

NEW **PREMIUM** ★★★



Measurement of forces in different tensile or compressive directions possible with only one measuring device



Supplied in a high-quality and robust system case (systainer® T-LOC) including plug-in power supply and USB cable type C

Premium force gauge with integrated measuring cell (optional) and connection possibility for up to 4 external measuring cells

Use with integrated measuring cell

The SAUTER FS premium force gauge has an integrated measuring cell for tensile and compressive force applications. Whether mobile for rapid testing or stationary integrated into a test stand or production line, the multifunction display allows all the values recorded to be read off at a glance in real time. Via the integrated interface, the data can be sent to a PC or laptop for further processing.

Use with external measuring cells

The SAUTER FS premium force gauge is compatible with all SAUTER strain gauge measuring cells, see page 88 et seq. Up to 4 external measuring cells can be connected simultaneously. If all available external measuring channels are used, the internal measuring cell is deactivated as long as an external measuring cell is connected.



Tip: Order the practical system case (systainer® T-LOC) for storing and transporting accessories, clamps, sensors, etc. at the same time, SAUTER FS TKZ, € 105,-



Can be mounted on all SAUTER test benches, illustration shows optional accessories, see page 35 et seq., and the manual test bench SAUTER TVL-XS, see page 19 et seq.



Simultaneous measurement on up to four channels. External sensors with sensor data memory optionally available



Compact force gauge with internal measuring cell (up to max. 500 N) for fast and mobile force measurements. Illustration shows optional accessories SAUTER AE 500 screw tension clamp

Digital force gauge SAUTER FS

Features

- 3,5" Touchscreen
- Standard version with 2 or 4 measuring channels for external force sensors (subsequently expandable from 2 to 4)
- An internal measuring cell is possible (is deactivated if an external measuring cell is connected)
- Suitable for 4-wire and 6-wire sensors with strain gauges
- Two-point adjustment with weights or numerical adjustment possible
- The specific data of an external sensor are stored directly in the connector
- USB interface for programming, data transfer and power supply as standard
- Integrated SD card memory
- Adjustable SI units kg, N, kN, mN, MN, Nm, kNm, mNm
- Tolerance function
- Track function for continuous measurement display
- Peak value measurement
- Mountable on SAUTER test benches

Technical data

- High resolution: up to 10000 points per measurement channel
- Storage of measured values as well as their transmission to the interface with up to 1000 Hz per measuring channel
- Measurement accuracy:
 - with internal measuring cell: 0.1 % of [Max]
 - with external measuring cell: among other things from the measuring cells used
- Overall dimensions W×D×H 71×31×180 mm
- Overload protection: 150 % of [Max] with internal measuring cell
- Thread on load receptor: M6 (outside)
- Battery operation internal, standard, operating time up to 8 h, Charging time approx. 8 h
- External mains adapter, for connection to the USB-C socket, standard
- Net weight approx. 0,4 kg

Accessories

- A/D converter module, only for models FS 2 and FS 2-xxx, SAUTER FS 34, € 190,-
- Stainless steel handle bar with rubber grip for safe handling, SAUTER AFK 02, € 95,-
- Transport case, e.g. for accessories, SAUTER FS TKZ, € 105,-
- Standard attachments, SAUTER AC 43, € 55,-
- Suitable measuring cells see page 86 et seqq.
- For holders for object fixation and other accessories see www.sauter.eu and page 35 et seqq.

Optional calibration see page 97 et seqq.

Calibration is recommended for each measuring cell!

Assembly and adjustment of measuring cell, connector and sensors must be ordered separately, see table below, SAUTER FS 401-FS 408

Order example SAUTER FS force gauge with 2 measuring cells:

1x	FS 2-50	2-channel force gauge with integrated measuring cell for tension/compression force measurements
1x	963-361	DAkkS calibration certificate tension/compression force up to 500 N
1x	CO 100-Y1	Miniature compression load cell up to 1 kN
1x	FS 403	Two-point adjustment up to 2 kN, incl. plug and memory for SAUTER FS
1x	963-262	DAkkS calibration certificate compression force up to 2 kN
1x	CS 500-3P2	Stainless steel "S" measuring cell for tension/compression force up to 5 kN
1x	963-363	DAkkS calibration certificate tension/compression force up to 5 kN
1x	FS 404	Two-point adjustment up to 5 kN, incl. connector and memory for SAUTER FS

STANDARD



OPTION



Model	Measuring range internal measuring cell [Max] N	Readability internal measuring cell [d] N	Internal measuring cell	Number of measuring channels	Price excl. of VAT ex works €
SAUTER FS 2	-	-	-	2	850,-
FS 2-20	20	0,004	•	2	950,-
FS 2-50	50	0,01	•	2	950,-
FS 2-100	100	0,02	•	2	950,-
FS 2-200	200	0,04	•	2	950,-
FS 2-500	500	0,1	•	2	950,-
FS 4	-	-	-	4	970,-
FS 4-20	20	0,004	•	4	1070,-
FS 4-50	50	0,01	•	4	1070,-
FS 4-100	100	0,02	•	4	1070,-
FS 4-200	200	0,04	•	4	1070,-
FS 4-500	500	0,1	•	4	1070,-

Service required for use with external sensors:

Model	Adjustment of optional, external sensors	Measuring range [Max] kN	Price excl. of VAT ex works €
SAUTER FS 401	Numeric*	-	120,-
FS 402	Two-point	0,5	140,-
FS 403		2	150,-
FS 404		5	170,-
FS 405		20	180,-
FS 406		50	180,-
FS 407		120	200,-
FS 408		250	220,-

*only for sensors > 250 kN