

AC153 Series

Low Cost, Low Frequency Accelerometer, Top Exit 2 Pin Connector,
500 mV/g, ±15%



Product Features

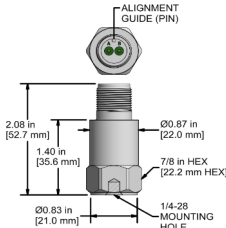
Designed for low speed Rotors, Main Bearings,
and Gear Box Inputs, but may also be used for
High Frequency Detection

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

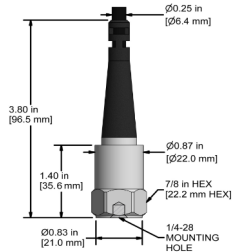
Connector	Polarity
Pin	
A	(+) Signal/Power
B	(-) Common



Stock Product

AC153-2D
CB103 Integral Cable

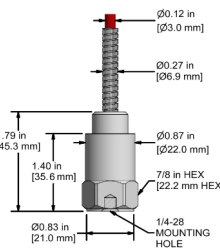
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC153-3D
CB206 Armored Integral Cable

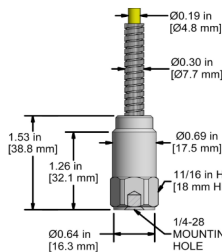
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC153-6D
CB611 Heavy Duty Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric
Part Number	AC153	M/ or M8/AC153
Sensitivity (±15%)	500 mV/g	
Frequency Response (±3dB)	6-600,000 CPM	0,1-10000 Hz
Frequency Response (±10%)	36-180,000 CPM	0,6-3000 Hz
Dynamic Range	± 16g, peak *Vsource ≥ 22V, 12Vbias	
Electrical		
Settling Time	<2 Seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	1.7 µg/√Hz	
Spectral Noise @ 100 Hz	0.2 µg/√Hz	
Spectral Noise @ 1000 Hz	0.12 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	92 grams
Case Material	316L Stainless Steel	
Mounting Thread	1/4-28 Blind Tapped Hole	
Connector (Non-Integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,080,000	18000 Hz