

VIBRATION MEASUREMENT

VIBRATION ANALYZER PCE-VT 3800 / PCE-VT 3800S

Vibration analyzer with external sensor / data logger function

The vibration analyzer is the ideal companion for checking vibrating parts, machines and plant. With the external vibration sensor of the vibration meter, the vibration displacement up to 3.9 mm, the vibration velocity up to 399.9 mm/s and the vibration acceleration up to 399.9 m/s² can be determined. RMS, peak, peak-to-peak and crest factor are available as measurement

parameters on the vibration meter. Another function of the vibration measuring device is the automatic evaluation according to ISO 10816-3. Accordingly, the vibration meter can determine the current vibration state of a machine via a good/bad evaluation. This means that the vibration meter is used, for example, for repair and maintenance work on machines.

ISO cal option

- ▶ data logger function
- ▶ automatic ISO 10816-3 evaluation
- ▶ measuring range up to 399.9 m/s² / 15744 in/s²
- ▶ hand-held device for mobile vibration measurement
- ▶ rechargeable battery
- ▶ 2.4" LC display



APPLICATION



TECHNICAL SPECIFICATIONS

Measuring range	Acceleration 0.0 ... 399.9 m/s ² / 0.0 - 15744 in/s ² 0.1 m/s ² / 3.94 in/s ² ±2 % 10 Hz ... 10 kHz 1 kHz ... 10 kHz	Dimensions	Ø 17 x 46 mm / 0.67 x 1.8"
Resolution		Weight (without cable)	52 g / 1.8 oz
Accuracy @ 160 Hz		Sensor PCE-VT 3800	Sensor with spiral cable PCE-VT 3xxx SENSOR Magnet adapter PCE-VT VMH
Frequency range		Sensor PCE-VT 3800S	Sensor with spiral cable PCE-VT 3xxx SENSOR Needle sensor PCE-VT NP Handle PCE-VT 3xxx HANDLE
Measuring range	Velocity 0.00 ... 399.9 mm/s / 0.00 - 15.74 in/s 0.1 mm/s / 0.0039 in/s ±2 % 10 Hz ... 1 kHz	Optional accessories:	
Resolution		PCE-VT NP	Needle sensor
Accuracy @ 160 Hz		PCE-VT VMH	Magnet adapter
Frequency range		CAL-PCE-VT 3xxx	ISO Calibration Certificate
Measuring range	Displacement 0.000 ... 3.9 mm / 0.000 - 0.154 in 1 µm / 39.4 µin ±2 % 10 Hz ... 200 Hz	PCE-VT 3xxx SENSOR	Replacement vibration sensor
Resolution		Further models:	
Accuracy @ 160 Hz		PCE-VT 3750	incl. sensor, magnetic adapter, headset
Frequency range		PCE-VT 3750S	incl. needle sensor with handgrip, headset
Measurement parameters	RMS, Peak, Peak-Peak Crest factor		
Manual memory	99 folders with 50 measured values each		
Data logger	Various start/stop triggers Measurement interval between 1 s ... 12 h 50 memory locations with 43.200 measured values each can be switched to metric / imperial		
Units	2.8" LC display		
Display	English, German, French Spanish, Italian, Dutch Portuguese, Turkish, Polish Russian, Chinese, Japanese		
Menu languages	internal: LiPo battery (3.7 V, 2.500 mAh) external: USB 5 VDC, 500 mA approx. 15 ... 20 h (depending on display brightness)		
Power supply			
Operating time			
Operating and storage conditions	temperature: -20 ... +65 °C / -4 ... 149 °F humidity: 10% RH ... 95% RH, non-condensing		
Protection Class	IP52		
Dimensions	165 x 85 x 32 mm / 6.5 x 3.3 x 1.3"		
Weight	239 g / 8.4 oz		
Technical Data Vibration Sensor			
Resonance frequency	24 kHz		
Transverse sensitivity	≤5 %		
Destruction limit	5000 g (peak)		
Operating and storage temperature	-55 °C ... +150 °C / -67 °F ... 302 °F		
Housing material	stainless steel		
Mounting thread	¼ - 28"		

PCE-VT 3800



PCE-VT 3800S



Subject to change without notice



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