

PRODUCT BROCHURE

SAUTER FL 50

Date: 29.04.2025

ENGLISH



Universal digital force gauge with graphic-assisted display and integrated load cell

CONTACT

KERN & SOHN GmbH
Ziegelei 1
72336 Balingen
Germany

Phone : +49 7433 9933-0
Fax : +49 7433 9933-149
Email : info@kern-sohn.com
Web : www.kern-sohn.com



Scan here for more
information

PRODUCT SHOWCASE



ENGLISH

DESCRIPTION

- 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 up to 5 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
- Standard attachments: as shown
- Selectable measuring units: N, kN, kgf, lbf
- Delivered in a robust carrying case

SPECIFICATIONS

Article codes, product groups & Status information

Model article-code	FL 50
Model-Serie	FL

Assortment	Sauter
Product Type	Force measurement
Product group	Digital force-measuring devices (internal sensor)
Product usage type	Main article
EAN code (Model)	4045761138865

Customs tariff number 90248000

CE Label yes

Tolerance (% from Max.) 0.2%

Force direction compression;tension

Technical data - Primary

Max. Force 50 N

Readability 0.02 N

Technical data - Construction

Dimension housing (W×D×H) 160×75×30 mm

Material housing aluminium

Mounting thread External thread M6

Technical data - Display

Display type LCD

Display digit height 8.5 mm

Display reverse yes

Technical data - Power supply

Power supply Battery & Power supply

Battery type NiMH

Operating time (Display off) 10 h

Operating time (Display on) 8 h

Mains adapter/adapter included CH;EURO

Protection Class no protection class

Technical data - Measuring system

Units N

Technical data - Functions

Hold-Function yes

Peak-Function yes

Limit value (Min - Max) yes

Interface Analog (0 +/-2V);RS-232 serienmäßig;USB-Device

Technical data - Environmental conditions

Maximum operating temperature 35 °C

Minimum storage temperature 40 °C

Technical data - Packing & Shipping

Dimensions packaging (W×D×H) 263×229×75 mm

Gross weight 1.2 kg

Net weight 0.50 kg

Shipping method Parcel service

UN number Ni-MH (UN 3496, Packing Instruction #0, Not Restricted as per Special Provision A199)

Packaging component - by weight - cardboard 673 g

Delivery time 1 d

Technical data - Counting data

Memory yes

Value memory - number of groups 1

Value memory - number of cells (per group) 500

Optional Services

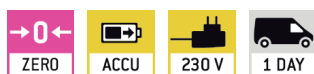
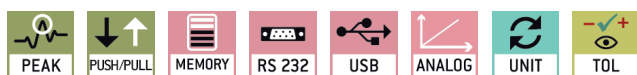
DAkkS calibration - push/pull 963-361

DAkkS calibration - push only 963-261

DAkkS calibration - pull only 963-161

FUNCTIONS

Standard



Option



ACCESSORIES

Model	Description
AC 01	Screw Tension Clamp SAUTER AC 01
AC 02	Stainless steel ball-shaped head SAUTER AC 02
AC 03	Clamp SAUTER AC 03
AC 12	Clamp SAUTER AC 12
AC 14	Screw Tension Clamp SAUTER AC 14
AC 22	Fine point clamp SAUTER AC 22
AC 17	Long clamp SAUTER AC 17
AFH 04	Stainless steel handle bar SAUTER AFH 04

Model	Description
AC 43	Standard attachments SAUTER AC 43
FL-A01	Interface cable FL-A01
FL-A03	Removable battery FL-A03
AC 01R	Screw Tension Clamp SAUTER AC 01R
AC 03R	Clamp SAUTER AC 03R
AC 11R	Clamp SAUTER AC 11R
AC 12R	Clamp SAUTER AC 12R
AC 14R	Screw Tension Clamp SAUTER AC 14R
AC 17R	Long clamp SAUTER AC 17R
AC 22R	Fine point clamp SAUTER AC 22R
FL-A04	Interface cable FL-A04
AE 500	Screw Tension Clamp SAUTER AE 500
RFL-3001	LCD Display RFL-3001
RFL-4001	Display overlay RFL-4001
AFM 05	Adapter KERN AFM 05
AFM 06	Adapter KERN AFM 06
AFM 07	Sleeve SAUTER AFM 07
AFM 12	assembly and repair AFM 12
AFM 15	Sleeve SAUTER AFM 15
AE 01	Standard Clamp AE 01
AE 02	Standard Clamp AE 02
AE 03	Clamp SAUTER AE 03
AE 04	Clamp SAUTER AE 04
AE 05	Rope and thread tension clamp SAUTER AE 05
AE 06	Clamp SAUTER AE 06
AE 07	Wedge Clamp with jaws AE 07
AC 45	Force sensor SAUTER AC 45
AC 46	Force sensor SAUTER AC 46
AC 47	Force sensor SAUTER AC 47
AE 08	Pressure plate SAUTER AE 08

SERVICES

Model	Description
963-161	DAkkS Calibration KERN 963-161
961-161	Factory calibration KERN 961-161
961-261	Factory calibration KERN 961-261
961-361	Factory calibration KERN 961-361
963-261	DAkkS Calibration KERN 963-261
963-361	DAkkS Calibration KERN 963-361
970-101	Warranty extension KERN (+2 years) 970-101

SPARE PARTS

Model	Description
FL-A01	Interface cable FL-A01
FL-A03	Removable battery FL-A03
DB-A01	Power Adapter KERN DB-A01
RFL-1004	Load cell SAUTER RFL-1004
FL-A10	Power Adapter KERN FL-A10
RFL-2001	Main PCB RFL-2001

SOFTWARES

Model	Description
AFH FD	Data Transfer Software SAUTER AFH FD
AFH LD	Data Transfer Software SAUTER AFH LD
AFH FAST	Data Transfer Software SAUTER AFH FAST

RELATED ARTICLES DATA

Model name	Max. Force	Readability
FL 500G	500 N	0.2 N
FL 1KG	1 kN	0.5 N
FL 20	25 N	0.01 N
FL 50	50 N	0.02 N
FL 5	5 N	0.002 N
FL 10	10 N	0.005 N
FL 100	100 N	0.05 N

Model name	Max. Force	Readability
FL 200	250 N	0.1 N
FL 500	500 N	0.2 N
FL 1K	1 kN	0.5 N