

Model Number  
603M 170

# INDUSTRIAL ICP® ACCELEROMETER

Revision: C  
ECN #: 49938

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[1]
Measurement Range	± 80 g	± 785 m/s <sup>2</sup>	
Frequency Range(± 3 dB)	24 to 840,000 cpm	0.4 to 14,000 Hz	[2]
Resonant Frequency	1,500 kcpm	25 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	550 µg	5,395 µm/sec <sup>2</sup>	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
<b>Environmental</b>			
Overload Limit(Shock)	5,000 g pk	49,050 m/s <sup>2</sup> pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	
<b>Electrical</b>			
Settling Time(within 1% of bias)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.4 sec	≥ 0.4 sec	
Excitation Voltage	24 to 28 VDC	24 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 150 Ohm	< 150 Ohm	
Output Bias Voltage	10 to 14 VDC	10 to 14 VDC	
Spectral Noise(10 Hz)	10 µg/√Hz	98.1 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(100 Hz)	7 µg/√Hz	68.7 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(1 kHz)	7 µg/√Hz	68.7 (µm/sec <sup>2</sup> )/√Hz	[3]
Electrical Isolation(Case)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	
<b>Physical</b>			
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 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	Top	Top	

## 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** - Hazardous Area Approval- contact factory for specific approvals

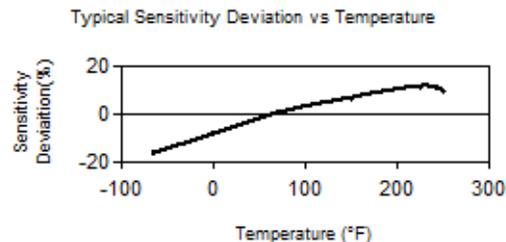
**M** - Metric Mount  
Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

## NOTES:

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [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 PS061 for details.

## SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud



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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Entered: LK	Engineer: gs	Sales: MC	Approved: BAM	Spec Number:
Date: 08/05/2020	Date: 08/05/2020	Date: 08/05/2020	Date: 08/05/2020	65594

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