

AC140 Series

Low Cost, Miniature Industrial Multipurpose Accelerometer, Top Exit 2 Pin
Mini-MIL Connector, 100 mV/g, $\pm 15\%$



VIBRATION ANALYSIS HARDWARE



Product Features

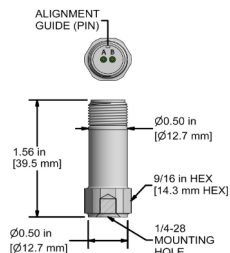
Mini Industrial Accelerometer, Great for Hard-to-Reach Locations

- ▶ ± 80 g, Dynamic Range
- ▶ 2 Pin Mini-MIL Connection
- ▶ -6N Integral Cable Option Features Food-Safe, FDA-Compliant 21 CFR 177.1330 Polyolefin Heat Shrink

AC140-1D

2 Pin Mini Mil Connector

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

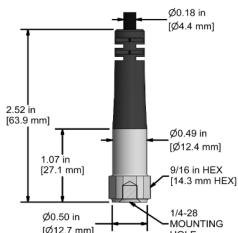


Stock Product

AC140-2D

CB110 Integral Cable

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

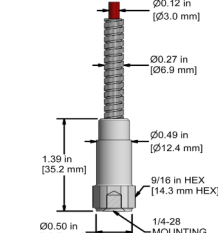


Built To Order

AC140-3D

CB206 Armored Integral Cable

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

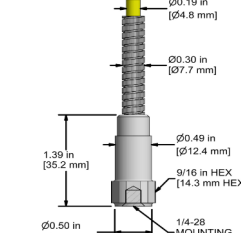


Built To Order

AC140-6D

CB611 Heavy Duty Armored Integral Cable

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

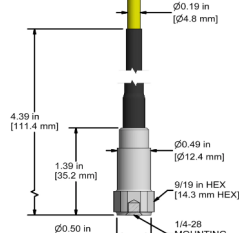


Built To Order

AC140-6N

CB111 Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC140	M/ or M8/AC140	<u>Environmental</u>		
Sensitivity ($\pm 15\%$)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	36-900,000 CPM	0.6-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 80 g, peak *Vsource ≥ 22 V, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
<u>Electrical</u>			Submersible Depth	200 ft.	60 m
Settling Time	<2.5 seconds		SIL Rating	SIL 2	
Voltage Source	18-30 VDC		<u>Physical</u>		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	30 μ g/ $\sqrt{\text{Hz}}$		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	4 μ g/ $\sqrt{\text{Hz}}$		Weight	0.7 oz	20 grams
Spectral Noise @ 1000 Hz	2 μ g/ $\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Blind Tapped Hole	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin mini-MIL (J Series)	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	2,040,000 CPM	34000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

