

AC102-M12A Series

Multipurpose Accelerometer, Top Exit 4 Pin M12 Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

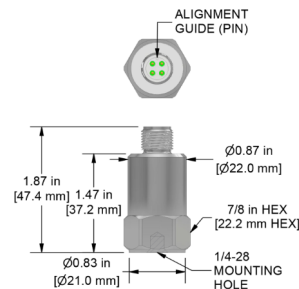
Affordably Priced, Hermetically Sealed Sensors

- ▶ 100 mV/g Sensitivity
- ▶ ± 80 g, peak Dynamic Range
- ▶ Common M12 Connection

AC102-M12A

4 Pin Connector

Connector Pin	Polarity
1	(+) Signal/Power
2	(-) Common
3	Not Used
4	Not Used



Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC102-M12A	M/ or M8/AC102-M12A	Environmental		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	30-810,000 CPM	0.5-13500 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 80 g, peak *Vsource ≥ 22V, 12Vbias		Electromagnetic Sensitivity	CE	
Electrical			Sealing	Welded, Hermetic	
Settling Time	<2.5 seconds		SIL Rating	SIL 2	
Voltage Source	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	14 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	2.3 µg/√Hz		Weight	3.2 oz	90 grams
Spectral Noise @ 1000 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Blind Tapped Hole	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	4 Pin M12	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

