



FLIGHT HERITAGE DIFFERENTIAL PRESSURE TRANSDUCER

MODEL 7300

FEATURES:

- Digital correction provides an optional 0.05% FSO accuracy
- Extremely lightweight, <8 oz (0.2 kg)
- 0 to 5 Vdc, 0 to 10 Vdc, or 4-20mA output
- Line pressure shift <1% FSO/1000 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

PRODUCT OVERVIEW:

The Model 7300 series from GP:50 is a flight qualified, 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.

FIELD OPTIONS:

- 0 to 5 Vdc, 0 to 10 Vdc isolated output
- Bi-directional operation
- Fomblin Oil fill for O2 applications



Model 7300
Flight Qualified
Differential Pressure Transducer

GP:50 MODEL 7300

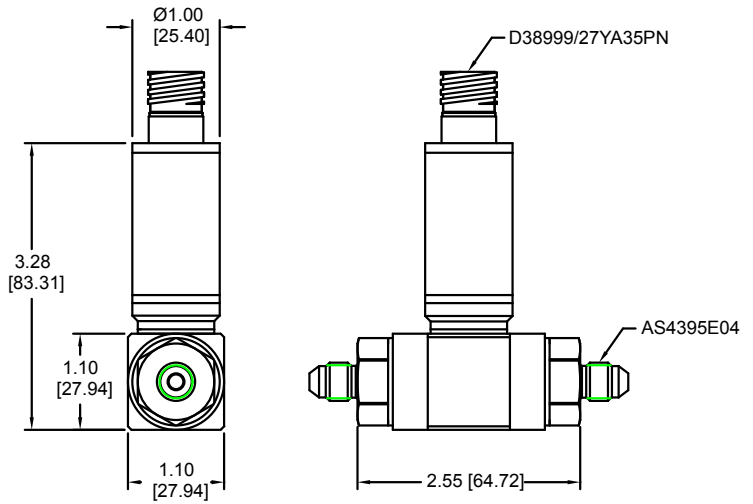
DIMENSIONAL DRAWING

All dimensions are in inches (mm)

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



REFERENCE SPECIFICATIONS

| | |
|---|---|
| <p>ELECTRICAL</p> <ul style="list-style-type: none"> • Output Signal: 0 to 5 Vdc, 0 to 10 Vdc digitally corrected • Supply Voltage: 18 to 36 Vdc (unregulated) • Response Time: ~500 Hz • Circuit Protection: Designed to meet *MIL-STD-461 EMI/RFI, Reverse polarity • Connection: PTIH-10-6P standard, options available | <p>MECHANICAL (Other options available)</p> <ul style="list-style-type: none"> • Process connection: AS5202-04 standard • O-Ring: Buna-N (Nitrile) is standard. For expanded temp ranges -65 °F to 350 °F Fluorosilicone is standard. • Proof Pressure: 3X pressure range (Higher available) • Burst Pressure: 5X pressure range • Static Line Pressure: 1000 PSI • Random Vibration: >25 G RMS (20 Hz to 2,000 Hz) • Approximate Weight: 8 oz (0.2 kg) (some options may affect weight) • Orientation Effect ≤ 2 PSI: ±3.5% FSO, Rotated 90° from Horizontal |
| <p>ACCURACY</p> <ul style="list-style-type: none"> • Static Accuracy: <±0.10% FSO, ±0.05% FSO available • Zero-repeatability: <±0.04% FSO • Hysteresis: <±0.05% FSO • Zero/Span Balance: ±0.1% FSO • Line Pressure Effect (Zero): <±1.0% FSO/100 PSI | <p>PRESSURE RANGES</p> <ul style="list-style-type: none"> • 0 to 1 thru 0 to 500 PSID (0.07 Bar thru 34.5 BAR) Bi-directional or uni-directional |
| <p>MATERIALS OF CONSTRUCTION</p> <ul style="list-style-type: none"> • Wetted Parts: 316L stainless steel • Housing: 300 series stainless steel • Internal Fill: Silicon Oil (Fomblin Oil Available) | <p>THERMAL SPECIFICATION</p> <ul style="list-style-type: none"> • Compensated Range: 0 °F to +180 °F (- 18°C to + 83°C) (other available) • Operating Range: -40 °F to +250 °F (-40 °C to +121 °C) • Storage Ambient: -65 °F to +250 °F (-54 °C to +121 °C) • Effect on Zero/Span: Standard: ±0.50% FSO/100 °F Improved: ±0.25% FSO/100 °F • NIST Traceability • Workmanship: J-001 • Quality System: ISO 9001:2008 |

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

**Standard configurations shown.
Please consult factory for other options.**

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

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Tel: +1.716.773.9300 Fax: +1.716.773.5019 Email: sales@gp50.com Web: www.gp50.com

