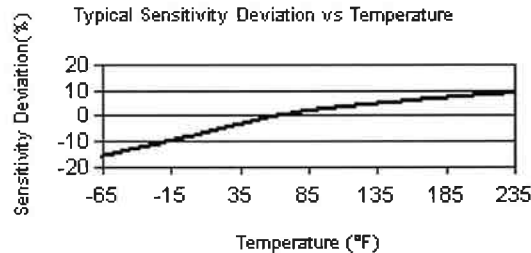


Model Number
VO622A11

HIGH FREQUENCY INDUSTRIAL ICP® VELOCITY SENSOR

Revision: F
ECN #: 30750

	ENGLISH	SI	
Performance			
Sensitivity(± 10 %)	100 mV/in/sec	3937 mV/m/sec	[2]
Measurement Range	± 50 in/sec	± 1.27 m/sec	
Frequency Range(± 10 %)	240 to 270,000 cpm	4 to 4500 Hz	[3][4]
(± 3 dB)	180 to 540,000 cpm	3 to 9000 Hz	
Resonant Frequency	1200 kcpm	20 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	450 µin/sec	11.4 µm/sec	[1]
Non-Linearity	± 1 %	± 1 %	[5]
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	[1]
Temperature Response	See Graph	See Graph	
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	[1]
(100 Hz)	7.0 µin/sec/√Hz	0.18 µm/sec/√Hz	[1]
(1 kHz)	0.4 µin/sec/√Hz	0.01 µm/sec/√Hz	[1]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation	>10 ⁸ ohm	>10 ⁸ ohm	
Physical			
Size (Hex x Height)	7/8 in x 4.3 in	22 mm x 109 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 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Cable Length	10 ft	3 m	
Cable Type	Polyurethane	Polyurethane	[7]



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.
ICP® is a registered trademark of PCB Group, Inc.

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.

CS - Canadian Standards Association Approved Intrinsically Safe
Hazardous Area Approval CI I, Div I, Groups A, B, C, D; CI I, Div I, Groups A, B, C, D;
CI II, Div I, Groups E, F, G; CI II, Div I, Groups E, F, G, CI III, Div I
Exia IIC T4, AExia IIC, T4 Exia IIC T4, AExia IIC, T4
CI I, Div 2, Groups A, B, C, D; CI I, Div 2, Groups A, B, C, D;
ExnL IIC T4, AExnA IIC T4 ExnL IIC T4, AExnA IIC T4

EX - Hazardous Area Approval- contact factory for specific approvals
Hazardous Area Approval EEx ia IIC T4, -54°C≤Tas≤121° EEx ia IIC T4, -54°C≤Tas≤121°
C, II 1 G C, II 1 G

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

TO - Temperature Output
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 3-Pin
Electrical Connections(Pin A) Acceleration Output Acceleration Output
(Pin B) Ground Ground
(Pin C) Temperature Output Temperature Output

NOTES:
[1] Typical.
[2] Conversion Factor 1g = 9.81 m/s².
[3] 1Hz = 60 cpm (cycles per minute).
[4] The high frequency tolerance is accurate within ±10% of the specified frequency.
[5] Zero-based, least-squares, straight line method.
[6] 1/4-28 has no equivalent in S.I. units.
[7] Twisted shielded pair.
[8] See PCB Declaration of Conformance PS023 or PS061 for details.

SUPPLIED ACCESSORIES:
Model 081A40 Mounting Stud (1)
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (1)

Entered: <i>JH</i>	Engineer: <i>DL</i>	Sales: <i>DF</i>	Approved: <i>NJ</i>	Spec Number:
Date: 2-5-10	Date: 5-18-09	Date: 11-10-08	Date: 10-7-08	12856

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