



ER System

The pioneering toolholding system

Product catalog

REGO-FIX 

Providing solutions for cutting-edge toolholding

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Experience the widest ER range

1.0 ER collets

| Standard | | | | Cylindrical collets | | | | Collet holders 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) |
| | | | | | | | | | | | | | | | |
| page 22 | page 28 | page 38 | page 44 | page 48 | page 52 | page 57 | page 58 | page 60 | page 62 | page 64 | page 66 | page 66 | page 68 | page 72 | page 74 |

2.0 ER collets

| 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 |
| | | | | | |
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3.0 ER clamping nuts, reCool®, disks

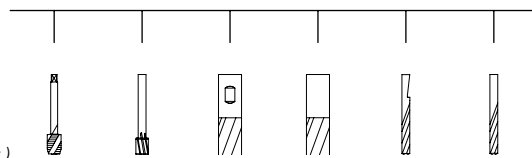
| Standard | | Standard with bearing | | Mini nut | | Slip-off proof mini nut | | ER MS | External thread | | Sealing and coolant flush disks | | |
|----------|-----------|-----------------------|------------|-----------|--------------|--------------------------|--------------------------|----------|-----------------|-------------|---------------------------------|----------|----------|
| 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(X) 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

For torque wrenches and other accessories please refer to page 142.

Suitable for carbide or HSS milling cutter in all shank forms (Weldon, Whistle-Notch, etc.)





At a glance

Providing solutions for cutting-edge toolholding

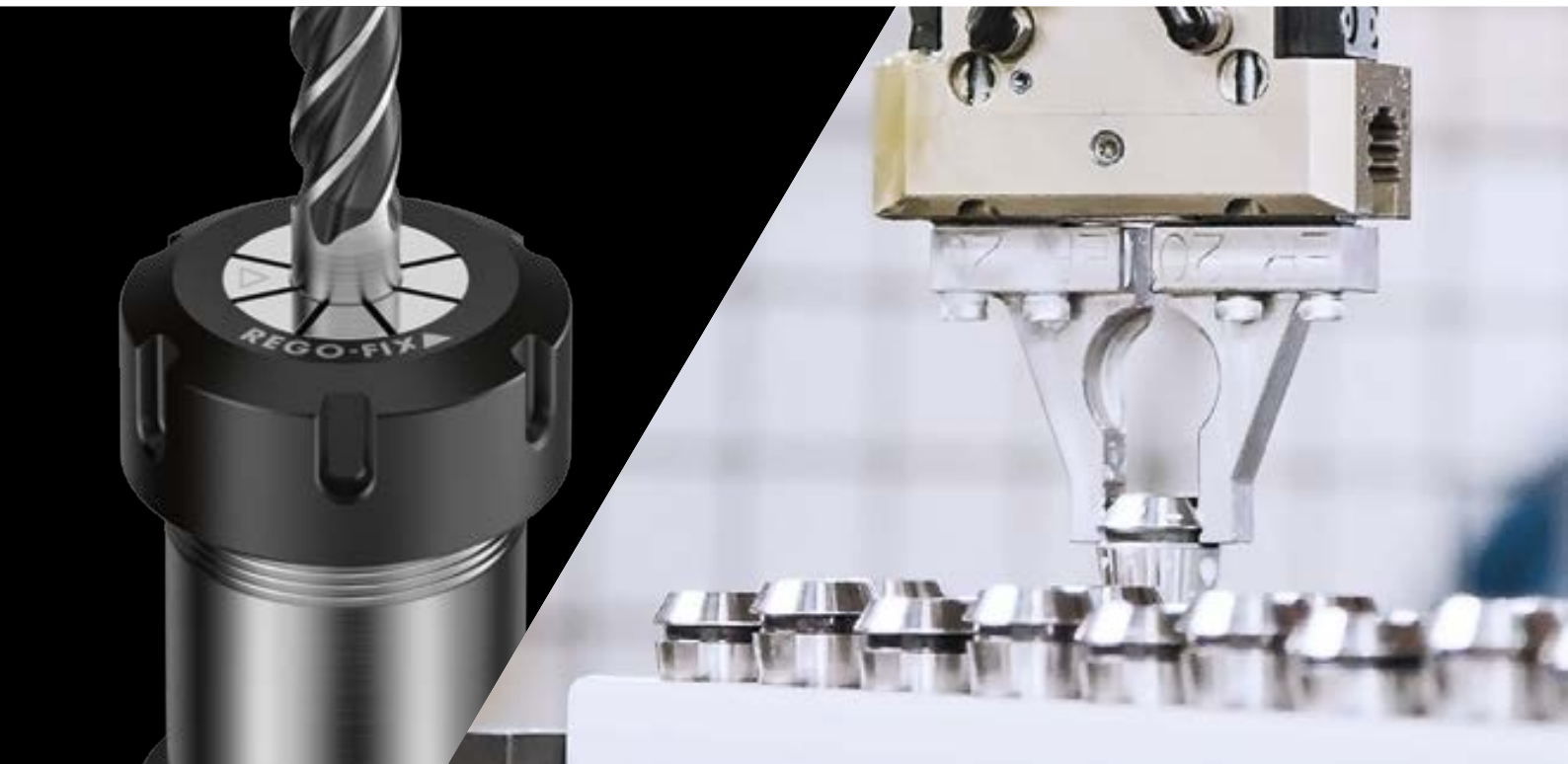
Our holistic toolholding systems excel with extraordinary reliability, high precision and outstanding quality.

Pioneering spirit Fritz Weber, a Swiss master craftsman, tapped into the promising optimism in the 1950s and founded a small business called Fritz Weber Feinmechanik und Werkzeugbau. With his innovative spirit and stern determination, Fritz Weber gradually expanded his range of products. The company, now called REGO-FIX AG, achieved international recognition in 1972 with the invention of the ER clamping system. Thus, changing the toolholding industry forever. The ER System, made in Switzerland, is an industrial standard clamping element. It set the industry standard and even became DIN Standard (DIN 6499) in 1993. Today, the ER collet made by REGO-FIX is still the most used clamping collet worldwide.

Shaping the future REGO-FIX is an international family-owned company that is run by the sons of Fritz Weber. With its over 220 employees, REGO-FIX manufactures and markets high-precision toolholding systems worldwide. Headquartered in Tenniken, Switzerland, the company has established itself

as one of the leading manufacturers of toolholding systems and enjoys an excellent industry-wide reputation. Through its close network of distributors and subsidiaries in the US and China, REGO-FIX is strategically well positioned and possesses a worldwide presence in key markets. With groundbreaking product inventions, REGO-FIX developed from a small company to a global solution provider for cutting-edge toolholding systems. At the core of every product lies an aim for machining excellence and a passion for precision.

Cradle of precision REGO-FIX manufactures its products in Switzerland to fit highest quality standards. The products are used in the fields of automotive, aerospace, medical engineering, watchmaking, telecommunications and also in the die and mold industry.

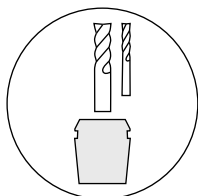


ER System

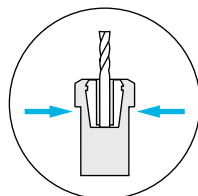
Defining toolholding standards

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.

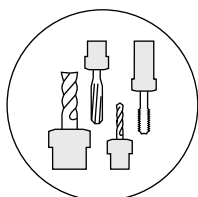
Key advantages



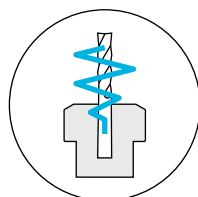
The widest ER product range: clamps all diameters from 0.2 mm – 36 mm.



Safe and accurate toolholding of all shank types and materials.



Outstanding flexibility for use with all tool types.

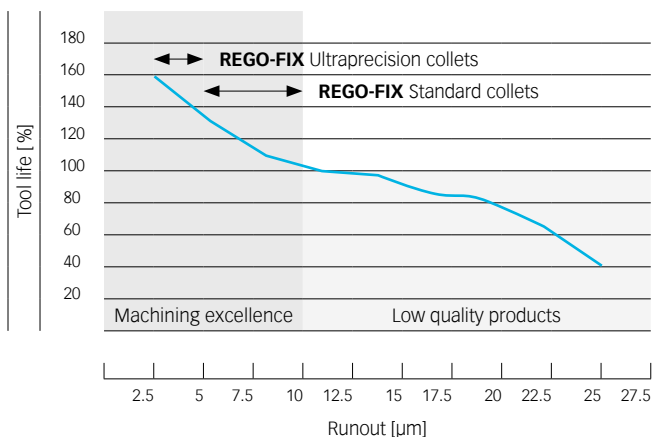


High vibration-dampening results in longer tool life and best surface finish.

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

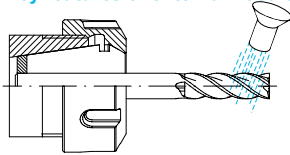
Cons

- // 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

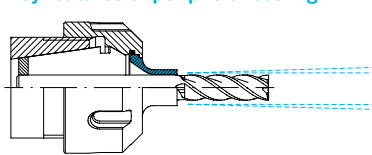


Key features of external flood cooling



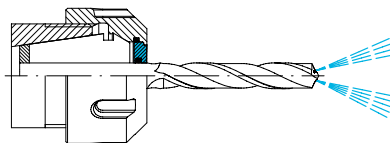
- // Universal application possibilities
- // Problems may arise with deep cavities
- // Reduction of tool life because cooling is not right on the cutting edge
- // Suboptimal chip deflection
- // Limited adjustment of nozzles due to different tool lengths and diameters

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.

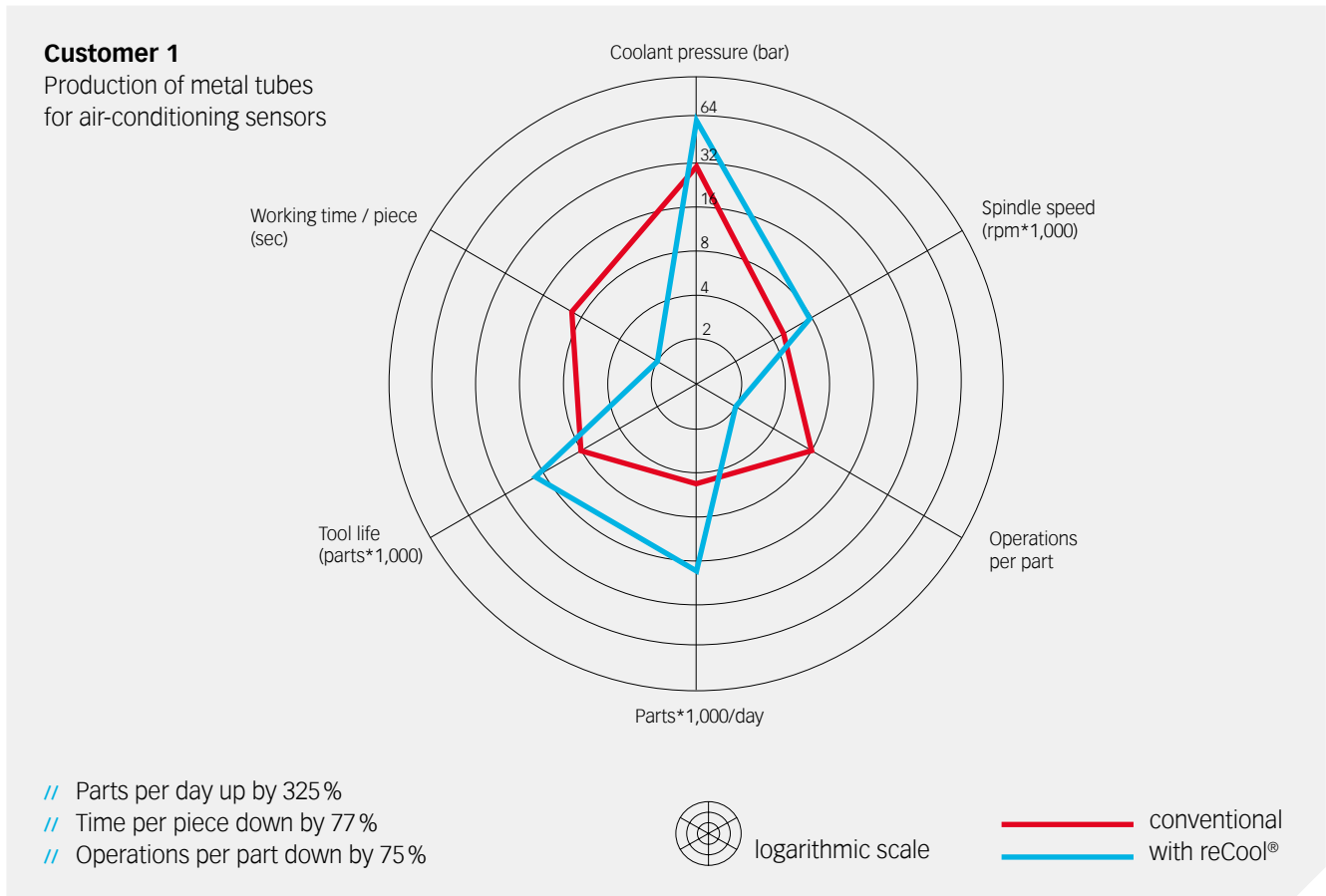


Advantages of internal cooling with reCool®

- // 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®

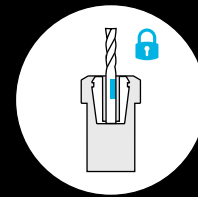
Form-fit for 100% pullout protection

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

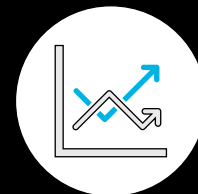


Threaded insert for end mill flat

Key advantages



ER secuRgrip® is available for all standard tools with Weldon flat (12 – 25 mm), without additional modifications.

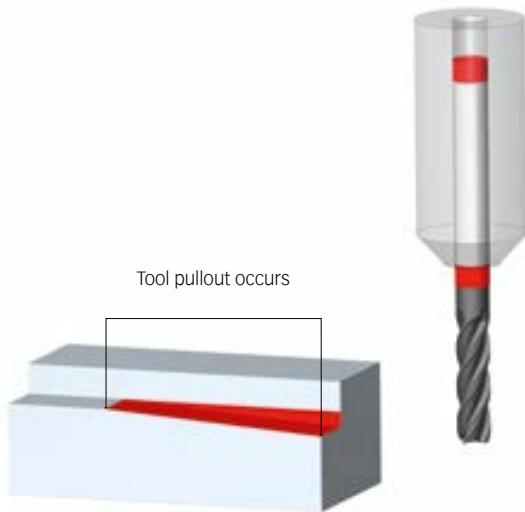


Increase productivity through process reliability.

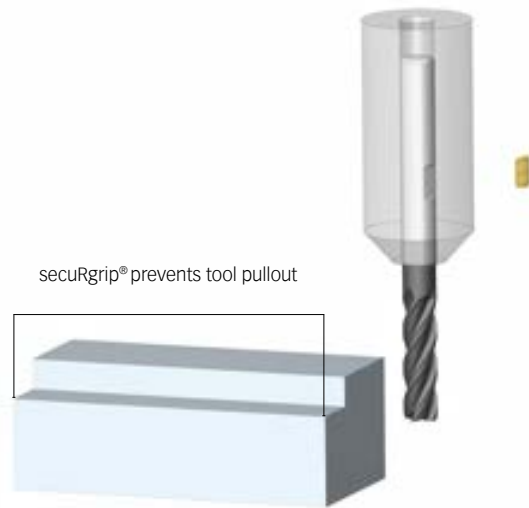
Fitted to REGO-FIX ER standards:

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.

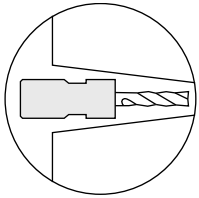


XL vibration dampening

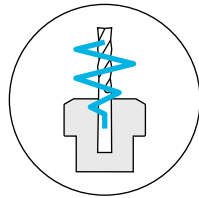
Optimize your surface finishes and extend tool life by minimizing occurring vibrations during machining.

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.

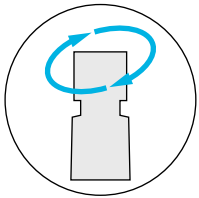
Key advantages



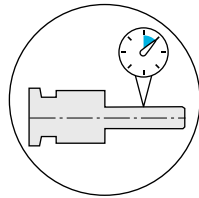
Minimal outside dimensions: long and slim design.



Exclusive vibration-dampening design.



Balanced by design.

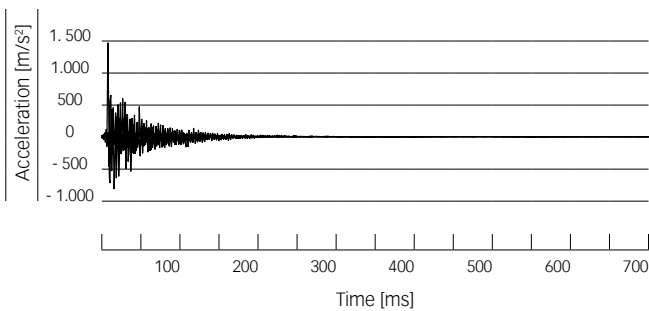


TIR I.D. to O.D. $\leq 10 \mu\text{m}$.



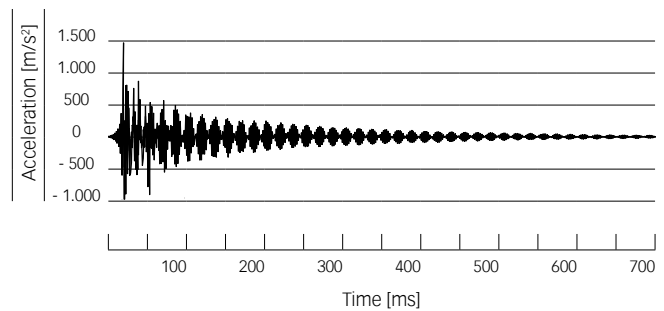
Vibration chart for the ER System

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




Vibration chart for the ER System

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














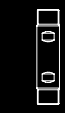
We engineer and manufacture our products at our headquarters. From Tenniken, we deliver our innovative Swiss-made toolholding systems worldwide.


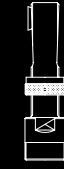

True Swiss quality

Standard



| | | | |
|---|---|---|---|
| SK/ ER | BT/ ER | HSK/ ER | REGO-FIX- CAPTO/ER <small>licensed by Sandvik Coromant</small> |
|  |  |  |  |
| page 22 | page 28 | page 38 | page 44 |

Cylindrical collets



| | | | |
|---|---|---|---|
| CYL/ ER | CYL/ ERM(X) CYLF/ ERM(X) | CYL/ ER NC | CYDF/ ERM CYDF/ ERM(X) |
|  |  |  |  |
| page 48 | page 52 | page 57 | page 58 |

| | | |
|---|---|--|
| MK/ ER | SH/ ER | ISO 20/ ER |
|  |  |  |
| page 60 | page 62 | page 64 |

Collet holders for tapping

| | |
|---|---|
| HSK-A SSY | CYL SSY CYL GSF |
|  |  |
| page 66 | page 66 |

Floating chucks

| | |
|---|---|
| PH/ER PHC/ER PHC-C/ER | MPH/ ERM(X) |
|  |  |
| page 68 | page 72 |

Collet reductions

| |
|---|
| ER(M)/ ERM ER(MX)/ ERM(X) |
|  |
| page 74 |



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 @ 22,000 rpm.

Balancing in XL collets

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

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

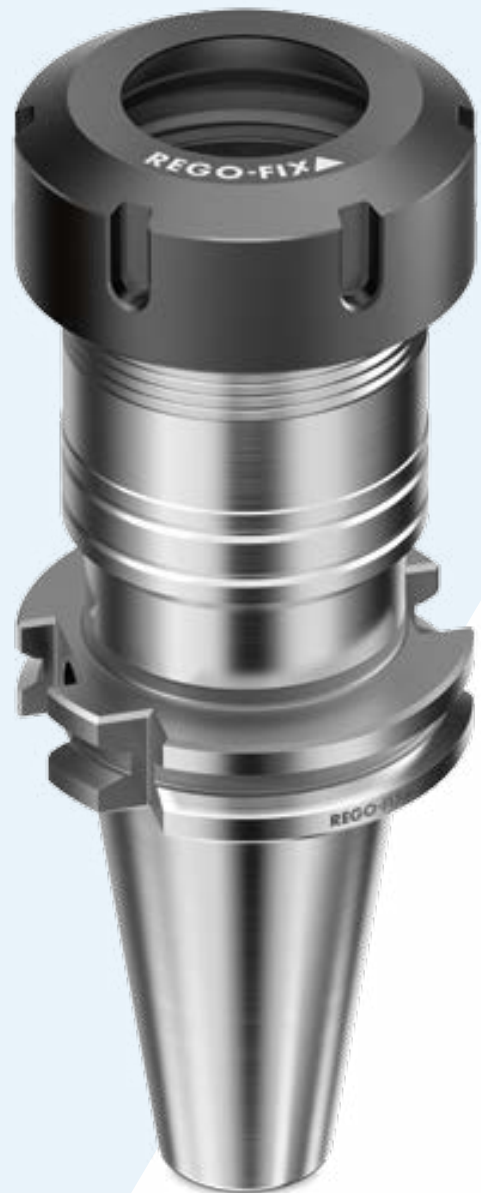
Guarantees highest clamping force and best balancing.

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.



Information



SK / ER and SK / ER XL colletholders

Applications

These colletholders 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 colletholders are balanced to G 2.5 @ 22,000 rpm. Type H colletholders 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 colletholders cannot be used.

For more details on our XL colletholders, 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.

Information



SK / ERA colletholders

Applications

These colletholders 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® colletholders 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 colletholders are balanced to G 2.5 @ 22,000 rpm. 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 using a torque wrench.

For tightening torque recommendations, please refer to page 157.

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

1.1.1 SK SK-B

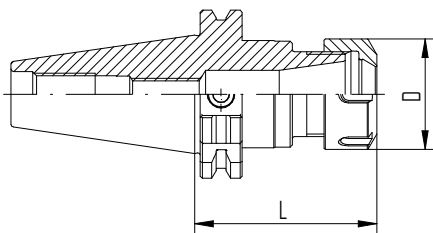
| Type | Part no. | Dimensions [mm] | | | | Accessories | |
|-------------------------|------------|-----------------|----|-----|----|-------------|--------|
| | | D | D1 | L | L1 | FWR ...* | Wrench |
| SK-B 40 | | | | | | | |
| SK-B 40 / ER 11 x 100 H | 4240.11153 | 19 | – | 100 | – | 325 | E 11 P |
| 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

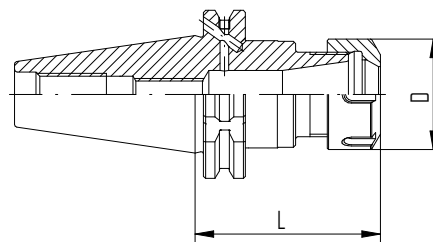
Included in delivery: ER colletholders come with Hi-Q® / ER clamping nut. ERA colletholders come with Hi-Q® / ERAX clamping nuts.

H: Ready to accept balancing rings

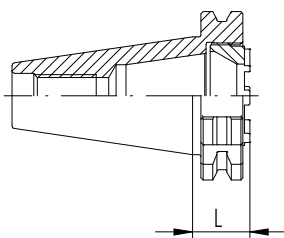
Accessories are not included in delivery.



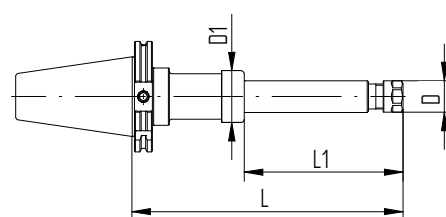
SK / ER (form A+AD)



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 collets BT

Universally suitable for different machining applications, the BT interface collets 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 @ 22,000 rpm.

Balancing in XL collets

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

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.



Information



BT / ER and BT / ER XL colletholders

Applications

These colletholders 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 colletholders are balanced to G 2.5 @ 22,000 rpm. Type H colletholders 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 colletholders cannot be used.

For more details on our XL colletholders, 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.

Information



BT / ERA colletholders

Applications

These colletholders 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® colletholders 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 colletholders are balanced to G 2.5 @ 22,000 rpm. 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 using a torque wrench.

For tightening torque recommendations, please refer to page 157.

BT colletholders

ERA Zero-Z® colletholder

BT
MAS 403
JIS B 6339
DIN ISO 7388-2

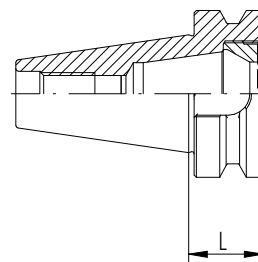
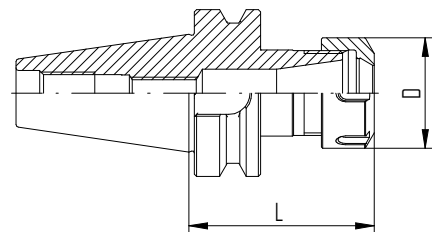
| Type | Part no. | Dimensions [mm] | | | | Accessories | |
|-----------------------------|------------|-----------------|----|-----|----|-------------|---------|
| | | D | D1 | L | L1 | FWR ...* | Wrench |
| BT 30 | | | | | | | |
| BT 30 / ER 11 x 050 | 2130.11110 | 19 | – | 50 | – | – | E 11 P |
| 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 colletholders

ERA Zero-Z[®] colletholder

BT

MAS 403

JIS B 6339

DIN ISO 7388-2

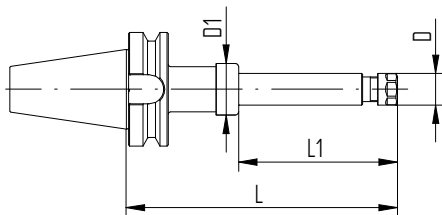
| Type | Part no. | Dimensions [mm] | | | | Accessories | |
|----------------------------|------------|-----------------|----|-----|-----|-------------|---------|
| | | D | D1 | L | L1 | FWR ...* | Wrench |
| BT 40 | | | | | | | |
| BT 40 / ER 11 x 100 H | 4140.11150 | 19 | – | 100 | – | 285 | E 11 P |
| 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.

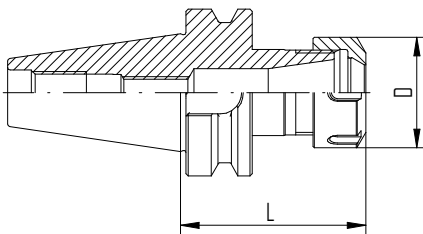
| Type | Part no. | Dimensions [mm] | | | | Accessories | |
|-----------------------|------------|-----------------|----|-----|----|-------------|--------|
| | | D | D1 | L | L1 | FWR ...* | Wrench |
| BT-B 50 | | | | | | | |
| BT-B 50/ER 16 x 100 H | 4150.11653 | 28 | – | 100 | – | 505 | E 16 P |
| 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

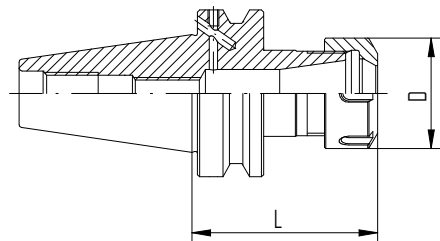
Included in delivery: ER colletholders come with HI-Q®/ER clamping nut. ERA colletholders come with HI-Q®/ERAX clamping nuts.

H: Ready to accept balancing rings

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



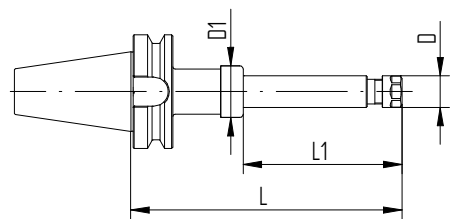
BT / ER (form A+AD)



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.

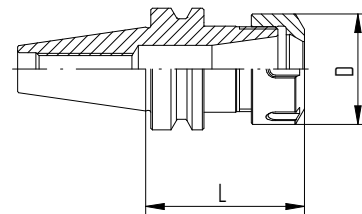
Balancing

REGO-FIX BT-OM / ER(A) colletholders are balanced to G 2.5 @ 22,000 rpm. 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.

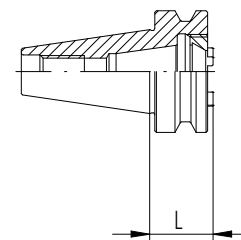
Matched tooling system for best fit

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

A close-up photograph of a man's hands holding a small, circular metal component. The component is a dark, metallic ring with a central hole and several radial slots. The man's face is blurred in the background, looking intently at the part. The foreground shows a large quantity of similar components, suggesting a manufacturing or assembly process.

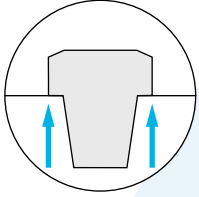
All our products are manufactured to meet our high demands in engineering and design. We say Swiss made and we mean it. Products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

True Swiss quality

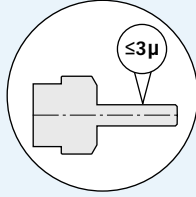
BT+ REGO PLUS dual contact colletholders

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

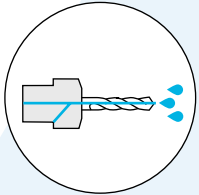
Key advantages



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



Improved machining accuracy and better surface finish.



Form AD+B as standard configuration.

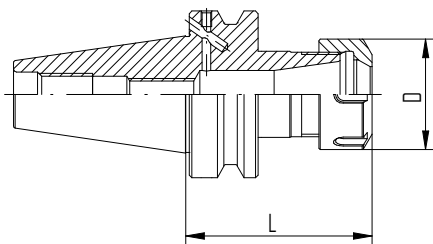


| Type | Part no. AD+B | Dimensions [mm] | | | | Accessories | |
|------------------------|---------------|-----------------|----|-----|----|-------------|--------|
| | | D | D1 | L | L1 | FWR ...* | Wrench |
| BT+ 30 | | | | | | | |
| BT+ 30 / ER 11 x 100 H | 4130.11156 | 19 | – | 100 | – | 225 | E 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.



BT+ / ER

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.

Balancing in XL colletholders

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

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.

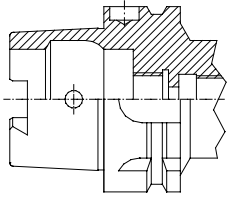


HSK forms and their key characteristics

HSK

DIN 69893

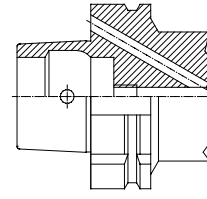
ISO 12164



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

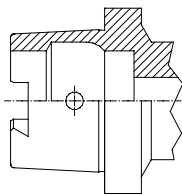
* Also usable in form C applications with side hole for manual tool change.



Form B

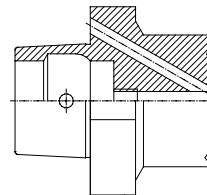
- // For machining centers, milling and turning machines
- // With enlarged flange size for higher radial rigidity
- // For automatic tool change
- // Coolant supply through the flange
- // Drive keys at the flange

Available on request.



Form C

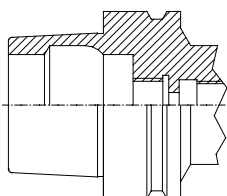
- // For transfer lines, special machines and modular tooling systems
- // For manual tool change
- // Drive keys at the end of HSK taper



Form D

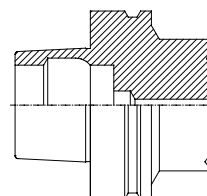
- // For special machines
- // With enlarged flange size for higher radial rigidity
- // For manual tool change
- // Coolant supply through the flange
- // Drive keys at the flange

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.

HSK-A colletholders

HSK-A

DIN 69893

ISO 12164

| 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 |

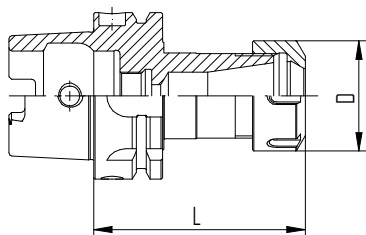
* Balancing rings H: Ready to accept balancing rings

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

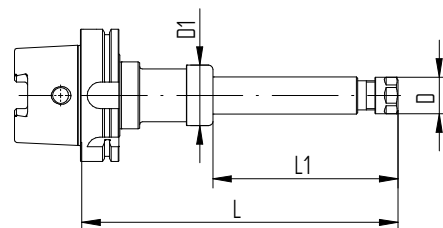
HSK-A: Hole for data carrier DIN STD 69873 in the flange available on request.

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

HSK-C colletholders

HSK-C

DIN 69893

ISO 12164

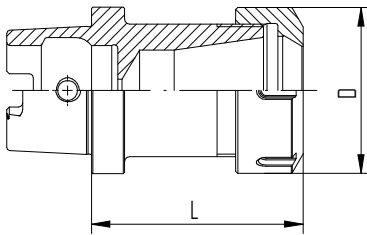
1.1.3 HSK

| 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 |

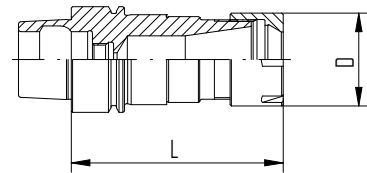
* Balancing rings H: Ready to accept balancing rings

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

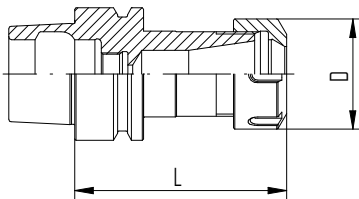
Accessories are not included in delivery.



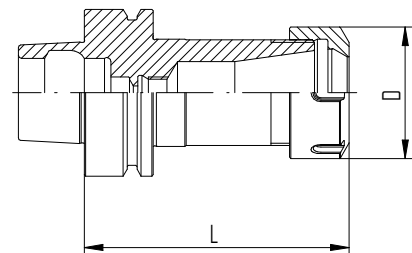
HSK-C / ER



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.

Balancing in XL colletholders

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

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.

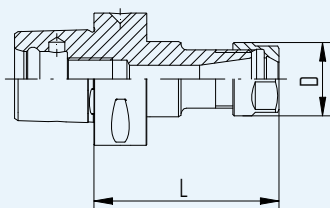
Hi-Q® / ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

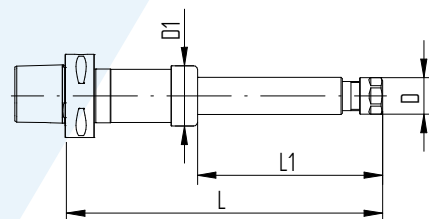
Vibration dampening

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.

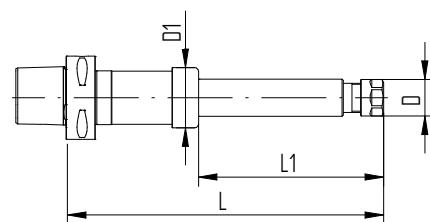
Other XL sizes available on request. All REGO-FIX CAPTO holders are also available with an ID chip hole on request.



Expert advice

We recommend tightening the clamping nuts using a torque wrench.

For tightening torque recommendations, please refer to page 157.





Cylindrical shank colletholders 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 colletholders.

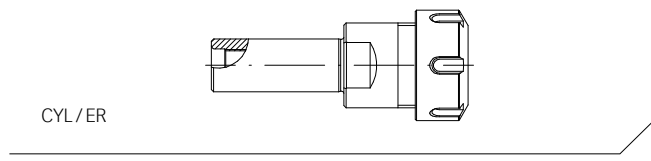
Expert advice

We recommend tightening the clamping nuts using a torque wrench.

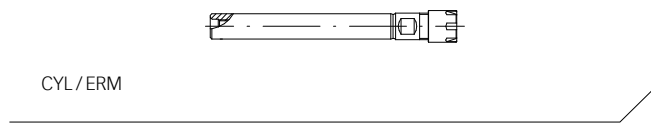
For tightening torque recommendations, please refer to page 157.

Available CYL colletholders and their key characteristics

Cylindrical REGO-FIX colletholders are designed for automatic turning machines and can also be used as extensions. We offer many different product types to fit your machining needs.



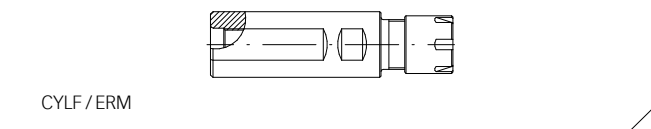
CYL / ER The short versions are particularly used on turret lathes, where a short overhang is often required.
For technical dimensions, please refer to page 50ff.



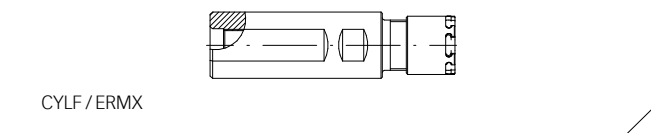
CYL / ERM This type is suited for Swiss automatic machines, machining centers and conventional machines. Can be used as extension.
For technical dimensions, please refer to page 52ff.



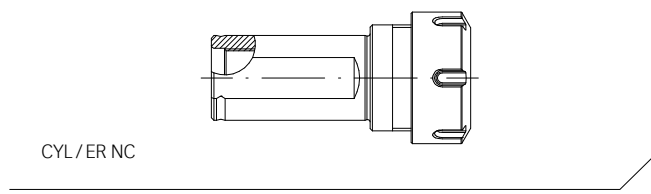
CYL / ERMX This type is suited for Swiss automatic machines, machining centers and conventional machines. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Can be used as extension.
For technical dimensions, please refer to page 52ff.



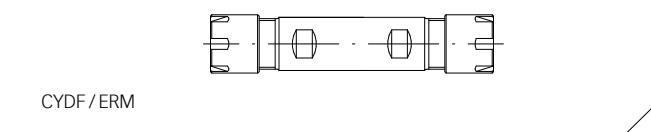
CYLF / ERM The line of cylindrical collet holders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. Cannot be used as extension.
For technical dimensions, please refer to page 54ff.



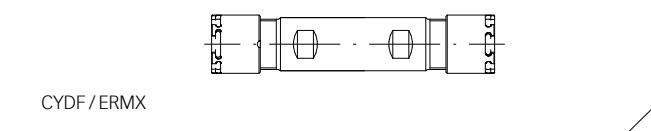
CYLF / ERMX The line of cylindrical collet holders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Cannot be used as extension.
For technical dimensions, please refer to page 54ff.



CYL / ER NC These collet holders 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 The line of double collet holders 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 collet holder.
For technical dimensions, please refer to page 58ff.



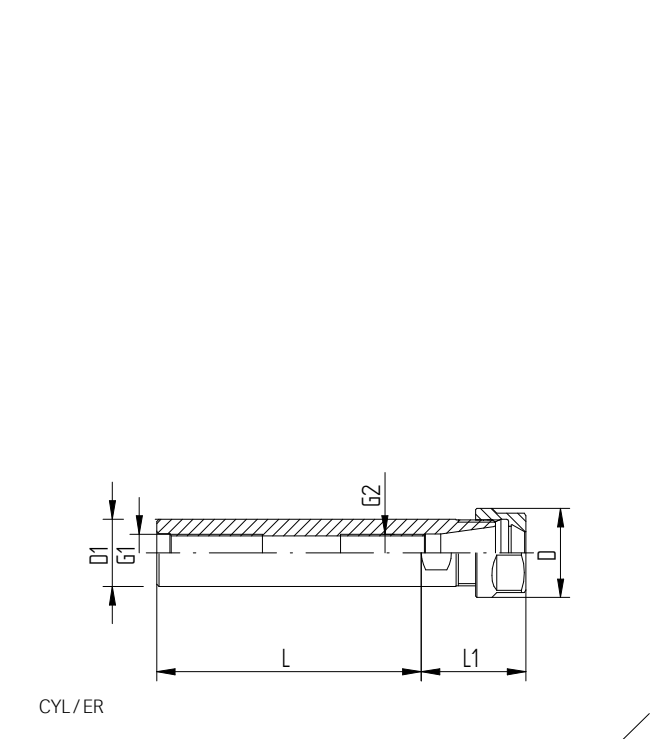
CYDF / ERMX The line of double collet holders with clamping flat has been designed for Swiss Automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos, and offers the possibility to hold two cutting tools on the same collet holder. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut.
For technical dimensions, please refer to page 58ff.

| Type | Part no. | Dimensions [mm] | | | | | | Accessory | |
|------------------------|------------|-----------------|--------|-----|------|------------|----------|-----------|--|
| | | D | D1 h6 | L | L1 | G1 | G2 | 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] | | | | | | Accessory | |
|--------------------------|------------|-----------------|-------|-----|------|------------|----|-----------|--|
| | | D | D1 h6 | L | L1 | G1 | G2 | 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 |
|--------------------------|------------|-----------------|-------|-----|------|---------|----|----------------|-----------|
| | | D | D1 h6 | L | L1 | | | | Wrench |
| 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 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 |

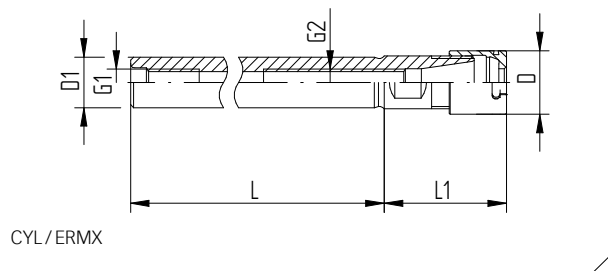
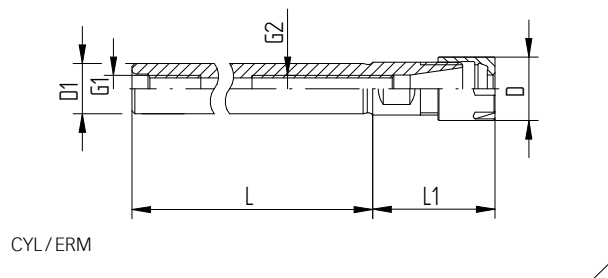
CYL/ERM colletholders (mini nut)

CYL

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

| Type | Part no. | Dimensions [mm] | | | | | G1 | G2 | Slip-off proof | Accessory Wrench |
|--------------------------|------------|-----------------|--------|-----|------|----------|----------|----|----------------|------------------|
| | | D | D1 h6 | L | L1 | | | | | |
| 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 |
|---------------------------|------------|-----------------|--------|-----|------|----------|----------|----|----------------|-----------|
| | | D | D1 h6 | L | L1 | Wrench | | | | |
| 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 | |
| CYLF 16 x 140 / ERM 11 | 2616.21192 | 16 | 16 | 140 | 19.5 | M 8 x 1 | – | – | E 11 M | |
| CYLF 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)

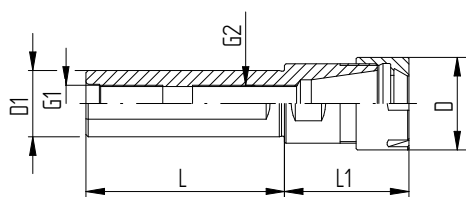
CYLF

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

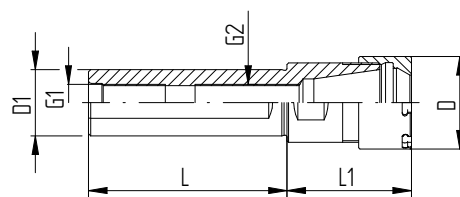
| Type | Part no. | Dimensions [mm] | | | | | G1 | G2 | Slip-off proof | Accessory Wrench |
|-------------------------|------------|-----------------|-------|-----|------|----------|----------|----|----------------|------------------|
| | | D | D1 h6 | L | L1 | | | | | |
| CYLF 20 [mm] | | | | | | | | | | |
| 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 back-up screw. Accessories are not included in delivery.



CYLF / ERM



CYLF / ERMX

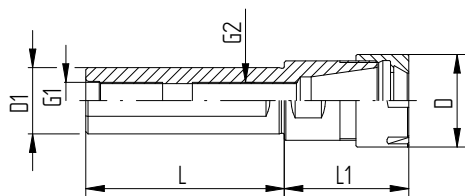
CYLF / ERM colletholders (mini nut)

CYLF

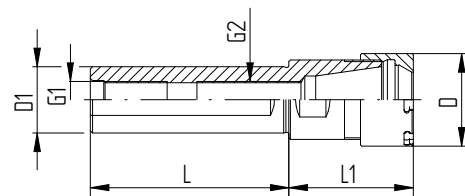
CYLF / ERMX colletholders with intRlox® (slip-off proof mini nut)

| Type | Part no. | Dimensions [mm] | | | | | G1 | G2 | Slip-off proof | Accessory Wrench |
|-------------------------|------------|-----------------|-------|-----|------|------------|----------|----|----------------|------------------|
| | | D | D1 h6 | L | L1 | | | | | |
| 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.



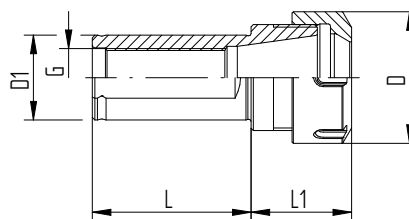
CYLF / ERM



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 | 2632.13232 | 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.



| Type | Part no. | Dimensions [mm] | | | | | Slip-off proof | Accessory Wrench |
|---------------------------|------------|-----------------|--------|----|-----|---|----------------|------------------|
| | | D | D1 h6 | L | L1 | G | | |
| 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.

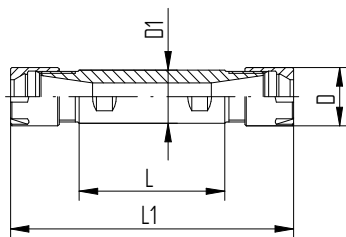
CYDF / ERM colletholders (mini nut)

CYDF

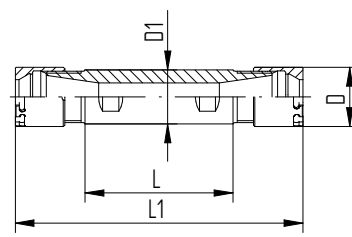
CYDF / ERMX colletholders with intRlox® (slip-off proof mini nut)

| Type | Part no. | Dimensions [mm] | | | | | Slip-off proof | Accessory Wrench |
|-------------------------|------------|-----------------|-------|-----|-----|---|----------------|------------------|
| | | D | D1 h6 | L | L1 | G | | |
| 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.

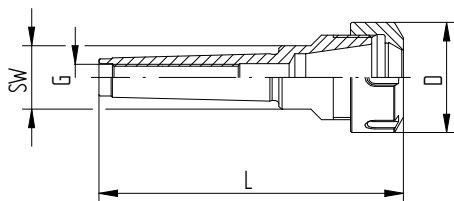
Expert advice

We recommend tightening the clamping nuts using a torque wrench.

For tightening torque recommendations, please refer to page 157.

| Type | Part no. | Dimensions [mm] | | | Accessory | |
|--------------------|------------|-----------------|-------|------|-----------|--------|
| | | D | L | G | SW | 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 | 24 | E 25 |
| MK 2 / ER 32 x 060 | 2702.13200 | 50 | 123 | M 10 | 36 | E 32 |
| MK 3 | | | | | | |
| MK 3 / ER 25 x 052 | 2703.12500 | 42 | 132 | M 12 | 24 | E 25 |
| MK 3 / ER 32 x 070 | 2703.13200 | 50 | 150 | M 12 | 24 | 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 | 32 | E 40 |
| MK 5 | | | | | | |
| MK 5 / ER 40 x 064 | 2705.14000 | 63 | 192 | M 20 | 45 | E 40 |
| MK 5 / ER 50 x 086 | 2705.15900 | 78 | 214 | M 20 | 45 | E 50 |

Included in delivery: Colletholder, 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 colletholders.

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 colletholder, 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 using a torque wrench.

For tightening torque recommendations, please refer to page 157.

Automotive shank colletholders SH

SH

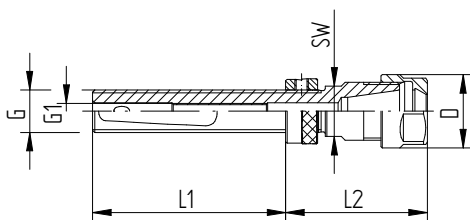
DIN 6327-C

| 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 |

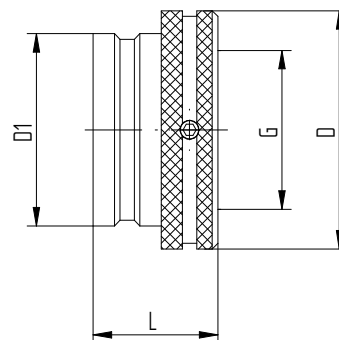
Included in delivery: Colletholder, Hi-Q® / ER clamping nut, back-up screw, setting nut and Woodruff-key. Accessories are not included in delivery.

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 G 2.5 @ 40,000 rpm.

Matched tooling system for best fit

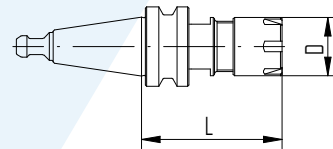
For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

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

Expert advice

We recommend tightening the clamping nuts using a torque wrench.

For tightening torque recommendations, please refer to page 157.



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.

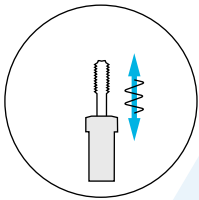
Accessories are not included in delivery.



ER thread-cutting solutions

CYL SSY / HSK-A SSY Softsynchro® tapping holder

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

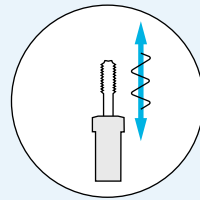


Applications

- // 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 %

CYL GSF tapping holder

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

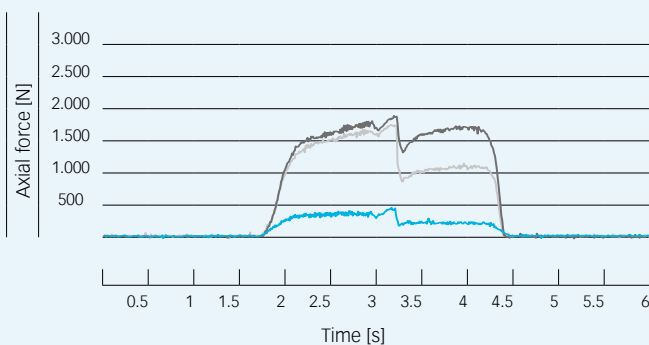


Applications

- // 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

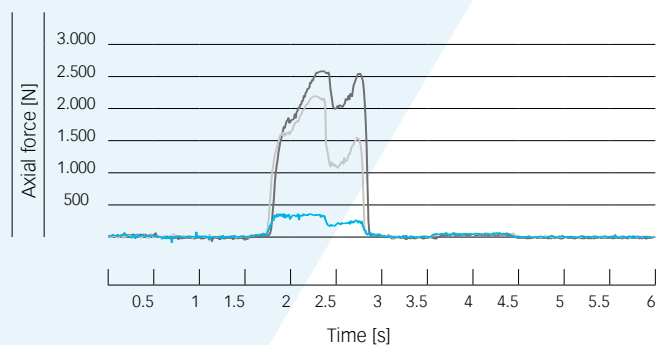
Comparative axial force testing

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



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 colletholder
- Rigid synchronous colletholder

Summary The axial forces increase with increasing speed. With a rigid colletholder, 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.

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 |

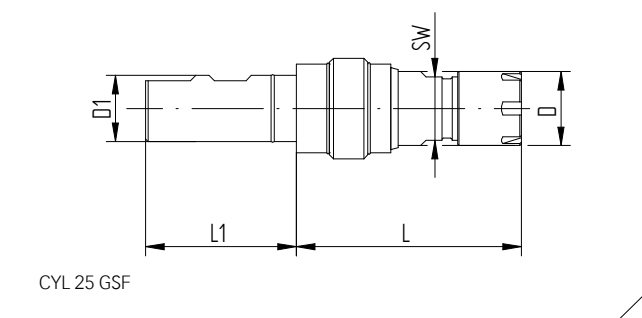
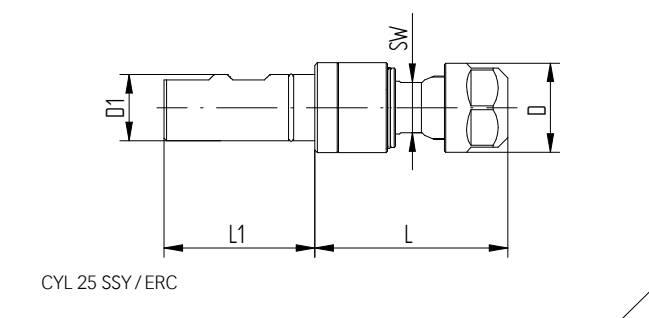
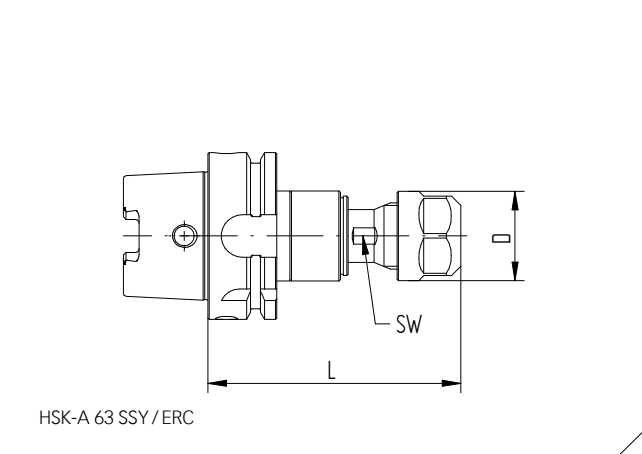
Included in delivery: Tapping holder with Hi-Q®/ERC clamping nut.

| 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 / ERMC 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®/ERMC clamping nut.



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.

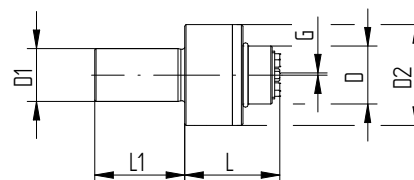
PH floating chucks for non coolant through tools

PH

1.3 ER floating chucks

| Type | Part no. | Dimensions [mm] | | | | | | Accessory |
|----------------------|------------|-----------------|-------|----|----|----|-----|-----------|
| | | D | D1 h6 | D2 | L | L1 | G | 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

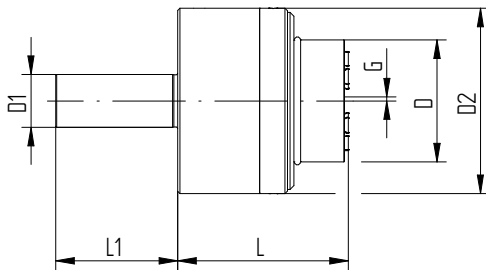
When using coolant through tools please order Hi-Q® / ERAXC clamping nuts and the corresponding sealing disks.

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

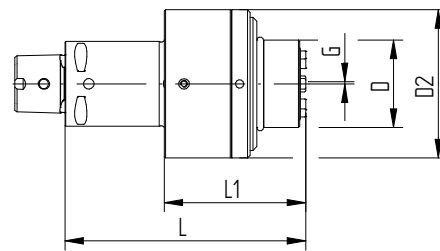
PHC-C

| 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.

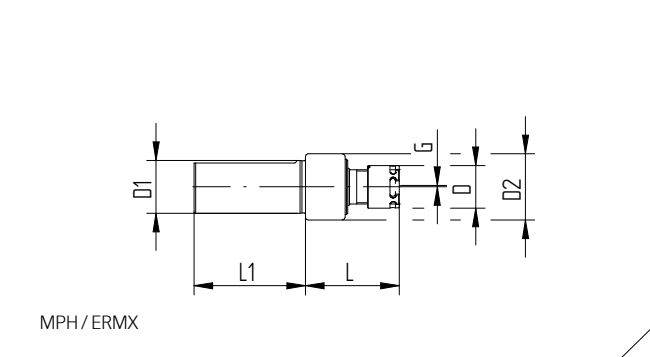
MPH mini floating chucks with intRlox® (slip-off proof mini nut)

MPH

1.3 ER floating chucks

| Type | Part no. | Dimensions [mm] | | | | | Accessory | |
|---------------------|------------|-----------------|-------|----|------|----|-----------|---------|
| | | D | D1 h6 | D2 | L | L1 | G | 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 using a torque wrench.

For tightening torque recommendations, please refer to page 157.

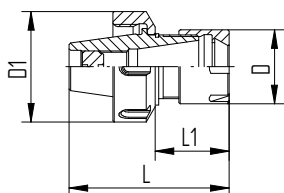
Collet reductions

ER / ERM

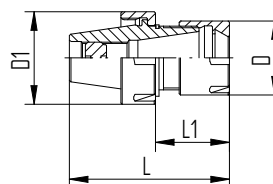
ERM / ERM

| 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.



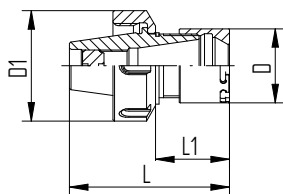
ER / ERM



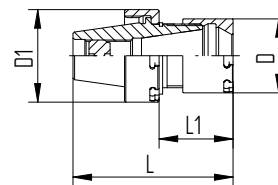
ERM / ERM

| 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 |

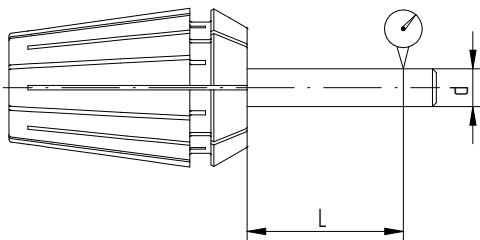


Successful clamping since 1972

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 | ΔER std. | ΔER-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.

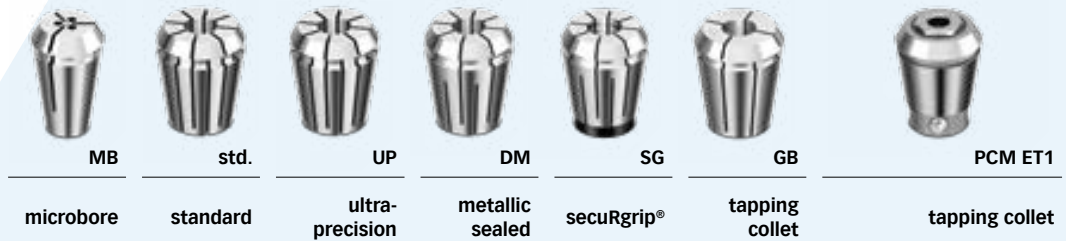


Swiss quality standard

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 microbore | std. standard | UP ultra-precision | DM metallic sealed | SG secuRgrip® | GB tapping collet | PCM ET1 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 | 10.0–16.0 | 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.

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.

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.

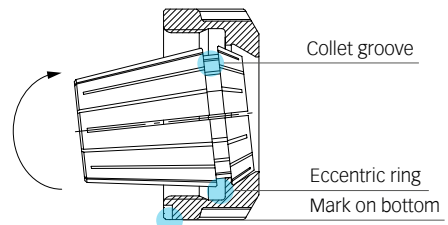
Finest quality deserves best treatment

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 colletcher
- // We recommend to tighten the nut with a torque wrench.

For recommended tightening torque please refer to list on page 157.



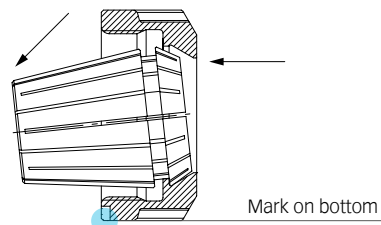
Assembling

Disassembly instructions After the nut is unscrewed from the colletcher, 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.

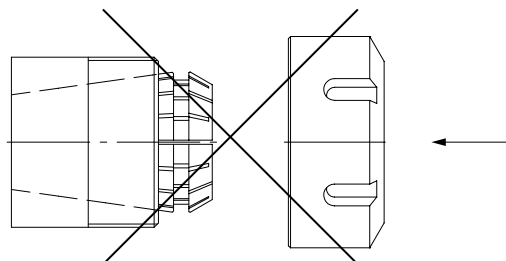
General advice Never clamp oversized tool shanks. For example, never use a Ø 12 mm to 11 mm collet to clamp a Ø 12.2 mm shank. Rather use the next bigger collet (in this case a Ø 12.5 mm – 11.5 mm or 13 mm – 12 mm collet). Insert tool to the full length of the collet for best results if possible.

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.

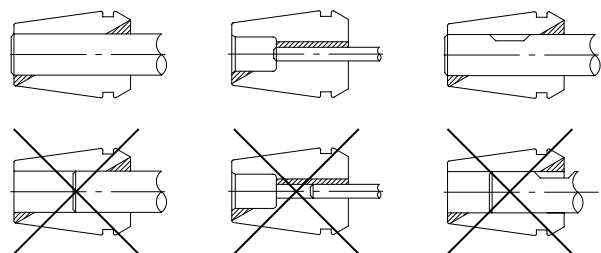


Disassembling



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.



| 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 159.

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. | 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 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 155.

* Approx. inch sizing

Expert advice

Various ER collets 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 |

| Type | Part no. | | Clamping range | | Ø [inch] | Included in set |
|---------------------|-------------|------------|----------------|----------------|----------|-----------------|
| | ER standard | ER-UP | [mm] | [decimal inch] | | |
| 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 155.

* Approx. inch sizing

Expert advice

Various ER collets 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 |

| Type | Part no. | | Clamping range | | Ø [inch] | Included in set |
|---------------------|-------------|------------|----------------|----------------|----------|-----------------|
| | ER standard | ER-UP | [mm] | [decimal inch] | | |
| 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 | 1.0–16.0 | 0.0394–0.6299 | – | – |
| 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.

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] | [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 155.

* 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 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

| Type | Part no. | | Clamping range | | Ø [inch] | Included in set |
|-------------------|-------------|------------|----------------|----------------|----------|-----------------|
| | ER standard | ER-UP | [mm] | [decimal inch] | | |
| 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 155.

* 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

Expert advice

Various ER collets 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 |

| 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 155.



| 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 155.



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 155.

| 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 155.

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. | [mm] | Ø [inch] |
|----------------------|------------|------|----------|
| ER 32-SG [mm] | | | |
| 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 12.0 mm | 7694.12000 |
| Ø 16.0 mm | 7694.16000 |
| 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" | 7694.25400 |

[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 colletholders 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

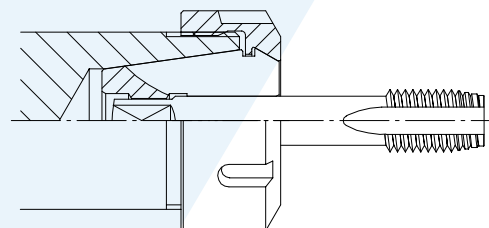
The compatibility of the entire system results in maximum precision, balance and tool life.

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 158 and 161.



ER-GB

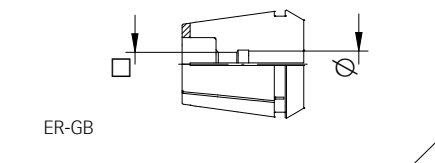


ER-GB

ER tapping collets

ER-GB

ER-GB [mm]

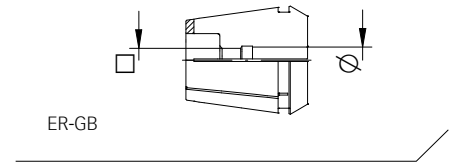


| Dimensions [mm] | | ER ... -GB | | | | | | | | Standard |
|-----------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------------|----------|
| Ø | □ | 11 | 16 | 20 | 25 | 32 | 40 | 50 | | |
| 2.5 | 2.1/2.0 | 1411.02500 | - | - | - | - | - | - | DIN / ISO | |
| 2.8 | 2.1 | 1411.02800 | - | - | - | - | - | - | DIN | |
| 3.5 | 2.7 | 1411.03500 | - | - | - | - | - | - | 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 |
|---------------------------|--------|------------|------------|------------|------------|------------|------------|------|----------|
| ∅ | □ | 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

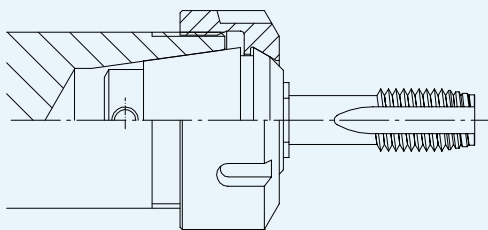
Very robust design with smallest space requirement.

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 159.



PCM ET1



PCM ET1

Expert advice

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

PCM ET1

| Shank Ø [mm] | PCM ET1- ... | | | | | | Standard |
|-----------------|--------------|------------|------------|------------|------------|------------|-----------------|
| | 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®/ERMC | Hi-Q®/ERMX intRlox® | Hi-Q®/ERMXC 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

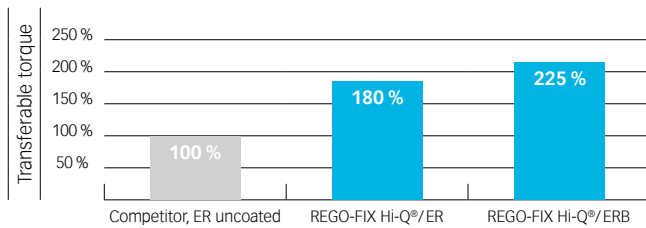
We offer a wide selection of ER clamping nuts for virtually any application.

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

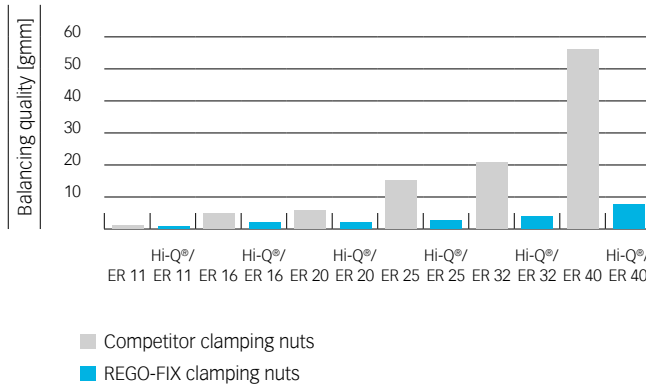
Torque comparison of different clamping nuts

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



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

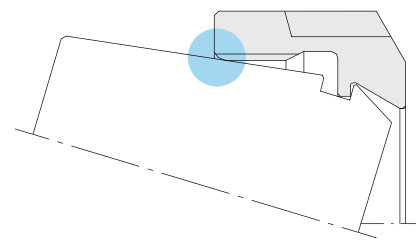
Lower frictional forces resulting in up to 80 % higher gripping force over standard non-treated clamping nuts.

Protection against corrosion

With a special surface treatment for longer life.

Optimal contour







Rounded thread start prevents damaging of collets on tool changes.








Swiss quality standard

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

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 coolant through |  |  |  |  |  |
|------------------------------------|---|---|---|---|---|
| | 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 8 – ER 25 | ER 8 – 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 colletholders.

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.

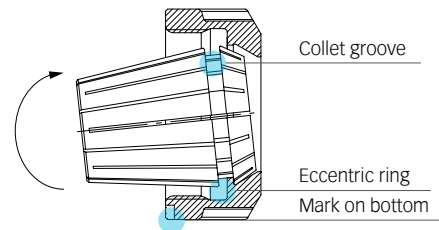
Correct assembling Improper assembly can permanently damage the runout TIR of the collet and may result in the destruction of the clamping nut. Only mount nuts with correctly inserted collets. Never place the collet into the holder without first assembling into the nut.

We recommend the use of original REGO-FIX torque wrenches to prevent any damages to the ER nut.

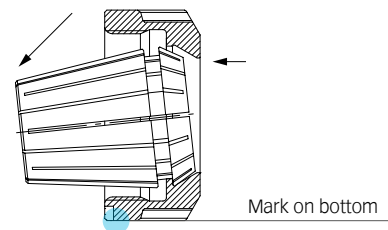
For the recommended tightening torque for ER clamping nuts, please refer to page 157.

Expert advice

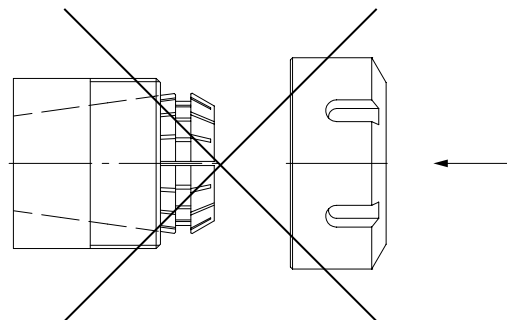
Please only set back-up screw to the tool shank **after** clamping the tool. Disregarding this will result in bad run out and reduced clamping force.



Assembling

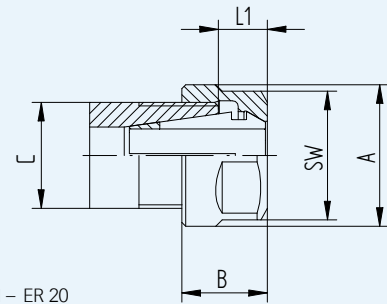


Disassembling

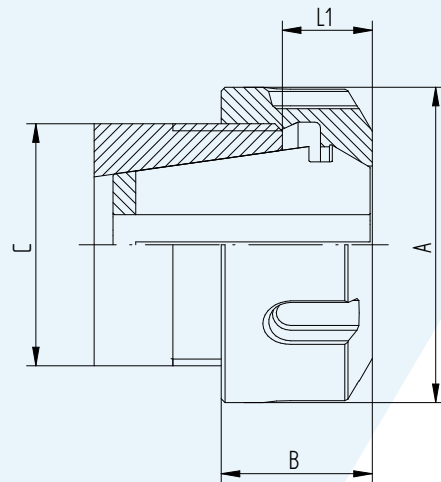


Hi-Q®/ER standard clamping nuts

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



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] | | | | | Accessory | |
|----------------------|------------|-----------------|------|-----------|----|----------------|-----------|--|
| | | A | B | L1 | SW | C | 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 11 L | 3411.02000 | 19 | 11.3 | 4.9–6.6 | 17 | M 14 x 0.75-LH | 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 16 L | 3416.02000 | 28 | 17.5 | 7.0–10.5 | 25 | M 22 x 1.5-LH | 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 20 L | 3420.02000 | 34 | 19 | 8.0–11.5 | 30 | M 25 x 1.5-LH | 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 25 L | 3425.02000 | 42 | 20 | 8.5–12.0 | – | M 32 x 1.5-LH | 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 32 L | 3432.02000 | 50 | 22.5 | 9.5–13.0 | – | M 40 x 1.5-LH | 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 40 L | 3440.02000 | 63 | 25.5 | 11.5–15.0 | – | M 50 x 1.5-LH | 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 | |

L: left-threaded nuts. Accessories are not included in delivery.

Expert advice

We recommend tightening the clamping nuts using a torque wrench.

For tightening torque recommendations, please refer to page 157.

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.

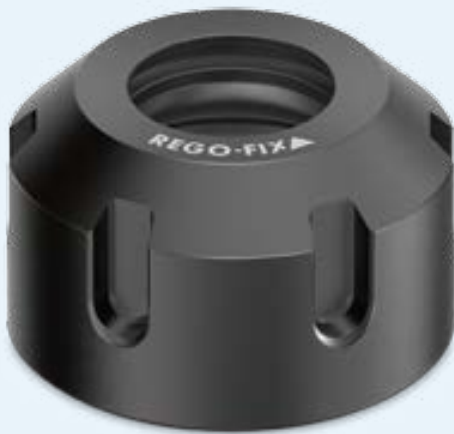
- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

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.

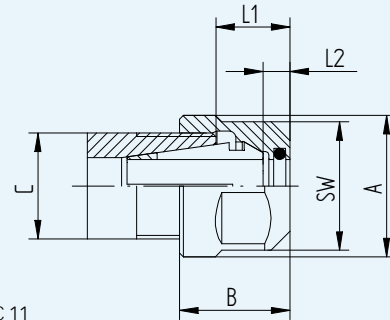
- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet



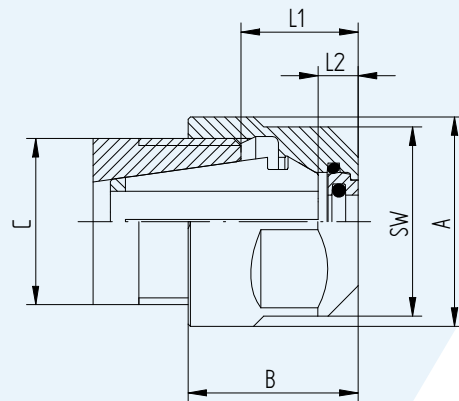
Expert advice

We recommend tightening the clamping nuts using a torque wrench.

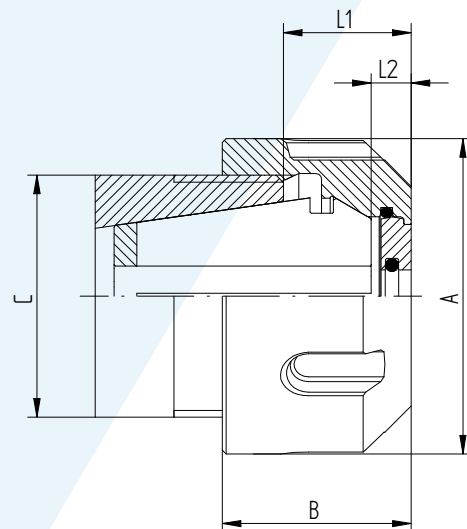
For tightening torque recommendations, please refer to page 157.



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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 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 | – | 42 | 13.5–17.0 | 5 | – | M 32 x 1.5 | 25 | – | E 25 |
| Hi-Q®/ERC 32 | | | | | | | | | | |
| Hi-Q®/ERC 32 | 3432.20000 | – | 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 | – | 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 | – | 78 | 19.0–26.0 | 5 | – | M 64 x 2 | 40.3 | – | E 50 |

Accessories are not included in delivery.

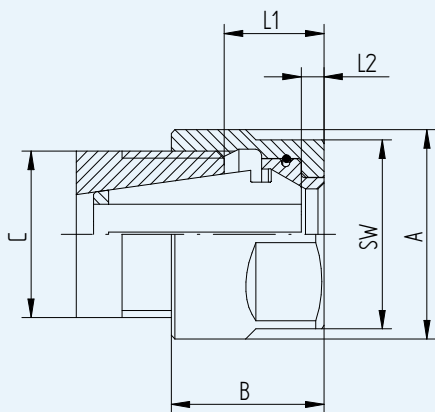
Hi-Q®/ERB friction-bearing Hi-Q®/ERBC for coolant through tools

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.

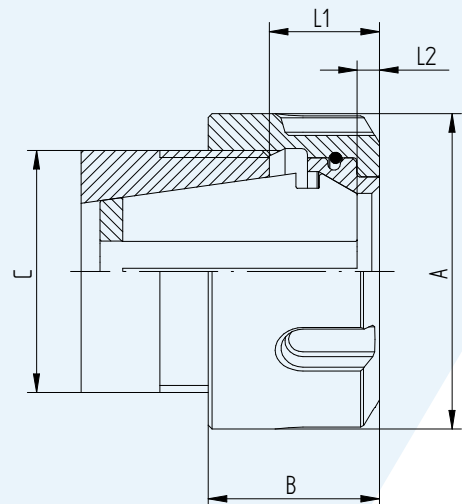
Application with sealing disk / coolant flush disk The Hi-Q®/ERBC clamping nut is intended for use with the sealing disk system DS/ER and the cool flush system KS/ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

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

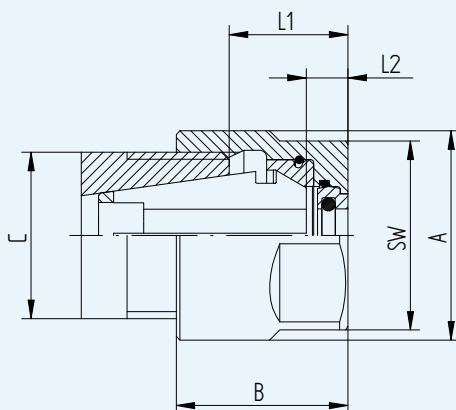
For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS/ER. Please refer to page 136ff.



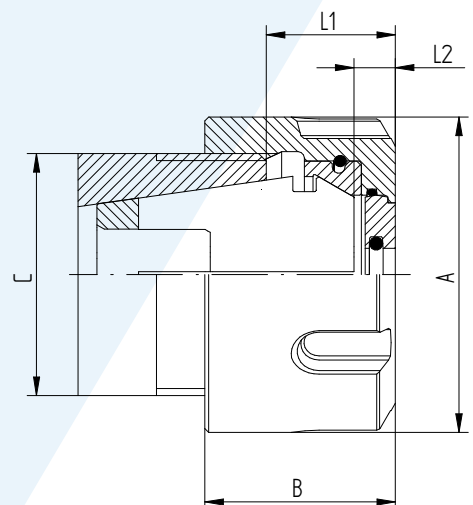
Hi-Q®/ERB 16 – ERB 20



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 using a torque wrench.

For tightening torque recommendations, please refer to page 157.

| 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.

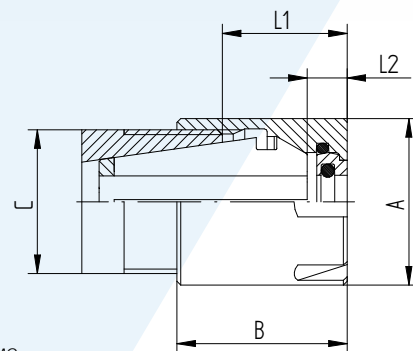
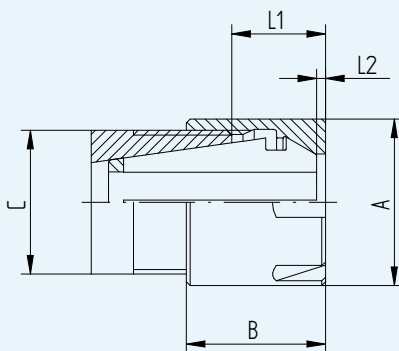
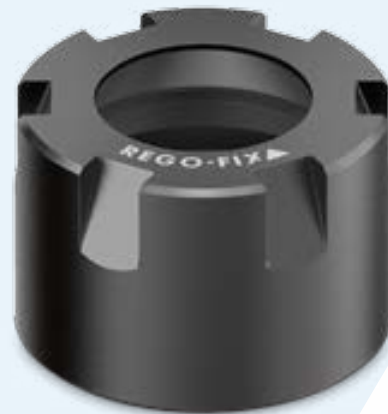
- // Up to 150 bar coolant pressure
- // Prevents dirt and chips from entering the collet

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 using our torque wrench.

For tightening torque recommendations, please refer to page 157.

| Type | Part no. | Dimensions [mm] | | | | C | Bore Ø | | Accessory Wrench |
|---------------------|------------|-----------------|------|----------|-----|----------------|--------|------|---------------------|
| | | A | B | L1 | L2 | | [inch] | [mm] | |
| 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 8 L | 3508.02000 | 12 | 10.8 | 4.3–6.1 | 1.5 | M 10 x 0.75-LH | – | – | 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 11 L | 3511.02000 | 16 | 12 | 5.7–7.5 | 0.4 | M 13 x 0.75-LH | – | – | 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 16 L | 3516.02000 | 22 | 18.4 | 8.0–11.5 | 0.9 | M 19 x 1-LH | – | – | 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 20 L | 3520.02000 | 28 | 19 | 8.0–11.5 | – | M 24 x 1-LH | – | – | 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 |
| Hi-Q®/ERM 25 L | 3525.02000 | 35 | 20 | 8.5–12.0 | – | M 30 x 1-LH | – | – | E 25 M |

| Type | Part no. | Dimensions [mm] | | | | C | Bore Ø | | Accessory Wrench |
|-------------------------|------------|-----------------|------|-----------|-----|-------------|---------|--------|---------------------|
| | | A | B | L1 | L2 | | [mm] | [inch] | |
| 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 |

L: left-threaded nuts. 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 colletholders 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

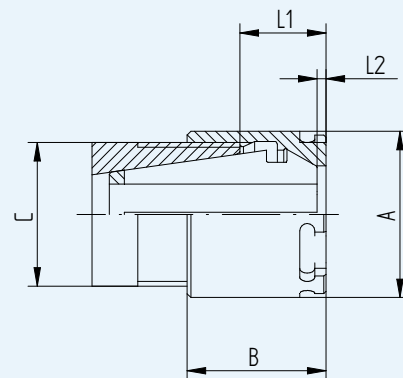
The Hi-Q®/ERMXC clamping nut is intended for use with the sealing disk system DS / ER and the coolant flush system KS / ER. The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

- // 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.



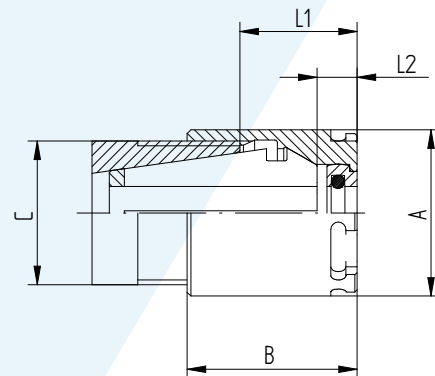
Hi-Q®/ERMX



Hi-Q®/ERMX



Hi-Q®/ERMXC



Hi-Q®/ERMXC

Hi-Q®/ERMX intRlox®

Hi-Q®/ERMXC intRlox®

ERMX

ERMXC

| Type | Part no. | Dimensions [mm] | | | | | C | Accessory |
|----------------------|------------|-----------------|------|----------|-----|-------------|---------|-----------|
| | | A | B | L1 | L2 | Wrench | | |
| Hi-Q®/ERMX 8 | | | | | | | | |
| Hi-Q®/ERMX 8 | 3508.60000 | 16 | 12 | 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 using our torque wrench.
We also recommend to use our REGO-FIX wrench heads and wrenches.

For tightening torque recommendations, please refer to page 157.

For matching wrenches and wrench heads, please refer to page 144ff.

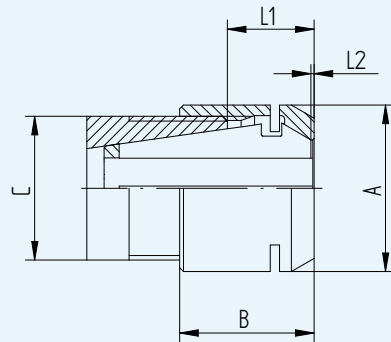
ER MS clamping nuts for highest RPM

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®/ERMC 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 collets 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® collet holder.
Please refer to page 30 for BT/ERA Zero-Z® collet holder.*

Key advantages

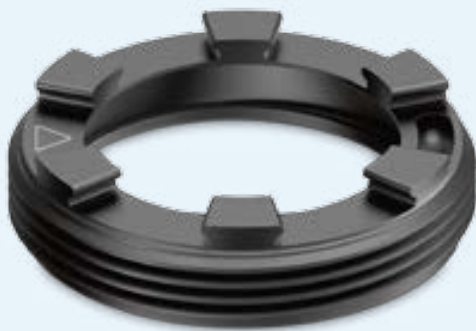
- // Space-saving design for ideal use on long-turning machines
- // S-profile wrench is self-centering on the nut and prevents slipping off while tightening the nut

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.

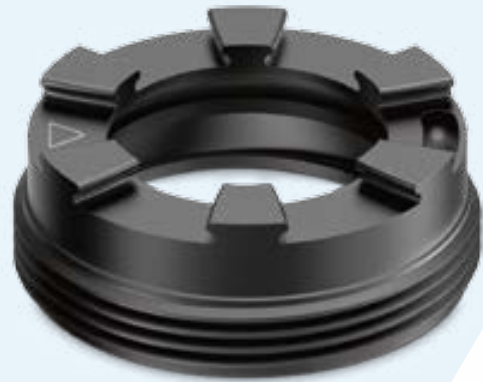
The disk system allows the use of all standard ER collets, ultraprecision collets and tapping collets for coolant through tools.

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

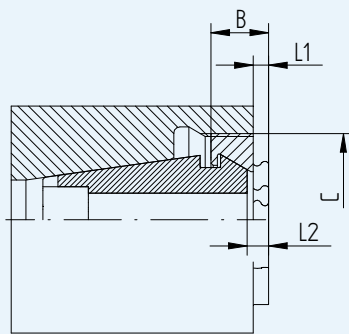
For peripheral cooling of non coolant through tools we recommend the coolant flush disks KS/ER. Please refer to page 136ff.



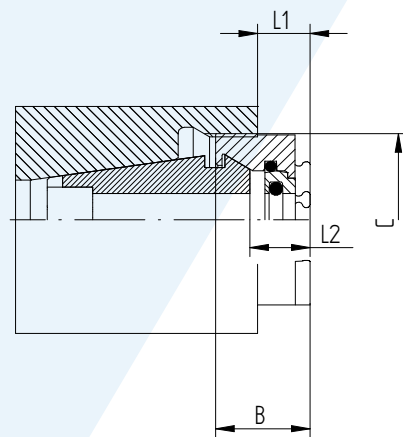
Hi-Q®/ERAX



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 |

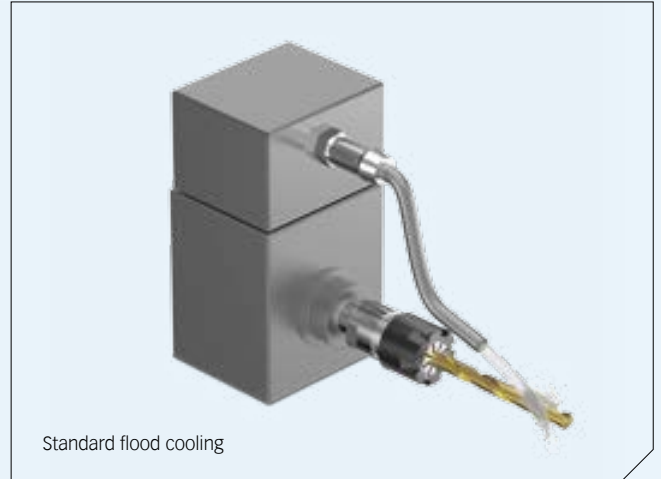
| Type | Part no. | Dimensions [mm] | | | C | Accessory |
|-----------------------|------------|-----------------|---------|-----|------------|-----------|
| | | B | L1 | L2 | | Wrench |
| Hi-Q®/ERAXC 16 | | | | | | |
| Hi-Q®/ERAXC 16 | 3316.70000 | 12.5 | 3.1–7.5 | 7.2 | M 24 x 1 | E 16 AX |
| Hi-Q®/ERAXC 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®

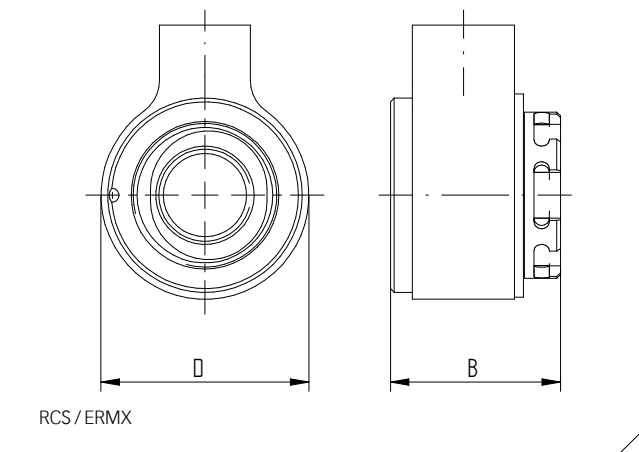
- // Optimized coolant supply to the cutting edge: increases tool life and reduces cycle time
- // Best chip removal
- // No scattering or spray losses

Expert advice

For wrench heads please refer to page 147.
For the matching slip-off proof extensions please refer to page 146.

| 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 |
| RCS/ERMX nut (for emulsion- and oil-based coolants) | | | | | | SET RVA-100 1/8" – 90° | 2 |
| 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

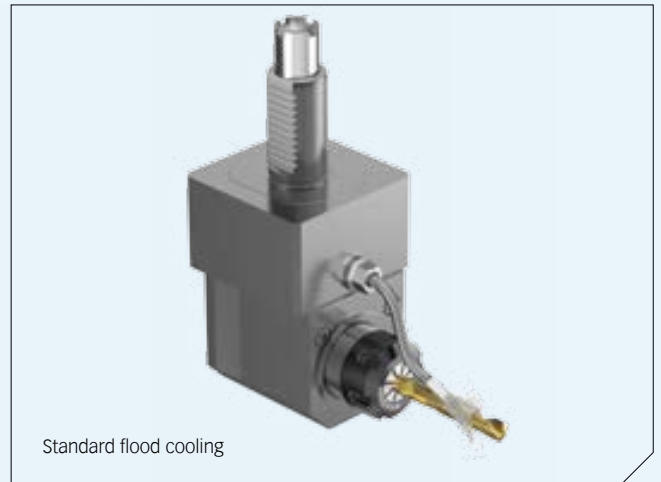
reCool® RCS and reCool® RCR sets



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

* 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.

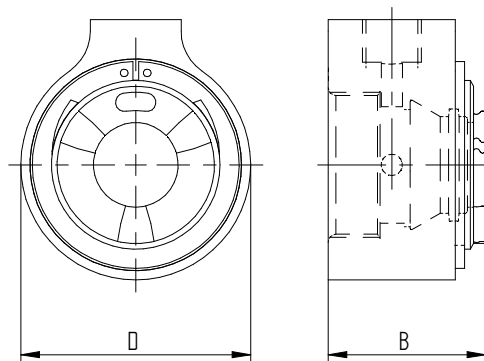
Please contact your REGO-FIX specialist to learn more about working with reCool®.

| 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) | | | | | | | |
| SET RCR-E&O / ER 16 | 3716.10000 | 24.5 | 34 | M 22 x 1.5 | E 16 AX | RCR / ER 16–40 | 1 |
| SET RCR-E&O / ER 20 | 3720.10000 | 26 | 40 | M 25 x 1.5 | E 20 AX | SET RHS-100 | 1 |
| SET RCR-E&O / ER 25 | 3725.10000 | 27 | 50 | M 32 x 1.5 | E 25 AX | SET RVG-100 1/8"–0° | 2 |
| SET RCR-E&O / ER 32 | 3732.10000 | 29.5 | 62.5 | M 40 x 1.5 | E 32 AX | SET RVA-100 1/8"–90° | 2 |
| SET RCR-E&O / ER 40 | 3740.10000 | 32.5 | 72.5 | M 50 x 1.5 | E 40 AX | | |

See page 10 for contents.

| 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 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.



| 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) | | | | | | | |
| SET RCR / ERM 16 | 3716.30000 | 24.5 | 31 | M 19 x 1 | E 16 AX | RCR / ERM 16–25 | 1 |
| SET RCR / ERM 20 | 3720.30000 | 26 | 38 | M 24 x 1 | E 20 AX | SET RHS-100 | 1 |
| SET RCR / ERM 25 | 3725.30000 | 27 | 46 | M 30 x 1 | E 25 AX | SET RVG-100 1/8"–0° | 2 |
| | | | | | | SET RVA-100 1/8"–90° | 2 |
| RCR / ERM nut (for emulsion- and oil-based coolants) | | | | | | | |
| 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 | | |

See page 10 for contents.

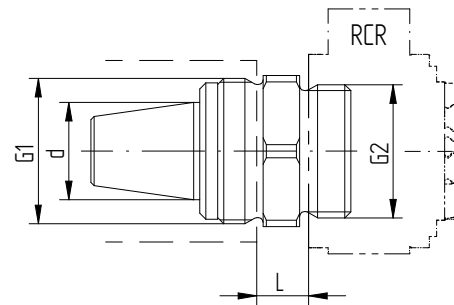
Accessories are not included in delivery.

Matching accessories for your reCool®

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

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.

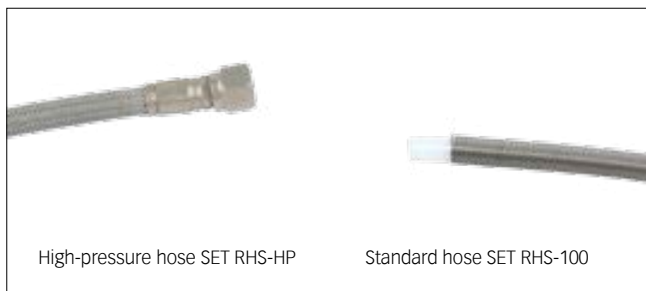
| Type | Part no. | Length [mm] |
|---|------------|-------------|
| High-pressure hoses (≤150 bar) with threaded 1/8" ends | | |
| SET RHS-HP L100 | 3799.97100 | 100 |
| SET RHS-HP L200 | 3799.97200 | 200 |
| SET RHS-HP L300 | 3799.97300 | 300 |
| SET RHS-HP L400 | 3799.97400 | 400 |

| Standard hose set (≤100 bar) | | |
|-------------------------------------|------------|---|
| SET RHS-100 | 3799.95000 | – |

| 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

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.

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.

Coolant resistant

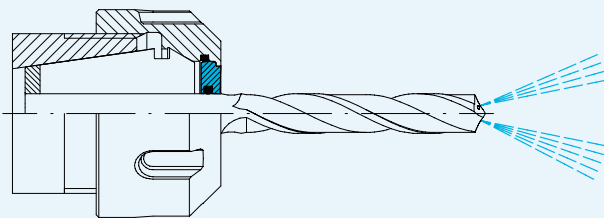
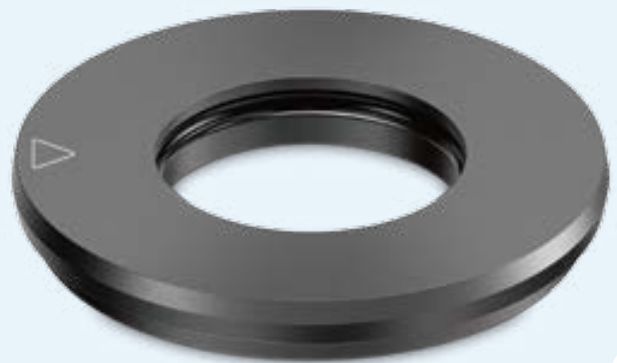
O-ring for aggressive coolant (VITON®-quality).

Interchangeable

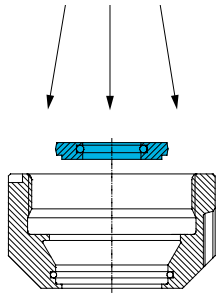
Quick change of sealing disks according to required tool shank diameter.

Coolant through

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



DS/ER

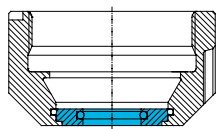


Assembling

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.

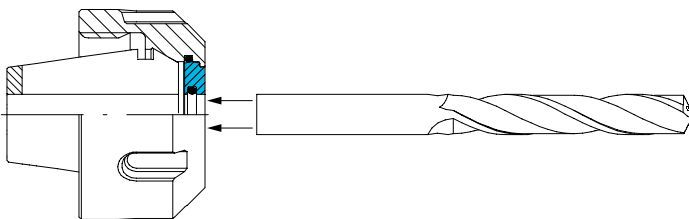
Removing To remove the disk, simply press on the outside of the disk evenly until it snaps out.



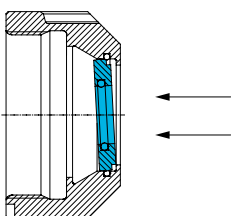
Inserted DS / ER

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

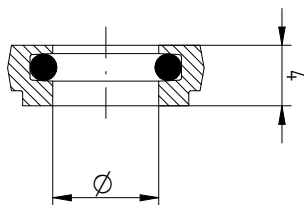


Disk removal

| Type | Part no. | Ø [inch] | Bore Ø | | Incl. in set |
|---------------------------------|------------|----------|-----------|----------------|--------------|
| | | | [mm] | [decimal inch] | |
| 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 | • |
| 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 | 0.2165–0.1969 | • |
| 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 | 0.1772–0.1575 | • |
| 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 | • |
| 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 | • |

| Type | Part no. | Ø [inch] | Bore Ø | | | Incl. in set |
|--------------------------------|------------|----------|-------------|-----------------|--|--------------|
| | | | [mm] | [decimal inch] | | |
| 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 | 0.2118 – 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 | | • |

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



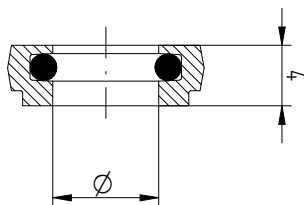
DS / ER

| Type | Part no. | Ø [inch] | Bore Ø | | Incl. in set |
|---------------------------------|------------|----------|-----------|----------------|--------------|
| | | | [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 | • |

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

| Type | Part no. | Ø [inch] | Bore Ø | | | Incl. in set |
|---------------------------------|------------|----------|-----------|----------------|--|--------------|
| | | | [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 | | • |

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



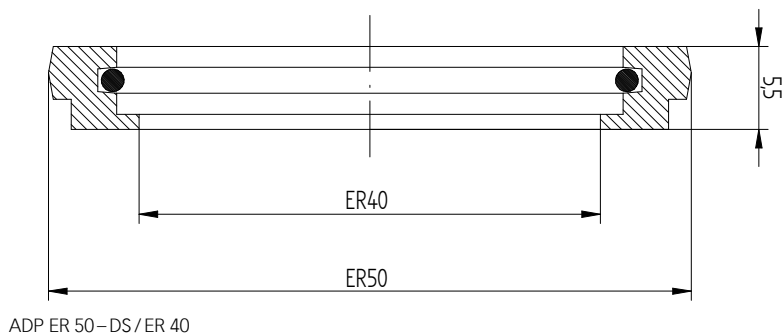
DS / ER

| Type | Part no. | Bore Ø | | | Incl. in set |
|-----------------------------|------------|----------|-------------|-----------------|--------------|
| | | Ø [inch] | [mm] | [decimal inch] | |
| DS / ER 40 continued | | | | | |
| 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 | • |
| 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 – 0.8661 | • |
| 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 | • |

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.



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

Marking

Type and size (reduced disk 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 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.

Universal use

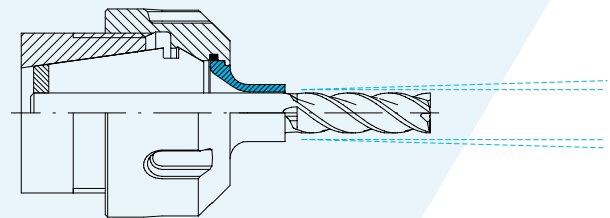
For all REGO-FIX collets and coolant nuts with interchangeable disk.

Interchangeable

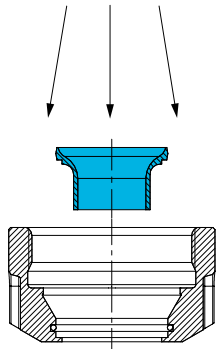
Quick change of coolant flush disks according to required tool shank diameter.

Peripheral cooling

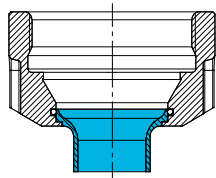
For better cooling and lubrication.
Extends tool life and supports chip removal.



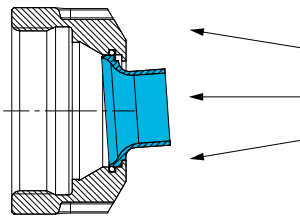
KS / ER



Assembling



Inserted KS / ER



Removing

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.

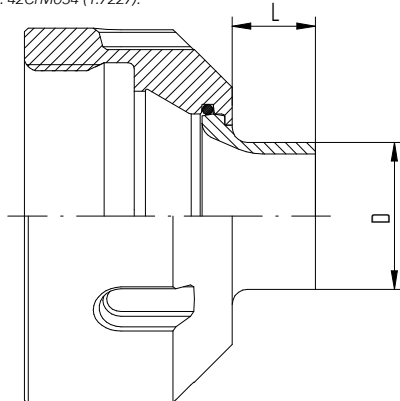
Removing To remove the disk, simply press on the outside of the disk evenly until it snaps out.

| Type | Part no. | Dimensions [mm] | | Ø | |
|-----------------------------|------------|-----------------|----|------|--------|
| | | D | L | [mm] | [inch] |
| 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 | – | – |

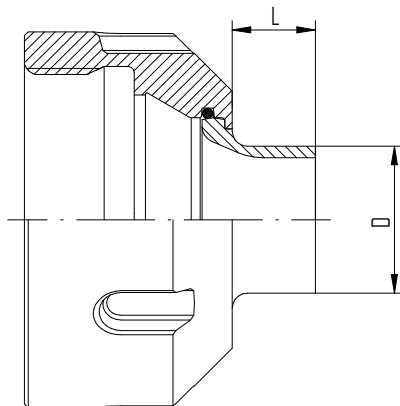
| | | | | | |
|--------------------------|------------|------|----|--------|-------|
| KS / ER 25 [inch] | | | | | |
| Ø 1/8" | 3925.30318 | 6.6 | 11 | 3.175 | 1/8" |
| Ø 3/16" | 3925.30476 | 8.2 | 11 | 4.763 | 3/16" |
| Ø 1/4" | 3925.30635 | 9.7 | 11 | 6.35 | 1/4" |
| Ø 5/16" | 3925.30794 | 11.3 | 11 | 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



REGO-FIX▲



Contents

ER accessories

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

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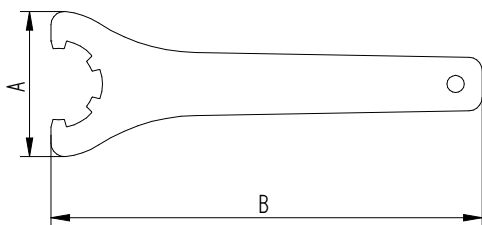


Wrenches

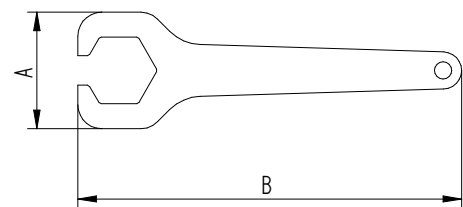
| | |
|----|-----|
| E | EP |
| EM | EMX |

Suited wrench for Hi-Q®

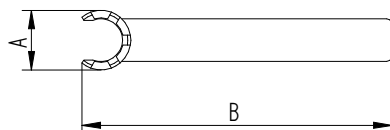
| Type | Part no. | A [mm] | B [mm] | ER | ERC | ERB | ERBC | ERM | ERMC | ERMX | ERMXC |
|------------|------------|--------|--------|----|-----|-----|------|-----|------|------|-------|
| E | | | | | | | | | | | |
| E 16 | 7111.16000 | 55 | 163 | - | - | - | - | - | - | - | - |
| E 20 | 7111.20000 | 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 | • | - | • | - | - | - | - | - |
| EP | | | | | | | | | | | |
| E 11 P | 7112.11010 | 32 | 95 | • | • | - | - | - | - | - | - |
| E 16 P | 7112.16010 | 44 | 145 | • | • | • | • | - | - | - | - |
| E 20 P | 7112.20010 | 52 | 170 | • | • | • | • | - | - | - | - |
| EM | | | | | | | | | | | |
| 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 | - | - | - | - | • | • | - | - |
| EMX | | | | | | | | | | | |
| 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 | - | - | - | - | - | - | • | • |



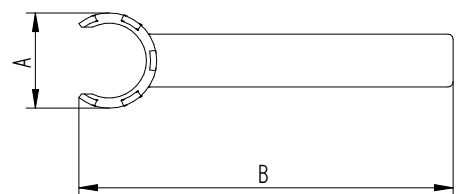
E



EP

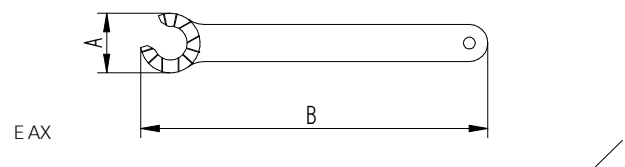
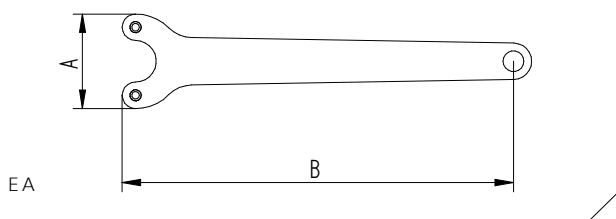
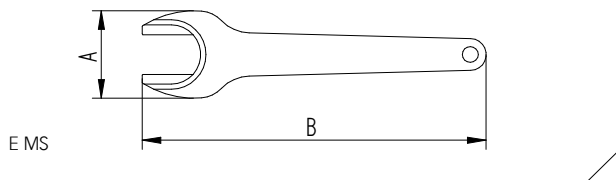


EM



EMX

| 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 | • | – | – |
| E A | | | | | | |
| E 11 A | 7115.11000 | 18.6 | 96 | – | – | – |
| E 16 A | 7115.16000 | 25 | 108 | – | – | – |
| E 20 A | 7115.20000 | 28 | 123 | – | – | – |
| E 25 A | 7115.25000 | 30.5 | 139 | – | – | – |
| E 32 A | 7115.32000 | 42 | 182 | – | – | – |
| 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

TORCO-FIX

V-E AX

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

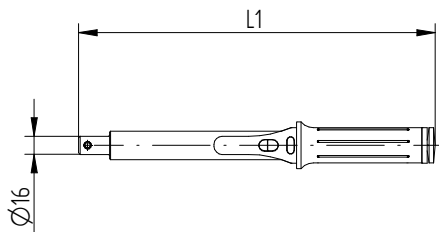
V-E MX

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

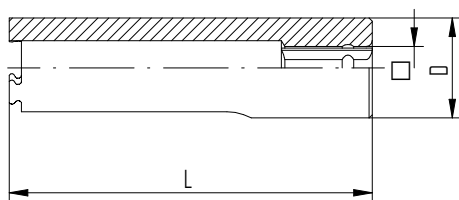
| Type | Part no. | L1 [mm] | Range [Nm] |
|------------------------|------------|---------|------------|
| TORCO-FIX / TSD | | | |
| TORCO-FIX 0 | 7150.02025 | 290 | 5.0–25.0 |
| TORCO-FIX I | 7150.05050 | 335 | 10.0–50.0 |
| TORCO-FIX II | 7150.20200 | 465 | 40.0–200.0 |
| TORCO-FIX III | 7150.60300 | 565 | 60.0–300.0 |

| Type | Part no. | D [mm] | L [mm] | Square □ | |
|---------------|------------|--------|--------|----------|--------|
| | | | | [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" |

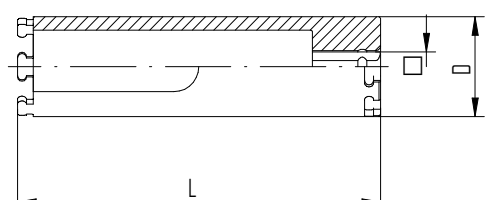
| Type | Part no. | D [mm] | L [mm] | Square □ | |
|---------------|------------|--------|--------|----------|--------|
| | | | | [mm] | [inch] |
| V-E MX | | | | | |
| V-E 8 MX | 7159.08000 | 17 | 60 | 6.35 | 1/4" |
| V-E 11 MX | 7159.11000 | 17 | 60 | 6.35 | 1/4" |
| V-E 16 MX | 7159.16000 | 22.5 | 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



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 |

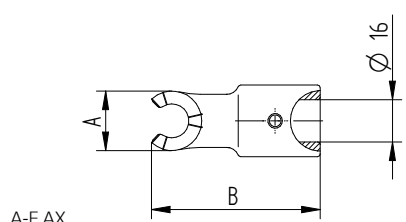
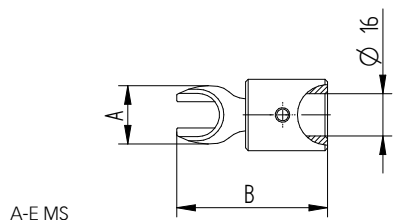
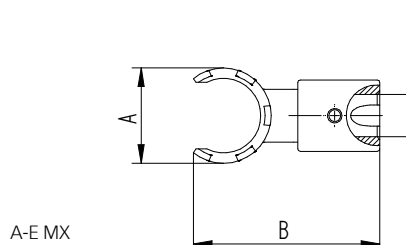
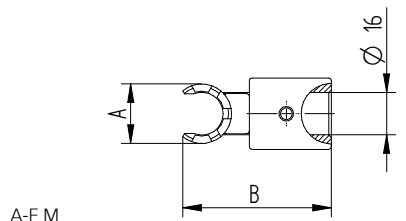
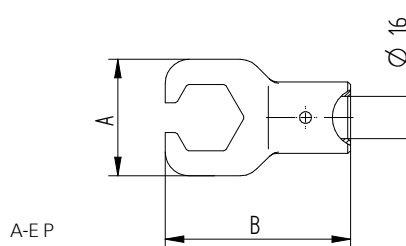
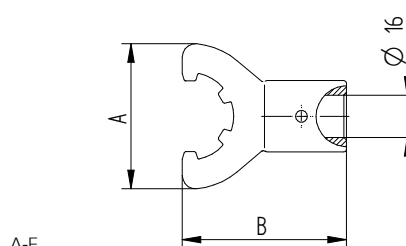
| | | | |
|--------------|------------|----|----|
| A-E P | | | |
| A-E 11 P | 7152.11010 | 32 | 57 |
| A-E 16 P | 7152.16010 | 44 | 70 |
| A-E 20 P | 7152.20010 | 52 | 80 |

| | | | |
|--------------|------------|----|----|
| 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 |



Trays for ER collet sets ZWT

Trays for sealing disk sets DSR

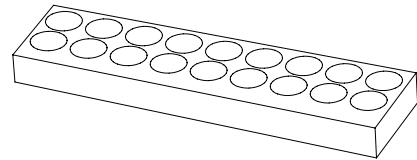
Tangs ATL

ZWT

DSR

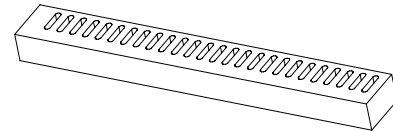
ATL

| 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 |



ZWT

| | | |
|--|------------|----|
| 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 |

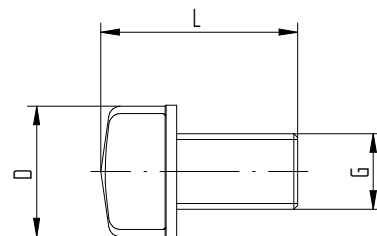


DSR

| 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

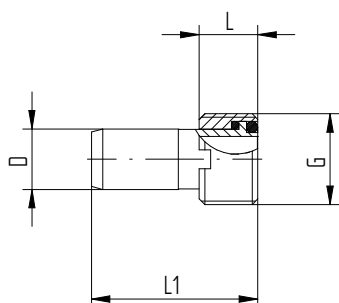
KSR

SKR

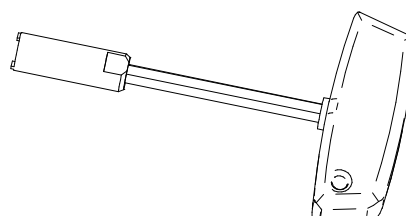
Wrenches for coolant tubes SKR

| 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

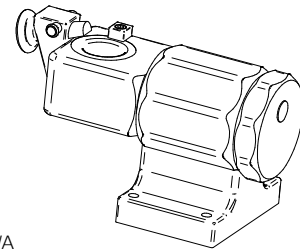


SKR

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 | – |

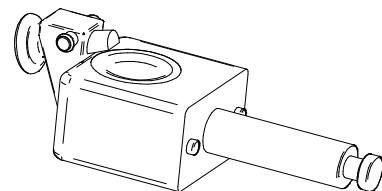


WMH / WA

| 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 |



WA

| 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 |

Hi-Q® balancing rings FWR

FWR

TSD

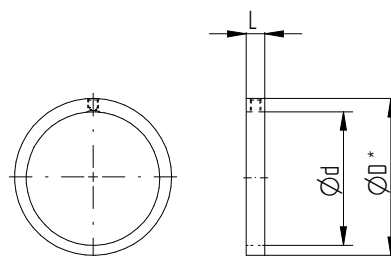
Torque screwdriver TSD

| 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.



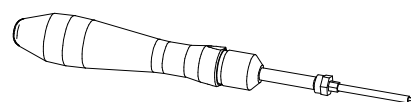
Balancing rings SET FWR



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.



Contents

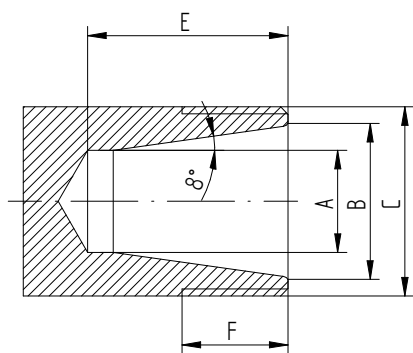
Technical information

| | |
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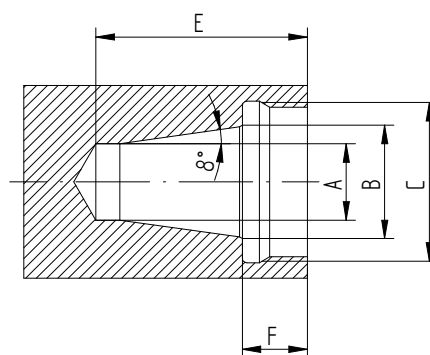


Dimensions for ER collet cavities in machine spindles and matching clamping nuts

| 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 24 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 |
| <hr/> | | | | | | | | | | | | | | | | |
| 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 28 x 1.5 | 26.5 | 13.5 |
| 25 | 0.5–17.0 | – | – | – | – | • | • | • | • | – | – | 18 | 25 | M 30 x 1 | 29 | 14 |
| <hr/> | | | | | | | | | | | | | | | | |
| 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

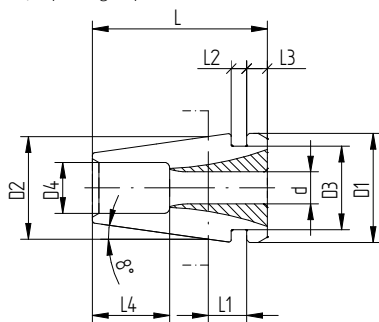


ER AX and ER AXc cavities

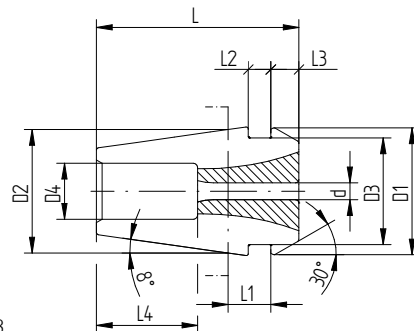
ER collets dimensions

| Size [mm] | Measurements [mm] | | | | | | | | | | |
|-----------|-------------------|------|----|------|-----|------|------|-----|-----|----|---------|
| D2 | d | D1 | D2 | D3 | D4 | L | L1** | L2 | L3 | L4 | Drawing |
| 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 |

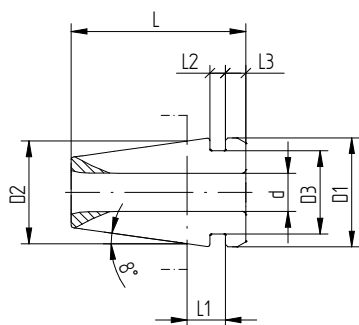
* Up to 27.5 available, depending on production. ** L1 references to the top plane of the colleholder.



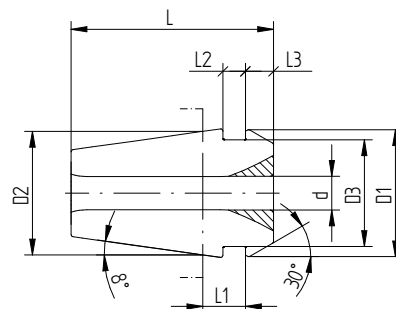
Drawing 1



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.

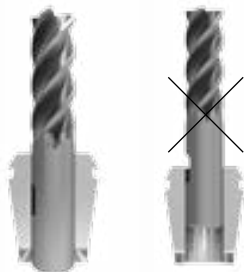
Always assemble correctly

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 | | | | | | | | | | | | |
|-------------|----------|------------------------|-----|----------|-----|----------|-----|------------|-----|------------|-----|--------------|------|-----------|
| | | ER/ERC | | ERB/ERBC | | ERM/ERMC | | ERMx/ERMxC | | ERAx/ERAXC | | ER MS | | |
| | | Collets [Nm] | | | | | | | | | | Collets [Nm] | | |
| Collet size | Ø [mm] | Ø [inch] | ER* | ER-GB | ER* | ER-GB | ER* | ER-GB | ER* | ER-GB | ER* | ER-GB | ER* | TORCO-FIX |
| 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 |
| ER 25 | 1.0–3.5 | 0.059–0.138 | 24 | – | 20 | – | 24 | – | 24 | – | 24 | – | – | I, II |
| | 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 |
| ER 32 | 2.0–2.5 | 0.078–0.098 | 24 | 24 | 20 | – | – | – | – | – | 24 | – | – | I, II |
| | 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 |
| ER 40 | 3.0–26.0 | 0.118–1.023 | 176 | 176 | 176 | 176 | – | – | – | – | 128 | 128 | – | II, III |
| ER 50 | 6.0–36.0 | 0.236–1.417 | 240 | 300 | 240 | 300 | – | – | – | – | – | – | – | III |

* Includes ER standard and ER-UP.

Technical information for tapping collets 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 | | |
|------|------------|--|--|--|--|--|--|---|------|----------|------|----------|------|----------|------|------|
| | | 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

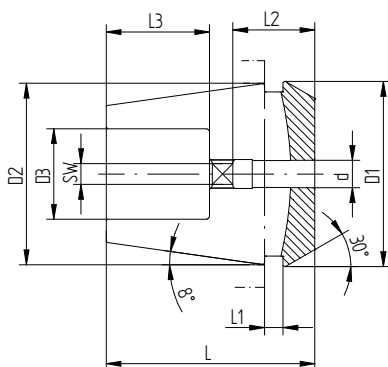
Do not use for coolant through tools and for applications with sealing disks.

Technical information for microbore collets

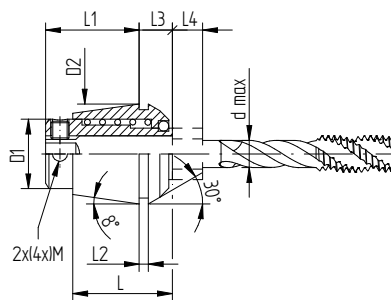
| Type | Measurements [mm] | | | | | | | | | |
|----------|-------------------|------|----|------|-----|------|-----|-----|-----|----|
| | d | D1 | D2 | D3 | D4 | L | L1 | L2 | L3 | L4 |
| ER 8-MB | 0.2-0.9 | 8.5 | 8 | 6.5 | 4 | 13.5 | 1.2 | 1.2 | 1.5 | 6 |
| ER 11-MB | 0.2-0.9 | 11.5 | 11 | 9.5 | 5 | 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

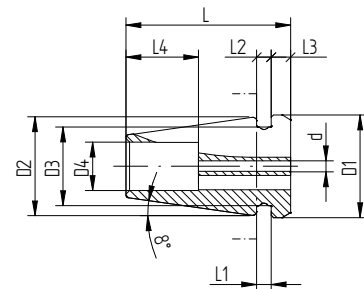
ER-MB collets have no clamping range. Only nominal diameters h7 can be clamped.



ER-GB, page 158



PCM ET1

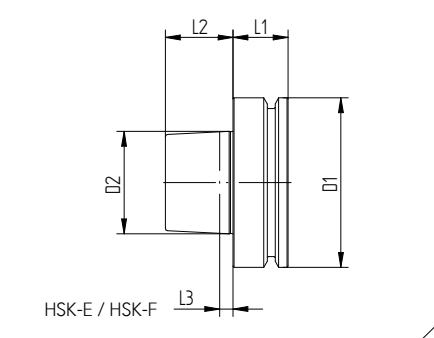
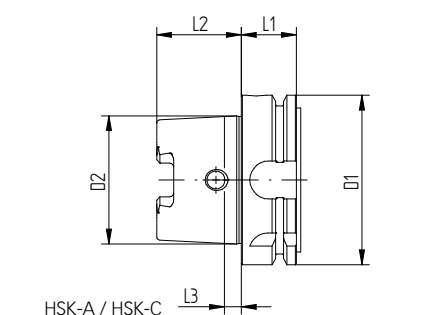
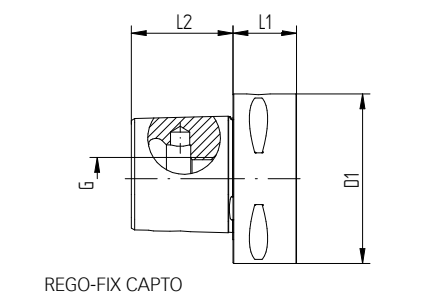
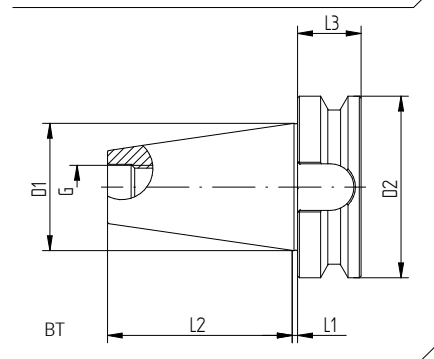
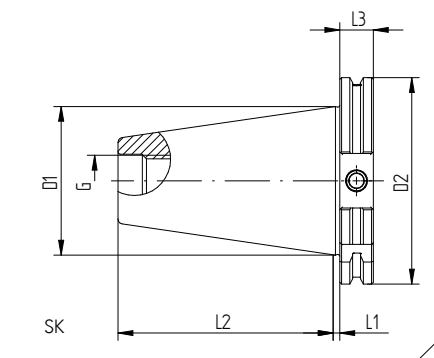


ER-MB

Spindle interface norms

| SK | BT | CAPTO | HSK |
|-----------|---------|-----------|-----------|
| DIN 69871 | MAS 403 | ISO 26623 | 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.

Imprint

Get in touch

We love to talk to you and share our toolholding expertise to maximize your productivity.

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