

Vibration Monitoring and Machine Protection Systems

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CMCP770A Compact Top Entry Accelerometer





Features

- Compact Top Exit Accelerometer
- 100 mV/g ±10%
- 150°C Max Temperature Range
- ±80 g Dynamic Range
- 1/4"-28 UNF and M8x1.25 Mounting Studs Included
- Sealed to IP68
- Choice of 2 Pin MS 5015 Connector or Integral Cable (over braided or submersible)
- Shown left: 2 Pin MS 5015 Connector

Typical Applications

For tight places on 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: 28 kHz (nominal)

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

CE

Frequency Response: 2.0 Hz to 14 kHz $\pm 5\%$ (120 cpm to 840k cpm) 1.5 Hz to 16 kHz $\pm 10\%$ (90 cpm to 960k cpm)

0.8 Hz to 19 kHz \pm 3dB (48 cpm to 1,140k cpm)

Isolation: Base Isolated

Measurement Range: ±80 g

Transverse Sensitivity: Less than 5%

Electrical

Supply Voltage: 18-30 VDC
Current Range: 0.5 mA to 8 mA
Bias Voltage: 10-12 Vdc
Electrical Noise: 0.1 mg max
Settling Time: 1 Second
Output Impedance: 200 Ohm max.
Case Isolation: >10⁸ Ohm at 500 Volt

Environmental

Operating Temperature Range: -67 to 302°F (-55 to 150°C)
Sealing: IP68 / Hermetically Sealed

Maximum Shock: 5000 g Approvals: CE Approved

Mechanical

Case Material: Stainless Steel
Sensing Element: PZT/Shear
Mounting Torque: 5.9 ft-lbs (8 Nm)
Weight: 1.8 Oz (52 gram)

Mating Connector: 2 Pin MS 5015 Connector or integral cable

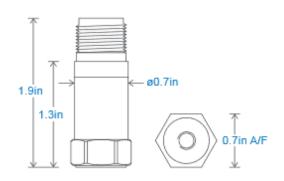
Mounting: 1/4-28 UNF and M8x1.25 Mounting Studs Provided

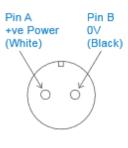
Recommended Cable Assembly: CMCP602L or CMCP602H Series

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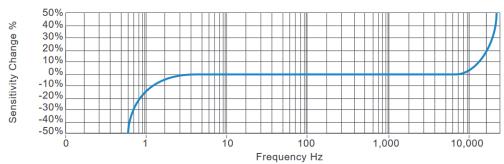
Dimensions

Connection Details





Frequency Response



Ordering Information

CMCP770A Compact Top Entry Accelerometer, 100 mV/g, 2 Pin MS 5015, ¼-28 UNF and M8x1.25

Mounting Studs provided

Ordering Information, Alternative Sensitivity

CMCP770A-XXX Specify Sensitivity in Place of -XXX

10 mV/g (-010), 30 mV/g (-030), 50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

Ordering Information, Alternative Versions with Integral Cable

CMCP770Ā-IXX
Compact Top Entry Accelerometer, 100 mV/g, Armored Cable, ¼-28 UNF Mount CMCP770A-IXX-M8
Compact Top Entry Accelerometer, 100 mV/g, Armored Cable, M8x1.25 Mount

(Specify Cable Length in Meters in Place of XX)

CMCP770A-IPXX Compact Top Entry Accelerometer, 100 mV/g, Submersible, ¼-28 UNF Mount CMCP770A-IPXX-M8 Compact Top Entry Accelerometer, 100 mV/g, Submersible, M8x1.25 Mount

(Specify Cable Length in Meters in Place of XX)

Alternative Versions



Compact Armored CMCP780A-I



Compact Submersible CMCP780A-IP