

Torque wrenches and tightening torque

for ER and MR clamping nuts



Wrench heads

A-E

A-E P

A-E M

A-E MX

A-E MS

A-E AX

Type	Part no.	A [mm]	B [mm]	SW [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		•

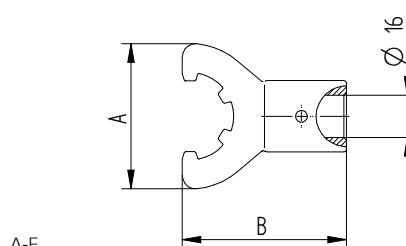
A-E P					
A-E 11 P	7152.11010	32	57	19	•
A-E 16 P	7152.16010	44	70	28	•
A-E 20 P	7152.20010	52	80	34	•

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

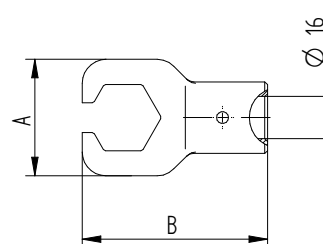
A-E MX					
A-E 8 MX	7158.08000	12	53		•
A-E 11 MX	7158.11000	17	54		•
A-E 16 MX	7158.16000	22	56		•
A-E 20 MX	7158.20000	29	68		•
A-E 25 MX	7158.25000	36	70		•

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

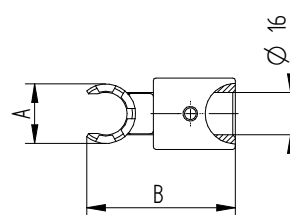
A-E AX					
A-E 11 AX	7157.11000	16	62		•
A-E 16 AX	7157.16000	22	63		•
A-E 20 AX	7157.20000	26	64		•
A-E 25 AX	7157.25000	29	93		•
A-E 32 AX	7157.32000	37	95		•
A-E 40 AX	7157.40000	47	99		•



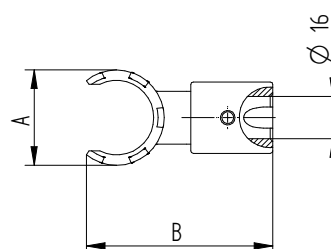
A-E



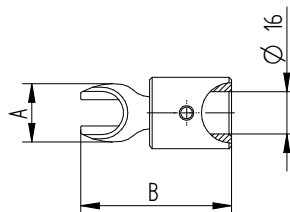
A-E P



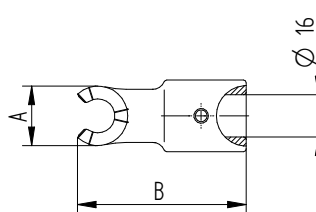
A-E M



A-E MX



A-E MS



A-E AX

Torque wrenches TORCO-FIX

Freewheel wrench heads A-FLS

Grip bar for wrench heads G-A

TORCO-FIX

A-FLS

G-A

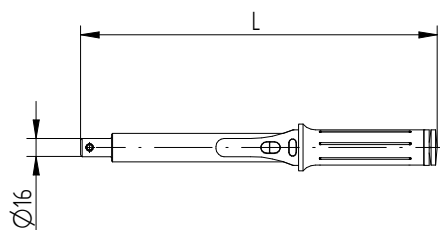
Type	Part no.	L1 [mm]	Range [Nm]	Range [ft-lbs]	System
TORCO-FIX					
TORCO-FIX 0	7150.02025	290	5–25	3.5–18	● ●
TORCO-FIX I	7150.05050	335	10–50	7.5–36.5	● ●
TORCO-FIX II	7150.20200	465	40–200	26.5–147	● ● ●
TORCO-FIX III	7150.60300	565	60–300	44.5–221	● ●

Type	Part no.	D [mm]	D1 [mm]	System
Freewheel wrench heads A-FLS				
A-FLS Ø 16/MR 11	7855.11000	16	34	●
A-FLS Ø 24/MRM 16	7855.16800	24	47	●
A-FLS Ø 28/MR 16/SG 15	7855.16000	28	47	● ●
A-FLS Ø 40/MR 25	7855.25000	40	61	●
A-FLS Ø 46/SG 25	7655.25000	46	68	●
A-FLS Ø 50/MR 32	7855.32000	50	77	●
A-FLS Ø 55/SG 32	7655.32000	55	77	●

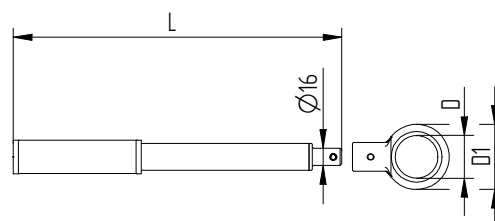
Type	Part no.	L1 [mm]	System
Grip bar for wrench heads G-A			
G-A	7655.99900	308	● ● ●
G-AS	7655.99500	120	●

Expert advice

Grip bar short G-AS is specially designed to be used with:
A-FLS Ø 16/MR 11
A-FLS Ø 24/MRM 16
A-FLS Ø 28/MR 16



TORCO-FIX



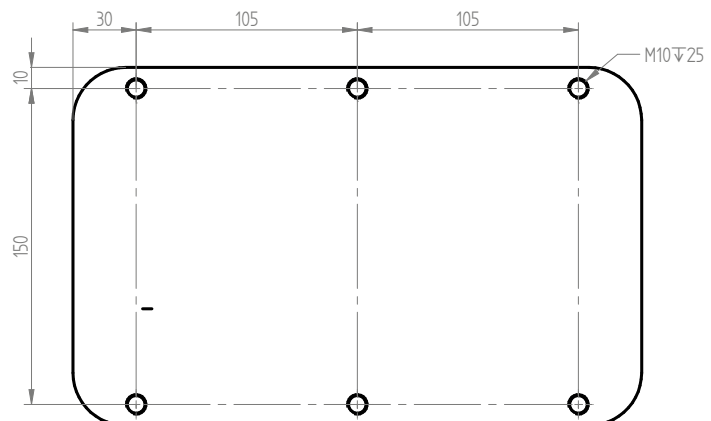
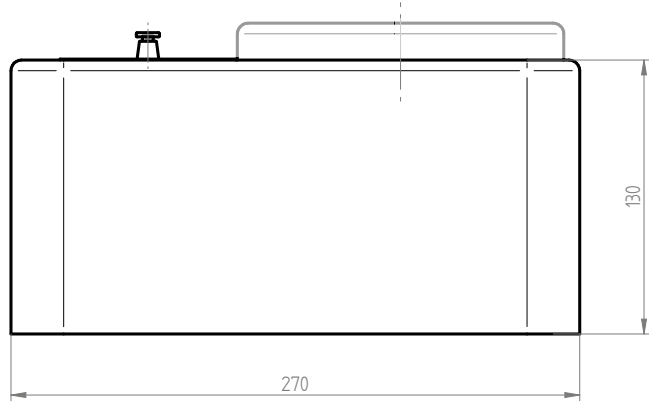
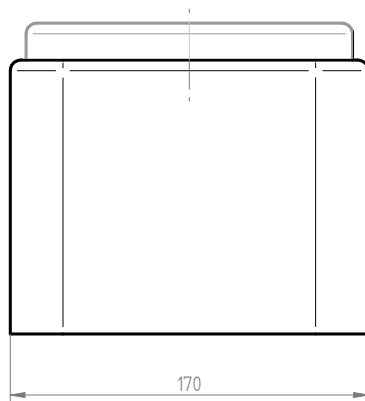
G-A/G-AS with A-FLS

Achieve perfect torque with any wrench

TORCO-BLOCK The only tool assembly device in the market that is comfortable and safe to use with integrated torque measuring. Usability is given for all collet based systems and available for all standard machine interfaces.

TORCO-BLOCK provides

- // Use any wrench and still be able to correctly measure tightening torque
 - // Minimal effort for toolclamping needed
 - // Toolholder will not be overtorqued
 - // Correct tightening torque guaranteed, no bad runout due to overtorquing
 - // Quick-change function for different taper interfaces with only one 4 mm Allen-key within seconds
 - // Safe assembling of cutting tools
 - // Easy and quick toolholder and adapter handling
 - // Required footprint 170 x 270 mm
 - // Correct installation of pull studs with standard wrenches
 - // Full or overhang mounting on a workbench possible
 - // TORCO-BLOCK supplied inclusive 10 indicator rings TB / IR
- Unit needs a stable workbench to be attached to with at least four M10 screws.*



TORCO-BLOCK and components

Type	Part no.
Tool assembly with torque measurement	
TORCO-BLOCK	7815.00000
<i>Included in delivery: TORCO-BLOCK and 10 indicator ring set (no tool adapters)</i>	
Indicator ring set/ 10 rings	
SET TB/IR	7816.99999
Tool adapter for CAT spindle interfaces	
TB/BT 30 & CAT 30	7816.30100
TB/SK 40 & CAT 40	7816.40200
TB/CAT 50	7816.50300
Tool adapter for SK spindle interface	
TB/SK 30	7816.30200
TB/SK 40 & CAT 40	7816.40200
TB/SK 50	7816.50200
Tool adapter for BT spindle interface	
TB/BT 30 & CAT 30	7816.30100
TB/HSK 63 & C6 & BT 40	7816.63500
TB/HSK 100 & BT 50	7816.00500

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

REGO-FIX CAPTO – licensed by Sandvik Coromant



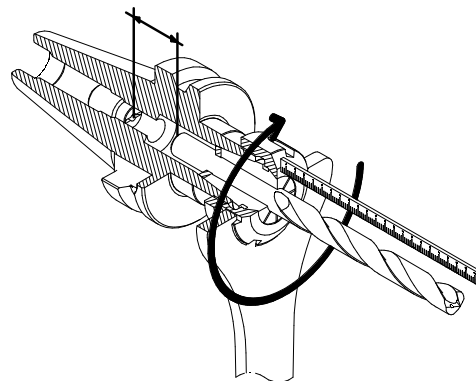
Instructions for correct clamping of tool shanks

Note

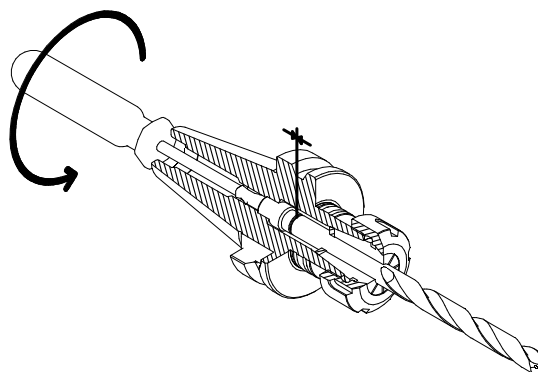
- // ER collet chucks – Exception: Toolholders with cylindrical shanks – are supplied without stop screws
- // Stop screws are supplied upon request
- // If ordering stop screw, specifying part no. (XXXX.XXXXX) and LOT no. (YYY). YYY of the toolholder is mandatory

Advice

- // Stop screws are used to secure tool shanks against axial displacement and may not be used as length adjustment screws
- // For trouble-free operation of the ER collet system, clamp tool shank first, then set stop screw
- // Incorrect handling of the stop screw may reduce runout accuracy and clamping force of the collet system
- // The use of stop screws may increase imbalance of the collet system



Set tool length with clearance to the stop screw, then clamp tool.



Apply stop screw to tool shank.

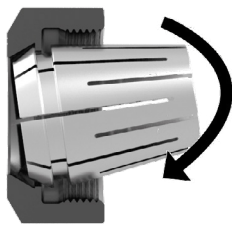
Increase collet and tool life

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

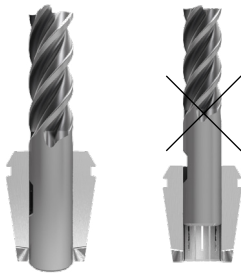
Always assemble correctly

First, clip the collet in the nut. Second, insert the tool shank more than $\frac{3}{4}$ 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 258 for order details.

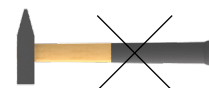
Only use REGO-FIX wrenches

To mount the collet in the toolholder please use one of these special wrenches- preferably the torque wrench, since it displays 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 toolholders professionally.

Never use any extensions or hammers



Recommended tightening torque for ER and MR clamping nuts

Maximum torques for retention knobs (Nm)

			Hi-Q®/ER clamping nuts											
			ER/ERC		ERB/ERBC		ERM/ERMC		ERMx/ERMx		ERAx/ERAx		ER MS	
			Collets [Nm]										Collets [Nm]	
Collet size	Ø [mm]	Ø [decimal 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	20	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	20	I, II
ER 25	7.0–13.0	0.276–0.512	80	35	80	24	28	28	28	28	52	35	20	I, II
	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
ER 32	8.0–17.0	0.315–0.669	104	80	104	79	32	32	32	32	80	80	–	II, III
	2.0–2.5	0.078–0.098	24	24	20	–	–	–	–	–	24	–	–	I, II
	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

			micRun® clamping nuts				Steep taper	maximum tightening torque
			MR/MRC		MRM/MRMC			
			micRun® collets [Nm]					
Collet size	Ø [mm]	Ø [decimal inch]	MR	MRC	MRM	MRMC		
MR 11	1.0–2.9	0.039–0.098	8	8	–	–	SK, BT, CAT 30	25 Nm
	3.0–7.0	0.118–0.256	16	16	–	–	SK, BT, CAT 40	50 Nm
MR 16	1.0	0.039	8	8	8	8	SK, BT, CAT 50	100 Nm
	1.5–3.5	0.059–0.138	20	20	20	20	Higher tightening torques can lead to deformation of the steep taper!	
	4.0–4.5	0.157–0.177	40	40	24	24		
	5.0–10.0	0.197–0.394	56	56	24	24		
MR 25	1.0–3.5	0.059–0.138	24	24	–	–		
	4.0–4.5	0.157–0.177	56	56	–	–		
	5.0–7.5	0.196–0.295	80	80	–	–		
	8.0–17.0	0.315–0.669	104	80	–	–		
MR 32	2.0–2.5	0.078–0.098	24	24	–	–	Expert advice	We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench. Original REGO-FIX accessories can be found on page 237.
	3.0–22.0	0.118–0.2917	136	136	–	–		

Higher tightening torques can lead to deformation of the steep taper!

Expert advice

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

Original REGO-FIX accessories can be found on page 237.