SAUTER CATALOGUE 2021

Ultrasonic thickness gauge SAUTER TD-US





SAUTER

Compact pocket-sized material thickness gauge

Features

- External sensor for difficult-to-access measuring points
- Data interface RS-232 included
- Base plate for adjustment incorporated
- Selectable measuring units: mm, inch
- 1 Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] + 0,1 mm
- Dimensions W×D×H 120×65×30 mm
 Battery operation, batteries standard
- 4× 1.5 V AAA, AUTO-OFF function to preserve batteries
- Net weight approx. 0,164 kg

Accessories

- Data transfer software, interface cable included, SAUTER ATC-01
- External sensor, 5 MHz, Ø 6 mm, for thin test materials: Measuring range (steel) 1–50 mm, SAUTER ATB-US01
- External sensor, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel) 1-225 mm at normal temperatures, 4-100 mm at temperatures of up to 300 °C, SAUTER ATB-US02
- External sensor, 5 MHz, Ø 8 mm, SAUTER ATB-US06
- External sensor, 5 MHz, Ø 10 mm, SAUTER ATU-US09
- External sensor, 5 MHz, Ø 10 mm, transducer at an angle of 90°, SAUTER ATU-US10
- Ultrasound contact gel, can be reordered, approx. 60 ml, SAUTER ATB-US03

| STANDARD | > | OPTION | | | |
|-----------|--------|--------|-------|----------|---------|
| + | | | | | ISO |
| CAL BLOCK | RS 232 | BATT | 1 DAY | SOFTWARE | +4 DAYS |

| Model | Measuring range | Readout | Sensor | Sound velocity | Option Factory calibration certificates | |
|--------------|-----------------|---------|----------------|----------------|--|--|
| | [Max] | [d] | | | | |
| SAUTER | mm | mm | | m/sec | KERN | |
| TD 225-0.1US | 1,2-225 | 0,1 | 5 MHz Ø 8 mm | 500-9000 | 961-113 | |

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Pictograms



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



Calibration block: Standard for adjusting or correcting

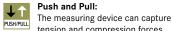
the measuring device

Peak hold function: PEAK

Capturing a peak value within a measuring process



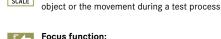
Scan mode: Continuous capture and display of measurements



tension and compression forces



Length measurement: Captures the geometric dimensions of a test



FOCUS

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:

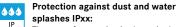
To connect the measuring instrument to a printer, PC or other peripheral devices

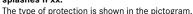
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Bluetooth* data interface: To transfer data from the balance/measuring

instrument to a printer, PC or other peripherals









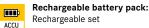
ZERO: Resets the display to "0"

Battery operation:



Ready for battery operation. The battery type is

specified for each device



Rechargeable set

230 V



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



Power supply:

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



Motorised drive: The mechanical movement is carried ELECTRO out by a electric motor



Motorised drive:

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



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Fast-Move:

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



Verification possible:

The time required for verification is specified +3 DAYS in the pictogram



DAkkS calibration possible:

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

ISO +4 DAYS

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

Pallet shipment:



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

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Your KERN specialist dealer:



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

For connecting the scale/measuring instrument

GLP/ISO record keeping:

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

WLAN data interface:

Data interface Infrared:

To connect relays, signal lamps,

To transfer data from the balance/measuring

instrument to a printer, PC or other peripherals

To transfer data from the measuring instrument

to a printer, PC or other peripheral devices

Control outputs (optocoupler, digital I/O):

To connect a suitable peripheral device for

analogue processing of the measurements

For output of an electrical signal depending

Using the saved values, the device

calculates statistical data, such as

To transfer the measurement data

to print out the measurement data

from the device to a PC

Network interface:

to an Ethernet network

average value, standard deviation etc.

A printer can be connected to the device

on the load (e.g. voltage 0 V - 10 V or current

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SWITCH

ANALOG

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KCP

PROTOCOL

valves, etc.

Analogue interface:

Analog output:

4 mA – 20 mA) Statistics:

PC Software:

Printer:

Measuring units:

Weighing units can be switched to e.g. non-metric at the touch of a key. 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

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