



STI Vibration Monitoring Inc.

# Vibration Monitoring and Machine Protection Systems

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Condition Monitoring Custom Products

## CMCP786A General Purpose Top Entry Accelerometer, 2 Pin MS 5015



### Features:

- General Purpose Top Entry Accelerometer
- 100mV/g  $\pm 10\%$
- 140°C Max Temperature Range
- $\pm 80g$  Dynamic Range
- 2 Pin MS 5015 Connector
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- 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: 22 kHz (nominal)  
 Sensitivity: 100mV/g  $\pm 10\%$  Nominal 80Hz at 22°C  
 Frequency Response: 1.0 Hz to 10 kHz  $\pm 10\%$  (60cpm to 600kcpm)  
 0.8 Hz to 12 kHz  $\pm 3dB$  (48cpm to 720kcpm)  
 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  
 Maximum Shock: 5000 g  
 Approvals: CE Approved  
 CSA/UL Class 1 Division 2, Groups B, C and D

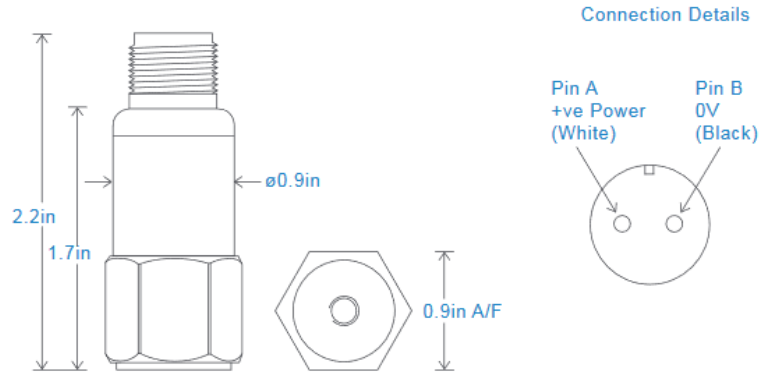
### Mechanical

Case Material: Stainless Steel  
 Sensing Element: PZT/Compression  
 Mounting Torque: 5.9ft. lbs (8Nm)  
 Weight: 4.9 Oz (139 grams)  
 Mating Connector: 2 Pin MS 5015  
 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 General Purpose Top Entry Accelerometer, 100mV/g, 2 Pin MS 5015 Connector

### Alternative Sensitivity Ordering Information:

CMCP786A-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)

CMCP602L Series 2 Socket MS Connector, Locking Collar, IP67  
CMCP602LST Series 2 Socket MS Connector, Push On Seal Tight, IP68

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

CMCP602H Series 2 Socket MS Connector, Locking Collar, IP67  
CMCP602HST Series 2 Socket MS Connector, Push On Seal Tight, IP68

### Similar Products



**M12 Connector**  
CMCP786A-M12



**Submersible**  
CMCP786A-IP



**Integral Armored Cable**  
CMCP786A-I