

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 195×83×35 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 Ø 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
- 11 Standard attachments as standard, set can be reordered, SAUTER AC 430
- · Further accessories see internet













Model SAUTER	Measuring range [Max] N	Readability [d] N	Option Factory calibration certificate		
			Tensile force KERN	Compressive force KERN	Tensile/Compressive force KERN
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



MEASURING TECHNOLOGY & TEST SERVICE 2024

SAUTER Pictograms



Conformity assessment

Models with type approval

DAkkS calibration

The time required for

DAkkS calibration is shown

Factory calibration (ISO)

The time required for factory

calibration is specified in

Package shipment

The time required for

internal shipping prepara-

tions is shown in days in

the pictogram

the pictogram

the pictogram

Pallet shipment

The time required for

internal shipping prepara-

tions is shown in days in

in days in the pictogram

for construction of verifiable

M

DAkkS

+3 DAYS

ISO

1 DAY

systems

possible



Adjusting program (CAL) For quick setting of the

instrument's accuracy. External adjusting weight required



Calibration block

Standard for adjusting or correcting the measuring



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 de-centralised 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



WIFI 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



Analogue 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



230V/50Hz in standard version for EU. On request GB, AUS or US version available

Plug-in power supply



Integrated power supply unit

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request



Motorised drive

The mechanical movement is carried out by a 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



