

AC102 Series

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

SECTION 1 - VIBRATION SENSORS
Accelerometers

Actual
Product
Size Shown



Product Features

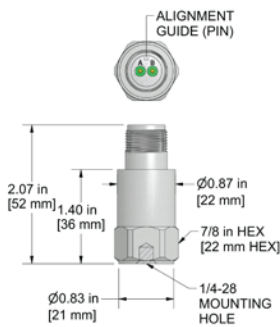
CTC's Most Popular Sensor!

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



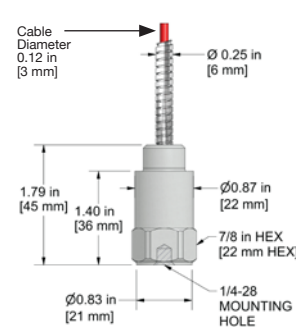
AC102-2C Integral Cable

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



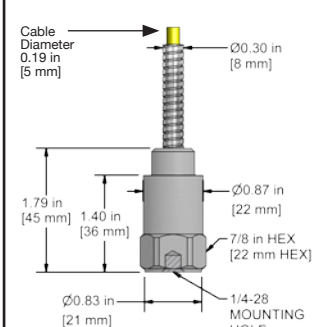
AC102-3C Armored Integral Cable

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	
Electrical		
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 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
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
Physical		
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)	(maximum armor length 100 ft.) (cable length in feet) (termination)	(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)	(maximum armor length 100 ft.) (cable length in feet) (termination)	(maximum armor length 20 ft.) (cable length in feet) (termination)
		[] M - []	[] M / [] M - []	[] M / [] M - []
		(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** **Z**

Backed by our Unconditional Lifetime Warranty

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AC104 Series

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

SECTION 1 - VIBRATION SENSORS
Accelerometers



Actual Product Size Shown



Product Features

CTC's Most Popular Side Exit Sensor!

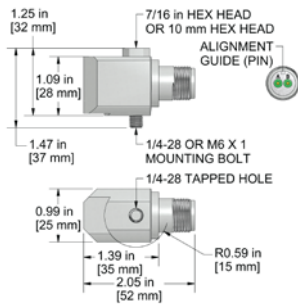
High Performance in a Low Cost Sensor

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

AC104-1A

2 Pin Connector

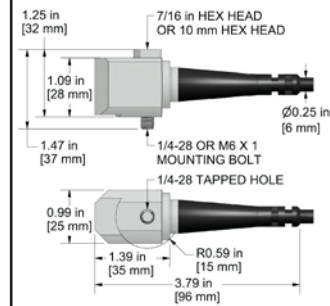
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC104-2C

Integral Cable

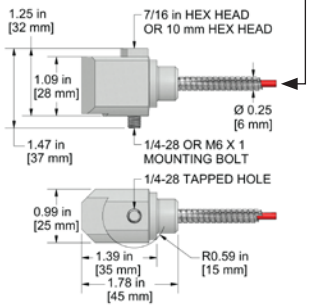
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC104-3C

Armored Integral Cable

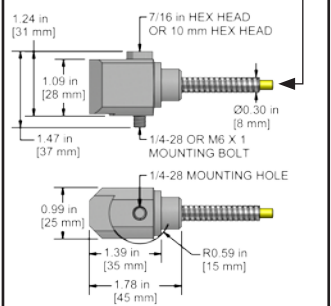
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC104-6C

Heavy Duty Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC104	M/AC104
Sensitivity ($\pm 10\%$)	100 mV/g	
Frequency Response ($\pm 3\text{dB}$)	30-600,000 CPM	0.5-10000 Hz
Frequency Response ($\pm 10\%$)	120-420,000 CPM	2.0-7000 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 100 Hz	2.3 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 1000 Hz	2 $\mu\text{g}/\sqrt{\text{Hz}}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
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 (AC104-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.1 oz	145 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,320,000 CPM	22000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Ordering Information

Standard	AC104-1A	AC104-2C	AC104-3C	AC104-6C
	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)
		(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/AC104-1A	M/AC104-2C	M/AC104-3C	M/AC104-6C
	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)
		(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** **Z**

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Actual Product Size Shown



Product Features

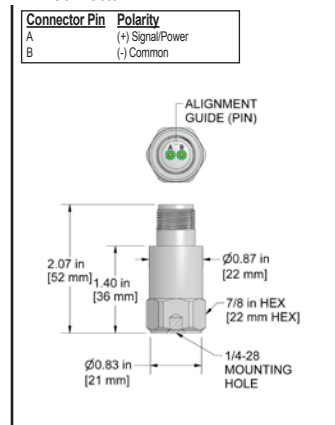
Low Cost Accelerometer - Perfect for Permanent Mounting

Excellent Choice for Budget Conscious Data Collection

- ± 50 g, Peak Dynamic Range
- Standard 2 Pin MIL Connection
- 1-10000 Hz (60-600,000 CPM) Frequency Response

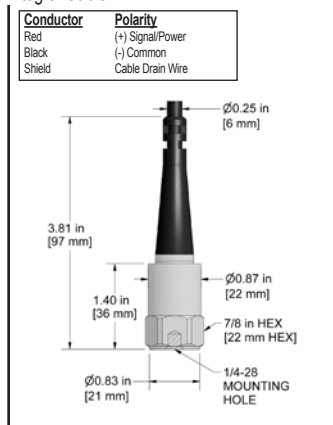
AC150-1A

2 Pin Connector



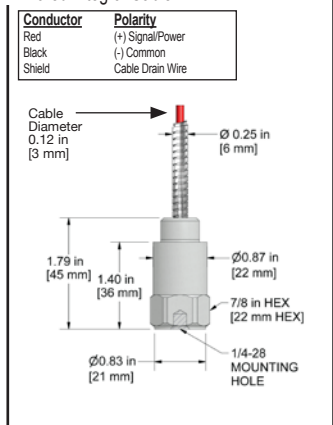
AC150-2C

Integral Cable



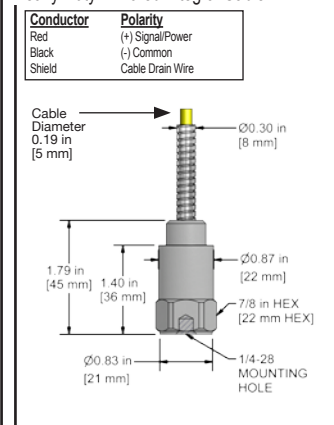
AC150-3C

Armored Integral Cable



AC150-6C

Heavy Duty Armored Integral Cable



Specifications	Standard	Metric
Part Number	AC150	M/AC150
Sensitivity ($\pm 15\%$)		100 mV/g
Frequency Response (± 3 dB)	60-600,000 CPM	1,0-10000 Hz
Dynamic Range		± 50 g, peak
Electrical		
Settling Time		<2.5 seconds
Voltage Source		18-30 VDC
Constant Current Excitation		2-10 mA
Spectral Noise @ 10 Hz		14 μ g/√Hz
Spectral Noise @ 100 Hz		2.3 μ g/√Hz
Spectral Noise @ 1000 Hz		2 μ g/√Hz
Output Impedance		<100 ohm
Bias Output Voltage		10-14 VDC
Case Isolation		>10 ⁸ ohm

Specifications	Standard	Metric
Environmental		
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 (AC150-2C/3C)	200 ft.	60 m
Physical		
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	AC150-1A	AC150-2C	AC150-3C	AC150-6C
	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)	(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/AC150-1A	M/AC150-2C	M/AC150-3C	M/AC150-6C
	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter 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)
		[] M - []	[] M / [] M - []	[] M / [] M - []
		(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 Z

