

Model Number
605B01

INDUSTRIAL ICP® ACCELEROMETER

Revision: NR
ECN #:

Performance	ENGLISH	SI	
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 300000 cpm	.5 to 5000 Hz	[3]
Resonant Frequency	600 kcpm	10 kHz	[1]
Broadband Resolution (1 to 10,000 Hz)	350 µg	3434 µm/s 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	
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 ohms	<150 ohms	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	8 µg/√Hz	78.5 (µm/s ²)/√Hz	[1]
Spectral Noise (100 Hz)	5 µg/√Hz	49.1 (µm/s ²)/√Hz	[1]
Spectral Noise (1 kHz)	4 µg/√Hz	39.2 (µm/s ²)/√Hz	[1]
Electrical Isolation (Case)	>10 ⁶ ohms	>10 ⁶ ohms	
Physical			
Size (Diameter x Height)	1.38 in x 1.00 in	34.9 mm x 25.4 mm	
Weight (without cable)	3.9 oz	110.6 gm	
Mounting Thread	1/4-28 UNF	Not Applicable	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	3-Pin MIL-C-5015	3-Pin MIL-C-5015	
Electrical Connection Position	Side	Side	
Electrical Connections (Pin A)	X axis	X axis	
Electrical Connections (Pin B)	Z axis	Z axis	
Electrical Connections (Pin C)	Ground	Ground	

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.

M - Metric Mount
Supplied Accessory : Model M081A68 Captive mounting bolt M6 x 1 (1) replaces Model 081A68

NOTES:

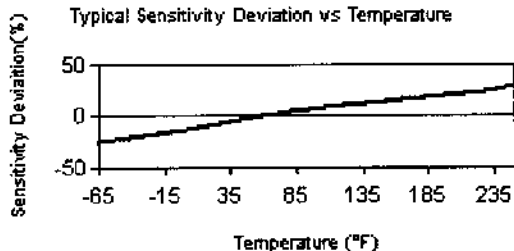
- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081A68 Captive mounting bolt 1/4-28 x .90" (1)
Model ACS-2T NIST Traceable Single Point Calibration at 100 Hz for Each Axis (1)

Industrial ICP® Accelerometer

Entered: <i>MRS</i>	Engineer: <i>MRS</i>	Sales: <i>DA</i>	Approved: <i>NT</i>	Spec Number:
Date: <i>7/21/03</i>	Date: <i>7/21/03</i>	Date: <i>7-25-03</i>	Date: <i>7/21/03</i>	23462



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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