

AC991 Series

Nonincendive, Intrinsically Safe, ANZEx Zone 0,1 Approved Accelerometer,
Side 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)

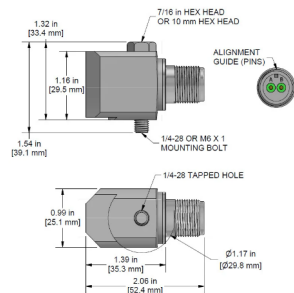
Control Drawing INS10172

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

AC991-1A

2 Pin Connector

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

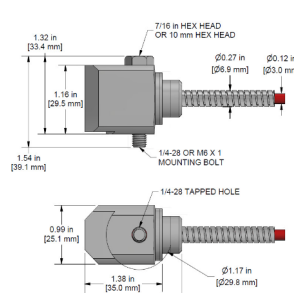


Stock Product

AC991-3A

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	AC991	M/AC991	<u>Environmental</u>		
Sensitivity (±10%)		100 mV/g	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-516,000 CPM	0.5-8600 Hz	Maximum Shock Protection		5,000 g, peak
Dynamic Range		± 50 g, peak	Electromagnetic Sensitivity		CE
Transverse Sensitivity		≤5%	Sealing		Welded, Hermetic
<u>Electrical</u>			Submersible Depth	200 ft.	61 m
Settling Time		<3 Seconds	SIL Rating		SIL 2
Voltage Source		18-28 VDC	<u>Physical</u>		
Constant Current Excitation		2-10 mA	Sensing Element		PZT Ceramic
Spectral Noise @ 10 Hz		6.5 µg/√Hz	Sensing Structure		Shear Mode
Spectral Noise @ 100 Hz		2 µg/√Hz	Weight	5.3 oz	150 grams
Spectral Noise @ 1000 Hz		1.8 µg/√Hz	Case Material		316L Stainless Steel
Output Impedance		<100 ohm	Mounting Thread		1/4-28
Bias Output Voltage		10-14 VDC	Connector (Non-Integral)		2 Pin MIL-C-5015
Case Isolation		>10 ⁸ ohm	Resonant Frequency	1,320,000 CPM	22000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate		CA10

Typical Frequency Response

