

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
- ▶ 2.48" LC display



APPLICATION



TECHNICAL SPECIFICATIONS

Measuring range	Acceleration 0.0 ... 399.9 m/s ² / 0.0 - 15744 in/s ²	Sensor PCE-VT 3800	Sensor with spiral cable
Resolution	0.1 m/s ² / 3.94 in/s ²		PCE-VT 3xxx SENSOR
Accuracy @ 160 Hz	±2 %		Magnet adapter PCE-VT VMH
Frequency range	10 Hz ... 10 kHz	Sensor PCE-VT 3800S	Sensor with spiral cable
	1 kHz ... 10 kHz		PCE-VT 3xxx SENSOR
			Magnet adapter PCE-VT VMH
			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		Optional accessories:
Resolution	0.1 mm/s / 0.0039 in/s		PCE-VT NP
Accuracy @ 160 Hz	±2 %		Needle sensor for vibration measuring device
Frequency range	10 Hz ... 1 kHz		Magnet adapter
		PCE-VT VMH	Magnet adapter
		CAL-PCE-VT 3xxx	ISO Calibration Certificate for vibration meter
		PCE-VT 3xxx SENSOR	Replacement vibration sensor
Measuring range	Displacement 0.000 ... 3.9 mm / 0.000 - 0.154 in		
Resolution	1 µm / 39.4 µin		
Accuracy @ 160 Hz	±2 %		
Frequency range	10 Hz ... 200 Hz		
Measurement parameters	RMS, Peak, Peak-Peak		
Manual memory	Crest factor		
Data logger	99 folders with 50 measured values each		
	Various start/stop triggers		
	Measurement interval between 1 s ... 12 h		
	50 memory locations with 43200 measured values		
	each		
Units	can be switched to metric / imperial		
Display	2.48" LC display		
Menu languages	English, German, French Spanish, Italian, Dutch Portuguese, Turkish, Polish Russian, Chinese, Japanese		
Power supply	internal: LiPo battery (3.7 V, 2500 mAh) external: USB 5 VDC, 500 mA		
Operating time (brightness)	approx. 15 ... 20 h (depending on display)		
Operating and storage conditions	temperature: -20 ... +65 °C / -4 ... 149 °F humidity: 10 % RH ... 95 % RH, non-condensing		
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"		
Dimensions	Ø 17 x 46 mm / 0.67 x 1.8"		
Weight (without cable)	52 g / 1.8 oz		

PCE-VT 3800 PCE-VT 3800S



Subject to change without notice