

Model Number
637A06

INDUSTRIAL ICP® ACCELEROMETER

Revision: B
ECN #: 53514

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	25 mV/g	2.54 mV/(m/s ²)	[1]
Measurement Range	± 200 g	± 1,962 m/s ²	
Frequency Range(± 5 %)	600 to 24,000 cpm	10 to 400 Hz	[2]
Frequency Range(± 3 dB)	240 to 90,000 cpm	4 to 1,500 Hz	
Filter Type	Low Pass	Low Pass	
Electrical Filter Corner Frequency	1.5 kHz	1.5 kHz	
Electrical Filter Roll-off	12 dB/octave	12 dB/octave	
Resonant Frequency	≥ 1,200 kcpm	≥ 20 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	1 mg rms	0.01 m/s ² rms	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	1,000 g pk	9,810 m/s ² pk	
Temperature Range	-320 to +250 °F	-196 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Electrical			
Settling Time(within 1% of bias)	≤ 3 sec	≤ 3 sec	
Discharge Time Constant	0.05 to 0.5 sec	0.05 to 0.5 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	1.6 to 20 mA	1.6 to 20 mA	
Output Impedance	≤ 100 Ohm	≤ 100 Ohm	
Output Bias Voltage	7 to 12 VDC	7 to 12 VDC	
Spectral Noise(1 Hz)	600 µg/√Hz	5,890 (µm/sec ²)/√Hz	
Spectral Noise(10 Hz)	120 µg/√Hz	1,180 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	36 µg/√Hz	355 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	25 µg/√Hz	250 (µm/sec ²)/√Hz	[3]
Spectral Noise(10 kHz)	6 µg/√Hz	59 (µm/sec ²)/√Hz	
Electrical Isolation	≥ 10 ⁸ Ohm	≥ 10 ⁸ Ohm	
Physical			
Size (Hex x Height)	7/8 in x 2.06 in	22 mm x 52.3 mm	
Weight	3.3 oz	94 gm	
Mounting Thread	1/4-28 Female	1/4-28 Female	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	[6]
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	

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 M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

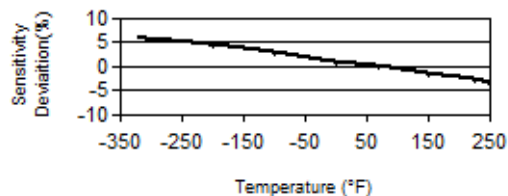
NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] 1Hz = 60 cpm (cycles per minute).
- [3] Typical.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] Design hydro tested to 1450 psi [10,000 kPa].
- [7] See Models's "Instructions for use" (IFU) for North American Conformity and Certification Statements

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)
Model ICS-6 NIST traceable single axis amplitude response calibration from 10 Hz to upper +/- 3dB point. (1)

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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Entered: ND	Engineer: BAM	Sales: EGY	Approved: JS	Spec Number:
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