

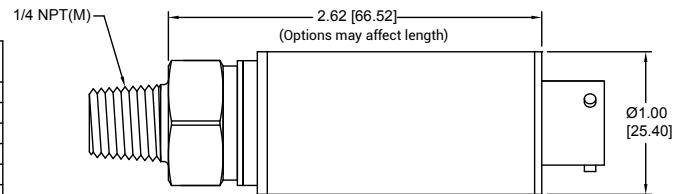


## MODEL 241 / 341

### HIGH-ACCURACY PRESSURE TRANSDUCER

MODEL 241 WIRING		MODEL 341 WIRING	
PIN/WIRE	DESCRIPTION	PIN/WIRE	DESCRIPTION
A/1/RED	+EXC	A/1/RED	+EXC/SIG
B/2/GRN	+SIG	B/2/BLK	-EXC/SIG
C/3/-	N/C	C/3/WHT	N/C
D/4/BLK	-EXC/SIG	D/4/BLU	PROGRAM GND*
E/5/BRN	N/C or SHUNT	E/5/BRN	N/C or SHUNT
F/6/ORG	PROGRAM*	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  $\pm 0.05\%$  FSO, with a total thermal error of 0.25% FSO over the compensated temperature range.

#### APPLICATIONS:

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

#### FEATURES:

- High accuracy to  $\pm 0.05\%$  FSO
- High thermal stability  $\pm 0.20\%$  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

#### 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

# GP:50 MODEL 241 / 341

## REFERENCE SPECIFICATIONS

Standard configurations shown, consult factory for other options

ELECTRICAL		MECHANICAL	
Output Signal:	(Model 241) 0 to 5, 0-10 Vdc (Model 341) 4-20 mA	Process Connection:	1/4" NPT (M) (consult factory for complete list of options)
Excitation Voltage:	9 to 32 Vdc (some options may affect this)	Electrical Connection:	PTIH-10-6P
Circuit Protection:	Reverse polarity protected Output may be grounded indefinitely Over voltage protection to 1kV for <1ms	Proof Pressure:	2X FSO
Response Time:	1 mSec Typ	Burst Pressure:	5X FSO or 22.5K PSI max. (1,551 BAR)
MATERIALS OF CONSTRUCTION		Random Vibration:	25 G RMS (20 to 2000 Hz)
Wetted Parts:	≤1,000 PSI: 316L SST, Hastelloy optional >1,000 PSI: 17-4 PH SST (Inconel, 316L SS optional)	Shock:	100G peak for 11 msec, 1/2 Sine
Housing:	300 Series SST	Approximate Weight:	<0.5 lb
Internal Fill:	Fomblin oil fill (May contain Silicone oil fill)	PRESSURE RANGES	
ACCURACY (BFSL): Non-Linearity @ +70 °F		0-30" WC thru 8K PSI (2.5 mBar to 552 BAR) Gauge, Vacuum, Absolute, Sealed Gauge	
Standard:	±0.10% FSO	THERMAL SPECIFICATIONS	
Improved:	±0.05% FSO	Operating Range:	-40 °F to +250 °F (-40 °C to +121 °C)
Zero & Span Balance:	±0.5% FSO at + 70 °F	Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C)
(BFSL method used. Improved options available.)		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	