

Digital force gauge SAUTER FK



Robust, digital force gauge for tensile and compressive force measurements

**Features**

- Turnable display: automatic direction identification
- Secure operability due to the ergonomic design
- Peak-Hold function to capture peaks (value is "frozen" for approx. 10 seconds) or Track function mode for a continuous measurement indication
- Selectable measuring units: N, lbf, kgf, ozf
- Auto-Power-Off
- **1** Standard attachments as shown, extension rod: 90 mm
- Can be mounted on all SAUTER test stands up to 5 kN

**Technical data**

- Measuring precision: 0,5 % of [Max]
- Overload protection: 200 % of [Max]
- Overall dimensions W×D×H 195×82×35 mm
- Thread: M8
- Ready for use: Batteries included, 6×1.5 V AA
- Net weight approx. 0,75 kg

**Accessories**

- **2** With one of the two optional attachments for tensile strength testing, the SAUTER FK can become a tensiometer for testing the material tension characteristics of cables, threads, wires, twine etc. (up to  $\varnothing$  5 mm): Illustration shows accessories SAUTER FK-A02
- Tensiometer attachment with Safe-insert function: Pull and release to insert the running cable in between the rolls, for tensile strength testing up to 250 N, aluminium attachment, rolls can be adjusted inwards, SAUTER FK-A01
- Tensiometer kit for high-capacity tensile strength testing up to 1000 N, steel attachment and steel rolls, rolls cannot be adjusted, SAUTER FK-A02
- **1** Standard attachments as standard, set can be reordered, SAUTER AC 430
- Further accessories see page 40 onwards or our website

STANDARD						OPTION	
PEAK	PUSH/PULL	ZERO	BATT	230 V	1 DAY	ISO	+4 DAYS

Model	Measuring range	Readout	Option <b>Factory calibration certificate</b>		
			Tensile force	Compressive force	Tensile/Compressive force
	[Max] N	[d] N	KERN	KERN	KERN
SAUTER FK 10	10	0,005	961-1610	961-2610	961-3610
FK 25	25	0,01	961-1610	961-2610	961-3610
FK 50	50	0,02	961-1610	961-2610	961-3610
FK 100	100	0,05	961-1610	961-2610	961-3610
FK 250	250	0,1	961-1610	961-2610	961-3610
FK 500	500	0,2	961-1610	961-2610	961-3610
FK 1K	1000	0,5	961-1620	961-2620	961-3620

Further calibration options on request



**Adjusting program (CAL):**  
For quick setting of the instrument'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



**Profibus:**  
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.



**Profinet:**  
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



**Data interface USB:**  
To connect the measuring instrument to a printer, PC or other peripheral devices



**Bluetooth\* data interface:**  
To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals



**WLAN data interface:**  
To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals



**Data interface Infrared:**  
To transfer data from the measuring instrument 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



**Analog output:**  
For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



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



**PC Software:**  
To transfer the measurement data from the device to a PC



**Printer:**  
A printer can be connected to the device to print out the measurement data



**Network interface:**  
For connecting the scale/measuring instrument to an Ethernet network



**KERN Communication Protocol (KCP):**  
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



**GLP/ISO record keeping:**  
Of measurement data with date, time and serial number. Only with SAUTER printers



**Measuring units:**  
Weighing units can be switched to e.g. non-metric. Please refer to website for more details



**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



**Protection against dust and water splashes IPxx:**  
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



**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



**Plug-in power supply:**  
230V/50Hz in standard version for EU. On request GB, AUS or USA version available



**Integrated power supply unit:**  
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request



**Motorised drive:**  
The mechanical movement is carried out by an electric motor



**Motorised drive:**  
The mechanical movement is carried out by a synchronous motor (stepper)



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



**Verification possible:**  
Models with type approval for construction of verifiable systems



**DAkKS calibration possible:**  
The time required for DAkKS calibration is shown in days in the pictogram



**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



**Pallet shipment:**  
The time required for internal shipping preparations is shown in days in the pictogram

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