

AC970 Series

Intrinsically Safe Small Accelerometer, 100 mV/g, Top Exit 2 Pin Mini-MIL Connector



VIBRATION ANALYSIS HARDWARE



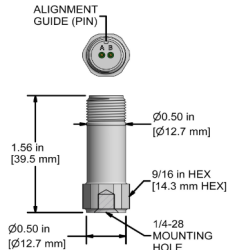
Regulatory Information

Ex ia IIC T3/T4 Ga	Control Drawing INS10012
AEx ia IIC T3/T4 Ga	Ui = 28 Vdc li = 112 mA
CLI Groups A, B, C, D	Pi = 1W, Ci = 63.036nF, Li = 0µH
CLII Groups E, F, G; CLIII	CSA 221421
CLI, Zone 0	Sira 15ATEX2152X
Operating Temperature Code: T4	Ex ia IIC T3 Ga
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

AC970-1D

2 Pin Connector

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

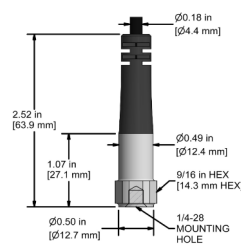


Stock Product

AC970-2D

CB190 Integral Cable

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

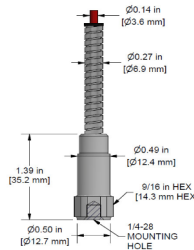


Built To Order

AC970-3D

CB206 Armored Integral Cable

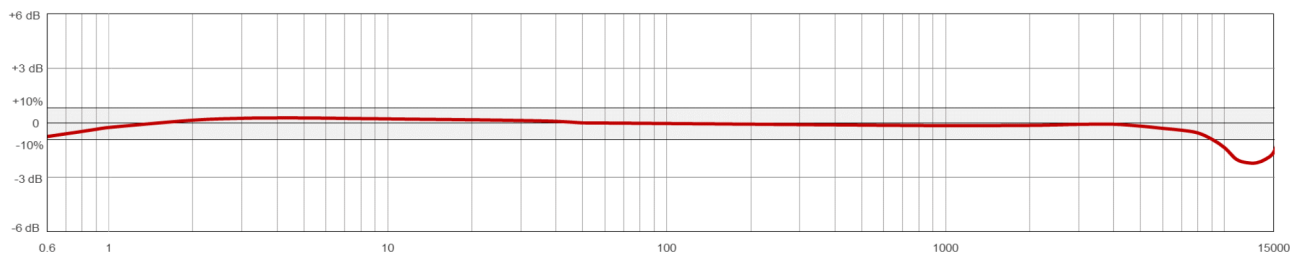
Conductor	Polarity
White	(+) Signal/Power
Black	(-) Common



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC970	M/AC970	Environmental		
Sensitivity (±10%)	100 mV/g		Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-900,000 CPM	0.6-15000 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	1/4-28	
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	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty

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