

CMCP420VT-T Series

Dual Output 4-20mA Vibration and Temperature Sensor



Features:

- Two Loop Powered 4-20mA Outputs
- Velocity RMS Output
- Temperature Output
- 2 to 2,000 Hz (120 to 120k CPM) Frequency Response
- -32 to 212°F (0 to 100°C) Measuring Range
- Two Velocity Ranges Available
- Terminal Block Connection
- Class I Division II Groups B-D Approved Standalone
- RoHS Compliant

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

| | |
|-------------------------|--|
| Velocity Ranges: | -01 Model: 0-1.0 In/Sec RMS (0-25.4mm/Sec.) -02 Model: 0-2.0 In/Sec RMS (0-50.8mm/Sec.) |
| Temperature Range: | -32 to 212°F (0 to 100°C) |
| Frequency Response: | 2 Hz to 2,000 kHz (120 to 120k CPM) ± 5% ISO 10816 |
| Isolation: | Base Isolated |
| Measurement Range: | 50 g peak |
| Transverse Sensitivity: | Less than 5% |

Electrical

| | |
|-------------------|--|
| Output Current: | Two 4-20mA DC Outputs Proportional to RMS Velocity and Temperature |
| Supply Voltage: | 22 to 36 VDC |
| Settling Time: | 3 Seconds |
| Output Impedance: | Loop Resistance 600 Ohms Max @ 24VDC |
| Case Isolation: | >100 Ohms at 500 Volts |

Environmental

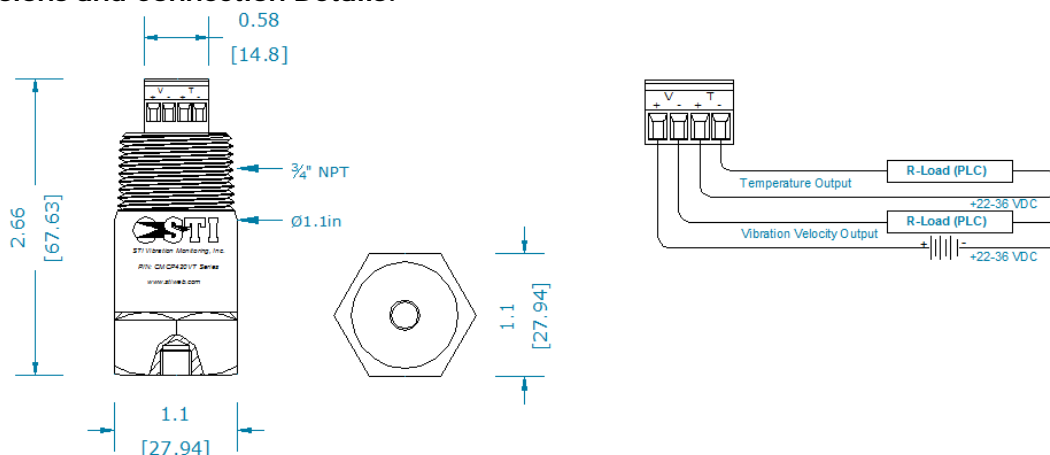
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|------------------------------|--|
| Operating Temperature Range: | -13 to 194°F (-25 to 90°C) |
| Sealing: | IP65 (IP67 with CMCP420BNC or CMCP420XPHD) |
| Maximum Shock: | 5000 g |

Mechanical

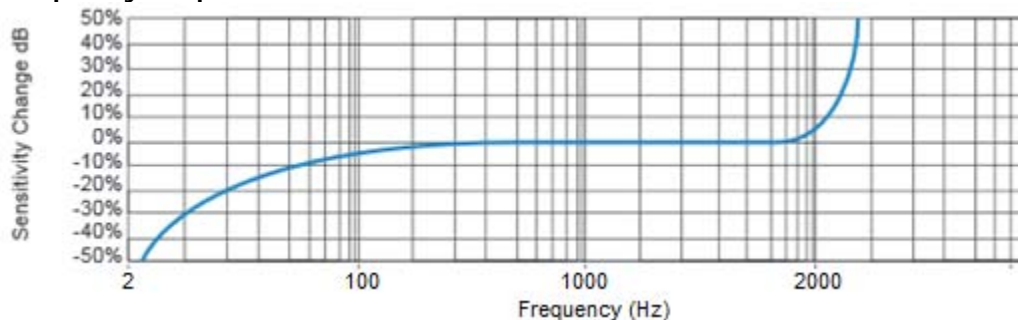
| | |
|-------------------|--|
| Case Material: | Stainless Steel |
| Sensing Element: | PZT/Compression Type |
| Mounting Torque: | 70 Lb.-In |
| Weight: | 8 Oz (226g) |
| Mounting: | 1/4"-28 UNF Mounting Stud (Supplied with Sensor) M8x1.25 Mounting Stud (Supplied with Sensor) Mounting Adapters Available (CMCP237 and CMCP238 Series) |
| Mating Connector: | 18-24AWG (0.81 – 0.32mm ²) Instrumentation Cable Twisted, Shielded Pair |

Approvals:
 Class 1 Division 2 Groups B-D
 UL1604, CSA C22.2 No. 213
 CE Approved
 RoHS Compliant

Dimensions and Connection Details:



Typical Frequency Response:



Ordering Information:

| CMCP420VT | -XX | -X | -XXX | Description |
|-----------|-----|----|------|-------------------------------------|
| | -T1 | | | 1.00 In/Sec Full Scale (25.4mm/Sec) |
| | -T2 | | | 2.00 In/Sec Full Scale (50.8mm/Sec) |



CMCP420VT Series
Vibration Velocity 4-20mA Sensor



CMCP422VT-XX-X-C
4-20mA Velocity Sensor with 2
Pin MS5015 Connector



CMCP422VT-XX-X-I
4-20mA Velocity Sensor with 5
Meter Integral Cable

CMCP420VT Accessories



CMCP420WF

Weatherproof Cable Fitting
0.18 to 0.22" Diameter Cables
Requires CMCP420EL

CMCP420EL

$\frac{3}{4}$ " to $\frac{3}{4}$ " NPT Elbow

CMCP420BNC

$\frac{3}{4}$ " Elbow with BNC Output for Buffered Signal (Data Collector Connection)

CMCP200-01

Sensor Mounting Pad

CMCP203-XX

NPT Mounting Thread Adapter (Adapts $\frac{1}{4}$ "-28 to NPT)

- 01: 1/2" NPT
- 02: 3/4" NPT
- 03: 3/8" NPT
- 04: 1/4" NPT

CMCP420LED-XX

LED Display, Mounts on Top of CMCP420VT Series

- 01: 1.00 In/Sec Full Scale
- 02: 2.00 In/Sec Full Scale
- 51: 25.4mm/Sec Full Scale
- 52: 50.8mm/Sec Full Scale

CMCP420XPHD-XX

Explosionproof Conduit Head for CMCP420VT

- 01: Epoxy Coated Aluminum
- 02: 316 Stainless Steel