

AC970 Series



VIBRATION ANALYSIS HARDWARE

Nonincendive Miniature Industrial, Intrinsically Safe, CSA North America Class 1, Division 1 and IECEx/ATEX Zone 0,1 Approved Accelerometer, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±10%



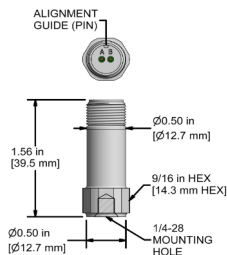
Regulatory Information

Ex ia IIC T3/T4 Ga	CSA 22 UKEX 1408X
AEx ia IIC T3/T4 Ga	Ex ia IIC T3/T4 Ga
CLI Groups A, B, C, D	Ex ia I Ma
CLII Groups E, F, G; CLIII	
CL I, Zone 0	Sira 15ATEX2152X
	Ex ia IIC T3 Ga
	Ex ia I Ma
Operating Temperature Code: T4	
Ambient Temperature Range = -40 to 80°C	
Operating Temperature Code: T3	IECEx SIR 15.0060X
Ambient Temperature Range = -40 to 121°C	Ex ia IIC T3 Ga
Control Drawing INS10012	Ex ia I Ma
Ui = 28 Vdc Ii = 112 mA	
Pj = 1W, Ci = 63.036nF, Li = 0µH	
CSA 221421	

AC970-1D

2 Pin Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

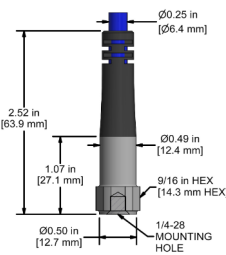


Stock Product

AC970-2D

CB193 Integral Cable

Conductor	Polarity
White	(+) Signal/Power
Black	(-) Common

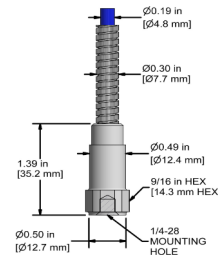


Built To Order

AC970-3D

CB296 Armored Integral Cable

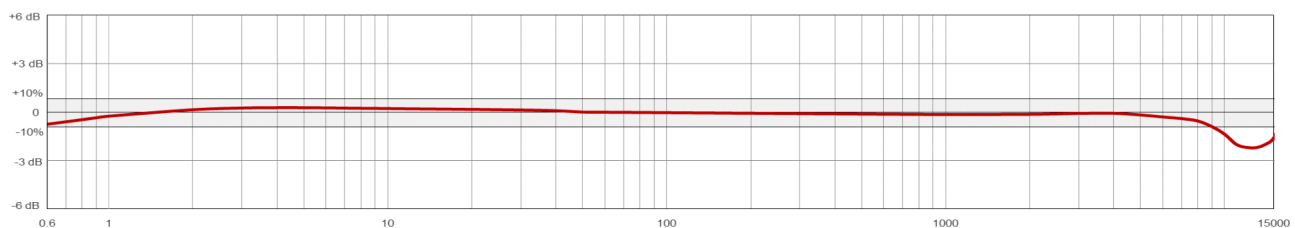
Conductor	Polarity
White	(+) Signal/Power
Black	(-) Common



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC970	M/ or M8/AC970	Environmental		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	36-1,200,000 CPM	0.6-20000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	60-420,000	1.0-7000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range		± 50 g, peak	Sealing	Welded, Hermetic	
Electrical			Physical		
Settling Time	< 2.5 Seconds		Sensing Element	PZT Ceramic	
Voltage Source (IEPE)	18-28 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	0.7 oz	20 grams
Spectral Noise @ 10 Hz	30 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	4 µg/√Hz		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 1000 Hz	2 µg/√Hz		Connector (Non-Integral)	2 Pin mini-MIL	
Output Impedance	<100 ohm		Resonant Frequency	2,040,000	34000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service

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