

# AC156 Series



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

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
- ▶ Standard 2 Pin MIL Connection or Integral Cable

Note: Integral Cable Options are Only for Permanent Monitoring Applications

AC156-1D 2 Pin Connector	AC156-2D CB103 Integral Cable	AC156-3D CB206 Armored Integral Cable	AC156-6D CB611 Heavy Duty Armored Integral Cable																														
<table border="1"> <thead> <tr> <th>Connector Pin</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>(+) Signal/Power</td> </tr> <tr> <td>B</td> <td>(-) Common</td> </tr> </tbody> </table> <p><b>Stock Product</b></p>	Connector Pin	Polarity	A	(+) Signal/Power	B	(-) Common	<table border="1"> <thead> <tr> <th>Conductor</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>(+) Signal/Power</td> </tr> <tr> <td>Black</td> <td>(-) Common</td> </tr> <tr> <td>Shield</td> <td>Cable Drain Wire</td> </tr> </tbody> </table> <p><b>Built To Order</b></p>	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire	<table border="1"> <thead> <tr> <th>Conductor</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>(+) Signal/Power</td> </tr> <tr> <td>Black</td> <td>(-) Common</td> </tr> <tr> <td>Shield</td> <td>Cable Drain Wire</td> </tr> </tbody> </table> <p><b>Built To Order</b></p>	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire	<table border="1"> <thead> <tr> <th>Connector Pin</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>(+) Signal/Power</td> </tr> <tr> <td>Black</td> <td>(-) Common</td> </tr> <tr> <td>Shield</td> <td>Cable Drain Wire</td> </tr> </tbody> </table> <p><b>Built To Order</b></p>	Connector Pin	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire
Connector Pin	Polarity																																
A	(+) Signal/Power																																
B	(-) Common																																
Conductor	Polarity																																
Red	(+) Signal/Power																																
Black	(-) Common																																
Shield	Cable Drain Wire																																
Conductor	Polarity																																
Red	(+) Signal/Power																																
Black	(-) Common																																
Shield	Cable Drain Wire																																
Connector Pin	Polarity																																
Red	(+) Signal/Power																																
Black	(-) Common																																
Shield	Cable Drain Wire																																

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC156	M/AC156	<b>Environmental</b>		
Sensitivity (±15%)		500 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	6-600,000 CPM		Maximum Shock Protection		5,000 g, peak
Frequency Response (±10%)	36-180,000 CPM		Electromagnetic Sensitivity		CE
Dynamic Range		+ 16g, peak *Vsource ≥ 22V, 12Vbias	Sealing		Welded, Hermetic
<b>Electrical</b>			Submersible Depth	200 ft.	60 m
Settling Time		<2 Seconds	SIL Rating		SIL 2
Voltage Source		18-30 VDC	<b>Physical</b>		
Constant Current Excitation		2-10 mA	Sensing Element		PZT Ceramic
Spectral Noise @ 10 Hz		1.7 µg/√Hz	Sensing Structure		Shear Mode
Spectral Noise @ 100 Hz		0.2 µg/√Hz	Weight	5.7 oz	162 grams
Spectral Noise @ 1000 Hz		0.12 µg/√Hz	Case Material		316L Stainless Steel
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 Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate		CA10

## Typical Frequency Response

