

Model Number
VO625B01

INDUSTRIAL ICP® VELOCITY SENSOR

Revision: A
ECN #: 49709

| Performance | ENGLISH | SI | |
|-----------------------------------|-----------------------|----------------------------|--------|
| Sensitivity(± 10 %) | 100 mV/in/sec | 3,937 mV/m/sec | [4] |
| Measurement Range | ± 50 in/sec | ± 1.27 m/s | |
| Frequency Range(± 10 %) | 180 to 150 kcpm | 2.5 to 2.5 kHz | [1][3] |
| Frequency Range(± 3 dB) | 90 to 360 kcpm | 1.5 to 6 kHz | |
| Resonant Frequency | 900 kcpm | 15 kHz | [6] |
| Broadband Resolution(1 to 10 kHz) | 400 µin/sec | 10.6 µm/sec | [6] |
| Non-Linearity | ± 1 % | ± 1 % | [2] |
| Transverse Sensitivity | ≤ 8 % | ≤ 8 % | |
| 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 | [6] |
| Enclosure Rating | IP68 | IP68 | |
| Electrical | | | |
| Settling Time(within 1% of bias) | ≤ 30 sec | ≤ 30 sec | |
| Excitation Voltage | 18 to 28 VDC | 18 to 28 VDC | |
| Constant Current Excitation | 2 to 10 mA | 2 to 10 mA | |
| Output Impedance | < 100 Ohm | < 100 Ohm | |
| Output Bias Voltage | 8 to 12 VDC | 8 to 12 VDC | |
| Spectral Noise(10 Hz) | 25 µin/sec/√Hz | 0.64 µm/sec/√Hz | [6] |
| Spectral Noise(100 Hz) | 3.0 µin/sec/√Hz | 0.08 µm/sec/√Hz | [6] |
| Spectral Noise(1 kHz) | 2.0 µin/sec/√Hz | 0.05 µm/sec/√Hz | [6] |
| Electrical Protection | RFI/ESD | RFI/ESD | |
| Electrical Isolation(Case) | > 10 ⁸ Ohm | > 10 ⁸ Ohm | |
| Physical | | | |
| Size - Diameter | 1.36 in | 34.5 mm | |
| Size - Height | 1.13 in | 28.7 mm | |
| Weight | 5.6 oz | 159 gm | |
| Mounting | Through Hole | Through Hole | |
| 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 | Stainless Steel | Stainless Steel | |
| Sealing | Welded Hermetic | Welded Hermetic | |
| Electrical Connector | 2-Pin MIL-C-5015 | 2-Pin MIL-C-5015 | |
| Electrical Connection Position | Side | Side | |

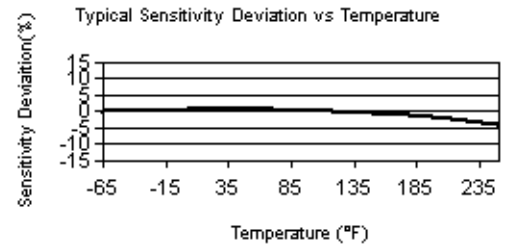
OPTIONAL VERSIONS
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

M - Metric Mount
Supplied Accessory: Model M081A73 Mounting Bolt M6 x 1.00 (1)

NOTES:
[1]1Hz = 60 cpm (cycles per minute).
[2]Zero-based, least-squares, straight line method.
[3]The high frequency tolerance is accurate within ±10% of the specified frequency.
[4]Conversion Factor 1 in/sec = 0.0254 m/sec.
[5]1/4-28 has no equivalent in S.I. units.
[6]Typical.
[7]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:
Model 081A73 Captive mounting bolt 1/4-28 x 1.34"
Model 080B45 Thermal Boot
Model Calibration Certificate

| | | | | |
|------------------|------------------|------------------|------------------|--------------|
| Entered: LK | Engineer: YHK | Sales: MC | Approved: NJF | Spec Number: |
| Date: 07/02/2019 | Date: 07/02/2019 | Date: 07/02/2019 | Date: 07/02/2019 | 55708 |



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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