

# CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear IEPE Side Exit

### Features

Our line of low cost accelerometers with AC voltage output is designed for use with all types of data collectors, online analysis systems and TSI.

### 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	
<b>Mounted Base Resonance:</b>	1500 Kcpm (25 KHz)	<b>Case Material:</b>	304 Stainless Steel
<b>Measurement Range</b>	See: "How To Order" Table ±10%	<b>Sensing Element/Construction:</b>	Ceramic Shear
<b>Frequency Range (±3 dB) :</b>	See: "How To Order" Table	<b>Mounting Torque:</b>	2 to 5 ft-lb (2.7 to 6.8 Nm)
<b>Transverse Sensitivity:</b>	≤7%	<b>Weight:</b>	2.6 oz (74 gm)
<b>Non-Linearity:</b>	± 1%	<b>Mounting Threads:</b>	See: "How To Order" Table
<b>Broadband Resolution (1 to 10 kHz):</b>	150 µg (1472 µm/sec <sup>2</sup> )		
Electrical		Environmental	
<b>Excitation Voltage:</b>	18 to 28 VDC	<b>Overload Limit (Shock)</b>	5000 g pk (49050 m/s <sup>2</sup> pk)
<b>Constant Current Excitation</b>	2 to 20 mA	<b>Temperature Range</b>	-65 to +250 °F (-54 to +121 °C)
<b>Settling Time (within 1% of bias)</b>	≤2.0 sec	<b>Temperature Response</b>	See Graph %/°F
<b>Electrical Isolation (Case):</b>	>10 <sup>8</sup> Ohm	<b>Enclosure Rating</b>	IP68
<b>Spectral Noise (10 Hz) :</b>	9.0 µg/√Hz (88.3 (µm/sec <sup>2</sup> )/√Hz)		

Wiring	Accel	Accel & Gnd	Temp	Temp & Gnd
2 Pin Mil-C-5015	Pin A	Pin B	N/A	N/A
3 Pin Mil-C-5015	Pin A	Pin B	Pin C	N/A
4 Pin M12	Pin A	Pin B	N/A	N/A
Integral Cable (AA)	Red	Bue	N/A	N/A
Integral Cable (AT)	Red	Black	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	G	General Purpose	11	Side Exit	A	1/4-28UNF Male	010	10 ft. (3,05 mts.)
						B	M6 x 1 mm Male	020	20 ft. (6,10 mts.)
								030	30 ft. (9,14 mts.)
								XXX	Length Specified in ft. ≥40 ft. (12.2 Mts)

Code	Output	Code	Sensitivity	Frequency Range (±3dB)	Range	Code	Cable/Connectors	Code	Options
AA [1][3]	Acceleration	010	10 mV/g 1.02 mV/(m/s <sup>2</sup> )	30 to 480Kcpm (0.5 Hz to 8 KHz)	±500 g (±4,905 m/s <sup>2</sup> )	52	2 Pin MIL-C-5015		(Blank)=No Options
AT [2]	Acceleration & Temp.	050	50 mV/g 5.1 mV/(m/s <sup>2</sup> )	30 to 480Kcpm (0.5 Hz to 8 KHz)	±100 g (±981 m/s <sup>2</sup> )	53	3 Pin MIL-C-5015	/EX	Intrinsically Safe
		100	100 mV/g 10.2 mV/(m/s <sup>2</sup> )	30 to 480Kcpm (0.5 Hz to 8 KHz)	±50 (±490 m/s <sup>2</sup> )	64	4 Pin M12	/HT	High Temperature (325° F/ 162°C)
		500	500 mV/g 51.0 mV/(m/s <sup>2</sup> )	30 to 180 Kcpm (0.5 Hz to 3 KHz)	±10 g (±98 m/s <sup>2</sup> )	01	Polyurethane-Jacketed Cable	/EH	Intrinsically Safe & High Temp
						02	Polyurethane-Jacketed w/ Armor Cable		

**AT Option Version**  
**Temp. Output Range:**  
 +36 to +250 °F (+2 to +121 °C)  
**Temp. Scale Factor:**  
 5.56 mV/°F + 32 (+10 mV/°C)

**Note:**  
 [1] Connector 52 : 2 Pin MIL-C-5015.  
 [2] Connector 53 : 3 Pin MIL-C-5015.  
 [3] Connector 64 : 4 Pin M12 Connector.



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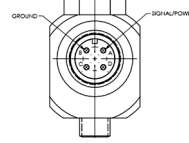
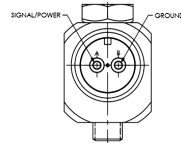
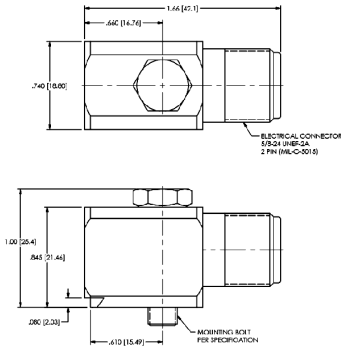
# CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear IEPE Top Exit With Connector

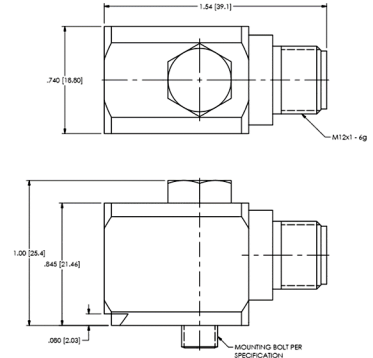


## OUTLINE DRAWING MODEL CM-G11 ACCELEROMETER

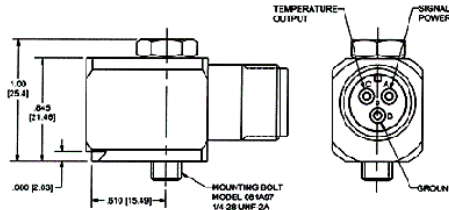
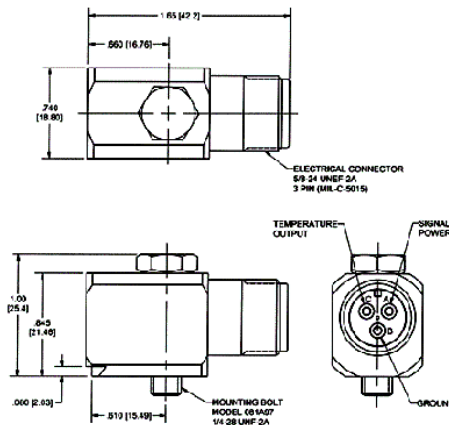
**TOP VIEW OF CONNECTOR  
2-PIN (MIL-C-5015)**



**TOP VIEW OF CONNECTOR  
4 PIN— (M12)**



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



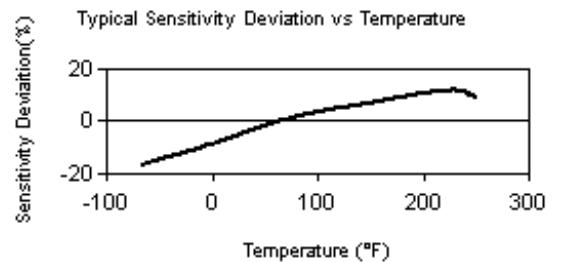
Option: EX , Hazardous Area Approval

Temperature Response Graph % / °F

All specifications are at room temperature unless otherwise specified.

- Ex ia IIC T4, AExia IIC, T4
- EEx nL IIC T4, -40°C<=Ta<=121°C, II 3 G
- Ex nL IIC T4, -40°C<=Ta<=121°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
- CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

Contact factory for specific approvals.



**Product Notes:**

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] Typical.
- [3] Zero-based, least-squares, straight line method.
- [4] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [5] 1/4-28 has no equivalent in S.I. units.



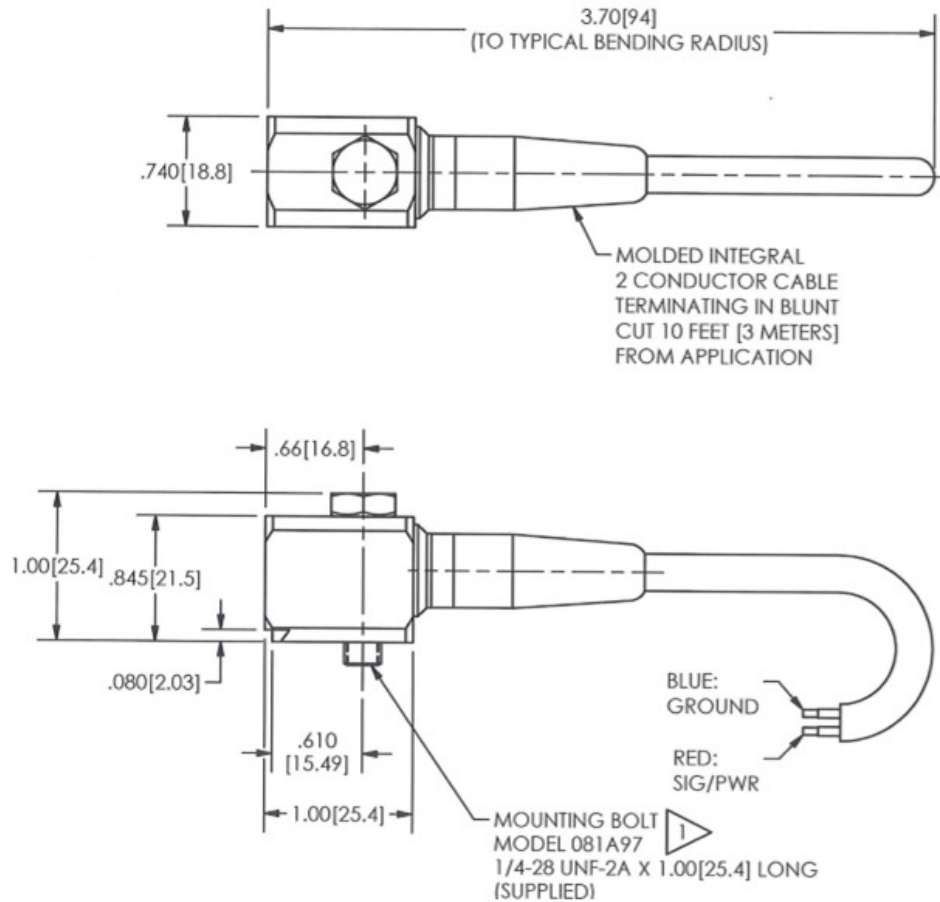
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# CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear IEPE Side Exit With Integral Polyurethane Cable

## OUTLINE DRAWING MODEL CM-G11 ACCELEROMETER



Option: EX , Hazardous Area Approval

Temperature Response Graph % / °F

Ex ia IIC T4, AExia IIC, T4

EEx nL IIC T4, -40°C<=Ta<=121°C, II 3 G

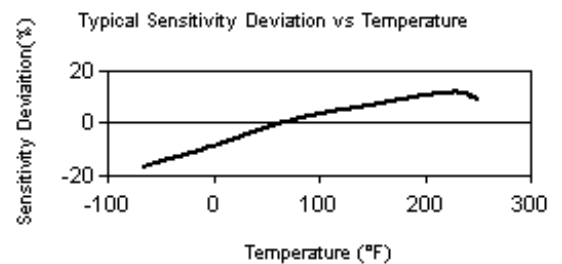
Ex nL IIC T4, -40°C<=Ta<=121°C, II 1 G

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

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

Contact factory for specific approvals.

All specifications are at room temperature unless otherwise specified.



### Product Notes:

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] Typical.
- [3] Zero-based, least-squares, straight line method.
- [4] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] Twisted shielded pair.



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