

AC156 Series

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



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

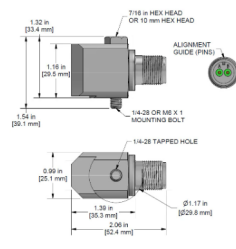
Low-Cost Accelerometer

- ▶ 500 mV/g Sensitivity
 - ▶ 0.1 Hz for Low-Frequency Measurements
8 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

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

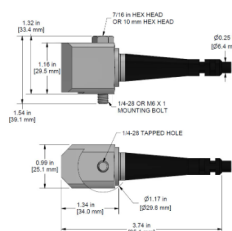


Stock Product

AC156-2D & -7A

2D = CB103 Integral Cable
7A = CB124 Integral Cable

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

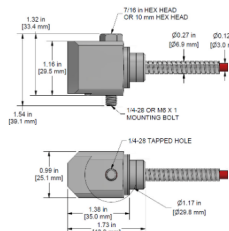


Built To Order

AC156-3D

CB206 Armored Integral Cable

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

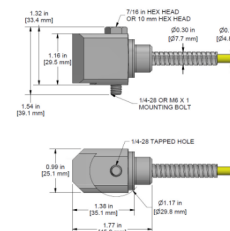


Built To Order

AC156-6D

CB611 Heavy Duty Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC156	M/AC156	Environmental		
Sensitivity ($\pm 15\%$)	500 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	6-480,000 CPM	0.1-8000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	+ 16g, peak *Vsource $\geq$ 22V, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<2 Seconds		SIL Rating	SIL 2	
Voltage Source	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	1.7 $\mu\text{g}/\sqrt{\text{Hz}}$		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	0.2 $\mu\text{g}/\sqrt{\text{Hz}}$		Weight	5.7 oz	162 grams
Spectral Noise @ 1000 Hz	0.12 $\mu\text{g}/\sqrt{\text{Hz}}$		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 ⁸ 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

