

AC972 Series



VIBRATION ANALYSIS HARDWARE

Intrinsically Safe Triaxial Accelerometer, Follows Cartesian Phase Coordinate System for Modal/ODS Analysis, Side Exit 4 Pin Mini-MIL Connector, 10 mV/g, ±10%

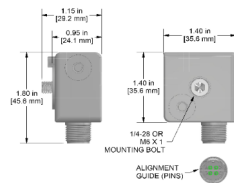


Regulatory Information

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	
CLI, Zone 0	Sira 15ATEX2152X
	Ex ia IIC T3 Ga
Operating Temperature Code: T4 Ex ia I Ma	
Ambient Temperature Range = -40 to 80°C IECEx SIR 15.0060X	
Operating Temperature Code: T3 Ex ia IIC T3 Ga	
Ambient Temperature Range = -40 to 121°C Ex ia I Ma	
Control Drawing INS10012	
Ui = 28 Vdc li = 112 mA	
Pi = 1W, Ci = 63.036nF, Li = 0µH	
CSA 221421	

AC972-1D 4 Pin Connector

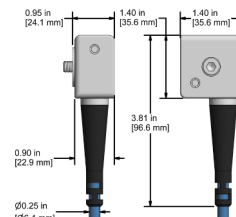
Connector Pin	Polarity
A (Axis Y)	(+) Signal/Power
B (Axis X)	(+) Signal/Power
C (Axis Z)	(+) Signal/Power
D	(-) Common



Stock Product

AC972-2D CB192 Integral Cable

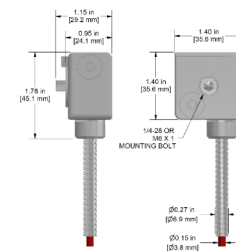
Conductor	Polarity
Red (Axis Y)	(+) Signal/Power
Green (Axis X)	(+) Signal/Power
White (Axis Y)	(+) Signal/Power
Black	(-) Common



Built To Order

AC972-3D CB218 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC972	M/AC972	Environmental		
Sensitivity (±10%)	10 mV/g		Operating Temperature Range	-65 to 250°F	-54 to 121°C
Frequency Response (±3dB)	60-600,000 CPM	1,0-10000 Hz	Electromagnetic Sensitivity	CE	
Frequency Response (±10%)	90-420,000 CPM	1,5-7000 Hz	Sealing	Welded, Hermetic Rated to IP68/IP69	
Frequency Response (±5%)	180-360,000 CPM	3,0-6000 Hz	SIL Rating	SIL 2	
Dynamic Range	± 500 g, peak		Physical		
Transverse Sensitivity	<5%		Sensing Element	PZT Ceramic	
Electrical			Sensing Structure	Shear Mode	
Settling Time	<2.5 seconds		Weight	7.1 oz	200 grams
Voltage Source (IEPE)	18-28 VDC		Case Material	316L Stainless Steel	
Constant Current Excitation	2-10 mA				
Spectral Noise @ 10 Hz	27 µg/√Hz				