

AC949 Series

Class I, Division 2/Zone 2 Accelerometer, For Use In "Non-Arcing, Non-Sparking" Environments, Biaxial Accelerometer, Connector/Cable, 100 mV/g

CSA/ATEX Approved

Actual Product Size Shown



Must Use "Class I, Division 2" CB191 or CB212 Cable and D3Q Connector

REGULATORY INFORMATION

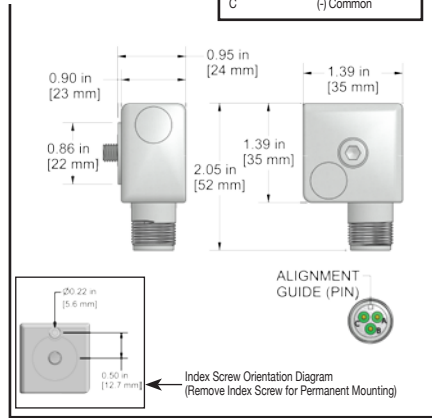
Ex nA IIC T3C Gc
 AEx nA IIC T3C Gc
 CLI Groups A, B, C, D
 CLII Groups E, F, G; CLIII
 CLI, Zone 2

Operating Temperature Code: T3C
 Ambient Temperature Range = -40°C to +121°C
 Ui = 28 Vdc li = 100 mA
 CSA 221421
 Sira 15ATEX2152X
 Ex nA IIC T3 Ga

AC949-1D

3 Pin Connector

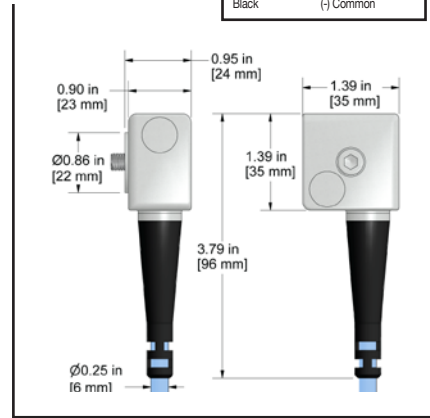
Connector Pin	Polarity
A	Axis X (+) Signal / Power
B	Axis Z (+) Signal / Power
C	(-) Common



AC949-2D

Integral Cable

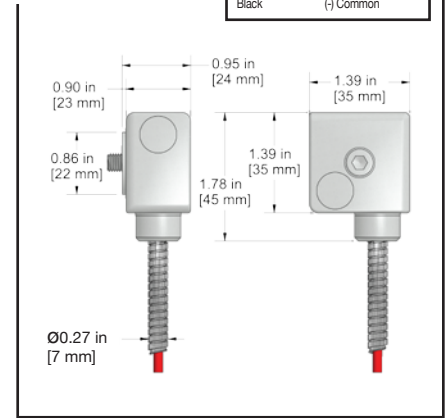
Conductor	Polarity
Green	Axis X (+) Signal / Power
White	Axis Z (+) Signal / Power
Black	(-) Common



AC949-3D

Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC949	M/AC949
Vibration		
Sensitivity (±10%)		100 mV/g
Frequency Response (±3dB)	60-390,000 CPM	1,0-6500 Hz
Dynamic Range		± 50 g, peak
Electrical		
Settling Time		<2.5 seconds
Voltage Source (IEPE)	18-28 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 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-58 to 250°F	-50 to 121°C
Electromagnetic Sensitivity		CE
Sealing		Welded, Hermetic
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 (AC949-1D)		3 Pin MIL-C-5015
Integral Cable (AC949-2D)		Blue TPE Cable
Armored Cable (AC949-3D)		Armor Jacketed Cable
Mounting Torque	1 to 2 ft. lbs.	1,4 to 2,7 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Indexing Screw		Provided for consistent axis orientation, may be removed in permanent installations
Calibration Certificate		CA10

Ordering Information

Standard	AC949-1D	AC949-2D /	AC949-3D /
	(1/4-28 Captive Bolt) Stock Product	(1/4-28 Captive Bolt) Build To Order	(1/4-28 Captive Bolt) Build To Order
		[] - [] (length in feet) (termination)	[] / [] - [] (maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/AC949-1D (M6x1 Captive Bolt) Stock Product	M/AC949-2D / (M6x1 Captive Bolt) Build To Order	M/AC949-3D / (M6x1 Captive Bolt) Build To Order
		[] - [] (length in feet) (termination)	[] / [] - [] (maximum armor length 100 ft.) (cable length in feet) (termination)
		[] - [] (length in meters) (termination)	[] / [] - [] (maximum armor length 30 m) (cable length in meters) (termination)

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

Read Before Purchasing
 Important information on Regulatory Approvals and Requirements on Page 87



Backed by our Unconditional Lifetime Warranty

SECTION 1 - VIBRATION SENSORS
Class 1, Division 2/Zone 2 Accelerometers