

Machinery Vibration Protection



Pocket-size Vibration Meter Model SH2000

< \$1000.00

VIBRA-CHECK™ your machines with this compact and economical vibration meter. It is an ideal tool for obtaining spot measurements of machinery vibration. The meter fits in a shirt pocket yet functions like units many times its size.

All three useful measurements are possible. Displacement, velocity, and acceleration modes allow a user to perform basic vibration analysis.

The robust high temperature accelerometer sensor has a removable magnetic mounting base for attachment of a stinger. The sensor is internally protected against thermal shock, electrical noise and amplitude overload.

The handy carrying pouch keeps the meter out of the way, yet ready for use. When it's time to take a reading, simply place the accelerometer on your machine and tilt the pouch up to view display.

Features

- Accurate, piezoelectric accelerometer sensor
- LCD read out in acceleration, velocity and displacement
- Sensor, cable rated 250 °C (482 °F)
- 9V battery included
- Certified Intrinsically safe
- True RMS detection

Applications

- Motors & Generators
- Fans, Pumps & Compressors
- Turbines
- Natural Gas Engines
- Piping Vibration
- Accuracy verification of installed shutdown switches and monitoring systems



Carrying pouch (included)

Typical Radial Vibration Casing Measurement



RMS vs. PEAK Readings

The SH2000 vibration meter uses an RMS detector. The meter is available with readings calibrated after detection either in direct RMS or scaled PEAK units.

The majority of the portable Velocity vibration meters that are purchased are calibrated for PEAK measurement. Most North American vibration level acceptance charts, including ours, and permanent vibration instruments with indicators show velocity severity in PEAK units.

If your chart and/or permanent instruments display RMS values (common in Europe) RMS calibration is recommended.

**Pocket-size Vibration Meter
Model SH2000**

Specifications

Weight & Dimensions

Function: Portable, hand held vibration indicator. Vibration level on LCD display.

Sensor and cable:

- Piezoelectric accelerometer
- 25,000 g shock limit
- 30 Khz resonance
- Stainless steel housing
- Integral low noise 1.2 M (48 in.) cable with strain relief at sensor & meter ends.

Selectable Measurands (metric versions):

- Acceleration: g, pk (m/s², RMS)
- Velocity: ips, pk (mm/s, RMS)
- Displacement: mils, pk-pk (um, pk-pk)

Frequency Response:

Standard (C=1 or 3 in How To Select):

- Acceleration: 10 to 10,000 Hz
- Velocity: 10 to 1000 Hz
- Displacement: 10 to 300 Hz

Low Frequency Option (C=2 or 4):

- Acceleration: 5 to 10,000 Hz
- Velocity: 5 to 1000 Hz
- Displacement: 5 to 300 Hz

Vib. Ranges (metric versions w/ C=3 or 4):

- Acceleration: 0.1 - 50.0 g (1 - 500 m/s²)
- Velocity: 0.01 - 5.00 ips (0.1 - 50.0 mm/s)
- Displ.: 0.1 - 50.0 mils (1 - 500 um)
- Error: less than 5% of full scale

Service Temperature Limits:

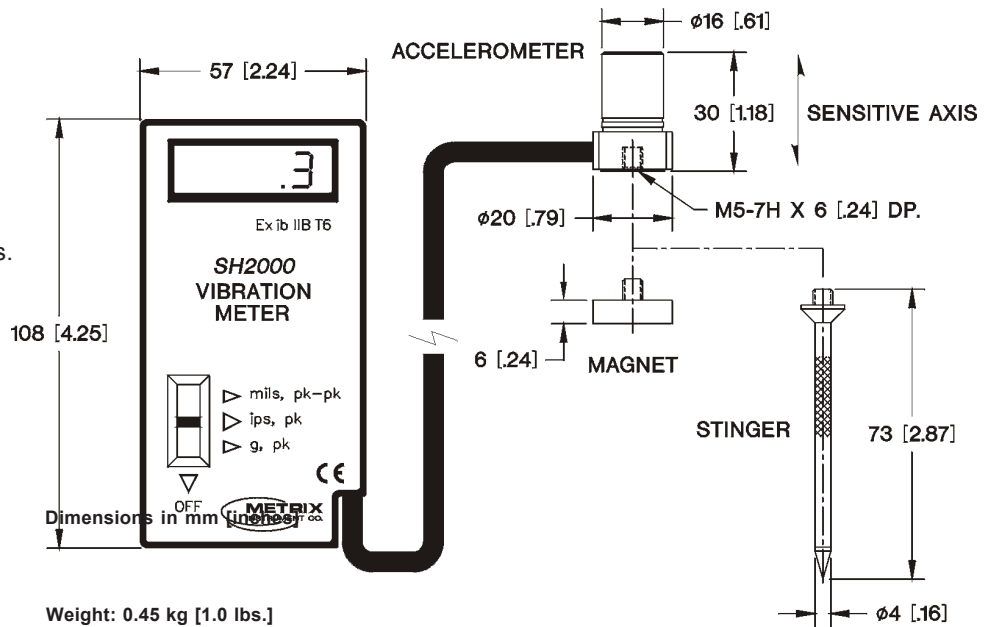
- Meter: 0° to +50°C (+32° to +122°F)
- Accelerometer & Cable: -30° to +250°C (-22° to +482°F)

Environmental & Hazard Ratings

- CE mark (for electro-magnetic compatibility)
- Intrinsically safe certified Ex ib IIB T6

Power:

- Dry Cell is 9 VDC GP10A type (included)
- Low battery warning indicator on LCD



Weight: 0.45 kg [1.0 lbs.]

How To Select...

MODEL	A	B	C
SH2000 -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Standard:
SH2000 - 0 0 1

A **Scope of Supply**

- 0 = Standard (includes meter, soft case, accelerometer with integral cable, magnetic base, stinger, users manual)

B **Certifications/Hazard Area Rating**

- 0 = CE marked and Ex ib IIB T6 certified by Vostnee

C **Frequency Range/Calibration**

- 1 = Standard Freq. Range, English: Peak units for acceleration and velocity. Pk-pk displacement
- 2 = Low Freq. Range, English: Peak units for acceleration and velocity. Pk-pk displacement
- 3 = Standard Freq. Range: Metric: RMS units for acceleration and velocity. Pk-pk displacement
- 4 = Low Freq. Range: Metric: RMS units for acceleration and velocity. Pk-pk displacement

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