

# AC115 Series

## Low Cost Triaxial Accelerometer, Connector/Cable, 100 mV/g

SECTION 1 - VIBRATION SENSORS Accelerometers

**Must Use J4A or J4C Connectors**  
**Must Use CB105, CB117, CB119 or CB218 Cables**

### Product Features

**Low Cost Triaxial Sensor**  
**Speeds Data Collection**



Actual Product Size Shown

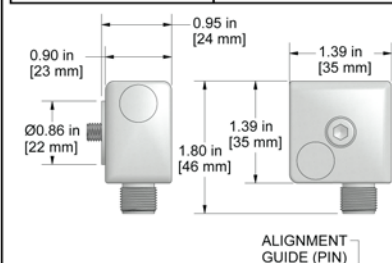


- **±15% Sensitivity**
- **Monitor 3 Channels of Data Simultaneously**
- **Affordably Priced**

### AC115-1D

4 Pin Connector

Connector Pin Polarity		Azima DLI Compatible Connector Pin Polarity	
A	Axis Y (+) Signal / Power	A	Axis 3 (+) Signal / Power
B	Axis X (+) Signal / Power	B	Axis 2 (+) Signal / Power
C	Axis Z (+) Signal / Power	C	Axis 1 (+) Signal / Power
D	(-) Common / Grid	D	(-) Common / Grid

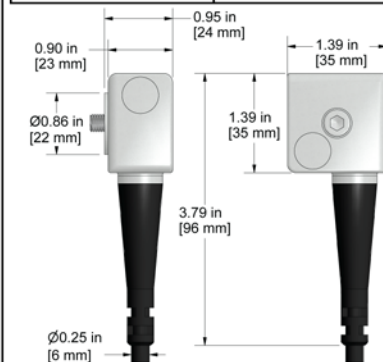


**CTC multi-conductor cable**  
 Red = Y axis  
 Green = X axis  
 White = Z axis  
 Black = Common

### AC115-2D

Integral Cable

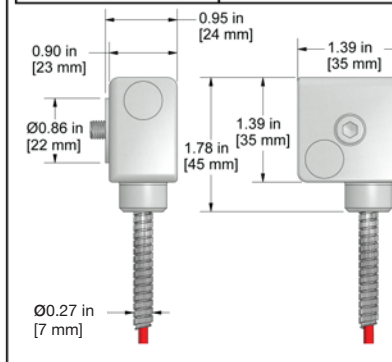
Conductor Polarity		Azima DLI Compatible Conductor Polarity	
Red	Axis Y (+) Signal / Power	Red	Axis 3 (+) Signal / Power
Green	Axis X (+) Signal / Power	Green	Axis 2 (+) Signal / Power
White	Axis Z (+) Signal / Power	White	Axis 1 (+) Signal / Power
Black	(-) Common / Grid	Black	(-) Common / Grid



### AC115-3D

Armored Integral Cable

Conductor Polarity		Azima DLI Compatible Conductor Polarity	
Red	Axis Y (+) Signal / Power	Red	Axis 3 (+) Signal / Power
Green	Axis X (+) Signal / Power	Green	Axis 2 (+) Signal / Power
White	Axis Z (+) Signal / Power	White	Axis 1 (+) Signal / Power
Black	(-) Common / Grid	Black	(-) Common / Grid



Specifications	Standard	Metric
Part Number	AC115	M/AC115
Sensitivity (±15%)	100 mV/g	
Frequency Response (±3dB)	60-390,000 CPM	1,0-6500 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	27 µg./√Hz	
Spectral Noise @ 100 Hz	6.5 µg./√Hz	
Spectral Noise @ 1000 Hz	2.5 µg./√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
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (AC115-2D/3D)	200 ft.	60 m
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	7.1 oz	200 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	4 Pin, J Connector	
Mounting Torque	1 to 2 ft. lbs.	1,4 to 2,7 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

### Ordering Information

Standard	AC115-1D (1/4-28 Captive Bolt)	AC115-2D - / [ ] - [ ] (1/4-28 Captive Bolt) (length in feet) (termination)	AC115-3D - / [ ] / [ ] - [ ] (1/4-28 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC115-1D (M6x1 Captive Bolt)	M/AC115-2D - / [ ] - [ ] (M6x1 Captive Bolt) (length in feet) (termination)	M/AC115-3D - / [ ] / [ ] - [ ] (M6x1 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination)
		[ ] M - [ ] (length in meters) (termination)	[ ] M / [ ] M - [ ] (maximum armor length 30 m) (cable length in meters) (termination)

**Cable Termination Options: L** **Z** **Note:** CTC multi-conductor cable: Red = Y axis, Green = X axis, White = Z axis, Black = Common

**Backed by our Unconditional Lifetime Warranty**

[www.ctconline.com](http://www.ctconline.com)



# AC230 Series

## Premium Series Triaxial Accelerometer, Connector/Cable, 100 mV/g

SECTION 1 - VIBRATION SENSORS  
Accelerometers

**Must Use J4A or J4C Connectors**  
**Must Use CB105, CB117, CB119 or CB218 Cables**

### Product Features

**Premium Triaxial Sensor**  
**Collect 3 Axes of Data**



Actual Product Size Shown



- Premium  $\pm 5\%$  Sensitivity
- Reduces Data Collection Time
- 1/4-28 or M6x1 Captive Bolt

### AC230-1D

4 Pin Connector

Connector Pin Polarity		Azima DLI Compatible Connector Pin Polarity	
A	Axis Y (+) Signal / Power	A	Axis 3 (+) Signal / Power
B	Axis X (+) Signal / Power	B	Axis 2 (+) Signal / Power
C	Axis Z (+) Signal / Power	C	Axis 1 (+) Signal / Power
D	(-) Common / Grid	D	(-) Common / Grid

**CTC multi-conductor cable**

Red = Y axis  
Green = X axis  
White = Z axis  
Black = Common

ALIGNMENT GUIDE (PIN)

### AC230-2D

Integral Cable

Conductor Polarity		Azima DLI Compatible Conductor Polarity	
Red	Axis Y (+) Signal / Power	Red	Axis 3 (+) Signal / Power
Green	Axis X (+) Signal / Power	Green	Axis 2 (+) Signal / Power
White	Axis Z (+) Signal / Power	White	Axis 1 (+) Signal / Power
Black	(-) Common / Grid	Black	(-) Common / Grid

### AC230-3D

Armored Integral Cable

Conductor Polarity		Azima DLI Compatible Conductor Polarity	
Red	Axis Y (+) Signal / Power	Red	Axis 3 (+) Signal / Power
Green	Axis X (+) Signal / Power	Green	Axis 2 (+) Signal / Power
White	Axis Z (+) Signal / Power	White	Axis 1 (+) Signal / Power
Black	(-) Common / Grid	Black	(-) Common / Grid

Specifications	Standard	Metric
Part Number	AC230	M/AC230
Sensitivity ( $\pm 5\%$ )	100 mV/g	
Frequency Response ( $\pm 3\text{dB}$ )	36-600,000 CPM	0.6-10000 Hz
Frequency Response ( $\pm 10\%$ )	60-390,000 CPM	1.0-6500 Hz
Frequency Response ( $\pm 5\%$ )	480-330,000 CPM	8.0-5500 Hz
Dynamic Range	$\pm 50$ 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	27 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 100 Hz	6.5 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 1000 Hz	2.5 $\mu\text{g}/\sqrt{\text{Hz}}$	
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	-65 to 250°F	-54 to 121°C
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (AC230-2D/3D)	200 ft.	60 m
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	7.1 oz	200 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	4 Pin	
Mounting Torque	1 to 2 ft. lbs.	1.4 to 2.7 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

### Ordering Information

Standard	AC230-1D (1/4-28 Captive Bolt)	AC230-2D - / [ ] - [ ] (1/4-28 Captive Bolt) (length in feet) (termination)	AC230-3D - / [ ] / [ ] - [ ] (1/4-28 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC230-1D (M6x1 Captive Bolt)	M/AC230-2D - / [ ] - [ ] (M6x1 Captive Bolt) (length in feet) (termination) [ ] M - [ ] (length in meters) (termination)	M/AC230-3D - / [ ] / [ ] - [ ] (M6x1 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination) [ ] M / [ ] M - [ ] (maximum armor length 30 m) (cable length in meters) (termination)

**Cable Termination Options:** L Z Note: CTC multi-conductor cable; Red = Y axis, Green = X axis, White = Z axis, Black = Common

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# AC360 Series

## Modal/ODS Triaxial Accelerometer, 100 mV/g, ± 5%

Actual Product Size Shown



Must Use **J4A, J4C** or **J4N** Connectors  
Must Use **CB105, CB117, CB119** or **CB218** Cables

### Product Features

#### Modal/ODS Triaxial Sensor

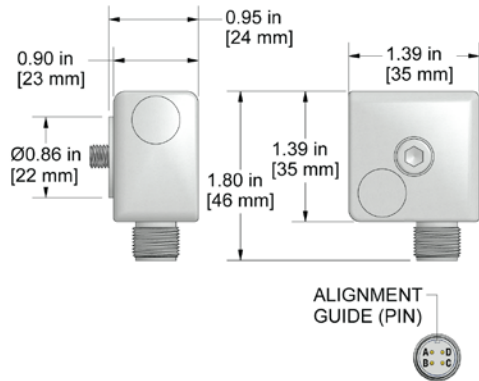
Collect 3 Axes of Data for Modal Analysis and ODS (Operating Deflection Shape)

- Premium 100 mV/g, ±5% Sensitivity
- Phase conforms to Cartesian Coordinate System (Right Hand Rule)

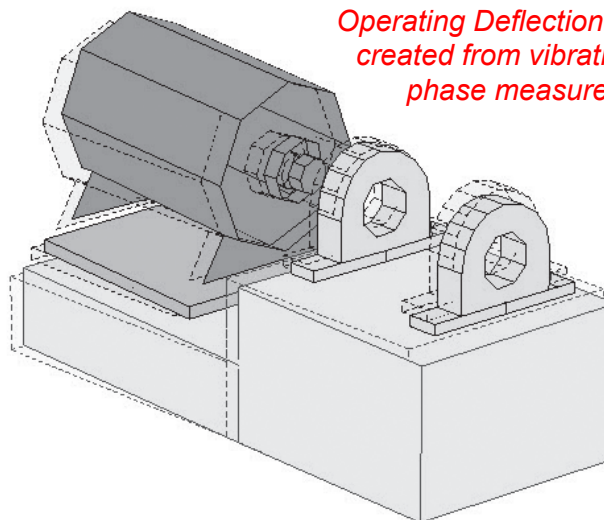
### AC360-1D

4 Pin Connector

Pin	Alpha Axis	Numeric Axis	Polarity	Heat Shrink Color
A	Y	3	+ Sig/Pwr	Red
B	X	2	+ Sig/Pwr	Green
C	Z	1	+ Sig/Pwr	White
D			- Com/Gnd	



Operating Deflection Shape created from vibration and phase measurements.



Specifications	Standard	Metric
Part Number	AC360	M/AC360
Sensitivity (±5%)	100 mV/g	
Frequency Response (±3dB)	36-600,000 CPM	0,6-10000 Hz
Frequency Response (±10%)	60-390,000 CPM	1,0-6500 Hz
Frequency Response (±5%)	480-330,000 CPM	8,0-5500 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	27 µg/√Hz	
Spectral Noise @ 100 Hz	6.5 µg/√Hz	
Spectral Noise @ 1000 Hz	2.5 µg/√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	-65 to 250°F	-54 to 121°C
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	7.1 oz	200 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	4 Pin	
Mounting Torque	1 to 2 ft. lbs.	1,4 to 2,7 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

### Ordering Information

Standard	AC360-1D	Part/Cable Number	Length in Feet
	(1/4-28 Captive Bolt)	CB105 - J4C - 006 - F3C	6
Metric	M/AC360-1D	Part/Cable Number	Length in Feet
	(M6x1 Captive Bolt)	CB105 - J4C - 010 - F3C	10
		CB105 - J4C - 015 - F3C	15
		CB105 - J4C - 020 - F3C	20
		CB105 - J4C - 030 - F3C	30

