



Condition Monitoring Custom Products

## CMCP787T

### Premium Dual Output Side Entry Accelerometer with Temperature 3 Pin MS Connector



#### Features:

- Dual Output Accelerometer with Temperature
- 100mV/g  $\pm 5\%$  and 10mV/ $^{\circ}\text{C}$  (0-150 $^{\circ}\text{C}$ )
- 150 $^{\circ}\text{C}$  Max Temperature Range
- $\pm 80\text{g}$  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: 27 kHz (nominal)  
 Sensitivity (Acceleration): 100mV/g  $\pm 10\%$  Nominal 80Hz at 22 $^{\circ}\text{C}$   
 Sensitivity (Temperature): 10mV/ $^{\circ}\text{C}$  (0-150 $^{\circ}\text{C}$  Range)  
 Frequency Response: 1.5 Hz to 12 kHz  $\pm 5\%$  (90cpm to 720kcpm)  
 1.0 Hz to 13 kHz  $\pm 10\%$  (60cpm to 780kcpm)  
 0.8 Hz to 15 kHz  $\pm 3\text{dB}$  (48cpm to 900kcpm)

Measurement Range:  $\pm 80\text{ g}$   
 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:  $>10^8$  Ohms at 500 Volts

#### Environmental

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

#### Mechanical

Case Material: Stainless Steel  
 Sensing Element: PZT/Shear  
 Mounting Torque: 5.9ft. lbs (8Nm)  
 Weight: 6.5 Oz (185 grams)  
 Mating Connector: 3 Pin MIL 5015 MS Connector  
 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

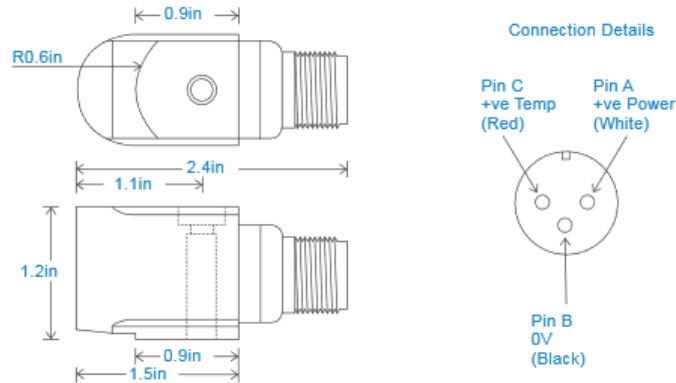
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C

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



## Ordering Information:

CMCP787T Premium Dual Output Side Entry Accelerometer with Temperature, 100mV/g, ¼-28 UNF Mount

CMCP787T-M8 Premium Dual Output Side Entry Accelerometer with Temperature, 100mV/g, M8x1.25 Mount

## Alternative Sensitivity Ordering Information:

CMCP787T-XXX Specify Sensitivity in Place of -XXX  
50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

## Recommended Cable Assemblies:

General Purpose TPE Jacketed Cable (Rated to 120°C)

CMCP603L Series 3 Socket MS Connector, Locking Collar, IP67

CMCP603LST Series 3 Socket MS Connector, Push On Seal Tight, IP68

High Temperature FEP Jacketed Cable (Rated to 200°C)

CMCP603H Series 3 Socket MS Connector, Locking Collar, IP67

CMCP603HST Series 3 Socket MS Connector, Push On Seal Tight, IP68

## Similar Products



**M12 Connector**  
CMCP787T-M12



**Submersible**  
CMCP787T-IP



**Integral Armored Cable**  
CMCP787T-I