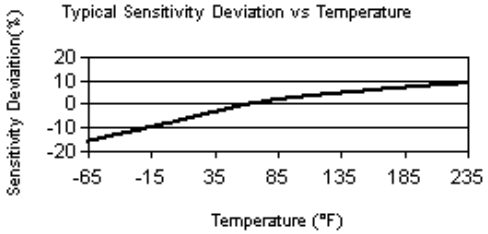
Model Number	HIGH FREQUENCY INDUSTRIAL ICP® VELOCITY SENSOR	Revision: G
VO622A01		ECN #: 30750

Performance	**ENGLISH**	**SI**	
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]
Frequency Range(± 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/s² 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)	≤ 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]
Spectral Noise(100 Hz)	7.0 µin/sec/√Hz	0.18 µm/sec/√Hz	[1]
Spectral Noise(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 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	

CE[7]



Ex CSA C US

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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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	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I
Hazardous Area Approval	Ex ia IIC T4, AExia IIC, T4	Ex ia IIC T4, AExia IIC, T4
Hazardous Area Approval	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

EX - Hazardous Area Approval- contact factory for specific approvals

Hazardous Area Approval	EEx ia IIC T4, -54°C≤Ta≤121° C, II 1 G	EEx ia IIC T4, -54°C≤Ta≤121° C, II 1 G

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

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] 1Hz = 60 cpm (cycles per minute).
[5] Zero-based, least-squares, straight line method.
[6] 1/4-28 has no equivalent in S.I. units.
[7] 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:	Engineer: JEC	Sales:	Approved: NJF	Spec Number:
Date:	Date: 5/18/2009	Date:	Date: 11/7/2008	**10163**

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