

AC220 Series

Premium, Miniature Industrial High G & High Frequency Accelerometer, Top Exit 2 Pin Mini-MIL Connector, 10 mV/g, $\pm 5\%$



VIBRATION ANALYSIS HARDWARE



Product Features

Very High 500 g Accelerometer

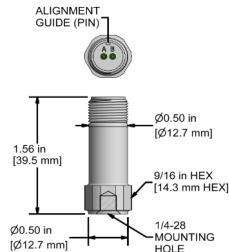
For Use with High Frequency Applications

- ▶ 1,0-25000 Hz (60-1,500,000 CPM) Frequency Response
- ▶ 10 mV/g, $\pm 5\%$ Sensitivity
- ▶ 34 kHz Resonant Frequency

AC220-1D

2 Pin Mini Mil Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

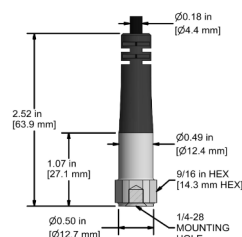


Stock Product

AC220-2D

CB110 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

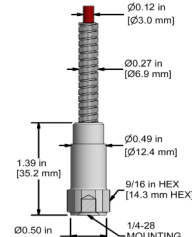


Built To Order

AC220-3D

CB206 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC220	M/ or M8/AC220	<u>Environmental</u>		
Sensitivity ($\pm 5\%$)	10 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	60-1,500,000 CPM	1,0-25000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response ($\pm 10\%$)	90-420,000 CPM	1,5-7000 Hz	Electromagnetic Sensitivity	CE	
Frequency Response ($\pm 5\%$)	180-180,000 CPM	3,0-3000 Hz	Sealing	Welded, Hermetic	
Dynamic Range	± 500 g, peak *Vsource $\geq 22\text{V}$, 12Vbias		Submersible Depth	200 ft.	60 m
Transverse Sensitivity	$\leq 5\%$		SIL Rating	SIL 2	
<u>Electrical</u>			<u>Physical</u>		
Settling Time	<3 Seconds		Sensing Element	PZT Ceramic	
Voltage Source	18-30 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	0.7 oz	20 grams
Spectral Noise @ 10 Hz	100 $\mu\text{g}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	19 $\mu\text{g}/\sqrt{\text{Hz}}$		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 1000 Hz	5 $\mu\text{g}/\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin mini-MIL	
Output Impedance	<100 ohm		Resonant Frequency	2,040,000 CPM	34000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

