

# AC224 Series

Premium Miniature Industrial High G & High Frequency Mini-MIL Accelerometer, Side Exit 2 Pin Mini-MIL Connector, 10 mV/g, ±5%



VIBRATION ANALYSIS HARDWARE



## Product Features

Very High 500g Side Exit Accelerometer for High Amplitude Applications

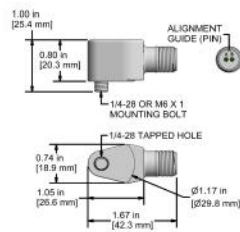
Helps to Detect Gearbox Defects and Other High Frequency Faults

- ▶ 1,0 - 15000 Hz (60-900,000 CPM) Frequency Response
- ▶ 10 mV/g ±5% Sensitivity
- ▶ 32 kHz Resonant Frequency

### AC224-1D

2 Pin Mini Mil Connector

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

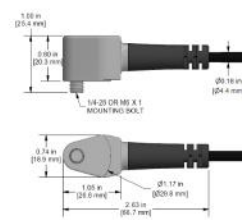


Stock Product

### AC224-2D

CB110 Integral Cable

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

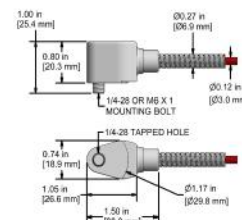


Built To Order

### AC224-3D

CB206 Armored Integral Cable

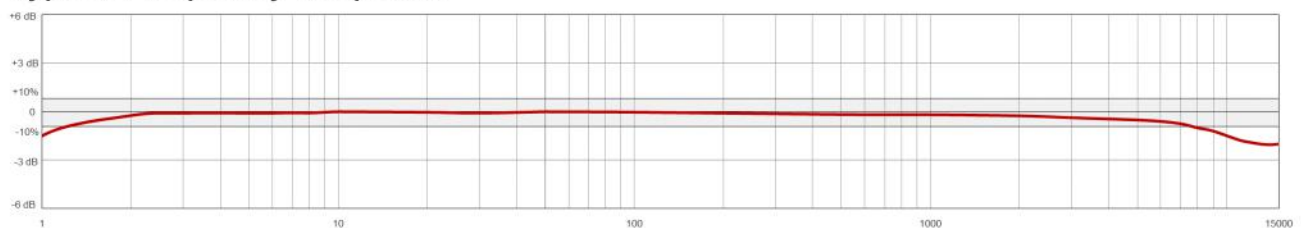
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC224	M/AC224	<b>Environmental</b>		
Sensitivity (±5%)	10 mV/g		Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	60-900,000 CPM	1,0-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	90-420,000 CPM	1,5-7000 Hz	Electromagnetic Sensitivity	CE	
Frequency Response (±5%)	180-180,000 CPM	3,0-3000 Hz	Sealing	Welded, Hermetic	
Dynamic Range	± 500 g, peak		Submersible Depth	200 ft.	60 m
<b>Electrical</b>			SIL Rating	SIL 2	
Settling Time	<2 seconds		<b>Physical</b>		
Voltage Source (IEPE)	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	100 µg/√Hz		Weight	2.1 oz	60 grams
Spectral Noise @ 100 Hz	19 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	5 µg/√Hz		Connector (Non-Integral)	2 Pin mini-MIL	
Output Impedance	<100 ohm		Resonant Frequency	1,920,000 CPM	32000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation	>10 <sup>8</sup> ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

## Typical Frequency Response



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# AC220 Series

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



VIBRATION ANALYSIS HARDWARE



## Product Features

Very High 500g Accelerometer for High Frequency Applications

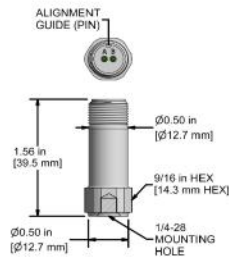
For use with High Frequency Applications

- ▶ 1,0 - 25000 Hz (60-1,500,000 CPM) Frequency Response
- ▶ 10 mV/g, ±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

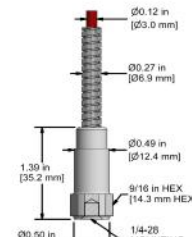


Built To Order

### AC220-3D

CB206 Armored Integral Cable

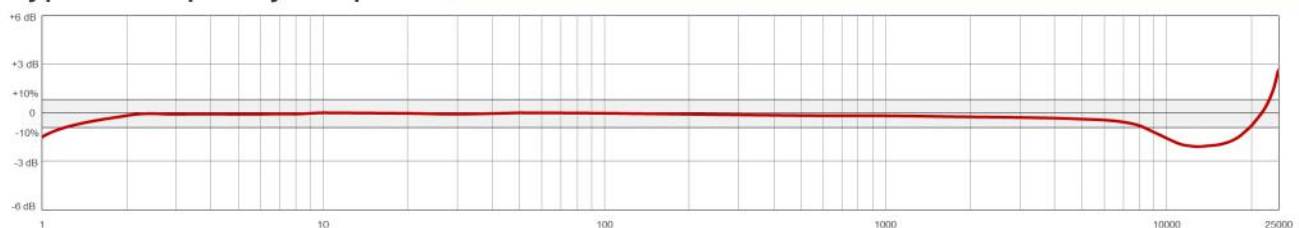
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC220	M/AC220	<b>Environmental</b>		
Sensitivity (±5%)	10 mV/g		Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	60-1,500,000 CPM	1,0-25000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	90-420,000 CPM	1,5-7000 Hz	Electromagnetic Sensitivity	CE	
Frequency Response (±5%)	180-180,000 CPM	3,0-3000 Hz	Sealing	Welded, Hermetic	
Dynamic Range	± 500 g, peak		Submersible Depth	200 ft.	60 m
<b>Electrical</b>			SIL Rating	SIL 2	
Settling Time	<3 Seconds		<b>Physical</b>		
Voltage Source (IEPE)	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	100 µg/√Hz		Weight	0.7 oz	20 grams
Spectral Noise @ 100 Hz	19 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	5 µg/√Hz		Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance	<100 ohm		Connector (Non-Integral)	2 Pin mini-MIL	
Bias Output Voltage	10-14 VDC		Resonant Frequency	2,040,000 CPM	34000 Hz
Case Isolation	>10 <sup>9</sup> ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	

## Typical Frequency Response



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# AC131 Series

High G & High Frequency Measurement Accelerometer, Top Exit 2  
Pin Connector, 10 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

Very High 500g Accelerometer

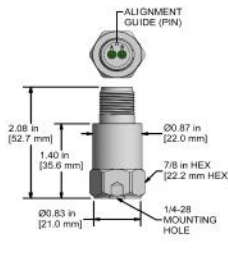
High Amplitude

- ▶ 1 - 15000 Hz (60-900,000 CPM) Frequency Response when Stud Mounted
- ▶ 10 mV/g ±10% Sensitivity
- ▶ ± 500 g Dynamic Range

### AC131-1A

2 Pin Connector

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

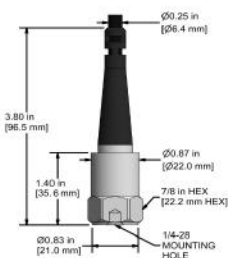


Stock Product

### AC131-2C

CB103 Integral Cable

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

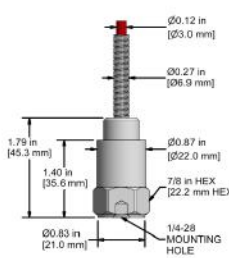


Built To Order

### AC131-3C

CB206 Armored Integral Cable

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

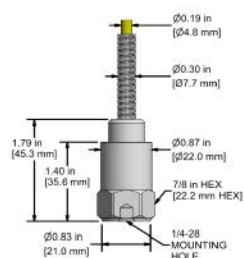


Built To Order

### AC131-6C

CB611 Heavy Duty Armored Integral Cable

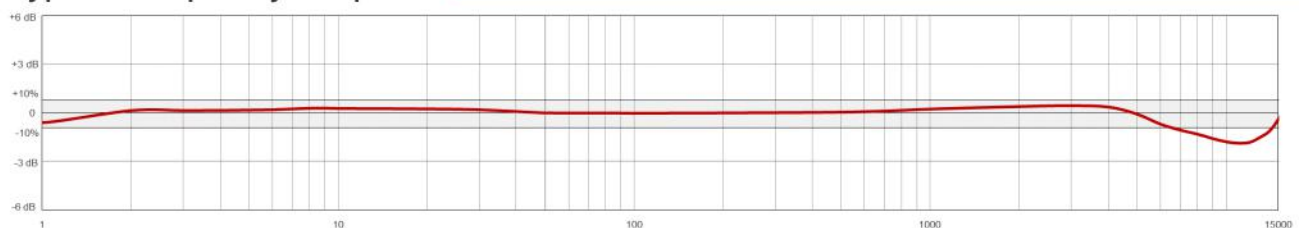
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC131	M/AC131	<b>Environmental</b>		
Sensitivity (±10%)	10 mV/g		Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	60-900,000 CPM	1,0-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	120-360,000 CPM	2,0-6000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 500 g, peak		Sealing	Welded, Hermetic	
<b>Electrical</b>			Submersible Depth	200 ft.	60 m
Settling Time	<2 Seconds		SIL Rating	SIL 2	
Voltage Source (IEPE)	18-30 VDC		<b>Physical</b>		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	300 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	30 µg/√Hz		Weight	3.2 oz.	90 grams
Spectral Noise @ 1000 Hz	6 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)	2 Pin MIL-C-5015	
Case Isolation	>10 <sup>8</sup> 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 Adapter Stud
			Calibration Certificate	CA10	

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