PROFESSIONAL MEASURING
SINCE 1844

KERN

Product brochure

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SAUTER FL 20K

Powerful digital force gauge with graphic assisted display for tensile and compressive force measurements with external load cell

ENGLISH



CONTACT

KERN & SOHN GmbH
Ziegelei 1
72336 Balingen
Germany

+49 7433 9933-0
info@kern-sohn.com
www.kern-sohn.com







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FEATURES

- Premium force gauge with external measuring cell, tension loops included with delivery
- 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
- Can be mounted on all SAUTER test stands starting 1 kN
- 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, in pull and push direction. The process is supported by a visual signal
- Internal memory for up to 500 measurement values
- Continuous analogue output: Linear voltage signal in dependence to the load (-2 to +2V)
- USB data interface, as standard
- Selectable measuring units: N, kN, kgf, ozf, lbf
- Delivered in a robust carrying case

TECHNICAL DATA

- Transfer rate to PC: approx. 25 measured values per second
- Measuring precision: 0,2% of [Max]
- Overload protection: 120% of [Max]
- Overall dimensions W×D×H 168×75×30 mm
- Dimensions load cell W×D×H 70×60×25 mm
- Threaded hole M12
- Rechargeable battery pack integrated, as standard, operating time up to 10 h without backlight, charging time approx. 8 h
- 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]
FL 2K	2,5 kN	1 N
FL 20K	20 kN	10 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)
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)
AFM 21	Threaded pin AFM 21
FL-A01	USB cable FL-A01
FL-A03	Rechargeable battery pack FL-A03
FL-A04	Cable FL-A04
RFL-3001	LCD Display RFL-3001
RFL-4001	Display overlay RFL-4001

Model	Description
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)
970-105	Warranty extension (+2 years) 970-105

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 USB: For connection to printers, PCs or other peripheral devices
	Data interface RS-232: For connection to printers, PCs or other peripheral devices for data transfer over longer distances. Network in bus topology possible
	Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements
	Units can be switched to e.g. non-metric units
	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