

Model Number  
**602D01**

## INDUSTRIAL ICP® ACCELEROMETER

Revision A  
ECN #: 21821

### Performance

Sensitivity ( $\pm 10\%$ ) [2]  
Measurement Range  $\pm 50$  g [3]  
Frequency Range ( $\pm 3$  dB) 30 to 480000 cpm [1]  
Resonant Frequency 1500 kcpm [1]  
Broadband Resolution (1 to 10000 Hz) 350  $\mu$ g [1]  
Non-Linearity  $\pm 1\%$  [4]  
Transverse Sensitivity  $\leq 7\%$  [4]

### Environmental

Overload Limit (Shock) 5000 g pk  
Temperature Range -65 to +250 °F  
Temperature Response See Graph  
Enclosure Rating IP68

### Electrical

Settling Time (within 1% of bias)  $\leq 2.0$  sec  
Discharge Time Constant  $\geq 0.3$  sec  
Excitation Voltage 18 to 28 VDC  
Constant Current Excitation 2 to 20 mA  
Output Impedance  $< 150$  ohm  
Output Bias Voltage 8 to 12 VDC  
Spectral Noise (10 Hz) 8.0  $\mu$ g/ $\sqrt{\text{Hz}}$   
Spectral Noise (100 Hz) 5  $\mu$ g/ $\sqrt{\text{Hz}}$   
Spectral Noise (1 kHz) 4  $\mu$ g/ $\sqrt{\text{Hz}}$   
Electrical Isolation (Case)  $> 10^8$  ohm

### Physical

Size (Length x Width x Height) 1.65 in x 0.74 in x 41.9 mm x 18.8 mm x 0.845 in  
Weight 2.61 oz  
Mounting Thread 1/4-28 Male  
Mounting Torque 2 to 5 ft-lb  
Sensing Element Ceramic  
Sensing Geometry Shear  
Housing Material Stainless Steel  
Sealing Welded Hermetic  
Electrical Connector 2-Pin MIL-C-5015  
Electrical Connection Position Side

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

#### M - Metric Mount

Supplied Accessory: Model M081A97 Captive mounting bolt, M6 x 1 x 25.4 mm long, hex head

#### 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 Connector	3-Pin	3-Pin
Electrical Connections (Pin A)	Acceleration Output	Acceleration Output
Electrical Connections (Pin B)	Ground	Ground
Electrical Connections (Pin C)	Temperature Output	Temperature Output

### Notes

- [1] Typical.
- [2] Conversion Factor  $1g = 9.81 \text{ m/s}^2$ .
- [3] The high frequency tolerance is accurate within  $\pm 10\%$  of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.

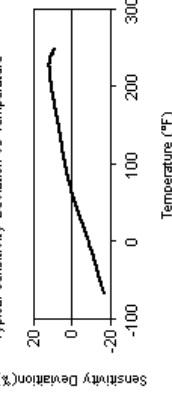
### Supplied Accessories

081A97 Thru bolt 1/4-28 (1)

Entered: BLS	Engineer: LAB	Sales: EGY	Approved: NJF	Spec Number:
Date: 03/22/2005	Date: 03/23/2005	Date: 03/23/2005	Date: 03/25/2005	<b>29429</b>



Typical Sensitivity Deviation vs Temperature



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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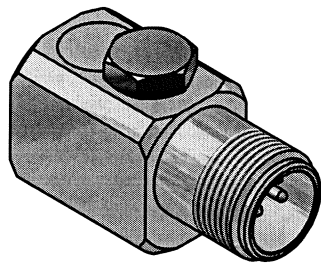
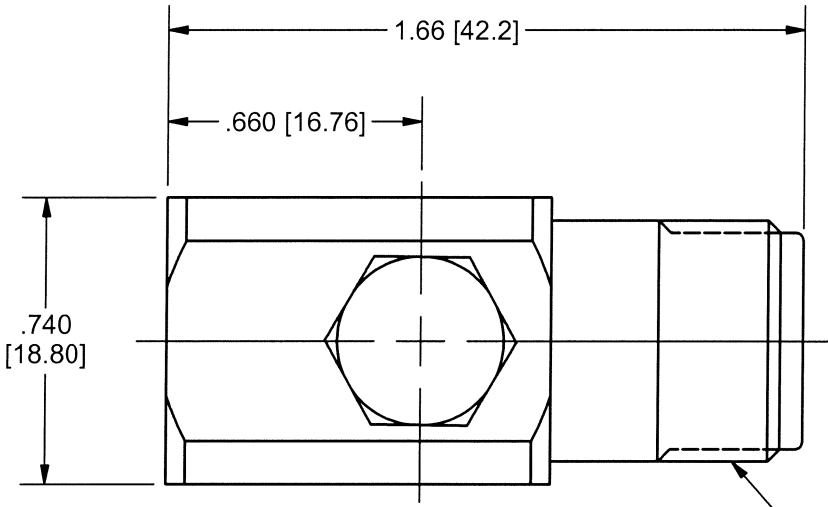
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2 APPLICATION

NEXT ASSY	USED ON	VAR

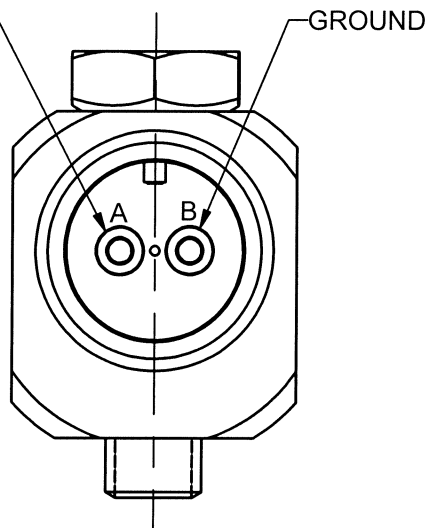
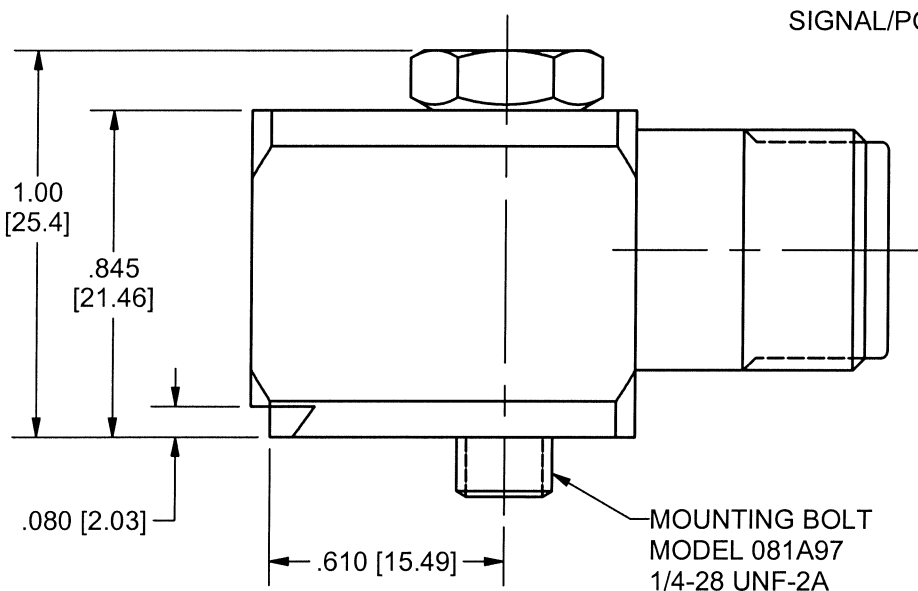
1 REVISIONS

REV	DESCRIPTION	ECN	APP'D
NR	RELEASED TO DRAFTING		<i>SM 3/23</i>



ACTUAL SIZE

ELECTRICAL CONNECTOR  
5/8-24 UNEF-2A  
2 PIN (MIL-C-5015)



MOUNTING BOLT  
MODEL 081A97  
1/4-28 UNF-2A  
X 1.00 [25.4] LONG  
(SUPPLIED)



1 FOR METRIC ACCELEROMETER (MODEL M602D01) USE MOUNTING BOLT MODEL M081A97, M6 X 1.00-6g X 1.00 [25.4] LONG.

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:

DIMENSIONS IN INCHES	DIMENSIONS IN MILLIMETERS [IN BRACKETS]
DECIMALS XX ± .03	DECIMALS X ± 0.8
XXX ± .010	XX ± 0.25
ANGLES ± 2 DEGREES	ANGLES ± 2 DEGREES

DRAWN	<i>RCE 3/2/05</i>	MFG	<i>D.L. 3/2/05</i>
CHK'D	<i>SM 3/3/05</i>	ENGR	<i>J.B. 3/3/05</i>
APP'D	<i>SM 3/3/05</i>	SALES	<i>SM 3/3/05</i>
TITLE	OUTLINE DRAWING		



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CODE IDENT. NO. 52681	DWG. NO. 29425
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SCALE: 2X SHEET 1 OF 1