

Model Number
640B02

LOOP POWERED CURRENT OUTPUT SENSOR

Revision: B
ECN #: 24962

	ENGLISH	SI	
Performance			
Measurement Range	0.0 to 2 in/s pk	0.0 to 50.8 mm/s pk	[1]
Output	4-20 mA	4-20 mA	
Frequency Range ($\pm 10\%$)	180 to 60,000 cpm	3 to 1000 Hz	[2][3]
Broadband Resolution	0.01 in/s pk	0.26 mm/s pk	[4]
Non-Linearity	$\pm 1\%$	$\pm 1\%$	
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	Not Applicable	
Mounting Torque	3 to 5 ft-lb	4 to 7 N-m	
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 (-)	

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.

EX - ATEX or ATEX and CSA Hazardous Area Approval
 Hazardous Area Approval EEx ia IIC T4, -40°C≤Tas80°C, II 1 G
 Hazardous Area Approval EEx nL IIC T4, -40°C≤Tas80°C, II 3 G
 Hazardous Area Approval DIV I, CL I, II, III, GRPS A-G, Exia, AExia, IIC T4
 Hazardous Area Approval DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4

M - Metric Mount
 Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

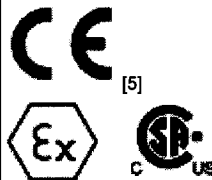
RV - Buffered Analog Signal Output - 100 mV/g ($\pm 20\%$)
 Electrical Connector 3-Pin MIL-C-5015
 Electrical Connections (Pin A) 4-20 mA Pos (+)
 Electrical Connections (Pin B) 4-20 mA Neg/Signal Output Neg
 Electrical Connections (Pin C) Signal Output Pos

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 or PS053 for details.

SUPPLIED ACCESSORIES:

Model 081A40 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)



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.

ICP® is a registered trademark of PCB Group, Inc.

Entered: <i>JRN</i>	Engineer: <i>MJC</i>	Sales: <i>QMM</i>	Approved: <i>NF</i>	Spec Number:
Date: <i>9-22-06</i>	Date: <i>9/22/06</i>	Date: <i>9/22/06</i>	Date: <i>9/22/06</i>	27244

IMI SENSORS
 A PCB PIEZOTRONICS DIV.
 3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464
 Fax: 716-684-3823
 E-Mail: imi@pcb.com