


Model Number 649A04	PROGRAMMABLE LOOP POWERED, CURRENT OUTPUT, INDUSTRIAL VIBRATION SENSOR				Revision B ECN #: 42229										
Performance	ENGLISH	SI	Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)												
Measurement Range (Velocity)	0.5 to 3 in/sec pk	12.7 to 76.2 mm/s pk	[1][2][3][4]	M - Metric Mount											
Measurement Range (Acceleration)	1 to 10 g pk	9.8 to 98.1 m/s ² pk	[5][1][4]	Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40											
Measurement Range (Displacement)	4 to 20 mil pk - pk	0.1 to 0.5 mm pk - pk	[1][6][4]	RV - Buffered Analog Signal Output - 100 mV/g (±20%)											
Output (±5 %)	4 mA	4 mA		Electrical Connector	3-Pin MIL-C-5015 3-Pin MIL-C-5015										
Output (±10 %)	20 mA	20 mA		Electrical Connections (Pin A)	4-20 mA Pos (+) 4-20 mA Pos (+)										
Frequency Range (-6 dB)	180 to 60000 cpm	3 to 1000 Hz	[7][8][9][4]	Electrical Connections (Pin B)	4-20 mA 4-20 mA										
Frequency Range	180 to 300000 cpm	3 to 5000 Hz	[7][8][4]		Neg/Signal Output Neg/Signal Output										
Frequency Range	180 to 600000 cpm	3 to 10000 Hz	[7][8][4]		Neg Neg										
Frequency Range	600 to 60000 cpm	10 to 1000 Hz	[7][8][4]	Electrical Connections (Pin C)	Signal Output Pos Signal Output Pos										
Frequency Range	600 to 300000 cpm	10 to 5000 Hz	[7][8][4]												
Frequency Range	600 to 600000 cpm	10 to 10000 Hz	[7][8][4]												
Environmental			Notes												
Temperature Range	-40 to +185 °F	-40 to +85 °C	[1] FS - Full Scale.												
Electrical			[2] Factory set, 1 in/sec peak.												
Excitation Voltage	15 to 30 VDC	15 to 30 VDC	[3] Conversion Factor 1 in/sec = 25.4 mm/sec.												
Settling Time (within 2% of value)	<30 sec	<30 sec	[4] USB Programmable with 600A21 kit.												
Electrical Isolation (Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	[5] Conversion Factor 1g = 9.81 m/s ² .												
Physical			[6] Conversion Factor 1 mil = 0.0254 mm												
Size (Hex x Height)	1.0 in x 2.6 in	25.4 mm x 66 mm	[7] 1Hz = 60 cpm (cycles per minute).												
Weight	4.6 oz	129 gm	[10]	[8] Current will fluctuate at frequencies below 5 Hz.											
Mounting Thread	1/4-28 UNF	No Metric Equivalent		[9] Factory Set											
Mounting Torque	3 to 5 ft-lb	4 to 7 Nm		[10] Typical.											
Sensing Element	Ceramic	Ceramic		[11] See PCB Declaration of Conformance PS124 for details.											
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 (-)													
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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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