

VEHICLE TEST PRESSURE TRANSDUCER / TRANSMITTER



Model 142 / 242 / 342

Vehicle Test Pressure Transducer / Transmitter

MODEL 142 / 242 / 342

FEATURES:

- Ranges 0 to 50 thru 0 to 15K PSI
- Broad operating temperature range of -40 °F to +250 °F (-40 °C to +121 °C)
- Accurate up to ±0.1% FSQ
- All-welded, hermetically sealed, stainless steel
- Compact size

APPLICATIONS:

- On-board vehicle testing
- Ground support systems
- Military flight testing
- Hydraulic test stands
- Jet engine test stands

PRODUCT OVERVIEW:

Developed from +20 years of aerospace experience, the 42 series was designed with aerospace criteria for industrial applications. The compact all welded construction offers higher accuracies and a broad thermally compensated range. The 42 series has all the performance and durability of an aerospace grade unit, but in industrial grade pricing.

FIELD OPTIONS:

- Exotic wetted materials
- Optional process and electrical connections



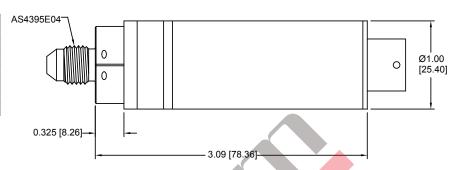
GP:50 MODEL 142 / 242 / 342

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

PIN	MODEL 142	MODEL 242	MODEL 342
A/1	+EXC	+EXC	+EXC/SIG
B/2	+SIG	+SIG	N/C
C/3	-SIG	N/C	N/C
D/4	-EXC	-EXC/SIG	-EXC/SIG
E/5	N/C	N/C	N/C
F/6	N/C	N/C	N/C



REFERENCE SPECIFICATIONS

ELECTRICAL

• Supply Voltage:

(142) 3.5 to 15 Vdc

(242) 9 to 40 Vdc

(342) 9 to 36 Vdc

• Output Signal:

(142) 3.0 mV/V: 0.5% FSO at $+70 \, ^{\circ}F$

(242) 0 to 5.0 Vdc: $\pm 0.5\%$ FSO at +70 °F

(342) 4-20 mA: $\pm 0.5\%$ FSO at +70 °F

• Input Impedance: (142) 5K Ω nominal, 350 Ω optional

• Input Current: (242) 10 mA, nominal

• Output Current: (242) 2.0 mA, max. for <0.1% FSO

attenuation

Circuit Protection: Reverse polarity, output may be

grounded indefinitely

• Response Time: 1 millisecond typical

• Connection: Bendix PTIH-10-6P connector or equivalent

MATERIALS OF CONSTRUCTION

• Wetted Parts:

15-5 PH and 316 stainless steel

• Housing:

316 stainless steel

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

Zero Balance and FSO: ±0.5% FSO at +70 °F

Standard: ±0.2% FSO Improved: ±0.1% FSO

MECHANICAL

• Process Connection: AS4395E04 standard, optional ports

available

• Proof Pressure: 2X FSO

• Burst Pressure: 5X FSO or 22.5K PSI (1,551 BAR),

whichever is less

• Weight: 3 oz nominal (85 grams)

PRESSURE RANGES

•0 to 15 thru 0 to 15K PSI (1 thru 1,034 BAR)

THERMAL SPECIFICATIONS

• Compensated: $-40 \,^{\circ}\text{F}$ to $+250 \,^{\circ}\text{F}$ ($-40 \,^{\circ}\text{C}$ to $+121 \,^{\circ}\text{C}$)

• Operating Ambient: $-40 \,^{\circ}\text{F}$ to $+250 \,^{\circ}\text{F}$ ($-40 \,^{\circ}\text{C}$ to $+121 \,^{\circ}\text{C}$)

• Storage: -40 °F to +250 °F (-40 °C to +121 °C)

• Effect on Zero/Span: ±0.75% FSO/100 °F standard

Standard configurations shown.

Please consult factory for other options.

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.