CMCP420VT Series
Loop Powered 4-20mA Vibration Velocity Sensor

Features:
- Loop Powered 4-20mA Output
- Velocity RMS Output
- 2 to 2,000 Hz (120 to 120k CPM) Frequency Response
- Two Ranges Available
- Dynamic Signal output (Buffered Output)
- Terminal Block Connection
- Class I Division II Groups B-D Approved Standalone
- RoHS Compliant

Typical Applications:

Technical Performance
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.)

Frequency Response: 2 Hz to 2,000 Hz (120 to 120k CPM) ± 5%
ISO 10816

Isolation: Base Isolated
Measurement Range: 50 g peak
Transverse Sensitivity: Less than 5%
Dynamic Output: 100mV/g ± 5%

Electrical
Output Current: 4-20mA DC Proportional to RMS Velocity
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
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 – 0.32mm²) 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
-01  1.00 In/Sec Full Scale (25.4mm/Sec)
-02  2.00 In/Sec Full Scale (50.8mm/Sec)

CMCP420VT-T Series
Dual Output Vibration and Temperature 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**
¾” to ¾” NPT Elbow

**CMCP420BNC**
¾” Elbow with BNC Output for Buffered Signal (Data Collector Connection)

**CMCP200-01**
Sensor Mounting Pad

**CMCP203-XX**
NPT Mounting Thread Adapter (Adapts ¼”-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