

AC194-M12A Series

Compact Multipurpose Accelerometer, 4 Pin M12 Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

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

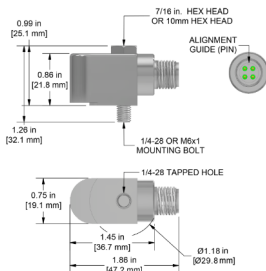
Very Low Noise and Superior RF Immunity

- ▶ 100 mV/g Sensitivity, ± 10%
- ▶ ± 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 (±10%)		100 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz	Maximum Shock Protection		5,000 g, peak
Dynamic Range	± 80 g, peak *Vsource ≥ 22V, 12Vbias		Electromagnetic Sensitivity		CE
Transverse Sensitivity	≤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 µg/√Hz		Sensing Structure		Shear Mode
Spectral Noise @ 100 Hz	4 µg/√Hz		Weight	3.3 oz	93 grams
Spectral Noise @ 1000 Hz	2 µg/√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

