

Model Number
602D91

INDUSTRIAL ICP® ACCELEROMETER

Revision: C
ECN #: 50817

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s ²)	[1]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 3 dB)	30 to 480,000 cpm	0.5 to 8,000 Hz	[2]
Resonant Frequency	1,500 kcpm	25 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	350 µg	3,434 µm/sec ²	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5,000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68, IP69K	IP68, IP69K	
Electrical			
Settling Time(within 1% of bias)	≤ 3.0 sec	≤ 3.0 sec	[3]
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 150 Ohm	< 150 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	8.0 µg/√Hz	78.5 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	5 µg/√Hz	49.1 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	4 µg/√Hz	39.2 (µm/sec ²)/√Hz	[3]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Physical			
Size (Length x Height x Width)	1.55 in x 0.845 in x 0.74 in	39.4 mm x 21.5 mm x 18.8 mm	
Weight	2.61 oz	74.0 gm	
Mounting Thread	1/4-28 Male	No Metric Equivalent	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	316L Stainless Steel	316L Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	4-Pin, M12	4-Pin, M12	
Electrical Connection Position	Side	Side	

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.

M - Metric Mount
Supplied Accessory: Model M081B97 Captive Mounting Bolt, M6 x 1 x 25 mm long, hex head (1)

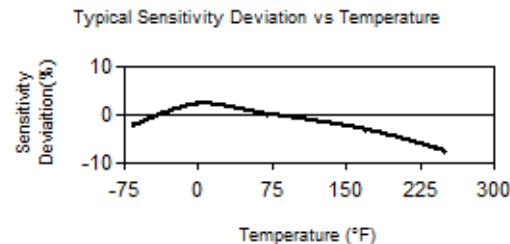
TO - Temperature Output		
Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C
Electrical Connections(Pin A)	Acceleration Signal / Power	Acceleration Signal / Power
Electrical Connections(Pin B)	Ground	Ground
Electrical Connections(Pin C)	No Connection	No Connection
Electrical Connections(Pin D)	Temperature Output	Temperature Output

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081B97 Captive Mounting Bolt 316SS - 7/16 HEX 1/4-28 UNF (1)
Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (1)



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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Entered: LK	Engineer: GD	Sales: MC	Approved: BAM	Spec Number:
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