

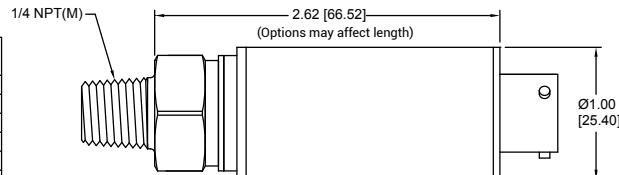
MODEL 241/341

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.



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 $+/-0.20\%$ 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 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)	Proof Pressure:	2X FSO
Circuit Protection:	Reverse polarity protected Output may be grounded indefinitely Over voltage protection to 1kV <1ms	Burst Pressure:	5X FSO, 22.5K PSI max. (1,551 BAR)
Response Time:	<4 ms typical	Random Vibration:	25 G RMS (20 to 2000 Hz)
		Shock:	100G peak for 11 msec, 1/2 Sine
		Approximate Weight:	<0.5 lb

MATERIALS OF CONSTRUCTION		PRESSURE RANGES	
Wetted Parts:	\leq 1,000 PSI: 316L SS, Hastelloy optional $>$ 1,000 PSI: 17-4 PH SST optional (Inconel, 316L SS optional)	0-30" WC thru 8K PSI (552 BAR) Gauge, Vacuum, Absolute, Sealed Gauge (both hermetic and non-hermetic)	
Housing:	300 Series SST		
Internal Fill:	Fomblin Oil (May contain Silicone oil fill)		

ACCURACY (BFSL): Non-Linearity @ +70 °F		THERMAL SPECIFICATIONS	
Standard:	\pm 0.10% FSO	Operating Range:	-40°F to +250 °F (-40 °C to +121 °C)
Improved:	\pm 0.05% FSO	Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C)
Zero & Span Balance:	\pm 0.5% FSO @ +70 °F	Expanded Range:	All Ranges: -40 °F to +250 °F (-40 °C to +121 °C) (Consult Factory): -65 °F to +250 °F (-54 °C to +121 °C)
(BFSL method used. Improved options available.)		Storage Ambient:	-40 °F to +250 °F (-40 °C to +121 °C)
		Effect on Zero/Span:	\pm 0.5% FSO/100 °F standard (\pm 1.0% FSO/100 °F from -40 to 185 °F (-40 °C to +85 °C))
		Improved Performance:	\pm 0.20% FSO/100 °F (-40 °F to +250 °F (-40 °C to +121 °C))

