

Model Number
VO622B01

HIGH FREQUENCY INDUSTRIAL ICP® VELOCITY SENSOR

Revision: B
ECN #: 53241

Performance

	ENGLISH	SI	
Sensitivity(± 10 %)	100 mV/in/sec	3,937 mV/m/sec	[1]
Measurement Range	± 50 in/sec	± 1.27 m/sec	
Frequency Range(± 10 %)	240 to 270,000 cpm	4 to 4,500 Hz	[2][3]
Frequency Range(± 3 dB)	180 to 540,000 cpm	3 to 9,000 Hz	
Resonant Frequency	1,800 kcpm	30 kHz	[4]
Broadband Resolution(1 to 10,000 Hz)	450 µin/sec	11.4 µm/sec	[4]
Non-Linearity	± 1 %	± 1 %	[5]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

Environmental

Overload Limit(Shock)	5,000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[4]
Enclosure Rating	IP68	IP68	

Electrical

Settling Time(within 1% of bias)	≤ 30 sec	≤ 30 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 10 mA	2 to 10 mA	
Output Impedance	< 100 Ohm	< 100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	40 µin/sec/√Hz	1.12 µm/sec/√Hz	[4]
Spectral Noise(100 Hz)	7.0 µin/sec/√Hz	0.18 µm/sec/√Hz	[4]
Spectral Noise(1 kHz)	0.4 µin/sec/√Hz	0.01 µm/sec/√Hz	[4]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation	> 10 ⁸ Ohm	> 10 ⁸ Ohm	

Physical

Size (Hex x Height)	7/8 in x 2.06 in	22 mm x 52.3 mm	
Weight	3.3 oz	94 gm	
Mounting Thread	1/4-28 Female	1/4-28 Female	[6]
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

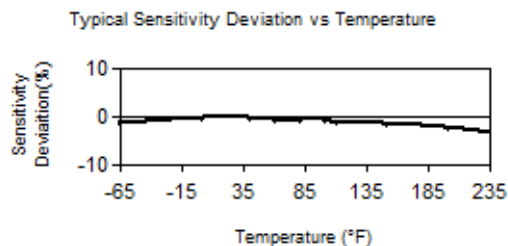
M - Metric Mount
Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] 1Hz = 60 cpm (cycles per minute).
- [4] Typical.
- [5] Zero-based, least-squares, straight line method.
- [6] 1/4-28 has no equivalent in S.I. units.

SUPPLIED ACCESSORIES:

- Model 081A40 Mounting Stud (1)
- Model ICS-8 NIST-traceable single-axis amplitude response calibration from 600 cpm (10Hz) to upper 10% frequency. (1)
- Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (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: ND	Engineer: BAM	Sales: JL	Approved: BAM	Spec Number:
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