

Model Number
607A01

SWIVELER® INDUSTRIAL ICP® ACCELEROMETER

Revision E
ECN #: 26068

Performance	ENGLISH	SI	
Sensitivity (±15 %)	100 mV/g	10.2 mV/(m/s ²)	[2]
Measurement Range	±50 g	±490 m/s ²	
Frequency Range (±3 dB)	30 to 600000 cpm	0.5 to 10000 Hz	
Resonant Frequency	1080 kcpm	18 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	350 µg	3434 µm/sec ²	[1]
Non-Linearity	±1 %	±1 %	[3]
Transverse Sensitivity	≤7 %	≤7 %	
Environmental			
Overload Limit (Shock)	5000 g pk	49050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
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/sec ²)/√Hz	[1]
Spectral Noise (100 Hz)	5 µg/√Hz	49.1 (µm/sec ²)/√Hz	[1]
Spectral Noise (1 kHz)	4 µg/√Hz	39.2 (µm/sec ²)/√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 Nm	[5][6]
Mounting Torque (hex nut)	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	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 standard model except where noted below. More than one option maybe used.)

EX - Hazardous Area Approval- contact factory for specific approvals

Approval	Exia IIC T4, AExia IIC, T4	Exia IIC T4, AExia 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 1 G	EEx nL IIC T4, -40°C≤Ta≤121°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
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 Mounting pad 3/4-16 to M6 x 1 (for Models 607A01 and 608A11) replaces Model 080A162

TO - Temperature Output

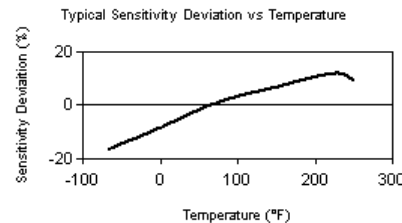
Parameter	+36 to +250 °F	+2 to +121 °C
Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	(+10 mV/°C)
Electrical Connector	3-Pin MIL-C-5015	3-Pin MIL-C-5015
Electrical Connections (Pin A)	Acceleration	Acceleration
Electrical Connections (Pin B)	Output	Output
Electrical Connections (Pin C)	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] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.
- [6] 1/8" hex Allen key required for English version, 4 mm hex Allen key required for Metric version.
- [7] See PCB Declaration of Conformance PS023 or PS060 for details.

Supplied Accessories

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



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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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