

Model Number
320C11

ICP® ACCELEROMETER

Revision: F
ECN #: 36906

Performance

	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 10 %)	5 mV/g	0.51 mV/(m/s ²)	
Measurement Range	± 1000 g pk	± 9810 m/s ² pk	
Frequency Range(± 5 %)	1.0 to 10,000 Hz	1.0 to 10,000 Hz	
Frequency Range(± 10 %)	0.7 to 18,000 Hz	0.7 to 18,000 Hz	
Frequency Range(± 3 dB)	0.35 to 30,000 Hz	0.35 to 30,000 Hz	
Resonant Frequency	≥ 60 kHz	≥ 60 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.01 g rms	0.1 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[3]

Environmental

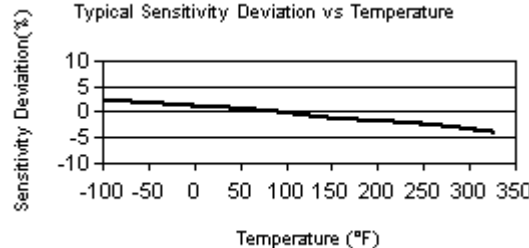
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s ² pk	
Temperature Range(Operating)	-100 to +325 °F	-73 to +163 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	≤ 0.0005 g/με	≤ 0.005 (m/s ²)/με	[1]

Electrical

Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 ohm	≤ 100 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.25 to 2.0 sec	0.25 to 2.0 sec	
Settling Time(within 10% of bias)	<5 sec	<5 sec	
Spectral Noise(1 Hz)	6400 μg/√Hz	62,784 (μm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	1400 μg/√Hz	13,734 (μm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	360 μg/√Hz	3532 (μm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	128 μg/√Hz	1256 (μm/sec ²)/√Hz	[1]

Physical

Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Hex x Height)	5/16 in x 0.43 in	5/16 in x 10.9 mm	
Weight	0.07 oz	2.0 gm	[1]
Electrical Connector	5-44 Coaxial	5-44 Coaxial	
Electrical Connection Position	Side	Side	
Mounting Thread	5-40 Male	5-40 Male	



[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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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.

A - Adhesive Mount

Supplied Accessory : Model 080A90 Quick Bonding Gel (1)

J - Ground Isolated

Frequency Range(± 5 %)	2 to 8000 Hz	2 to 8000 Hz
Frequency Range(± 10 %)	1.5 to 12,000 Hz	1.5 to 12,000 Hz
Frequency Range(± 3 dB)	0.7 to 30,000 Hz	0.7 to 30,000 Hz
Resonant Frequency	≥ 50 kHz	≥ 50 kHz
Electrical Isolation(Base)	≥ 10 ⁸ ohm	≥ 10 ⁸ ohm
Size - Hex x Height	3/8 in x 0.38 in	3/8 in x 9.7 mm
Weight	0.11 oz	3.1 gm

M - Metric Mount

Mounting Thread	M3x0.50 Male	M3x0.50 Male
Supplied Accessory : Model M080A15 Adhesive Mounting Base (1)		

W - Water Resistant Cable

Electrical Connector	Sealed Integral Cable	Sealed Integral Cable
Electrical Connection Position	Side	Side

NOTES:

- [1] Typical.
- [2] Zero-based, least-squares, straight line method.
- [3] Transverse sensitivity is typically ≤ 3%.
- [4] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 080A109 Petro Wax (1)
- Model 080A15 Adhesive Mounting Base (1)
- Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)

Entered: DMW	Engineer: BLS	Sales: WDC	Approved: BAM	Spec Number:
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