

AC990 Series

Nonincendive, Intrinsically Safe, ANZEx Zone 0,1, 2 Approved
Accelerometer, Top Exit 2 Pin Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Regulatory Information

ANZEx 18.4160

Ex ia I Ma (-40°C ≤ Ta ≤ +80°C)

Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +125°C)

Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +80°C)

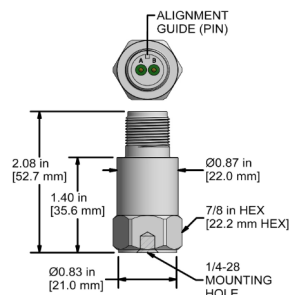
Control Drawing INS10172

Vmax/Ui = 28V Imax/Ii=100mA

AC990-1A

2 Pin Connector

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

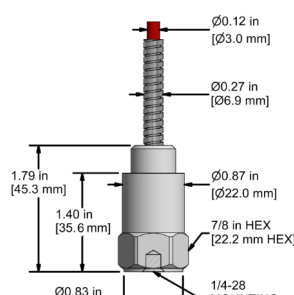


Stock Product

AC990-3A

CB296 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC990	M/ or M8/AC990	Environmental		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	60-600,000 CPM	1.0-10000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 50 g, peak		Sealing	Welded, Hermetic	
Transverse Sensitivity	≤5%		Physical		
Electrical			Sensing Element	PZT Ceramic	
Settling Time	<3 Seconds		Sensing Structure	Shear Mode	
Voltage Source	18-28 VDC		Weight	3.2 oz	91 grams
Constant Current Excitation	2-10 mA		Case Material	316L Stainless Steel	
Spectral Noise @ 10 Hz	30 µg/√Hz		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 100 Hz	19 µg/√Hz		Connector (Non-Integral)	2 Pin MIL-C-5015	
Spectral Noise @ 1000 Hz	15 µg/√Hz		Resonant Frequency	1,380,000 CPM	23000 Hz
Output Impedance	<100 ohm		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Bias Output Voltage	10-14 VDC		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Case Isolation	>10 ⁸ ohm		Calibration Certificate	CA10	

Typical Frequency Response

