

LOOP POWERED, CURRENT OUTPUT, INDUSTRIAL VIBRATION SENSOR

Performance

Measurement Range
Output
Frequency Range(± 3 dB)
Broadband Resolution
Non-Linearity

ENGLISH

0.0 to 10 g rms
4-20 mA
180 to 600,000 cpm
0.05 g rms
± 1 %
-40 to 185 °F

SI

0.0 to 98.1 m/s² rms
4-20 mA
3 to 10 kHz
0.49 m/s² rms
± 1 %
-40 to 85 °C

Environmental

Electrical

Excitation Voltage
Load Resistance
Settling Time(within 2% of value)
Electrical Isolation(Case)

12 to 30 VDC
50(Vs-12) ohm
<15 sec
>10⁸ 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

Sensing Geometry

Shear

Housing Material

Stainless Steel

Sealing

Welded Hermetic

Electrical Connector

2-Pin MIL-C-5015

Electrical Connection Position

Top

Electrical Connections(Pin A)

4-20 mA Pos (+)

Electrical Connections(Pin B)

4-20 mA Neg (-)

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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.

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

OPTIONAL VERSIONS

EX - ATEX or ATEX and CSA Hazardous Area Approval
Hazardous Area Approval EEx ia IIC T4, -40°CsTas80°
Hazardous Area Approval EEx nL IIC T4, -40°CsTas80°
Hazardous Area Approval EEx nL IIC T4, -40°CsTas80°
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 (±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
Electrical Connections(Pin C) Signal Output Pos 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)

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|----------------------|----------------------|----------------------|----------------------|--------------|
| Entered: <i>YH</i> | Engineer: <i>MSB</i> | Sales: <i>EGY</i> | Approved: <i>YH</i> | Spec Number: |
| Date: <i>9-13-07</i> | Date: <i>8-30-07</i> | Date: <i>8-30-07</i> | Date: <i>9-11-07</i> | 27377 |



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