

LOOP POWERED, CURRENT OUTPUT, INDUSTRIAL VIBRATION SENSOR

Model Number
646B00

Revision: B
ECN #: 25316

Performance

Measurement Range
Output
Frequency Range ($\pm 10\%$)
Broadband Resolution
Non-Linearity
Environmental
Temperature Range
Electrical
Excitation Voltage
Load Resistance
Settling Time (within 2% of value)
Electrical Isolation (Case)

0.0 to 10 g rms
4-20 mA
180 to 60,000 cpm
0.05 g rms
 $\pm 1\%$
-40 to 185 °F
12 to 30 VDC
50(Vs-12) ohm
<15 sec
>10⁸ ohm

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
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EEx ia IIC T4, -40°CsTas80°C, II 1 G
EEx nL IIC T4, -40°CsTas80°C, II 3 G
DIV I, CL I, II, III, GRPS A-G, Exia, AExia, IIC T4
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
Electrical Connections (Pin A)
Electrical Connections (Pin B)
Electrical Connections (Pin C)
3-Pin MIL-C-5015
4-20 mA Pos (+)
4-20 mA Neg/Signal Output Neg
Signal Output Pos

Physical
Size (Hex x Height)
Weight
Mounting Thread
Mounting Torque
Sensing Element
Sensing Geometry
Housing Material
Sealing
Electrical Connector
Electrical Connection Position
Electrical Connections (Pin A)
Electrical Connections (Pin B)

1.0 in x 2.6 in
4.7 oz
1/4-28 UNF
3 to 5 ft-lb
Ceramic
Shear
Stainless Steel
Welded Hermetic
2-Pin MIL-C-5015
Top
4-20 mA Pos (+)
4-20 mA Neg (-)

0.0 to 98.1 m/s² rms
4-20 mA
3 to 1 kHz
0.49 m/s² rms
 $\pm 1\%$
-40 to 85 °C
12 to 30 VDC
50(Vs-12) ohm
<15 sec
>10⁸ ohm
25.4 mm x 66 mm
131 gm
Not Applicable
4 to 7 N-m
Ceramic
Shear
Stainless Steel
Welded Hermetic
2-Pin MIL-C-5015
Top
4-20 mA Pos (+)
4-20 mA Neg (-)

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [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)

Entered: <i>JAH</i>	Engineer: <i>MT</i>	Sales: <i>DA</i>	Approved: <i>NS</i>	Spec Number:
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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.

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