





Clamping Nuts Sealing Disks Coolant Disks

4

ER_{SYSTEM}

Clamping Nuts

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ER_{SYSTEM}

Sealing Disks

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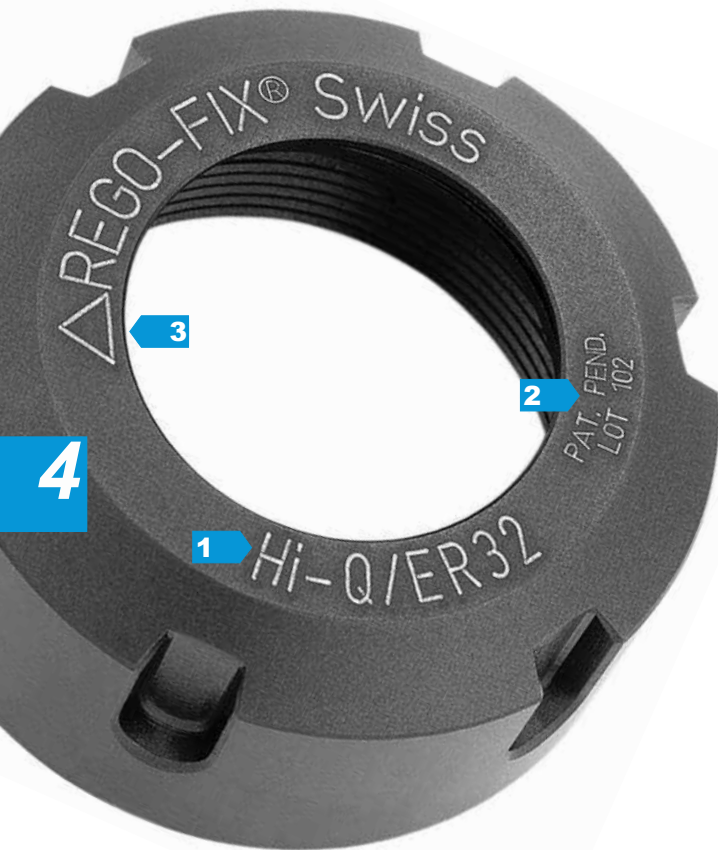


Swiss
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Clamping Nuts

Features | Benefits



Swiss Quality

Made in Switzerland to ISO9001/ISO14001.

1 Marking

With type and size (reduced selection error).

2 Product Traceability

Lot number marked on collets, therefore traceable through entire manufacturing process.

3 Original REGO-FIX®

Our extensive experience results in a well-engineered system. When buying ER clamping nuts please note the REGO-FIX® quality seal \triangle on the front of the clamping nut.

Collet Locking-System (pat. pend.)

Retains collet in nut for easier assembly.

Q+® Balancing

Ideal for high-speed applications.

Higher Transferable Torque

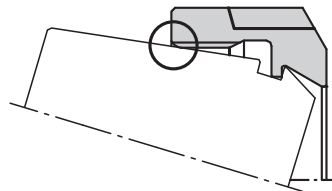
Lower frictional forces resulting in up to 80% higher gripping force over standard non-treated clamping nuts.

Protection Against Corrosion

With a special treatment of the surface for longer life.

Optimal contour

Rounded thread start prevents damaging of collets on tool changes.



Great Selection of Specific Products for Virtually any Application

- with friction bearing for higher clamping force
- with sealing disk for coolant through tools
- Mini nut with minimal external diameter
- High speed clamping nut (for high rpm)
- Externally threaded clamping nut for floating chucks, ERA Zero-Z® toolholder and live tooling

Mounting Instructions

DIN 6499/ISO 15488

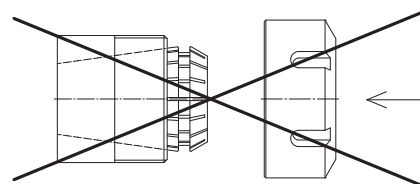
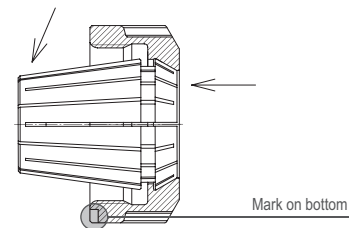
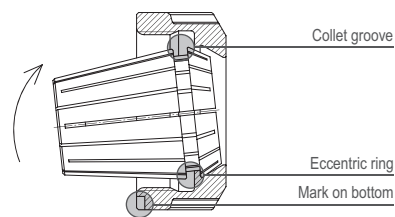
Hi-Q® Clamping Nuts (pat. pend.)

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 tool holder.

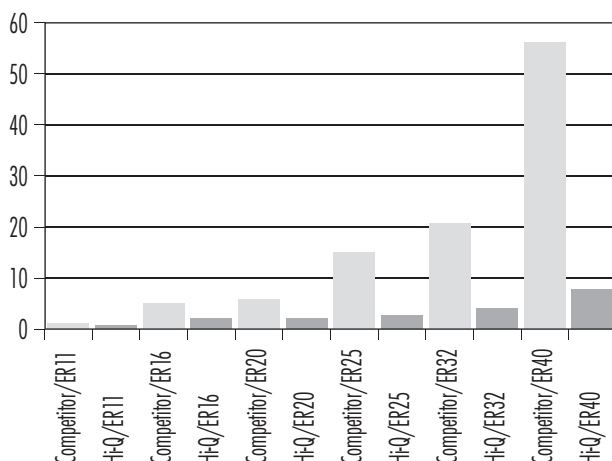
Removing Collet

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.

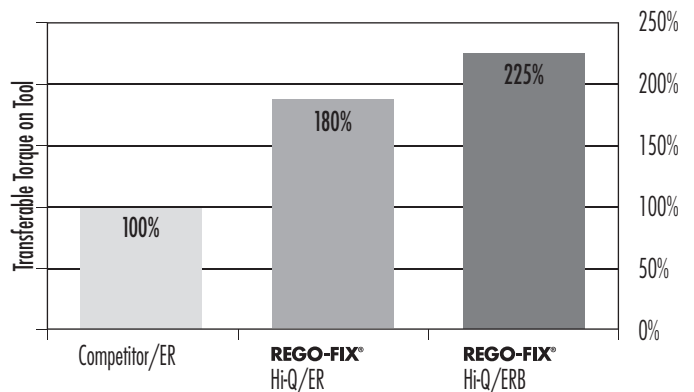


! Improper assembly can permanently damage the concentricity of the collet and may result in the destruction of the clamping nut.
■ Only mount nuts with correctly inserted collets! Never place the collet into the holder without first assembling into the nut.

Maximal Balancing [gmm]



Torque Comparison of Clamping Nuts





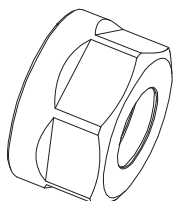
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Clamping Nuts

Features | Benefits

1 Hi-Q®/ER11 – ER20



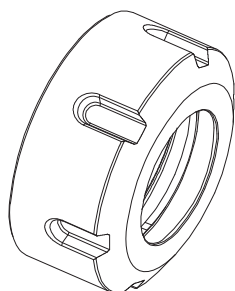
Standard

Hi-Q®/ER Clamping Nuts with corrosion resistant surface are standard on all REGO-FIX® ER toolholders.

Clamping nuts with left-hand thread upon request.

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2 Hi-Q®/ER25 – ER50

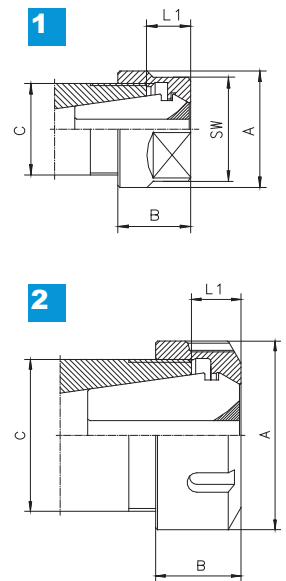


Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|---|------|---------|-------|
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | ET1-12 | 3.08 | E 11 P | 12.01 |
| ER 16 | - | - | - | - | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | ER 16-GB | 3.04 | ET1-16 | 3.08 | E 16 P | 12.01 |
| ER 20 | - | - | - | - | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | ER 20-GB | 3.04 | ET1-20 | 3.08 | E 20 P | 12.01 |
| ER 25 | - | - | - | - | ER 25 | 2.14 | ER 25-DM | 2.26 | - | - | ER 25-GB | 3.04 | ET1-25 | 3.08 | E 25 | 12.01 |
| ER 32 | - | - | - | - | ER 32 | 2.16 | ER 32-DM | 2.28 | - | - | ER 32-GB | 3.04 | ET1-32 | 3.08 | E 32 | 12.01 |
| ER 40 | - | - | - | - | ER 40 | 2.18 | - | - | - | - | ER 40-GB | 3.04 | ET1-40 | 3.08 | E 40 | 12.01 |
| ER 50 | - | - | - | - | ER 50 | 2.20 | - | - | - | - | ER 50-GB | 3.04 | - | - | E 50 | 12.01 |

Hi-Q®/ER Standard

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini-Nut | Nut with External Thread | A [mm] | B [mm] | C | L1 [mm] | SW | Drawing |
|------------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|--------|--------|-------------|-------------|----|---------|
| Hi-Q/ER 11 | 3411.00000 | ■ | ■ | ■ | ■ | ■ | | | 19 | 11.3 | M 14 x 0.75 | 4.9 – 6.6 | 17 | 1 |
| Hi-Q/ER 16 | 3416.00000 | ■ | ■ | ■ | ■ | ■ | | | 28 | 17.5 | M 22 x 1.50 | 7.0 – 10.5 | 25 | 1 |
| Hi-Q/ER 20 | 3420.00000 | ■ | ■ | ■ | ■ | ■ | | | 34 | 19.0 | M 25 x 1.50 | 8.0 – 11.5 | 30 | 1 |
| Hi-Q/ER 25 | 3425.00000 | ■ | ■ | ■ | ■ | ■ | | | 42 | 20.0 | M 32 x 1.50 | 8.5 – 12.0 | – | 2 |
| Hi-Q/ER 32 | 3432.00000 | ■ | ■ | ■ | ■ | ■ | | | 50 | 22.5 | M 40 x 1.50 | 9.5 – 13.0 | – | 2 |
| Hi-Q/ER 40 | 3440.00000 | ■ | ■ | ■ | ■ | ■ | | | 63 | 25.5 | M 50 x 1.50 | 11.5 – 15.0 | – | 2 |
| Hi-Q/ER 50 | 3450.00000 | ■ | ■ | ■ | ■ | ■ | | | 78 | 35.3 | M 64 x 2.00 | 14.0 – 21.0 | – | 2 |



The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.



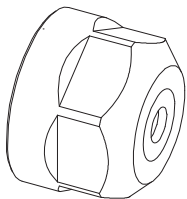
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Clamping Nuts

Features | Benefits

1 Hi-Q®/ERC11 – ERC20



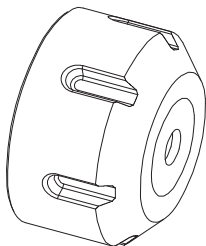
Application with Sealing Disk

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 sealing disk system DS/ER allows the use of all standard ER collets, ultra precision collets and tapping collets for coolant through tools.

Up to 150 Bar (2000 psi) Coolant Pressure

Prevents Dirt and Chips from Entering the Collet

2 Hi-Q®/ERC25 – ERC40



For Peripheral Cooling of Non Coolant Through Tools

we recommend the coolant flush disks KS/ER.

See page 4.27/4.28

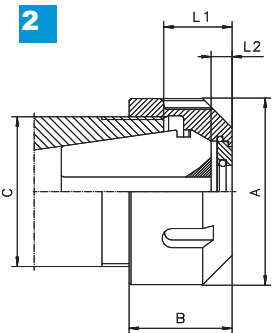
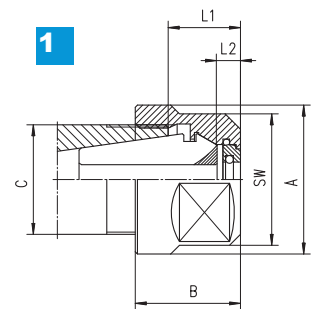
Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation* | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|--|------|---------|-------|
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | - | - | E 11 P | 12.01 |
| ER 16 | DS / ER 16 | 4.22 | KS / ER 16 | 4.28 | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | ER 16-GB | 3.04 | - | - | E 16 P | 12.01 |
| ER 20 | DS / ER 20 | 4.22 | KS / ER 20 | 4.28 | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | ER 20-GB | 3.04 | - | - | E 20 P | 12.01 |
| ER 25 | DS / ER 25 | 4.24 | KS / ER 25 | 4.28 | ER 25 | 2.14 | ER 25-DM | 2.26 | - | - | ER 25-GB | 3.04 | - | - | E 25 | 12.01 |
| ER 32 | DS / ER 32 | 4.24 | KS / ER 32 | 4.28 | ER 32 | 2.16 | ER 32-DM | 2.28 | - | - | ER 32-GB | 3.04 | - | - | E 32 | 12.01 |
| ER 40 | DS / ER 40 | 4.26 | - | 4.28 | ER 40 | 2.18 | - | - | - | - | ER 40-GB | 3.04 | - | - | E 40 | 12.01 |

*Not for coolant through tools.

Hi-Q® ERC Clamping Nuts for Coolant Through Tools

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini nut | Nut with External Thread | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] | SW | Drawing |
|-------------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|---------------|--------|-------------|-------------|---------|----|---------|
| Hi-Q/ERC 11 | | | | | | | | | See page 4.08 | | | | | | |
| Hi-Q/ERC 16 | 3416.20000 | | ■ | ■ | ■ | | | | 28 | 22.5 | M 22 x 1.50 | 12.0 – 15.5 | 5.0 | 25 | 1 |
| Hi-Q/ERC 20 | 3420.20000 | | ■ | ■ | ■ | | | | 34 | 24.0 | M 25 x 1.50 | 13.0 – 16.5 | 5.0 | 30 | 1 |
| Hi-Q/ERC 25 | 3425.20000 | | ■ | ■ | ■ | | | | 42 | 25.0 | M 32 x 1.50 | 13.5 – 17.0 | 5.0 | – | 2 |
| Hi-Q/ERC 32 | 3432.20000 | | ■ | ■ | ■ | | | | 50 | 27.5 | M 40 x 1.50 | 14.5 – 18.0 | 5.0 | – | 2 |
| Hi-Q/ERC 40 | 3440.20000 | | ■ | ■ | ■ | | | | 63 | 30.5 | M 50 x 1.50 | 16.5 – 20.0 | 5.0 | – | 2 |



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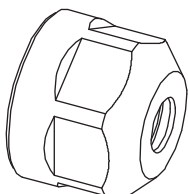
The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.

Features | Benefits



Application

The Hi-Q®/ERC 11 clamping nut for coolant through tools is the internal cooling version of the Hi-Q®/ER 11 clamping nut.

Does not Require Sealing Disks

The sealing system is built into the clamping nut.

Up to 150 Bar (2000 psi) Coolant Pressure

Integrated Seal Prevents Dirt and Chips from Entering the Collet

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Matching Products

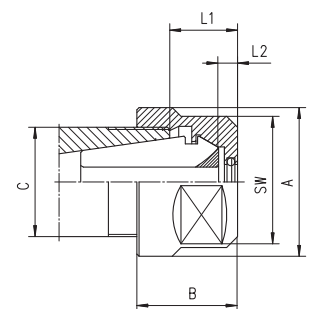
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|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|--|------|---------|-------|
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | - | - | E 11 P | 12.01 |

*Not for coolant through tools.

Clamping Nuts with Built-In Sealing System

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini-Nut | Nut with External Thread | Sealing Capacity [mm] | Sealing Capacity [Inch] | Ø [Inch] |
|-------------------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|-----------------------|-------------------------|----------|
| Hi-Q/ERC 11 Ø 3.0 | 3411.20300 | | ■ | ■ | ■ | | | | 3.00 – 2.50 | 0.1181 – 0.0984 | 3/32" |
| Hi-Q/ERC 11 Ø 3.5 | 3411.20350 | | ■ | ■ | ■ | | | | 3.50 – 3.00 | 0.1378 – 0.1181 | 1/8" |
| Hi-Q/ERC 11 Ø 4.0 | 3411.20400 | | ■ | ■ | ■ | | | | 4.00 – 3.50 | 0.1575 – 0.1378 | 5/32" |
| Hi-Q/ERC 11 Ø 4.5 | 3411.20450 | | ■ | ■ | ■ | | | | 4.50 – 4.00 | 0.1772 – 0.1575 | – |
| Hi-Q/ERC 11 Ø 5.0 | 3411.20500 | | ■ | ■ | ■ | | | | 5.00 – 4.50 | 0.1969 – 0.1772 | 3/16" |
| Hi-Q/ERC 11 Ø 5.5 | 3411.20550 | | ■ | ■ | ■ | | | | 5.50 – 5.00 | 0.2165 – 0.1969 | 7/32" |
| Hi-Q/ERC 11 Ø 6.0 | 3411.20600 | | ■ | ■ | ■ | | | | 6.00 – 5.50 | 0.2362 – 0.2165 | – |
| Hi-Q/ERC 11 Ø 6.5 | 3411.20650 | | ■ | ■ | ■ | | | | 6.50 – 6.00 | 0.2559 – 0.2362 | 1/4" |
| Hi-Q/ERC 11 Ø 7.0 | 3411.20700 | | ■ | ■ | ■ | | | | 7.00 – 6.50 | 0.2756 – 0.2559 | – |

| Type | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] | SW |
|-------------|--------|--------|-------------|-------------|---------|----|
| Hi-Q/ERC 11 | 19 | 14.6 | M 14 x 0.75 | 8.10 – 9.80 | 3.5 | 17 |



The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.



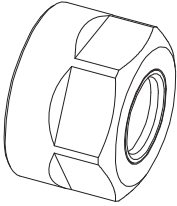
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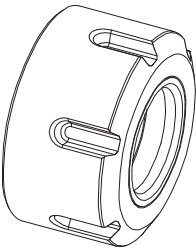
Clamping Nuts

Features | Benefits

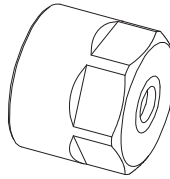
1 Hi-Q®/ERB16 – ERB20



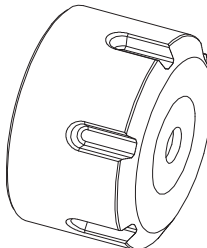
2 Hi-Q®/ERB25 – ERB50



3 Hi-Q®/ERBC16 – ERBC20



4 Hi-Q®/ERBC25 – ERBC40



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 STD 6499.

Application with Sealing 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 sealing disk system DS/ER allows the use of all standard ER collets, ultra precision collets and tapping collets for coolant through tools.

Up to 150 Bar (2000 psi) Coolant Pressure For Peripheral Cooling of Non Coolant Through Tools

we recommend the coolant flush disks KS/ER.

See page 4.27/4.28

Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation* | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|--|------|---------|-------|
| ER 16 | DS / ER 16 | 4.22 | KS / ER 16 | 4.28 | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | ER 16-GB | 3.04 | ET1-16 | 3.08 | E 16 P | 12.01 |
| ER 20 | DS / ER 20 | 4.22 | KS / ER 20 | 4.28 | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | ER 20-GB | 3.04 | ET1-20 | 3.08 | E 20 P | 12.01 |
| ER 25 | DS / ER 25 | 4.24 | KS / ER 25 | 4.28 | ER 25 | 2.14 | ER 25-DM | 2.26 | - | - | ER 25-GB | 3.04 | ET1-25 | 3.08 | E 25 | 12.01 |
| ER 32 | DS / ER 32 | 4.24 | KS / ER 32 | 4.28 | ER 32 | 2.16 | ER 32-DM | 2.28 | - | - | ER 32-GB | 3.04 | ET1-32 | 3.08 | E 32 | 12.01 |
| ER 40 | DS / ER 40 | 4.26 | - | - | ER 40 | 2.18 | - | - | - | - | ER 40-GB | 3.04 | ET1-40 | 3.08 | E 40 | 12.01 |
| ER 50 | - | - | - | - | ER 50 | 2.20 | - | - | - | - | ER 50-GB | 3.04 | - | - | E 50 | 12.01 |

*Not for coolant through tools – use with Hi-Q/ERB clamping nut only.

Hi-Q® ERB Friction Bearing Hi-Q® ERBC Friction Bearing for Coolant Through Tools

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini-Nut | Nut with External Thread | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] | SW | Drawing |
|--------------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|--------|--------|-------------|-------------|---------|----|---------|
| Hi-Q/ERB 16 | 3416.30000 | | ■ | ■ | | ■ | | | 28 | 20.2 | M 22 x 1.50 | 10.0 – 13.6 | 3.0 | 25 | 1 |
| Hi-Q/ERB 20 | 3420.30000 | | ■ | ■ | | ■ | | | 34 | 21.7 | M 25 x 1.50 | 11.0 – 14.5 | 3.0 | 30 | 1 |
| Hi-Q/ERB 25 | 3425.30000 | | ■ | ■ | | ■ | | | 42 | 22.6 | M 32 x 1.50 | 11.5 – 15.0 | 3.0 | – | 2 |
| Hi-Q/ERB 32 | 3432.30000 | | ■ | ■ | | ■ | | | 50 | 25.0 | M 40 x 1.50 | 12.5 – 16.0 | 3.0 | – | 2 |
| Hi-Q/ERB 40 | 3440.30000 | | ■ | ■ | | ■ | | | 63 | 28.2 | M 50 x 1.50 | 14.5 – 18.0 | 3.0 | – | 2 |
| Hi-Q/ERB 50 | 3450.30000 | | ■ | ■ | | ■ | | | 78 | 38.1 | M 64 x 2.00 | 17.0 – 24.0 | 3.0 | – | 2 |
| Hi-Q/ERBC 16 | 3416.40000 | | ■ | ■ | ■ | ■ | | | 28 | 22.7 | M 22 x 1.50 | 12.5 – 16.0 | 5.5 | 25 | 3 |
| Hi-Q/ERBC 20 | 3420.40000 | | ■ | ■ | ■ | ■ | | | 34 | 24.2 | M 25 x 1.50 | 13.5 – 17.0 | 5.5 | 30 | 3 |
| Hi-Q/ERBC 25 | 3425.40000 | | ■ | ■ | ■ | ■ | | | 42 | 25.2 | M 32 x 1.50 | 14.0 – 17.5 | 5.5 | – | 4 |
| Hi-Q/ERBC 32 | 3432.40000 | | ■ | ■ | ■ | ■ | | | 50 | 27.4 | M 40 x 1.50 | 15.0 – 18.5 | 5.5 | – | 4 |
| Hi-Q/ERBC 40 | 3440.40000 | | ■ | ■ | ■ | ■ | | | 63 | 30.7 | M 50 x 1.50 | 17.0 – 20.5 | 5.5 | – | 4 |

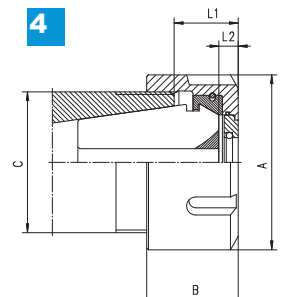
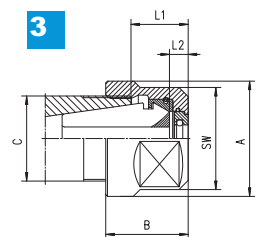
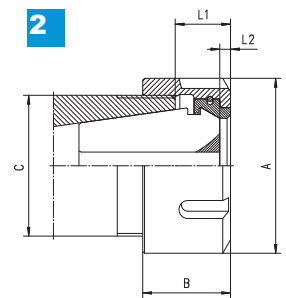
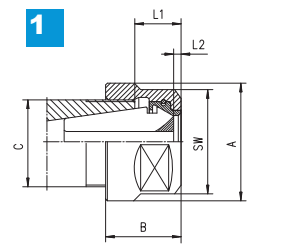


The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.



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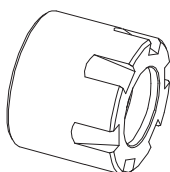


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Features | Benefits

1 Hi-Q®/ERM

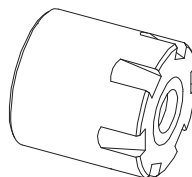


Application

This mini clamping nut is recommended for use where minimal external diameters are important. For example, it is ideal for multi-spindle drilling heads and collet holder extensions. The corresponding spanners have the same external dimensions as the clamping nuts.

Clamping nuts with left-hand thread upon re-quest.

2 Hi-Q®/ERMC



Application with Sealing Disk

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

Up to 150 Bar (2000 psi) Coolant Pressure

Integrated Seal Prevents Dirt and Chips from Entering the Collet

For Peripheral Cooling of Non Coolant Through Tools

we recommend the coolant flush disks KS/ER.

See page 4.27/4.28

Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation* | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|--|------|---------|-------|
| ER 8 | - | - | - | - | ER 8 | 2.06 | - | - | ER 8-MB | 2.06 | - | - | - | - | E 8 M | 12.01 |
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | ET1-12 | 3.08 | E 11 M | 12.01 |
| ER 16 | DS / ER 16 | 4.22 | KS / ER 16 | 4.28 | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | ER 16-GB | 3.04 | ET1-16 | 3.08 | E 16 P | 12.01 |
| ER 20 | DS / ER 20 | 4.22 | KS / ER 20 | 4.28 | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | ER 20-GB | 3.04 | ET1-20 | 3.08 | E 20 P | 12.01 |
| ER 25 | DS / ER 25 | 4.24 | KS / ER 25 | 4.28 | ER 25 | 2.14 | ER 25-DM | 2.26 | - | - | ER 25-GB | 3.04 | ET1-25 | 3.08 | E 25 | 12.01 |

*Not for coolant through tools – use with Hi-Q/ERM clamping nut only.

Clamping Nuts with Minimal External Diameter

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini-Nut | Nut with External Thread | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] | Drawing |
|-------------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|--------|--------|-------------|------------|---------|---------|
| Hi-Q/ERM 8 | 3508.00000 | | | ■ | | | ■ | | 12 | 10.8 | M 10 x 0.75 | 4.3 – 6.1 | 1.5 | 1 |
| Hi-Q/ERM 11 | 3511.00000 | | | ■ | | ■ | ■ | | 16 | 12.0 | M 13 x 0.75 | 5.7 – 7.5 | 0.9 | 1 |
| Hi-Q/ERM 16 | 3516.00000 | | | ■ | | ■ | ■ | | 22 | 18.4 | M 19 x 1.00 | 8.0 – 11.5 | 0.9 | 1 |
| Hi-Q/ERM 20 | 3520.00000 | | | ■ | | ■ | ■ | | 28 | 19.0 | M 24 x 1.00 | 8.0 – 11.5 | – | 1 |
| Hi-Q/ERM 25 | 3525.00000 | | | ■ | | ■ | ■ | | 35 | 20.0 | M 30 x 1.00 | 8.5 – 12.0 | – | 1 |

| | | | | | | | | | | | | | | |
|--------------|------------|--|--|---|---|---|---|--|---------------|------|-------------|-------------|-----|---|
| Hi-Q/ERMC 11 | | | | | | | | | See page 4.14 | | | | | |
| Hi-Q/ERMC 16 | 3516.20000 | | | ■ | ■ | ■ | ■ | | 22 | 22.0 | M 19 x 1.00 | 11.5 – 15.0 | 4.5 | 2 |
| Hi-Q/ERMC 20 | 3520.20000 | | | ■ | ■ | ■ | ■ | | 28 | 24.0 | M 24 x 1.00 | 13.0 – 16.5 | 5.0 | 2 |
| Hi-Q/ERMC 25 | 3525.20000 | | | ■ | ■ | ■ | ■ | | 35 | 25.0 | M 30 x 1.00 | 13.5 – 17.0 | 5.0 | 2 |

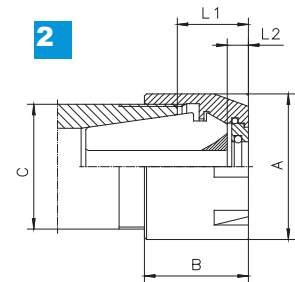
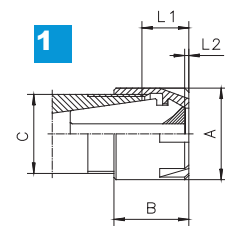


The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.



4

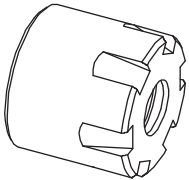


Swiss
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Tools

ER

Clamping Nuts

Features | Benefits



Application

The Hi-Q®/ERMC 11 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.

Does not Require Sealing Disks

The sealing system is built into the clamping nut.

Up to 150 Bar (2000 psi) Coolant Pressure

Integrated Seal Prevents Dirt and Chips from Entering the Collet

4

Matching Products

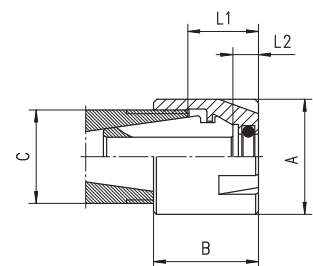
| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|---|------|---------|-------|
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | - | - | E 11 P | 12.01 |

Clamping Nuts with Built-In Sealing System

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System* | Mini-Nut | Nut with External Thread | Sealing Capacity [mm] | Sealing Capacity [Inch] | Ø [Inch] |
|---------------------|------------|----------|-----------------------|----------|---------------------------|------------------------|----------|--------------------------|-----------------------|-------------------------|----------|
| Hi-Q/ERM C 11 Ø 3.0 | 3511.20300 | | | ■ | ■ | ■ | ■ | | 3.00 – 2.50 | 0.1181 – 0.0984 | 3/32" |
| Hi-Q/ERM C 11 Ø 3.5 | 3511.20350 | | | ■ | ■ | ■ | ■ | | 3.50 – 3.00 | 0.1378 – 0.1181 | 1/8" |
| Hi-Q/ERM C 11 Ø 4.0 | 3511.20400 | | | ■ | ■ | ■ | ■ | | 4.00 – 3.50 | 0.1575 – 0.1378 | 5/32" |
| Hi-Q/ERM C 11 Ø 4.5 | 3511.20450 | | | ■ | ■ | ■ | ■ | | 4.50 – 4.00 | 0.1772 – 0.1575 | – |
| Hi-Q/ERM C 11 Ø 5.0 | 3511.20500 | | | ■ | ■ | ■ | ■ | | 5.00 – 4.50 | 0.1969 – 0.1772 | 3/16" |
| Hi-Q/ERM C 11 Ø 5.5 | 3511.20550 | | | ■ | ■ | ■ | ■ | | 5.50 – 5.00 | 0.2165 – 0.1969 | 7/32" |
| Hi-Q/ERM C 11 Ø 6.0 | 3511.20600 | | | ■ | ■ | ■ | ■ | | 6.00 – 5.50 | 0.2362 – 0.2165 | – |
| Hi-Q/ERM C 11 Ø 6.5 | 3511.20650 | | | ■ | ■ | ■ | ■ | | 6.50 – 6.00 | 0.2559 – 0.2362 | 1/4" |
| Hi-Q/ERM C 11 Ø 7.0 | 3511.20700 | | | ■ | ■ | ■ | ■ | | 7.00 – 6.50 | 0.2756 – 0.2559 | – |

*Not applicable for tapping collets ER11-GB.

| Type | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] |
|---------------|--------|--------|-------------|-------------|---------|
| Hi-Q/ERM C 11 | 16 | 14.6 | M 13 x 0.75 | 8.10 – 9.80 | 3.5 |



The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.

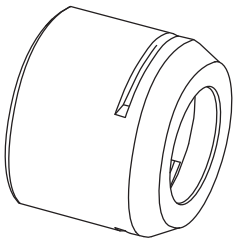


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ER

Clamping Nuts

Features | Benefits



Application

The ER MS clamping nut for highest RPM with minimal external diameter does not have the extractor ring and all the contours are ground. This provides best balancing for critical high-speed machining applications. The collet is released with the special EMS spanner. 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 concentricity.

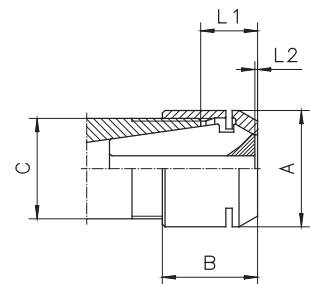
4

Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|---|------|---------|-------|
| ER 8 | - | - | - | - | ER 8 | 2.06 | - | - | ER 8-MB | 2.06 | - | - | - | - | E 8 MS | 12.02 |
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | - | - | - | - | E 11 MS | 12.02 |
| ER 16 | - | - | - | - | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | - | - | - | - | E 16 MS | 12.02 |
| ER 20 | - | - | - | - | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | - | - | - | - | E 20 MS | 12.02 |

Clamping Nuts for Highest RPM

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System | Mini-Nut | Nut with External Thread | A [mm] | B [mm] | C | L1 [mm] | L2 [mm] |
|----------|------------|----------|-----------------------|----------|---------------------------|-----------------------|----------|--------------------------|--------|--------|-------------|------------|---------|
| ER 8 MS | 3208.50000 | | | ■ | | | ■ | | 12 | 10.8 | M 10 x 0.75 | 4.3 – 6.1 | 1.5 |
| ER 11 MS | 3211.50000 | | | ■ | | | ■ | | 16 | 11.5 | M 13 x 0.75 | 4.6 – 6.8 | 0.4 |
| ER 16 MS | 3216.50000 | | | ■ | | | ■ | | 22 | 17.8 | M 19 x 1.00 | 6.1 – 10.5 | 0.3 |
| ER 20 MS | 3220.50000 | | | ■ | | | ■ | | 28 | 19.0 | M 24 x 1.00 | 7.1 – 11.5 | 0.3 |



The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.



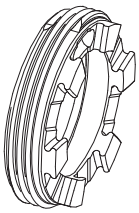
Swiss
Precision
Tools

ER

Clamping Nuts

Features | Benefits

1 Hi-Q®/ERAX (pat. pend.)



Application

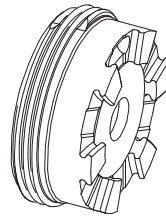
For REGO-FIX® floating chucks and other ER toolholders with internal thread (such as ERA Zero-Z® collets, see page 6.04).

S-Profile Spanner

The spanner is self centering on the nut and prevents slipping off.

Space Saving Design

2 Hi-Q®/ERAXC (pat. pend.)



Application with Sealing Disk

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

Up to 150 Bar (2000 psi) Coolant Pressure

Integrated Seal Prevents Dirt and Chips from Entering the Collet

For Peripheral Cooling of Non Coolant Through Tools

we recommend the coolant flush disks KS/ER. See page 4.27/4.28

4

Matching Products

| Size | Sealing Disks | Page | Coolant Flush Disks | Page | Collets | Page | Metallic Sealed Collets | Page | Microbore Collets | Page | Tapping Collets without Axial Compensation | Page | Tapping Collets with Axial Compensation* | Page | Spanner | Page |
|-------|---------------|------|---------------------|------|---------|------|-------------------------|------|-------------------|------|--|------|--|------|---------|-------|
| ER 11 | - | - | - | - | ER 11 | 2.08 | - | - | ER 11-MB | 2.08 | ER 11-GB | 3.04 | ET1-12 | 3.08 | E 11 AX | 12.02 |
| ER 16 | DS / ER 16 | 4.22 | KS / ER 16 | 4.28 | ER 16 | 2.10 | ER 16-DM | 2.22 | ER 16-MB | 2.10 | ER 16-GB | 3.04 | ET1-16 | 3.08 | E 16 AX | 12.02 |
| ER 20 | DS / ER 20 | 4.22 | KS / ER 20 | 4.28 | ER 20 | 2.12 | ER 20-DM | 2.24 | - | - | ER 20-GB | 3.04 | ET1-20 | 3.08 | E 20 AX | 12.02 |
| ER 25 | DS / ER 25 | 4.24 | KS / ER 25 | 4.28 | ER 25 | 2.14 | ER 25-DM | 2.26 | - | - | ER 25-GB | 3.04 | ET1-25 | 3.08 | E 25 AX | 12.02 |
| ER 32 | DS / ER 32 | 4.24 | KS / ER 32 | 4.28 | ER 32 | 2.16 | ER 32-DM | 2.28 | - | - | ER 32-GB | 3.04 | ET1-32 | 3.08 | E 32 AX | 12.02 |
| ER 40 | DS / ER 40 | 4.26 | - | - | ER 40 | 2.18 | - | - | - | - | ER 40-GB | 3.04 | ET1-40 | 3.08 | E 40 AX | 12.02 |

*Not for coolant through tools, use with Hi-Q/ERAX clamping nut only.

Clamping Nuts with External Thread

| Type | Part No. | Standard | With Friction Bearing | Balanced | For Coolant Through Tools | Collet Locking System* | Mini-Nut | Nut with External Thread | B [mm] | C | L1 [mm] | L2 [mm] | Drawing |
|---------------|------------|----------|-----------------------|----------|---------------------------|------------------------|----------|--------------------------|--------|-------------|-----------|---------|---------|
| Hi-Q/ERAX 11 | 3311.60000 | | | ■ | | ■ | | ■ | 7.5 | M 18 x 1.00 | 1.0 – 3.2 | 3.9 | 1 |
| Hi-Q/ERAX 16 | 3316.60000 | | | ■ | | ■ | | ■ | 7.6 | M 24 x 1.00 | 0.0 – 2.6 | 2.3 | 1 |
| Hi-Q/ERAX 20 | 3320.60000 | | | ■ | | ■ | | ■ | 8.5 | M 28 x 1.50 | 0.0 – 2.5 | 2.3 | 1 |
| Hi-Q/ERAX 25 | 3325.60000 | | | ■ | | ■ | | ■ | 8.8 | M 32 x 1.50 | 0.0 – 1.9 | 2.3 | 1 |
| Hi-Q/ERAX 32 | 3332.60000 | | | ■ | | ■ | | ■ | 9.8 | M 40 x 1.50 | 0.0 – 1.1 | 2.5 | 1 |
| Hi-Q/ERAX 40 | 3340.60000 | | | ■ | | ■ | | ■ | 11.7 | M 50 x 1.50 | 0.0 – 1.0 | 2.4 | 1 |
| Hi-Q/ERAXC 16 | 3316.70000 | | | ■ | ■ | ■ | | ■ | 12.5 | M 24 x 1.00 | 3.1 – 7.5 | 7.2 | 2 |
| Hi-Q/ERAXC 20 | 3320.70000 | | | ■ | ■ | ■ | | ■ | 13.5 | M 28 x 1.50 | 3.1 – 7.5 | 7.3 | 2 |
| Hi-Q/ERAXC 25 | 3325.70000 | | | ■ | ■ | ■ | | ■ | 13.8 | M 32 x 1.50 | 2.5 – 6.9 | 7.3 | 2 |
| Hi-Q/ERAXC 32 | 3332.70000 | | | ■ | ■ | ■ | | ■ | 14.9 | M 40 x 1.50 | 1.8 – 6.2 | 7.6 | 2 |
| Hi-Q/ERAXC 40 | 3340.70000 | | | ■ | ■ | ■ | | ■ | 16.6 | M 50 x 1.50 | 1.5 – 5.9 | 7.3 | 2 |

*Not applicable for tapping collets ER11-GB. Additional technical information see page 13.05 and 13.06



The maximum torque shall not be more than 25% above the recommended tightening torque.

Recommended tightening torque on page 13.03/13.04



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.

