

## Multi-Purpose Accelerometer, Top Exit Connector/Cable, 100 mV/g

SECTION I - VIBRATION SENSORS  
Accelerometers



Actual Product Size Shown



### Product Features

**CTC's Most Popular Sensor!**  
High Performance in a Low Cost Sensor

- Standard 2 Pin MIL Connection
- Perfect for Thousands of Applications
- Affordably Priced, Hermetically Sealed Sensors

#### AC102-1A

2 Pin Connector

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



#### AC102-2C

Integral Cable

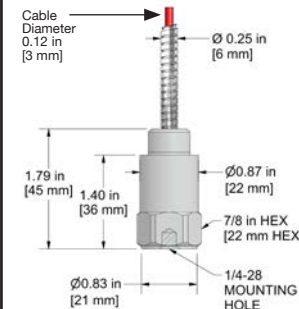
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



#### AC102-3C

Armored Integral Cable

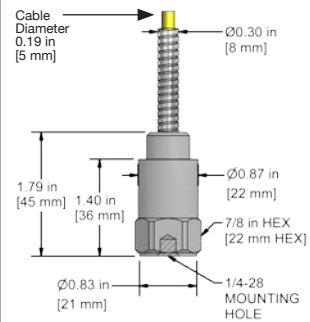
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



#### AC102-6C

Heavy Duty Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC102	M/AC102
Sensitivity ( $\pm 10\%$ )	100 mV/g	
Frequency Response ( $\pm 3dB$ )	30-900,000 CPM	0.5-15000 Hz
Frequency Response ( $\pm 10\%$ )	120-600,000 CPM	2.0-10000 Hz
Dynamic Range	$\pm 50$ g, peak	
<b>Electrical</b>		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 $\mu$ g/√Hz	
Spectral Noise @ 100 Hz	2.3 $\mu$ g/√Hz	
Spectral Noise @ 1000 Hz	2 $\mu$ g/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 <sup>8</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (AC102-2C/3C)	200 ft.	60 m
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	90 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

### Ordering Information

Standard	AC102-1A (1/4-28 Stud)	AC102-2C - / (1/4-28 Stud)	AC102-3C - / (1/4-28 Stud)	AC102-6C - / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft) (cable length in feet) (termination)	(maximum armor length 20 ft) (cable length in feet) (termination)
Metric	M/AC102-1A (M6x1 Adapter Stud)	M/AC102-2C - / (M6x1 Adapter Stud)	M/AC102-3C - / (M6x1 Adapter Stud)	M/AC102-6C - / (M6x1 Adapter Stud)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)	(maximum armor length 6 m) (cable length in meters) (termination)

Cable Termination Options: E F L Z

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VIBRATION ANALYSIS HARDWARE