

## Vibration Monitoring and Machine Protection Systems

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# CMCP785T Dual Output Side Entry Accelerometer with Temperature 3 Pin MS 5015







- Dual Output Accelerometer with Temperature
- 100 mV/g ±10% and 10 mV/°C
- 140°C Max Temperature Range
- ±80 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 or M8x1.25 Captive Mounting Bolt
- 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: 21 kHz (nominal)

Sensitivity (Acceleration):  $100 \text{ mV/g} \pm 10\% \text{ Nominal } 80 \text{ Hz at } 22^{\circ}\text{C}$ 

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

Frequency Response: 2.0 Hz to 10 kHz  $\pm$ 5% (120 cpm to 600 kcpm) 1.5 Hz to 12 kHz  $\pm$ 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
Current Range: 0.5 to 8 mA
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)

Sealing: IP68

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

Weight: 6.5 Oz (185 gram)
Mating Connector: 3 Pin MS 5015

Recommended Cable Assembly: CMCP603L or CMCP603H Series

Mounting Thread:

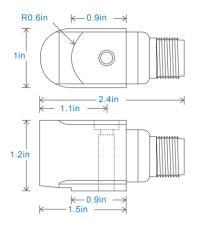
CMCP785A: 1/4"-28 UNF Captive Bolt Supplied with Sensor CMCP785A-M8: M8x1.25 Captive Bolt Supplied with Sensor

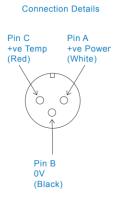
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## **Hazardous Location Ratings**

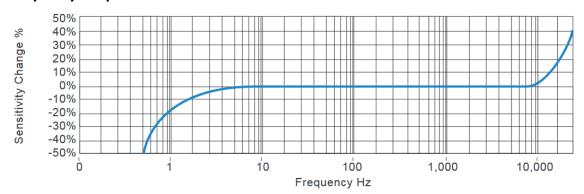
Class I, II, III, Division 1 and 2, Groups A-G, T4, -55°C to + 110°C IP65 Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C Zone 20, AEx, ia, IIIC, T130°C, IP65, Da, -55°C to + 110°C Class I, II, III, Division 1, 2, Groups A-G, T6, -55°C to + 110°C Zone 20, AEx, ia, IIIX, T80°C, IP65, DA, -55°C to + 110°C

#### **Dimensions**





## **Frequency Response**



## **Ordering Information**

CMCP785T Dual Side Entry Accelerometer with Temperature, 100 mV/g, 3 Pin MS 5015, ¼-28 UNF Mount CMCP785T-M8 Dual Side Entry Accelerometer with Temperature, 100 mV/g, 3 Pin MS 5015, M8x1.25 Mount

## **Alternative Sensitivity Ordering Information**

Part Number	Sensitivity	Measurement Range	Base Resonance
CMCP785T-10	10 mV/g	±800 g	27 kHz
CMCP785T-30	30 mV/g	±250 g	25 kHz
CMCP785T-50	50 mV/g	±160 g	23 kHz
CMCP785T-250	250 mV/g	±32 g	19 kHz
CMCP785T-500	500 mV/g	±16 g	17 kHz

## **Similar Products**



M12 Connector CMCP785T-M12



Submersible CMCP785T-IP



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