



SPACE HERITAGE FLOW-THRU PRESSURE TRANSDUCER

MODEL 7901

FEATURES:

- "S" Class electronics option
- Lightweight, compact size <55 grams
- Flight qualified
- High accuracy, up to $<\pm 0.1\%$ FSO RSS
- Full traceability
- Rad-hard 100 KRAD optional
- Flow-thru design
- Isolated outputs for EMI/RFI
- Shock and vibration tested to MIL-STD-810C&E requirements

APPLICATIONS:

- Miniature propulsion platforms
- Space vehicles
- Satellite propulsion
- Launch vehicles
- Life support systems

PRODUCT OVERVIEW:

Model 7901 series is a light weight, space heritage flow-thru pressure transmitter designed for flight propulsion systems. The flow thru design is engineered to measure up to 0.1% of full scale pressure across the sensor and will stand up to the rigorous conditions associated with space propulsion.

FIELD OPTIONS:

- "S" Class electronics option
- mV/V, 0 to 5 Vdc, 0 to 10 Vdc (4-wire isolated output options) or 4-20 mA output
- Temperature (RTD) output
- Improved temperature compensation
- B+ and "S" Class electronics (see model 7901)
- D38999/27YB98PN, D38999/27YA35PN electrical connectors

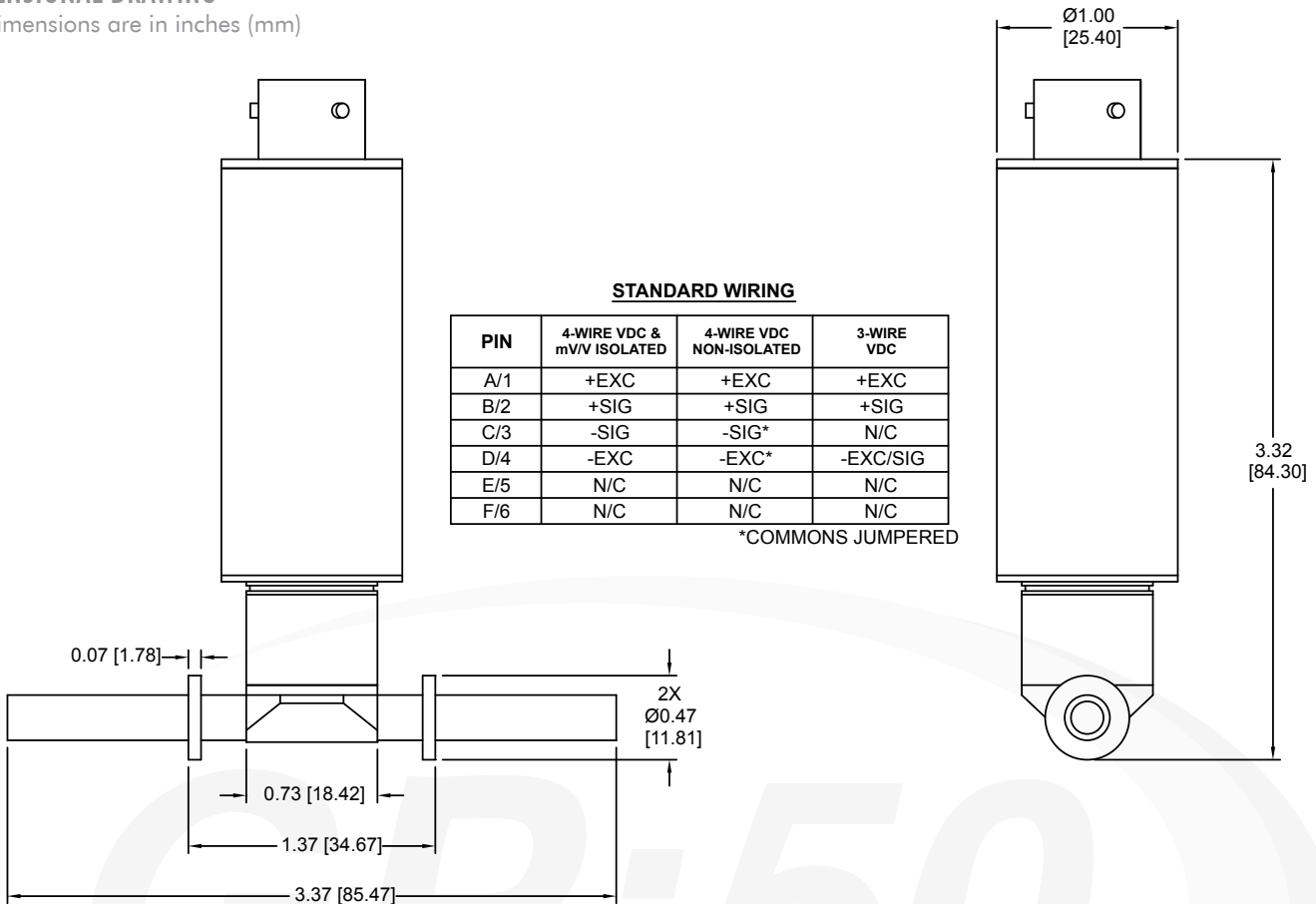


Model 7901
Space Heritage Flow-thru
Pressure Transducer

GP:50 MODEL 7901

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



STANDARD WIRING

PIN	4-WIRE VDC & mV/V ISOLATED	4-WIRE VDC NON-ISOLATED	3-WIRE VDC
A/1	+EXC	+EXC	+EXC
B/2	+SIG	+SIG	+SIG
C/3	-SIG	-SIG*	N/C
D/4	-EXC	-EXC*	-EXC/SIG
E/5	N/C	N/C	N/C
F/6	N/C	N/C	N/C

*COMMONS JUMPERED

REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> • Output Signal: 3 mV/V, 0 to 5 Vdc and 0 to 10 Vdc isolated and non isolated • Supply Voltage: 5 Vdc, 12 Vdc, and 18 to 36 Vdc isolated • Response Time: <4 ms • Connection: MIL-PTIH-10-6 standard, other options available • Circuit Protection: Reverse polarity protection design meets MIL-STD-461/EMI/RFI (some options may affect rating) 	<ul style="list-style-type: none"> • Process Connection: Welded 1/4" ID stainless steel tube, flow through, in-line design (other ports available) • Proof Pressure: 1.5X FSO • Burst Pressure: 2.0X FSO • Weight: <55 grams
MATERIALS OF CONSTRUCTION	PRESSURE RANGES
<ul style="list-style-type: none"> • Wetted Parts: 316 stainless steel • Housing: 316L stainless steel 	0 to 50 thru 0 to 5,000 PSIA, PSIG or PSISG (3.4 thru 345 BAR)
ACCURACY	THERMAL SPECIFICATIONS
<p>Static Accuracy (RSS): <±0.3% FSO, ±0.1 % FSO optional Non-repeatability: <±0.1% FSO Hysteresis: <±0.2% FSO Non-linearity: <±0.2% FSO Total Error Band: ±1.0% FSO</p>	<ul style="list-style-type: none"> • Compensated: -20 °F to +120 °F (-29 °C to +49 °C) expanded range available • Operating: -100 °F to +250 °F (-73 °C to +121 °C) • Effect on Zero/Span: ±1.0% FSO/100 °F
	OPTIONAL
	<ul style="list-style-type: none"> • NIST Traceability/Calibration: ANSI-Z540-1 • Workmanship: J-001/NASA 8739.3 standard • Quality System: ISO 9001:2008

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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