

# AC971 Series



VIBRATION ANALYSIS HARDWARE

Premium 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, ±5%

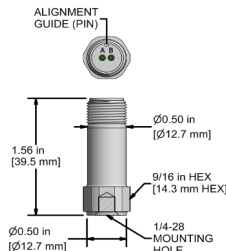


## Regulatory Information

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	
CLI, 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 li = 112 mA	
Pj = 1W, Ci = 63.036nF, Li = 0µH	
CSA 221421	

### AC971-1A 2 Pin Connector

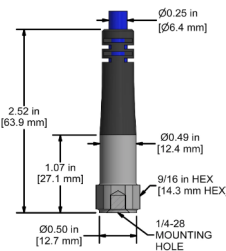
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

### AC971-2A CB193 Integral Cable

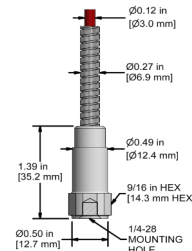
Conductor	Polarity
White	(+) Signal/Power
Black	(-) Common



Built To Order

### AC971-3A CB296 Armored Integral Cable

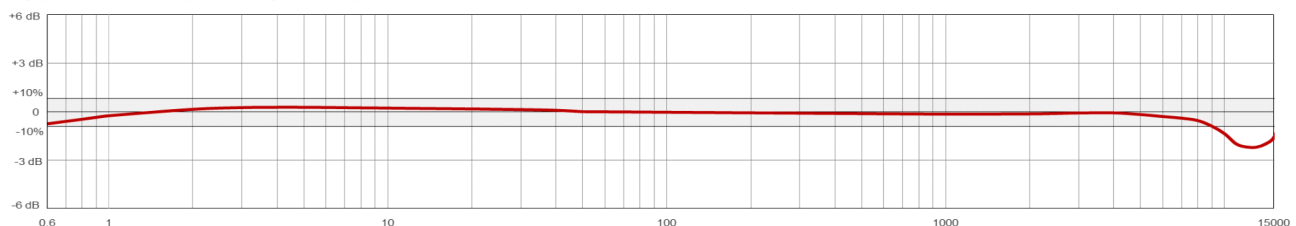
Conductor	Polarity
White	(+) Signal/Power
Black	(-) Common



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC971	M/ or M8/AC971	<b>Environmental</b>		
Sensitivity (±5%)		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
<b>Electrical</b>			<b>Physical</b>		
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 <sup>8</sup> ohm	Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate		CA10

## Typical Frequency Response



[www.delta3n.hu](http://www.delta3n.hu)

Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service

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