

AC972 Series

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

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CLI Groups A, B, C, D

CLII Groups E, F, G; CLIII

CLI, Zone 0

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

CSA 22 UKEX 1408X

Ex ia IIC T3/T4 Ga

Ex ia I Ma

Sira 15ATEX2152X

Ex ia IIC T3 Ga

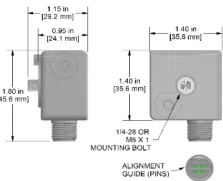
IECEX SIR 15.0060X

Ex ia IIC T3 Ga

Ex ia I Ma

AC972-1D
4 Pin Connector

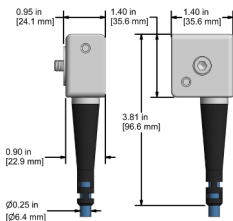
Connector	Polarity
Pin	
A (Axis Y)	(+) Signal/Power
B (Axis X)	(+) Signal/Power
C (Axis Z)	(+) Signal/Power
D	(-) Common



Stock Product

AC972-2D
CB192 Integral Cable

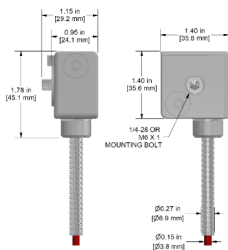
Conductor	Polarity
Red (Axis Y)	(+) Signal/Power
Green (Axis X)	(+) Signal/Power
White (Axis Y)	(+) Signal/Power
Black	(-) Common



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			