Ultrasonic thickness gauge SAUTER TD-US

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, ∅ 6 mm, for thin test materials: Measuring range (steel) 1–50 mm, SAUTER ATB-US01
· External sensor, 5 MHz, ∅ 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, ∅ 8 mm, SAUTER ATB-US06
· External sensor, 5 MHz, ∅ 10 mm, SAUTER ATU-US09
· External sensor, 5 MHz, ∅ 10 mm, transducer at an angle of 90°, SAUTER ATU-US10
· Ultrasound contact gel, can be reordered, approx. 60 ml, SAUTER ATB-US03

STANDARD

| CAL BLOCK | RS 232 | BATT | 1 DAY |

OPTION

| SOFTWARE | ISO +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 | ∅ 8 mm	500–9000		961-113	

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:
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 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

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

Analog 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 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

Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram.

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

Mains adapter:
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 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

Verification possible:
The time required for verification is specified in the pictogram

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

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

Your KERN specialist dealer: