Model Number 640B09	LOOP POWERED, CURRENT OUTPUT, INDUSTRIAL VIBRATION SENSOR	Revision: NR ECN #:

Performance	ENGLISH	SI	
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(± 3 dB)	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	± 1 %	± 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 (-)	

CE [5]

Ex

c SP us

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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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≤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
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

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	3-Pin MIL-C-5015
Electrical Connections(Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections(Pin B)	4-20 mA Neg/Signal Output Neg	4-20 mA 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] 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:	Engineer:	Sales:	Approved:	Spec Number:
Date: 4-24-07	Date: 4/24/07	Date: 4/25/07	Date: 4/25/07	37369

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