AC153 Series



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



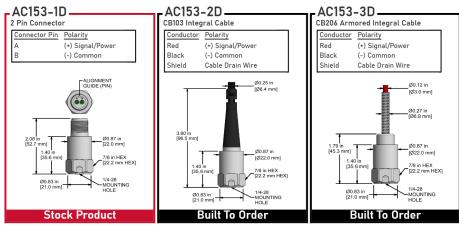


Product Features

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



Specifications	Standard		Metric	Specifications	Standard		Metric
Part Number	AC153		M/AC153	Environmental			
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	
<u>Electrical</u>				Submersible Depth	200 ft.		60 m
Settling Time		<2 Seconds		Physical			
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 ⁸ 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

