Model Number 623C11

INDUSTRIAL ICP® ACCELEROMETER

Revision: C

ECN #: 14824

V=VV.			
Performance	ENGLISH	<u>SI</u>	
Sensitivity (±5 %)	100 mV/g	10.2 mV/(m/s²)	[2]
Measurement Range	±50 g	±490 m/s²	
Frequency Range (±5 %)	144 to 480000 cpm	2.4 to 8000 Hz	[3]
Frequency Range (±10 %)	102 to 600000 cpm	1.7 to 10000 Hz	
Frequency Range (±3 dB)	48 to 900000 cpm	0.8 to 15000 Hz	
Resonant Frequency	2400 kcpm	40 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	100 µg	981 μm/s²	[1]
Non-Linearity	±1 %	±1 %	[4]
Transverse Sensitivity	≤5 %	≤5 %	
Environmental			
Overload Limit (Shock)	5000 g pk	49050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	
Enclosure Rating	IP68	IP68	
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	<150 ohms	<150 ohms	
	8 to 12 VDC	8 to 12 VDC	
Output Bias Voltage Spectral Noise (10 Hz)	7.0 μg/√Hz	68.7 (μm/s²)/√Hz	[1]
	7.0 μg/√Hz 2.8 μg/√Hz	27.5 (μm/s²)/√Hz	[1]
Spectral Noise (100 Hz)	2.6 μg/√Hz 0.9 μg/√Hz	8.8 (μm/s²)/√Hz	[1]
Spectral Noise (1 kHz)	0.9 μg/νπ2 >10 ⁸ ohms	ο.ο (μπ/s-// νη2 >10 ⁸ ohms	ניז
Electrical Isolation (Case)			
Electrical Protection	RFI/ESD	RFI/ESD	
Physical		17.5	
Size (Hex x Height)	11/16 in x 4.2 in	17.5 mm x 107 mm	
Weight (without cable)	1.80 oz	51 gm	re1
Mounting Thread	1/4-28 Female	Not Applicable	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Тор	Тор	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[6]
	g Typical Sensitivity Deviation vs Temperature		
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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.

LB - Low Bias Voltage

6 to 8 VDC Output Bias Voltage 6 to 8 VDC 12 to 28 VDC 12 to 28 VDC **Excitation Voltage** Measurement Range ±35 g ±343 m/s²

M - Metric Mount

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

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] Twisted shielded pair.
- [7] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)

Model 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: 10. Date: Date:/0/ Date: 7984



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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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Temperature (°F)