

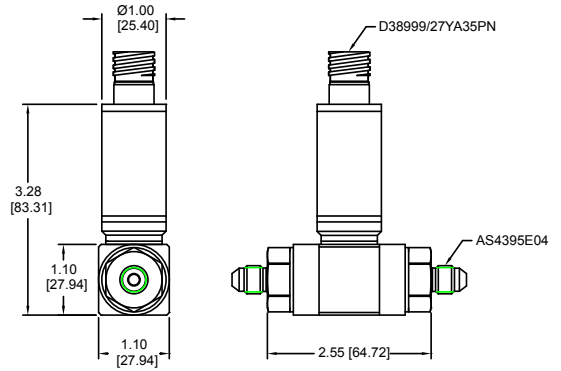
MODEL 7300 FLIGHT HERITAGE DIFFERENTIAL PRESSURE TRANSDUCER



STANDARD WIRING

| PIN | 4-20mA | 4-WIRE VDC ISOLATED | 4-WIRE VDC NON-ISOLATED | 3-WIRE VDC |
|-------|----------|---------------------|-------------------------|------------|
| 1/RED | +EXC/SIG | +EXC | +EXC | +EXC |
| 2/GRN | N/C | +SIG | +SIG | +SIG |
| 3/WHT | N/C | -SIG | -SIG* | N/C |
| 4/BLK | -EXC/SIG | -EXC | -EXC* | -EXC/SIG |
| 5/BLU | N/C | N/C | N/C | N/C |
| 6/BRN | N/C | N/C | N/C | N/C |

* COMMONS JUMPERED



Standard configurations shown.
Please consult factory for other options.

PRODUCT OVERVIEW:

GP:50 Model 7300 is a flight heritage, differential pressure transducer digitally corrected to provide high-accuracy pressure measurement. The compact, proprietary sensor design provides added zero stability required for commercial aviation, military, aerospace, UAV, satellite, and defense applications.

FEATURES:

- Accuracy to 0.1% FSO
- Extremely lightweight, <8 oz (0.2 kg)
- 0 to 5 Vdc, 0 to 10 Vdc, or 4-20mA output
- Line pressure shift <1% FSO/100 PSI
- 1000 PSI line pressure rating
- Ranges from 0-1 thru 0-500 PSID

APPLICATIONS:

- Aviation and suborbital spacecraft
- Space heritage flight
- Commercial and military satellites
- Launch vehicles
- Test stand applications
- Ground and engine testing

OPTIONS:

- Digital correction provides an optional 0.05% FSO accuracy
- 0 to 5 Vdc, 0 to 10 Vdc isolated output
- Bi-directional operation
- Fomblin Oil fill for O₂ applications
- Various MIL-SPECS available. Consult factory.

GP:50 MODEL 7300

REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

| ELECTRICAL | |
|---------------------|--|
| Output Signal: | 4-20mA, 0 to 5 Vdc or 0 to 10 Vdc |
| Excitation Voltage: | 8 to 32 Vdc (4-20mA, and 0-5 Vdc non-isolated output) 12-32 Vdc (0-10 Vdc and 0-5 Vdc isolated output) |
| RLoad max: | $(4-20 \text{ mA}) = ((\text{Power supply Voltage} - 9.0\text{V}) / .020) - \text{Wire Resistance}$. (Options may affect this, consult factory) |
| Circuit Protection: | EMI/RFI, Reverse Polarity |
| Response Time: | ~1 ms |

| MATERIALS OF CONSTRUCTION | |
|---------------------------|--|
| Wetted Parts: | 316L Stainless Steel |
| Housing: | 300 Series Stainless Steel |
| O-Ring: | Buna-N (Nitrile) is standard. For expanded temp ranges (-65 °F to 350 °F, 54 °C to 177 °C) Fluorosilicone is standard. |
| Internal Fill: | Silicone Oil (Fomblin oil available) |

| ACCURACY (RSS): Hysteresis, Non-Linearity & Repeatability @ +70 °F | |
|--|----------------------------|
| Static Accuracy (RSS): | $\leq \pm 0.3\%$ FSO |
| Non-Linearity: | $\leq \pm 0.2\%$ FSO (Typ) |
| Hysteresis: | $\leq \pm 0.1\%$ FSO (Typ) |
| Repeatability: | $\leq \pm 0.1\%$ FSO (Typ) |
| Zero Balance: | $\pm 1.0\%$ FSO |
| Span Balance: | $\pm 1.0\%$ FSO |

(BFSL method used. Improved options available.)

| | |
|-----------------|---------------------|
| Calibration: | NIST Traceable Cert |
| Workmanship: | IPC-A-610 Soldering |
| Quality System: | ISO 9001 |

Options may affect specifications.
Please consult factory for your specific needs.

| MECHANICAL | |
|----------------------------------|--|
| Process Connection: | AS4395E04 standard (Optional pressure ports available) |
| Electrical Connection: | PTIH-10-6P standard, options available |
| Proof Pressure: | 3X pressure range (Higher available) |
| Burst Pressure: | 5X pressure range |
| Static Pressure: | 1000 PSI |
| Random Vibration: | >25 G RMS (20 Hz to 2,000 Hz) |
| Orientation Effect ≤ 2 PSI: | $\pm 3.5\%$ FSO, Rotated 90° from Horizontal |
| Approximate Weight: | <8 oz (0.2 kg) (Some options may affect weight) |

| PRESSURE RANGES | |
|---|--|
| 0 to 1 thru 0 to 500 PSID (0.07 BAR thru 34.5 BAR) (Bidirectional or unidirectional) | |

| THERMAL SPECIFICATIONS | |
|---|--|
| Operating Range: | -40 °F to +250 °F (-40 °C to +121 °C) |
| Compensated Range: | 0 °F to +180 °F (-18 °C to +82 °C) (Other available) |
| Compensated Ranges from -65 °F to +250 °F (-54 °C to +121 °C) | |
| Effect on Zero & Span: | $\pm 1.0\%$ FSO/100 °F (Improved specifications available) |

