

CM-TV Velocity Output Transducer

4-20mA Velocity Output - Side Exit

Features

Low cost on-line means of monitoring with the capability of interfacing direct into PLC, BMS or any 4-20mA input module. Proven use in vibration monitoring for offline applications using commercially available data collectors.

Protecting

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.



Technical Performance		Mechanical Performance	
Measurement Range (Vibration):	See: "How To Order" Table	Case Material:	304 Stainless Steel
Frequency Response:	See: "How To Order" Table	Sensing Element/Construction:	Ceramic Shear
Broadband Resolution:	0.005 IPS Peak	Mounting Torque (Stud):	3 to 4 ft-lb (4.1 to 5.4 N-m)
Non--Linearity:	± 1%	Mounting Torque (hex nut):	2 to 3 ft-lb (2.7 to 4.1 N-m)
		Weight:	3.8 oz (108 gm)
		Mounting threads²:	See: "How To Order" Table
Electrical		Environmental	
Excitation Voltage:	12 to 30 VDC	Temperature Range:	-40°F to 185°F (-40 to 85°C)
Load Resistance:	50 (Vs-12) Ω	Sealing:	Welded Hermetic
Settling Time:	<15 sec		
Electrical Isolation (Case):	>10 ⁸ Ω		
Electrical Isolation:	Case		

	Wiring	Accel	Accel	Accel	Temp	Temp
1. Current will fluctuate at frequencies below 5 Hz			Gnd	Analog		Gnd
2. Broadband Resolution 0.01 IPS Peak for 0-2.0 IPS RMS & Peak	2 Pin Mil-C-5015	Pin A	Pin B	N/A	N/A	N/A
3. Other mounting options available	3 Pin Mil-C-5015	Pin A	Pin B	Pin C	N/A	N/A
4. Calibration Certificate NIST-Traceable	4 Pin Bayonet	Pin A	Pin B	N/A	Pin C	Pin C
	Integral Cable	Red	Black	N/A	White	Green



Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)

How To Order

Product Prefix		Product Series		Code	Model	Code	Stud Mounting Threads	Code	Cable Length (10 ft Increments)
CM	Case Mounted	T	Vibration Transmitter	51	Side Exit	A	1/4-28UNF Male	010	10 ft.
						B	M6 x 1 mm Male	020	20 ft.
								030	30 ft.
								XXX	Length Specified in ft ≥40 ft (12.2 mts)

Code	Output	Code	Velocity Range	Frequency Range (±10 %)	Code	Cable/Connector	Code	Options
VV ^[1]	Velocity	05R	0-0.5 IPS RMS	180 CPM to 60,000 CPM (3 Hz to 1KHz)	52	2 Pin MIL-C-5015		(Blank)=No Options
VR ^[2]	Velocity & Raw Vib.	10R	0-1.0 IPS RMS	180 CPM to 60,000 CPM (3 Hz to 1KHz)	53	3 Pin MIL-C-5015	/EX	Intrinsically Safe
VT ^[3]	Velocity & Temp.	20R	0-2.0 IPS RMS	180 CPM to 60,000 CPM (3 Hz to 1KHz)	54	4 Pin Bayonet	/HT	High Temperature 4 to 257 °F (-40 to 125 °C)
VT Option Version Temp. Output Range: -40 to 257 °F (-40 to 125 °C)		05P	0-0.5 IPS Peak	180 CPM to 60,000 CPM (3 Hz to 1KHz)	01	Polyurethane-Jacketed Cable		
		10P	0-1.0 IPS Peak	180 CPM to 60,000 CPM (3 Hz to 1KHz)	02	Polyurethane-Jacketed w/ Armor Cable		
		20P	0-2.0 IPS Peak	180 CPM to 60,000 CPM (3 Hz to 1KHz)				

Note:
 [1] Connector 52 : 2 Pin MIL-C-5015.
 [2] Connector 53 : 3 Pin MIL-C-5015.
 [3] Connector 54 : 4 Pin Bayonet.



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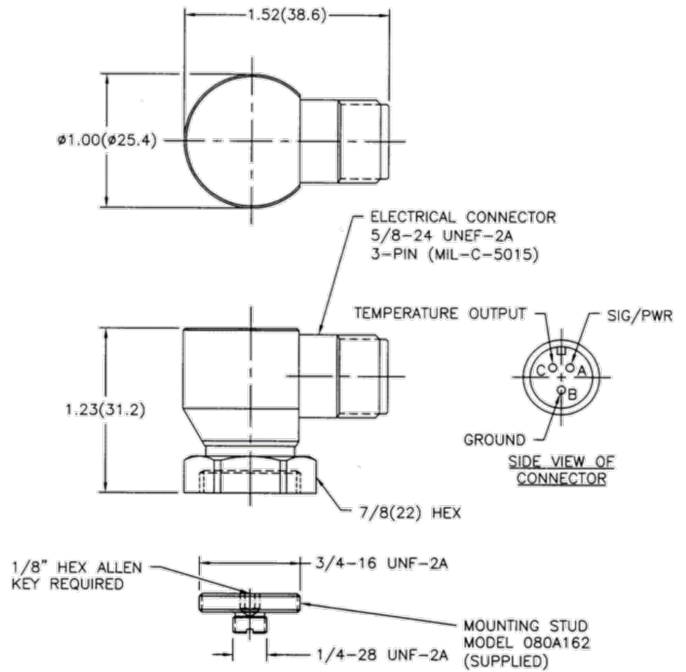
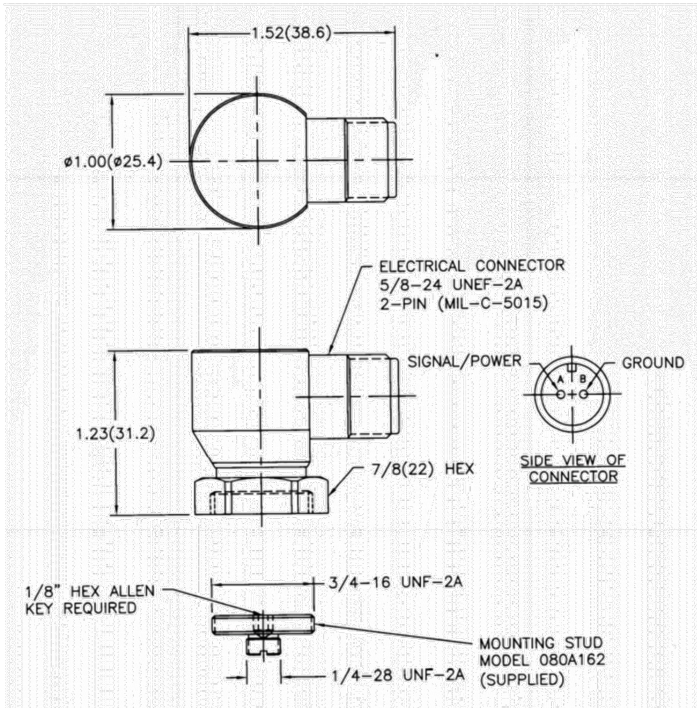
4-20mA Velocity Output - Side Exit With Connector and Swiveling Base



OUTLINE DRAWING MODEL CM-T51 VELOCITY OUTPUT TRANSDUCER

TOP VIEW OF CONNECTOR
2-PIN (MIL-C-5015)

TOP VIEW OF CONNECTOR
3-PIN (MIL-C-5015)



Option: EX , Hazardous Area Approval

DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4

EEx ia IIC T4, -40°C ≤ T_a ≤ 80°C, II 1 G

EEx nL IIC T4, -40°C ≤ T_a ≤ 80°C, II 3 G

DIV I, CL I, II, III, GRPS A-G, Exia, AExia, IIC T4

Contact factory for specific approvals.



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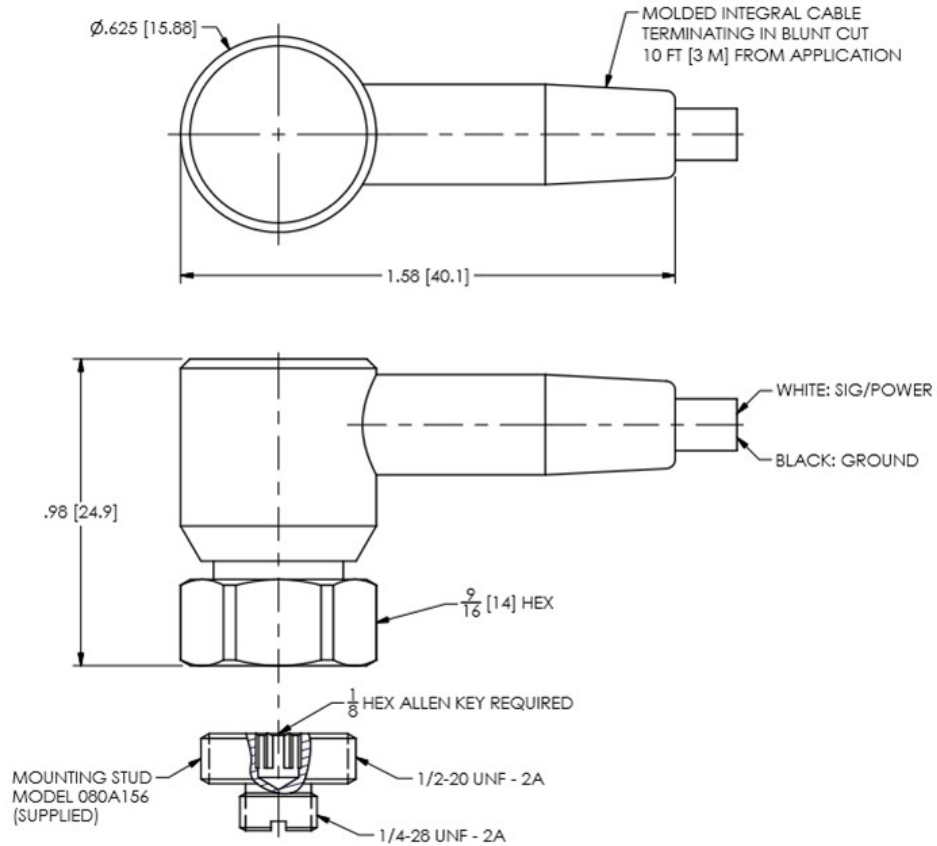


CM-TV Velocity Output Transducer

4-20mA Velocity Output - Side Exit With Integral Polyurethane Cable and Swiveling Base



OUTLINE DRAWING MODEL CM-T51 VELOCITY OUTPUT TRANSDUCER



Option: EX , Hazardous Area Approval

CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

EEx ia IIC T4, $-40^{\circ}\text{C} \leq \text{Ta} \leq 121^{\circ}\text{C}$, II 1 G

CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I

Ex ia IIC T4, AExia IIC, T4

EEx nL IIC T4, $-40^{\circ}\text{C} \leq \text{Ta} \leq 121^{\circ}\text{C}$, II 3 G

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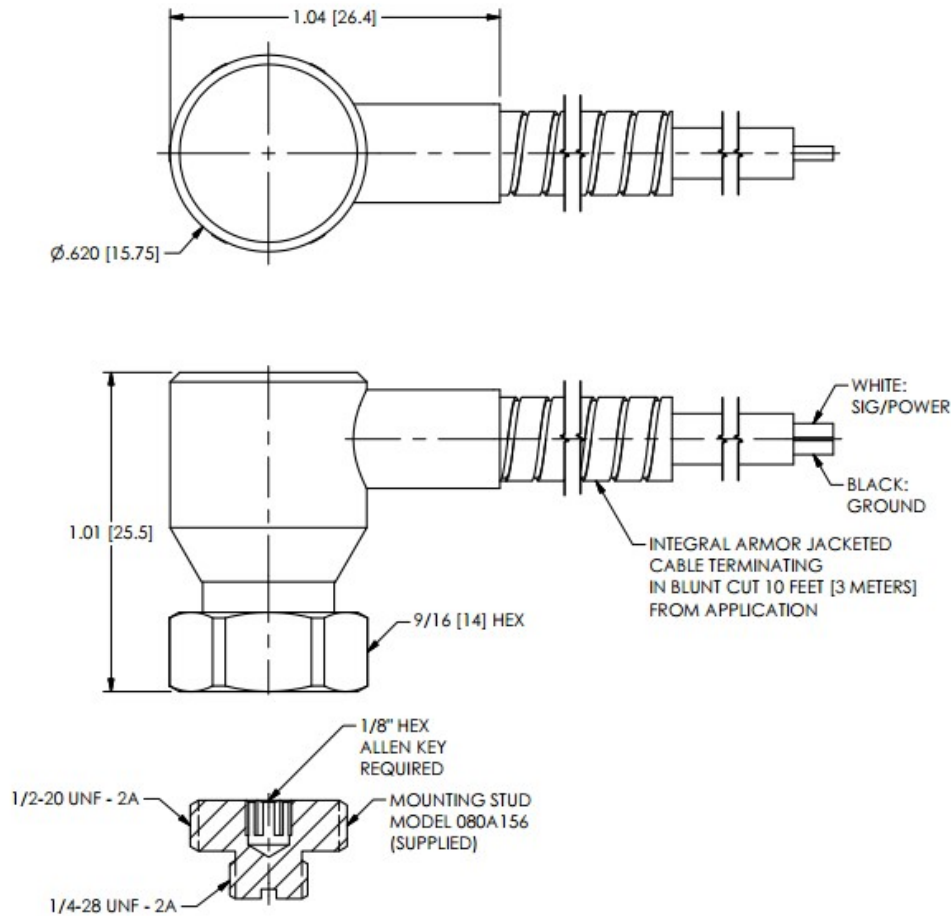


CM-TV Velocity Output Transducer

4-20mA Velocity Output - Side Exit With Integral Armored Cable and Swiveling Base



OUTLINE DRAWING MODEL CM-T51 VELOCITY OUTPUT TRANSDUCER



Option: EX , Hazardous Area Approval

CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

EEx ia IIC T4, $-40^{\circ}\text{C} \leq \text{Ta} \leq 121^{\circ}\text{C}$, II 1 G

CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I

Ex ia IIC T4, AExia IIC, T4

EEx nL IIC T4, $-40^{\circ}\text{C} \leq \text{Ta} \leq 121^{\circ}\text{C}$, II 3 G

Contact factory for specific approvals.



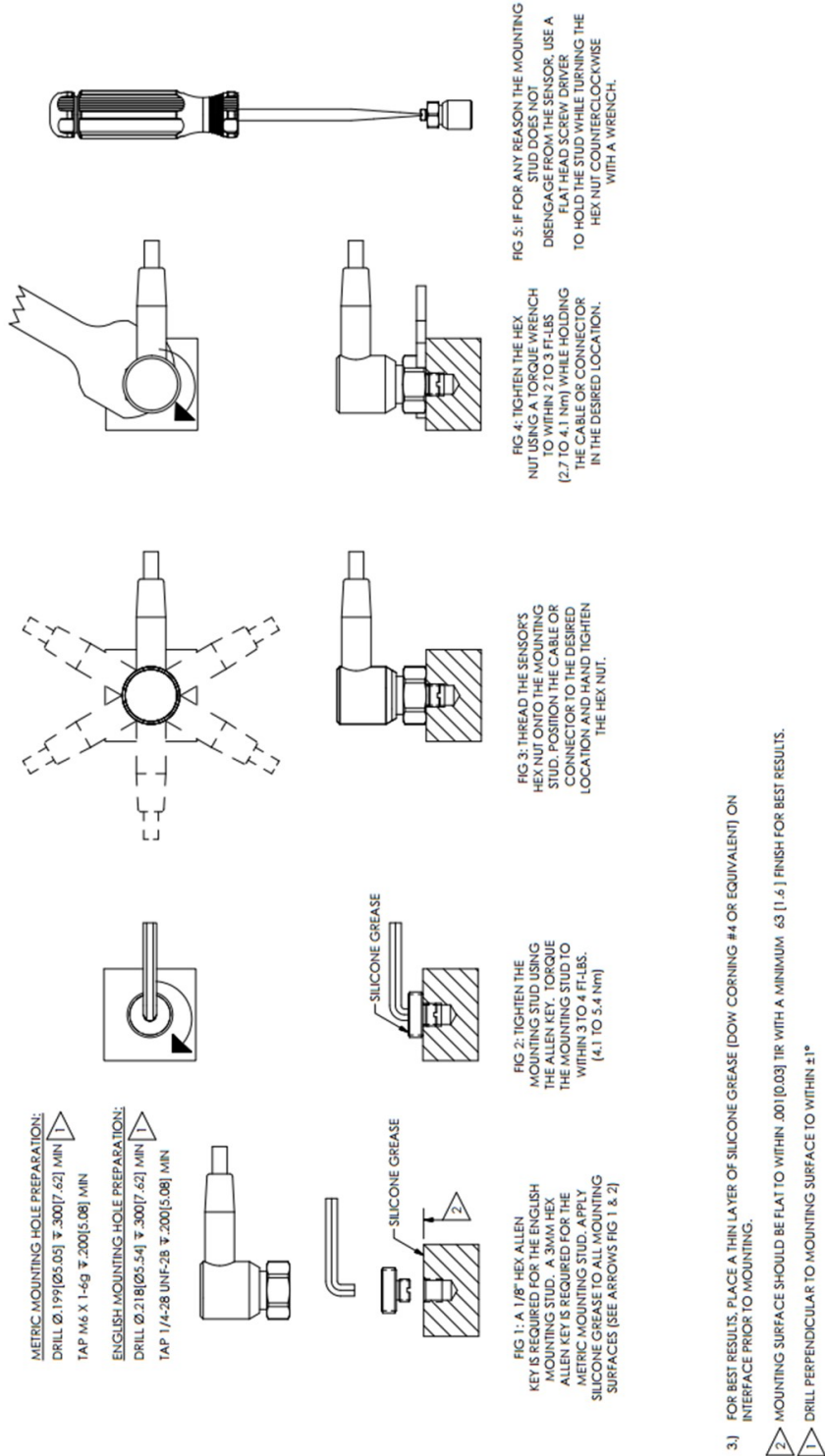
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