

## PRODUCT BROCHURE

# MEASURING INSTRUMENTS FH 1K

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

## CONTACT

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## PRODUCT SHOWCASE



## DESCRIPTION

- 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

## SPECIFICATIONS

### Article codes, product groups & Status information

Model article-code	FH 1K
Model-Serie	FH-M-EXT
Assortment	Sauter
Product Type	Force measurement
Product group	Digital force-measuring devices (external sensor)
Product usage type	Main item;Accessories/Services
EAN code (Model)	4045761368507
Predecessor Model	FH 1K-2019a; FH 1K-2023a
Customs tariff number	90248000

### Technical data - Primary

Max. Force	1 kN
Readability	0.5 N

### Technical data - Construction

Dimension housing (W×D×H)	45×25×0 mm
Material housing	plastic
Mounting thread	threaded hole M12

### Technical data - Display

Display type	LCD
DisplayReverse	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
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)	330×190×175 mm
Gross weight	2.8 kg

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Net weight	1.6 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	210 g
Packaging component - by weight - plastics	14 g
Packaging component - by weight - styrofoam	536.5 g
Delivery time	1 d

Option



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### Technical data - Counting data

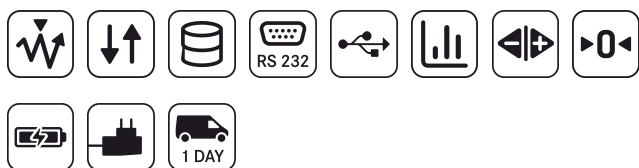
Memory	yes
Value memory - number of groups	1
Value memory - number of cells (per group)	10

### Optional Services

DAkkS calibration - push/pull	963-362
DAkkS calibration - push only	963-262
DAkkS calibration - pull only	963-162

### FUNCTIONS

Standard



## ACCESSORIES

Model	Description
<a href="#"><u>YKA-01</u></a>	Power supply KERN YKA-01
<a href="#"><u>AC 02</u></a>	Stainless steel ball-shaped head SAUTER AC 02
<a href="#"><u>AC 03</u></a>	Clamp SAUTER AC 03
<a href="#"><u>AC 12</u></a>	Clamp SAUTER AC 12
<a href="#"><u>AC 18</u></a>	Clamp SAUTER AC 18
<a href="#"><u>YKA-02</u></a>	Power supply adapter set KERN YKA-02
<a href="#"><u>AC 43</u></a>	Standard attachments SAUTER AC 43
<a href="#"><u>AC 11R</u></a>	Clamp SAUTER AC 11R
<a href="#"><u>AC 12R</u></a>	Clamp SAUTER AC 12R
<a href="#"><u>AC 18R</u></a>	Clamp SAUTER AC 18R
<a href="#"><u>AFM 14</u></a>	Adapter KERN AFM 14
<a href="#"><u>AFM 16</u></a>	Adapter KERN AFM 16
<a href="#"><u>AFM 17</u></a>	Thread SAUTER AFM 17
<a href="#"><u>AFM 18</u></a>	Thread SAUTER AFM 18
<a href="#"><u>AFM 21</u></a>	Thread SAUTER AFM 21
<a href="#"><u>FS-E07</u></a>	Power supply KERN FS-E07
<a href="#"><u>AC 45</u></a>	Force sensor SAUTER AC 45
<a href="#"><u>AC 46</u></a>	Force sensor SAUTER AC 46
<a href="#"><u>AC 47</u></a>	Force sensor SAUTER AC 47
<a href="#"><u>AE 08</u></a>	Pressure plate SAUTER AE 08
<a href="#"><u>FH-A04</u></a>	Interface cable FH-A04

## SERVICES

Model	Description
<a href="#"><u>YKA-01</u></a>	Power supply KERN YKA-01
<a href="#"><u>AC 02</u></a>	Stainless steel ball-shaped head SAUTER AC 02
<a href="#"><u>AC 03</u></a>	Clamp SAUTER AC 03
<a href="#"><u>AC 12</u></a>	Clamp SAUTER AC 12
<a href="#"><u>AC 18</u></a>	Clamp SAUTER AC 18
<a href="#"><u>YKA-02</u></a>	Power supply adapter set KERN YKA-02

Model	Description
<a href="#"><u>AC 43</u></a>	Standard attachments SAUTER AC 43
<a href="#"><u>AC 11R</u></a>	Clamp SAUTER AC 11R
<a href="#"><u>AC 12R</u></a>	Clamp SAUTER AC 12R
<a href="#"><u>AC 18R</u></a>	Clamp SAUTER AC 18R
<a href="#"><u>AFM 14</u></a>	Adapter KERN AFM 14
<a href="#"><u>AFM 16</u></a>	Adapter KERN AFM 16
<a href="#"><u>AFM 17</u></a>	Thread SAUTER AFM 17
<a href="#"><u>AFM 18</u></a>	Thread SAUTER AFM 18
<a href="#"><u>AFM 21</u></a>	Thread SAUTER AFM 21
<a href="#"><u>FS-E07</u></a>	Power supply KERN FS-E07
<a href="#"><u>AC 45</u></a>	Force sensor SAUTER AC 45
<a href="#"><u>AC 46</u></a>	Force sensor SAUTER AC 46
<a href="#"><u>AC 47</u></a>	Force sensor SAUTER AC 47
<a href="#"><u>AE 08</u></a>	Pressure plate SAUTER AE 08
<a href="#"><u>FH-A04</u></a>	Interface cable FH-A04

## SPARE PARTS

Model	Description
<a href="#"><u>YKA-01</u></a>	Power supply KERN YKA-01
<a href="#"><u>AC 02</u></a>	Stainless steel ball-shaped head SAUTER AC 02
<a href="#"><u>AC 03</u></a>	Clamp SAUTER AC 03
<a href="#"><u>AC 12</u></a>	Clamp SAUTER AC 12
<a href="#"><u>AC 18</u></a>	Clamp SAUTER AC 18
<a href="#"><u>YKA-02</u></a>	Power supply adapter set KERN YKA-02
<a href="#"><u>AC 43</u></a>	Standard attachments SAUTER AC 43
<a href="#"><u>AC 11R</u></a>	Clamp SAUTER AC 11R
<a href="#"><u>AC 12R</u></a>	Clamp SAUTER AC 12R
<a href="#"><u>AC 18R</u></a>	Clamp SAUTER AC 18R
<a href="#"><u>AFM 14</u></a>	Adapter KERN AFM 14
<a href="#"><u>AFM 16</u></a>	Adapter KERN AFM 16
<a href="#"><u>AFM 17</u></a>	Thread SAUTER AFM 17

<b>Model</b>	<b>Description</b>
<b><u>AFM 18</u></b>	Thread SAUTER AFM 18
<b><u>AFM 21</u></b>	Thread SAUTER AFM 21
<b><u>FS-E07</u></b>	Power supply KERN FS-E07
<b><u>AC 45</u></b>	Force sensor SAUTER AC 45
<b><u>AC 46</u></b>	Force sensor SAUTER AC 46
<b><u>AC 47</u></b>	Force sensor SAUTER AC 47
<b><u>AE 08</u></b>	Pressure plate SAUTER AE 08
<b><u>FH-A04</u></b>	Interface cable FH-A04

## SOFTWARES

<b>Model</b>	<b>Description</b>
<b><u>YKA-01</u></b>	Power supply KERN YKA-01
<b><u>AC 02</u></b>	Stainless steel ball-shaped head SAUTER AC 02
<b><u>AC 03</u></b>	Clamp SAUTER AC 03
<b><u>AC 12</u></b>	Clamp SAUTER AC 12
<b><u>AC 18</u></b>	Clamp SAUTER AC 18
<b><u>YKA-02</u></b>	Power supply adapter set KERN YKA-02
<b><u>AC 43</u></b>	Standard attachments SAUTER AC 43
<b><u>AC 11R</u></b>	Clamp SAUTER AC 11R
<b><u>AC 12R</u></b>	Clamp SAUTER AC 12R
<b><u>AC 18R</u></b>	Clamp SAUTER AC 18R
<b><u>AFM 14</u></b>	Adapter KERN AFM 14
<b><u>AFM 16</u></b>	Adapter KERN AFM 16
<b><u>AFM 17</u></b>	Thread SAUTER AFM 17
<b><u>AFM 18</u></b>	Thread SAUTER AFM 18
<b><u>AFM 21</u></b>	Thread SAUTER AFM 21
<b><u>FS-E07</u></b>	Power supply KERN FS-E07
<b><u>AC 45</u></b>	Force sensor SAUTER AC 45
<b><u>AC 46</u></b>	Force sensor SAUTER AC 46
<b><u>AC 47</u></b>	Force sensor SAUTER AC 47
<b><u>AE 08</u></b>	Pressure plate SAUTER AE 08





Model name	Max. Force	Readability
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 2K</u>	2 kN	1 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 50K</u>	50 kN	10 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N
<u>FH 5K</u>	5 kN	1 N

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Model name	Max. Force	Readability
<u><a href="#">FH 5K</a></u>	5 kN	1 N
<u><a href="#">FH 5K</a></u>	5 kN	1 N
<u><a href="#">FH 5K</a></u>	5 kN	1 N
<u><a href="#">FH 5K</a></u>	5 kN	1 N
<u><a href="#">FH 5K</a></u>	5 kN	1 N
<u><a href="#">FH 5K</a></u>	5 kN	1 N