Vibration Monitoring and Machine Protection Systems

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CMCP1300T Series Low-Cost Compact Triaxial Accelerometer



Features

- Side Exit Triaxial Accelerometer
- 100 mV/g ±10% per channel
- 0.32 Hz to 10 kHz Frequency Response
- · Waterproof, Epoxy Encapsulated
- 4-Pin 8SL Bayonet Connector
- · UV and Oil Resistant
- Small Size Aluminum Case

Typical Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

Technical Performance

Mounted Base Resonance: >25 kHz (nominal)

Sensitivity: $100 \text{ mV/g} \pm 10\% \text{ Nominal } 80 \text{ Hz at } 22^{\circ}\text{C}$

Frequency Response: 1.5 Hz to 8 kHz ±10% (90 cpm to 480 kcpm) 0.32 Hz to 10 kHz ±3dB (19.2 cpm to 600 kcpm)

Isolation: Case Isolated

Measurement Range: $\pm 50 \text{ g}$

Amplitude Linearity: Less than 1% Deviation

Transverse Sensitivity: Less than 5%

Electrical

Condition Monitoring Custom Products

Supply Voltage: 18 to 28 VDC Current Range: 2 to 20 mA Bias Voltage: 8-12 Vdc Electrical Noise: 0.1 mg max. **Electrical Protection:** RFI/ESD Settling Time: 2.5 Second Output Impedance: <100 Ohm max. Case Isolation: >108 Ohm at 500 Volt

Spectral Noise: 1 Hz: 85 μ g/ \sqrt{Hz} [850 (μ m/s²)/ \sqrt{Hz}]

10 Hz: $10 \mu g/\sqrt{Hz}$ $[100 (\mu m/s^2)/\sqrt{Hz}]$ 100 Hz: $2.7 \mu g/\sqrt{Hz}$ $[27 (\mu m/s^2)/\sqrt{Hz}]$ 1000 Hz: $1.0 \mu g/\sqrt{Hz}$ $[10 (\mu m/s^2)/\sqrt{Hz}]$

Environmental

Operating Temperature Range: -65 to 185°F (-54 to 85°C)
Sealing: Epoxy Encapsulated

Maximum Shock: 7,000 g
Approvals: CE Approved

Mechanical

Case Material: Aluminum
Sensing Element: PZT/Shear

Mounting Torque: 2-5 ft-lbs (2.7 to 6.8 Nm)

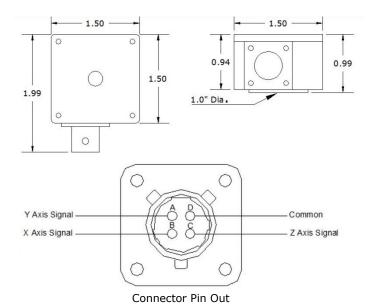
Weight: 3 Oz (85 gram)
Connector: 4-Pin 8SL Bayonet

Mounting Thread: 1/4-28 UNF Captive Mounting Bolt

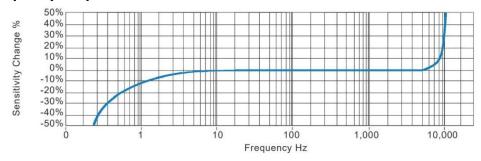


1010 East Main Street League City, Texas 77573 USA Phone: +1 (281) 334-0766 Fax: +1 (281) 334-4255 SalesSupport@stiweb.com

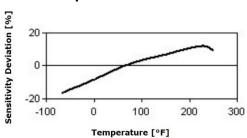
Dimensions



Typical Frequency Response



Typical Sensitivity Deviation vs Temperature



Ordering Information

CMCP1300T

Low-Cost Triaxial Accelerometer, 100mV/g, Side Entry, 4 Pin MS Bayonet

Recommended Cable Assembly

CMCP604L Series of extension cable

Similar Products



MS Connector CMCP760T