

## Flaw Detector PCE-FD 20



PCE-FD 20 is a portable ultrasonic flaw detector with a large LCD screen that displays A-scan maps of ultrasonic signals as well as B-scan cross sections. Ideal for use in mechanical engineering, aerospace and metallurgical applications, this high-frequency ultrasound-based defectoscope uses a contact transducer (two different probes included; 45° and 90°) to measure material thickness and identify flaws and defects such as discontinuity in welds.

- ▶ Operating frequency range: 1 ... 10 MHz
- ▶ Measured time interval range: 6 ... 1000 microseconds (µs)
- ▶ Sound velocity: 1000 ... 9999 m/s
- ▶ Implements shadow, echo and mirror-shadow testingmethods
- ▶ Features a USB interface for downloading data to PC for detailed analysis
- Lightweight
- ▶ Battery or electric power
- ▶ 1.5 m long probe cable

## **Specifications**

## More information

## **Technical specifications**

Operating frequency range 1 ... 10 MHz

Measure time interval range (scan 6 ... 1000 microseconds (µs)

duration)

Sound velocity range 1000 ... 9999 m/s

Deviation of measurement of time Not exceed  $\pm$  0.025 $\mu$ s

intervals

Max. deviation of amplitude of signals at Not exceed  $\pm$  0.5 dB

receiver input in 0 ... 110 dB range

Testing gain region 125 dB

Averaging over the quantity of starts 1 ... 16

Range of time-variable gain (TVG) / 40 dB / 15

Number of control points TVG

Duration of excitation pulse to load 0 ... 0.5 μs

Amplitude of excitation pulse to 50 Ohm 100, 200, 300

load, not less

Operating frequency range of receiver at 1 ... 10 MHz

-3 dB

Deviation of amplitudes of input signals Not more than 1 dB

in 10 ... 100% range of screen height

Scanning 1 ... 1000 μs

Scanning delay 0 ... 2000 µs

Measurement range of time intervals  $0 \dots 1000 \mu s$ 

Prism of probe delay  $0 \dots 15 \mu s$ 

Automatic signaling of defects (AFS) Dual-gate

Setting range of AFS gates 0 ... 2000 µs

Adjusting thresholds of AFS gates 0 ... 100%

Detection of signals (receiver) Positive half-wave, radio mode

Dimensions of device (approx.) 80 x 162 x 35 mm / 3.14 x 6.37 x 1.37"

Dimensions display (approx.) 48 x 74 mm / 1.88 x 2.91"

Power supply 100 ... 250 V AC or 3 x 1.5 V AA batteries

Weight (approx.) 250 g / 0.55 lb (without batteries)

Manual

More product info



Similar products



Subject to change