

AC298-M12A Series

Premium, Compact Multipurpose Accelerometer, Side Exit 4 Pin M12 Connector, M8x1.25 Captive Bolt, 100 mV/g, $\pm 5\%$



VIBRATION ANALYSIS HARDWARE



Product Features

High Performance in an Affordable, Side-Exit M12 Compact Sensor

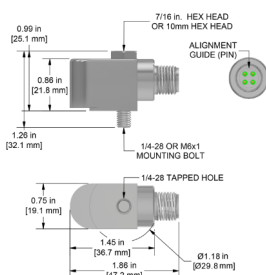
Very Low Noise and Superior RF Immunity

- ▶ 100 mV/g Sensitivity, $\pm 5\%$
- ▶ $\pm 80g$ Dynamic Range
- ▶ 4 Pin M12 Connector

AC298-M12A

4 Pin Connector

Connector Pin	Polarity
1	(+) Signal/Power
2	(-) Common
3	Not Used
4	Not Used



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Sensitivity ($\pm 5\%$)	100 mV/g		<u>Environmental</u>		
Frequency Response ($\pm 3dB$)	30-480,000 CPM	0.5-8000 Hz	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 10\%$)	60-150,000 CPM	1.0-2500 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response ($\pm 5\%$)	600-120,000 CPM	10-2000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	$\pm 80 g$, peak *Vsource $\geq 22V$, 12Vbias		Sealing	Welded, Hermetic	
Transverse Sensitivity	$\leq 5\%$		Submersible Depth	200 ft.	60 m
<u>Electrical</u>			SIL Rating	SIL 2	
Settling Time	<2 Seconds		<u>Physical</u>		
Voltage Source	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	8 $\mu g/\sqrt{Hz}$		Weight	3.4 oz	96 grams
Spectral Noise @ 100 Hz	4 $\mu g/\sqrt{Hz}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	2 $\mu g/\sqrt{Hz}$		Connector (Non-Integral)	4 Pin M12	
Output Impedance	<100 ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	M8x1.25 Captive Bolt	
			Calibration Certificate	CA10	

Typical Frequency Response

