

AC154 Series

Low Cost, Multipurpose Accelerometer, Side Exit 2 Pin Connector, 100 mV/g, $\pm 15\%$



VIBRATION ANALYSIS HARDWARE



Product Features

Low-Cost, Side-Exit Sensor

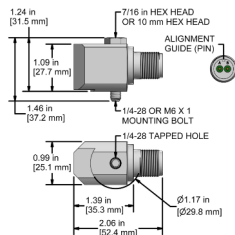
Economical Way to Trend Machinery

- ▶ ± 80 g, Peak Dynamic Range
 - ▶ 0.5 - 7000 Hz (30 - 420,000 CPM) Frequency Response
 - ▶ Standard 2 Pin MIL Connection or Integral Cable
- Note: Integral Cable Options are only for Permanent Monitoring Applications

AC154-1A

2 Pin Connector

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



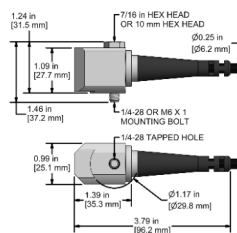
Stock Product

AC154-2C & -7A

2C = CB103 Integral Cable

7A = CB124 Integral Cable

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

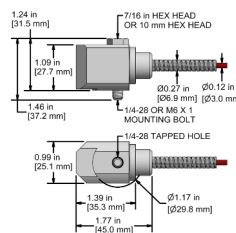


Built To Order

AC154-3C

CB206 Armored Integral Cable

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

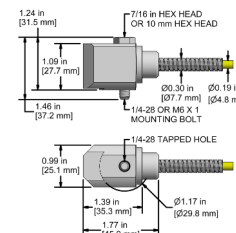


Built To Order

AC154-6C

CB611 Heavy Duty 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	AC154	M/AC154	<u>Environmental</u>		
Sensitivity ($\pm 15\%$)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	30-420,000 CPM	0.5-7000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 80 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
<u>Electrical</u>			SIL Rating	SIL 2	
Settling Time	<2.5 seconds		<u>Physical</u>		
Voltage Source	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	14 μ g/ $\sqrt{\text{Hz}}$		Weight	5.1 oz	145 grams
Spectral Noise @ 100 Hz	2.3 μ g/ $\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	2 μ g/ $\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin MIL-C-5015	
Output Impedance	<100 ohm		Resonant Frequency	1,320,000 CPM	22000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

