

## Vibration Monitoring and Machine Protection Systems

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# CMCP770A Compact Top Exit Accelerometer, 2 Pin MS 5015



#### Features:

- Compact Top Exit Accelerometer
- 100mV/g ±10% (Standard, Others Available)
- 2 Pin MS 5015 Connector
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- -67 to +266°F (-55 to +130°C) Extended Temperature Range
- ±80g Range
- 1/4"-28 UNF Mounting Stud Included (Adapters Available)
- Sealed to IP68

## **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: 28 kHz (nominal)

Sensitivity: 100mV/g ±10% Nominal 80Hz at 22°C 2 Hz to 14 kHz ±5% (120 cpm to 840k cpm) Frequency Response: 1.5 Hz to 16 kHz  $\pm 10\%$  (90 cpm to 960k cpm)

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

Isolation: Base Isolated

Measurement Range: ±80 g

Transverse Sensitivity: Less than 5%

### **Electrical**

Electrical Noise: 0.1mg max Current Range: 0.5mA to 8mA Bias Voltage: 10-12 Vdc Settling Time: 1 Second Output Impedance: 200 Ohms max.

Case Isolation: >108 Ohms at 500 Volts

## **Environmental**

-67 to 266°F (-55 to 130°C) Operating Temperature Range: IP68 / Hermetically Sealed Sealing:

Maximum Shock: 5000 q Approvals: CE Approved

CSA/UL Class 1 Division 2, Groups B, C and D

#### Mechanical

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

1/4"-28 UNF Mounting Stud (Supplied with Sensor) Mounting:

Adapters Available, See CMCP237 (Metric) and CMCP238 (Imperial) Series

Mating Connector: 2 Pin MIL 5015 MS Connector



## **Hazardous Location Ratings**

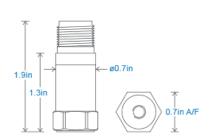
Class I, II, III, Division 1 and 2, Groups A-G, T4, -55°C to + 110°C IP65 Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C Zone 20, AEx, ia, IIIC, T130°C, IP65, Da, -55°C to + 110°C Class I, II, III, Division 1, 2, Groups A-G, T6, -55°C to + 110°C Zone 20, AEx, ia, IIIX, T80°C, IP65, DA, -55°C to + 110°C

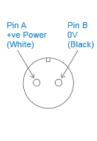
#### **Optional Modifications**

Non-Stocked Sensitivities: 50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

Sensitivity specified after base part number (ex. CMCP770A-500)

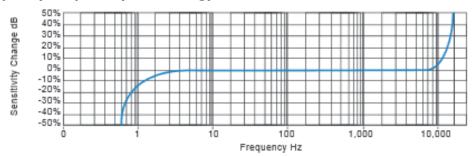
#### **Dimensions**





Connection Details

## Typical Frequency Response (at 100mV/g)



### **Ordering Information:**

CMCP770A Compact Accelerometer, Top Exit, 100mV/g with 2 Pin MS 5015

## **Alternative Sensitivity Ordering Information:**

CMCP770A-XXX Specify Sensitivity in Place of –XXX

50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

#### **Similar Products:**



Compact Side Exit Accelerometer