

## CMCP420VT Series Loop Powered Transmitters

### Features

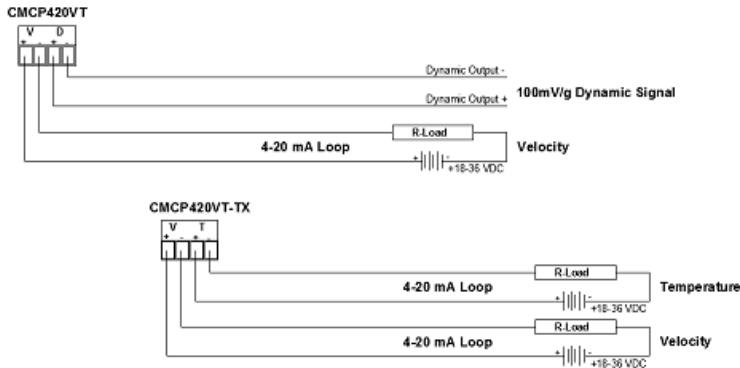
- Solid State Reliability
- Integral Sensor
- 4-20 mA Output
- Dual Parameter Vibration and Temperature (CMCP420VT-T Model)
- Class 1, Div 2, Group B-D Approved
- CE Approved
- RoHS Compliant
- Dynamic Signal Output (CMCP420VT Model)

### Description

The CMCP420VT Series Sensors are solid state, loop powered sensors which are available with a Vibration Velocity output (VT) or Vibration Velocity and Temperature outputs (VT-T). Both versions provide 4-20mA outputs which are proportional to the overall vibration and temperature level. Both Loop Powered Sensors continuously monitor machinery health and transmit directly into a PLC or DCS for Trending, Alarm and Machine Shutdown. The CMCP420VT Series are rated for installation in Class I, Division II, Groups B, C and D areas. The sensor may also be installed in Class I Division I areas when used with the CMCP420-XPHD Explosion Proof Conduit Fitting.

### Simple Installation

Simply mount one of the CMCP420VT Series Sensors into a tapped hole in the bearing housing or machine case, connect two wires into a 4-20 mA loop, and you are ready to interface with a PLC or DCS. Electrical conduit may be connected directly to the top 3/4" NPT fitting. The CMCP420VT has a 1/4"-28 UNF tapped hole and has a variety of adaptors available.



### Ordering Information:

#### Vibration Velocity / Dynamic Output Only:

CMCP420VT -01 0-1 in/sec (0-25.4 mm/sec) RMS  
-02 0-2 in/sec (0-50.8 mm/sec) RMS

#### Vibration Velocity and Temperature Output:

CMCP420VT-T -01 0-1.0 in/sec and 0-100 Degrees  
-02 0-2.0 in/sec and 0-100 Degrees



Hazardous Location Safety  
E112798  
Class 1, Div 2, Group B, C, D  
24 VDC, 23 mA Max



CMCP420VT Shown with  
CMCP420LED Display

### Specifications:

#### Electrical:

Power (Two wire loop power): + 22 to + 36 Vdc  
Maximum Load: 600 Ohms resistive  
Grounding: Case Isolated

#### Environmental:

Operating Temperature: -20° C to +80° C  
Sealed: Epoxy Encapsulated  
Enclosure: SS, NEMA 4, 4X, 12  
Mounting: Stud Mounted 1/4x28 UNF  
Weight: 8 oz. (without display)

#### Classifications:

UL 1604  
CSA C22.2 No. 213  
Class 1, Division 2, Group B-D  
CE Approved, RoHS Compliant

#### Dynamic:

CMCP420VT Vibration Output  
Vibration: 4-20mA proportional to full scale velocity  
Frequency Response: 2 to 2,000 Hz  
Accuracy: 5%  
Dynamic Output: 100mV/g

#### CMCP420VT-T Vibration and Temperature Output

Vibration: 4-20mA proportional to full scale velocity  
Frequency Response: 2 to 2,000 Hz  
Temperature: 0-100 Degrees Celsius

## CMCP420VT Series Transmitter Accessories

### CMCP420-LED/LCD - Retrofit Display

Displays actual vibration levels in velocity on an easy to read bright red LED or standard black LCD display. Includes a BNC connector that provides access to the raw acceleration signal. This is useful for connection to portable data collectors



### CMCP420-BNC - BNC Adapter Retrofit

90 Degree 3/4" NPT conduit elbow with a BNC connector to access the raw acceleration signal. This is useful for connection to portable data collectors



### CMCP420-EL - 90 Degree 3/4" by 3/4" NPT Elbow

Useful for connecting CMCP420VT to hard or flexible conduit. When used with the CMCP420-WF, provides a simple weatherproof exit for the instrument wire.



### CMCP420-WF - 3/4" NPT Weatherproof Cable Fitting

When used with the CMCP420-EL, provides a simple weatherproof exit for the instrument wire.



### CMCP420-XPHD—Class 1 Division 1 Conduit Head

Allows installation of the CMCP420VT Series in Class I Division I Environments.



#### Ordering Information:

<b>CMCP420</b>	<b>-XXXX</b>	<b>Description:</b>
	-EL	90 Deg. Elbow
	-WF	Weatherproof Cable Fitting
	-BNC	BNC Adapter
	-XPHD	Class I Division I Conduit Head
<b>CMCP420</b>	<b>-XXX -XX</b>	<b>Description:</b>
	-LED	-01 0-1.00 In/Sec RMS
	-LCD	-02 0-2.00 In/Sec RMS
		-03 0-25.4 mm/Sec RMS
		-04 0-50.8 mm/Sec RMS
		-05 0-100 Deg. C (CMCP420VT-T Series Only)
		-06 -32 to 212 Deg. F (CMCP420VT-T Series Only)