

### Digital Torquemeter SAUTER DA



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

### 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 durable use in harsh 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
- Internal data memory saves up to 500 measurements. The memory contents can be transferred to the PC using optional software
- **4** Data interface USB and RS-232 included

- 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
- Scope of delivery: four bottle holders with rubber coating, sturdy carrying case

### Technical data

- Selectable measuring units: Nm, lbf-in, kgf-cm, kgf-m, ft-lbf
- Measuring precision:  $\pm 0,5\%$  of [Max]
- Usable measuring range: 5 – 100 % of [Max]
- Overload protection: 120% of [Max]
- Rechargeable battery pack integrated, as standard, operating time up to 18 h without backlight, charging time approx. 14 h
- Overall dimensions WxDxH 260x160x60 mm
- Net weight approx. 3,0 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-2.0, see internet
- Data transfer software with graphic display of the measurement process, force-time, SAUTER AFH FAST

#### STANDARD



#### OPTION



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

 <p><b>Adjusting program (CAL)</b> For quick setting of the instrument's accuracy. External adjusting weight required</p>	 <p><b>Bluetooth* data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring units</b> Weighing units can be switched to e.g. non-metric. Please refer to website for more details</p>	 <p><b>Conformity assessment</b> Models with type approval for construction of verifiable systems</p>
 <p><b>Calibration block</b> Standard for adjusting or correcting the measuring device</p>	 <p><b>WIFI data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring with tolerance range (limit-setting function)</b> Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model</p>	 <p><b>DAkkS calibration possible</b> The time required for DAkkS calibration is shown in days in the pictogram</p>
 <p><b>Peak hold function</b> Capturing a peak value within a measuring process</p>	 <p><b>Data interface infrared</b> To transfer data from the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>Protection against dust and water splashes IPxx</b> The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989 +A1:1999+A2:2013</p>	 <p><b>Factory calibration (ISO)</b> The time required for factory calibration is specified in the pictogram</p>
 <p><b>Scan mode</b> Continuous capture and display of measurements</p>	 <p><b>Control outputs (optocoupler, digital I/O)</b> To connect relays, signal lamps, valves, etc.</p>	 <p><b>ZERO</b> Resets the display to "0"</p>	 <p><b>Package shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Push and Pull</b> The measuring device can capture tension and compression forces</p>	 <p><b>Analogue interface</b> To connect a suitable peripheral device for analogue processing of the measurements</p>	 <p><b>Battery operation</b> Ready for battery operation. The battery type is specified for each device</p>	 <p><b>Pallet shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Length measurement</b> Captures the geometric dimensions of a test object or the movement during a test process</p>	 <p><b>Analogue output</b> For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)</p>	 <p><b>Rechargeable battery pack</b> Rechargeable set</p>	
 <p><b>Focus function</b> Increases the measuring accuracy of a device within a defined measuring range</p>	 <p><b>Statistics</b> Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.</p>	 <p><b>Plug-in power supply</b> 230V/50Hz in standard version for EU. On request GB, AUS or US version available</p>	
 <p><b>Internal memory</b> To save measurements in the device memory</p>	 <p><b>PC Software</b> To transfer the measurement data from the device to a PC</p>	 <p><b>Integrated power supply unit</b> Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request</p>	
 <p><b>Data interface RS-232</b> Bidirectional, for connection of printer and PC</p>	 <p><b>Printer</b> A printer can be connected to the device to print out the measurement data</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by an electric motor</p>	
 <p><b>Profibus</b> 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</p>	 <p><b>Network interface</b> For connecting the scale/measuring instrument to an Ethernet network</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by a synchronous motor (stepper)</p>	
 <p><b>Profinet</b> 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</p>	 <p><b>KERN Communication Protocol (KCP)</b> 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</p>	 <p><b>Fast-Move</b> The total length of travel can be covered by a single lever movement</p>	
 <p><b>Data interface USB</b> To connect the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>GLP/ISO record keeping</b> of measurement data with date, time and serial number. Only with SAUTER printers</p>		

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