PROFESSIONAL MEASURING
SINCE 1844

KERN

Product brochure

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SAUTER FH 20K

Universal digital force gauge for tensile and compressive force measurements with external load cell

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FEATURES

- Turnable display with backlight
- NEW: USB interface for data transfer and power supply as standard
- Data interface RS-232 as standard
- Selectable measuring units: N, kN, kgf, tf
- Peak-Hold function to capture the peak value or Track function for continuous display of measurement
- Measuring with tolerance range (limit-setting function): Upper and lower limit adjustable, in pull and push direction. The process is supported by an audible and visual signal
- Auto-Power-Off
- Internal memory for up to 10 measurement values
- Mini Statistics Kit: calculates the average result from up to 10 stored measured values, as well as min., max., n
- Tension loops and compression plates are included in delivery
- Delivered in a robust carrying case

TECHNICAL DATA

- Transfer rate to PC: approx. 25 measured values per second
- Measuring precision: 0,5% of [Max]
- Overload protection: 150% of [Max]
- Overall dimensions W×D×H 224×67×37,5 mm
- Rechargeable battery pack integrated, as standard, operating time up to 40 h without backlight, charging time approx. 120 min
- External mains adapter, for connection to the USB-C connector, standard
- Cable length approx. 3 m
- Net weight approx. 1,6 kg

MAIN SCOPE OF APPLICATIONS

- Test laboratories
- Research and development
- Automotive industry
- Maintenance and servicing
- Plastics technology

PICTOGRAMS

Standard



Option



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MODEL OVERVIEW

Model	Measuring range [Max]	Readability [d]
FH 1K	1 kN	0,5 N
FH 2K	2 kN	1 N
FH 5K	5 kN	1 N
FH 10K	10 kN	5 N
FH 20K	20 kN	10 N
FH 50K	50 kN	10 N
FH 100K	100 kN	50 N

ACCESSORIES

Model	Description
AD 9095	Wedge Clamp with jaws AD 9095 (up to 20 kN | width 50 mm, | clamping width 13 mm | 1 piece)
AD 9100	Wedge Clamp with jaws AD 9100 (up to 20 kN | width 40 mm, | clamping width 10 mm | 1 piece)
AD 9255	Strip tension clamp AD 9255 (up to 20 kN | width 80 mm, | clamping width 5 mm | 1 piece)
AFH 05	Stainless steel handle with plastic coating AFH 05
AFM 14	Adapter AFM 14 (External thread M12 | External thread M6)
AFM 16	Adapter AFM 16 (External thread M12 | Threaded hole M10)
AFM 17	Adapter AFM 17 (External thread M12 | External thread M10)
AFM 18	Adapter AFM 18 (External thread M12 | External thread M10)

Model	Description
AFM 21	Threaded pin AFM 21
CE R12	Rod end CE R12
FH-A04	RS232 interface cable FH-A04
FS-E07	Power supply unit EURO FS-E07
YKA-01	Schuko> UK Plug Power Adapters YKA-01
YKA-02	Travel adapter YKA-02
YKT-01	Needle printer YKT-01

SOFTWARE

Model	Description
AFH FAST	Data transfer software for force-time-measurements, AFH FAST
AFH LD	Data transfer software for force-displacement-measurements AFH LD

SERVICES

Model	Description
961-164	Factory calibration certificate 961-164 (force direction tension | 5 kN – 20 kN | measurement result unit N | calibration standard KERN)
961-264	Factory calibration certificate 961-264 (force direction compression | 5 kN – 20 kN | measurement result unit N | calibration standard KERN)
961-364	Factory calibration certificate 961-364 (force direction tension, compression | 5 kN – 20 kN | measurement result unit N | calibration standard KERN)
963-164	DAkkS calibration certificate 963-164 (force direction tension | 5 kN – 20 kN | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
963-264	DAkkS calibration certificate 963-264 (force direction compression | 5 kN – 20 kN | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
963-364	DAkkS calibration certificate 963-364 (force direction tension, compression | 5 kN – 20 kN | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
970-107	Warranty extension (+2 years) 970-107

KERN Pictogram Overview

	Peak hold function: capturing a peak value within a measuring process
	Push and Pull: the measuring device can capture tension and compression forces
	Memory: Device-internal memory capacity, e.g. for article data, measuring data, tare weights, PLU etc.
	Data interface RS-232: For connection to printers, PCs or other peripheral devices for data transfer over longer distances. Network in bus topology possible
	Data Interface USB: For connection to printers, PCs or other peripheral devices
	Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.
	Measuring with tolerance range (checkweighing): Upper and lower limit values can be programmed, e.g. for sorting, portioning or for measuring coatings or material thicknesses. The process is supported by an acoustic and/or optical signal
	ZERO: Reset the display to 0
	Rechargeable battery pack: Rechargeable set
	Plug-in power supply: 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
	Package shipment by courier service: The duration of internal product provision is one day
	PC Software: to transfer the measurements from the device to a PC
	Factory calibration (ISO): Factory calibration takes 4 working days
	Accredited calibration (DKD): The duration of the accredited calibration is 3 working days

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