

Model Number
605B01

INDUSTRIAL ICP[®] ACCELEROMETER

Revision: NR
ECN #:

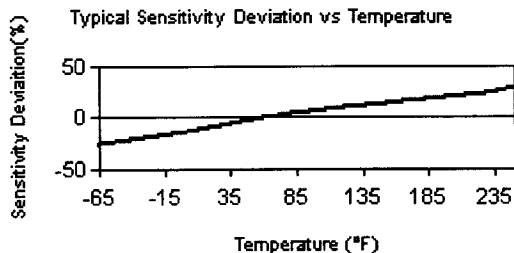
| | ENGLISH | SI | |
|---------------------------------------|-----------------------|-------------------------------|-----|
| Performance | | | |
| Sensitivity (± 20 %) | 100 mV/g | 10.2 mV/(m/s ²) | [2] |
| Measurement Range | ± 50 g | ± 490 m/s ² | |
| Frequency Range (± 3 dB) | 30 to 300000 cpm | .5 to 5000 Hz | [3] |
| Resonant Frequency | 600 kcpm | 10 kHz | [1] |
| Broadband Resolution (1 to 10,000 Hz) | 350 µg | 3434 µm/s ² | [1] |
| Non-Linearity | ± 1 % | ± 1 % | [4] |
| Transverse Sensitivity | ≤ 5 % | ≤ 5 % | |
| Environmental | | | |
| Overload Limit (Shock) | 5000 g pk | 49,050 m/s ² pk | |
| Temperature Range | -65 to +250 °F | -54 to +121 °C | |
| Temperature Response | See Graph | See Graph | |
| Enclosure Rating | IP68 | IP68 | |
| Electrical | | | |
| Settling Time (within 1% of bias) | ≤ 2.0 sec | ≤ 2.0 sec | |
| 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 ohms | <150 ohms | |
| Output Bias Voltage | 8 to 12 VDC | 8 to 12 VDC | |
| Spectral Noise (10 Hz) | 8 µg/√Hz | 78.5 (µm/s ²)/√Hz | [1] |
| Spectral Noise (100 Hz) | 5 µg/√Hz | 49.1 (µm/s ²)/√Hz | [1] |
| Spectral Noise (1 kHz) | 4 µg/√Hz | 39.2 (µm/s ²)/√Hz | [1] |
| Electrical Isolation (Case) | >10 ⁸ ohms | >10 ⁸ ohms | |
| Physical | | | |
| Size (Diameter x Height) | 1.38 in x 1.00 in | 34.9 mm x 25.4 mm | |
| Weight (without cable) | 3.9 oz | 110.6 gm | |
| Mounting Thread | 1/4-28 UNF | Not Applicable | [5] |
| Mounting Torque | 2 to 5 ft-lb | 2.7 to 6.8 N-m | |
| Sensing Element | Ceramic | Ceramic | |
| Sensing Geometry | Shear | Shear | |
| Housing Material | Stainless Steel | Stainless Steel | |
| Sealing | Welded Hermetic | Welded Hermetic | |
| Electrical Connector | 3-Pin MIL-C-5015 | 3-Pin MIL-C-5015 | |
| Electrical Connection Position | Side | Side | |
| Electrical Connections (Pin A) | X axis | X axis | |
| Electrical Connections (Pin B) | Z axis | Z axis | |
| Electrical Connections (Pin C) | Ground | Ground | |

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 M081A68 Captive mounting bolt M6 x 1 (1) replaces Model 081A68

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [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.



[6]

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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SUPPLIED ACCESSORIES:

Model 081A68 Captive mounting bolt 1/4-28 x .90" (1)
Model ACS-2T NIST Traceable Single Point Calibration at 100 Hz for Each Axis (1)

Industrial ICP[®] Accelerometer

| | | | | |
|---------------------|----------------------|------------------|---------------------|--------------|
| Entered: <i>MCS</i> | Engineer: <i>MCS</i> | Sales: <i>JD</i> | Approved: <i>NT</i> | Spec Number: |
| Date: 7/21/03 | Date: 7/21/03 | Date: 7-25-03 | Date: 7/21/03 | 23462 |

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