

Model Number
602D02

INDUSTRIAL ICP® ACCELEROMETER

Revision: F
ECN #: 53502

	ENGLISH	SI	
Performance			
Sensitivity(± 20 %)	500 mV/g	51.0 mV/(m/s ²)	[1]
Measurement Range	± 10 g	± 98 m/s ²	
Frequency Range(± 3 dB)	30 to 180,000 cpm	0.5 to 3,000 Hz	[2]
Resonant Frequency	1,500 kcpm	25 kHz	[3]
Broadband Resolution	300 µg	2,941 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)	≤ 5.0 sec	≤ 5.0 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	< 500 Ohm	< 500 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	[3]
Spectral Noise(100 Hz)	3 µg/√Hz	29.4 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	3 µg/√Hz	29.4 (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.

EX - Hazardous Area Approval- contact factory for specific approvals

Hazardous Area Approval	EEx nL IIC T4, -40 °C ≤ Ta ≤ 121 °C, II 3 G	EEx nL IIC T4, -40 °C ≤ Ta ≤ 121 °C, II 3 G
Hazardous Area Approval	EEx ia IIC T4, -40 °C ≤ Ta ≤ 121 °C, II 1 G	EEx ia IIC T4, -40 °C ≤ Ta ≤ 121 °C, II 1 G
Hazardous Area Approval	CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I	CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I
Hazardous Area Approval	Ex ia IIC T4, AExia IIC, T4	Ex ia IIC T4, AExia IIC, T4
Hazardous Area Approval	CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4	CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

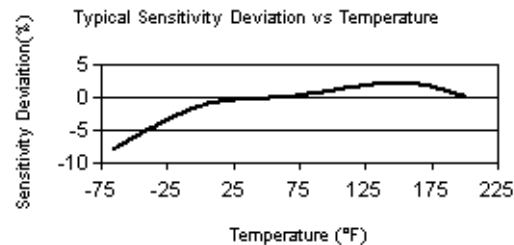
M - Metric Mount
Supplied Accessory: Model M081B97 Captive Mounting Bolt, M6 x 1 x 25 mm long, hex head (1) replaces Model 081B97

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)
Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (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:
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