GP:50

DM-SENSORS

HIGH-ACCURACY PRESSURE TRANSDUCER

Model 241 / 341
High-Accuracy Pressure Transducer

MODEL 241 / 341

FEATURES:

- High accuracy to ±0.05% FSO
- High thermal stability
- Compact, lightweight, all stainless steel design
- 1 millisecond response time
- Optional zero span and adjustment
- Optional shunt calibration for active line testing

APPLICATIONS:

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

PRODUCT OVERVIEW:

Model 241/341 from GP:50 is our most accurate pressure transducer. It is designed specifically for aerospace and automotive test stand applications. More than 25 years of field expertise went into the design of a 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 ±0.20% FSO over the compensated temperature range.

FIELD 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

DIMENSIONAL DRAWING

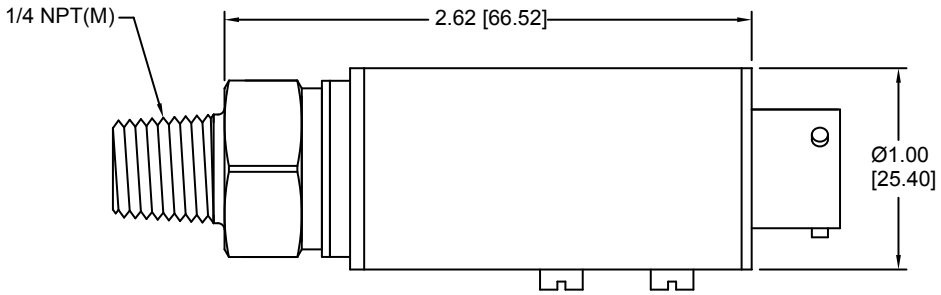
All dimensions are in inches (mm)

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
B/2/BLK	-EXC/SIG
C/3/-	N/C
D/4/BLU	PROGRAM GND
E/5/BRN	N/C or SHUNT
F/6/ORG	PROGRAM



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage**: 8 to 32 Vdc (some options may affect this)
- **Output Signal**:
(Model 241) 0 to 5 Vdc
(Model 341) 4-20 mA
- **Load Resistance**:
(Model 241) 100K Ω min.
(Model 341) 1150 Ω max. at 32 Vdc
- **Circuit Protection**:
Reverse polarity protected
Output may be grounded indefinitely
Over voltage protection to 1k V for <1m S
- **Response Time**:1m Sec (Typical)
- **Connection**: PTIH-10-6P

MATERIALS OF CONSTRUCTION

- **Wetted Parts**:
≤1,000 PSI (69 BAR): 316 stainless steel
>1,000 PSI (69 BAR): 17-4 PH stainless steel
- **Housing**: 300 series stainless steel

STATIC ACCURACY (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

- ±0.10% and ±0.05% FSO

MECHANICAL

- **Process Connection**: 1/4" NPT (M)
(consult factory for complete list of options)
- **Proof Pressure**: 2X FSO or 22.5K PSI max. (1,551 BAR)
(varies by pressure range)
- **Burst Pressure**: 5X FSO or 22.5K PSI max. (1,551 BAR)

PRESSURE RANGES

- 0-30" WC thru 15K PSI (1,034 BAR) Gauge, Vacuum, Absolute, Sealed Gauge (both hermetic and non-hermetic)

THERMAL SPECIFICATIONS

- **Compensated**: +32 °F to +180 °F (0 °C to +82 °C)
- **Effect on Zero/Span**: ±0.5% FSO/100 °F each
(±1.0% FSO/100 °F from -40 to 185 °F / (-40 °C to +85 °C)
- **Operating Temp**: -40 °F to +185 °F (-40 °C to +85 °C)
- **Storage Temp**: -40 °F to +250 °F (-40 °C to +121 °C)

Improved performance options:
- **Expanded Ranges**: -40 °F to +250 °F (-40 °C to +121 °C)
- **Improved Performance**: ±0.20% FSO over compensated range

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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