Model Number 629A32	ACCELEROMETER, INDUSTRIAL, ICP®	Revision A ECN #: 10490

Performance	ENGLISH	SI	
Sensitivity (±5 %)	500 mV/g	51 mV/(m/s²)	[3]
Measurement Range	±10 g	±98 m/s²	
Frequency Range (±5 %)	144 to 120000 cpm	2.4 to 2000 Hz	[4]
Frequency Range (±10 %)	102 to 300000 cpm	1.7 to 5000 Hz	
Frequency Range (±3 dB)	48 to 480000 cpm	0.8 to 8000 Hz	
Resonant Frequency	1200 kcpm	20 kHz	[2]
Broadband Resolution (1 to 10000 Hz)	120 µg	1177 µm/sec²	[2]
Non-Linearity	±1 %	±1 %	[5]
Transverse Sensitivity	≤5 %	≤5 %	
Environmental			
Overload Limit (Shock)	5000 g pk	49050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +94 °C	
Electrical			
Settling Time (within 1% of bias)	≤2.0 sec	≤2.0 sec	
Discharge Time Constant	≥0.2 sec	≥0.2 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<100 Ohm	<100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	6.0 µg/√Hz	58.9 (µm/sec²/√Hz	[1][2]
Spectral Noise (100 Hz)	2.2 µg/√Hz	21.6 (µm/sec²/√Hz	[2]
Spectral Noise (1 kHz)	1.2 µg/√Hz	11.8 (µm/sec²/√Hz	[2]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation (Case)	>10⁸ Ohm	>10⁸ Ohm	
Physical			
Size (Length x Width x Height)	1.5 in x 1.5 in x 0.82 in	38.1 mm x 38.1 mm x 20.8 mm	
Weight	4.9 oz	139 gm	
Mounting Thread	1/4-28 Male	Not Applicable	[6]
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	4-Pin MIL-C-26482	4-Pin MIL-C-26482	
Electrical Connection Position	Side	Side	
Electrical Connections (Pin A)	X axis	X axis	
Electrical Connections (Pin B)	Y axis	Y axis	
Electrical Connections (Pin C)	Z axis	Z axis	
Electrical Connections (Pin D)	Ground	Ground	

CE[7]

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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Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

LB - Low Bias Voltage

Output Bias Voltage	6 to 8 VDC	6 to 8 VDC
Excitation Voltage	12 to 18 VDC	12 to 18 VDC
Measurement Range	±35 g	±343 m/s²

M - Metric Mount

Notes

[1] Typical value.
[2] Typical.
[3] Conversion Factor 1g = 9.81 m/s².
[4] The high frequency tolerance is accurate within ±10% of the specified frequency.
[5] Zero-based, least-squares, straight line method.
[6] 1/4-28 has no equivalent in S.I. units.
[7] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories

081A56 Captive mounting bolt 1/4-28 x .75" ()
ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency ()

Entered:	Engineer:	Sales:	Approved:	Spec Number:
Date:	Date:	Date:	Date:	**8402**

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