

## Angle and torque wrench MANOSKOP®

### 714R



Product no. **96501020**  
GTIN **4018754212767**  
Model **714R/20**



#### Label.

Angle and torque wrench MANOSKOP® Model 714R Measuring r. 20-200N·m Drive 1/2 L. 594mm

#### Features.

- with reversible ratchet (size 1-4), fine-tooth reversible ratchet (size 6-65) or insert ratchet insert adaptor with push-through square drive (size 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 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
- for controlled clockwise and anticlockwise tightening (sizes 1-65); for anticlockwise tightening in "triggering" function mode the insert tool must be rotated (sizes 80-100)
- visual, acoustic and tactile trigger signal
- torque and angle of rotation simultaneously visible
- measurement regardless of the force application point (for sizes 1, 2 and 4)
- safe handling due to the ergonomically formed 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**
- **torque display deviation  $\pm 2\%$ ,  $\pm 1$  digit**

## Advantages.

Torque and angle 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.



PRODUCT IMAGE  
IN PROGRESS

### Torque and angle of rotation measurement.

Our torque and angle controlled 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.



PRODUCT IMAGE  
IN PROGRESS

### 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.



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### 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 optimization 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's 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 minimize operating errors. Screw joints and sequence plans, for example, can be parameterized 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.

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

## 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
External square drive (inch)	1/2
Battery type	Micro (AAA) 1,5V
Width mm (b)	80 mm
DIN	DIN EN ISO 6789-2:2017
Weight with box	2198 g
Size	20
Size square socket [inside square drive]	14 x 18 mm
Height mm (h)	70 mm
Length mm (L)	594 mm

## Logistics data.

Depth mm (IFS)	680
Width mm (IFS)	80
Height mm (IFS)	70
Length (packed, mm)	700
Width (packed, mm)	100
Height (packed, mm)	75
Volume (packed, dm <sup>3</sup> )	5.25 dm <sup>3</sup>
Product no.	96501020
Weight (gross, kg)	2,225
Weight PAP (kg)	0,130
Weight PVC (kg)	0,000
GTIN	4018754212767
Country of origin	GERMANY
Region of origin	Nordrhein-Westfalen
WEEE/ElektroG	Großgeräte B2C
Customs tariff no.	82041100
Packing standard	1
Weight	1663 g

## Variants.

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

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

## GTIN-Code.



## Accessories.



96521161  
Interface adapter set



52110061  
Interface adapter



52110220  
Bluetooth Low Energy  
module 714

## Images.

