

Model Number  
**603C62**

## INDUSTRIAL ICP® ACCELEROMETER

Revision A  
ECN #: 38753

Performance	ENGLISH	SI	
Sensitivity (±10 %)	500 mV/g	51.0 mV/(m/s <sup>2</sup> )	[2]
Measurement Range	±10 g	±98 m/s <sup>2</sup>	
Frequency Range (±3 dB)	30 to 180000 cpm	0.5 to 3000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	350 µg	3434 µm/sec <sup>2</sup>	[1]
Non-Linearity	±1 %	±1 %	[4]
Transverse Sensitivity	≤7 %	≤7 %	
<b>Environmental</b>			
Overload Limit (Shock)	5000 g pk	49050 m/s <sup>2</sup> pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Enclosure Rating	IP68	IP68	
<b>Electrical</b>			
Settling Time (within 1% of bias)	≤5.0 sec	≤5.0 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/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise (100 Hz)	3 µg/√Hz	29.4 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise (1 kHz)	3 µg/√Hz	29.4 (µm/sec <sup>2</sup> )/√Hz	[1]
Electrical Isolation (Case)	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm	
<b>Physical</b>			
Size (Hex x Height)	11/16 in x 4.7 in	18 mm x 119 mm	
Weight (without cable)	1.8 oz	51 gm	
Mounting Thread	1/4-28 Female	1/4-28 Female	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Integral Armored Cable	Integral Armored Cable	
Electrical Connection Position	Top	Top	
Electrical Connections	Signal / Power	Signal / Power	
Electrical Connections (Blue)	Ground	Ground	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[6]

**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

Approval	Version 1	Version 2
Hazardous Area Approval	Ex ia IIC T4, AExia IIC, T4	Ex ia IIC T4, AExia IIC, T4
Hazardous Area Approval	Ex nL IIC T4, -40°Câ%Taâ%1 21°C, II 3 G	Ex nL IIC T4, -40°Câ%Taâ%1 21°C, II 3 G
Hazardous Area Approval	Ex ia IIC T4, -40°Câ%Taâ%1 21°C, II 1 G	Ex ia IIC T4, -40°Câ%Taâ%1 21°C, II 1 G
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	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

**M** - Metric Mount  
Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

**TO** - Temperature Output

Parameter	Version 1	Version 2
Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	(+10 mV/°C)
Electrical Connections (Red)	Acceleration	Acceleration
Electrical Connections (Black)	Output Ground	Output Ground
Electrical Connections (White)	Temperature Output	Temperature Output
Electrical Connections (Green)	Ground	Ground

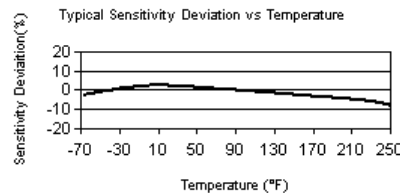
**Notes**

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [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] Stainless steel armor jacket over twisted shielded pair.
- [7] 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: NJF	Engineer: NJF		Spec Number:
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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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