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## Material Thickness Meter PCE-TG 300

## Thickness meter PCE-TG 300 Large measuring range / Up to 600 mm / Pulse-echo or echo-echo mode / For all homogeneous materials / Print function via Bluetooth / USB connection

The PCE-TG 300 is a wall thickness meter with special sensors for various applications. In general, the wall thicknesses of all homogeneous materials can be measured with the PCE-TG 300. For damping or scattering materials such as plastic or cast a special sensor is available. An angled 90° sensor also enables measurements at hard-to-reach measuring points. The speed of sound can be set freely on the wall thickness meter PCE-TG 300 and thus adapted to a wide variety of materials.

The measured values are displayed directly on the easy-to-read TFT color display. Due to the internal memory, which can be read out via the optionally available software, different measuring points can be clearly stored. The non-destructive ultrasound measuring method enables the measurement even on end products. Thanks to the Echo-Echo working mode, even coated workpieces can be measured.

- Large measuring range
- Various sensors available
- Battery operation
- Error and voids detection
- Internal measurement data memory
- Print via Bluetooth

## **Specifications:**

Measuring range PE: pulse-echo mode 0.65 ... 600 mm (steel)

EE: echo-echo mode 2.50 ... 60 mm

Accuracy  $\pm 0.04 \text{ mm H [mm] (<10 mm); } \pm 0.4\% \text{ H [mm] (> 10 mm)}$ 

H refers to the material thickness of the workpiece

Resolution 0.1 mm / 0.01 mm / 0.001 mm (adjustable)

Measurable materials Metals

Plastics Ceramics Epoxy resin Glass

And all homogeneous materials

Working modes Pulse echo mode (fault and blower detection)

Echo-Echo mode (hiding layer thicknesses, eg paints)

Calibration Sound velocity calibration

Zeroing

Two-point calibration

View mode Normal mode, Scan mode, Difference mode

Units mm / inch

Data transfer Print via Bluetooth / USB 2.0

Storage Non-volatile memory with 100 data groups with 100 data sets each

Operating time Continuous operation 100 h

Automatic stand-by mode (adjustable) Automatic switch-off mode (adjustable)

Power supply 4 x AA battery 1.5V

Display 320 x 240 pixels TFT LCD color display with brightness adjustment

Operating conditions  $0 \dots 50^{\circ}\text{C} / 32 \dots 122^{\circ}\text{F}, \le 80\% \text{ RH not condensing}$ Storage conditions  $-20 \dots 70^{\circ}\text{C} / -4 \dots 158^{\circ}\text{F}, \le 80\% \text{ rh non-condensing}$ 

Dimensions 185 x 97 x 40 mm / 7.3 x 3.8 x 1.6 in

Weight 375 g/<1 lb

## Specification of the available sensors for wall thickness gauge PCE-TG 300

NO<sub>2</sub>

Frequency 2.5 MHz Diameter 14 mm

Measuring range 3 ... 40 mm (steel)

3 ... 300 mm (steel)

Minimum diameter of pipes 
Not suitable for curved materials

Description For damping / scattering materials (plastics, cast iron)

NO<sub>5</sub>

Frequency 5 MHz Diameter 10 mm

Measuring range 1 ... 600 mm (steel)

Minimum diameter of pipes 20 x 3 mm

Description Normal measurement

NO5 / 90°

Frequency 5 MHz Diameter 10

Measuring range 1 ... 600 mm (steel)

Minimum diameter of pipes 20 x 3 mm

Description Normal measurement

**NO7** 

Frequency 7 MHz Diameter 6 mm

Measuring range 0.65 ... 200 mm (steel)

Minimum diameter of pipes 15 x 2 mm

Description Or thin-walled or heavily curved pipes

HT5

Frequency 5 MHz Diameter 12 mm

Measuring range 1 ... 600 mm (steel)

Minimum diameter of pipes 30 mm

Description For high temperatures (max 300°C / 572°F)

P5EE

Frequency 5 MHz Diameter 10 mm

Measuring range PE: 2 ... 600 mm, EE: 2.5 ... 100 mm

Minimum diameter of pipes 20 x 3 mm

Description Normal measurement and EE test

Delivery scope:

1 x Thickness meter PCE-TG 300

1 x Sensor P5EE

1 x 100 ml coupling gel

1 x Transport case

- 4 x AA batteries
- 1 x User manual