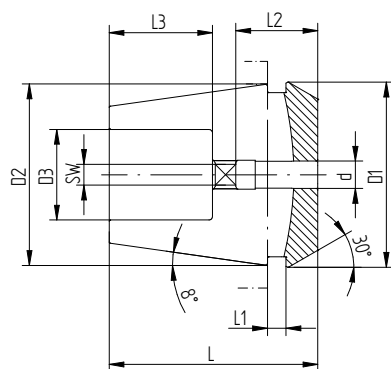
Do not use for coolant through tools and for applications with sealing disks.

Technical information for microbore collets

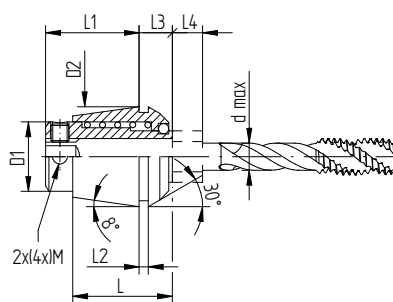
Type	Measurements [mm]									
	d	D1	D2	D3	D4	L	L1	L2	L3	L4
ER 8-MB	0.2–0.9	8.5	8	6.5	4	13.5	1.2	1.2	1.5	6
ER 11-MB	0.2–0.9	11.5	11	9.5	5	18	2	2	2.5	9
ER 16-MB	0.2–0.9	17	16	13.8	7.5	27.5	6.3	2.7	4	13

Expert advice

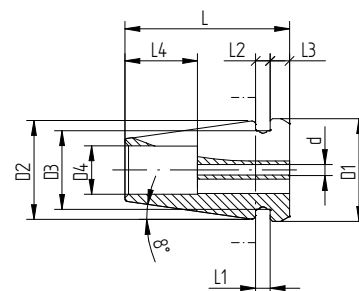
ER-MB collets have no clamping range. Only nominal diameters h7 can be clamped.



ER-GB, page 162



PCM ET1



ER-MB

Spindle interface norms

SK

DIN 69871

BT

MAS 403

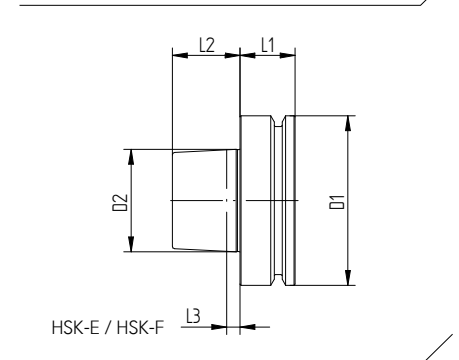
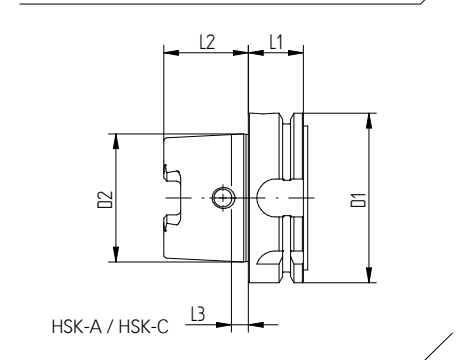
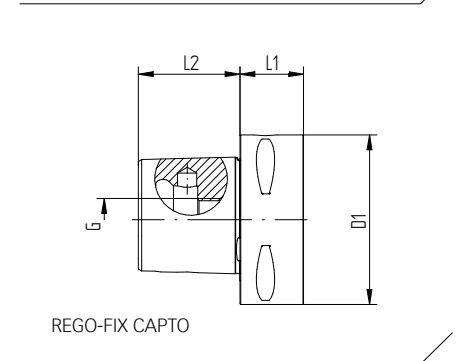
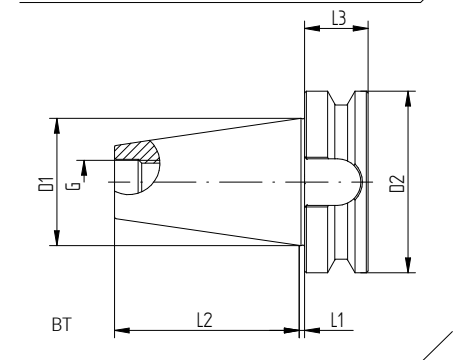
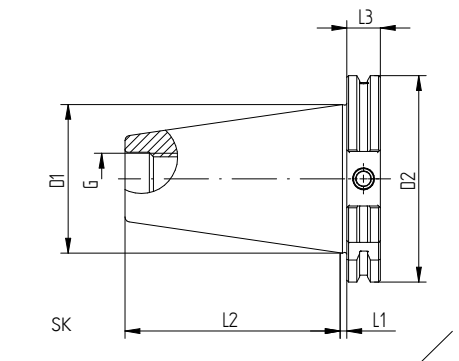
CAPTO

ISO 26623

HSK

DIN 69893

Type	Measurements [mm]					G
	D1	D2	L1	L2	L3	
SK DIN 69871						
SK 30	31.75	50	3.2	47.8	15.85	M 12
SK 40	44.45	63.55	3.2	68.4	15.85	M 16
SK 50	69.85	97.5	3.2	101.75	15.85	M 24
BT MAS 403						
BT 30	31.75	46	2	48.4	20	M 12
BT 40	44.45	63	2	65.4	25	M 16
BT 50	69.85	100	3	101.8	35	M 24
Polygon shank CAPTO ISO 26623						
Polygon shank C3	32	–	15	19	–	M 12 x 1.5
Polygon shank C4	40	–	20	24	–	M 14 x 1.5
Polygon shank C5	50	–	20	30	–	M 16 x 1.5
Polygon shank C6	63	–	22	38	–	M 20 x 2
Polygon shank C8	80	–	30	48	–	M 20 x 2
HSK DIN 69893						
HSK-A 25	25	19	10	13	2.5	–
HSK-C 25	25	19	8	13	2.5	–
HSK-E 25	25	19	10	13	2.5	–
HSK-A 32	32	24	20	16	3.2	–
HSK-C 32	32	24	10	16	3.2	–
HSK-E 32	32	24	20	16	3.2	–
HSK-A 40	40	30	20	20	4	–
HSK-C 40	40	30	10	20	4	–
HSK-E 40	40	30	20	20	4	–
HSK-A 50	50	38	26	25	5	–
HSK-C 50	50	38	12.5	25	5	–
HSK-E 50	50	38	26	25	5	–
HSK-F 50	50	30	26	20	4	–
HSK-A 63	63	48	26	32	6.3	–
HSK-C 63	63	48	12.5	32	6.3	–
HSK-E 63	63	48	26	32	6.3	–
HSK-F 63	63	38	26	25	5	–
HSK-A 80	80	60	26	40	8	–
HSK-C 80	80	60	16	40	8	–
HSK-F 80	80	48	26	32	6.3	–
HSK-A 100	100	75	29	50	10	–
HSK-C 100	100	75	16	50	10	–
HSK-E 100	100	70	29	50	10	–



Shank diameter of taps

TAP

Thread		ISO 529*		ISO 2283		DIN 371		DIN 357/376		DIN 352		JIS B 4430 1998		ASME B 94.9 1999	
[mm]	[inch]	[Ø]	[□]	[Ø]	[□]	[Ø]	[□]	[Ø]	[□]	[Ø]	[□]	[Ø]	[□]	[Ø]	[□]
M 1	–	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	–	–
M 1.1	–	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	–	–
M 1.2	–	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	–	–
M 1.4	–	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	–	–
M 1.6	1/16	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	0.141	0.11
M 1.7	–	–	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	–	–
M 1.8	–	2.5	2	–	–	2.5	2.1	–	–	2.5	2.1	3	2.5	0.141	0.11
M 2	–	2.5	2	–	–	2.8	2.1	–	–	2.8	2.1	3	2.5	0.141	0.11
M 2.2	–	2.8	2.24	–	–	2.8	2.1	–	–	2.8	2.1	3	2.5	0.141	0.11
M 2.3	–	–	–	–	–	2.8	2.1	–	–	2.8	2.1	3	2.5	–	–
M 2.5	3/32	2.8	2.25	–	–	2.8	2.1	–	–	2.8	2.1	3	2.5	0.141	0.11
M 2.6	–	–	–	–	–	2.8	2.1	–	–	2.8	2.1	3	2.5	–	–
M 3	1/8	3.15	2.5	2.24	1.8	3.5	2.7	2.2	–	3.5	2.1	4	3.2	0.141	0.11
M 3.5	–	3.55	2.8	2.5	2	4	3	2.5	2.1	4	3	4	3.2	0.141	0.11
M 4	5/32	4	3.15	3.15	2.5	4.5	3.4	2.8	2.1	4.5	3.4	5	4	0.168	0.131
M 4.5	3/16	4.5	3.55	3.55	2.8	6	4.9	3.5	2.7	6	4.9	5	4	0.194	0.152
M 5	–	5	4	4	3.15	6	4.9	3.5	2.7	6	4.9	5.5	4.5	0.194	0.152
M 6	1/4	6.3	5	4.5	3.55	6	4.9	4.5	3.4	6	4.9	6	4.5	0.255	0.191
M 7	5/16	7.1	5.6	5.6	4.5	7	5.5	5.5	4.3	6	4.9	6.2	5	0.318	0.238
M 8	–	8	6.3	6.3	5	8	6.2	6	4.9	6	4.9	6.2	5	0.318	0.238
M 9	–	9	7.1	7.1	5.6	9	7	7	5.5	7	5.5	7	5.5	–	–
M 10	3/8	10	8	8	6.3	10	8	7	5.5	7	5.5	7	5.5	0.318	0.286
M 11	–	8	6.3	8	6.3	–	–	8	6.2	8	6.2	8	6	–	–
M 12	1/2	9	7.1	9	7.1	–	–	9	7	9	7	8.5	6.5	0.367	0.275
M 14	9/16	11.2	9	11.2	9	–	–	11	9	11	9	10.5	8	0.429	0.322
M 16	5/8	12.5	10	12.5	10	–	–	12	9	12	9	12.5	10	0.48	0.36
M 18	11/16	14	11.2	14	11.2	–	–	14	11	14	11	14	11	0.542	0.406
M 20	13/16	14	11.2	14	11.2	–	–	16	12	16	12	15	12	0.652	0.489
M 22	7/8	16	12.5	16	12.5	–	–	18	14.5	18	14.5	17	13	0.697	0.523
M 24	15/16	18	14	18	14	–	–	18	14.5	18	14.5	19	15	0.76	0.571
M 27	1/16	20	16	–	–	–	–	20	16	20	16	20	15	0.896	0.672
M 30	3/16	20	16	–	–	–	–	22	18	22	18	23	17	1.021	0.766

All dimensions in mm (except US Standard ASME B 94.9 in inch).

* M 3–M 10 with reinforced shank.

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