STAHLWILLE®

# Electromechanical angle-controlled torque wrenches MANOSKOP®

## 714 eClick

| | |
|---|---|
| Product no. | **96500100** |
| GTIN | **4018754222773** |
| Model | **MANOSKOP® 714/100 eClick** |

**Label.**

Electromechanical angle-controlled torque wrenches MANOSKOP® 714 eClick 100-1000N·m 22 x 28 mm L. 1343mm

**Properties.**

- eClick - electromechanical click
- acoustic, haptic, 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 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 cap/battery pack with bayonet connection
- optional: Li-ion battery no. 7195-2 and charger no. 7160
- 3 function modes: clicking (patented electromechanical click), 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) or WLAN module
- QuickRelease safety lock - switching system for insert tools
- data storage for up to 2,500 bolting processes, including date and time stamp
- up to 200 bolted joints in a maximum of 25 sequence diagrams can be programmed
- different tolerance limits can be set depending on the type of bolted joint
- fast and precise adjustment via the keyboard
- no unintentional adjustments thanks to password-protected keypad lock
- acoustic and visual signal warns of torque wrench overload and forced clicking in clockwise tightening mode
- automatic indication of the next calibration date, user-configurable by time interval and/or number of joints
- fully automatic calibration and adjustment with the perfectControl® calibration and adjustment system 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: option of entering a deviating extension length to ensure the required target value is achieved

- ready for operation again immediately after release
- for a controlled tightening process. The insert tool must be turned in clicking mode
- 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 indicating/clicking 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 micro-batteries AAA/LR03, 1.5 V
- **angle of rotation display resolution 0.1°**
- **angle of rotation display accuracy ±1°, ±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; > 400 N·m: 1 N·m**
- **torque display 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 eClick technology (electromechanical click): accurate electronic measurement combined with the familiar mechanical click.

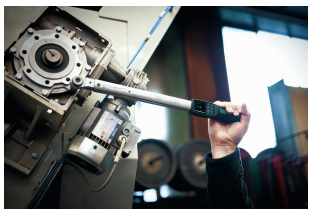
Simple documentation of the recorded measurements on the PC via the USB interface and via optional communication modules (Bluetooth LE or WLAN).

## 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.

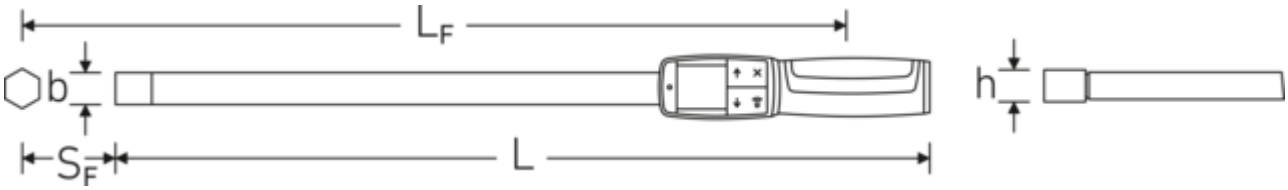
**eClick.**
The electromechanical eClick torque tools combine digital measuring technology with a mechanical click. This allows torques to be applied accurately, with the additional advantage of a clearly detectable, haptic stop signal. This helps users to achieve reliable, reproducible bolted joints without sacrificing the familiar handling of traditional tools.

**QuickRelease**
The QuickRelease safety lock prevents unintentional loss of sockets and insert tools. These click securely into place, and are only released again at the push of a button for a quick tool change. In transducers: The QuickRelease safety lock helps you to quickly mount and change transducers. The transducers lock into the calibration system and only unlock again at the push of the buttons.

**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.

**DIN EN ISO 6789-2**
Our torque wrenches and torque screwdrivers are professionally calibrated in accordance with DIN EN ISO 6789-2 and delivered with a corresponding calibration certificate. We also calibrate angle-controlled torque wrenches in accordance with VDI 2648-2. This ensures the accuracy and traceability of our tools.

## Technical drawing.




## Technical attributes.

| | |
|---|---|
| **Size** | 100 |
| **Anzeigeabweichung** | Drehwinkel ±1°, ±1 Digit bis 100°, >100° mindestens 1%, ± 1 Digit |
| **Tool holder size [internal square]** | 22 x 28 mm |
| **Measuring range N·m** | 100-1000 N·m |
| **Measuring range ft-lb** | 74-750 ft·lb |
| **Measuring range in-lb** | 900-9000 in·lb |
| **MA N·m** | 100 N·m |
| **Nominal value N·m** | 1000 N·m |
| **Length mm (L)** | 1343 mm |
| **Width mm (b)** | 30,6 mm |
| **Height mm (h)** | 25,6 mm |
| **Battery type** | Micro (AAA) 1,5V |
| **DIN** | DIN EN ISO 6789-2:2017 |
| **LF** | 1343 mm |
| **SF** | 55 mm |
| **Weight with box** | 10500 g |

## Logistics data.

| | |
|---|---|
| **Product no.** | 96500100 |
| **GTIN** | 4018754222773 |
| **Weight (g)** | 4990 g |
| **Volume (packaged, dm3)** | 19.89 dm3 |
| **Packing standard** | 1 |
| **WEEE/ElektroG** | Großgeräte B2C |
| **Customs tariff no.** | 82041100 |
| **Country of origin AWR** | GERMANY |
| **Region of origin** | Nordrhein-Westfalen |
| **Depth mm (IFS)** | 1530 |
| **Width mm (IFS)** | 130 |
| **Height mm (IFS)** | 100 |
| **Weight (gross, kg)** | 10,500 |
| **Weight PAP (kg)** | 0,650 |
| **Weight PVC (kg)** | 0,000 |
| **Length (packaged, mm)** | 1530 |
| **Width (packaged, mm)** | 130 |
| **Height (packaging, mm)** | 100 |

## Parts list.

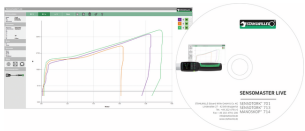
51110057
USB cable

59220003
Battery

## GTIN.

4 018754 222773

## Accessories (for).

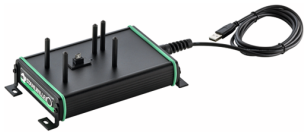


96585235
SensoMaster software license

96521161
Interface adaptor set

52110061
Interface adaptor

52110162
Support for docking station No. 7762



52110062
Docking station for No.714

54101195
Li-Ion battery

52110220
Bluetooth Low Energy module

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