AC255 Series

Low Cost, Low Frequency Accelerometer, Side Exit 2 Pin Connector, 1,000 mV/g, ±15%

VIBRATION ANALYSIS HARDWARE

CE

Product Features

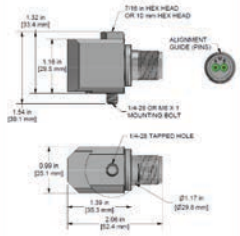
Designed for Low-Speed Rotors, Wind Turbine Main Bearings, Gear Box Inputs, and May Also Be Used for High Frequency Detection

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 (± 3dB)
- 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

AC255-1D
2 Pin Connector

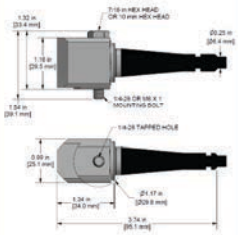
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

AC255-2D
CB103 Integral Cable

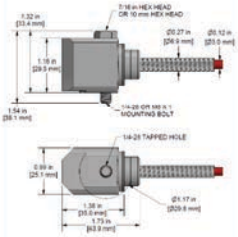
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC255-3D
CB206 Armored Integral Cable

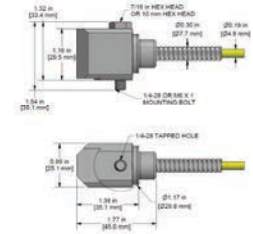
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC255-6D
CB611 Heavy Duty Armored Integral Cable

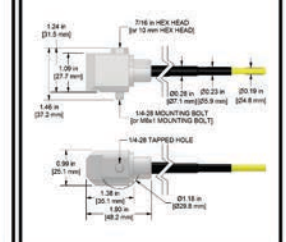
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

AC255-6N
CB111 FEP Jacketed Integral Cable

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



Built To Order

Specifications	Standard	Metric
Part Number	AC255	M/AC255
Sensitivity (±15%)	1000 mV/g	
Frequency Response (±3dB)	6-480,000 CPM	0.1-8000 Hz
Dynamic Range	± 7 g, peak *Vsource ≥ 22V, 12Vbias	
Transverse Sensitivity	≤5%	
Electrical		
Settling Time	< 2 seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	1.3 µg/√Hz	
Spectral Noise @ 100 Hz	0.2 µg/√Hz	
Spectral Noise @ 1000 Hz	0.1 µg/√Hz	
Output Impedance	< 100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	> 10^8 ohm	

Specifications	Standard	Metric
Environmental		
Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Maximum Shock Protection	5000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
SIL Rating	SIL 2	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.7 oz	162 g
Case Material	316L Stainless Steel	
Connector (Non-Integral)	4 Pin M12	
Resonant Frequency	1,020,000 CPM	18000 Hz
Mounting Torque	2 Pin MIL-C-5015	2.7 to 6.8 Nm
Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Typical Frequency Response