

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
- ${\boldsymbol{\cdot}}$  Zeroing by a short push of the switch
- f 1 Delivered in a robust carrying case
- 2 Standard attachments as shown, extension rod: 90 mm

## Technical data

- Measuring precision: 1% of [Max]
- Overall dimensions W×D×H 235×60×50 mm
- Thread: M6
- Net weight approx. 0,55 kg

## Accessories

• 2 Standard attachments as standard, set can be reordered, SAUTER AC 43

961-3610

• Further accessories see internet

STANDARD









Model	Measuring range [Max]	Division [d]	Option Factory calibration certificate		
			Tensile force	Compressive force	Tensile/Compressive force
SAUTER	N	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

961-2610

**FA 500** 500 Further calibration options on request

961-1610

## **MEASURING TECHNOLOGY & TEST SERVICE 2024**

**SAUTER Pictograms** 



Conformity assessment

Models with type approval

**DAkkS** calibration

The time required for

DAkkS calibration is shown

Factory calibration (ISO)

The time required for factory

calibration is specified in

Package shipment

The time required for

internal shipping prepara-

tions is shown in days in

the pictogram

the pictogram

the pictogram

Pallet shipment

The time required for

internal shipping prepara-

tions is shown in days in

in days in the pictogram

systems

possible

for construction of verifiable

M

DAkkS

+3 DAYS

ISO

1 DAY



## Adjusting program (CAL)

For quick setting of the instrument's accuracy. External adjusting weight required



## **Calibration block**

Standard for adjusting or correcting the measuring



## Peak hold function

Capturing a peak value within a measuring process



#### Scan mode

Continuous capture and display 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 de-centralised 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



## WIFI data interface

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



## Data interface infrared

To transfer data from the measuring instrument to a printer, PC or other peripheral devices



## **Control outputs** (optocoupler, digital I/O) To connect relays, signal

lamps, valves, etc.



## Analogue interface

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



## Analogue output

For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



#### Statistics

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



## **PC Software**

To transfer the measurement data from the device to a PC



## Printer

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



## **Network interface**

For connecting the scale/ measuring 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. 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



#### 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



#### **ZERO**

Resets the display to "0"



## **Battery operation**

Ready for battery operation. The battery type is specified for each device



#### Rechargeable battery pack

Rechargeable set



#### Plug-in power supply 230V/50Hz in standard

version for EU. On request GB, AUS or US version available



## Integrated power supply unit

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request



## Motorised drive

The mechanical movement is carried out by a electric motor



## Motorised drive

The mechanical movement is carried out by a synchronous motor (stepper)



## **Fast-Move**

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



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