

# Vibration Monitoring and Machine Protection Systems

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## **CMCP422AT-IP Series**

Loop Powered 4-20 mA Acceleration Sensor, Top Exit, IP68, Submersible, Integral Cable



#### **Features**

- Loop Powered 4-20 mA Output
- · Acceleration RMS or Peak Detection
- Top Exit with PUR Integral Cable
- Interfaces Directly with Control Systems (PLC/DCS)
- Four Different Ranges Available
- 10 Hz to 5.0 kHz +/-5% Frequency Response (600 CPM to 300 kCPM)
- Submersible, -Sealed to IP68
- -25 to +120°C (-13 to 248°F) Temperature Rating
- Class I Division II Approved Standalone
- Class I Division I Approved with Barrier or Isolator

#### **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: 10 kHz Min.

Ranges: 1, 2, 5 or 10 g; to specify see Ordering Information below

Frequency Response: 10 Hz to 5.0 kHz  $\pm$  5% 600 CPM to 300 kCPM

Isolation: Base Isolated with Faraday Cage

Transverse Sensitivity: Less than 5%

#### **Electrical**

Output Current: 4-20mA DC Proportional to RMS or Peak Acceleration (g)

Supply Voltage: 15 to 30 VDC Settling Time: 2 Second

Output Impedance: Loop Resistance 600 Ohm Max @ 24 VDC

Case Isolation: >108 Ohm at 500 Volt

Ratings:  $U_i=28V; I_i = 115mA; P_i = 0.65W$ 

## **Environmental**

Operating Temperature Range:  $-13 \text{ to } +248 ^{\circ}\text{F} \text{ (-25 to } +120 ^{\circ}\text{C)}$ 

Sealing: IP68 Maximum Shock: 5000 g

Submersible: Up to 100 meter (10 bar)

### Mechanical

Case Material: Stainless Steel

Sensing Element: PZT/Compression Type
Mounting Torque: 5.9 ft. lbs (8 Nm)
Weight: 5.2 Oz (150 g)

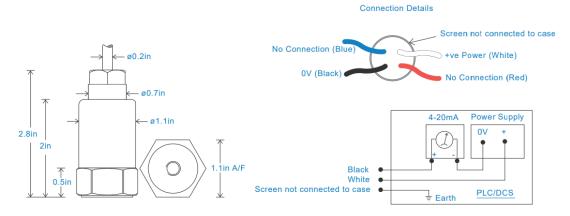
Mounting: 1/4-28 UNF Mounting Stud and 1/4-28 to M8x1.25 Adapter Stud (Supplied with Sensor)

Mating Connector: PUR (Polyurethane) Jacketed Cable

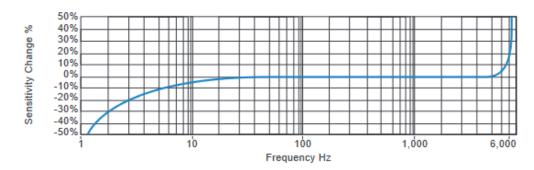
#### **Hazardous Location Ratings:**

Class I, II, III, Division 1, 2, Groups A-G, T6 -40°C to +60°C, IP65 Class 1, Zone 0, AEx, ia, IIC, T6, Ga, -40°C to +60°C Zone 20, AEx, ia IIIC, T80°C, IP65, Da, -40°C to +60°C

#### **Dimensions**



# **Typical Frequency Response**



### **Ordering Information**

CMCP422AT	-XX	-X	-XXX	Description
	-01			1 g Full Scale
	-02			2 g's Full Scale
	-05			5 g's Full Scale
	-10			10 g's Full Scale
		-R		RMS Detection
		-P		Peak Detection
			-M12	M12 Eurofast Connector
			-C	2 Pin MS 5015 Connector
			-I	Armored Braided Cable
			-IP	Integral PUR Submersible Cable, 5 m (16')

Specify desired Cable Length in Meter after 'IP' (for example IP20 for 20 meter)

#### **Similar Products**



CMCP422AT-XX-X-M12 M12 Eurofast Connector



CMCP422AT-XX-X-C 2 Pin MS 5015 Connector



CMCP422AT-XX-X-I Braided Integral Cable

Note: Due to STI's continuous process improvement, specifications are subject to change without notice.