Model Number **641B02**	**4-20 MA OUTPUT VELOCITY SENSOR**	Revision B ECN #: 24962

Performance	**ENGLISH**	**SI**	
Measurement Range	0.0 to 2 in/sec rms	0.0 to 50.8 mm/s rms	[1]
Output	4-20 mA	4-20 mA	
Frequency Range (±10 %)	600 to 60000 cpm	10 to 1 kHz	[2][3]
Broadband Resolution	0.01 in/sec rms	0.26 mm/s rms	[4]
Non-Linearity	±1 %	±1 %	
Environmental			
Temperature Range	-40 to 185 °F	-40 to 85 °C	
Electrical			
Excitation Voltage	12 to 30 VDC	12 to 30 VDC	
Settling Time (within 2% of value)	<15 sec	<15 sec	
Electrical Isolation (Case)	$>10^8$ Ohm	$>10^8$ Ohm	
Physical			
Size (Hex x Height)	1.0 in x 2.6 in	25.4 mm x 66 mm	
Weight	4.7 oz	131 gm	
Mounting Thread	1/4-28 UNF	No Metric Equivalent	
Mounting Torque	3 to 5 ft-lb	4 to 7 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	
Electrical Connections (Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)	
Electrical Connections (Pin B)	4-20 mA Neg (-)	4-20 mA Neg (-)	

CE[5]

C SA® US Ex

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 standard model except where noted below. More than one option maybe used.)

EX - Hazardous Area Approval- contact factory for specific approvals

Hazardous Area Approval	DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4	DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4
Hazardous Area Approval	EEx ia IIC T4, -40°C≤Ta≤80°C, II 1 G	EEx ia IIC T4, -40°C≤Ta≤80°C, II 1 G
Hazardous Area Approval	EEx nL IIC T4, -40°C≤Ta≤80°C, II 3 G	EEx nL IIC T4, -40°C≤Ta≤80°C, II 3 G
Hazardous Area Approval	DIV I, CL I, II, III, GRPS A-G, Exia, AExia, IIC T4	DIV I, CL I, II, III, GRPS A-G, Exia, AExia, IIC T4

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

RV - Buffered Analog Signal Output - 100 mV/g (±20%)

Electrical Connector	3-Pin MIL-C-5015	3-Pin MIL-C-5015
Electrical Connections (Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections (Pin B)	4-20 mA Neg/Signal Output Neg	4-20 mA Neg/Signal Output Neg
Electrical Connections (Pin C)	Signal Output Pos	Signal Output Pos

Notes

[1] Conversion Factor 1 in/sec = 0.0254 m/sec.
[2] 1Hz = 60 cpm (cycles per minute).
[3] Current will fluctuate at frequencies below 5 Hz.
[4] Typical.
[5] See PCB Declaration of Conformance PS039 or PS053 for details.

Supplied Accessories

081A40 Mounting Stud (1)
ICS-4 NIST-traceable single-axis amplitude response calibration from 0 cpm (0 Hz) to upper 10% frequency for 4 - 20 mA output vibration sensor (1)

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