Digital torquemeter SAUTER DA


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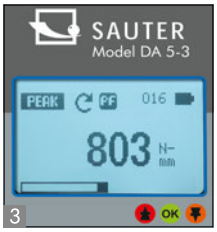

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## Comfortable testing of screw tops, e.g. bottles, jars

### Features

- 1 Optimised for torque testing of bottles, jars and other packaging with screw tops with a minimum diameter of 15 mm and a maximum diameter of 160 mm, in the food industry and pharmaceutical industry, as well as in the manufacturing of cosmetics such as, for example, lipsticks, etc.
- 2 Quick pin system: The four bottle mounts (holders) are pushed in, instead of being screwed in, to save time. This allows you to reconfigure quickly for other bottle sizes
- Metal housing for continuous use in tough environmental conditions
- 3 Capacity display: A bar lights up to show how much of the measuring range is still available.
- 3 LCD graphics display with backlight
- Rubber feet with anti-slip feature
- Scope of delivery: four bottle mounts with rubber coat, sturdy carrying case
- Internal data memory saves up to 500 measurements. The memory contents can be transferred to the PC using optional software
- 4 USB and RS-232 data interfaces standard
- Peak hold function to capture the peak value or Track function for continuous display of measurement
- Can be used in both directions of rotation
- Measuring with tolerance range (limit-setting function): Upper and lower limiting can be programmed individually. The process is supported by an audible and visual signal
- AUTO-OFF function

### Technical data

- Selectable units: Nm, lbf-in, kgf-cm, kgf-m, ft-lbf
- Measuring precision: ± 0,5 % of [Max]
- Usable measuring range: 5–100 % of [Max]
- Overload protection: 150 % of [Max]
- Rechargeable battery pack integrated, standard, operating time up to 18 h without backlight, charging time approx. 14 h
- Overall dimensions W×D×H 250×160×100 mm
- Net weight approx. 3 kg

### Accessories

- Plug-In for data transfer of measuring data from the measuring instrument and transfer to a PC, e.g. in Microsoft Excel®, SAUTER AFI-1.0
- Force-time data transfer software with graphic display of the measurement process, SAUTER AFH FAST
- USB/PC connection cable, standard, SAUTER FL-A01

STANDARD


OPTION


| Model<br><br>SAUTER | Measuring range<br>[Max]<br>Nm | Readout<br>[d]<br>Nm | Diameter test object<br><br>mm | | Option **Factory calibration certificate**<br><br>KERN | |
|---|---|---|---|---|---|---|
| **DA 1-4** | 1 | 0,0002 | 15–160 | | 961-120 | |
| **DA 5-3** | 5 | 0,001 | 15–160 | | 961-120 | |
| **DA 10-3** | 10 | 0,002 | 15–160 | | 961-120 | |

## Pictograms


**Adjusting program (CAL):**
For quick setting of the instrument's accuracy. External adjusting weight required


**Calibration block:**
Standard for adjusting or correcting the measuring device


**Peak hold function:**
Capturing a peak value within a measuring process


**Scan mode:**
Continuous capture and display of measurements


**Push and Pull:**
The measuring device can capture tension and compression forces


**Length measurement:**
Captures the geometric dimensions of a test object or the movement during a test process


**Focus function:**
Increases the measuring accuracy of a device within a defined measuring range


**Internal memory:**
To save measurements in the device memory


**Data interface RS-232:**
Bidirectional, for connection of printer and PC


**Profibus:**
For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference.


**Profinet:**
Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible


**Data interface USB:**
To connect the measuring instrument to a printer, PC or other peripheral devices


**Bluetooth* data interface:**
To transfer data from the balance/measuring instrument to a printer, PC or other peripherals


**WLAN data interface:**
To transfer data from the balance/measuring instrument to a printer, PC or other peripherals


**Data interface Infrared:**
To transfer data from the measuring instrument to a printer, PC or other peripheral devices


**Control outputs (optocoupler, digital I/O):**
To connect relays, signal lamps, valves, etc.


**Analogue interface:**
To connect a suitable peripheral device for analogue processing of the measurements


**Analog output:**
For output of an electrical signal depending on the load (e.g. voltage 0 V – 10 V or current 4 mA – 20 mA)


**Statistics:**
Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.


**PC Software:**
To transfer the measurement data from the device to a PC


**Printer:**
A printer can be connected to the device to print out the measurement data


**Network interface:**
For connecting the scale/measuring instrument to an Ethernet network


**KERN Communication Protocol (KCP):**
It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems


**GLP/ISO record keeping:**
Of measurement data with date, time and serial number. Only with SAUTER printers


**Measuring units:**
Weighing units can be switched to e.g. non-metric. Please refer to website for more details


**Measuring with tolerance range (limit-setting function):**
Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model


**Protection against dust and water splashes IPxx:**
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013


**ZERO:**
Resets the display to "0"


**Battery operation:**
Ready for battery operation. The battery type is specified for each device


**Rechargeable battery pack:**
Rechargeable set


**Plug-in power supply:**
230V/50Hz in standard version for EU. On request GB, AUS or USA version available


**Integrated power supply unit:**
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request


**Motorised drive:**
The mechanical movement is carried out by a electric motor


**Motorised drive:**
The mechanical movement is carried out by a synchronous motor (stepper)


**Fast-Move:**
The total length of travel can be covered by a single lever movement


**Verification possible:**
The time required for verification is specified in the pictogram


**DAkkS calibration possible:**
The time required for DAkkS calibration is shown in days in the pictogram


**Factory calibration:**
The time required for factory calibration is specified in the pictogram


**Package shipment:**
The time required for internal shipping preparations is shown in days in the pictogram


**Pallet shipment:**
The time required for internal shipping preparations is shown in days in the pictogram

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