



Condition Monitoring Custom Products

## CMCP786A-LF-IP Low Frequency Top Entry Accelerometer, Submersible



### Features:

- Low Frequency Top Entry Accelerometer
- 500mV/g  $\pm 10\%$
- 0.2Hz to 15kHz (12cpm to 900kcpm)
- 140°C Max Temperature Range
- $\pm 80g$  Dynamic Range
- PUR Jacketed Cable (Submersible)
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- 1/4"-28 UNF and M8x1.25 Mounting Studs Provided
- Sealed to IP65



### 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:	22 kHz (nominal)
Sensitivity:	500mV/g $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response:	0.5 Hz to 12 kHz $\pm 10\%$ (30cpm to 720kcpm) 0.2 Hz to 15 kHz $\pm 3dB$ (12cpm to 900kcpm)
Isolation:	Base Isolated
Measurement Range:	$\pm 80 g$
Transverse Sensitivity:	Less than 5%

### Electrical

Electrical Noise:	0.1mg max
Current Range:	0.5mA to 8mA
Bias Voltage:	10-12 Vdc
Settling Time:	1.5 Second
Output Impedance:	200 Ohms max.
Case Isolation:	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range:	-67 to 284°F (-55 to 140°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/Compression
Mounting Torque:	5.9ft. lbs (8Nm)
Weight:	4.9 Oz (139 grams)
Mating Connector:	Flying Leads (Integral PUR Cable)
Mounting Thread:	1/4-28 UNF and M8x1.25 Mounting Studs Provided

## Hazardous Location Ratings

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

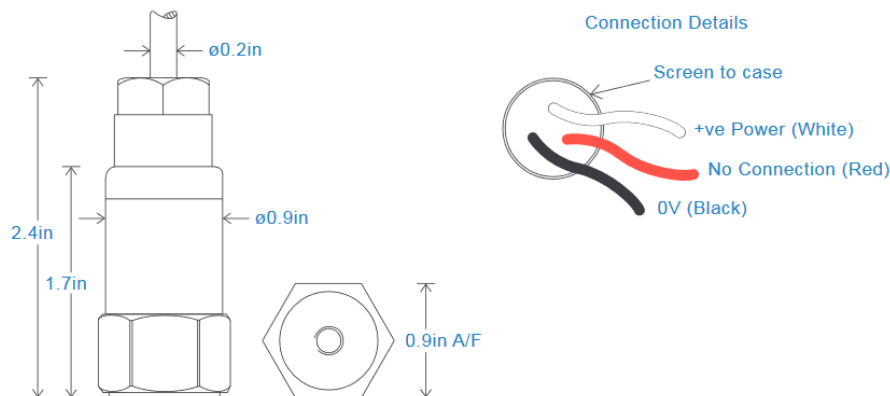
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C

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:

CMCP786A-LF-IPXX Low Frequency Top Entry Accelerometer, 500mV/g, Submersible  
(Specify Cable Length in Meters in Place of XX)

## Alternative Sensitivity Ordering Information:

CMCP786A-LF-IP-XXX Specify Sensitivity in Place of -XXX  
100mV/g (-100) and 250mV/g (-250)

## Similar Products



**M12 Connector**  
CMCP786A-LF-M12



**Integral Armored Cable**  
CMCP786A-LF-I



**MS Connector**  
CMCP786A-LF