

AC194-M12A Series

Compact Multipurpose Accelerometer, 4 Pin M12 Connector, 100 mV/g, $\pm 10\%$



VIBRATION ANALYSIS HARDWARE



Product Features

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

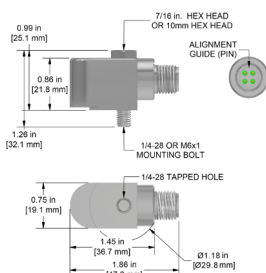
Very Low Noise and Superior RF Immunity

- ▶ 100 mV/g Sensitivity, $\pm 10\%$
- ▶ $\pm 80g$ Dynamic Range
- ▶ 4 Pin M12 Connector

AC194-M12A

4 Pin Connector

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



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC194-M12A	M/AC194-M12A	Environmental		
Sensitivity ($\pm 10\%$)	100 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3dB$)	30-600,000 CPM	0.5-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	$\pm 80 g$, peak *Vsource $\geq 22V$, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<2 Seconds		SIL Rating	SIL 2	
Voltage Source	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	8 $\mu g/\sqrt{Hz}$		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	4 $\mu g/\sqrt{Hz}$		Weight	3.3 oz	93 grams
Spectral Noise @ 1000 Hz	2 $\mu g/\sqrt{Hz}$		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Connector (Non-Integral)	4 Pin M12	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,380,000 CPM	23000 Hz
Case Isolation	>10 ⁸ ohm		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

