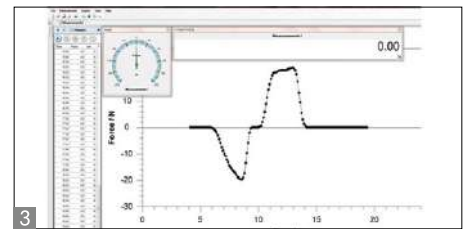## Digital force gauge SAUTER FC

Compact force measuring device

Features

· **Turnable display** with backlight
· **Peak-Hold function** to capture peaks (measurement result will be "frozen" for a short time) or **Track function** mode for a continuous measurement indication (period of time approx. 10 s)
· **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 limiting can be programmed 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
· Data interface USB standard

· **Data interface RS-232 standard,** only for connection to the printer
· Selectable: AUTO-OFF function or permanent operation
· 1 **Delivered in a robust carrying case**
· **Selectable measuring units:** N, kg, oz, lb
· 2 Standard attachments: as shown below
· Can be mounted on all SAUTER test stands

Technical data

· Precision: 0,3 % of [Max]
· Internal measuring frequency: 1000 Hz
· Overload protection: 150 % of [Max]
· Overall dimensions W×D×H 145×73×34 mm
· Thread: M6
· Net weight approx. 0,94 kg
· Permissible ambient temperature –10 °C/40 °C

Accessories

· **Plug-In for data transfer of measuring** data from the measuring instrument and transfer to a PC, e.g. in Microsoft Excel®, SAUTER AFI-1.0
· 3 **Force-time data transfer software** for graphical representation on the PC and data transfer to Microsoft Excel®, SAUTER AFH FAST
· **Force-displacement data transfer software** with graphic display of the measurement process, only in combination with SAUTER LB, SAUTER AFH FD
· **RS-232/PC-Connecting cable** to connect models from the SAUTER FC range to a PC, SAUTER FC-A01
· 2 **Standard attachments,** SAUTER AC 43
· **Matrix needle printer** KERN YKN-01N
· **Thermal printer,** KERN YKB-01N
· **Statistics thermal printer,** KERN YKS-01
· **Label printer,** KERN YKE-01
· For further accessories see page 30 onwards or our website

STANDARD

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

OPTION

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

Model	Measuring range	Readout		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

Pictograms

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.

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

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

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.

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 at the touch of a key. 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

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 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.

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.

Your KERN specialist dealer: