Digital force gauge SAUTER FL

PREMIUM
★★★

Premium force measuring instrument with graphic-assisted display

Features

- **Turnable display** with backlight
- **Real time** or **Peak Hold Mode** to observe transcients or capture peaks
- **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
- **Function to set limits**, programming of Max./Min., in pull and push direction, with output of acoustic and optical signal. Ideal mode for efficient and accurate testing of standard parts
- **Internal memory** for up to 500 measurements

- **Continuous analogue output:** Linear voltage signal in relation to the load (0–2 V)
- **1** Delivered in a hard carrying case
- **2** SAUTER FL 2K: with external sensor, Tension loops and pressure plates are included in delivery
- **3** Standard attachments: as shown besides (not for FL 2K)
- Selectable measuring units: N, kN, kg, oz, lbf

Technical data

- Internal measuring frequency
- Precision: 0,2 % of [Max]
- Overload protection: 120 % of [Max]
- Dimensions WxDxH 175x75x30 mm
- Thread: M6

- Rechargeable battery pack internal, standard, operating time up to 10 h without backlight, charging time approx. 8 h
- Net weight approx. 515 g

Accessories

- **Force-time data transfer software** for graphical representation on the PC and data transfer to Microsoft Excel, transmission rate 20 HZ, SAUTER AFH FAST
- **Force-distance evaluation software** with graphic display of the measuring process, SAUTER AFH FD
- USB cable, SAUTER FL-A01
- **RS232 adapter cable**, SAUTER FL-A04
- Further accessory see www.sauter.eu and page 21 et seqq.

STANDARD

PEAK	PUSH/PULL	MEMORY	RS 232	USB	ANALOG	GLP PROTOCOL	UNIT	TOL	ACCU	230 V	1 DAY	2 YEARS WARRANTY

OPTION

SOFTWARE	ISO +4 DAYS

Model	Measuring range	Readout		Option **ISO Calibration Certificate**			
				Tension		**Compression**	
	[Max]	[d]		**ISO**		**ISO**	
SAUTER	N	N		KERN		KERN	
FL 5	5	0,002		961-161		961-261	
FL 10	10	0,005		961-161		961-261	
FL 20	25	0,01		961-161		961-261	
FL 50	50	0,02		961-161		961-261	
FL 100	100	0,05		961-161		961-261	
FL 200	250	0,1		961-161		961-261	
FL 500	500	0,2		961-161		961-261	
FL 1K	1000	0,5		961-162		961-262	
FL 2K	2500	1		961-162		961-262	

SAUTER Pictograms:

Adjusting program (CAL):
For quick setting of the balance'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.

Data interface USB:
To connect the balance to a printer, PC or other peripheral devices.

Data interface Infrared:
To transfer data from the balance 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.

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

PC Software:
to transfer the measurements from the device to a PC.

Printer:
a printer can be connected to the device to print out the measurements.

GLP/ISO record keeping:
of measurements with date, time and serial number. Only with SAUTER printers.

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.

Measuring with tolerance range:
Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.

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.

Mains adapter:
230V/50Hz in standard version for EU. On request GB, AUS or USA version available.

Power supply:
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 motorised drive.

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

ISO Calibration:
The time required for ISO calibration is shown in days 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.

Warranty:
The warranty period is shown in the pictogram.