



# **TORQUE MEASUREMENT**

There is a fundamental differentiation here between the measurement of static and dynamic torques.

Dynamic torques measurement is typically carried out using torque sensors on test objects which are rotating – during the movement.

Static torques measurement, on the other hand, is always carried out when the item is at rest.

The SAUTER range includes static torques gauges for determining the torque expended when opening rotary or screw caps of any kind.

Further typical applications of static torque measuring devices are testing of assembly tools for screws and nuts, in particular torque keys and mechanical assembly tools such as cordless electric screw drivers.

# **Quick Finder**

Readout	Measuring range	Model	Page
[d]	[Max]		
Nm	Nm	SAUTER	
0,0001	0,5	DB 0.5-4	52
0,0002	1	DA 1-4	51
0,0002	1	DB 1-4	52
0,001	5	DA 5-3	51
0,001	5	DB 5-3	52
0,002	10	DA 10-3	51
0,002	10	DB 10-3	52
0,005	20	DB 20-3	52
0,01	50	DB 50-2	52
0,02	100	DB 100-2	52
0,05	200	DB 200-2	52
0,1	500	DB 500-2	52











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

#### **Features**

- I 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: ± 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 W×D×H 260×160×60 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,
- · Data transfer software with graphic display of the measurement process, force-time, SAUTER AFH FAST

































Model	Measuring range	Readout	Diameter test object	Option  Factory calibration certificate
SAUTER	[Max] Nm	[d] Nm	mm	KERN
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











# Convenient way to test the torque of tools

## **Features**

- In Particularly suitable for testing torque wrenches, electric hand screwdrivers and cordless screwdrivers
- 2 Torque pick-up system for dynamic testing of electric screwdrivers (from SAUTER DB 0.5-4 to DB 50-2)
- · Metal housing for durable use in harsh environmental conditions
- · Capacity display: A bar lights up to show how much of the measuring range is still available
- · LCD graphics display with backlight
- · Rubber feet with anti-slip feature (from SAUTER DB 0.5-4 to DB 10-3)
- 3 Stable mounting plate for solid fixation (from SAUTER DB 20-3 to DB 500-2)
- · Data interface USB and RS-232 included
- · Internal data memory saves up to 500 measurements. The memory contents can be transferred to the PC using optional software

- · 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: Torque pick-up, sturdy carry case, mounting plate (for models with  $[Max] \ge 20 \text{ Nm}$

### Technical data

- · Backlit LCD graphics display
- · Selectable measuring 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: 120 % of [Max]
- Rechargeable battery pack integrated, as standard, operating time up to 18 h without backlight, charging time approx. 14 h
- Overall dimensions W×D×H 180×110×60 mm
- Net weight approx. 2,2 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































Model	Measuring range	Readout	Tool fitting	Option
	[Max]	[d]		Factory Calibration Certificate
SAUTER	Nm	Nm	mm/Inch	KERN
DB 0.5-4	0,5	0,0001	20 mm & 3/8"	961-120
DB 1-4	1	0,0002	20 mm & 3/8"	961-120
DB 5-3	5	0,001	20 mm & 3/8"	961-120
DB 10-3	10	0,002	20 mm & 3/8"	961-120
DB 20-3	20	0,005	20 mm & 3/8"	961-120
DB 50-2	50	0,01	20 mm & 3/8"	961-120
DB 100-2	100	0,02	3/8"	961-120
DB 200-2	200	0,05	1/2"	961-120
DB 500-2	500	0,1	3/4"	961-120