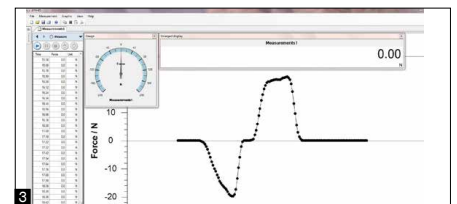## Digital Force Gauge SAUTER FC

Compact force gauge for tensile and compressive force measurements

Features

- Turnable display with backlight
- Peak-Hold function to capture the peak value or Track function for continuous display of measurement
- Metal housing for durable use in harsh environmental conditions
- 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 limit adjustable, between 10 and 100 % of [Max], in pull and push direction. The process is supported by an acoustic and visual signal
- Safety: If loads exceed 110 % of the measuring range, the device will give clear acoustic and visual signals
- Internal memory for up to 500 measurement values
- USB data interface and USB interface cable as standard
- Selectable: AUTO-OFF function or permanent operation

- ☑1 Delivered in a robust carrying case
- Selectable measuring units: N, kgf, ozf, lbf
- ☑2 Standard attachments as shown, extension rod: 90 mm
- Can be mounted on all SAUTER test stands up to 5 kN

Technical data

- Measuring precision: 0,3 % of [Max]
- Transmission rate to PC: up to 200 measured values/second
- Overload protection: 150 % of [Max]
- Overall dimensions W×D×H 145×73×34 mm
- Thread: M6
- Rechargeable battery pack integrated, as standard, operating time up to 20 h without backlight, charging time approx. 4 h
- Net weight approx. 0,50 kg

Accessories

- ☑3 Data transfer software with graphic display of the measurement process, force-time, SAUTER AFH FAST
- ☑2 Standard attachments as standard, set can be reordered, SAUTER AC 43
- Further accessories see internet

STANDARD

| PEAK | PUSH/PULL | MEMORY | RS 232 | USB | UNIT | TOL | ZERO | ACCU | 230 V | 1 DAY |

OPTION

| SOFTWARE | DAkkS +4 DAYS | ISO +4 DAYS |

Model	Measuring range	Readability	Option **DAkkS Calibration Certificate**		
			Tensile force	Compressive force	Tensile/Compressive force
	[Max]	[d]	DAkkS	DAkkS	DAkkS
SAUTER	N	N	KERN	KERN	KERN
FC 10	10	0,01	963-161	963-261	963-361
FC 50	50	0,01	963-161	963-261	963-361
FC 100	100	0,1	963-161	963-261	963-361
FC 500	500	0,1	963-161	963-261	963-361
FC 1K	1000	1	963-162	963-262	963-362

Further calibration options on request

Adjusting program (CAL)
CAL EXT
For quick setting of the instrument's accuracy. External adjusting weight required

Calibration block
CAL BLOCK
Standard for adjusting or correcting the measuring device

Peak hold function
PEAK
Capturing a peak value within a measuring process

Scan mode
SCAN
Continuous capture and display of measurements

Push and Pull
PUSH/PULL
The measuring device can capture tension and compression forces

Length measurement
SCALE
Captures the geometric dimensions of a test object or the movement during a test process

Focus function
FOCUS
Increases the measuring accuracy of a device within a defined measuring range

Internal memory
MEMORY
To save measurements in the device memory

Data interface RS-232
RS 232
Bidirectional, for connection of printer and PC

Profibus
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
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
USB
To connect the measuring instrument to a printer, PC or other peripheral devices

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

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

Data interface infrared
IR
To transfer data from the measuring instrument to a printer, PC or other peripheral devices

Control outputs (optocoupler, digital I/O)
SWITCH
To connect relays, signal lamps, valves, etc.

Analogue interface
ANALOG
To connect a suitable peripheral device for analogue processing of the measurements

Analogue output
DUAL
For output of an electrical signal depending on the load (e.g. voltage 0 V – 10 V or current 4 mA – 20 mA)

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

PC Software
SOFTWARE
To transfer the measurement data from the device to a PC

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

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

KERN Communication Protocol (KCP)
KCP PROTOCOL
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
GLP PRINTER
of measurement data with date, time and serial number. Only with SAUTER printers

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

Measuring with tolerance range (limit-setting function)
TOL
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
IP
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989 +A1:1999+A2:2013

ZERO
ZERO
Resets the display to "0"

Battery operation
BATT
Ready for battery operation. The battery type is specified for each device

Rechargeable battery pack
ACCU
Rechargeable set

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

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

Motorised drive
ELECTRO
The mechanical movement is carried out by a electric motor

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

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

Conformity assessment
M
Models with type approval for construction of verifiable systems

DAkkS calibration possible
DAkkS +3 DAYS
The time required for DAkkS calibration is shown in days in the pictogram

Factory calibration (ISO)
ISO +4 DAYS
The time required for factory calibration is specified in the pictogram

Package shipment
1 DAY
The time required for internal shipping preparations is shown in days in the pictogram

Pallet shipment
2 DAYS
The time required for internal shipping preparations is shown in days in the pictogram

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