



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 $\pm 0.1\%$ FSO
- 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



Model 142 / 242 / 342

Vehicle Test Pressure Transducer / Transmitter

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 | STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F) |
|--|---|
| <ul style="list-style-type: none"> 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 °F (242) 0 to 5.0 Vdc: ±0.5% FSO at +70 °F (342) 4-20 mA: ±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 | <ul style="list-style-type: none"> Standard: ±0.2% FSO Improved: ±0.1% FSO Zero Balance and FSO: ±0.5% FSO at +70 °F |
| MATERIALS OF CONSTRUCTION | MECHANICAL |
| <ul style="list-style-type: none"> Wetted Parts: 17-4 PH stainless steel Housing: 316 stainless steel | <ul style="list-style-type: none"> 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 |
| | <ul style="list-style-type: none"> 0 to 15 thru 0 to 15K PSI (1 thru 1,034 BAR) |
| | THERMAL SPECIFICATIONS |
| | <ul style="list-style-type: none"> Compensated: -40 °F to +250 °F (-40 °C to +121 °C) Operating Ambient: -40 °F to +250 °F (-40 °C to +121 °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.

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