



STI Vibration Monitoring Inc.

Vibration Monitoring and Machine Protection Systems

1010 East Main Street, League City, TX 77573 Phone: 281.334.0766 Fax: 281.334.4255
www.stiweb.com / www.stiwebstore.com

Condition Monitoring Custom Products

CMCP420VT Vibration Transmitter

Features

- **Solid State Reliability**
- **Integral Sensor**
- **4-20 mA Output**
- **Dynamic Signal Output**
- **UL and CSA Approved Class 1, Div 2, Group B-D**
- **CE Approved**
- **RoHS Compliant**

Description

The CMCP420VT is a solid state, loop powered vibration transmitter. It provides a 4-20 mA output that is proportional to overall vibration in terms of velocity. The CMCP420VT continuously monitors machinery health and transmits directly into a PLC or DCS for trending, alarm and machine shutdown. In addition, the CMCP420VT provides access to the dynamic transducer output. The buffered output is available for temporary connection of portable analyzers for detailed machine fault analysis.

Simple Installation

Simply mount the CMCP420VT 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.

If the LED display is ordered, it is shipped loose, and is a simple installation.

To Order Online Please Visit
www.stiwebstore.com



CMCP420VT



CMCP420 & CMCP420-LED



Specifications:

Dynamic

Output: 4-20 mA proportional to full scale Velocity
Frequency Response: 2-2,000 Hz
Buffered Output: Acceleration, 100 mV/g
Accuracy: ±5%

Electrical

Power (Two wire loop power): + 22 to + 36 Vdc
Recommended Load: $(V_s - 14 - V_d) / .02$
RL= Load Resistance
Vs= Dc Supply Voltage
Vd= Display Voltage: 5.0 Vdc for LED. 2.0 Vdc for LCD, 0.0 for no display

The Recommended RL for most installations if: 250 Ohms or 100 Ohms, @ Vs= 24 VDC

Grounding: Case Isolated

Environmental

Operating Temperature: -20° C to +80° C
Sealed: Epoxy Encapsulated

CMCP420VT Vibration Transmitter Accessories

CMCP420-LED - LED Display Retrofit

Displays actual vibration levels in velocity on an easy to read LED 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.



Ordering Information:

Part No.	-XX	Description
CMCP420VT	01	0-1 in/sec (0-25.4 mm/sec) RMS
	02	0-2 in/sec (0-50.8 mm/sec) RMS

Part No.		Description
CMCP420-LED	-XX	CMCP420VT LED Display Retrofit
	-01	0-1 in/sec, RMS
	-02	0-2 in/sec, RMS
	-03	0-25.4 mm/sec, RMS
	-04	0-50.8 mm/sec, RMS

CMCP420-BNC		CMCP420VT BNC Adapter Retrofit
-------------	--	--------------------------------

CMCP420-EL		90 Degree 3/4" x 3/4" NPT Elbow
------------	--	---------------------------------

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



CMCP420VT with 90 Degree Elbow and Weatherproof Cable Fitting

To Order Online Please Visit
www.stiwebstore.com