

# AC153 Series



Low Cost, Low Frequency Accelerometer, Top Exit 2 Pin Connector, 500 mV/g, ±20%

VIBRATION ANALYSIS HARDWARE



## Product Features

Designed for low speed Rotors, Main Bearings, and Gear Box Inputs, but may also be used for High Frequency Detection

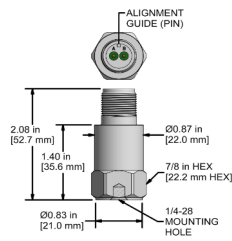
Low Cost Accelerometer

- ▶ 500 mV/g Sensitivity
- ▶ 0.1 Hz for Low Frequency Measurements
- ▶ 10 kHz for High Frequency Detection

### AC153-1D

2 Pin Connector

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

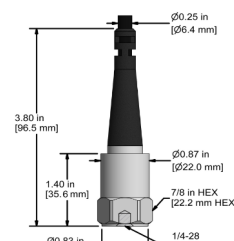


Stock Product

### AC153-2D

CB103 Integral Cable

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

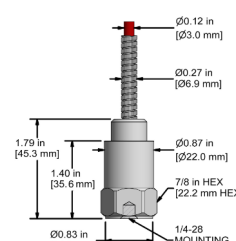


Built To Order

### AC153-3D

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	AC153	M/AC153	<b>Environmental</b>		
Sensitivity (±20%)	500 mV/g		Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	6-600,000 CPM	0.1-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	36-180,000 CPM	0.6-3000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 16g, peak		Sealing	Welded, Hermetic	
<b>Electrical</b>			Submersible Depth	200 ft.	60 m
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	1.7 µg/√Hz		Weight	3.2 oz	92 grams
Spectral Noise @ 100 Hz	0.2 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	0.12 µg/√Hz		Mounting	1/4-28	
Output Impedance	<100 ohm		Connector (Non-Integral)	2 Pin MIL-C-5015	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,080,000 CPM	18000 Hz
Case Isolation	>10 <sup>8</sup> ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate		CA10

## Typical Frequency Response

