

Vibration Monitoring and Machine Protection Systems

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CMCP422VT-D Series with Dynamic Output

4-20 mA Velocity Sensor, Top Exit, 3-Pin MS 5015 Connector



Features

- Loop Powered 4-20 mA Output
- · Velocity Output with RMS or Peak Detection
- 100 mV/g Dynamic Output
- Top Exit with 3-Pin MS 5015 or 4-Pin M12 Connector
- Interfaces Directly with Control Systems (PLC/DCS)
- Selectable Full-Scale Ranges
- 10 Hz to 1.0 kHz +/-5% Frequency Response (600 CPM to 60 kCPM)
- Sealed to IP68 (or IP67 with M12 Connector)
- -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: 5 kHz Min.

Analog Output: 4-20 mA, Between Pin 1 and 2 Dynamic Output: 100 mV/g, Between Pin 3 and 2

Frequency Response: 10 Hz to $1.0 \text{ kHz} \pm 5\%$ (600 CPM to 60 kCPM), ISO 10816

Isolation: Base Isolated Measurement Range: 50 g peak

Transverse Sensitivity: Less than 5% with Faraday Cage

Electrical

Output Current: 4-20 mA DC Proportional to RMS or Peak Velocity

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

Environmental

Operating Temperature Range: -13 to +248°F (-25 to +120°C)

Sealing: IP68 (IP67 with M12 Eurofast Connector)

Maximum Shock: 5000 g

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)

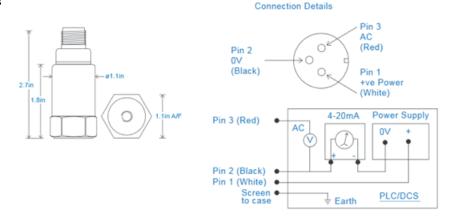
Mating Connector:

CMCP422VT-XXD-X-C: 3 Pin MIL 5015 MS Connector CMCP422VT-XXD-X-M12: 4 Pin M12 Eurofast Connector

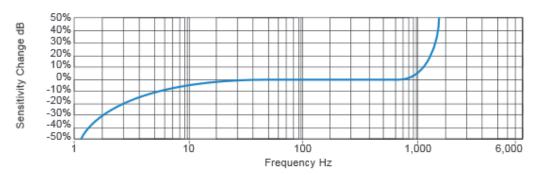
Hazardous Location Ratings

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

CMCP422VT	-XXD	-X	-XXX	Description
	-01 D			1.00 In/Sec Full Scale (25.4 mm/s)
	-02 D			2.00 In/Sec Full Scale (50.8 mm/s)
		-R		RMS Detection
		-P		Peak Detection
			-C	3 Pin MS 5015 Connector
			-M12	M12 Eurofast Connector
			-I	Integral Braided Armor Cable (5 meter)
			-IP	Integral PUR Cable (5 meter)

Example Part Number: CMCP422VT-01D-R-C Loop Powered 4-20 mA Velocity Sensor, Top Exit, Full Scale 1.0 In/Sec, Dynamic Output, RMS Detection, and 3 Pin MS 5015 Connector

Similar Products



CMCP422VT-XXD-X-M12 M12 Eurofast Connector



CMCP422VT-XXD-X-I Braided Integral Cable



CMCP422VT-XXD-X-IP PUR Integral Cable

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