



Model Number TO640B31	4-20 MA OUTPUT VELOCITY SENSOR WITH TEMPERATURE			Revision B ECN #: 29071										
Performance	ENGLISH	SI		Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)										
Measurement Range (Vibration)	0.0 to 1.0 in/sec pk	0.0 to 25.4 mm/s pk	[2]	for standard model except where noted below. More than one option maybe used.)										
Measurement Range (Temperature)	-40 to 257 °F	-40 to 125 °C	[1]	M - Metric Mount										
Output	4-20 mA	4-20 mA		Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model										
Frequency Range (±10 %)	180 to 60000 cpm	3 to 1 kHz	[3][4]	081A40										
Broadband Resolution	0.005 in/sec pk	0.13 mm/s pk	[5]	Notes										
Non-Linearity	1 %	1 %		[1] Vibration 4-20mA output accuracy is limited to 185°F (85°C)										
Environmental				[2] Conversion Factor 1 in/sec = 0.0254 m/sec.										
Temperature Range	-40 to 185 °F	-40 to 85 °C	[1]	[3] 1Hz = 60 cpm (cycles per minute).										
Electrical				[4] Current will fluctuate at frequencies below 5 Hz.										
Excitation Voltage	12 to 30 VDC	12 to 30 VDC		[5] Typical value.										
Load Resistance	50 (Vs-12) ohms	50 (Vs-12) ohms		[6] See PCB Declaration of Conformance PS039 for details.										
Settling Time	<15 sec	<15 sec												
Electrical Isolation (Case)	>10 ⁸ Ohm	>10 ⁸ Ohm												
Physical				Supplied Accessories										
Size (Hex x Height)	1.00 in x 2.60 in	25.4 mm x 66.0 mm		081A40 Mounting Stud (1)										
Weight	4.7 oz	131 gm		ICS-4 NIST-traceable single-axis amplitude response calibration from 0 cpm (0 Hz) to										
Mounting Thread	1/4-28 UNF	1/4-28 UNF		upper 10% frequency for 4 - 20 mA output vibration sensor ()										
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	4-Pin Bayonet	4-Pin Bayonet												
Electrical Connection Position	Top	Top												
Electrical Connections (Pin A)	Vibration, 4-20 mA	Vibration, 4-20 mA												
	Pos.	Pos.												
Electrical Connections (Pin B)	Vibration, 4-20 mA	Vibration, 4-20 mA												
	Neg.	Neg.												
Electrical Connections (Pin C)	Temperature, 4-20	Temperature, 4-20												
	mA Pos.	mA Pos.												
Electrical Connections (Pin D)	Temperature, 4-20	Temperature, 4-20												
	mA Neg.	mA Neg.												
														
<p><i>All specifications are at room temperature unless otherwise specified.</i></p> <p>In the interest of constant product improvement, we reserve the right to change specifications without notice.</p> <p>ICP® is a registered trademark of PCB group, Inc.</p>				<table border="1"> <tr> <td>Entered: LLH</td> <td>Engineer: EGY</td> <td>Sales: NJF</td> <td>Approved: LLH</td> <td>Spec Number:</td> </tr> <tr> <td>Date: 07/09/2008</td> <td>Date: 07/08/2008</td> <td>Date: 07/08/2008</td> <td>Date: 07/11/2008</td> <td>25712</td> </tr> </table>	Entered: LLH	Engineer: EGY	Sales: NJF	Approved: LLH	Spec Number:	Date: 07/09/2008	Date: 07/08/2008	Date: 07/08/2008	Date: 07/11/2008	25712
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