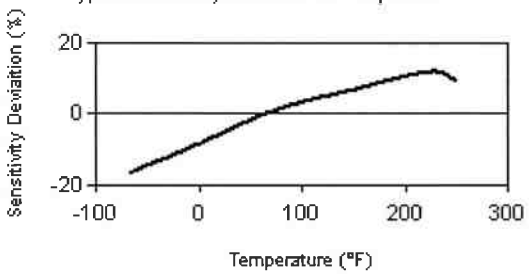
Model Number	INDUSTRIAL ICP® ACCELEROMETER	Revision: E
607A01		ECN #: 26068

Performance	ENGLISH	SI	
Sensitivity(± 15 %)	100 mV/g	10.2 mV/(m/s²)	[2]
Measurement Range	± 50 g	± 490 m/s²	
Frequency Range(± 3 dB)	30 to 600,000 cpm	0.5 to 10,000 Hz	
Resonant Frequency	1080 kcpm	18 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	350 µg	3434 µm/s²	[1]
Non-Linearity	± 1 %	± 1 %	[3]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
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)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 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)	8 µg/√Hz	78.5 (µm/s²)/√Hz	[1]
Spectral Noise(100 Hz)	5 µg/√Hz	49.1 (µm/s²)/√Hz	[1]
Spectral Noise(1 kHz)	4 µg/√Hz	39.2 (µm/s²)/√Hz	[1]
Electrical Isolation(Case)	$>10^8$ ohm	$>10^8$ ohm	
Physical			
Size (Hex x Height)	7/8 in x 1.23 in	22 mm x 31.2 mm	
Weight	3.7 oz	105 gm	
Mounting	Stud	Stud	
Mounting Thread	1/4-28 Male	Not Applicable	[4]
Mounting Torque(stud)	7 to 8 ft-lb	9.5 to 10.8 N-m	[5][6]
Mounting Torque(hex nut)	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	

Typical Sensitivity Deviation vs Temperature



CE [7]

Ex

SA C 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.

EX - ATEX or ATEX and CSA Hazardous Area Approval

Hazardous Area Approval	EEx ia IIC T4, -40°C≤Ta≤121° C, II 1 G	EEx ia 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	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	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 M080A163 (1) replaces Model 080A162

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

NOTES:

[1] Typical.
[2] Conversion Factor 1g = 9.81 m/s².
[3] Zero-based, least-squares, straight line method.
[4] 1/4-28 has no equivalent in S.I. units.
[5] 1/8" hex Allen key required for English version, 4 mm hex Allen key required for Metric version.
[6] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.
[7] See PCB Declaration of Conformance PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

Model 080A162 Mounting Stud (1)
Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered:	Engineer:	Sales:	Approved:	Spec Number:
Date: 3/20/07	Date: 3/21/07	Date: 3/21/07	Date: 3/21/07	13832

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