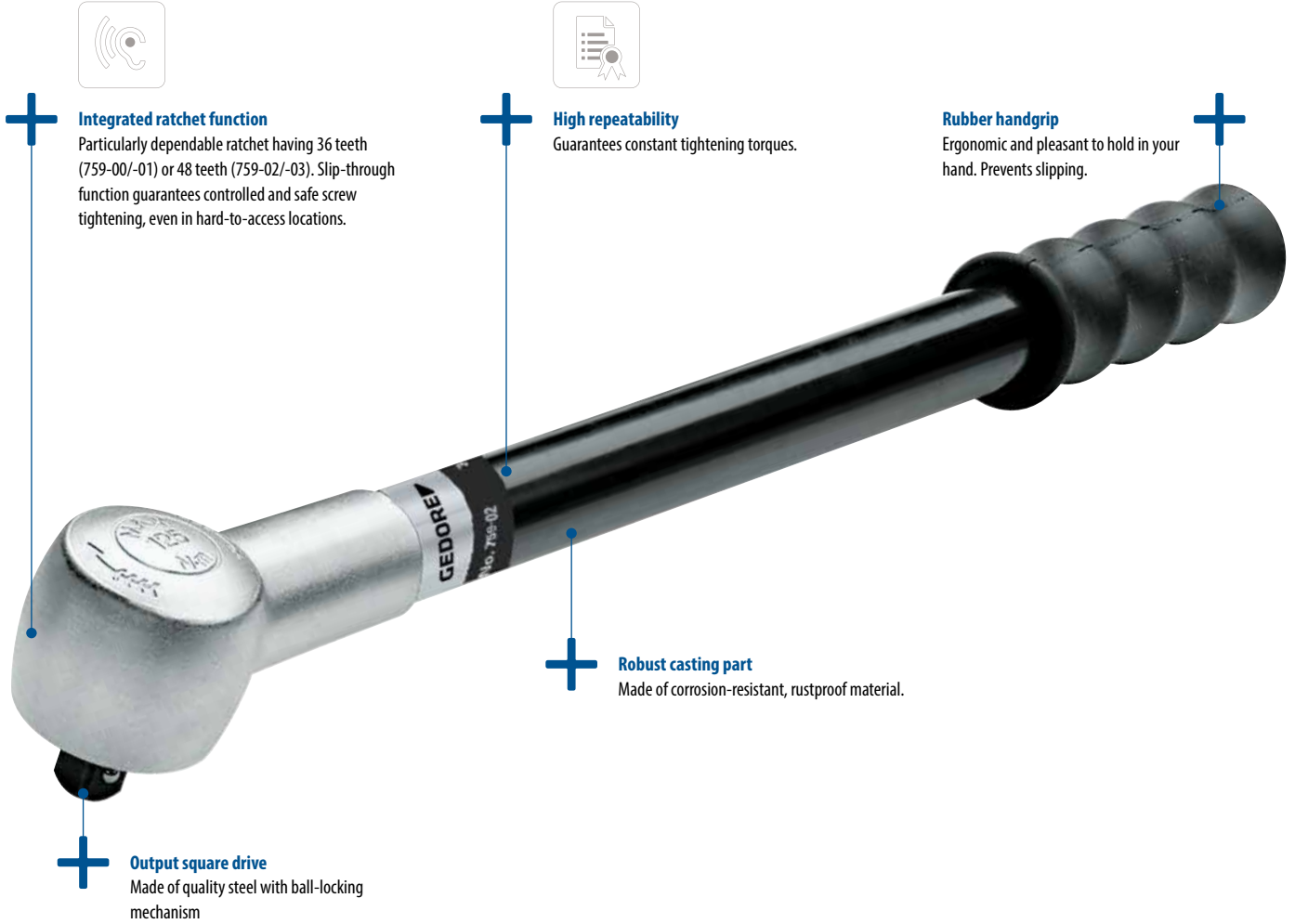


TSN SLIPPER



Pre-set ratchet head torque wrench with automatic actuation and slip function. Over-tightening is not possible.



Integrated ratchet function

Particularly dependable ratchet having 36 teeth (759-00/-01) or 48 teeth (759-02/-03). Slip-through function guarantees controlled and safe screw tightening, even in hard-to-access locations.



High repeatability

Guarantees constant tightening torques.

Rubber handgrip

Ergonomic and pleasant to hold in your hand. Prevents slipping.



Robust casting part

Made of corrosion-resistant, rustproof material.



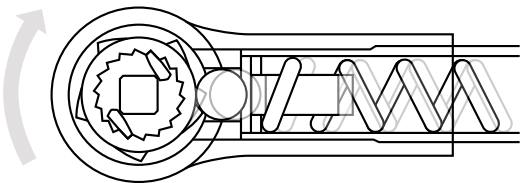
Output square drive

Made of quality steel with ball-locking mechanism

Working principle

TSN SLIPPER

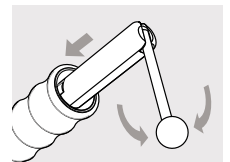
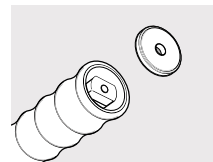
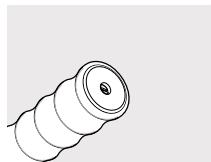
When the pre-set torque value is achieved, the mechanism slips through over the ball (without the possibility of over-tightening). The torque wrench is then immediately ready for the next operation.



Technical information

TSN SLIPPER & TBN BREAKER

All TSN SLIPPER and TBN BREAKER torque wrenches (apart from 760-00/-01) are fitted with the patented "Mechanical Torque Adjustment Locking Device" to modify torque tester.



759

TORQUE WRENCH TSN SLIPPER

5-125 N·m / pre-set

Use:

- > Controlled screw tightening in the range 5 - 125 N·m
- > Serial / production-line assembling
- > Extremely long-term work

Features:

- > Pre-set production torque wrench - without scale
- > 1/4", 3/8" or 1/2" square drive with ball locking device
- > With integrated ratchet-function for controlled clockwise tightening
- > Working accuracy: +/- 4 % tolerance of the set torque
- > Acc. to DIN EN ISO 6789, traceable to national standards
- > Precision mechanism slips very noticeably and audibly ("click") when the pre-set value is achieved - over-tightening is not possible
- > Automatic resetting to the starting position
- > Lightweight yet robust and corrosion-resistant construction design

- > Very convenient non-slip rubber handgrip
- > The pre-setting can be made at the factory or by the user on suitable torque testers
- > If ordering, please specify the N·m value - if a factory pre-setting is desired (price on request)
- > EPA-conformant (Electrostatic Protected Area), for use in sensitive electrostatic applications

Scope of delivery:

- > Torque wrench type TSN SLIPPER
- > Special adjusting key for changing the pre-set torque value
- > Test certificate acc. to DIN EN ISO 6789
- > Delivered in sturdy cardboard packaging



- > TSN SLIPPER - the pre-set production torque wrench (without scale).
- > With this torque wrench, accidental adjustment while working is ruled out.
- > The state-of-the-art lightweight production wrenches "slip" through as soon as the set torque is achieved.
- > Over-tightening is impossible.
- > The ideal torque tool for all jobs where for a longer time only one tightening torque value is required.
- > The automatic resetting and integrated ratchet are the ideal assistance for working swiftly.

> TSNs for counter-clockwise tightening, bi-directional tightening without a ratchet-function or as a VDE-Wrench can be manufactured specially - on request.



"	■	N·m	l- mm -l	⚖	Code	No.
1/4	6.3	5-25	216	0.340	7091900	759-00
3/8	10.0	5-25	216	0.340	7092040	759-01
3/8	10.0	15-55	324	0.800	7092120	759-02
1/2	12.5	40-125	460	1.360	7092200	759-03

761 TORQUE WRENCH TSP SLIPPER

1-10 N·m / pre-set

- Use:**
- > Controlled screw tightening in the range 1 - 10 N·m
 - > Ideal for assembly work where controlled tightening with low torque values is required (e.g. electronic hardware sector, precision mechanics etc.)
- Features:**
- > Pre-set production torque wrench - without scale
 - > 1/4" square drive with ball locking device
 - > With integrated ratchet-function for controlled clockwise tightening
 - > Working accuracy: +/- 6 % tolerance of the set torque
 - > Acc. to DIN EN ISO 6789, traceable to national standards
 - > Precision mechanism slips very noticeably and audibly ("click") when the pre-set value is reached - over-tightening is not possible
 - > Automatic resetting to the starting position
 - > 2 models in the range 1 N·m to 10 N·m
- > Extremely lightweight yet robust and corrosion-resistant construction design
- > Very convenient non-slip rubber handgrip
- > EPA-conformant (Electrostatic Protected Area), for use in sensitive electrostatic applications
- > The pre-setting can be made at the factory or by the user on suitable torque testers
- > If ordering, please specify the N·m value - if a fixed factory pre-setting is desired (price on request)

- Scope of delivery:**
- > Torque wrench type TSP SLIPPER
 - > Adjusting tool for changing the pre-set torque value
 - > Test certificate acc. to DIN EN ISO 6789
 - > Delivered in sturdy cardboard packaging

- > TSP SLIPPER - the pre-set production torque wrench (without scale) for the lower torque range 1 - 10 N·m.
- > Accidental adjustment while working is ruled out.
- > The built-in ratchet with clockwise tightening and the corrosion-resistant lightweight construction design make this torque wrench the optimum working partner for quick and controlled screw tightening.
- > The integrated slipping mechanism reliably prevents over-tightening - the guarantee for high repeatability and controlled tightening values.



"	mm	N·m	mm	kg	Code	No.
1/4	6.3	1-5	185	0.190	1196650	761-05
1/4	6.3	2-10	185	0.190	1196731	761-10

762 TORQUE WRENCH TSC SLIPPER

1-10 N·m

- Use:**
- > Controlled screw tightening in the range 1 - 10 N·m
 - > Ideal for assembly work where controlled tightening with low torque values is required (e.g. electronic hardware sector, precision mechanics etc.)
- Features:**
- > Adjustable torque wrench - with scale
 - > 1/4" square drive with ball locking device
 - > With integrated ratchet-head function for controlled clockwise tightening
 - > Working accuracy: +/- 6 % tolerance of set torque
 - > Acc. to DIN EN ISO 6789, traceable to national standards
 - > Precision mechanism slips very noticeably and audibly ("click") when the set torque is reached - over-tightening is not possible
- > Automatic resetting to the starting position
- > Micrometre scale graduation: 0.05 N·m / 0.1 N·m
- > 2 models in the range 1 N·m to 10 N·m
- > Extremely lightweight yet robust and corrosion-resistant construction design
- > Very convenient non-slip rubber handgrip
- > EPA-conformant (Electrostatic Protected Area), for use in sensitive electrostatic applications

- Scope of delivery:**
- > Torque wrench type TSC SLIPPER
 - > Test certificate acc. to DIN EN ISO 6789
 - > Delivered in sturdy cardboard packaging

- > The scale is situated on the body tube.
- > The setting is made by rotating the unlocked handgrip with the integrated micrometre ring.
- > TSCSLIPPER - the adjustable torque wrenches (with scale) for the lower torque range 1 - 10 N·m.
- > The built-in ratchet with clockwise tightening and the corrosion-resistant lightweight construction design make this torque wrench the optimum working partner for quick and controlled screw tightening.
- > The integrated slipping mechanism reliably prevents over-tightening - the guarantee for high repeatability and controlled tightening values.



"	mm	N·m	mm	kg	Code	No.	
1/4	6.3	1-5	195	0,05 N·m	0.235	1196480	762-05
1/4	6.3	2-10	195	0,1 N·m	0.235	1196510	762-10

TBN BREAKER



Pre-set torque wrench with automatic snap actuation. Torque wrench offering maximum accuracy. Guaranteed tightening values without over-tightening.

- Drive**
16 mm spigot end or 9x12 mm rectangular cavity made of quality steel with pin-locking mechanism
- Breaking**
All TBN breaking torque wrenches break by 20° at the pivot point when the set torque is achieved. The models 760-00/-01 can also be set to a breaking angle of 90°.
- Rubber handgrip**: Ergonomic and pleasant to hold in your hand. Prevents slipping.
- Lightweight steel tube**
Firm, solid, and free of corrosion
- Patented mechanism**
Guarantees a long product lifespan with guaranteed accuracy values



TBN Knicker
16
5 - 135 N·m



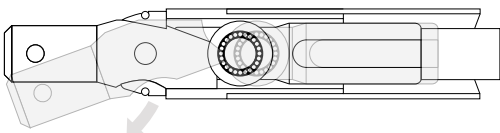
TBN Knicker
9x12
0,2 - 135 N·m



As an option, we also manufacture the TBN BREAKER models 760-00/-01 with interchangeable fittings directly positioned on the tool.

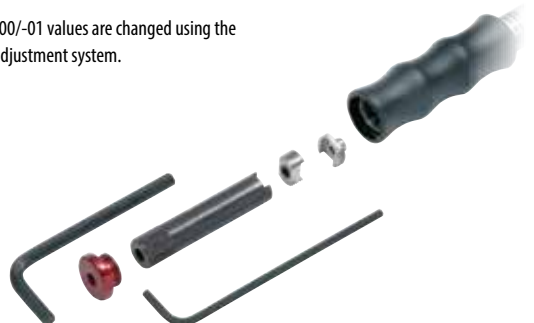
Working principle TBN BREAKER

When the TBN breaking torque wrench is operated, the rear section of the driver unit presses the roller. When the pre-set torque value is achieved, the lever switches over and the front section of the drive unit breaks.



Technical information TBN BREAKER

TBN BREAKER 760-00/-01 values are changed using the "Double Positive" adjustment system.



760 BREAKING TORQUE WRENCH TBN

0.4-135 N·m / 1.8-1195 lbf·in / pre-set

Use:

- > Controlled screw tightening in the range 0.4 - 135 N·m
- > Serial / production-line assembling
- > Extremely long-term work

Features:

- > Pre-set production torque wrench - without scale
- > With 9x12 mm rectangular-cavity-end or 16 mm spigot-end
- > For bi-directional tightening (the wrench only has to be turned by 180°!)
- > Working accuracy: +/- 4 % tolerance of the set torque
- > Acc. to DIN EN ISO 6789, traceable to national standards
- > Breaking of the handgrip by 20° (90° also possible in the case of no. 760-00/-01) when the pre-set torque value is achieved makes over-tightening unlikely
- > Automatic resetting to the starting position
- > Lightweight yet robust and corrosion-resistant construction design
- > Very convenient non-slip rubber handgrip

- > No. 760-00/-01: EPA (Electrostatic Protected Area) compliant
- > The pre-setting can be made at the factory or by the user on suitable torque testers
- > If ordering, please specify the N-m value - if a fixed factory pre-setting is desired (price on request)

Scope of delivery:

- > TBN breaking torque wrench
- > Adjusting tool for changing the pre-set torque value
- > Test certificate acc. to DIN EN ISO 6789
- > Delivered in sturdy cardboard packaging



760-00



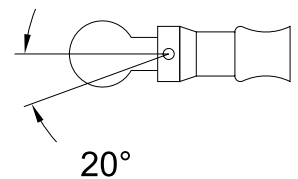
760-35



760-50



- > TBN breaking torque wrench - the pre-set production torque wrench (without scale).
- > With this torque wrench, accidental adjustment while working is ruled out.
- > The state-of-the-art lightweight production wrenches "break" as soon as the set torque is achieved.
- > Over-tightening is unlikely.
- > The ideal torque tool for all jobs where for a longer time only one tightening torque value is required.
- > For this reason, it is optimally suited for large series.
- > However, the TBN breaking torque wrench is also ideal when varying tightening values are required.



□ mm	∅	N·m	lbf·in	EPA	↳ mm ↲	⚖ kg	Code	No.
9 x 12		0,4-2,0	1,8-18	x	105	0.110	7090690	760-00
9 x 12		2-10	17,8-89	x	105	0.130	7090770	760-01
	16	5-25	44-221		265	0.405	1824686	760-30
9 x 12		5-25	44-221		265	0.405	1824694	760-35
	16	13-65	115-575		302	0.745	1824708	760-40
9 x 12		13-65	115-575		302	0.745	1824716	760-45
	16	27-135	239-1195		408	1.027	1824724	760-50
9 x 12		27-135	239-1195		408	0.830	7092630	760-11

Torque wrench Type 88

8800 TORQUE WRENCH TYPE 88

100-1500 N·m / 70-1000 lbf·ft

Use:

- > Controlled screw tightening in the range 100 - 1500 N-m
- > Industry and vehicle sector (lorries, industrial vehicles), machine maintenance

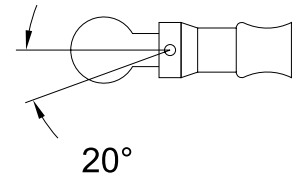
Features:

- > Adjustable torque wrench - with scale
- > 3/4" square drive with integrated ratchet-function or 22 mm spigot-end
- > Suitable for bi-directional tightening on account of push-through square drive
- > Working accuracy: +/- 4% tolerance of the value setting
- > Acc. to DIN EN ISO 6789, traceable to national standards
- > Breaking mechanism as an actuation signal which can be seen and felt and makes over-tightening unlikely

- > Dual scale in N-m and lbf·ft
- > 5 models in the range 100 - 1500 N-m

Scope of delivery:

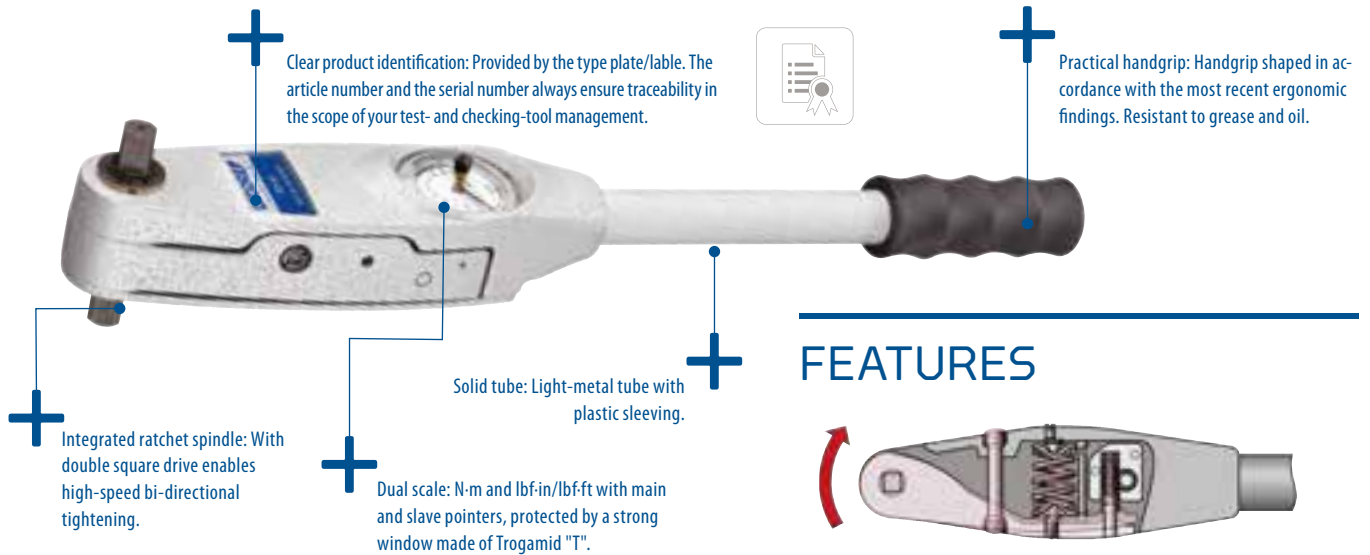
- > Type 88 breaking torque wrench
- > Operating instructions are provided on a label on the torque wrench
- > Test certificate acc. to DIN EN ISO 6789
- > Delivered in sturdy cardboard packaging



□"	■	∅	N·m	lbf·ft	↳ mm ◁	▬▬▬▬	⚖ kg	Code	No.
3/4	20		100-500	70-350	915	10 N·m	5.5	7715700	8800-01
3/4	20		150-700	100-500	1090	10 N·m	6.0	7715890	8800-02
3/4	20		300-1000	200-750	1470	20 N·m	7.3	7716000	8800-03
3/4	20		700-1500	500-1000	1470	25 N·m	10.5	7716190	8800-04
		22	130-550	100-400	915	10 N·m	4.8	7716270	8800-06

Torque wrench Type 83

TORQUE WRENCHES WITH SLAVE POINTER IDEAL FOR TEST, CONTROL AND MAINTENANCE WORK



FEATURES



The working principle of the torque wrench with slave pointer type 83

8301 - 8305 TORQUE WRENCH WITH SLAVE POINTER TYPE 83

0.8-2000 N·m / 7 lbf·in - 1500 lbf·ft



Use:

- > Controlled tightening and verification of tightening values
- > For use in all areas of industrial manufacturing and in quality control
- > Working ranges of 0.8 to 2000 N-m are covered

Features:

- > Dial-indicating torque wrench with dual scale and multi-functional slave pointer
- > 1/4", 3/8", 1/2", 3/4" or 1" double-square drive with ball locking device for controlled bi-directional tightening
- > Models 8301-04 to 8304-80: With integrated ratchet-function
- > For controlled screw tightening and torque measurements
- > Working accuracy: +/- 4 % tolerance of the indicated torque
- > Acc. to DIN EN ISO 6789, traceable to national standards
- > With dual scale in N-m and lbf-in or lbf-ft double-tinted clearly readable face
- > Integrated overload protection - mechanical stop up to max. 25 % overload of the maximum value
- > Housing made of lightweight, robust special aluminium construction - lacquered, silver-grey
- > Black, non-slip rubber handgrips
- > **Models 8301-04 to 8301-40: EPA-conformant (Electrostatic Protected Area), for use in sensitive electrostatic applications**
- > Audio-visual signal is standard on models 8303-40 to 8305-20

Scope of delivery:

- > Dial-measuring torque wrench type 83
- > Battery (models 8303-40 to 8305-20)
- > Test certificate acc. to DIN EN ISO 6789
- > Delivered in a sturdy black plastic box (no. 8301-04 to 8302-20), otherwise in sturdy cardboard packaging (no. 8303-40 to 8305-20)



8305-14



8305-20



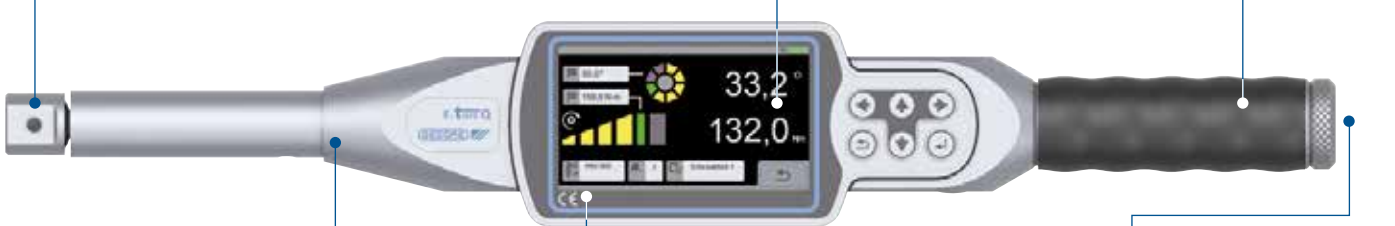
Type	█"	█	N-m	lbf-in	lbf-ft	EPA	█ mm █	█	Height	█	Code	No.
█	1/4	6,3	0,8-4	7-35		x	244	0,1 N-m / 1 lbf-in	61	0,5	7651390	8301-04
█	1/4	6,3	2,4-12	22-120		x	244	0,5 N-m / 2 lbf-in	61	0,5	7651470	8301-12
█	3/8	10,0	5-25	44-240		x	244	1 N-m / 10 lbf-in	69	0,5	7651550	8301-25
█	3/8	10,0	8-40	72-360		x	244	1 N-m / 10 lbf-in	69	0,5	7651630	8301-40
█	1/2	12,5	16-80		12-60		435	2 N-m / 1 lbf-ft	86	1,4	7651710	8302-08
█	1/2	12,5	40-200		30-160		515	5 N-m / 5 lbf-ft	86	1,4	7651980	8302-20
█	3/4	20,0	80-400		60-300		710	10 N-m / 10 lbf-ft	111	3,2	7652280	8303-40
█	3/4	20,0	160-800		120-600		1000	20 N-m / 20 lbf-ft	123	4,8	7652010	8304-80
█	1	25,0	280-1400		200-1000		2040	25 N-m / 25 lbf-ft	138	16,7	1196790	8305-14
█	1	25,0	400-2000		300-1500		2040	50 N-m / 50 lbf-ft	138	16,7	1196804	8305-20

ELECTRONIC TORQUE WRENCH E-TORC Q

Powerful. Variable.
Holders: Rectangular-cavity SE 9x12 (E-torc Q 100) and SE 14x18 (E-torc Q 200, 300)

Extensively. Resilient.
Large TFT graphics display of a 109 mm (4.3") diagonal with touch function. This makes a gloves operation possible.


Ergonomic. Safe.
The ergonomic handle ensures easy, safe handling - even with large tightening torques.



Flexible. Positional.
Easy-to-handle: Housing-oriented tool holding fixture rotatable through 60° in both directions (120°)

Intuitive. Visible.
Touch function or six hardware keys for intuitive user software operating and, in addition, an extremely robust enter key.

High-performance lithium-ion rechargeable battery with rapid changing system



Charging unit for two lithium-ion rechargeable batteries (optional)

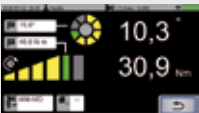



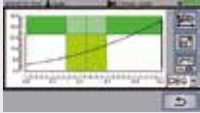




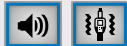



All the standard measurement methods:

- > Torque
- > Torque/rotary angle
- > Loosening/tightening
- > First movement
- > Yield point
- > High measurement accuracy e.g. torque +/- 1%, +/- 1 digit



Communication to the high-capacity PC user software or attachment to CAQ systems (optional)

<p>> Virtual progress bar for torque and angle</p> 	<p>> Clear depiction of the measurement results</p> 	<p>> A variety of users and a user account management can be set up</p> 
<p>> Measured value compilation and assessment</p> 	<p>> Graph representation and evaluation directly possible at E-torc Q</p> 	<p>> Management of fitting and depth gauge parameters</p> 
<p>> Touch screen for clear objective input</p> 	<p>> Operating with workflows</p> 	<p>> Wireless (Wi-Fi 2.4 and 5 GHz) or USB mini interface for communication purposes</p> 
		<p>> Acoustic, visual or vibration-induced signalling</p> 
		<p>> 2D scanner (optional) for reading in barcodes and QR codes</p> 

Electronic Torque Wrenches

ET2SA

ELECTRONIC TORQUE WRENCH E-TORC

2-1000 N·m / 1.5-750 lbf·ft, with rotary angle measurement



Tightening check for torque/rotary angle:

- > Optical, acoustic and sensory signalling on reaching the set bolting parameter/with additional visualisation of screw tightening by means of LED progress bar.
- > Software-enabling graphics evaluation.
- > Marked contrast graphics display with backdrop lighting

Drive:

- > Spigot end 22/28 mm, 1/4" square drive or 9x12/14x18 mm rectangular cavity with pin-locking mechanism. The installation size determines the drive (model-dependent)
- > ET2SKA 150 and ET2SKA 300 incl. 1/2" rectangular reversible ratchet head
- > For hard-to-access places and given not enough room.
- > Special tools on request.

Light and pleasant:

- > The aluminium housing and ergonomic handle ensure easy, safe handling - even with large tightening torques.
- > Tool holding fixture, as from ET2SKA 150 120° rotatable to the aluminium housing

Function keys:

- > Easy to use
- > Key pressure taring
- > Side ergonomic operating key
- > Convertible from N·m to lbf·ft via software

Fields of operation:

- > Mini-batch assembly
- > Quality assurance
- > Test labs and testing departments
- > Emergency strategies for bolting stations
- > Corrective work places
- > Inspection and analysis of bolted connections

Version:

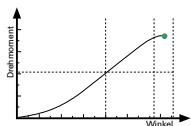
- > Large field of operation: 5 models in the range from 2 to 1000 N·m
- > Tool holding fixture 1/4" square, 9x12, 14x18 rectangular cavity with pin-locking mechanism, 22 and 28 mm spigot end
- > Signalling: visual (LED progress bar), acoustic (beep), sensory (vibration)
- > Tool holding fixture, as of ET2SKA 150 120° rotatable to the aluminium housing
- > Traceable to national standards
- > Torque reading precision +/- 1%, +/- 1 digit from reading figure
- > Factory certificate as per DIN ISO 6789 Type I Class C
- > Optional certificate as per DAkkS-DKD-R 3-7
- > Rotary angle calibration based on VDI 2648 Sheet 2
- > Backlit graphic display
- > Input of depth gauges for a variety of attachment tools
- > Power supply: Battery or rechargeable battery operation

Evaluation:

- > Reading a max. 2,000 data records
- > Serial interface RS232 for PC (USB adapter enclosed)
- > Comprehensive documentation of all screw parameters

Scope of delivery:

- > Electronic torque wrench Etorc2S/A
- > Operating instructions with brief guide
- > Test certificate acc. to DIN EN ISO 6789:2003 Type I Class C
- > 2 standard Mignon AA batteries
- > Evaluating software and data transmission cable RS232 and USB
- > ET2SKA 150 and ET2SKA 300 incl. 1/2" rectangular reversible ratchet head
- > Delivered in a robust sheet-metal case with insert



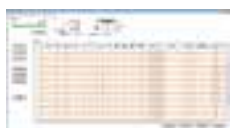
Torque/Angle



Editor



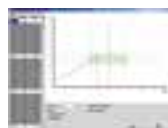
Parameter



Main screen



Settings



Curve diagram



■ "	■ mm	∅	N·m	lbf·ft	lw	a	b	c	d	kg	Code	No.
1/4	6.3		2-25	1,5-18	275	35	45		347	0.8	2795493	ET2SKA 25
1/2	12.5	9 x 12	10-150	7-111	457	35	45	17.5	514	1.3	2795612	ET2SKA 150
1/2	12.5	14 x 18	30-300	22-221	696	35	45	25.0	753	1.8	2795620	ET2SKA 300
			22	100-600	74-443	990	35	45	56.0	1055	2795639	ET2SZA 600
			28	100-1000	74-750	1423	40	45	75.0	1488	2795655	ET2SZA 1000

TT3KH

ELECTRONIC TORQUE WRENCH TORCOTRONIC III

10-350 N·m / 7.4-258.2 lbf·ft



Use:

- > For everyday requirements in installation and torque control
- > For use in all areas of manufacturing and development

Features:

- > Microprocessor-controlled, electronic torque wrench
- > For controlled bi-directional tightening
- > Acc. to DIN EN ISO 6789, traceable to national standards
- > Robust workshop design
- > Broad measurement range in N·m, can be switched to lbf·ft
- > With 1/2" reversible ratchet. The ratchet is exchangeable, providing the option of using a 9x12 mm (TT3H 120) or 14x18 mm (TT3H 350) square socket

Characteristics:

- > Torque and torque angle measure
- > 5 different measuring modes
- > 5 parameters storable
- > USB interface for data exchange
- > 2000 storage places
- > Measurement accuracy torque +/- 1 %, +/- 1 digit
- > Measurement accuracy torque angle +/- 1 %, but min. +/- 1° on 360° with min. 4°/sec
- > Different depth gauges for end fittings programmable
- > Simple to operate with easy to understand icon-menu navigation and 4 functional keys
- > Clearly readable, illuminated LCD display
- > Resolution torque: 0.1 N·m
- > Resolution torque angle: 0.1°
- > PC-software easy to operate for uncomplicated programming and documentation of data
- > Data can be transferred to MS Excel®
- > Keyboard lock
- > Operation with standard Mignon AA or optional with rechargeable-battery (NiMH)
- > Visual signal: 3x LED (yellow, green, red)
- > Acoustic signal: buzzer
- > TÜV certified, CE and RoHS
- > 2 models in the range 10 - 350 N·m
- > Test certificate acc. to DIN EN ISO 6789:2003 Type I Class C
- > Calibration to DAkkS-DKD-R 3-7, Class 1 (on request)

Scope of delivery:

- > Electronic torque wrench TorcoTronic III HighLine
- > Reversible ratchet 1/2"
- > USB cable
- > Software on CD-R
- > Test certificate acc. to DIN EN ISO 6789:2003 Type I Class C
- > Delivered in a transparent plastic box with insert

Attention:

- > A PC, running a Windows® operating system (from Windows XP®) is required to obtain the full benefit of all the functions of this product.



Main menu



Settings



Parameter



Evaluation

"		mm	N·m	lbf·ft	kg	Code	No.
1/2	12.5	9 x 12	10-120	7,4-88,5	0.9	2648636	TT3KH 120
1/2	12.5	14 x 18	70-350	51,6-258,2	1.2	2648644	TT3KH 350