

AC221 Series

Low Cost, Miniature Industrial High G & High Frequency Accelerometer, Top Exit 2 Pin Mini-MIL Connector, 10 mV/g, $\pm 15\%$



VIBRATION ANALYSIS HARDWARE



Product Features

Very High 500 g Accelerometer

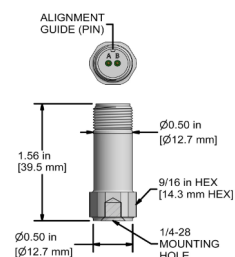
For Use with High Frequency Applications

- ▶ 1,0-25000 Hz (60-1,500,000 CPM) Frequency Response
- ▶ 10 mV/g, $\pm 15\%$ Sensitivity
- ▶ 34 kHz Resonant Frequency

AC221-1A

2 Pin Mini Mil Connector

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

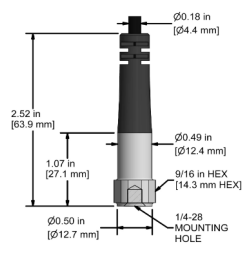


Stock Product

AC221-2A

CB110 Integral Cable

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

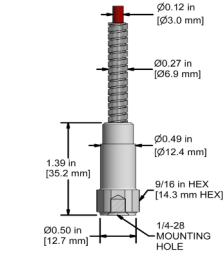


Built To Order

AC221-3A

CB206 Armored Integral Cable

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

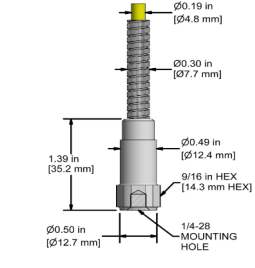


Built To Order

AC221-6A

CB611 Heavy Duty Armored Integral Cable

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

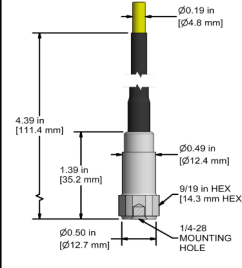


Built To Order

AC221-6N

CB111 Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC221	M/ or M8/AC221	Environmental		
Sensitivity ($\pm 15\%$)		10 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	60-1,500,000 CPM	1,0-25000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 500 g, peak *Vsource ≥ 22 V, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<3 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	100 μ g/ $\sqrt{\text{Hz}}$		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	19 μ g/ $\sqrt{\text{Hz}}$		Weight	0.7 oz	20 grams
Spectral Noise @ 1000 Hz	5 μ g/ $\sqrt{\text{Hz}}$		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)	2 Pin mini-MIL	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	2,040,000 CPM	34000 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

