

# Vibration Monitoring and Machine Protection Systems

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# **CMCP1300ST-T Series Low-Cost Triaxial Accelerometer with Temperature**





#### **Features**

- Side Exit Triaxial Accelerometer with Temperature
- 100 mV/g ±10% Per Axis
- 10 mV/°C Temperature Output
- 0.32 Hz to 10 kHz Frequency Response
- Waterproof, Epoxy Encapsulated
- 5 Pin M12 Connector
- 316 Stainless Steel Case
- ±80 g Range
- ¼"-28 UNF or M8x1.25 Mounting Bolt

#### **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: >20 kHz (nominal)

Sensitivity: 100 mV/g ±10% Nominal 80 Hz at 22°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)

Case Isolated

Measurement Range: ±80 g

Amplitude Linearity: Less than 1% Deviation

Transverse Sensitivity: Less than 5%

#### **Electrical**

Isolation:

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. >108 Ohm at 500 Volt Case Isolation:

Spectral Noise: 1 Hz: 85  $\mu$ g/ $\sqrt{Hz}$  [850 ( $\mu$ 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

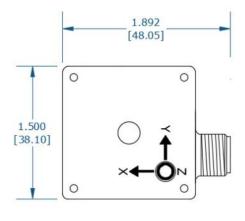
Case Material: 316 Stainless Steel
Sensing Element: PZT/Shear
Mounting Torque: 5.9 ft-lbs (8 Nm)
Weight: 6.7 Oz (189 gram)

Connector: 5-Pin M12

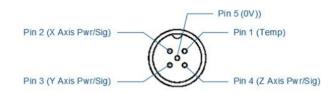
Mounting Thread: 1/4-28 UNF or M8x1.25 Captive Mounting Bolt

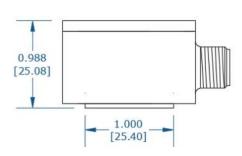
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### **Dimensions**

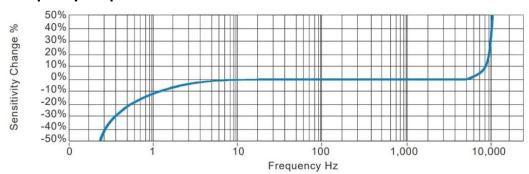


# Connection Details





# **Typical Frequency Response**



# **Ordering Information**

CMCP1300T-T Low-Cost Triaxial Accelerometer, 100 mV/g, Side Entry, ¼-28 UNF Mounting Bolt CMCP1300T-T-M8 Low-Cost Triaxial Accelerometer, 100 mV/g, Side Entry, M8x1.25 Mounting Bolt

# **Recommended Cable Assembly**

CMCP605M Series of extension cable

#### **Similar Products**



MS Connector CMCP760T-T