

PRODUCT BROCHURE

SAUTER FH 20

Date: 29.04.2025

ENGLISH



Universal digital force gauge for tensile and compressive force measurements with 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



DESCRIPTION

- Turnable display with backlight
- Can be mounted on all SAUTER test stands up to 5 kN
- NEW: USB interface for data transfer and power supply as standard
- Data interface RS-232 as standard
- Selectable measuring units: N, kgf, lbf
- 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
- Standard attachments as shown, extension rod: 90 mm, included with the delivery
- Delivered in a robust carrying case

SPECIFICATIONS

Article codes, product groups & Status information

Model article-code	FH 20
Model-Serie	FH-S-INT

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

EAN code (Model)	404576 136852 1
Predecessor Model	FH 20-2019a; FH 20-2023a
Customs tariff number	90248000
CE Label	yes

Technical data - Primary

Max. Force	20 N
Readability	0.01 N

Technical data - Construction

Dimension housing (W×D×H)	240×70×40 mm
Material housing	plastic
Mounting thread	External thread M6

Technical data - Display

Display type	LCD
Display reverse	yes

Technical data - Power supply

Power supply	Battery & Power supply
Battery type	NiMH
Operating time (Display off)	40 h
Operating time (Display on)	24 h

Technical data - Measuring system

Units	N
Tolerance (% from Max.)	0.5%

Force direction	compression;tension
-----------------	---------------------

Technical data - Functions

Statistic-Function	yes
Peak-Function	yes
Limit value (Min - Max)	yes
Audible ready signal	yes
Interface	RS-232 standard;USB-Device

Technical data - Environmental conditions

Maximum operating temperature	40 °C
Minimum storage temperature	40 °C

Technical data - Packing & Shipping

Dimensions packaging (W×D×H)	325×190×90 mm
Gross weight	1.4 kg
Net weight	0.60 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	152 g
Packaging component - by weight - styrofoam	358.5 g
Delivery time	1 d

Technical data - Counting data

Memory	yes
Value memory - number of groups	1
Value memory - number of cells (per group)	10

Optional Services

DAkkS calibration - push/pull	963-361
DAkkS calibration - push only	963-261
DAkkS calibration - pull only	963-161

FUNCTIONS

Standard	
 PEAK	 PUSH/PULL
 MEMORY	 RS 232
 USB	 STATISTIC
 TOL	 ZERO
 ACCU	 230 V
 1 DAY	
Option	
 SOFTWARE	 DAkkS +4 DAYS
 ISO +4 DAYS	

ACCESSORIES

Model	Description
YKA-01	Power supply KERN YKA-01
AC 02	Stainless steel ball-shaped head SAUTER AC 02
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
YKA-02	Power supply adapter set KERN YKA-02

Model	Description
AC 43	Standard attachments SAUTER AC 43
AC 01R	Screw Tension Clamp SAUTER AC 01R
AC 11R	Clamp SAUTER AC 11R
AC 14R	Screw Tension Clamp SAUTER AC 14R
AC 17R	Long clamp SAUTER AC 17R
AC 22R	Fine point clamp SAUTER AC 22R
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
AE 08	Pressure plate SAUTER AE 08
FH-A04	Interface cable FH-A04

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
YKA-02	Power supply adapter set KERN YKA-02
FH-A02	Display overlay FH-A02
OBB-A1569	UK power supply unit KERN OBB-A1569
FS-E06	Cable SAUTER FS-E06
FS-E07	Power supply KERN FS-E07

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
FH 5	5 N	0.001 N
FH 500	500 N	0.1 N
FH 50	50 N	0.01 N
FH 2	2 N	0.001 N
FH 20	20 N	0.01 N
FH 200	200 N	0.1 N
FH 10	10 N	0.005 N
FH 100	100 N	0.05 N