

Digital force gauge SAUTER FL-M

NEW **PREMIUM**
★★★



Premium force measuring instrument with graphic assisted display for tension and compression tests with external measuring cell

Features

- **Premium force gauge** with external measuring cell, tension loops and compression plates included in delivery
- **Turnable display** with backlight
- **Peak-Hold function** to capture peaks (measurement result will be "frozen" for a short time) or **Track function** mode for a continuous measurement indication (period of time approx. 10 s)
- **Metal housing** for durable usage in harsh environmental conditions
- Can be mounted on all SAUTER test stands
- **Capacity display:** A bar lights up to show how much of the measuring range is still available
- **Measuring with tolerance range (limit-setting function):** Upper and lower limiting can be programmed individually, in pull and push direction. The process is supported by an visual signal.
- **Internal memory** for up to 500 measurement values
- **Continuous analogue output:** Linear voltage signal in dependence to the load (-2 to +2 V)
- **Selectable measuring units:** N, kN, kg, oz, lbf
- **Delivered in a robust carrying case**

Technical data

- Internal measuring frequency: 1000 Hz
- Precision: 0,2 % of [Max]
- Overload protection: 120 % of [Max]
- Dimensions housing: W×D×H 175×75×30 mm
- Dimensions load cell W×D×H 76,2×51×19 mm
- Thread: M12
- Rechargeable battery pack integrated, standard, operating time up to 10 h without backlight, charging time approx. 8 h
- Net weight approx. 0,5 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-displacement data transfer software** with graphical representation of the measuring process, only in combination with SAUTER LD, SAUTER AFH LD
- **Force-time data transfer software** for graphical representation on the PC and data transfer to Microsoft Excel®, SAUTER AFH FAST
- **Force-displacement data transfer software** with graphic display of the measurement process, only in combination with SAUTER LB, SAUTER AFH FD
- **USB cable**, SAUTER FL-A01
- **RS-232 adapter cable**, SAUTER FL-A04

STANDARD

























OPTION



Model	Measuring range	Readout	Option DAkkS calibration certificate (≤ 5 kN) / Factory calibration certificates (< 5 kN)			
			Tensile force		Compressive force	
			DAkkS KERN		DAkkS KERN	
SAUTER	[Max] N	[d] N				
FL 2K	2500	1	963-162		963-262	963-362
FL 5K	5000	1	963-163		963-263	963-363
FL 10K	10000	2	961-164		-	-
FL 20K	20000	5	961-164		-	-

Pictograms

 Adjusting program (CAL): For quick setting of the instrument's accuracy. External adjusting weight required.	 Control outputs (optocoupler, digital I/O): to connect relays, signal lamps, valves, etc.	 Battery operation: Ready for battery operation. The battery type is specified for each device.
 Calibration block: standard for adjusting or correcting the measuring device.	 Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements	 Rechargeable battery pack: rechargeable set.
 Peak hold function: capturing a peak value within a measuring process.	 Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.	 Mains adapter: 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
 Scan mode: continuous capture and display of measurements.	 PC Software: to transfer the measurement data from the device to a PC.	 Power supply: Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.
 Push and Pull: the measuring device can capture tension and compression forces.	 Printer: a printer can be connected to the device to print out the measurement data.	 Motorised drive: The mechanical movement is carried out by a electric motor.
 Length measurement: captures the geometric dimensions of a test object or the movement during a test process.	 GLP/ISO record keeping: of measurement data with date, time and serial number. Only with SAUTER printers	 Motorised drive: The mechanical movement is carried out by a synchronous motor (stepper).
 Focus function: increases the measuring accuracy of a device within a defined measuring range.	 Measuring units: Weighing units can be switched to e.g. non-metric at the touch of a key. Please refer to website for more details.	 Fast-Move: the total length of travel can be covered by a single lever movement.
 Internal memory: to save measurements in the device memory.	 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	 DAkkS calibration possible: The time required for DAkkS calibration is shown in days in the pictogram.
 Data interface RS-232: bidirectional, for connection of printer and PC.	 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.
 Data interface USB: To connect the measuring instrument to a printer, PC or other peripheral devices.	 ZERO: Resets the display to "0".	 Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 Data interface Infrared: To transfer data from the measuring instrument to a printer, PC or other peripheral devices.		

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