

Model Number
EX629M 49

INDUSTRIAL TRIAXIAL ICP® ACCELEROMETER

Revision: A
ECN #: 50951

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s ²)	[1]
Measurement Range	± 50 g	± 490.5 m/s ²	
Frequency Range(+/- 3 dB)(z axis)	120 to 600,000 cpm	2 to 10,000 Hz	[2][3]
Frequency Range(+/- 3 dB)(x or y axis)	120 to 420,000 cpm	2 to 7,000 Hz	
Non-Linearity	± 1 %	± 1 %	[4]
Broadband Resolution(1 to 10,000 Hz)	560 µg	5,694 µm/sec ²	[5]
Resonant Frequency	1,020 kcpm	17 kHz	[5]
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	[5]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 3.0 sec	≤ 3.0 sec	
Discharge Time Constant	≥ 0.1 sec	≥ 0.1 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 350 Ohm	< 350 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	40 µg/√Hz	392 (µm/sec ²)/√Hz	[5]
Spectral Noise(100 Hz)	10 µg/√Hz	98.1 (µm/sec ²)/√Hz	[5]
Spectral Noise(1 kHz)	6 µg/√Hz	58.9 (µm/sec ²)/√Hz	[5]
Electrical Isolation	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Electrical Protection	RFI/ESD	RFI/ESD	
Physical			
Size (Diameter x Height)	1.49 in x 1.23 in	37.9 mm x 31.3 mm	
Weight	4.22 oz	119.7 gm	[5]
Mounting	Through Hole	Through Hole	
Mounting Torque(Through Bolt)	2 to 5 ft-lb	2.7 to 6.8 N-cm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	NA	M12, 4-Pin	
Electrical Connection Position	Top	Top	
Electrical Connections(Pin 1)	Z axis	Z axis	
Electrical Connections(Chrome-Plated Brass)	X axis	X axis	
Electrical Connections(Pin 3)	Y axis	Y axis	
Electrical Connections(Pin 4)	Ground	Ground	

OPTIONAL VERSIONS

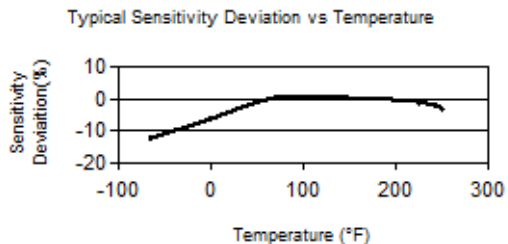
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] 1Hz = 60 cpm (cycles per minute).
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] Typical.
- [6] See PCB Declaration of Conformance PS140 for details.

SUPPLIED ACCESSORIES:

Model 081A126 Mounting Bolt 10-32x.93" (Mating Guide) (1)
 Model 54102-01 Locator Pin 5mm OD x 5.8mm long (1)
 Model ICS-7 NIST traceable triaxial amplitude response calibration from 10 Hz to upper +/- 3dB point.



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: LK	Engineer: GD	Sales: MC	Approved: BAM	Spec Number:
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