

Model Number
640B01

PLATINUM 4-20 MA OUTPUT VELOCITY SENSOR

Revision E
ECN #: 25866

Performance

	ENGLISH	SI	
Measurement Range	0.0 to 1 in/sec pk	0.0 to 25.4 mm/s pk	[1]
Output	4-20 mA	4-20 mA	
Frequency Range (±10 %)	180 to 60000 cpm	3 to 1000 Hz	[2][3]
Broadband Resolution	0.005 in/sec pk	0.13 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
Load Resistance	50 (Vs-12) ohms	50 (Vs-12) ohms
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	No Metric Equivalent
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	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 (-)



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.)

Option	Option 1	Option 2
EX - Hazardous Area Approval- contact factory for specific approvals		
Hazardous Area Approval	DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4	DIV II, CL I, GRPS A-D, ExnL, AExnA, IIC T4
Hazardous Area Approval	EEx ia IIC T4, -40°C≤Ta≤80°C, II 1 G	EEx ia IIC T4, -40°C≤Ta≤80°C, II 1 G
Hazardous Area Approval	EEx nL IIC T4, -40°C≤Ta≤80°C, II 3 G	EEx nL IIC T4, -40°C≤Ta≤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

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

RV - Buffered Analog Signal Output - 100 mV/g (±20%)

RVVO - Buffered Analog Signal Output - 100 mV/in/sec (±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	4-20 mA
	Neg/Signal Output Neg	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.
- [5] See PCB Declaration of Conformance PS039 or PS053 for details.

Supplied Accessories

081A40 Mounting Stud (1)

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: NJF	Sales: LLH	Spec Number:
Date: 02/19/2007	Date: 02/28/2007	Date: 03/02/2007	25315



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