



**CMCP787T**  
**Premium Dual Output Side Entry Accelerometer**  
**with Temperature and 3 Pin MS 5015**



**Features**

- Dual Output Precision Accelerometer with Temperature
- 100 mV/g  $\pm 5\%$  and 10 mV/ $^{\circ}\text{C}$
- 150 $^{\circ}\text{C}$  Max Temperature Range
- $\pm 80$  g Dynamic Range
- 3 Pin MS 5015 Connector
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- 1/4"-28 UNF or M8x1.25 Captive Mounting Bolt
- 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: 21 kHz (nominal)  
 Sensitivity (Acceleration): 100 mV/g  $\pm 5\%$  Nominal 80 Hz at 22 $^{\circ}\text{C}$   
 Sensitivity (Temperature): 10 mV/ $^{\circ}\text{C}$  (0-100 $^{\circ}\text{C}$  Range)  
 Frequency Response:  
 1.5 Hz to 10 kHz  $\pm 5\%$  (90 cpm to 600 kcpm)  
 0.5 Hz to 12 kHz  $\pm 10\%$  (30 cpm to 720 kcpm)  
 0.2 Hz to 15 kHz  $\pm 3\text{dB}$  (12 cpm to 900 kcpm)

Isolation: Base Isolated  
 Measurement Range:  $\pm 80$  g  
 Transverse Sensitivity: Less than 5%

**Electrical**

Supply Voltage: 18-30 VDC  
 Current Range: 0.5 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:  $>10^8$  Ohm at 500 Volt

**Environmental**

Operating Temperature Range: -67 to 302 $^{\circ}\text{F}$  (-55 to 150 $^{\circ}\text{C}$ )  
 Sealing: IP68  
 Maximum Shock: 5000 g  
 Approvals: CE and UKCA Approved  
 CSA/UL Class 1 Division 2, Groups B, C and D

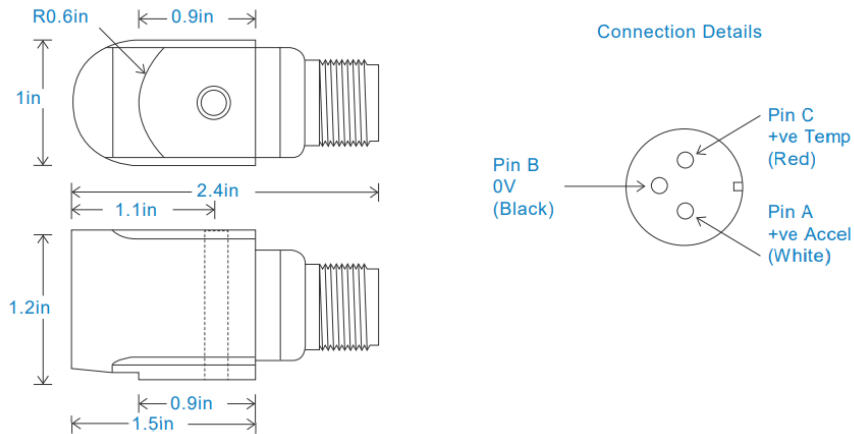
**Mechanical**

Case Material: Stainless Steel  
 Sensing Element/Construction: PZT/Shear  
 Mounting Torque: 5.9 ft-lbs (8 Nm)  
 Weight: 6.5 Oz (185 gram)  
 Mating Connector: 3 Pin MS 5015  
 Recommended Cable Assembly: CMCP603H Series  
 Mounting Thread:  
 CMCP787T: 1/4"-28 UNF Captive Bolt Supplied with Sensor  
 CMCP787T-M8: M8x1.25 Captive Bolt Supplied with Sensor

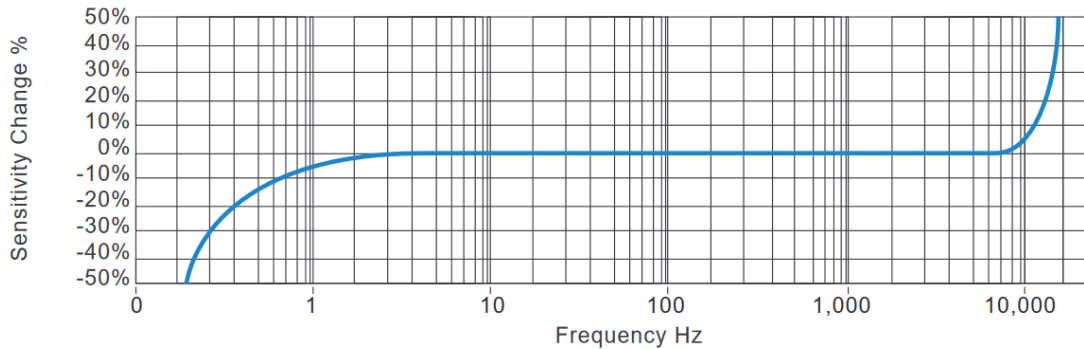
## Hazardous Location Ratings

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

## Dimensions



## Typical Frequency Response



## Ordering Information

CMCP787T Dual Side Entry Accelerometer with Temperature, 100 mV/g, 3 Pin MS 5015, ¼-28 UNF Mount  
 CMCP787T-M8 Dual Side Entry Accelerometer with Temperature, 100 mV/g, 3 Pin MS 5015, M8x1.25 Mount

## Alternative Sensitivity Ordering Information

Part Number	Sensitivity	Measurement Range	Base Resonance
CMCP787T-10	10 mV/g	±800 g	27 kHz
CMCP787T-30	30 mV/g	±250 g	25 kHz
CMCP787T-50	50 mV/g	±160 g	23 kHz
CMCP787T-250	250 mV/g	±32 g	19 kHz
CMCP787T-500	500 mV/g	±16 g	17 kHz

## Similar Products



**M12 Connector**  
CMCP787T-M12



**Submersible**  
CMCP787T-IP



**Integral Armored Cable**  
CMCP787T-I