

CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear IEPE Top 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	
Mounted Base Resonance:	1500 Kcpm (25 KHz)	Case Material:	304 Stainless Steel
Measurement Range	See: "How To Order" Table ±10%	Sensing Element/Construction:	Ceramic Shear
Frequency Range (±3 dB) :	See: "How To Order" Table	Mounting Torque:	2 to 5 ft-lb (2.7 to 6.8 Nm)
Transverse Sensitivity:	≤7%	Weight:	1.8 oz (51 gm)
Non-Linearity:	± 1%	Mounting Threads:	See: "How To Order" Table
Broadband Resolution (1 to 10 kHz):	350 µg (3434 µm/sec ²)		
Electrical		Environmental	
Excitation Voltage:	18 to 28 VDC	Overload Limit (Shock)	5000 g pk (49050 m/s ² pk)
Constant Current Excitation	2 to 20 mA	Temperature Range	-65 to +250 °F (-54 to +121 °C)
Settling Time (within 1% of bias)	≤2.0 sec	Temperature Response	See Graph %/°F
Electrical Isolation (Case):	>10 ⁸ Ohm	Enclosure Rating	IP68
Spectral Noise (10 Hz) :	8.0 µg/√Hz (78.5 (µm/sec ²)/√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	10	Top 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 ²)	30 to 600Kcpm (0.5 Hz to 10 KHz)	±500 g (±4,905 m/s ²)	52	2 Pin MIL-C-5015		(Blank)=No Options
AT [2]	Acceleration & Temp.	050	50 mV/g 5.1 mV/(m/s ²)	30 to 600Kcpm (0.5 Hz to 10 KHz)	±100 g (±981 m/s ²)	53	3 Pin MIL-C-5015		/EX Intrinsically Safe
		100	100 mV/g 10.2 mV/(m/s ²)	30 to 600Kcpm (0.5 Hz to 10 KHz)	±50 (±490 m/s ²)	64	4 Pin M12		
		500	500 mV/g 51.0 mV/(m/s ²)	30 to 180 Kcpm (0.5 Hz to 3 KHz)	±10 g (±98 m/s ²)	01	Polyurethane-Jacketed Cable		
						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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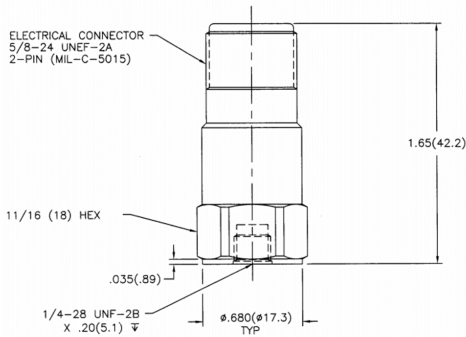
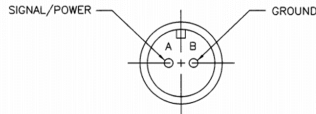
CM-G General Purpose Accelerometer

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

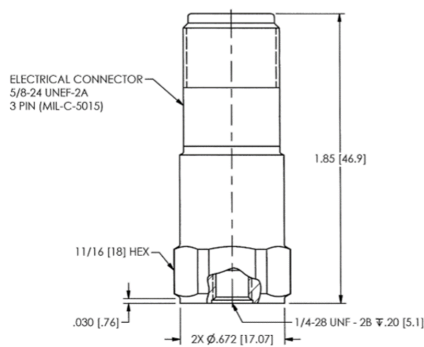
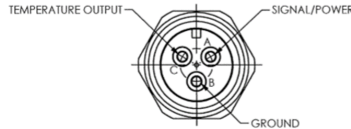


OUTLINE DRAWING MODEL CM-G10 ACCELEROMETER

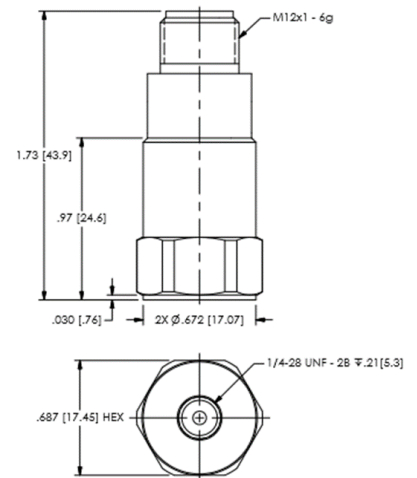
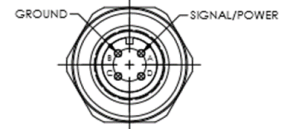
**TOP VIEW OF CONNECTOR
2-PIN (MIL-C-5015)**



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



**TOP VIEW OF CONNECTOR
4 PIN—M12**



Option: EX , Hazardous Area Approval

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

EEx 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

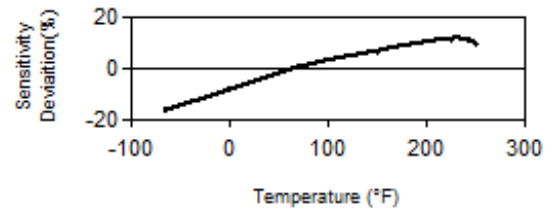
Ex ia IIC T4, AExia IIC, T4

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

Temperature Response Graph % / °F

All specifications are at room temperature unless otherwise specified.

Typical Sensitivity Deviation vs Temperature



Contact factory for specific approvals.

Product Notes:

- [1] Conversion Factor 1g = 9.81 m/s².
- [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.



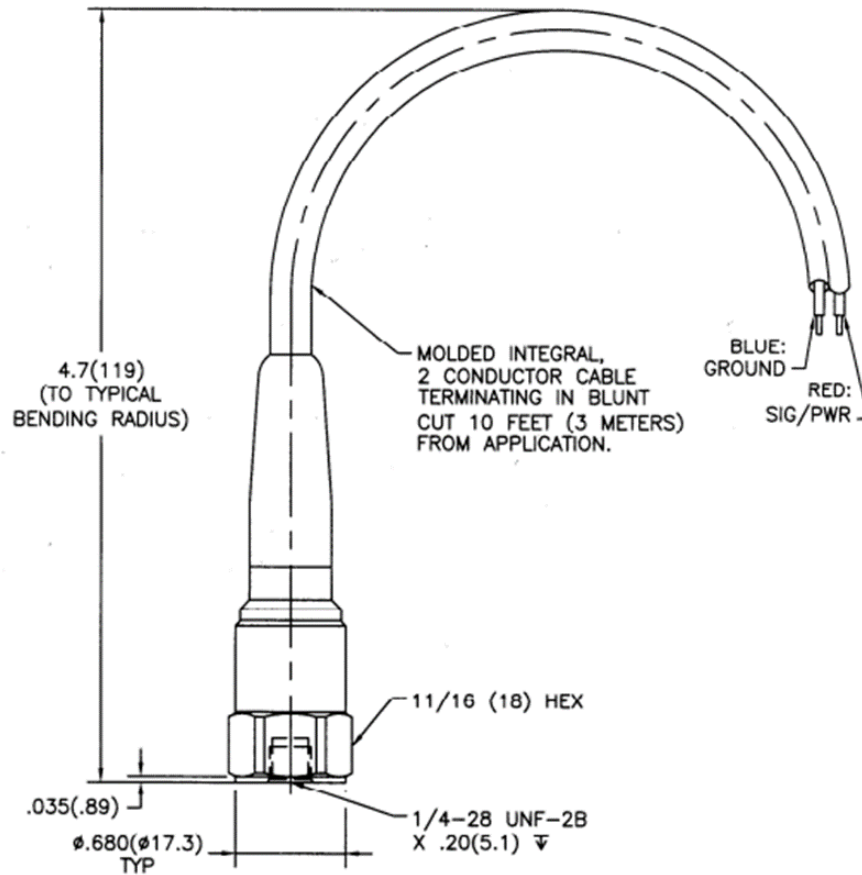
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CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear ICP Top Exit Integral Polyurethane Cable

OUTLINE DRAWING MODEL CM-G10 ACCELEROMETER

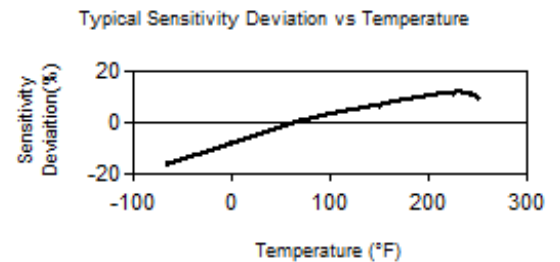


Option: EX , Hazardous Area Approval

Temperature Response Graph % / °F

CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4
 EEx nL IIC T4, $-40^{\circ}\text{C} \leq T_a \leq 121^{\circ}\text{C}$, 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, $-40^{\circ}\text{C} \leq T_a \leq 121^{\circ}\text{C}$, II 3 G

All specifications are at room temperature unless otherwise specified.



Contact factory for specific approvals.

Product Notes:

- [1] Conversion Factor $1g = 9.81 \text{ m/s}^2$.
- [2] Typical.
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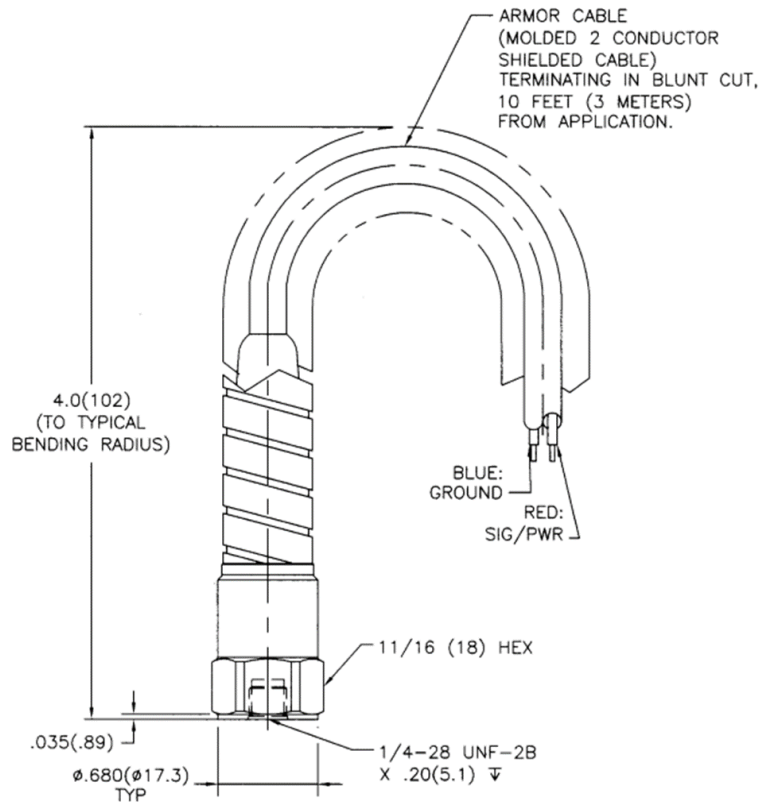


CM-G General Purpose Accelerometer

Accelerometer General Purpose, Industrial, Ceramic Shear IEPE Top Exit With Integral Armored Cable



OUTLINE DRAWING MODEL CM-G10 ACCELEROMETER

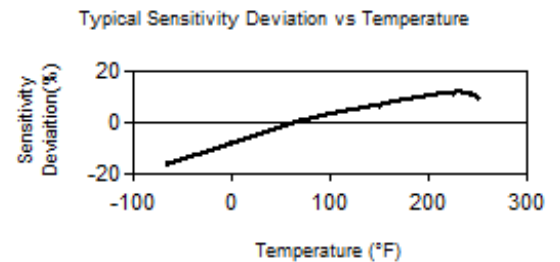


Option: EX , Hazardous Area Approval

Temperature Response Graph % / °F

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

All specifications are at room temperature unless otherwise specified.



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