

Model Number 642A00		4-20 MA OUTPUT VELOCITY SENSOR			Revision: A ECN #: 43341	
Performance		ENGLISH		SI		
Measurement Range		0.0 to 0.5 in/sec pk		0.0 to 12.7 mm/s pk		
Output		4-20 mA		4-20 mA		
Frequency Range(± 10 %)		180 to 60,000 cpm		3 to 1 kHz		
Broadband Resolution		0.005 in/sec pk		0.13 mm/s pk		
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)		7/8 in x 1.41 in		22.2 mm x 35.8 mm		
Weight		3.8 oz		108 gm		
Mounting Thread		1/4-28 UNF		1/4-28 UNF		
Mounting Torque(Stud)		3 to 4 ft-lb		4.1 to 5.4 Nm		
Mounting Torque(hex nut)		2 to 3 ft-lb		2.7 to 4.1 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		Side		Side		
Electrical Connections(Pin A)		4-20 mA Pos (+)		4-20 mA Pos (+)		
Electrical Connections(Pin B)		4-20 mA Neg (-)		4-20 mA Neg (-)		
						
<i>All specifications are at room temperature unless otherwise specified.</i> <i>In the interest of constant product improvement, we reserve the right to change specifications without notice.</i> 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.						
M - Metric Mount						
Supplied Accessory : Model M080A163A (1) replaces Model 080A162						
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 value.						
[5]1/8" hex Allen key required for English version, 3mm hex Allen key required for metric version.						
[6]Stud torque must exceed sensor hex nut torque to ensure proper dismantling.						
[7]See PCB Declaration of Conformance PS039 for details.						
SUPPLIED ACCESSORIES:						
Model 080A162 Mounting Stud (1)						
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: AP		Engineer: DK		Sales: EGY		
Date: 10/10/2014		Date: 10/10/2014		Date: 10/10/2014		
				Approved: BAM		
				Spec Number:		
				28682		
						
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