



STI Vibration Monitoring Inc.

# Vibration Monitoring and Machine Protection Systems

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Condition Monitoring Custom Products

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



### Features:

- General Purpose Top Exit Accelerometer
- 100mV/g  $\pm 10\%$  (Standard, Others Available)
- 2 Pin MS 5015 Connector
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- -67 to +284°F (-55 to +140°C) Extended Temperature Range
- $\pm 80g$  Range
- 1/4"-28 UNF Mounting Stud Included (Adapters Available)
- 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: 2 Hz to 10 kHz  $\pm 5\%$  (120 cpm to 600k cpm)  
 1.5 Hz to 12 kHz  $\pm 10\%$  (90 cpm to 720k cpm)  
 0.8 Hz to 15 kHz  $\pm 3dB$  (48 cpm to 900k cpm)

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 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/Shear  
 Mounting Torque: 5.9ft. lbs (8Nm)  
 Weight: 4.9 Oz (139 grams)  
 Mounting: 1/4"-28 UNF Mounting Stud (Supplied with Sensor)  
 Adapters Available, See CMCP237 (Metric) and CMCP238 (Imperial) Series  
 Mating Connector: 2 Pin MIL 5015 MS Connector

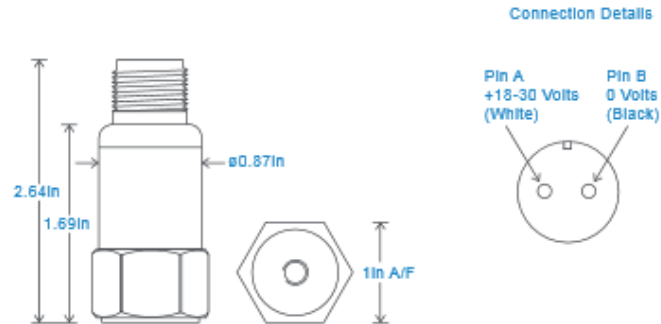
### Hazardous Location Ratings

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

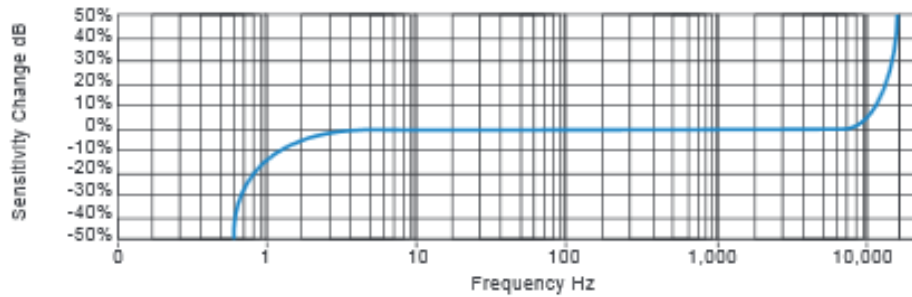
### Optional Modifications

Non-Stocked Sensitivities: 50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)  
Sensitivity specified after base part number (ex. CMCP786A-500)

### Dimensions



### Typical Frequency Response (at 100mV/g)



### Ordering Information:

CMCP786A General Purpose Accelerometer, Top Exit, 100mV/g with 2 Pin MS 5015

### Alternative Sensitivity Ordering Information:

CMCP786A-XXX Specify Sensitivity in Place of -XXX  
50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

### Similar Products:



**CMCP786A-I**  
Integral Armored Cable



**CMCP786A-M12**  
M12 Eurofast Connector