# **MEASURING TECHNOLOGY & TEST SERVICE 2023**

FORCE MEASUREMENT



Mechanical force gauge SAUTER FA





Mechanical force gauge for tensile and compressive force measurements with peak hold function

# Features

- Dual scale: shows Newton and kg
- Turnable display unit for an easy zero setting of the instrument
- Peak hold function by drag pointer
- Can be mounted on all manual test stands
- Zeroing by a short push of the switch
- 1 Delivered in a robust carrying case
- Standard attachments as shown, extension rod: 90 mm

# **Technical data**

- Measuring precision: 1 % of [Max]
- Overall dimensions W×D×H 232×60×51 mm
- Thread: M6
- Net weight approx. 0,55 kg

# Accessories

- 🛛 Standard attachments as standard, set can be reordered, SAUTER AC 43
- Further accessories see page 40 onwards or our website

STANDAR	OPTION			
	$\downarrow\uparrow$	→0←	<b>A</b>	ISO
PEAK	PUSH/PULL	ZERO	1 DAY	+4 DAYS

Model	Measuring range	Readout	Option Factory calibration certificate			
			Tensile force	Compressive force	Tensile/Compressive force	
SAUTER	[Max] N	[d] N	KERN	KERN	KERN	
FA 10	10	0,05	961-1610	961-2610	961-3610	
FA 20	20	0,1	961-1610	961-2610	961-3610	
FA 50	50	0,25	961-1610	961-2610	961-3610	
FA 100	100	0,5	961-1610	961-2610	961-3610	
FA 200	200	1	961-1610	961-2610	961-3610	
FA 300	300	2	961-1610	961-2610	961-3610	
FA 500	500	2,5	961-1610	961-2610	961-3610	

Further calibration options on request

# MEASURING TECHNOLOGY & TEST SERVICE 2023

SAUTER PICTOGRAMS

required



Adjusting program (CAL): For quick setting of the instrument's accuracy. External adjusting weight



Calibration block: Standard for adjusting or correcting the measuring device



Peak hold function: Capturing a peak value within a measuring process

#### Scan mode: \_∕\/~

Continuous capture and display SCAN of measurements



# Push and Pull: The measuring device can capture

tension and compression forces



# Length measurement:

Captures the geometric dimensions of a test object or the movement during a test process



# Focus function:

Increases the measuring accuracy of a device within a defined measuring range



# Internal memory:

To save measurements in the device memory



# Data interface RS-232:

Bidirectional, for connection of printer and PC



## **Profibus:**

For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference.



## Profinet:

Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible



# Data interface USB:

To connect the measuring instrument to a printer, PC or other peripheral devices



# Bluetooth\* data interface:

To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals



# WLAN data interface:

To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals







(optocoupler, digital I/O): SWITCH To connect relays, signal lamps, valves, etc.



Analogue interface: To connect a suitable peripheral device for analogue processing of the measurements

## Analog output:



#### Statistics: how

Using the saved values, the device STATISTIC calculates statistical data, such as average value, standard deviation etc.



PC Software: To transfer the measurement data from the device to a PC

#### Printer: 님

A printer can be connected to the device to print out the measurement data



Network interface: For connecting the scale/measuring LAN instrument to an Ethernet network



## KERN Communication Protocol (KCP): It is a standardized interface command

set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems



GLP/ISO record keeping:

Of measurement data with date, time and serial number. Only with SAUTER printers



# Measuring units:

Weighing units can be switched to e.g. UNIT non-metric. Please refer to website for more details



# Measuring with tolerance range (limit-setting function): Upper and lower limiting can be programmed individually. The process

is supported by an audible or visual signal, see the relevant model



\*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Othear trademarks and trade names are those of their respective owners.

Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013

SAUTER GmbH · c/o KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. +49 7433 9933 - 0 · www.kern-sohn.com · info@kern-sohn.com

ZERO Battery operation: Ready for battery operation. The battery type is specified for each device BATT Rechargeable battery pack: Rechargeable set ACCU

ZERO:

Resets the display to "0"

→0+



**\_** 

# Plug-in power supply:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available



230 V More standards e.g. GB, AUS or USA on request



#### Motorised drive: The mechanical movement is carried

out by a electric motor



Motorised drive: The mechanical movement is carried

#### Fast-Move:

2 The total length of travel can be covered by a single lever movement

out by a synchronous motor (stepper)



#### Verification possible:

Models with type approval for construction of verifiable systems



# DAkkS calibration possible:

The time required for DAkkS calibration is shown in days in the pictogram



## Factory calibration:

The time required for factory calibration is specified in the pictogram

The time required for internal shipping preparations is shown in days in the pictogram





Package shipment: 1 DAY