

Model Number
604B31

LOW-COST TRIAXIAL INDUSTRIAL ICP® ACCELEROMETER

Revision: B
ECN #: 49214

Performance

	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 20 %)	100 mV/g	10.2 mV/(m/s ²)	[2]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 3 dB)	30 to 300,000 cpm	0.5 to 5000 Hz	[3]
Resonant Frequency	600 kcpm	10 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	350 µg	3434 µm/sec ²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

Environmental

Overload Limit(Shock)	5000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Enclosure Rating	IP68	IP68	

Electrical

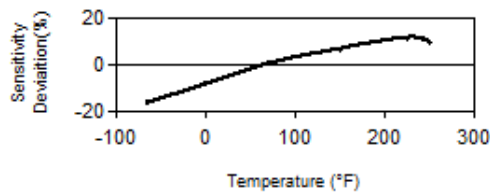
Settling Time(within 1% of bias)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<150 Ohm	<150 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	8 µg/√Hz	78.5 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	5 µg/√Hz	49.1 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	4 µg/√Hz	39.2 (µm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	

Physical

Size (Diameter x Height)	1.38 in x 1.00 in	35.1 mm x 25.4 mm	
Weight	4.4 oz	124 gm	
Mounting	Through Hole	Through Hole	
Mounting Thread	1/4-28 Male	Not Applicable	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	4-Pin MIL-C-26482	4-Pin MIL-C-26482	
Electrical Connection Position	Side	Side	
Electrical Connections(Pin A)	X axis	X axis	
Electrical Connections(Pin B)	Y axis	Y axis	
Electrical Connections(Pin C)	Z axis	Z axis	
Electrical Connections(Pin D)	Ground	Ground	



Typical Sensitivity Deviation vs Temperature



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.

EX - Hazardous Area Approval- contact factory for specific approvals

M - Metric Mount
Supplied Accessory : Model M081A68 Captive mounting bolt M6 x 1 (1)

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS023 or PS098 for details.
- [7] See Model's "Instructions For Use" (IFU) for North American Conformity and Certification Statements.

SUPPLIED ACCESSORIES:

Model 081A68 Captive mounting bolt 1/4-28 x .90" (1)

Entered: LK	Engineer: gs	Sales: MC	Approved: BAM	Spec Number:
Date: 3/13/2019	Date: 3/13/2019	Date: 3/13/2019	Date: 3/13/2019	21814

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