

# Vibration Monitoring and Machine Protection Systems

#### www.stiweb.com

# CMCP786T-IP **Dual Top Entry Accelerometer with Temperature** Submersible









#### **Features**

- Dual Output Accelerometer with Temperature
- 100 mV/g  $\pm$ 10% and 10 mV/°C
- 140°C Max Temperature Range
- ±80 g Dynamic Range
- Integral PUR Cable
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator

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- 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 (Acceleration): 100 mV/g ±10% Nominal 80 Hz at 22°C

10 mV/°C (0-100°C Range) Sensitivity (Temperature):

Frequency Response: 2.0 Hz to 10 kHz ±5% (120 cpm to 600 kcpm) 1.5 Hz to 12 kHz ±10% (90 cpm to 720 kcpm)

 $0.8 \text{ Hz to } 15 \text{ kHz } \pm 3 \text{dB}$ (48 cpm to 900 kcpm)

Isolation: Base Isolated

Measurement Range: ±80 g

Transverse Sensitivity: Less than 5%

#### **Electrical**

Supply Voltage: 18-30 VDC 0.5 to 8 mA Current Range: Bias Voltage: 10-12 VDC **Electrical Noise:** 0.1 mg Max. Settling Time: 1.5 Second Output Impedance: 200 Ohm Max. Case Isolation: >108 Ohm at 500 Volt

### **Environmental**

Operating Temperature Range: -67 to 284°F (-55 to 140°C)

IP68 Sealing:

Submersible: Up to 100 meter (10 bar)

Maximum Shock:

Approvals: CE and UKCA Approved

CSA/UL Class 1 Division 2, Groups B, C and D

# Mechanical

Case Material: Stainless Steel Sensing Element/Construction: PZT/Compression Mounting Torque: 5.9 ft-lbs (8 Nm)

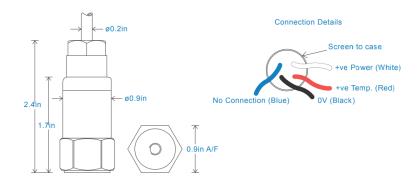
Weight: 4.9 Oz (139 gram), Sensor only Mating Connector: Flying Leads (White/Black/Red/Shield)

Mounting Thread: 1/4-28 UNF and M8x1.25 Mounting Studs Provided

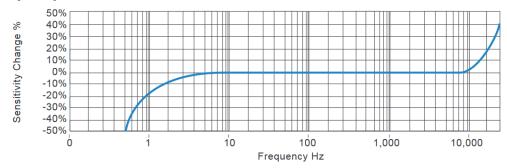
## **Hazardous Location Ratings**

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**



# **Frequency Response**



## **Ordering Information**

CMCP786T-IP Dual Top Entry Accelerometer with Temperature, 100 mV/g, Submersible, Cable Length

5 Meter (16 ft), 1/4-28 UNF and M8x1.25 Mounting Studs

CMCP786T-IPXX Dual Top Entry Accelerometer with Temperature, 100 mV/g, Submersible

(Specify Cable Length in Meters in Place of XX)

### **Alternative Sensitivity Ordering Information**

Part Number	Sensitivity	Measurement Range	<b>Base Resonance</b>
CMCP786T-IP-10	10 mV/g	±800 g	34 kHz
CMCP786T-IP-30	30 mV/g	±250 g	33 kHz
CMCP786T-IP-50	50 mV/g	±160 g	32 kHz
CMCP786T-IP-250	250 mV/g	±32 g	28 kHz
CMCP786T-IP-500	500 mV/g	±16 g	26 kHz

# **Similar Products**



M12 Connector CMCP786T-M12



Armored Braided Cable CMCP786T-I



MS Connector CMCP786T