

Model Number
625B01

INDUSTRIAL ICP® ACCELEROMETER

Revision: H
ECN #: 29661

	ENGLISH	SI	
Performance			
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s ²)	[2]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 5 %)	30 to 390,000 cpm	0.5 to 6500 Hz	[3]
Frequency Range(± 10 %)	22 to 450,000 cpm	0.37 to 7500 Hz	
Frequency Range(± 3 dB)	12 to 630,000 cpm	0.2 to 10,500 Hz	
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	50 µg	491 µm/s ²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	[1]
Temperature Response	See Graph	See Graph	
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 8.0 sec	≤ 8.0 sec	
Discharge Time Constant	≥ 1.0 sec	≥ 1.0 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)	2.5 µg/√Hz	24.5 (µm/s ²)/√Hz	[1]
Spectral Noise(100 Hz)	0.8 µg/√Hz	7.8 (µm/s ²)/√Hz	[1]
Spectral Noise(1 kHz)	0.5 µg/√Hz	4.9 (µm/s ²)/√Hz	[1]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation(Case)	>10 ⁸ ohm	>10 ⁸ ohm	
Physical			
Size (Diameter x Height)	1.36 in x 1.13 in	35.1 mm x 28.7 mm	
Weight	5.1 oz	145 gm	
Mounting	Through Hole	Through Hole	
Mounting Thread	1/4-28 Male	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	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Side	Side	

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.

CS - Canadian Standards Association Approved Intrinsically Safe

Hazardous Area Approval	CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I	CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I
Hazardous Area Approval	Exia IIC T4, AExia IIC, T4	Exia IIC T4, AExia IIC, T4
Hazardous Area Approval	CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4	CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

LB - Low Bias Voltage

Output Bias Voltage	6 to 8 VDC	6 to 8 VDC
Excitation Voltage	12 to 28 VDC	12 to 28 VDC
Measurement Range	± 35 g	± 343 m/s ²

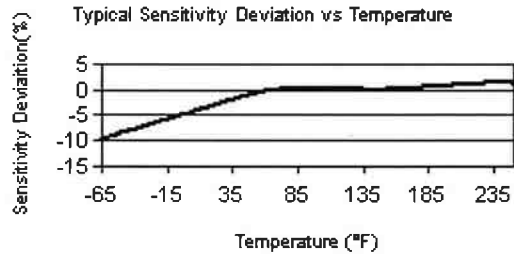
M - Metric Mount
Supplied Accessory : Model M081A73 Mounting Bolt M6 x 1.00

TO - Temperature Output

Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C
Electrical Connector	3-Pin	3-Pin
Electrical Connections(Pin A)	Acceleration Output	Acceleration Output
Electrical Connections(Pin B)	Ground	Ground
Electrical Connections(Pin C)	Temperature Output	Temperature Output

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 for details.

SUPPLIED ACCESSORIES:
Model 080B45 Thermal Boot (1)
Model 081A73 Captive mounting bolt 1/4-28 x 1.34" (1)
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency



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: BLS	Engineer: JEC	Sales: JJ	Approved: NF	Spec Number:
Date: 11/1/08	Date: 11/7/08	Date: 11/10/08	Date: 11/7/08	8609

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