Model Number 602D02

INDUSTRIAL ICP® ACCELEROMETER

Revision: E

ECN #: 41753

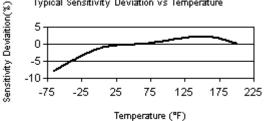
Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 20 %)	500 mV/g	51.0 mV/(m/s²)	[2]
Measurement Range	$\pm 10 \text{ g}$ $\pm 98 \text{ m/s}^2$		
Frequency Range(± 3 dB)	30 to 180,000 cpm	0.5 to 3000 Hz	
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution	300 µg	2941 µm/sec ²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s² 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)	≤ 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	[1]
Spectral Noise(100 Hz)	3 μg/√Hz	29.4 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	3 μg/√Hz	29.4 (µm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	
Physical			
Size (Length x Width x Height)	1.65 in x 0.74 in x 0.845 in	41.9 mm x 18.8 mm x 21.5 mm	

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Size (Length x Width x Height)	1.65 in x 0.74 in x 0.845 in	41.9 mm x 18.8 mm x 21.5 mm
Weight	2.61 oz	74.0 gm
Mounting Thread	1/4-28 Male	No Metric Equivalent
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

Typical Sensitivity Deviation vs Temperature







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° EEx nL IIC T4, -40°C≤Ta≤121°

C, II 3 G C, II 3 G

Hazardous Area Approval EEx ia IIC T4, -40°C≤Ta≤121° EEx ia IIC T4, -40°C≤Ta≤121° C, II 1 G C, II 1 G

Hazardous Area Approval CII, Div I, Groups A, B, C, D; CI CII, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, II, Div I, Groups E, F, G; CI III,

Ex ia IIC T4, AExia IIC, T4 Ex ia IIC T4, AExia IIC, T4 Hazardous Area Approval Hazardous Area Approval CI I, Div 2, Groups A, B, C, D; CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4 ExnL IIC T4, AExnA IIC T4

M - Metric Mount

Supplied Accessory: Model M081A97 Captive mounting bolt, M6 x 1 x 25.4 mm long, hex head (1) replaces Model 081A97

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 PS060 for details.

SUPPLIED ACCESSORIES:

Model 081A97 Thru bolt 1/4-28 (1)

Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered: AP	Engineer: gs	Sales: EGY	Approved: BAM	Spec Number:
Date: 7/17/2013	Date: 7/17/2013	Date: 7/17/2013	Date: 7/17/2013	40562



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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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