



OPERATION MANUAL

CMCP420VT Series Loop Powered Transmitters

*CMCP420VT-01
CMCP420VT-02
CMCP420VT-T1
CMCP420VT-T2*

REV. J 8-15-2013



IMPORTANT!

After installation of this unit, no connections are to be made or broken while any connection on the unit is powered up.

Après l'installation de cette unité, pas de connexions doivent être faites ou cassé pendant toute connexion de l'appareil est sous tension.

STI Vibration Monitoring, Inc.
1010 East Main Street
League City, Texas 77573 USA

Model Description:

The **CMCP420VT Series Transmitters** are solid state loop powered Velocity and Velocity/Temperature Sensors. Each parameter provides a 4-20mA output that is proportional to overall vibration and/or temperature in terms of velocity and degrees Celsius or Fahrenheit. The CMCP420VT Series continuously monitors machinery health and transmits directly into a PLC or DCS for trending, alarm and machine shutdown. The dynamic output terminals on the CMCP420VT provides the user with a direct connection to the internal accelerometer for connecting data collectors. The CMCP420VT-T is not equipped with a dynamic output.

Ranges:

Vibration and Dynamic Output (VT Series)

CMCP420VT-01 0-1.0 In/Sec RMS (0-25.4mm/Sec)

CMCP420VT-02 0-2.0 In/Sec RMS (0-50.8mm/Sec)

Vibration and Temperature Output (VT-T Series)

CMCP420VT-T1 0-1.0 In/Sec RMS (0-25.4mm) and 0-100°C (32-212°)

CMCP420VT-T2 0-2.0 In/Sec RMS (0-50.8mm) and 0-100°C (32-212°)

Power Requirements

+22 to +36 VDC Per 4-20mA Loop

R-Load

RL max = 600 Ohms

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

Loop Connections:

Vibration	V+ V-	CMCP420VT and CMCP420VT-T Series, 4-20mA Loop Output
Temperature	T+ T-	CMCP420VT-T Series Only, 4-20mA Loop Output
Dynamic	D+ D-	CMCP420VT Series Only, 100mV/g Output

Case:

316 Stainless Steel

Mounting Options:

Supplied with ¼"-28 x ½" mounting stud

Dimensions:

Case: 2 5/8" H x 1 1/16" W

3/4" NPT Top Fitting for Conduit

Weight:

8 oz.

Environmental:

Operating Temperature: -20°C to +80°C

Sealed: Epoxy Encapsulated

Certifications:

UL and CSA Approved Class I Division II, Groups B, C and D

CE Approved

RoHS Compliant

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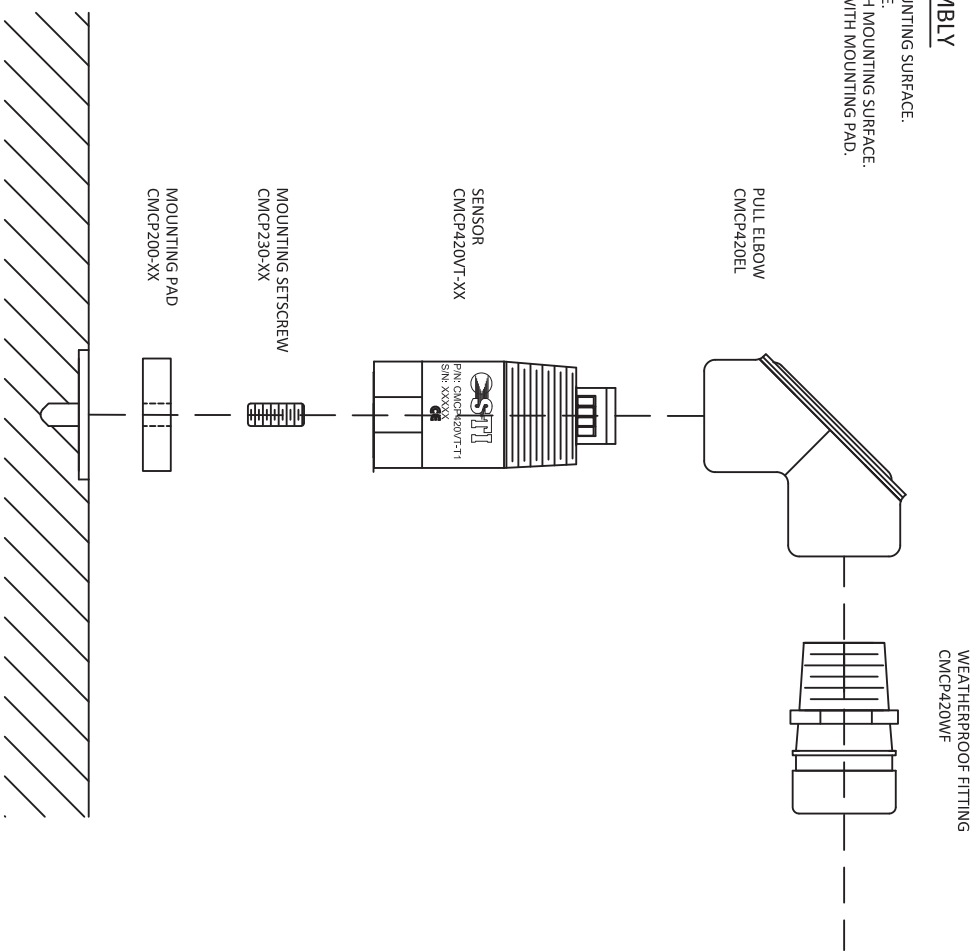
CE Approved

RoHS Compliant

STI Vibration Monitoring, Inc.
1010 East Main Street
League City, Texas 77573 USA

CMCP420VT SERIES INSTALLATION AND ASSEMBLY

1. REMOVE ANY DEBRIS FROM THREADED HOLE DRILLED INTO MOUNTING SURFACE.
2. INSTALL SENSOR SETSCREW (CMCP230-XX) INTO THREADED HOLE.
3. THREAD MOUNTING PAD ONTO SETSCREW UNTIL CONTACT WITH MOUNTING SURFACE.
4. THREAD CMCP420VT ONTO SETSCREW UNTIL IT IS IN CONTACT WITH MOUNTING PAD.
MAX TORQUE 30 INCH-POUNDS
5. INSTALL CMCP420EL ONTO SENSOR.
6. USE WRENCH TO HOLD CMCP420VT WHILE TIGHTENING ELBOW.
7. IF USED, INSTALL THE CMCP420WF FITTING ON THE ELBOW.
FLEXIBLE CONDUIT CAN BE USED IN PLACE OF THE CMCP420EL.
8. REMOVE ELBOW COVER AND MAKE TERMINAL CONNECTIONS.



Note:
1. OPTIONAL INSTALLATION TOOL KIT - CMCP20-01

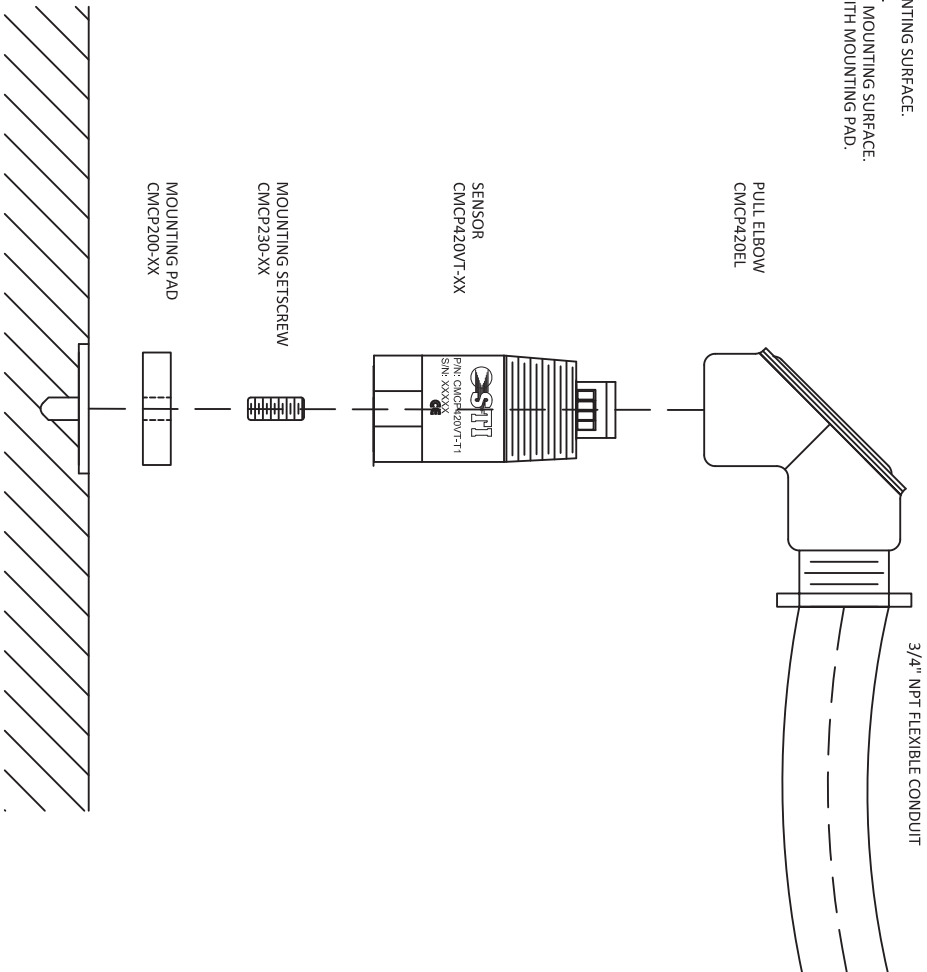
REV.	DATE	DRAWN	DESCRIPTION
1	11/19/09		ORIGINAL DRAWING

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CUSTOMER LOCATION	ORDER NO.	SR. NO.	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES.	TOLERANCES	DECIMALS .XX ± 0.01	FRACTIONS 1/64 ± 0.005	ANGLES 1/10	DATE 11/19/09	ORDER NO. 11/19/09	DATE 11/19/09	SCALE: NONE	SHEET 1 OF 1
STI			STI			STI			STI			
Sales Technology Inc. League City, Texas										CMCP420VT SERIES ASSEMBLY		REV. A
VTINSTALL001										SCALE: NONE		REV. A

CMCP420VT SERIES INSTALLATION AND ASSEMBLY

1. REMOVE ANY DEBRIS FROM THREADED HOLE DRILLED INTO MOUNTING SURFACE.
2. INSTALL SENSOR SETSCREW (CMCP230-XX) INTO THREADED HOLE.
3. THREAD MOUNTING PAD ONTO SETSCREW UNTIL CONTACT WITH MOUNTING SURFACE.
4. THREAD CMCP420VT ONTO SETSCREW UNTIL IT IS IN CONTACT WITH MOUNTING PAD.
MAX TORQUE 30 INCH-POUNDS
5. INSTALL CMCP420EL ONTO SENSOR.
6. USE WRENCH TO HOLD CMCP420VT WHILE TIGHTENING ELBOW.
7. CONNECT RIGID OR FLEXIBLE CONDUIT TO CMCP420EL.
8. REMOVE ELBOW COVER AND MAKE TERMINAL CONNECTIONS.



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CUSTOMER	
LOCATION	
ORDER NO.	
SR. NO.	
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE INCHES.	
FRACTIONS: XX ± 1/64	ANGLES: ± 1.0
DECIMALS: .XX ± 0.01	
.XXX ± 0.005	
.000X ± 0.0005	

		DATE	11/19/09
		ORDER NO.	11/19/09
DRAWN	MCH	DATE	11/19/09
CHKD	MCH	DATE	11/19/09
APPD			

Sales Technology Inc. League City, Texas		CMCP420VT SERIES ASSEMBLY VTINSTALL003	SHEET 1 OF 1
SCALE: NONE			



Note:
 1. OPTIONAL INSTALLATION TOOL KIT - CMCP201

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