

Model Number
625M42

INDUSTRIAL ICP® ACCELEROMETER

Revision: A
ECN #: 49110

	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s ²)	[2]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 5 %)	30 to 390,000 cpm	0.5 to 6500 Hz	[3]
Frequency Range(± 10 %)	22 to 450,000 cpm	0.37 to 7500 Hz	
Frequency Range(± 3 dB)	12 to 630,000 cpm	0.2 to 10,500 Hz	
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	50 µg	491 µm/sec ²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s ² 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)	≤ 8.0 sec	≤ 8.0 sec	
Discharge Time Constant	≥ 1.0 sec	≥ 1.0 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<100 Ohm	<100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	2.5 µg/√Hz	24.5 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	0.8 µg/√Hz	7.8 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	0.5 µg/√Hz	4.9 (µm/sec ²)/√Hz	[1]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation(Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	
Physical			
Size (Diameter x Height)	1.38 in x 1.13 in	35.1 mm x 28.7 mm	
Weight(without cable)	4.7 oz	133 gm	
Mounting	Through Hole	Through Hole	
Mounting Thread	No English Equivalent	M6 x 1 male	[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	Sealed Integral Cable	Sealed Integral Cable	[6]
Cable Termination	Blunt cut	Blunt cut	
Cable Length	70 ft	21.3 m	
Cable Type	Polyurethane	Polyurethane	[7]

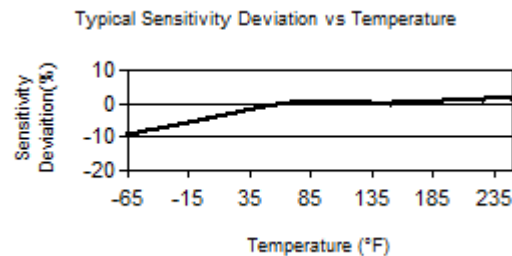
OPTIONAL VERSIONS
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

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] Metric mounting thread has no equivalent in English units.
- [6] Sensor and Cable hydrotested without connector to 850 psi [5.86 MPa]
- [7] Twisted shielded pair.
- [8] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 080B45 Thermal Boot (1)
- Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (1)
- Model M081A73 Mounting Bolt M6 x 1.00 (1)



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: JM	Engineer: BAM	Sales: KK	Approved: BAM	Spec Number:
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