

Ultrasonic thickness gauge SAUTER TN-US



Portable measuring device for ultrasonic material thickness testing

Features

- External sensor
- Data interface USB, standard (only for models with readout [d] = 0,01 mm)
- 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
- Delivered in a robust carrying case

Technical data

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

Accessories

- Data transfer software, USB 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, ø 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						OPTION	
[d] < 0,01 mm						+4 DAYS	

Model	Measuring range	Readout	Sensor	Sound velocity	Option	
					Factory calibration certificates	
SAUTER	[Max] mm	[d] 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	

Ultrasonic thickness gauges SAUTER TN-EE



Hand-held measuring device for ultrasonic material thickness testing in Echo-Echo principle

Features

- External sensor
- Data interface USB, standard
- 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
- Two measuring modes to determine material thickness:
 - Pulse-Echo mode
 - Echo-Echo mode
- Echo-Echo measuring: Determining the actual thickness of materials irrespective of any coating which might be present. In this way, the wall thickness of pipes, for example, can be determined in a non-destructive manner, without having to remove the coating and the measurement can be shown on the display, with the adjustment for the coating thickness already taken into account
- Echo-Echo measurements are only possible with the measuring head included as part of the delivery (ATU-US12, see accessory)
- Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] ± 0,04 mm
- Dimensions W×D×H 74×32×150 mm
- Battery operation, batteries standard 2× 1.5 V AA, AUTO-OFF function to preserve batteries
- Net weight approx. 245 g
- Maximum thickness of coating (paints, lacquers or similar coatings which shall be eliminated): 3 mm

Accessories

- Data transfer software, USB interface cable included, SAUTER ATU-04
- External sensor, 5 MHz, ø 10 mm, for echo-echo measuring, SAUTER ATU-US12
- Ultrasound contact gel, standard, can be reordered, approx. 60 ml, SAUTER ATB-US03
Note: All following Pulse-Echo sensors can only be used in Pulse-Echo mode, not in Echo-Echo mode
- External sensor (Pulse-Echo), 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 (Pulse-Echo), 7 MHz, ø 6 mm, for thin test materials: Measuring range 0,75–80 mm (steel), SAUTER ATU-US02
- External sensor (Pulse-Echo), 5 MHz, ø 10 mm, SAUTER ATU-US09
- External sensor (Pulse-Echo), 5 MHz, ø 10 mm, transducer at an angle of 90°, SAUTER ATU-US10

STANDARD						OPTION	

Model	Measuring range Echo-Echo	Measuring range Pulse-Echo	Readout	Sensor	Sound velocity	Option	
						Factory calibration certificates	
SAUTER	mm	mm	[d] mm		m/sec	KERN	
TN 30-0.01EE	3–30	0,65–600	0,01	5 MHz ø 10 mm	1000–9999	96 1-113	
TN 60-0.01EE	3–60	0,65–600	0,01	5 MHz ø 10 mm	1000–9999	96 1-113	