

AC215 Series

Premium, Low Frequency Accelerometer, Side 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 8 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

AC215-1D 2 Pin Connector <table><tr><th>Connector</th><th>Polarity</th></tr><tr><th>Pin</th><th></th></tr><tr><td>A</td><td>(+) Signal/Power</td></tr><tr><td>B</td><td>(-) Common</td></tr></table> Stock Product	Connector	Polarity	Pin		A	(+) Signal/Power	B	(-) Common	AC215-2D & -7A 2D = CB103 Integral Cable 7A = CB124 Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-3D CB206 Armored Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-6D CB611 Heavy Duty Armored Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-6N CB111 FEP Jacketed Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order </td></td></td>	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire	AC215-3D CB206 Armored Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-6D CB611 Heavy Duty Armored Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-6N CB111 FEP Jacketed Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order </td></td>	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire	AC215-6D CB611 Heavy Duty Armored Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order <td> AC215-6N CB111 FEP Jacketed Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order </td>	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire	AC215-6N CB111 FEP Jacketed Integral Cable <table><tr><th>Conductor</th><th>Polarity</th></tr><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></table> Built To Order	Conductor	Polarity	Red	(+) Signal/Power	Black	(-) Common	Shield	Cable Drain Wire
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Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC215	M/AC215	<u>Environmental</u>		
Sensitivity ($\pm 5\%$)	1000 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	6-480,000 CPM	0,1-8000 Hz	Maximum Shock Protection	5000 g, peak	
Frequency Response ($\pm 10\%$)	36-180,000 CPM	0,6-3000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 7 g, peak *V _{source} $\geq$ 22V, 12Vbias		Sealing	Welded, Hermetic	
Transverse Sensitivity	$\leq 5\%$		SIL Rating	SIL 2	
<u>Electrical</u>			<u>Physical</u>		
Settling Time	< 2 seconds		Sensing Element	PZT Ceramic	
Voltage Source	18-30 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	5.7 oz	162 g
Spectral Noise @ 10 Hz	1.3 $\mu\text{g}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	0.2 $\mu\text{g}/\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin MIL-C-5015	
Spectral Noise @ 1000 Hz	0.1 $\mu\text{g}/\sqrt{\text{Hz}}$		Resonant Frequency	1,020,000 CPM	18000 Hz
Output Impedance	< 100 ohm		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Bias Output Voltage	10-14 VDC		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Case Isolation	> 10 ⁸ ohm		Calibration Certificate	CA10	

Typical Frequency Response

