



## CMCP788A-IP Premium Top Entry Accelerometer, Submersible



### Features

- Precision Top Entry Accelerometer
- 100 mV/g  $\pm 5\%$
- 150°C Max Temperature Range
- $\pm 80$  g Dynamic Range
- Integral PUR Cable
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- $\frac{1}{4}$ "-28 UNF and M8x1.25 Mounting Studs Included
- 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:	30 kHz (nominal)
Sensitivity:	100 mV/g $\pm 5\%$ Nominal 80 Hz at 22°C
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 780 kcpm) 0.2 Hz to 15 kHz $\pm 3$ 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°F (-55 to 150°C)
Sealing:	IP68
Submersible:	Up to 100 meter (10 bar)
Maximum Shock:	5000 g
Approvals:	CE and UKCA Approved CSA/UL Class 1 Division 2, Groups B, C and D

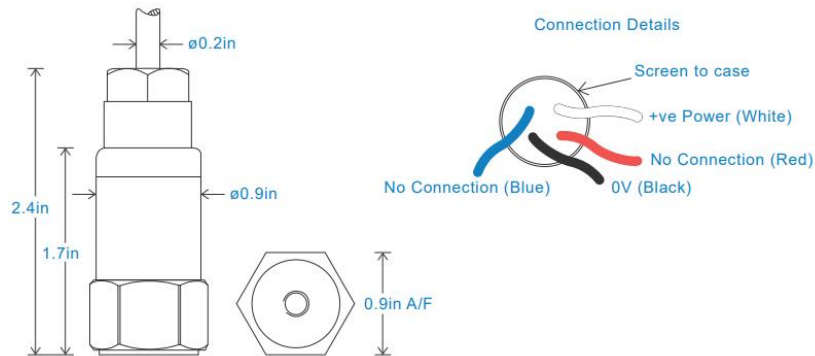
### Mechanical

Case Material:	Stainless Steel
Cable Jacket:	PUR (Polyurethane)
Sensing Element/Construction:	PZT/Shear
Mounting Torque:	5.9 ft-lbs (8 Nm)
Weight:	4.9 Oz (139 gram), Sensor only
Mating Connector:	Flying Leads (Integral PUR Jacketed Cable)
Mounting Thread:	$\frac{1}{4}$ -28 UNF Female $\frac{1}{4}$ -28 UNF and M8x1.25 Mounting Studs Provided

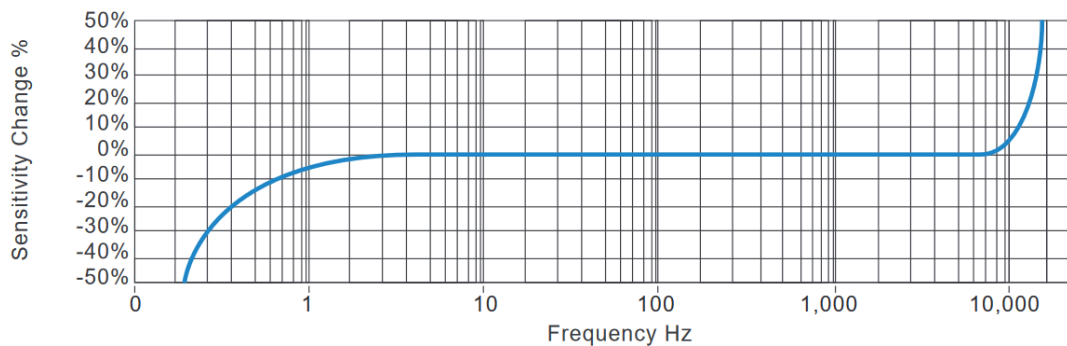
## Hazardous Location Ratings

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



## Frequency Response



## Ordering Information

CMCP788A-IP Precision Top Entry Accelerometer, 100 mV/g, Armored Cable Length 5 Meter (16 ft)  
 CMCP788A-IPXX Precision Output Top Entry Accelerometer, 100mV/g, Integral Braided Armored Cable  
 Specify Cable Length in Meters in Place of XX (CMCP788A-IP10 for 10 Meters)

## Alternative Sensitivity Ordering Information

Part Number	Sensitivity	Measurement Range	Base Resonance
CMCP788A-IP-10	10 mV/g	±800 g	34 kHz
CMCP788A-IP-30	30 mV/g	±250 g	33 kHz
CMCP788A-IP-50	50 mV/g	±160 g	32 kHz
CMCP788A-IP-250	250 mV/g	±32 g	28 kHz
CMCP788A-IP-500	500 mV/g	±16 g	26 kHz

## Similar Products



**M12 Connector**  
CMCP788A-M12



**Armored Braided Cable**  
CMCP788A-I



**MS Connector**  
CMCP788A