

AC119 Series

Low Cost Biaxial Accelerometer, Connector/Cable, 100 mV/g

SECTION I - VIBRATION SENSORS
Accelerometers



Actual Product Size Shown



Product Features

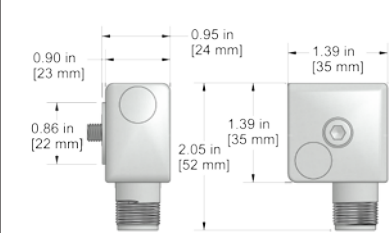
Low Cost Biaxial Sensor
Speeds Data Collection

- 100 mV/g/axis ($\pm 15\%$)
- Monitor 2 Channels of Data Simultaneously
- Cost Effective

AC119-1D

3 Pin Connector

Connector	Pin Polarity
A	Axis X (+) Signal / Power
B	Axis Z (+) Signal / Power
C	(-) Common / Gnd



CTC multi-conductor cable

Green = X axis
White = Z axis
Black = Common

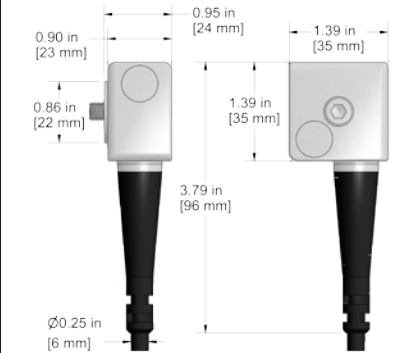
ALIGNMENT GUIDE (PIN)



AC119-2D

Integral Cable

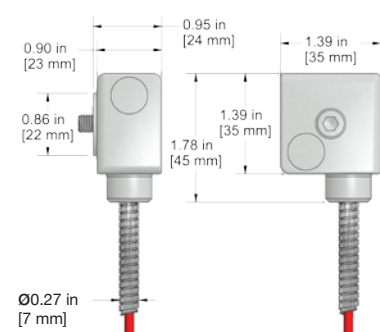
Conductor	Polarity
Green	Axis X (+) Signal / Power
White	Axis Z (+) Signal / Power
Black	(-) Common / Gnd



AC119-3D

Armored Integral Cable

Conductor	Polarity
Green	Axis X (+) Signal / Power
White	Axis Z (+) Signal / Power
Black	(-) Common / Gnd



Specifications	Standard	Metric
Part Number	AC119	M/AC119
Sensitivity ($\pm 15\%$)	100 mV/g	
Frequency Response ($\pm 3dB$)	60-390,000 CPM	1,0-6500 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	27 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 100 Hz	6.5 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 1000 Hz	2.5 $\mu g/\sqrt{Hz}$	
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
Electromagnetic Sensitivity		CE
Sealing		IP68
Submersible Depth (AC119-2D/3D)	200 ft.	60 m
Physical		
Sensing Element		PZT Ceramic
Sensing Structure		Shear Mode
Weight	6.9 oz	195 grams
Case Material		316L Stainless Steel
Mounting		1/4-28
Connector (non-integral)		3 PIN MIL
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	AC119-1D	AC119-2D - /	AC119-3D - /
	(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)
Metric	M/AC119-1D	M/AC119-2D - /	M/AC119-3D - /
	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)
		(length in meters) (termination)	(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

