PROFESSIONAL MEASURING
SINCE 1844

KERN

Product brochure

31.10.2026

SAUTER FE 500

Digital force gauge with pass-fail function for tensile and compressive force measurements

ENGLISH



CONTACT

KERN & SOHN GmbH
Ziegelei 1
72336 Balingen
Germany

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







ENGLISH

FEATURES

- Reversible display with backlighting
- Secure operability due to the ergonomic design
- Peak-hold function to capture the peak value or Track function for continuous display of the measurement
- Can be mounted on all SAUTER test stands up to 1 kN
- 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
- Selectable measuring units: N, kN, kgf, ozf, lbf
- Standard attachments: as shown
- Delivered in a robust carrying case

TECHNICAL DATA

- Measuring precision: 0,3% of [Max]
- Overload protection: 150% of [Max]
- Overall dimensions W×D×H 71×31×180 mm
- External thread M6
- Rechargeable battery pack integrated, as standard, operating time up to 10 h without backlight, charging time approx. 8 h, Convenient charging via USB-C port
- Net weight approx. 0,35 kg

MAIN SCOPE OF APPLICATIONS

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

PICTOGRAMS

Standard



Option



MODEL OVERVIEW

Model	Measuring range [Max]	Readability [d]
FE 1K	1 kN	0,5 N
FE 5	5 N	0,002 N
FE 10	10 N	0,005 N
FE 20	20 N	0,01 N
FE 50	50 N	0,02 N
FE 100	100 N	0,05 N
FE 200	200 N	0,1 N
FE 500	500 N	0,2 N

ACCESSORIES

Model	Description
AC 02	Ball-shaped head SAUTER AC 02 (Ball radius: 5 mm / 8 mm | 2 pieces)
AC 02R	Accessory force measurement AC 02R
AC 17	Screw tension clamp with jaws AC 17 (up to 500 N | width 8 mm, | clamping width 2,5 mm | 2 piece)
AC 17R	Screw tension clamp with jaws AC 17R (up to 500 N | width 8 mm, | clamping width 2,5 mm | 1 piece)
AE 01	Standard Clamp AE 01
AE 05	Rope and thread tension clamp AE 05 (up to 500 N | width , | clamping width 2,5 mm | 1)
AFK 02	Stainless steel handle with plastic coating AFK 02
AFM 23	Adapter AFM 23 (External thread M10 | Threaded hole M8)
FK-A01	Tensiometer attachment FK FK-A01
FS-E07	Power supply unit EURO FS-E07
FS TKZ	Transport case FS TKZ
YKA-01	Schuko> UK Plug Power Adapters YKA-01

ENGLISH

SERVICES

Model	Description
961-161O	Factory calibration certificate 961-161O (tension | N)
961-261O	Factory calibration certificate 961-261O (compression | N)
961-361O	Factory calibration certificate 961-361O (tension, compression | N)
963-161O	DAkkS calibration certificate 963-161O (force direction tension | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
963-261O	DAkkS calibration certificate 963-261O (force direction compression | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
963-361O	DAkkS calibration certificate 963-361O (force direction tension, compression | measurement result unit N | calibration standard DKD-R 3-3 - sequence A)
970-014	Warranty extension (+3 years) 970-014

KERN Pictogram Overview

	Hold function: When the weighing conditions are unstable, a stable weight is calculated as an average value
	Push and Pull: the measuring device can capture tension and compression forces
	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
	Rechargeable battery pack: Rechargeable set
	Integrated power supply unit: Integrated in device. 230 V/50 Hz standard EU. More standards e.g. GB, USA or AUS on request
	Package shipment by courier service: The duration of internal product provision is one day
	Factory calibration (ISO): Factory calibration takes 4 working days
	Accredited calibration (DKD): The duration of the accredited calibration is 3 working days

ENGLISH