MODEL 241 / 341

HIGH-ACCURACY PRESSURE TRANSDUCER

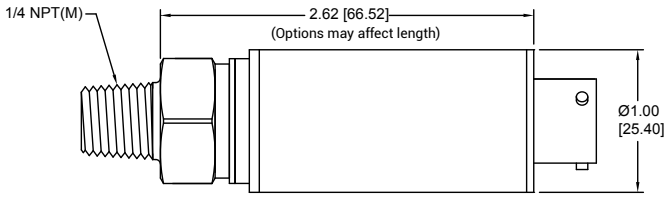
MODEL 241 WIRING

PIN/WIRE	DESCRIPTION
A/1/RED	+EXC
B/2/GRN	+SIG
C/3/-	N/C
D/4/BLK	-EXC/SIG
E/5/BRN	N/C or SHUNT
F/6/ORG	PROGRAM*

MODEL 341 WIRING

PIN/WIRE	DESCRIPTION
A/1/RED	+EXC/SIG
B/2/BLK	-EXC/SIG
C/3/WHT	N/C
D/4/BLU	PROGRAM GND*
E/5/BRN	N/C or SHUNT
F/6/ORG	PROGRAM*

*Do not connect to program pins.



Inches (mm)

REF DIMENSIONS ONLY.
CONSULT FACTORY FOR ACTUAL DIMENSIONS.

PRODUCT OVERVIEW:

Model 241/341 from GP:50 is our most accurate pressure transducer. Designed specifically for aerospace and automotive test stand applications, it is 5x tighter through temperature than standard industrial transmitters with a 0.20% FSO / 100 °F thermal stability. More than 25 years of field expertise went into the design of our pressure transducer for exceptional reliability. The compact, corrosion-resistant, all-welded stainless steel design of the Model 241/341 offers ease of installation within space constrained environments. Static accuracy is available to ±0.05% FSO, with a total thermal error of 0.25% FSO over the compensated temperature range.

FEATURES:

- High accuracy to ±0.05% FSO
- High thermal stability ±0.20% FSO/100 °F
- -65 °F to +250 °F compensation options
- Compact, lightweight, all stainless steel design
- Less than 4 millisecond response time
- Tightest thermal stability in its class

APPLICATIONS:

- Dynamometer testing
- Transmission testing
- Brake testing
- Hydraulic & Pneumatic valve testing
- Jet engine testing
- Emission test stands

OPTIONS:

- Optional zero and span adjustment
- Shunt calibration for active line testing without a pressure source
- Comprehensive list of process and electrical connections for existing application retrofits

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GP:50 MODEL 241 / 341

REFERENCE SPECIFICATIONS

Standard configurations shown, consult factory for other options

ELECTRICAL	
Output Signal:	(Model 241) 0 to 5, 0-10 Vdc (Model 341) 4-20 mA
Excitation Voltage:	9 to 32 Vdc (some options may affect this)
Circuit Protection:	Reverse polarity protected Output may be grounded indefinitely Over voltage protection to 1kV for <1ms
Response Time:	1 mSec Typ

MATERIALS OF CONSTRUCTION	
Wetted Parts:	≤2,000 PSI: 316L SST, Hastelloy optional >2,000 PSI: 17-4 PH SST (Inconel, 316L SS optional)
Housing:	300 Series SST
Internal Fill:	Silicone oil fill (Other fill available) ≤2000 PSI

ACCURACY (BFSL): Hysteresis, non-Linearity & Repeatability @ + 70 °F	
Standard:	±0.10% FSO
Improved:	±0.05% FSO
Zero & Span Balance:	±0.5% FSO at + 70 °F

(BFSL method used. Improved options available.)

MECHANICAL	
Process Connection:	¼" NPT (M) (consult factory for complete list of options)
Electrical Connection:	PTIH-10-6P
Proof Pressure:	2X FSO
Burst Pressure:	5X FSO or 22.5K PSI max. (1,551 BAR)
Random Vibration:	25 G RMS (20 to 2000 Hz)
Shock:	100G peak for 11 msec, ½ Sine
Approximate Weight:	<0.5 lb

PRESSURE RANGES
0-30" WC thru 8K PSI (2.5 mBar to 552 BAR) Gauge, Vacuum, Absolute, Sealed Gauge

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)
Expanded Compensation:	All Ranges: -40 °F to +250 °F (-40 °C to +121 °C) (Consult Factory): -65 °F to +250 °F (-54 °C to +121 °C)
Storage Ambient:	-40°F to +250 °F (-40 °C to +121 °C)
Effect on Zero/Span:	±0.5% FSO/100 °F standard (±1.0% FSO/100 °F from -40 to 185 °F (-40 °C to +85 °C))
Improved Performance:	±0.20% FSO/100 °F (-40 °F to +250 °F (-40 °C to +121 °C))

INDUSTRIAL

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