

## Angle and torque wrench MANOSKOP®

### 714



Product no. **96500920**  
GTIN **4018754222834**  
Model **714/20**



#### Label.

Angle and torque wrench MANOSKOP® 714 20-200N·m 14 x 18 mm L. 547mm

#### Features.

- 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 target range), red light (measurement outside tolerance range)
- freely configurable menu structure
- battery compartment cap with bayonet connection
- optional: Li-ion battery no. 7195-2 and charger no. 7160
- 3 function modes: click (patented electromechanical triggering), peak hold (displaying mode with peak value display) and track (displaying mode with actual value display)
- micro USB interface for data communication
- optional Bluetooth low energy module(5.2)
- QuickRelease security lock - insert tool changing system
- data storage for up to 2,500 tightenings, including date and time stamp
- up to 200 screw joints in a maximum of 25 sequences can be programmed
- different tolerance limits adjustable depending on the type of bolted joint
- acoustic and visual evaluation of the 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 compensation: Possibility of entering a custom extension length to ensure that the required target value is achieved correctly with compensation for the lever extension
- ready for operation again immediately after release

- clockwise and anticlockwise tightening - the insert tool must be rotated for anticlockwise torque in "triggering" function mode
- visual, acoustic and tactile trigger signal
- torque and angle of rotation displays visible at the same time
- 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 displaying/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 sheet steel box)
- registered design, patented
- supplied with SensoMaster 4 software, USB cable, 4 micro-batteries AAA/LR03, 1.5 V
- **angle of rotation display resolution 0.1°**
- **angle of rotation display deviation  $\pm 1^\circ$ ,  $\pm 1$  digit to 100°, >100° at least 1%,  $\pm 1$  digit**
- **torque display resolution  $\leq 60$  N-m: 0.01 N-m; > 60 N-m: 0.1 N-m; >400N-m: 1N-m**
- **torque display deviation  $\pm 2\%$ ,  $\pm 1$  digit**

## Advantages.

An angle and 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 method.

Visual evaluation of the bolted joint.

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

Electromechanically displaying (with electronic measurement) and triggering (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 angle and torque 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 triggering.

The patented electromechanical MANOSKOP® 714 measures the applied torque electronically. A visual evaluation of the bolted joint is shown by means of a display and side signal lights. Unlike a purely electronic torque wrench, the triggering and haptic user feedback are provided mechanically. A distinctly perceptible jolt and a clearly audible click indicate that the target value has been reached.



### Comprehensive documentation.

Our electromechanical torque wrenches can be documented. They can be easily configured and programmed using the SensoMaster software. This means that all data can be read out, stored and subjected to further processing on the PC for better monitoring and optimisation of the work processes. The digital measurement also allows the actual torque which has been applied (actual value) to be specified after triggering, as well as the target value.



### 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 triggering torque for the selected bolted joint. The triggering 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.



### Perfect entry level solution.

Electromechanical STAHLWILLE torque wrenches make it easier to switch from purely mechanical to documenting torque wrenches. Users who previously only worked with mechanical wrenches become accustomed to them more quickly because our electromechanical torque wrenches provide maximum optimised signalling with haptic, acoustic and visual feedback. This simplifies the switch to digital technology.

## Technologies and features.



### 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.



### QuickRelease

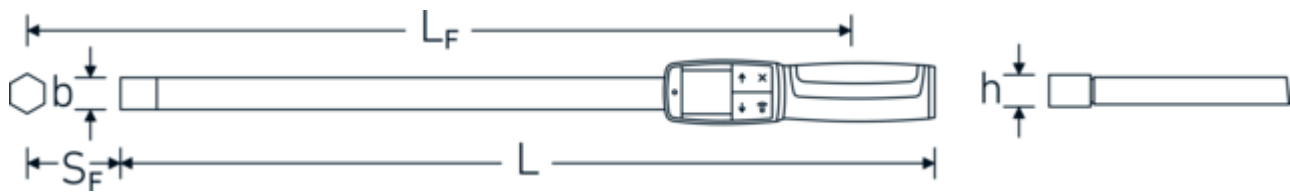
The QuickRelease safety lock prevents unintentional loss of insert tools. These click securely into place, and are only released again at the push of a button for a quick tool change.



### 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 and based on DKD-R 10-8 for traceability of the measuring equipment.

## Technical Drawing.



## Technical Attributes.

Measuring range N·m	20-200 N·m
Measuring range ft·lb	15-150 ft·lb
Measuring range in·lb	180-1800 in·lb
Battery type	Micro (AAA) 1,5V
Width mm (b)	28 mm
DIN	DIN EN ISO 6789-2:2017
Weight with box	1896 g
Size	20
Size square socket [inside square drive]	14 x 18 mm
Height mm (h)	23 mm
Length mm (L)	547 mm
LF	516 mm
SF	25 mm

## Logistics data.

Depth mm (IFS)	685
Width mm (IFS)	90
Height mm (IFS)	75
WEEE/ElektroG	Großgeräte B2C
Length (packed, mm)	685
Width (packed, mm)	90
Height (packed, mm)	75
Volume (packed, dm <sup>3</sup> )	4.62375 dm <sup>3</sup>
Product no.	96500920
Weight (gross, kg)	2,085
Weight PAP (kg)	0,130
Weight PVC (kg)	0,000
GTIN	4018754222834
Country of origin AWR	GERMANY
Region of origin	Nordrhein-Westfalen
Customs tariff no.	82041100
Packing standard	1
Weight	1361 g

## Parts list.



81370003  
Plastic case, empty



59220003  
Battery



51110057  
USB cable

## Variants.

Product no.	Model no. (ERP)	Description	GTIN
96500901	714/ 1	Angle and torque wrench MANOSKOP® 714 1-10N·m 9 x 12 mm L. 226mm	4018754222780
96500902	714/ 2	Angle and torque wrench MANOSKOP® 714 2-20N·m 9 x 12 mm L. 226mm	4018754222797
96500904	714/ 4	Angle and torque wrench MANOSKOP® 714 4-40N·m 9 x 12 mm L. 252mm	4018754222803
96500906	714/ 6	Angle and torque wrench MANOSKOP® 714 6-60N·m 9 x 12 mm L. 393mm	4018754222810
96500910	714/10	Angle and torque wrench MANOSKOP® 714 10-100N·m 9 x 12 mm L. 466mm	4018754222827
96500920	714/20	Angle and torque wrench MANOSKOP® 714 20-200N·m 14 x 18 mm L. 547mm	4018754222834
96500940	714/40	Angle and torque wrench MANOSKOP® 714 40-400N·m 14 x 18 mm L. 687mm	4018754222841
96500965	714/65	Angle and torque wrench MANOSKOP® 714 65-650N·m 22 x 28 mm L. 890mm	4018754222858
96500980	714/80	Angle and torque wrench MANOSKOP® 714 80-800N·m 22 x 28 mm L. 1158mm	4018754222865
96500100	714/100	Angle and torque wrench MANOSKOP® 714 100-1000N·m 22 x 28 mm L. 1343mm	4018754222773

## GTIN-Code.



## Accessories.



96521161  
Interface adaptor set



52110061  
Interface adaptor



52110220  
Bluetooth Low Energy  
module 714



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