

Model Number
393B31

SEISMIC ICP® ACCELEROMETER

Revision: F
ECN #: 29724

	ENGLISH	SI	
Performance			
Sensitivity(± 5 %)	10.0 V/g	1.02 V/(m/s ²)	[2]
Measurement Range	0.5 g pk	4.9 m/s ² pk	
Frequency Range(± 5 %)	0.1 to 200 Hz	0.1 to 200 Hz	
Frequency Range(± 10 %)	0.07 to 300 Hz	0.07 to 300 Hz	
Resonant Frequency	≥ 700 Hz	≥ 700 Hz	
Broadband Resolution(1 to 10,000 Hz)	0.000001 g rms	0.000009 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 40 g pk	± 392 m/s ² pk	
Temperature Range	0 to +150 °F	-18 to +65 °C	
Temperature Response	See Graph	See Graph	
Base Strain Sensitivity	≤ 0.0005 g/με	≤ 0.005 (m/s ²)/με	[1]
Electrical			
Excitation Voltage	24 to 28 VDC	24 to 28 VDC	
Constant Current Excitation	2 to 10 mA	2 to 10 mA	
Output Impedance	≤ 500 ohm	≤ 500 ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Discharge Time Constant	≥ 5 sec	≥ 5 sec	
Settling Time(within 10% of bias)	60 sec	60 sec	
Spectral Noise(1 Hz)	0.06 μg/√Hz	0.6 (μm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	0.01 μg/√Hz	0.1 (μm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	0.004 μg/√Hz	0.04 (μm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	≥ 10 ⁸ ohm	≥ 10 ⁸ ohm	
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Flexural	Flexural	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Size (Diameter x Height)	2.25 in x 2.8 in	57.2 mm x 71.1 mm	
Weight	22.4 oz	635 gm	[1]
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	
Mounting Thread	1/4-28 Female	1/4-28 Female	
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

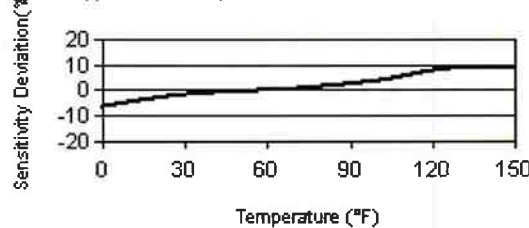
NOTES:

- [1] Typical.
- [2] Measured at 10 Hz, 0.1 grms
- [3] Zero-based, least-squares, straight line method.
- [4] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 081B20 Mounting Stud, with shoulder (1/4-28 to 1/4-28) (1)
- Model ACS-11 NIST traceable amplitude and phase response from 0.5 Hz to upper 5% frequency (1)
- Model M081B20 Mounting Stud 1/4-28 to M6 X 0.75

Typical Sensitivity Deviation vs Temperature



[4]

All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.

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Entered: BLS	Engineer: BM	Sales: RJL	Approved: JJB	Spec Number:
Date: 11/24/08	Date: 11/20/08	Date: 11/20/08	Date: 11/20/08	2005



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