

AC971 Series

Premium Miniature Industrial Intrinsically Safe Accelerometer, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±5%



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

CSA 22 UKEX 1408X
Ex ia IIC T3/T4 Ga
Ex ia I Ma
Sira 15ATEX2152X
Ex ia IIC T3 Ga

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

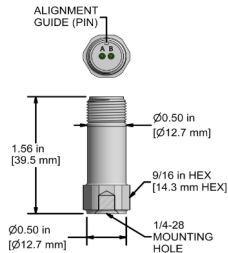
Operating Temperature Code: T3
Ambient Temperature Range =
-40 to 121°C

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

IECEX SIR 15.0060X

AC971-1A
2 Pin Connector

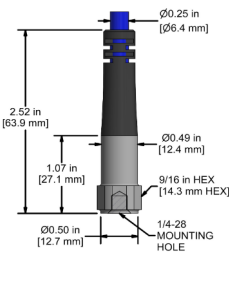
Connector	Polarity
Pin	
A	(+)
	Signal/Power
B	(-) Common



Stock Product

AC971-2A
CB193 Integral Cable

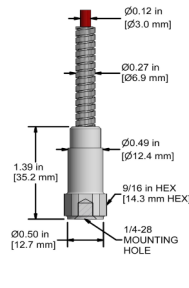
Conductor	Polarity
White	(+)
	Signal/Power
Black	(-) Common



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	Environmental		
Sensitivity (±5%)	100 mV/g		Operating 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 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				
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				