

Model Number  
CS640B93

# LOOP POWERED, CURRENT OUTPUT, INDUSTRIAL VIBRATION SENSOR

Revision: NR  
ECN #: 51542

**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(± 3 dB)	180 to 60,000 cpm	3 to 1,000 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 176 °F	-40 to 80 °C	
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**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 <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	Integral Cable	Integral Cable	
Electrical Connection Position	Top	Top	
Wire Length	36 in	91.44 cm	

**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.

**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 for details.

**SUPPLIED ACCESSORIES:**

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



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.

Entered: LK	Engineer: gs	Sales: JL	Approved: BAM	Spec Number:
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