



STI Vibration Monitoring Inc.

# Vibration Monitoring and Machine Protection Systems

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Condition Monitoring Custom Products

## CMCP788T

### Premium Dual Output Top Entry Accelerometer with Temperature



#### Features:

- Dual Output Accelerometer with Temperature
- 100mV/g  $\pm 5\%$  and 10mV/ $^{\circ}\text{C}$  (0-150 $^{\circ}\text{C}$ )
- 150 $^{\circ}\text{C}$  Max Temperature Range
- $\pm 80\text{g}$  Dynamic Range
- 3 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 Provided
- 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 (Acceleration):	100mV/g $\pm 5\%$ Nominal 80Hz at 22 $^{\circ}\text{C}$
Sensitivity (Temperature):	10mV/ $^{\circ}\text{C}$ (0-150 $^{\circ}\text{C}$ Range)
Frequency Response:	1.5 Hz to 12 kHz $\pm 5\%$ (90cpm to 720kcpm) 1.0 Hz to 13 kHz $\pm 10\%$ (60cpm to 780kcpm) 0.8 Hz to 15 kHz $\pm 3\text{dB}$ (48cpm to 900kcpm)
Isolation:	Base Isolated
Measurement Range:	$\pm 80\text{ g}$
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 302 $^{\circ}\text{F}$ (-55 to 150 $^{\circ}\text{C}$ )
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)
Mating Connector:	3 Pin MS 5015 Connector
Mounting Thread:	1/4-28 UNF and M8x1.25 Mounting Stud Provided

## Hazardous Location Ratings

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

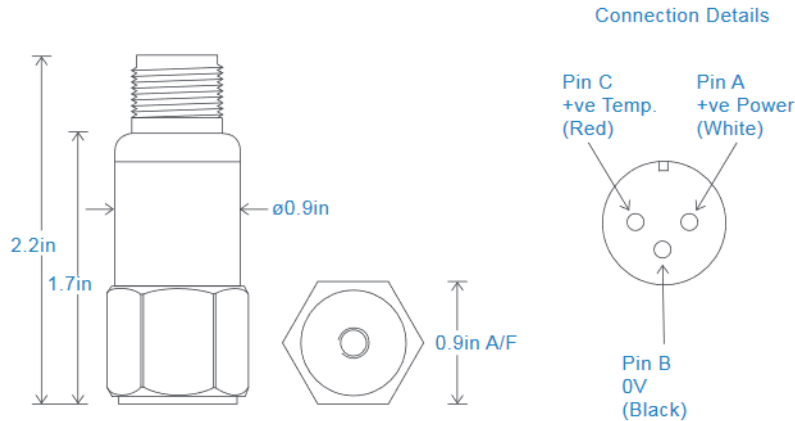
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C

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:

CMCP788T Premium Dual Output Accelerometer with Temperature, Top Entry 3 Pin MS Connector

## Recommended Cable Assemblies:

General Purpose TPE Jacketed Cable (Rated to 120°C)

CMCP603L Series 3 Socket MS Connector, Locking Collar, IP67

CMCP603LST Series 3 Socket MS Connector, Push On Seal Tight, IP68

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

CMCP603H Series 3 Socket MS Connector, Locking Collar, IP67

CMCP603HST Series 3 Socket MS Connector, Push On Seal Tight, IP68

## Similar Products



**M12 Connector**  
CMCP786T-M12



**Submersible**  
CMCP786T-IP



**Integral Armored Cable**  
CMCP786T-I