



Universal digital force gauges for tension and compression tests with integrated measuring cell and RS-232 data interface

Features

- Turnable display with backlight
- ${\boldsymbol{\cdot}}$ ${\boldsymbol{\blacksquare}}$ Can be mounted on all SAUTER test stands
- Digital force gauge with internal sensor
- Data interface RS-232, included
- Istandard attachments: as shown below, extension rod: 90 mm
- ${\scriptstyle \bullet}$ ${\scriptstyle \hbox{\scriptsize II}}$ Delivered in a hard carrying case
- Selectable measuring units: N, lb, kg
- **Peak-Hold function** to capture peaks (measurement result will be "frozen" for a short time) or **Track function** mode for a continuous measurement indication (period of time approx. 10 s)
- Limit value function, programming of Max./ Min., in pull and push direction, with output of acousitc and optical signal. Ideal mode for efficient and accurate testing of standard parts

Auto-Power-Off

- Internal memory for up to 10 measurements
- Mini Statistics Kit: calculates the average result from up to ten stored single results, min., max., n

Technical data

- High resolution: up to 10,000 points (total measuring range)
- Internal measuring frequency: 2000 Hz
- Precision: 0,5 % of [Max]
- Overload protection: 150 % of [Max]
- Dimensions W×D×H 66×36×230 mm
- Thread: M6
- Rechargeable battery pack integrated, standard, operating time up to 12 h without backlight, charging time approx. 4 h
- Net weight approx. 0,64 kg

Accessories

- **Relais module,** serves to amplify the output signal of the dynamometer to control direct actions, SAUTER AFH-02
- Force-time data transfer software for graphical representation on the PC and data transfer to Microsoft Excel[®], SAUTER AFH FAST
- Force-displacement data transfer software with graphic display of the measurement process, SAUTER AFH FD
- Standard attachments, SAUTER AC 43
- Matrix needle printer KERN YKN-01N
- Thermal printer, KERN YKB-01N
- Statistics thermal printer, KERN YKS-01
- Label printer, KERN YKE-01
- Further accessory see www.sauter.eu and page 24 et seqq.

| STANDARD | OPTION | | |
|----------|----------------------|--------------------------------|------------------------|
| | RS 232 STATISTIC TOL | ZERO ACCU 230 V 1 DAY WARRANTY | SWITCH SOFTWARE 4 DAYS |

| Model | Measuring range | Readout | S. | rtificate | |
|---------|-----------------|---------|---------------|-------------------|---------------------------|
| Woder | weasuring range | Redubut | Tensile force | Compressive force | Tensile/Compressive force |
| | [Max] | [d] | DAkkS | DAkkS | DAkkS |
| SAUTER | N | Ν | KERN | KERN | KERN |
| FH 2. | 2 | 0,001 | 963-161 | 963-261 | 963-361 |
| FH 5. | 5 | 0,001 | 963-161 | 963-261 | 963-361 |
| FH 10. | 10 | 0,005 | 963-161 | 963-261 | 963-361 |
| FH 20. | 20 | 0,01 | 963-161 | 963-261 | 963-361 |
| FH 50. | 50 | 0,01 | 963-161 | 963-261 | 963-361 |
| FH 100. | 100 | 0,05 | 963-161 | 963-261 | 963-361 |
| FH 200. | 200 | 0,1 | 963-161 | 963-261 | 963-361 |
| FH 500. | 500 | 0,1 | 963-161 | 963-261 | 963-361 |

SAUTER Pictograms:



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



Calibration block:

standard for adjusting or correcting the measuring device.



Peak hold function: capturing a peak value within a measuring process.

continuous capture and display



of measurements.

Scan mode:



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.



Data interface USB:

To connect the balance to a printer, PC or other peripheral devices.



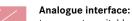
Data interface Infrared: To transfer data from the balance to a

printer, PC or other peripheral devices.



Control outputs

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



to connect a suitable peripheral device for ANALOG analogue processing of the measurements.



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



PC Software: to transfer the measurements from the device to a PC.



a printer can be connected to the PRINT device to print out the measurements.



GLP/ISO record keeping: of measurements with date, time and serial number. Only with SAUTER printers.



Measuring units:

Weighing units can be switched to UNIT e.g. non-metric at the touch of a key. Please refer to website for more details.

> Measuring with tolerance range: Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.



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TOL

7FRO. Resets the display to "0".



Battery operation: Ready for battery operation.

The battery type is specified for each device.



Rechargeable battery pack: rechargeable set.



Mains adapter:

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

The mechanical movement is carried out



Power supply:



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



Motorised drive: by a electric motor.

| 00 | |
|--------|--|
| TEPPER | |

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.



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.



Package shipment:

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



VARRANTY

Pallet shipment:

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



The warranty period is shown in the pictogram.

Your SAUTER specialist dealer:

