

EMUGE



SOFTSYNCHRO®
HIGH PERFORMANCE TAP HOLDERS

You Know **EMUGE** Taps

Now *take them to the next level*

*Triple your tap life and more with
Emuge Softsynchro[®] Tap Holders!*



Emuge is widely recognized in the industry as the leader in designing and manufacturing exceptionally high performance, quality taps. And with Emuge's patented Softsynchro Tap Holder technology, you can take Emuge Taps to the next level and beyond with maximum tool life, thread quality, tapping speed and performance.

Emuge, the Leader in Advanced Tap Holder Technology.

Having the correct tap for the job is not enough. You need the best tap holder to drive the best taps in the world to their optimum levels.

Emuge recognized the industry shift to synchronized tapping in the early '90s and developed the first tap holder for this environment. Composed of a two-part construction that physically separates the tap from the spindle via **PATENTED ELASTOMER SPRINGS**, the Emuge Softsynchro® Holder provides minimum tap length compensation that is necessary for exceptional tool life. Emuge offers an extensive line of high performance tool holder solutions for a full range of applications.



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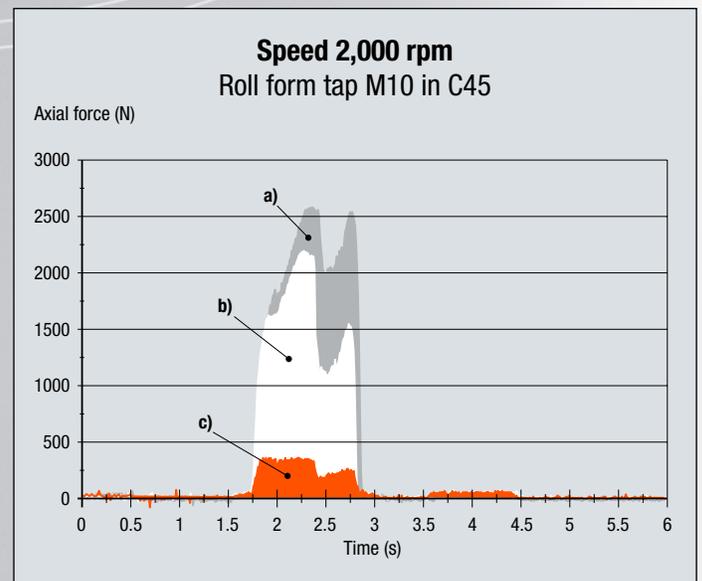
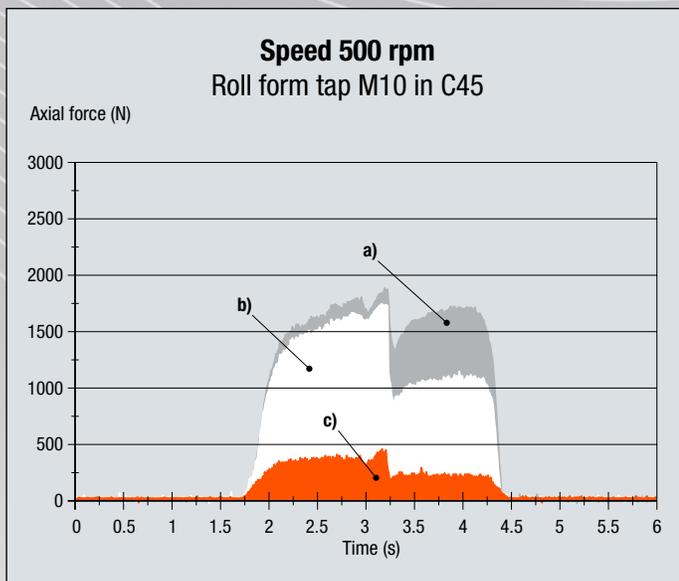
Addressing Axial Force in Synchronous Tapping.

Taps are the only tool in which the feed rate remains static and must be synchronized with the tool's ground pitch. Any deviation from this precise feed rate in a CNC machine can cause many issues, including oversize threads, premature tool wear and tap failure. The following are just a few scenarios that create differences between the actual and programmed cycle:

- **Increasing tool temperatures during the machining process elongates the tap slightly**, causing a difference in length from when the tap was measured at the machine. While small, this difference is enough to cause excessive wear on thread flanks.
 - **Difficult-to-machine materials will increase torque loads** on the cutting teeth, causing them to dull and start pushing material instead of cutting it. This leads to work hardening, further increasing the forces acting on the tap.
 - **CNC computers cannot keep pace with rotational accuracy at high speeds**, leading to errors that cause increased axial forces on the tap. (See chart below)
- All of these small errors have a compounding effect** that leads to poor tool life and premature tool failures.

Axial Force Reduction by Speed (rpm) – Emuge vs. Competitor

As speed increases, so does axial force. Regardless of speed, Emuge Softsynchro® Holders virtually eliminate axial force to a controlled, bare minimum.



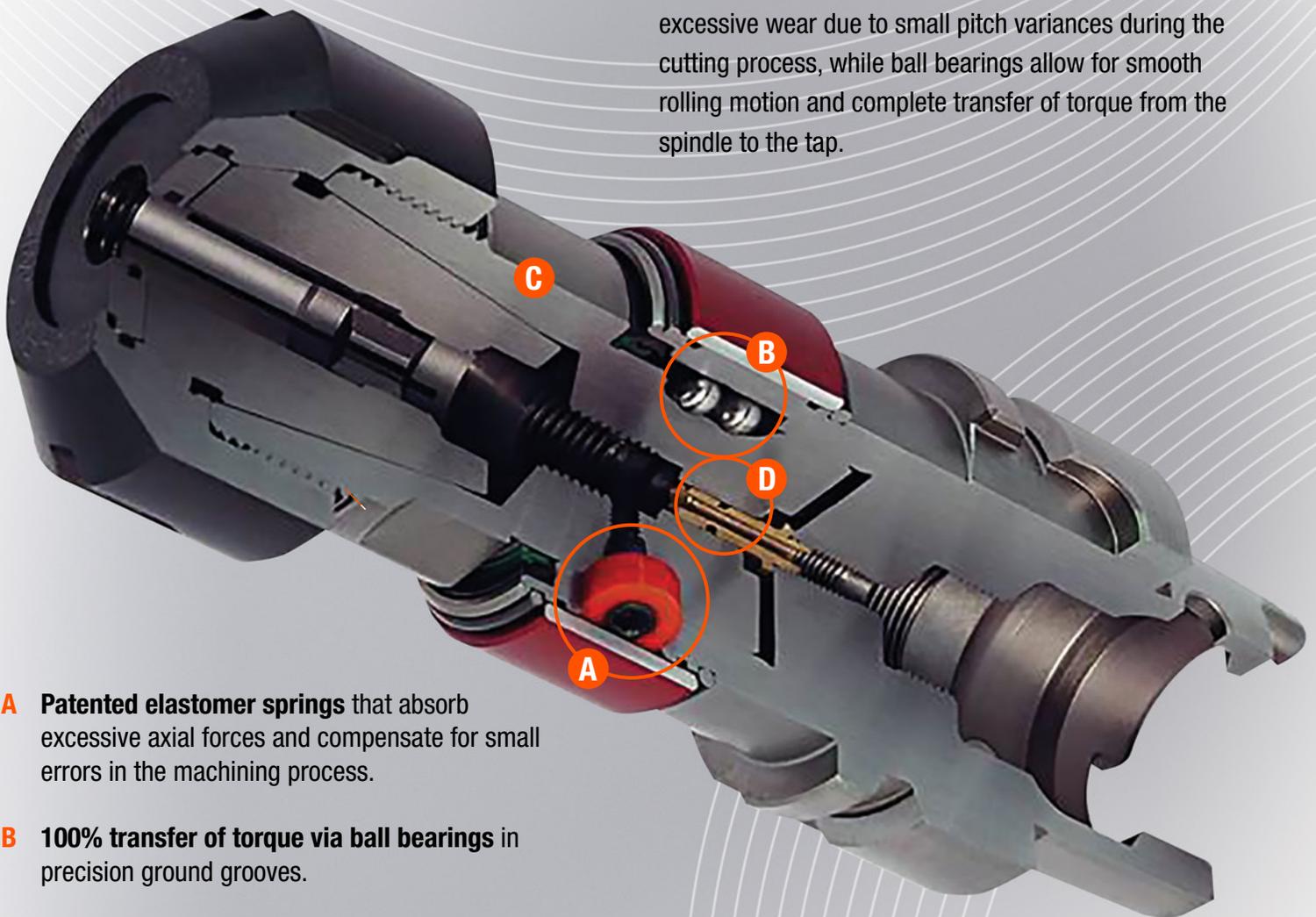
- (a) Excess axial forces during rigid tapping
- (b) Force reduction of competitor tap holder with synchronous collet adaption
- (c) Force levels greatly reduced with Emuge Softsynchro Tap Holder solution

An Original Emuge Design Dramatically Reduces Force, Increasing Tool Life, Thread Quality.

The Emuge Softsynchro® holder design makes optimum use of a synchronous spindle, providing the best possible tool life, performance and thread surface quality. Constructed from two separate, precision-ground sections, the body and shank, **Softsynchro effectively separates the spindle from the tap via patented elastomer springs** that absorb axial forces, giving the tap an immense boost in tool life and performance.

The Transmission of Torque and Axial Force, Separated.

Torque from the spindle is transferred seamlessly to the tap via ball bearings riding in precision ground grooves. These ball grooves minimize rolling friction on the torque transmission balls to guarantee precision micro-correction of lead errors in a rigid tapping cycle, even under the most demanding machining conditions. Effectively, the tap is riding on shocks to prevent excessive wear due to small pitch variances during the cutting process, while ball bearings allow for smooth rolling motion and complete transfer of torque from the spindle to the tap.



- A** **Patented elastomer springs** that absorb excessive axial forces and compensate for small errors in the machining process.
- B** **100% transfer of torque via ball bearings** in precision ground grooves.
- C** **Two-part construction** that physically separates the tap from the spindle.
- D** **Coolant-through capability** is standard on all Softsynchro Tap Holders.

The Softsynchro® Modular System

The beauty of Softsynchro modularity is you **only need to purchase one tap holder** vs. buying a different holder for each of your applications. Instead, less-costly adapters can be purchased when your applications change, saving you money while still providing **coolant-through capability!**

CAT Adapter

Softsynchro

Collet

Seal Disk

Clamping Nut

Coolant-Through Tap

*German engineered
Emuge quality*

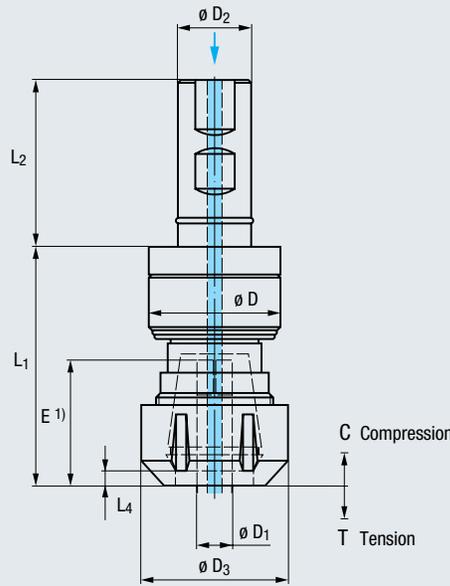
Softsynchro® 0

Weldon Shank
ASME B94.19

For use on machines
with synchronous spindle



Icon descriptions on page 16.



Tap Range	Collet	Clamping Nut	Shank Size ø D ₂	ø D	ø D ₃	L ₁	L ₂	C	T	EDP no.
#2-#10 M2-M8	ER11-GB	Hi-Q/ERM 11	1"	1.3386"	0.6299"	2.8622"	2.2835"	0.01968"	0.01968"	F3150H36.1.44

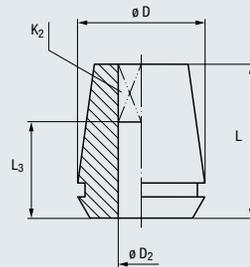
ER11-GB Collet

Inch / Metric
DIN ISO 15488 (DIN 6499)

With square drive



Icon descriptions on page 16.



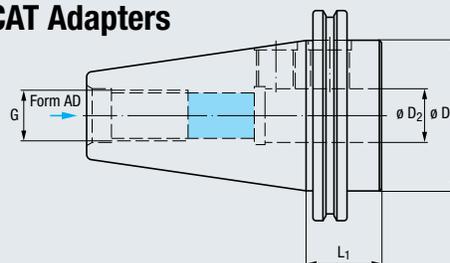
	Tap Size	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
[inch]	#0-#6	0.141"	0.110"	0.433"	0.709"	0.55"	F0942011.3.58
	#8	0.168"	0.131"	0.433"	0.709"	0.55"	F0942011.4.27
	#10	0.194"	0.152"	0.433"	0.709"	0.55"	F0942011.4.93

	Reinforced Shank	Reduced Shank	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
[mm]	M2-M2.5	M4	2.8 mm	2.1 mm	11.0 mm	18.0 mm	12.0 mm	F0942011.2.8
	M3	M4.5-M5	3.5 mm	2.7 mm	11.0 mm	18.0 mm	14.0 mm	F0942011.3.5
	M3.5	M5.5	4.0 mm	3.0 mm	11.0 mm	18.0 mm	14.0 mm	F0942011.4
	M4	M6	4.5 mm	3.4 mm	11.0 mm	18.0 mm	14.0 mm	F0942011.4.5
	M4.5-M6	M8	6.0 mm	4.9 mm	11.0 mm	18.0 mm	14.0 mm	F0942011.6

Wrench Set



CAT Adapters



Holder Size	Collet Size	EDP no.
Softsynchro 0	ER11-GB	F315098.02

Size	Type	Bore Size ø D ₂	ø D	G	L ₁	EDP no.
CAT 40	ASME B5.50 UNC	1"	1.9"	5/8"-11	1.75"	F440007.03
CAT 50	ASME B5.50 UNC	1"	2.75"	1"-8	1.63"	F440007.04
CAT 50	ASME B5.50 UNC	1.25"	2.75"	1"-8	1.63"	F440007.05

Softsynchro® 1

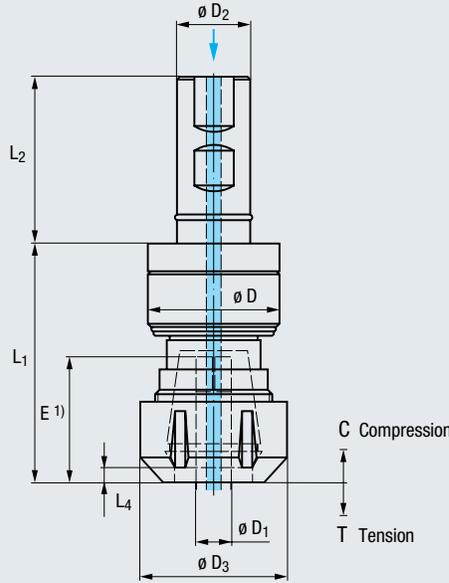
Weldon Shank

ASME B94.19

For use on machines
with synchronous spindle



Icon descriptions on page 16.



Tap Range	Collet	Clamping Nut	Shank Size ø D ₂	ø D	ø D ₃	L ₁	L ₂	C	T	EDP no.
#8-1/2" M4-M12	ER20-GB	Hi-Q/ERC 20	1"	1.3386"	1.3386"	2.8740"	2.2835"	0.0197"	0.0197"	F3151H36.1.44

ER20-GB Collet

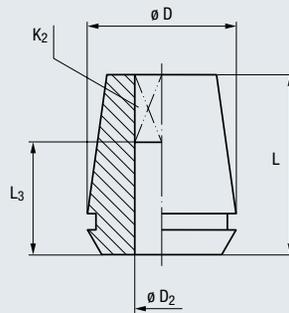
Inch / Metric

DIN ISO 15488 (DIN 6499)

With square drive



Icon descriptions on page 16.



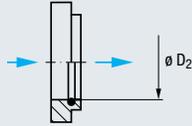
Tap Size	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
#8	0.168"	0.131"	0.787"	1.240"	0.71"	F0942020.4.27
#10	0.194"	0.152"	0.787"	1.240"	0.71"	F0942020.4.93
#12	0.220"	0.165"	0.787"	1.240"	0.71"	F0942020.5.59
1/4"	0.255"	0.191"	0.787"	1.240"	0.71"	F0942020.6.48
5/16"	0.318"	0.238"	0.787"	1.240"	0.87"	F0942020.8.08
3/8"	0.381"	0.286"	0.787"	1.240"	0.87"	F0942020.9.68
7/16"	0.323"	0.242"	0.787"	1.240"	0.87"	F0942020.8.20
1/2"	0.367"	0.275"	0.787"	1.240"	0.87"	F0942020.9.32

Reinforced Shank	Reduced Shank	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
M4	M6	4.5 mm	3.4 mm	16.0 mm	27.5 mm	15.0 mm	F0942020.4.5
M4.5-M6	M8	6.0 mm	4.9 mm	16.0 mm	27.5 mm	18.0 mm	F0942020.6
M7	M9-M10	7.0 mm	5.5 mm	16.0 mm	27.5 mm	18.0 mm	F0942020.7
M8	M11	8.0 mm	6.2 mm	16.0 mm	27.5 mm	22.0 mm	F0942020.8
M9	M12	9.0 mm	7.0 mm	16.0 mm	27.5 mm	22.0 mm	F0942020.9
M10	-	10.0 mm	8.0 mm	16.0 mm	27.5 mm	25.0 mm	F0942020.10

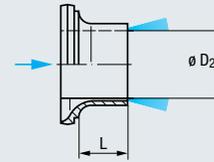
DS/ER 20 Seal Disk
Inch / Metric



Icon descriptions on page 16.



KS/ER 20 Coolant Flush Disk
Inch / Metric



$L = 0.429'' (11\text{mm})$



Tap Size	Shank Size $\varnothing D_2$	EDP no.
#8	0.168"	F0941520.4.5
#10	0.194"	F0941520.5
#12	0.220"	F0941520.6
1/4"	0.255"	F0941520.6.5
5/16"	0.318"	F0941520.8.5
3/8"	0.381"	F0941520.10
7/16"	0.323"	F0941520.8.5
1/2"	0.367"	F0941520.9.5

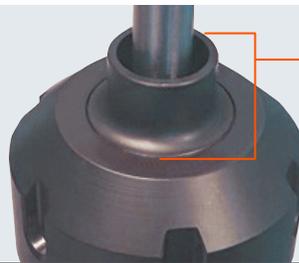
Reinforced Shank	Reduced Shank	Shank Size $\varnothing D_2$	EDP no.
M4	M6	4.5 mm	F0941520.4.5
M4.5-M6	M8	6.0 mm	F0941520.6
M7	M9-M10	7.0 mm	F0941520.7
M8	M11	8.0 mm	F0941520.8
M9	M12	9.0 mm	F0941520.9
M10	-	10.0 mm	F0941520.10

Tap Size	Shank Size $\varnothing D_2$	EDP no.
#8	0.168"	F0941720.5
#10	0.194"	F0941720.6
#12	0.220"	F0941720.7
1/4"	0.255"	F0941720.8
5/16"	0.318"	F0941720.9
3/8"	0.381"	F0941720.11
7/16"	0.323"	F0941720.9
1/2"	0.367"	F0941720.10

Reinforced Shank	Reduced Shank	Shank Size $\varnothing D_2$	EDP no.
M4.5-M6	M8	6.0 mm	F0941720.6
M7	M9-M10	7.0 mm	F0941720.7
M8	M11	8.0 mm	F0941720.8
M9	M12	9.0 mm	F0941720.9
M10	-	10.0 mm	F0941720.10

Seal Disk and Coolant Flush Disk
Functionality

For more information visit www.emuge.com



COOLANT FLUSH DISK directs the coolant coming through the slits of the collet down the shank of the tap.

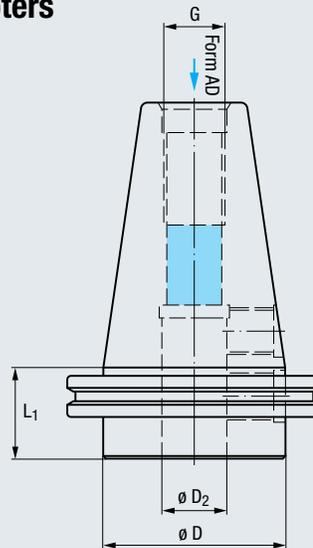
SEAL DISK (not shown) seals the area and forces the coolant through the tap only.

Wrench Set



Holder Size	Collet Size	EDP no.
Softsynchro 1	ER20-GB	F315198.02

CAT Adapters



Size	Type	Bore Size $\varnothing D_2$	$\varnothing D$	G	L ₁	EDP no.
CAT 40	ASME B5.50 UNC	1"	1.9"	5/8"-11	1.75"	F440007.03
CAT 50	ASME B5.50 UNC	1"	2.75"	1"-8	1.63"	F440007.04
CAT 50	ASME B5.50 UNC	1.25"	2.75"	1"-8	1.63"	F440007.05

Softsynchro® 3

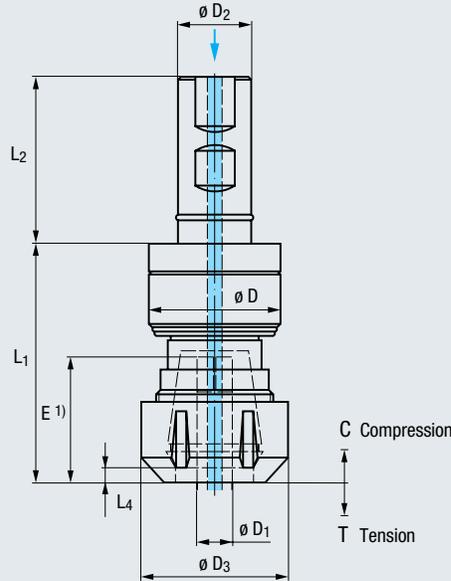
Weldon Shank

ASME B94.19

For use on machines
with synchronous spindle



Icon descriptions on page 16.



Tap Range	Collet	Clamping Nut	Shank Size ø D ₂	ø D	ø D ₃	L ₁	L ₂	C	T	EDP no.
1/4"-3/4" M4-M20	ER32-GB	Hi-Q/ERC 32	1"	1.7717"	1.9685"	3.4370"	2.2835"	0.0197"	0.0197"	F3153H36.1.44

ER32-GB Collet

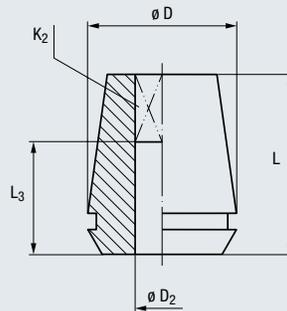
Inch / Metric

DIN ISO 15488 (DIN 6499)

With square drive



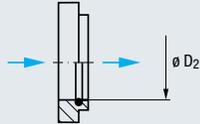
Icon descriptions on page 16.



Tap Size	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
1/4"	0.255"	0.191"	1.26"	1.575"	0.71"	F0942032.6.48
5/16"	0.318"	0.238"	1.26"	1.575"	0.87"	F0942032.8.08
3/8"	0.323"	0.286"	1.26"	1.575"	0.87"	F0942032.9.68
7/16"	0.367"	0.242"	1.26"	1.575"	0.87"	F0942032.8.20
1/2"	0.381"	0.275"	1.26"	1.575"	0.87"	F0942032.9.32
9/16"	0.429"	0.322"	1.26"	1.575"	0.98"	F0942032.1090
1/8 NPT	0.4375"	0.328"	1.26"	1.575"	0.98"	F0942032.1111
5/8"	0.480"	0.360"	1.26"	1.575"	0.98"	F0942032.1219
11/16"	0.542"	0.406"	1.26"	1.575"	0.98"	F0942032.1377
1/4 NPT	0.5625"	0.421"	1.26"	1.575"	0.98"	F0942032.1429
3/4"	0.590"	0.442"	1.26"	1.575"	0.98"	F0942032.1499

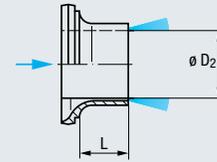
Reinforced Shank	Reduced Shank	Shank Size ø D ₂	Square K ₂	ø D	L	L ₃	EDP no.
M4	M6	4.5 mm	3.4 mm	32.0 mm	40.0 mm	15.0 mm	F0942032.4.5
M4.5-M6	M8	6.0 mm	4.9 mm	32.0 mm	40.0 mm	18.0 mm	F0942032.6
M7	M9-M10	7.0 mm	5.5 mm	32.0 mm	40.0 mm	18.0 mm	F0942032.7
M8	M11	8.0 mm	6.2 mm	32.0 mm	40.0 mm	22.0 mm	F0942032.8
M9	M12	9.0 mm	7.0 mm	32.0 mm	40.0 mm	22.0 mm	F0942032.9
M10	-	10.0 mm	8.0 mm	32.0 mm	40.0 mm	25.0 mm	F0942032.10
-	M14	11.0 mm	9.0 mm	32.0 mm	40.0 mm	25.0 mm	F0942032.11
-	M16	12.0 mm	9.0 mm	32.0 mm	40.0 mm	25.0 mm	F0942032.12
-	M18	14.0 mm	11.0 mm	32.0 mm	40.0 mm	25.0 mm	F0942032.14
-	M20	16.0 mm	12.0 mm	32.0 mm	40.0 mm	25.0 mm	F0942032.16

DS/ER 32 Seal Disk
Inch / Metric



Icon descriptions on page 16.

KS/ER 32 Coolant Flush Disk
Inch / Metric



L = 0.429" (11mm)

Tap Size	Shank Size ϕD_2	EDP no.
1/4"	0.255"	F0941532.6.5
5/16"	0.318"	F0941532.8.5
3/8"	0.381"	F0941532.10
7/16"	0.323"	F0941532.8.5
1/2"	0.367"	F0941532.9.5
9/16"	0.429"	F0941532.11
1/8 NPT	0.4375"	F0941532.11.5
5/8"	0.480"	F0941532.12.5
1/4 NPT	0.5625"	F0941532.14.5
3/4"	0.590"	F0941532.15

Reinforced Shank	Reduced Shank	Shank Size ϕD_2	EDP no.
M4.5-M6	M8	6.0 mm	F0941532.6
M7	M9-M10	7.0 mm	F0941532.7
M8	M11	8.0 mm	F0941532.8
M9	M12	9.0 mm	F0941532.9
M10	-	10.0 mm	F0941532.10
-	M14	11.0 mm	F0941532.11
-	M16	12.0 mm	F0941532.12
-	M18	14.0 mm	F0941532.14
-	M20	16.0 mm	F0941532.16

Tap Size	Shank Size ϕD_2	EDP no.
1/4"	0.255"	F0941732.7
5/16"	0.318"	F0941732.9
3/8"	0.381"	F0941732.11
7/16"	0.323"	F0941732.9
1/2"	0.367"	F0941732.10
9/16"	0.429"	F0941732.12
1/8 NPT	0.4375"	F0941732.12
5/8"	0.480"	F0941732.14
1/4 NPT	0.5625"	F0941732.16
3/4"	0.590"	F0941732.16

Reinforced Shank	Reduced Shank	Shank Size ϕD_2	EDP no.
M4.5-M6	M8	6.0 mm	F0941732.6
M7	M9-M10	7.0 mm	F0941732.7
M8	M11	8.0 mm	F0941732.8
M9	M12	9.0 mm	F0941732.9
M10	-	10.0 mm	F0941732.10
-	M14	11.0 mm	F0941732.11
-	M16	12.0 mm	F0941732.12
-	M18	14.0 mm	F0941732.14
-	M20	16.0 mm	F0941732.16

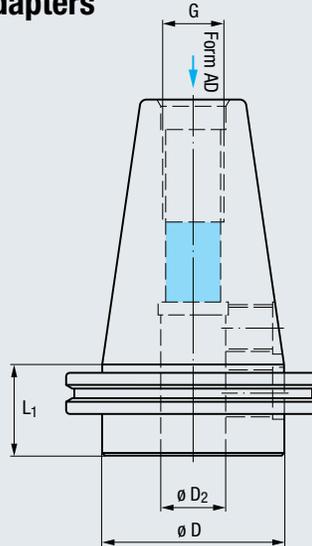
See page 9 regarding Seal Disk and Coolant Flush Disk functionality.

Wrench Set



Holder Size	Collet Size	EDP no.
Softsynchro 3	ER32-GB	F315398.01

CAT Adapters



Size	Type	Bore Size ϕD_2	ϕD	G	L_1	EDP no.
CAT 40	ASME B5.50 UNC	1"	1.9"	5/8"-11	1.75"	F440007.03
CAT 50	ASME B5.50 UNC	1"	2.75"	1"-8	1.63"	F440007.04
CAT 50	ASME B5.50 UNC	1.25"	2.75"	1"-8	1.63"	F440007.05

Softsynchro® 4

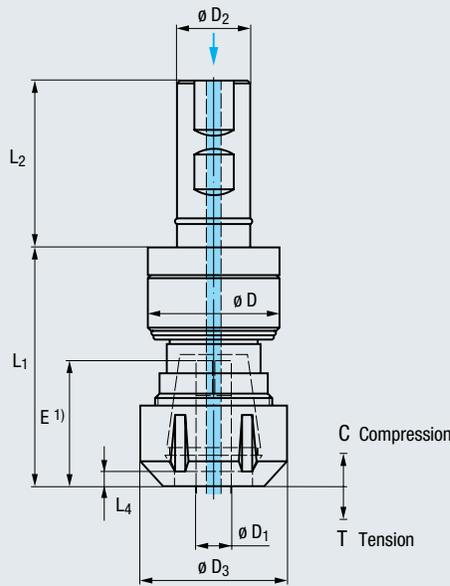
Weldon Shank

ASME B94.19

For use on machines
with synchronous spindle



Icon descriptions on page 16.



Tap Range	Collet	Clamping Nut	Shank Size ϕD_2	ϕD	ϕD_3	L ₁	L ₂	C	T	EDP no.
7/16"-1" M12-M30	ER40-GB	Hi-Q/ERC 40	1.25"	2.480"	2.480"	4.469"	2.2835"	0.0276"	0.0276"	F3154H38.1

ER40-GB Collet

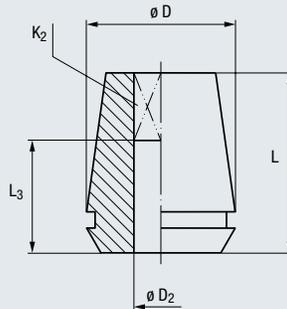
Inch / Metric

DIN ISO 15488 (DIN 6499)

With square drive



Icon descriptions on page 16.



Tap Size*	Shank Size ϕD_2	Square K ₂	ϕD	L	L ₃	EDP no.
7/16"	0.323"	0.242"	1.575"	1.811"	0.87"	F0942040.9.32
1/2"	0.367"	0.275"	1.575"	1.811"	0.87"	F0942040.9.68
9/16"	0.429"	0.322"	1.575"	1.811"	0.98"	F0942040.1090
1/8 NPT	0.4375"	0.328"	1.575"	1.811"	0.98"	F0942040.1111
5/8"	0.480"	0.360"	1.575"	1.811"	0.98"	F0942040.1219
11/16"	0.542"	0.406"	1.575"	1.811"	0.98"	F0942040.1377
1/4 NPT	0.5625"	0.421"	1.575"	1.811"	0.98"	F0942040.1429
3/4"	0.590"	0.442"	1.575"	1.811"	0.98"	F0942040.1499
1/2 NPT	0.6875"	0.515"	1.575"	1.811"	0.98"	F0942040.1745
7/8"	0.697"	0.523"	1.575"	1.811"	0.98"	F0942040.1770
3/8 NPT	0.700"	0.531"	1.575"	1.811"	0.98"	F0942040.1778
1"	0.800"	0.600"	1.575"	1.811"	1.10"	F0942040.2032

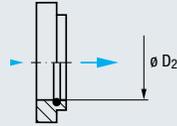
Reinforced Shank	Reduced Shank	Shank Size ϕD_2	Square K ₂	ϕD	L	L ₃	EDP no.
M9	M12	9.0 mm	7.0 mm	40.0 mm	40.0 mm	15.0 mm	F0942040.9
M10	-	10.0 mm	8.0 mm	40.0 mm	40.0 mm	18.0 mm	F0942040.10
-	M14	11.0 mm	9.0 mm	40.0 mm	40.0 mm	18.0 mm	F0942040.11
-	M16	12.0 mm	9.0 mm	40.0 mm	40.0 mm	22.0 mm	F0942040.12
-	M18	14.0 mm	11.0 mm	40.0 mm	40.0 mm	22.0 mm	F0942040.14
-	M20	16.0 mm	12.0 mm	40.0 mm	40.0 mm	25.0 mm	F0942040.16
-	M22-M24	18.0 mm	14.5 mm	40.0 mm	40.0 mm	25.0 mm	F0942040.18
-	M27	20.0 mm	16.0 mm	40.0 mm	40.0 mm	25.0 mm	F0942040.20
-	M30	22.0 mm	18.0 mm	40.0 mm	40.0 mm	25.0 mm	F0942040.22

*More sizes available upon request.

DS/ER 40 Seal Disk
Inch / Metric



Icon descriptions on page 16.



Tap Size*	Shank Size $\varnothing D_2$	EDP no.
7/16"	0.323"	F0941540.8.5
1/2"	0.367"	F0941540.9.5
9/16"	0.429"	F0941540.11
1/8 NPT	0.4375"	F0941540.11.5
5/8"	0.480"	F0941540.12.5
1/4 NPT	0.5625"	F0941540.14.5
3/4"	0.590"	F0941540.15
1/2 NPT	0.6875"	F0941540.17.5
7/8"	0.697"	F0941540.18
3/8 NPT	0.700"	F0941540.18
1"	0.800"	F0941540.20.5

Reinforced Shank	Reduced Shank	Shank Size $\varnothing D_2$	EDP no.
M9	M12	9.0 mm	F0941540.9
M10	-	10.0 mm	F0941540.10
-	M14	11.0 mm	F0941540.11
-	M16	12.0 mm	F0941540.12
-	M18	14.0 mm	F0941540.14
-	M20	16.0 mm	F0941540.16
-	M22-M24	18.0 mm	F0941540.18
-	M27	20.0 mm	F0941540.20
-	M30	22.0 mm	F0941540.22

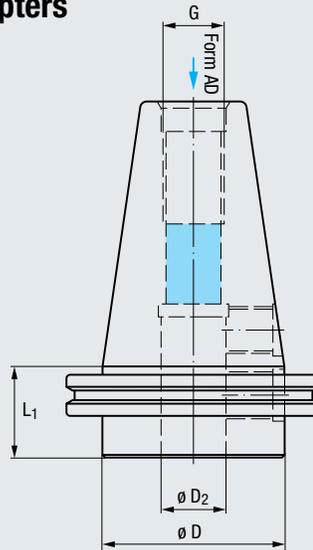
See page 9 regarding Seal Disk functionality.
*More sizes available upon request.

Wrench Set



Holder Size	Collet Size	EDP no.
Softsynchro 4	ER40-GB	F315498.01

CAT Adapters

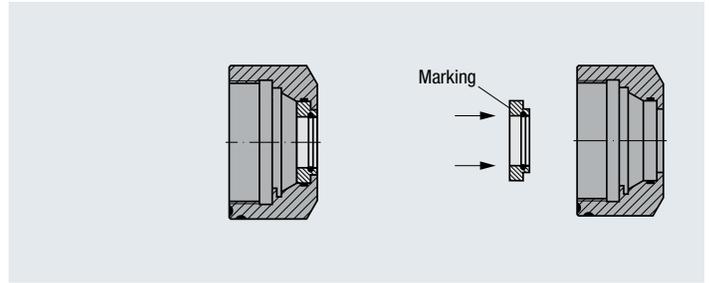


Size	Type	Bore Size $\varnothing D_2$	$\varnothing D$	G	L ₁	EDP no.
CAT 40	ASME B5.50 UNC	1"	1.9"	5/8"-11	1.75"	F440007.03
CAT 50	ASME B5.50 UNC	1"	2.75"	1"-8	1.63"	F440007.04
CAT 50	ASME B5.50 UNC	1.25"	2.75"	1"-8	1.63"	F440007.05

Assembly of Seal Disk, Collet and Tap

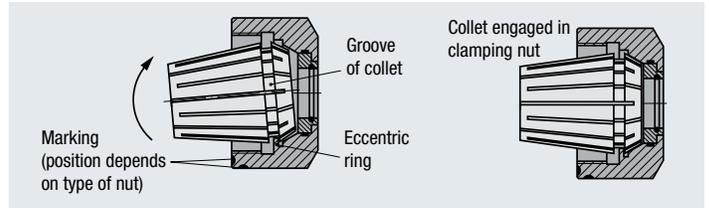
1. Assembly of seal disk with collets type ER16-GB up to ER50-GB:

Insert the seal disk into the clamping nut as shown in the illustration, and push it forward until you can clearly hear it engaging. After that, the seal disk is flush with the clamping nut. For collets type ER11-GB you can use clamping nuts with integrated sealing system – a separate seal disk is not needed then. The clamping nut must be selected in accordance with the clamping diameter used.



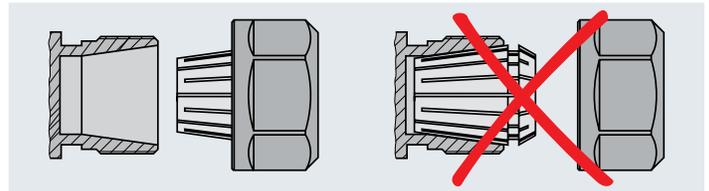
2. Assembly of clamping nuts:

Insert the collet into the clamping nut, then tilt it. The groove of the collet must engage in the eccentric ring of the clamping nut at the marked position. Now, tilt the collet in the opposite direction until you clearly hear it engaging.



3. Screw the clamping nut with the engaged collet onto the thread of the holder.

Important: Only screw on clamping nuts with correctly engaged collet!

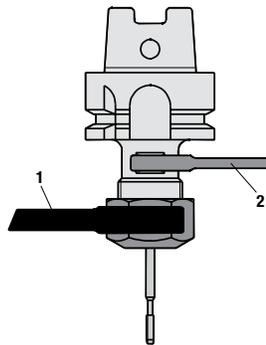


4. Insert tool.

Important: If you use a collet with integrated square, make sure to turn the tool around until it is in a position that allows it to be pushed into the square seat of the collet.

5. Tighten the clamping nut with the wrench. Observe the max. torque values in the table.

Important: In order to avoid damage to the holder, please counter with open-ended spanner 2 while tightening the clamping nut with wrench 1.



Type	Recommended Tightening Torque		Type	Recommended Tightening Torque	
	ft lbs	Nm		ft lbs	Nm
Hi-Q/ERM 8	4	6	Hi-Q/ERC 11	10	14
Hi-Q/ERM 11	9	12	Hi-Q/ERC 16	29	40
Hi-Q/ER 11	10	14	Hi-Q/ERC 20	23	32
Hi-Q/ER 50	177	240	Hi-Q/ERC 25	59	80
Hi-Q/ERMC 11	9	12	Hi-Q/ERC 32	66	90
Hi-Q/ERMC 16	17	24	Hi-Q/ERC 40	132	180
Hi-Q/ERMC 20	20	28	Hi-Q/ERCB 50 AF	221	300
Hi-Q/ERMC 25	23	32			

The indicated values apply to collets type ER-GB. The maximum tightening torque must not exceed the recommended value by more than 25%. An excessive tightening torque can result in permanent deformation of the collet holder. For the setting of the correct torque we recommend using an Emuge TORCO-FIX Torque Wrench.

Softsynchro® Assembly Device

Fixture for clamping holder neck during assembly



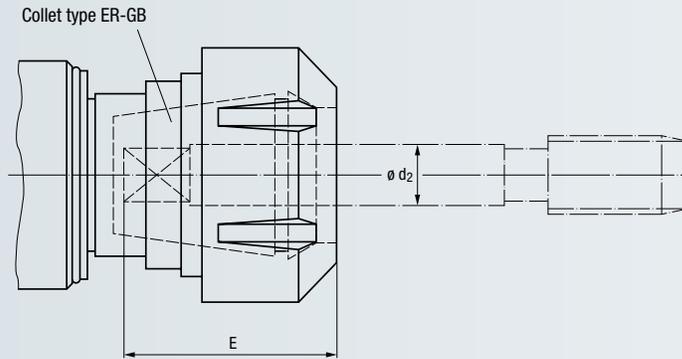
For Collet Holders

Softsynchro® 1 - Softsynchro® 4

Tool no.

F315199.02

Clamping Depths - Inch / Metric



Collets		ER 20 GB	ER 32 GB	ER 40 GB
Clamping Nuts		Hi-Q/ERMC 20 Hi-Q/ERC 20	Hi-Q/ERC 32	Hi-Q/ERC 40
	$\varnothing d_2$ inch	Clamping Depths E inch		
No.8		1.16		
No.10		1.16		
No.12		1.19		
1/4		1.22		
1/16 NPT		1.45		
5/16		1.45		
	7/16	1.48		
	1/2	1.51		
3/8		1.51		
1/4			1.22	1.22
1/16 NPT			1.45	1.45
5/16			1.45	1.45
	7/16		1.48	1.48
	1/2		1.51	1.51
3/8			1.51	1.51
	9/16		1.68	1.68
1/8 NPT			1.56	1.56
	5/8		1.74	1.74
	11/16		1.81	1.81
1/4 NPT			1.62	1.62
	3/4		1.87	1.87
	7/8			1.93
	1			2.11
	1 1/8			0.896
	1 1/4			1.021
	1 3/8			1.108
	1 1/2			1.233

Collets		ER 20 GB	ER 25 GB	ER 32 GB	ER 40 GB
Clamping Nuts		Hi-Q/ERMC 20 Hi-Q/ERC 20	Hi-Q/ERMC 25 Hi-Q/ERC 25	Hi-Q/ERC 32	Hi-Q/ERC 40
	$\varnothing d_2$ mm	Clamping Depths E mm			
M4	M6	4.5	26	26	26
M4.5 - M6	M8	6	31	31	31
M7	M9 - M10	7	31	31	31
M8	M11	8	36	36	36
M9	M12	9	37	37	37
M10		10	41	41	41
	M14	11		42	42
	M16	12		42	42
	M18	14		44	44
	M20	16		45	45
	M22 - M24	18			47
	M27	20			52
	M30	22			54
	M33	25			
	M36	28			
	M39 - M42	32			
	M45 - M48	36			



Refurbish your Softsynchro® Tap Holders before tool failures happen!

Emuge tap holder maintenance offers:

- Available for KSN 0, 1 and 3 holders.
- Cleaning and replacing of critical wear components to return holder to like-new condition.
- Short, one-week delivery for decreased down time.
- One low, baseline price for all eligible holders.
- Included inspection for any other defects, with Repair Program also available.

Icon Descriptions

	<p>Internal Coolant Supply (IKZ)</p>		<p>Length compensation on compression and tension</p>	 <p>Coolant pressure at the entry to the holder</p>
	<p>Minimum-quantity lubrication (MQL)</p>		<p>Tool adaption by means of collets, type ER (GB)</p>	

Emuge Tap Extensions

Why buy special extra-length taps when an Emuge tap extension holder will solve the problem?



Make the investment and save money

- **Uses standard tap designs**
- **Eliminates the need** for special made extra-length taps
- **Precision ground, one-piece construction** provides high accuracy
- **Slim design profile** for hard-to-reach spaces
- **Versatile, long-lasting**
- **Available in two versions** - short or long length
- **Designs for either UNC/UNF, or Metric Taps**
- **Solid or coolant-fed options**
- Complete specifications available at Emuge.com

Also available in shrink fit designs.

Visit Emuge.com for more information or contact customer service.

Replacement clamping nuts and wrenches available on request.

Emuge has an extensive line of taps,

including NEW Z-Taps; coolant-through taps
with Z-Geometry and GLT-1 Coating, that are
ideal with Softsynchro® Tap Holders.

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EMUGE HIGH PERFORMANCE TOOLS

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