

AC214 Series

Premium, Low Frequency Accelerometer, Top Exit 2 Pin Connector, 1,000 mV/g, $\pm 5\%$



Product Features

Designed for Low-Speed Rotors, Wind Turbine Main Bearings, Gear Box Inputs, and May Also Be Used for High Frequency Detection

May be Used with Any Application That Requires Low and High Frequency Measurements

- ▶ 1000 mV/g Sensitivity
- ▶ 0.1 Hz to 10 kHz Frequency Response ($\pm 3\text{dB}$)

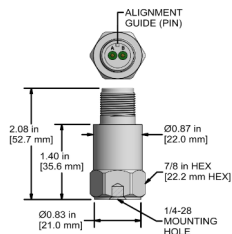
▶ Standard 2 Pin MIL Connection or Integral Cable
Note: Integral Cable Options are Only for Permanent Monitoring Applications .

-6N Integral Cable Option Features Food Safe FDA Compliant 21 CFR 177.1330 Polyolefin Heat Shrink

AC214-1D

2 Pin Connector

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

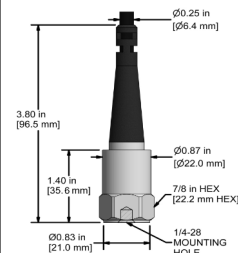


Stock Product

AC214-2D & -7A

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

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

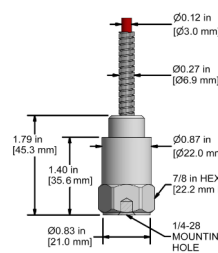


Built To Order

AC214-3D

CB206 Armored Integral Cable

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

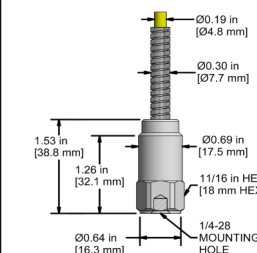


Built To Order

AC214-6D

CB611 Heavy Duty Armored Integral Cable

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

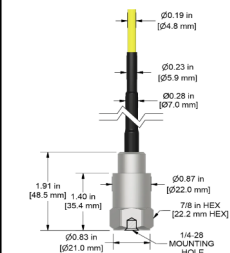


Built To Order

AC214-6N

CB111 FEP Jacketed Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC214	M/ or M8/AC214	<u>Environmental</u>		
Sensitivity ($\pm 5\%$)		1000 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	6-600,000 CPM	0,1-10000 Hz	Maximum Shock Protection	5000 g, peak	
Frequency Response ($\pm 10\%$)	18-480,000 CPM	0,3-8000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range		± 7 g, peak *Vsource $\geq 22\text{V}$, 12Vbias	Sealing	Welded, Hermetic	
Transverse Sensitivity		$\leq 5\%$	Submersible Depth	200 ft.	60 m
<u>Electrical</u>			SIL Rating	SIL 2	
Settling Time		< 2 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		1.3 $\mu\text{g}/\sqrt{\text{Hz}}$	Weight	3.25 oz	92 g
Spectral Noise @ 100 Hz		0.2 $\mu\text{g}/\sqrt{\text{Hz}}$	Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz		0.1 $\mu\text{g}/\sqrt{\text{Hz}}$	Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance		< 100 ohm	Connector (Non-Integral)	2 Pin MIL-C-5015	
Bias Output Voltage		10-14 VDC	Resonant Frequency	1,020,000 CPM	17000 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 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

