

AC202-M12A Series

Premium Accelerometer, Top Exit 4 Pin M12 Connector, 100 mV/g, $\pm 5\%$



VIBRATION ANALYSIS HARDWARE



Product Features

High-Performance Sensor for Demanding Applications

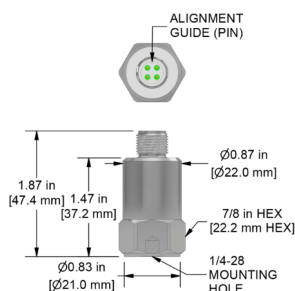
High Dynamic Range with Excellent Frequency Response

- ▶ ± 80 g, Dynamic Range
- ▶ Excellent Bias Stability Throughout Operating Temperature Range

AC202-M12A

4 Pin Connector

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



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC202-M12A	M/ or M8/AC202-M12A	<u>Environmental</u>		
Sensitivity ($\pm 5\%$)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	30-900,000 CPM	0.5-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response ($\pm 10\%$)	60-420,000 CPM	1.0-7000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 80 g, peak *Vsource ≥ 22 V, 12Vbias		Sealing	Welded, Hermetic	
Transverse Sensitivity	$\leq 5\%$		<u>Physical</u>		
<u>Electrical</u>			Sensing Element	PZT Ceramic	
Settling Time	<2.0 seconds		Sensing Structure	Shear Mode	
Voltage Source	18-30 VDC		Weight	3.2 oz	90 grams
Constant Current Excitation	2-10 mA		Case Material	316L Stainless Steel	
Spectral Noise @ 10 Hz	8 μ g/ $\sqrt{\text{Hz}}$		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 100 Hz	4 μ g/ $\sqrt{\text{Hz}}$		Connector (Non-Integral)	4 Pin M12	
Spectral Noise @ 1000 Hz	2 μ g/ $\sqrt{\text{Hz}}$		Resonant Frequency	1,560,000 CPM	26000 Hz
Output Impedance	<100 ohm		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Bias Output Voltage	10-14 VDC		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Case Isolation	>10 ⁸ ohm		Calibration Certificate	CA10	
Dielectric Breakdown Voltage	SIL 2				

Typical Frequency Response

