



**CMCP785A-I  
General Purpose Side Entry Accelerometer, Armored Cable**



**Features**

- General Purpose Side Entry Accelerometer
- 100 mV/g ±10%
- 140°C Max Temperature Range
- ±80 g Dynamic Range
- Integral Braided Armored Cable
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- ¼"-28 UNF or M8x1.25 Captive Mounting Bolt
- Sealed to IP65



**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:	100 mV/g ±10% Nominal 80 Hz at 22°C
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 Hz to 15 kHz ±3dB (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:	>10 <sup>8</sup> Ohm at 500 Volt

**Environmental**

Operating Temperature Range:	-67 to 284°F (-55 to 140°C)
Sealing:	IP65
Maximum Shock:	5000 g
Approvals:	CE and UKCA Approved CSA/UL Class 1 Division 2, Groups B, C and D

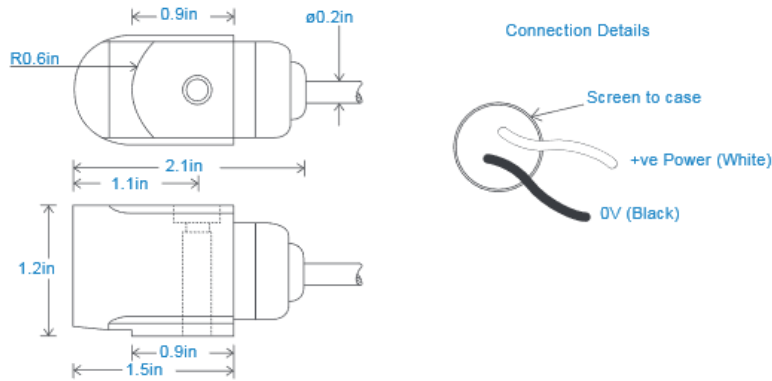
**Mechanical**

Case Material:	Stainless Steel
Sensing Element/Construction:	PZT/Compression
Mounting Torque:	5.9 ft-lbs (8 Nm)
Weight:	6.5 Oz (185 gram), Sensor only
Mating Connector:	Flying Leads (White/Black/Shield)
Mounting Thread:	
CMCP785A-I:	1/4"-28 UNF Captive Bolt Supplied with Sensor
CMCP785A-I-M8:	M8x1.25 Captive Bolt Supplied with Sensor

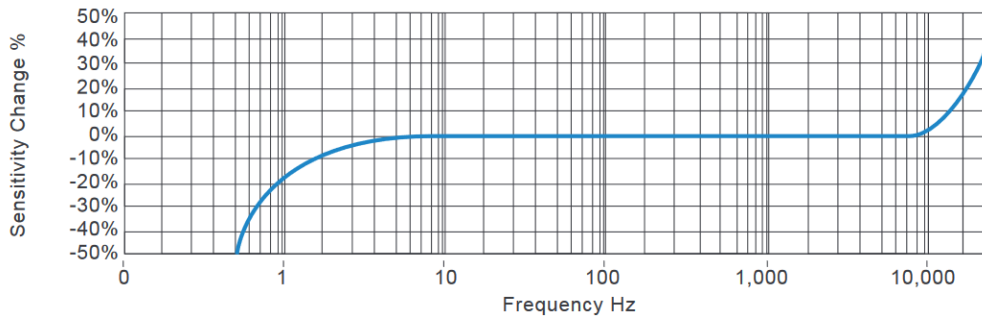
## Hazardous Location Ratings

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

CMCP785A-I General Purpose Side Entry Accelerometer, 100 mV/g, Armored Cable Length 5 Meter (16 ft), ¼-28 UNF Mount  
 CMCP785A-**IXX** General Purpose Side Entry Accelerometer, 100 mV/g, Armored Cable, ¼-28 UNF Mount  
 CMCP785A-**IXX**-M8 General Purpose Side Entry Accelerometer, 100 mV/g, Armored Cable, M8x1.25 Mount  
 (Specify Cable Length in Meters in Place of **XX**)

## Alternative Sensitivity Ordering Information

Part Number	Sensitivity	Measurement Range	Base Resonance
CMCP785A-IXX-10	10 mV/g	±800 g	27 kHz
CMCP785A-IXX-30	30 mV/g	±250 g	25 kHz
CMCP785A-IXX-50	50 mV/g	±160 g	23 kHz
CMCP785A-IXX-250	250 mV/g	±32 g	19 kHz
CMCP785A-IXX-500	500 mV/g	±16 g	17 kHz

## Similar Products



**M12 Connector**  
CMCP785A-M12



**Submersible**  
CMCP785A-IP



**MS Connector**  
CMCP785A