

AC980 Series

Intrinsically Safe Accelerometer, Triaxial Accelerometer, Connector/Cable, 100 mV/g

CSA/ATEX/IECEX Approved

Actual Product Size Shown



REGULATORY INFORMATION

Ex ia IIC T3/T4 Ga
 AEx ia IIC T3/T4 Ga
 CLI Groups A, B, C, D
 CLII Groups E, F, G; CLIII
 CLI, Zone 0

Control Drawing INS10012
 Ui = 28 Vdc li = 112 mA
 Pi = 1W, Ci = 63.036nF, Li = 0µH
 CSA 221421

Sira 15ATEX2152X
 Ex ia IIC T3 Ga

IECEX SIR 15.0060X
 Ex ia IIC T3 Ga

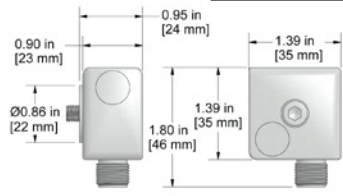
Operating Temperature Code: T4
 Ambient Temperature Range = -40°C to +80°C
 Operating Temperature Code: T3
 Ambient Temperature Range = -40°C to +121°C

Requires **Intrinsically Safe Barrier IS111**

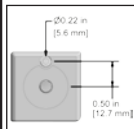
AC980-1D

4 Pin Connector

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



ALIGNMENT GUIDE (PIN)

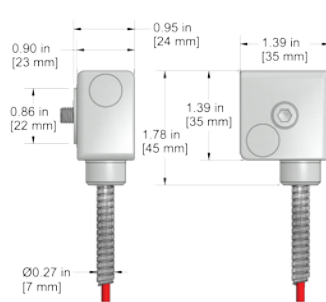


Index Screw Orientation Diagram (Remove Index Screw for Permanent Mounting)

AC980-3D

Integral Cable

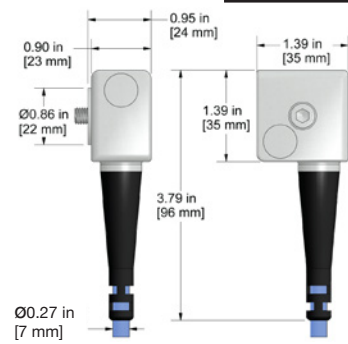
Conductor	Polarity
Red	Axis Y (+) Signal/Power
Green	Axis X (+) Signal/Power
White	Axis Z (+) Signal/Power
Black	(-) Common



AC980-9D

Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	AC980	M/AC980
Vibration		
Sensitivity (±10%)	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	
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	-65 to 250°F	-54 to 121°C
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	7.1 oz	200 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC980-1D)	4 Pin, J Series Connector	
Armored Cable (AC980-3D)	Armor Jacketed Cable	
Integral Cable (AC980-9D)	Blue TPE 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	AC980-1D	AC980-3D /	AC980-9D /
	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)
	Stock Product	Build To Order	Build To Order
		(maximum armor length 100 ft.)	(length in feet)
		(cable length in feet)	(termination)
Metric	M/AC980-1D	M/AC980-3D /	M/AC980-9D /
	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)
	Stock Product	Build To Order	Build To Order
		(maximum armor length 30 m)	(length in meters)
		(cable length in meters)	(termination)

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

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

Cable Terminations: L Z



VIBRATION ANALYSIS HARDWARE

Backed by our Unconditional Lifetime Warranty