

AC980 Series

Nonincendive Intrinsically Safe, CSA North America Class 1, Division 1 and IECEx/ATEX Zone 0,1 Approved Triaxial Accelerometer, Side Exit 4 Pin Mini-MIL Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Regulatory Information

CSA 221421
 Ex ia IIC T3/T4 Ga
 Ex ia I Ma
 AEx ia IIC T3/T4
 CLI Groups A, B, C, D
 CLII Groups E, F, G; CLIII
 CLI, Zone 0
 Operating Temp Code: T4
 Ambient Temp Range = -40 to 80°C
 Operating Temp Code: T3
 Ambient Temp Range = -40 to 121°C
 Control Drawing INS10012
 Ex ia IIC T3 -40°C < Ta < +121°C
 Ex ia IIC T4 -40°C < Ta < +80°C

Sira 15ATEX2152X
 IECEx SIR 15.0060X
 Ex ia IIC T3/T4 Ga
 Ex ib IIIC T135°C...T143°C Db
 Operating Temp Code: T143°C Db
 Ambient Temp Range = -40°C to 121°C
 Operating Temp Code: T135°C
 Ambient Temp Range = -40°C to +80°C
 Ex ia I Ma

Connector Exit Entity Parameters:
 Ui = 28 Vdc, Ii = 120 mA, Pi = 1W, Ci = 28nF, Li = 0µH

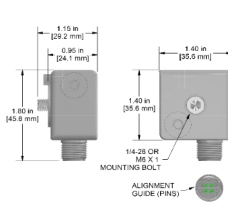
200 ft (61 m) Maximum Allowable Integral Cable Length
 Approved Cabling: CB192*, CB298 (*Approved for Use in T4 Applications Only)
 Requires Two IS111-1B Intrinsic Safety Barriers Per Sensor

Integral Cable Entity Parameters
 Ui = 28 Vdc, Ii = 120 mA, Pi = 1W, Ci = 40nF, Li = 40.2µH

AC980-1D

4 Pin Connector

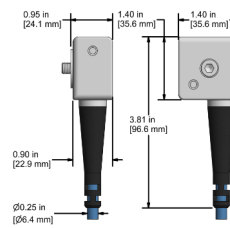
Connector Pin	Polarity
A (Axis Y)	(+) Signal/Power
B (Axis X)	(+) Signal/Power
C (Axis Z)	(+) Signal/Power
D	(-) Common



AC980-2D

CB192 Molded Integral Cable

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

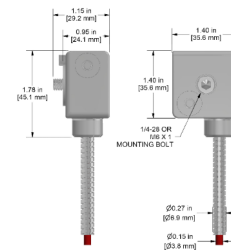


Built To Order

AC980-3D

CB298 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC980	M/AC980	Environmental		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-65 to 250°F	-54 to 121°C
Frequency Response (±3dB)	36-600,000 CPM	0.6-10000 Hz	Electromagnetic Sensitivity		CE
Frequency Response (±10%)	60-390,000 CPM	1.0-6500 Hz	Sealing		Welded, Hermetic
Dynamic Range		± 50 g, peak	Physical		
Electrical			Sensing Element		PZT Ceramic
Settling Time		<2.5 seconds	Weight	7.1 oz	200 grams
Voltage Source		18-28 VDC	Case Material		316L Stainless Steel
Constant Current Excitation		2-10 mA	Mounting Thread		1/4-28 Captive Bolt
Spectral Noise @ 10 Hz		27 µg/√Hz	Connector (Non-Integral)		4 Pin J Connector
Spectral Noise @ 100 Hz		6.5 µg/√Hz	Mounting Torque	1 to 2 ft. lbs	1.4 to 2.7 Nm
Spectral Noise @ 1000 Hz		2.5 µg/√Hz	Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Output Impedance		<100 ohm	Calibration Certificate		CA10
Bias Output Voltage		10-14 VDC			
Case Isolation		>10 ⁸ ohm			

Typical Frequency Response

