

# AC102 Series

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

SECTION 1 - VIBRATION SENSORS  
Accelerometers

Actual  
Product  
Size Shown



### Product Features

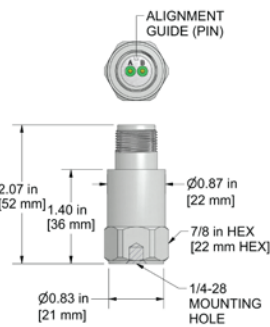
**CTC's Most Popular Sensor!**

**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



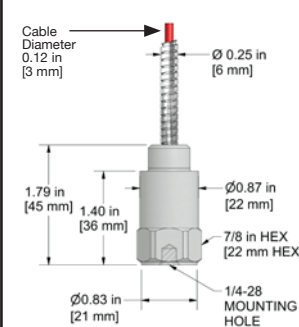
#### AC102-2C Integral Cable

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



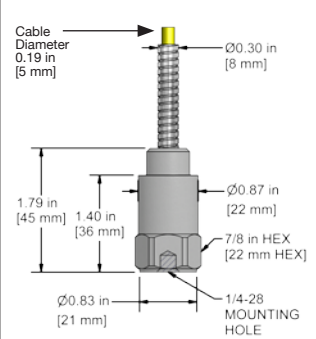
#### AC102-3C Armored Integral Cable

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 (±10%)	100 mV/g	
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz
Frequency Response (±10%)	120-600,000 CPM	2.0-10000 Hz
Dynamic Range	± 50 g, peak	
<b>Electrical</b>		
Settling Time	<2.5 seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 µg/√Hz	
Spectral Noise @ 100 Hz	2.3 µg/√Hz	
Spectral Noise @ 1000 Hz	2 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 <sup>9</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	Welded, Hermetic	
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	AC102-2C	AC102-3C	AC102-6C
	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)
		- / [ ] - [ ]	- / [ ] / [ ] - [ ]	- / [ ] / [ ] - [ ]
		(length in feet) (termination)	(length in feet) (maximum armor length 100 ft.) (cable length in feet) (termination)	(length in feet) (maximum armor length 20 ft.) (cable length in feet) (termination)
Metric	M/AC102-1A	M/AC102-2C	M/AC102-3C	M/AC102-6C
	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)
		- / [ ] - [ ]	- / [ ] / [ ] - [ ]	- / [ ] / [ ] - [ ]
		(length in feet) (termination)	(length in feet) (maximum armor length 100 ft.) (cable length in feet) (termination)	(length in feet) (maximum armor length 20 ft.) (cable length in feet) (termination)
		[ ] M - [ ]	[ ] M / [ ] M - [ ]	[ ] M / [ ] M - [ ]
		(length in meters) (termination)	(length in meters) (maximum armor length 30 m) (cable length in meters) (termination)	(length in meters) (maximum armor length 6 m) (cable length in meters) (termination)

**Cable Termination Options: E** **F** **Z**

**Backed by our Unconditional Lifetime Warranty**

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