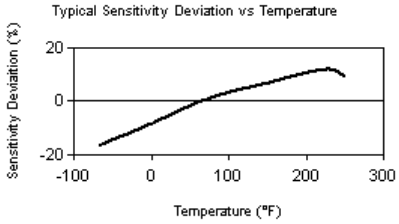
Model Number **603C05**	**LOW-COST INDUSTRIAL ICP® ACCELEROMETER**	Revision NR ECN #:

Performance	**ENGLISH**	**SI**	
Sensitivity (±20 %)	50 mV/g	5.1 mV/(m/s²)	[2]
Measurement Range	±100 g	±981 m/s²	
Frequency Range (±3 dB)	72 to 600000 cpm	1.2 to 10000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	750 µg	7358 µm/sec²	[1]
Non-Linearity	±1 %	±1 %	[4]
Transverse Sensitivity	≤7 %	≤7 %	
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	[1]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time (within 1% of bias)	≤2.0 sec	≤2.0 sec	
Discharge Time Constant	≥0.4 sec	≥0.4 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 ohm	<150 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	18 µg/√Hz	176 (µm/sec²/√Hz	[1]
Spectral Noise (100 Hz)	10 µg/√Hz	98.1 (µm/sec²/√Hz	[1]
Spectral Noise (1 kHz)	7 µg/√Hz	68.7 (µm/sec²/√Hz	[1]
Electrical Isolation (Case)	>10^8 ohm	>10^8 ohm	
Physical			
Size (Hex x Height)	11/16 in x 1.65 in	18 mm x 42.2 mm	
Weight	1.8 oz	51 gm	
Mounting Thread	1/4-28 Female	No Metric Equivalent	[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	Top	Top	

CE[6]



C SA US Ex

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.)

EX - Hazardous Area Approval- contact factory for specific approvals

Hazardous Area Approval	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4
Hazardous Area Approval	EEx nL IIC T4, -40°C≤Ta≤121°C, II 1 G	EEx nL IIC T4, -40°C≤Ta≤121°C, II 1 G
Hazardous Area Approval	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I
Hazardous Area Approval	Exia IIC T4, AExia IIC, T4	Exia IIC T4, AExia IIC, T4
Hazardous Area Approval	EEx nL IIC T4, -40°C≤Ta≤121°C, II 3 G	EEx nL IIC T4, -40°C≤Ta≤121°C, II 3 G

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1

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 MIL-C-5015	3-Pin MIL-C-5015
Electrical Connections (Pin A)	Acceleration Output	Acceleration Output
Electrical Connections (Pin B)	Ground	Ground
Electrical Connections (Pin C)	Temperature Output	Temperature Output
Size (Height)	1.86 in	47.2 in
Weight	2.0 oz	56.7 oz

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 or PS060 for details.

Supplied Accessories

081A40 Mounting Stud ()
ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered: LLH	Engineer: MJN	Sales: EGY	Approved: LLH	Spec Number:
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