

Model Number 640B72	4-20 MA OUTPUT VELOCITY SENSOR	Revision: C ECN #: 33907
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	ENGLISH	SI	
Performance			
Measurement Range	0.0 to 2 in/sec pk	0.0 to 50.8 mm/s pk	[1]
Output	4-20 mA	4-20 mA	
Frequency Range(± 3 dB)	180 to 60,000 cpm	3 to 1000 Hz	[2][3]
Broadband Resolution	0.01 in/sec pk	0.26 mm/s pk	[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)	1.5 in x 3.7 in	38.1 mm x 94 mm	
Weight	19.5 oz	553 gm	
Mounting Thread	1/4 NPT	No Metric Equivalent	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Electrical Connector	Removable Screw Terminals	Removable Screw Terminals	
Electrical Connection Position	Top	Top	
Electrical Connections(Tab 1)	4-20 mA Pos (+)	4-20 mA Pos (+)	
Electrical Connections(Tab 2)	4-20 mA Neg (-)	4-20 mA Neg (-)	
Screw Terminal Wire Size	12-24 AWG	3.0 - .2mm ²	



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.		
EP - Explosion-proof certified conduit housing with 1" pipe thread		
HT - High temperature, extends normal operation temperatures [6]		
Temperature Range	-40 to 275 °F	-40 to 125 °C
RV - Buffered Analog Signal Output - 100 mV/g (±20%)		
Electrical Connector	Removable Screw Terminals	Removable Screw Terminals
Electrical Connections(Tab 1)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections(Tab 2)	4-20 mA Neg (-)	4-20 mA Neg (-)
Electrical Connections(Tab 3)	Signal Output Pos	Signal Output Pos
Electrical Connections(Tab 4)	Signal Output Neg	Signal Output Neg
TO - Temperature Output [7]		
Temperature Output Range	-40 to +125 °C	-40 to +125 °C
Electrical Connector	Removable Screw Terminals	Removable Screw Terminals
Electrical Connections(Tab 1)	Vibration, 4-20 mA Pos.	Vibration, 4-20 mA Pos.
Electrical Connections(Tab 2)	Vibration, 4-20 mA Neg.	Vibration, 4-20 mA Neg.
Electrical Connections(Tab 3)	Temperature, 4-20 mA Pos.	Temperature, 4-20 mA Pos.
Electrical Connections(Tab 4)	Temperature, 4-20 mA Neg.	Temperature, 4-20 mA Neg.
VO - Buffered Analog Signal Output 100 mV/in/sec (±20%) [8]		
Electrical Connections(Tab 1)	Vibration, 4-20 mA Pos.	Vibration, 4-20 mA Pos.
Electrical Connections(Tab 2)	Vibration, 4-20 mA Neg.	Vibration, 4-20 mA Neg.
Electrical Connections(Tab 3)	Signal Output Pos	Signal Output Pos
Electrical Connections(Tab 4)	Signal Output Neg	Signal Output Neg
Electrical Connector	Terminal Block	Terminal Block

NOTES:
 [1] Conversion Factor 1 in/sec = 0.0254 m/sec.
 [2] Current will fluctuate at frequencies below 5 Hz.
 [3] 1Hz = 60 cpm (cycles per minute).
 [4] Typical.
 [5] See PCB Declaration of Conformance PS039 for details.
 [6] Can not be combined with EX or VO options.
 [7] Can not be combined with RV or VO options.
 [8] Can not be combined with EX, HT, TO , RV options.

SUPPLIED ACCESSORIES:
 Model 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)

Entered: <i>pmw</i>	Engineer: <i>Dgo</i>	Sales: <i>mm</i>	Approved: <i>Dgo</i>	Spec Number:
Date: <i>9/1/10</i>	Date: <i>9/1/10</i>	Date: <i>9/1/10</i>	Date: <i>9/1/10</i>	34414

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