

Ultrasonic Thickness Meter PCE-TG 100



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Thickness meter for homogeneous materials, Ultrasonic speed adjustable, Internal calibration standard, Measuring range up to 225 mm / 8.86 in (displays in mm only)

The PCE-TG 100 is a compact ultrasonic thickness meter for homogeneous materials. This ultrasonic thicknessmeter PCE-TG 100 works with an external ultrasonic probe; this probe conducts ultrasonic waves into the material to be tested. Different materials conduct ultrasound at different speeds, so you can choose different ultrasonic speeds on the PCE-TG 100 ultrasonic thickness meter. The step size is 1 m/s with a setting range of 500 to 9999 m/s. The meter is factory pre-set with five different sound speeds for different material.

With the ultrasonic thickness meter, you can determine the material thicknesses of metal, glass, plastics and other homogeneous materials in seconds. Operation of the ultrasonic thickness meter is very easy via the six buttons. The ultrasound probe has a measuring head, which is fitted in a resilient black spring washer. The spring ring in turn has round cutouts, so that a measurement on straight, even or round material surfaces is possible. The ultrasonic thickness meter is delivered calibrated. As an accessory, you can order an ISO laboratory calibration including certificate at the time of initial order or recalibration.

- ▶ Suitable for metals, glass, plastics
- ▶ 5 MHz probe
- ▶ Resolution 0.1 mm
- ▶ 4-digit LCD display displays in mm only
- ▶ Up to 225 mm (8.8") material thickness
- ▶ Battery status indicator
- ▶ Automatic calibration
- ▶ Integrated 3.0 mm (0.11") calibration block

Specifications

Measurement range	0.8 mm ... 225 mm / 0.03 in ... 8.86 in, displays in mm only
Measurable materials	Ferrous and non-ferrous metals, steel, plastic, glass, gold, and otherhomogeneous materials (without air pockets)
Frequency	5 MHz
Resolution	0.1 mm / 3.94 mil
Calibration	3.0 mm / 0.1 in integrated steel block
Accuracy	$\pm(0.5\% + 0.1 \text{ mm})$ at 0.8 ... 99.9 mm $\pm(1\% + 1 \text{ mm})$ at 100 ... 300 mm
Sound velocity range	1000 ... 9999 m/s (freely adjustable, depending on the material to be tested)
Sound velocity resolution	1 m/s
Display	4 digit LCD display
Surface temperature for probe	Standard -10 ... 50°C / 14 ... 122°F
Measuring head diameter	10 mm / 0.4 in
Measuring head shape	Straight
Operating temperature range	0 ... 40°C / 32 ... 104°F
Ambient humidity	20 ... 90% r.H.
Battery status	Low power indicator
Power supply	2 x 1.5V AA batteries
Battery life	250 h
Auto shutdown	For battery conservation (after about 3 minutes without operation)
Dimensions	127 x 67 x 30 mm / 5 x 2.64 x 1.18 in (H x W x D)
Weight	270 g / < 1 lb incl. batteries

Subject to change

