

Model Number
602M138

INDUSTRIAL ICP® ACCELEROMETER

Revision: A
ECN #: 53502

	ENGLISH	SI	
Performance			
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s ²)	[1]
Measurement Range	± 80 g	± 785 m/s ²	
Frequency Range(± 3 dB)	24 to 480,000 cpm	0.4 to 8,000 Hz	[2]
Resonant Frequency	1,500 kcpm	25 kHz	[3]
Broadband Resolution	550 µg	5,395 µm/sec ²	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5,000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.4 sec	≥ 0.4 sec	
Excitation Voltage	24 to 28 VDC	24 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 150 Ohm	< 150 Ohm	
Output Bias Voltage	10 to 14 VDC	10 to 14 VDC	
Spectral Noise(10 Hz)	10 µg/√Hz	98.1 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	7 µg/√Hz	68.7 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	7 µg/√Hz	68.7 (µm/sec ²)/√Hz	[3]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Physical			
Size (Length x Height x Width)	1.65 in x 0.845 in x 0.74 in	41.9 mm x 21.5 mm x 18.8 mm	
Weight	2.61 oz	74.0 gm	
Mounting Thread	1/4-28 Male	No Metric Equivalent	[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	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Side	Side	

OPTIONAL VERSIONS

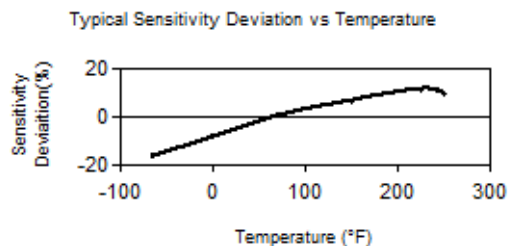
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [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 081B97 Captive Mounting Bolt 316SS - 7/16 HEX 1/4-28 UNF (1)



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: ND	Engineer: BAM	Sales: JL	Approved: NJF	Spec Number:
Date: 01/18/2023	Date: 01/18/2023	Date: 01/18/2023	Date: 01/18/2023	67176

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