

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)

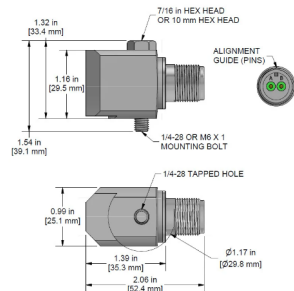
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +80°C)

Control Drawing INS10172

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

AC991-1A 2 Pin Connector

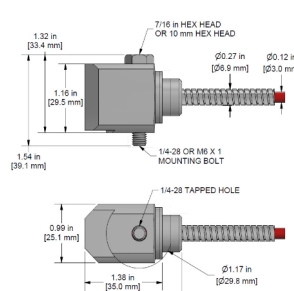
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



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	Environmental		
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	
Electrical			Submersible Depth	200 ft.	61 m
Settling Time	<3 Seconds		SIL Rating	SIL 2	
Voltage Source	18-28 VDC		Physical		
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

