

Model Number  
EX641B71

## VIBRATION SENSOR, INDUSTRIAL, 4-20 MA, LOOP POWERED

Revision C  
ECN #: 27692

### Performance

	ENGLISH	SI	
Measurement Range	0.0 to 1 in/sec rms	0.0 to 25.4 mm/s rms	[1]
Output	4-20 mA	4-20 mA	
Frequency Range (±3 dB)	600 to 60000 cpm	10 to 1000 Hz	[2][3]
Broadband Resolution	0.005 in/sec rms	0.13 mm/s rms	[4]
Non-Linearity	±1 %	±1 %	

### Environmental

Temperature Range	-40 to 176 °F	-40 to 80 °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 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm

### Physical

Size (Hex x Height)	3.85 in x 5.52 in	98 mm x 140 mm
Weight	1.2 lb	544 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 <sup>2</sup>



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.

**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, ExnA, AExnA, IIC T4	DIV II, CL I, GRPS A-D, ExnA, AExnA, IIC T4
Hazardous Area Approval	Ex ia IIC T4, - 40°Câ%Taâ%80 C, II 1 G	Ex ia IIC T4, - 40°Câ%Taâ%80 C, II 1 G
Hazardous Area Approval	Ex nA IIC T4, - 40°Câ%Taâ%80 C, II 3 G	Ex nA IIC T4, - 40°Câ%Taâ%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

**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

### 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

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: LLH	Engineer: MPN	Sales: NJF	Approved: LLH	Spec Number:
Date: 11/15/2007	Date: 11/12/2007	Date: 11/12/2007	Date: 11/26/2007	<b>33800</b>



3425 Walden Avenue  
Depew, NY 14043  
UNITED STATES  
Phone: 716-684-0003  
Fax: 716-684-3823  
E-mail: imi@pcb.com  
Web site: www.imi-sensors.com