



Condition Monitoring Custom Products

## CMCP787A-IP Precision Side Entry Accelerometer, Submersible



### Features:

- Precision Side Entry Accelerometer
- Submersible to 100m (10 bar)
- 100mV/g ±5%
- 150° Max Temperature Range
- ±80g Dynamic Range
- PUR Cable
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- ¼"-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:	100mV/g ±5% Nominal 80Hz at 22°C
Frequency Response:	1.5 Hz to 12 kHz ±5% (90cpm to 720kcpm) 1.0 Hz to 13 kHz ±10% (60cpm to 780kcpm) 0.8 Hz to 15 kHz ±3dB (48cpm to 900kcpm)
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:	>10 <sup>8</sup> Ohms at 500 Volts

### Environmental

Operating Temperature Range:	-67 to 302°F (-55 to 150°C)
Sealing:	IP68
Submersible Depth:	100m (10 bar)
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:	Flying Leads (Integral PUR Jacketed Cable)
Mounting Thread:	
CMCP787A-IP:	1/4-28 UNF Captive Bolt
CMCP787A-IP-M8:	M8x1.25 Captive Bolt

## Hazardous Location Ratings

Class I, II, III, Division 1 and 2, Groups A-G, T4, -55°C to + 110°C IP65

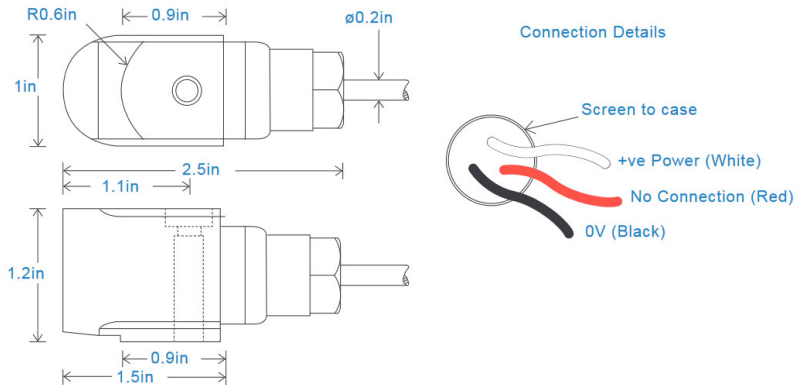
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C

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:

CMCP787A-IPXX

Precision Side Entry Accelerometer, 100mV/g, Submersible, ¼-28 UNF Mount

CMCP787A-IPXX-M8

Precision Side Entry Accelerometer, 100mV/g, Submersible, M8x1.25 Mount

(Specify Cable Length in Meters in Place of XX)

## Alternative Sensitivity Ordering Information:

CMCP787A-IP-XXX

Specify Sensitivity in Place of -XXX

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

## Similar Products



**M12 Connector**  
CMCP787A-M12



**Integral Armored Cable**  
CMCP787A-I



**MS Connector**  
CMCP787A