

AC102 Series

Multipurpose Accelerometer, Top Exit 2 Pin Connector, 100 mV/g, $\pm 10\%$



VIBRATION ANALYSIS HARDWARE



Product Features

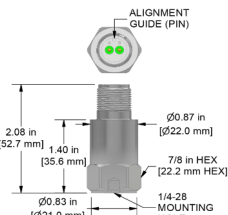
CTC's Best Selling, Multi-Purpose Sensor

- ▶ Wide frequency response range and ± 80 g dynamic range enables the user to identify bearing faults at both slower and higher speeds
- ▶ -6N Integral Cable Option Features Food Safe FDA Compliant 21 CFR 177.1330 Polyolefin Heat Shrink

AC102-1A

2 Pin Connector

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

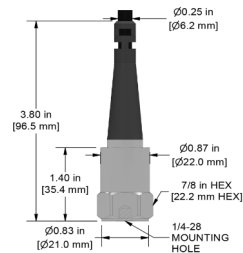


Stock Product

AC102-2C & -7A

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

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

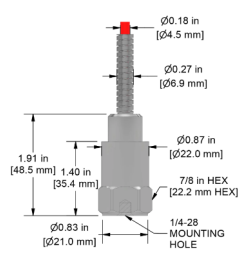


Built To Order

AC102-3C

CB206 Armored Integral Cable

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

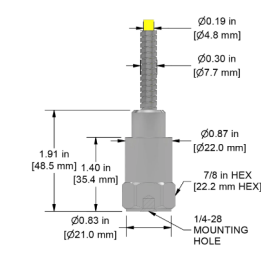


Built To Order

AC102-6C

CB611 Heavy Duty Armored Integral Cable

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

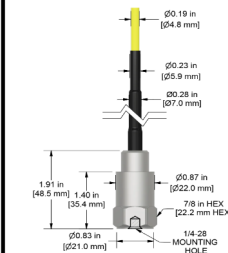


Built To Order

AC102-6N

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	AC102	M/ or M8/AC102	<u>Environmental</u>		
Sensitivity ($\pm 10\%$)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	30-810,000 CPM	0.5-13500 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 80 g, peak		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	*V _{source} $\geq$ 22V, 12V Bias		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	14 μ g/ $\sqrt$ Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	2.3 μ g/ $\sqrt$ Hz		Weight	3.2 oz	90 grams
Spectral Noise @ 1000 Hz	2 μ g/ $\sqrt$ 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 MIL-C-5015	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	1,380,000 CPM	23000 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

