



# Electromechanical torque and angle wrenches MANOSKOP®

#### 714R

Product no. 96501004

GTIN 4018754212736

Model MANOSKOP® 714R/4







Label.

Electromechanical torque and angle wrench MANOSKOP® 714R 4-40N·m 1/4" L. 295mm

Properties.

- · electromechanical triggering
- · acoustic and visual trigger signal
- with reversible ratchet (sizes 1-4), fine-tooth reversible ratchet (sizes 6-65) or ratchet insert with square drive (sizes 80-100)
- 4 measuring modes (torque, angle of rotation, torque with 'angle of rotation' monitoring variable, angle of rotation with 'torque' monitoring variable)
- high-resolution colour OLED display and side signal lights
- visual evaluation of the bolted joint: yellow light (pre-warning threshold reached), green light (within tolerance range), red light (measurement outside tolerance range)
- · freely configurable menu structure
- battery compartment/battery pack with bayonet connection
- optional: Li-ion battery no. 7195-2 and charger no. 7160
- 3 function modes: triggering (patented electromechanical triggering), peak-hold (indicating mode with peak value display) and track (indicating mode with actual value display)
- micro USB interface for data communication
- optional Bluetooth low energy-module (5.2)
- · QuickRelease safety lock switching system for insert tools
- data storage for up to 2,500 processes, including date and time stamp
- up to 200 joints in a maximum of 25 guided sequences can be programmed
- · different tolerance limits adjustable depending on the type of bolted joint
- · fast and precise setting via the keypad
- no unintentional adjustments thanks to password-protected keypad lock
- acoustic and visual signal warns of torque wrench overload and forced triggering in clockwise tightening mode
- automatic indication of the next calibration date, user-configurable according to elapsed time and/or number of operations
- fully automatic calibration and adjustment with the perfectControl® calibration and adjustment device No. 7794-2 (torque) or 7794-3 (torque and angle of rotation) for reducing error influencing factors
- units of measurement: N·m, ft·lb, in·lb

- automatic extension length correction: when an insert tool with a non-standard extension length is used, input the extension length to ensure that the required target value is achieved
- · ready for operation again immediately after release
- for controlled clockwise and anticlockwise tightening (size 1- 65); for anticlockwise tightening in "triggering' function mode the insert tool must be flipped over (size 80-100)
- torque and angle of rotation displays simultaneously
- measurement regardless of the force application point (for sizes 1, 2 and 4)
- safe handling due to the ergonomically shaped 2-component handle (resistant to the most common oils, greases, fuels, brake fluids and Skydrol)
- 3 certificates included (torque indicating/triggering in accordance with DIN EN ISO 6789-2:2017, angle of rotation based on VDI/VDE 2648-2)
- in sturdy plastic box (sizes 40-100 in steel box)
- · registered design, patented
- supplied with SensoMaster 4 software, USB cable, 4 batteries AAA/LR03, 1.5 V
- angle of rotation display resolution 0.1°
- angle of rotation accuracy°, ± 1 digit to 100°, >100° at least 1%, ± 1 digit
- torque display resolution ≤ 60 N·m: 0.01 N·m; > 60 N·m: 0.1 N·m
- torque measurement accuracy ± 2%, ± 1 digit

### Benefits.

Torque and angle-controlled torque wrench for bolted joints in accordance with the torque, angle of rotation, torque with 'angle of rotation' monitoring variable and angle of rotation with 'torque' monitoring variable tightening methods.

Visual evaluation of the bolted joint.

Thanks to the combination of the patented electromechanical clicking type and the display and acoustic feedback, the wrench provides signalling with maximum optimisation.

With patented electromechanical release: precise electronic measurement combined with the familiar mechanical 'click'.

Simple documentation of the recorded measurements on the PC via the USB interface and via an optional Bluetooth low energy module.

### Product highlights.



#### Angle of rotation and torque measurement

Our torque and angle wrenches make it possible to tighten bolted joints in accordance with the torque, angle of rotation, torque with 'angle of rotation' monitoring variable and angle of rotation with 'torque' monitoring variable tightening method. Thanks to this functional diversity, the wrench is suitable for the most popular tightening methods.



#### Electromechanical clicking type.

The MANOSKOP® with patented electromechanical release measures the applied torque electronically. A visual evaluation of the bolted connection is provided by a display and signal lights on the side. Unlike a purely electronic torque wrench, the cycle and haptic user feedback are also mechanical. A clearly perceptible cycle and an equally audible click indicate that the target value has been reached.





Our electromechanical torque wrenches are documentation-compatible. They can be easily configured and programmed using the SensoMaster software. This allows all data to be read out, stored and further processed on a PC for better monitoring and optimisation of work processes. In addition, digital measurement enables precise cycling at the setpoint and documentation of the actual torque (actual value) applied during tightening.



#### Also suitable for difficult application areas.

STAHLWILLE electromechanical torque wrenches are ideal for application areas in which electronic torque wrenches are pushed to their signalling limits - such as when working overhead or if the display cannot be read off. Even in noisy, busy and very bright environments which can make it difficult to perceive vibrations or visual and acoustic signals, electromechanical torque wrenches use patented haptic feedback to indicate that the target value has been reached.



#### More reliability.

Our electromechanical torque wrenches minimise operating errors. Screw joints and sequence plans, for example, can be parameterised and saved. The torque wrench then automatically sets the clicking type torque for the selected bolted joint. The clicking type torque is also specified digitally so that parallax effects (errors caused by to an incorrect reading angle), which are possible when using a mechanical scale are eliminated.



#### Exchangeable insert tools.

Our MANOSKOP® 714R includes a ratchet insert adaptor. Depending on the size of the torque wrench, this is a reversible ratchet, adjustable fine tooth ratchet or ratchet insert adaptor with push-through square drive. This is not permanently installed, and can be replaced with other insert tools to suit your individual application.

### Technologies and features.



#### QuickRelease

The QuickRelease safety lock prevents unintentional loss of insert tools. These click securely into place, and are only released again at the push of a button for a quick tool change.



#### 2-component handle

Our 2-component handle is non-slip and ergonomically designed. It is resistant to the most common oils, greases, fuels, brake fluids, and Skydrol. The arrow markings on the handle indicate the direction of operation.



#### Factory calibration certificate (ISO calibration)

Our torque tools, transducers, and test equipment are delivered with a factory calibration certificate in accordance with DIN EN ISO 6789-2:2017, and based on DKD-R 10-8 for traceability of the measuring equipment.

## Technical attributes.

Measuring range N·m	4-40 N·m
Measuring range ft-lb	3-30 ft·lb
Measuring range in-lb	36-360 in·lb
External square drive (inch)	1/4
Number of teeth	22
Battery type	Micro (AAA) 1,5V
Width mm (b)	80 mm
DIN	DIN EN ISO 6789-2:2017
Weight with box	907 g
Size	4
Tool holder size [internal square]	9 x 12 mm
Height mm (h)	70 mm
Length mm (L)	295 mm

## Logistics data.

Depth mm (IFS)	560	
Width mm (IFS)	80	
Height mm (IFS)	70	
WEEE/ElektroG	Kleingeräte B2C	
Length (packaged, mm)	560	
Width (packaged, mm)	80	
Height (packaging, mm)	70	
Volume (packaged, dm3)	3.136 dm3	
Product no.	96501004	
Weight (gross, kg)	1,135	
Weight PAP (kg)	0,095	
Weight PVC (kg)	0,000	
GTIN	4018754212736	
Country of origin AWR	GERMANY	
Region of origin	Nordrhein-Westfalen	
Customs tariff no.	82041100	
Packing standard	1	
Weight (g)	482 g	

## Variants.

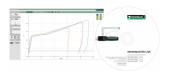
Product no.	Model No. (ERP)	Description	GTIN
96501001	MANOSKOP® 714R/1	Electromechanical torque and angle wrench MANOSKOP® 714R 1-10N·m 1/4" L. 269mm	4018754212712
96501002	MANOSKOP® 714R/2	Electromechanical torque and angle wrench MANOSKOP® 714R 2-20N·m 1/4" L. 269mm	4018754212729
96501004	MANOSKOP® 714R/4	Electromechanical torque and angle wrench MANOSKOP® 714R 4-40N·m 1/4" L. 295mm	4018754212736
96501006	MANOSKOP® 714R/6	Electromechanical torque and angle wrench MANOSKOP® 714R 6-60N·m 3/8" L. 427mm	4018754212743
96501010	MANOSKOP® 714R/10	Electromechanical torque and angle wrench MANOSKOP® 714R 10-100N·m 1/2" L. 500mm	4018754212750
96501020	MANOSKOP® 714R/20	Electromechanical torque and angle wrench MANOSKOP® 714R 20-200N·m 1/2" L. 594mm	4018754212767

96501040	MANOSKOP® 714R/40	Electromechanical torque and angle wrench MANOSKOP® 714R 40-400N·m 3/4" L. 737mm	4018754212774
96501065	MANOSKOP® 714R/65	Electromechanical torque and angle wrench MANOSKOP® 714R 65-650N·m 3/4" L. 980mm	4018754212781
96501080	MANOSKOP® 714R/80	Electromechanical torque and angle wrench MANOSKOP® 714R 80-800N·m 3/4" L. 1253mm	4018754212798
96501100	MANOSKOP® 714R/100	Electromechanical torque and angle wrench MANOSKOP® 714R 100-1000N·m 3/4" L. 1438mm	4018754212804

### GTIN.



## Accessories (for).



96585235 SENSOMASTER Live software



54100070 QuickRelease safety lock



96521161 Interface adaptor set



52110062 Docking station for No.714



52110162 Rest for docking station No.7762



52110061 Interface adaptor



54101195 Li-ion battery for No.714



52110220 Bluetooth Low Energy

## Images.

