



Portable measuring device for ultrasonic material thickness testing

Features

- · External sensor
- Data interface USB, standard (only for models with readout [d] = 0,01 mm)
- 11 Delivered in a hard carrying case
- Scan mode (10 measurements per sec.) or single point measuring mode possible
- Internal memory for up to 20 files (with up to 100 values per file)
- · Selectable measuring units: mm, inch

Technical data

- Precision: 0,5 % of [Max] ± 0,04 mm
- Dimensions W×D×H 74×32×150 mm
- · Battery operation, batteries standard 2× 1.5V AA, AUTO-OFF function to preserve the batteries
- · Net weight approx. 245 g

Accessories

- · Plug-In for data transfer of measuring data from the measuring instrument and transfer to a PC, e.g. in Microsoft Excel®, SAUTER AFI-1.0
- · Software, interface cable included, SAUTER ATU-04
- External sensor, 2,5 MHz, Ø 14 mm, for thick samples, in particular cast iron with rough upper surfaces: Measuring range 3-300 mm (steel), SAUTER ATU-US01

- External sensor, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75-80 mm (steel), **SAUTER ATU-US02**
- External sensor, 5 MHz, Ø 6 mm, **SAUTER ATB-US01**
- 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
- External sensor, 5 MHz, ∅ 12 mm, for hot test materials: Measuring range (steel) 3-200 mm at temperatures of up to 300 °C, **SAUTER ATB-US02**
- Ultrasound contact gel, standard, can be reordered, approx. 60 ml, **SAUTER ATB-US03**

STANDARD





















Model	Measuring range	Readout	Sensor	Sound velocity	Option
				,	Factory calibration certificates
	[Max]	[d]			
SAUTER	mm	mm		m/sec	KERN
TN 80-0.1US.	0,75-80	0,1	7 MHz Ø 6 mm	1000-9999	961-113
TN 230-0.1US.	1,2-230	0,1	5 MHz Ø 10 mm	1000-9999	961-113
TN 300-0.1US.	3-300	0,1	2,5 MHz Ø 14 mm	1000-9999	961-113
TN 80-0.01US.	0,75-80	0,01	7 MHz Ø 6 mm	1000-9999	961-113
TN 230-0.01US.	1,2-200 230	0,01 0,1	5 MHz Ø 10 mm	1000-9999	961-113
TN 300-0.01US.	3-200 300	0,01 0,1	2,5 MHz Ø 14 mm	1000-9999	961-113

SAUTER Pictograms:





Adjusting program (CAL):

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



Control outputs

(optocoupler, digital I/O):

to connect relays, signal lamps, valves, etc.



Mains adapter:

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



PEAK

Calibration block:

Peak hold function: capturing a peak value within a

measuring process.

standard for adjusting or correcting the measuring device.

continuous capture and display



Analogue interface:

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



Power supply:

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



Statistics:

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



Motorised drive:

The mechanical movement is carried out by a electric motor.



PC Software:

to transfer the measurements from the device to a PC.



Motorised drive:

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



SCAN

Push and Pull:

of measurements.

Scan mode:

the measuring device can capture tension and compression forces.



Printer:

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



Fast-Move:

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



Length measurement:

captures the geometric dimensions of a test object or the movement during a test process.



GLP/ISO record keeping:

of measurements with date, time and serial number. Only with SAUTER printers.



DAkkS calibration possible:

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



Focus function:

increases the measuring accuracy of a device within a defined measuring range.



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.



Factory calibration:

The time required for factory calibration is specified in the pictogram.



FOCUS

Internal memory:

to save measurements in the device memory.



•0+

ZERO

Measuring with tolerance range:

Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.

Resets the display to "0".



Package shipment:

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



Data interface RS-232:

bidirectional, for connection of printer and PC.



Pallet shipment:

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



Data interface USB:

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



Battery operation:

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



Warrantv:

The warranty period is shown in the pictogram.



Data interface Infrared:

To transfer data from the balance to a printer, PC or other peripheral devices.



Rechargeable battery pack:

rechargeable set.

