



AC974 Series

Miniature Industrial Intrinsically Safe Accelerometer, Side Exit 2
Pin Mini-MIL Connector, 100 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

Sira 15ATEX2152X

CLI, Zone 0

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

Control Drawing INS10012

Ui = 28 Vdc li = 112 mA

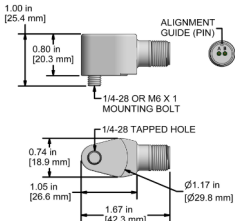
Pi = 1W, Ci = 63.036nF, Li = 0μH

CSA 221421

AC974-1D

2 Pin Connector

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

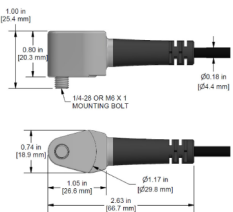


Stock Product

AC974-2D

CB193 Integral Cable

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

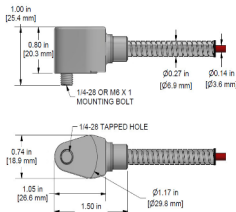


Built To Order

AC974-3D

CB296 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC974	M/AC974	Environmental		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-600,000 CPM	0,6-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range		± 50 g, peak	Electromagnetic Sensitivity	CE	
Electrical			Sealing	Welded, Hermetic	
Settling Time	<2.5 Seconds		Physical		
Voltage Source (IEPE)	18-28 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	30 μg/√Hz		Weight	2.1 oz	60 grams
Spectral Noise @ 100 Hz	4 μg/√Hz		Case Material	316L Steel	
Spectral Noise @ 1000 Hz	2 μg/√Hz		Mounting Thread	1/4-28	
Output Impedance	< 100 ohm		Connector (Non-Integral)	2 Pin mini-MIL	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	1,920,000 CPM	32000 Hz