

AC312 Series

Low Voltage Accelerometer, Top Exit 3 Pin Connector, 25 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

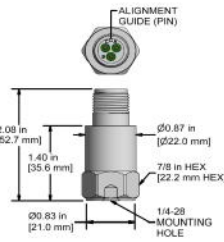
Ultra Low Power Sensor
For Battery Powered Transmission Systems

- ▶ 3 Pin MIL Connector
- ▶ Supply Voltage 3-5 Volts
- ▶ Compatible with Many Wireless Transmission Systems

AC312-1A

3 Pin Connector

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

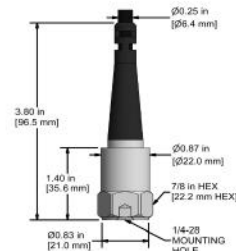


Stock Product

AC312-2C

Integral Cable

Conductor	Polarity
Red	(+) Power
Black	(-) Common
White	(+) Signal

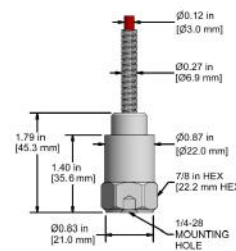


Built To Order

AC312-3C

Armored Integral Cable

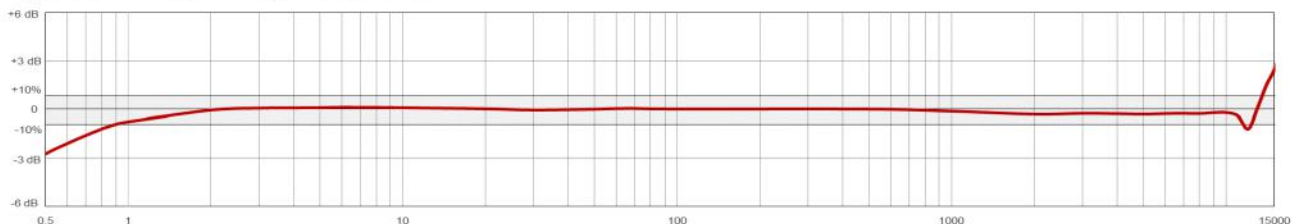
Conductor	Polarity
Red	(+) Power
Black	(-) Common
White	(+) Signal



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC312	M/AC312	Environmental		
Sensitivity (±10%)		25 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz	Maximum Shock Protection		5,000 g, peak
Frequency Response (±10%)	60-720,000 CPM	1.0-12000 Hz	Sealing		IP68
Dynamic Range		± 50 g, peak	Submersible Depth	200 ft.	60 m
Electrical			Physical		
Settling Time		<1.0 second	Sensing Element		PZT Ceramic
Voltage Source (IEPE)		3-5 VDC (10%)	Sensing Structure		Shear Mode
Spectral Noise @ 10 Hz		60 µg/√Hz	Weight	3.2 oz	90 grams
Spectral Noise @ 100 Hz		20 µg/√Hz	Case Material		316L Stainless Steel
Spectral Noise @ 1000 Hz		5 µg/√Hz	Mounting Thread		1/4-28 Blind Tapped Hole
Output Impedance		<100 ohm	Connector (Non-Integral)		3 Pin MIL-C-5015
Bias Output Voltage		1.5 V ± 10%	Resonant Frequency	1,860,000 CPM	31000 Hz
Case Isolation		>10 ⁸ ohm	Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Supply Current		< 20 µA	Mounting Hardware Supplied	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate		CA10

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty

www.ctconline.com | sales@ctconline.com | 585-924-5900

AC314 Series

Low Voltage Accelerometer, Side Exit 3 Pin Connector, 25 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

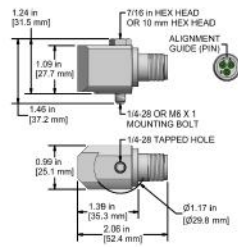
Ultra Low Power Sensor
For Battery Powered Systems

- ▶ Compatible with Many Wireless Transmission Systems
- ▶ Supply Voltage 3-5 Volts
- ▶ 3 Pin MIL Connection or Integral Cable
Note: Integral Cable Options are only for Permanent Monitoring Applications

AC314-1A

3 Pin Connector

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

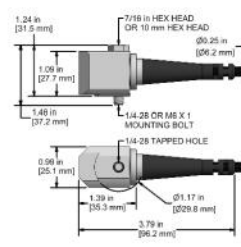


Stock Product

AC314-2C

CB105 Integral Cable

Conductor	Polarity
Red	(+) Power
Black	(-) Common
White	(+) Signal

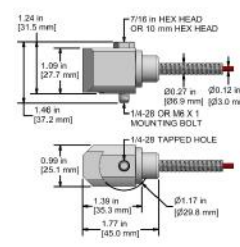


Built To Order

AC314-3C

CB218 Armored Integral Cable

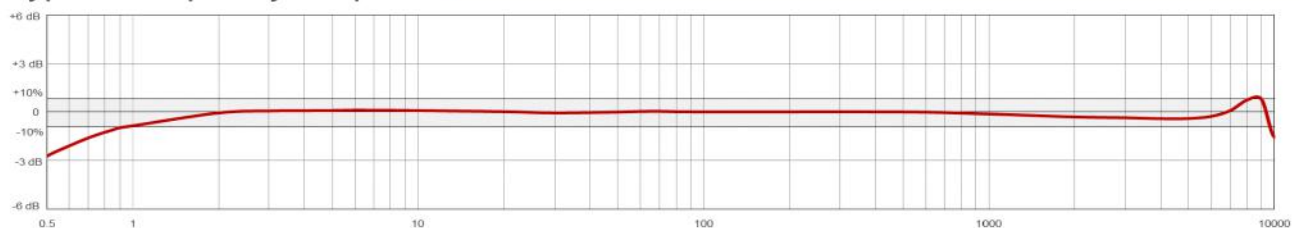
Conductor	Polarity
Red	(+) Power
Black	(-) Common
White	(+) Signal



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC314	M/AC314	Environmental		
Sensitivity (±10%)		25 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz	Maximum Shock Protection		5,000 g, peak
Frequency Response (±10%)	60-480,000 CPM	1,0-8000 Hz	Sealing		IP68
Dynamic Range		± 50 g, peak	Physical		
Electrical			Sensing Element		PZT Ceramic
Settling Time		< 1 second	Sensing Structure		Shear Mode
Voltage Source (IEPE)		3-5 VDC (10%)	Weight	5.1 ounces	145 grams
Spectral Noise @ 10 Hz		60 µg/√Hz	Case Material		316L Stainless Steel
Spectral Noise @ 100 Hz		20 µg/√Hz	Connector (Non-Integral)		3 Pin MIL-C-5015
Spectral Noise @ 1000 Hz		5 µg/√Hz	Resonant Frequency	1,260,000 CPM	21000 Hz
Output Impedance		< 100 ohm	Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Bias Output Voltage		1.5 V ± 10 %	Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Case Isolation		> 10 ⁸ ohm	Calibration Certificate		CA10
Supply Current		< 20 µA			

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty

www.ctconline.com | sales@ctconline.com | 585-924-5900