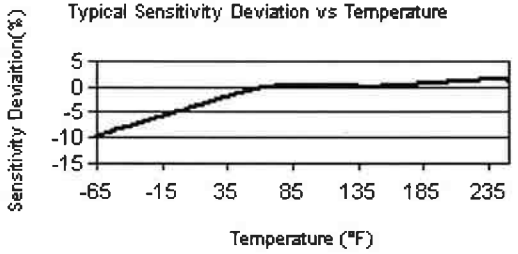
Model Number	INDUSTRIAL ICP® ACCELEROMETER	Revision: H
625B01		ECN #: 29661

Performance	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s²)	[2]
Measurement Range	± 50 g	± 490 m/s²	
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/s²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
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/s²)/√Hz	[1]
Spectral Noise(100 Hz)	0.8 µg/√Hz	7.8 (µm/s²)/√Hz	[1]
Spectral Noise(1 kHz)	0.5 µg/√Hz	4.9 (µm/s²)/√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	

CE [6]



c SP us

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 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/s²

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

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

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