

## Electromechanical torque and angle wrenches MANOSKOP®

**714**



Product no. **96500965**  
GTIN **4018754222858**  
Model **MANOSKOP® 714/65**



### Label.

Electromechanical torque and angle wrench MANOSKOP® 714 65-650N·m 22 x 28 mm L. 890mm

### Properties.

- electromechanical triggering
- acoustic and visual trigger signal
- 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
- clockwise and anticlockwise tightening - the insert tool must be flipped over for anticlockwise torque in 'triggering' function mode
- 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  $\pm 1^\circ$ ,  $\pm 1$  digit to  $100^\circ$ ,  $>100^\circ$  at least 1%,  $\pm 1$  digit**
- **torque display resolution  $\leq 60$  N·m: 0.01 N·m;  $> 60$  N·m: 0.1 N·m;  $> 400$  N·m: 1 N·m**
- **torque accuracy  $\pm 2\%$ ,  $\pm 1$  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.



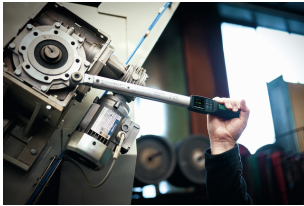
### Electromechanical clicking type.

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.



### **Comprehensive documentation.**

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.



### **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**

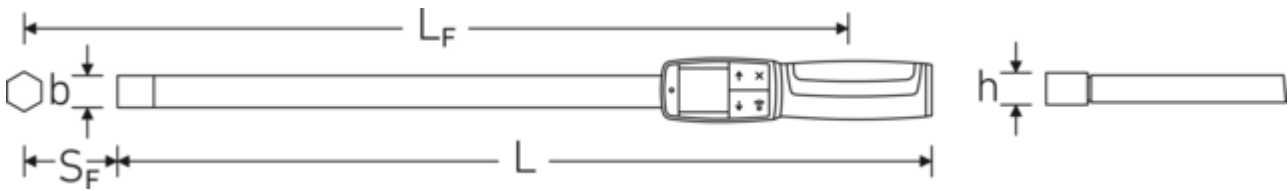
The QuickRelease safety lock prevents unintentional loss of insert tools. These click securely into place, and are only released again at the push of a button for a quick tool change.



### **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 6789-2:2017, and based on DKD-R 10-8 for traceability of the measuring equipment.

## Technical drawing.



## Technical attributes.

Measuring range N·m	65-650 N·m
Measuring range ft·lb	48-480 ft·lb
Measuring range in·lb	580-5800 in·lb
Battery type	Micro (AAA) 1,5V
Width mm (b)	30,6 mm
DIN	DIN EN ISO 6789-2:2017
Weight with box	7000 g
Size	65
Tool holder size [internal square]	22 x 28 mm
Height mm (h)	25,6 mm
Length mm (L)	890 mm
LF	890 mm
SF	55 mm

## Logistics data.

Depth mm (IFS)	1035
Width mm (IFS)	130
Height mm (IFS)	90
WEEE/ElektroG	Großgeräte B2C
Length (packaged, mm)	1045
Width (packaged, mm)	145
Height (packaging, mm)	100
Volume (packaged, dm <sup>3</sup> )	15.1525 dm <sup>3</sup>
Product no.	96500965
Weight (gross, kg)	7,460
Weight PAP (kg)	0,400
Weight PVC (kg)	0,000
GTIN	4018754222858
Country of origin AWR	GERMANY
Region of origin	Nordrhein-Westfalen
Customs tariff no.	82041100
Packing standard	1
Weight (g)	3222 g

## Variants.

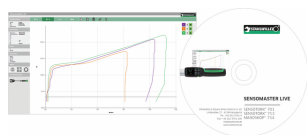
Product no.	Model No. (ERP)	Description	GTIN
96500901	MANOSKOP® 714/1	Electromechanical torque and angle wrench MANOSKOP® 714 1-10N·m 9 x 12 mm L. 226mm	4018754222780
96500902	MANOSKOP® 714/2	Electromechanical torque and angle wrench MANOSKOP® 714 2-20N·m 9 x 12 mm L. 226mm	4018754222797
96500904	MANOSKOP® 714/4	Electromechanical torque and angle wrench MANOSKOP® 714 4-40N·m 9 x 12 mm L. 252mm	4018754222803

96500906	MANOSKOP® 714/6	Electromechanical torque and angle wrench MANOSKOP® 714 6-60N·m 9 x 12 mm L. 393mm	4018754222810
96500910	MANOSKOP® 714/10	Electromechanical torque and angle wrench MANOSKOP® 714 10-100N·m 9 x 12 mm L. 466mm	4018754222827
96500920	MANOSKOP® 714/20	Electromechanical torque and angle wrench MANOSKOP® 714 20-200N·m 14 x 18 mm L. 547mm	4018754222834
96500940	MANOSKOP® 714/40	Electromechanical torque and angle wrench MANOSKOP® 714 40-400N·m 14 x 18 mm L. 687mm	4018754222841
96500965	MANOSKOP® 714/65	Electromechanical torque and angle wrench MANOSKOP® 714 65-650N·m 22 x 28 mm L. 890mm	4018754222858
96500980	MANOSKOP® 714/80	Electromechanical torque and angle wrench MANOSKOP® 714 80-800N·m 22 x 28 mm L. 1158mm	4018754222865
96500100	MANOSKOP® 714/100	Electromechanical torque and angle wrench MANOSKOP® 714 100-1000N·m 22 x 28 mm L. 1343mm	4018754222773

## GTIN.



## Accessories (for).



96585235  
SENSOMASTER Live  
software



81231100  
Textile bag for large  
torque wrenches



96521161  
Interface adaptor set



52110061  
Interface adaptor



54101195  
Li-ion battery for  
No.714



52110062  
Docking station for  
No.714



52110162  
Rest for docking station  
No.7762



52110220  
Bluetooth Low Energy

