| Model Number 261A03 | 3-COMPONENT ICP® FORCE SENSOR | Revision C ECN #: 33704 |
|---|---|---|

| Performance | ENGLISH | SI | |
|---|---|---|---|
| Sensitivity (±20 %) (z axis) | 0.25 mV/lb | 0.06 mV/N | [1] |
| Sensitivity (±20 %) (x or y axis) | 1.25 mV/lb | 0.28 mV/N | [1] |
| Measurement Range (z axis) | 10000 lb | 44.48 kN | |
| Measurement Range (x or y axis) | 4000 lb | 17.79 kN | |
| Maximum Force (z axis) | 11000 lb | 48.93 kN | |
| Maximum Force (x or y axis) | 4400 lb | 19.57 kN | |
| Maximum Moment (z axis) | 240 ft-lb | 325.4 Nm | |
| Maximum Moment (x or y axis) | 325 ft-lb | 440.7 Nm | |
| Broadband Resolution (x or y axis ) | 0.05 lb-rms | 0.222 N-rms | [2] |
| Broadband Resolution (x or y axis ) | 0.01 lb-rms | 0.04 N-rms | [2] |
| Upper Frequency Limit | 10 kHz | 10 kHz | |
| Low Frequency Response (-5 %) (z-axis) | 0.01 Hz | 0.01 Hz | |
| Low Frequency Response (-5 %) (x or y axis) | 0.001 Hz | 0.001 Hz | |
| Non-Linearity | ≤1 % FS | ≤1 % FS | [3] |
| Cross Talk (between x and y axis) | ±3 % | ±3 % | |
| Cross Talk (between (x or y axis) and z axis) | ±5 % | ±5 % | |
| **Environmental** | | | |
| Temperature Range | -65 to +250 °F | -54 to +121 °C | |
| **Electrical** | | | |
| Full Scale Output (Z Direction) | ±2.5 VDC | ±2.5 VDC | |
| Full Scale Output (X and Y Direction) | ±5 VDC | ±5 VDC | |
| Discharge Time Constant (z axis) | ≥50 sec | ≥50 sec | |
| Discharge Time Constant (x or y axis) | ≥500 sec | ≥500 sec | |
| Excitation Voltage (all channels) | 20 to 30 VDC | 20 to 30 VDC | |
| Constant Current Excitation (all channels) | 2 to 20 mA | 2 to 20 mA | |
| Output Impedance | ≤100 Ohm | ≤100 Ohm | |
| Output Bias Voltage | 8 to 14 VDC | 8 to 14 VDC | |
| Spectral Noise (1 Hz) (X & Y ) | 0.003 lb/√Hz | 0.0134 N/√Hz | |
| Spectral Noise (10 Hz) (X & Y ) | 0.001 lb/√Hz | 0.00445 N/√Hz | |
| Spectral Noise (100 Hz) (X & Y ) | 0.0004 lb/√Hz | 0.00178 N/√Hz | |
| Spectral Noise (1000 Hz) (X & Y ) | 0.0001 lb/√Hz | 0.000445 N/√Hz | |
| Spectral Noise (1 Hz) (Z ) | 0.02 lb/√Hz | 0.089 N/√Hz | |
| Spectral Noise (10 Hz) (Z ) | 0.005 lb/√Hz | 0.0222 N/√Hz | |
| Spectral Noise (100 Hz) (Z ) | 0.002 lb/√Hz | 0.0089 N/√Hz | |
| Spectral Noise (1000 Hz) (Z ) | 0.0005 lb/√Hz | 0.00222 N/√Hz | |
| Output Polarity | Positive | Positive | |
| **Physical** | | | |
| Stiffness (z axis) | 40 lb/µin | 7 kN/µm | [2] |
| Stiffness (x or y axis) | 15 lb/µin | 2.6 kN/µm | [2] |
| Size (Height x Length x Width) | 3.54 in x 3.15 in x 3.15 in | 89.9 mm x 80.0 mm x 80.0 mm | |
| Weight | 96.25 oz | 2994 gm | |
| Housing Material | Stainless Steel | Stainless Steel | |
| Sealing | Hermetic | Hermetic | |
| Electrical Connector | 4-Pin | 4-Pin | |
| Electrical Connection Position | Side | Side | |

CE[4]

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

**M** - Metric Mount

**W** - Water Resistant Cable

| | | |
|---|---|---|
| Electrical Connection Position | Side | Side |

**Notes**

[1] Sensitivites are for listed preload. Sensitivites may vary ±5% depending on preload used.

[2] Typical.

[3] Zero-based, least-squares, straight line method.

[4] See PCB Declaration of Conformance PS023 for details.

| Entered: DMW | Engineer: MJK | Sales: KWW | Approved: ECB | Spec Number: |
|---|---|---|---|---|
| Date: 08/17/2010 | Date: 08/17/2010 | Date: 08/17/2010 | Date: 08/17/2010 | **28787** |

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| *All specifications are at room temperature unless otherwise specified.*<br>In the interest of constant product improvement, we reserve the right to change specifications without notice.<br>ICP® is a registered trademark of PCB group, Inc. | |