AC137-M12A Series

Low Cost, High G and High Frequency Measurement Accelerometer, Top Exit 4 Pin M12 Connector, 10 mV/g, ±15%

VIBRATION ANALYSIS HARDWARE

CE

Product Features

Very High 500 g Accelerometer

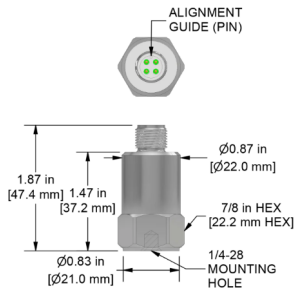
High Amplitude

- 1-13500 Hz (60-810,000 CPM) Frequency Response when Stud Mounted

AC137-M12A

4 Pin M12 Connector

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



Stock Product

Specifications	Standard	Metric
Part Number	AC137-M12A	M/ or M8/AC137-M12A
Sensitivity (±10%)	10 mV/g	
Frequency Response (±3dB)	60-810,000 CPM	1,0-13500 Hz
Dynamic Range	± 500 g, peak *Vsource ≥ 22V, 12Vbias	
Transverse Sensitivity	≤5%	
Electrical		
Settling Time	<2 Seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	300 µg/√Hz	
Spectral Noise @ 100 Hz	30 µg/√Hz	
Spectral Noise @ 1000 Hz	6 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10^8 ohm	

Specifications	Standard	Metric
Environmental		
Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth	200 ft.	60 m
SIL Rating	SIL 2	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz.	90 grams
Case Material	316L Stainless Steel	
Mounting Thread	1/4-28 Blind Tapped Hole	
Connector (Non-Integral)	2 Pin MIL-C-5015	
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