

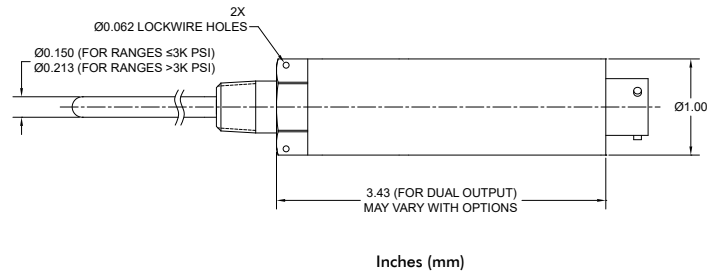
MODEL 243 / 343

DUAL PRESSURE & TEMPERATURE TRANSDUCER



STANDARD WIRING CONFIGURATION

| PIN/COND. | MODEL 243 | PIN/COND. | MODEL 343 |
|-----------|------------------|-----------|------------------|
| A/RED | +EXC (PRESS) | A/RED | +EXC/SIG (PRESS) |
| B/GRN | +SIG (PRESS) | B/BLK | -EXC/SIG (PRESS) |
| C/BLK | -EXC/SIG (PRESS) | C/BRN | +EXC/SIG (TEMP) |
| D/WHT | +EXC (TEMP) | D/BLU | -EXC/SIG (TEMP) |
| E/BRN | +SIG (TEMP) | E/WHT | N/C |
| F/BLU | -EXC/SIG (TEMP) | F/GRN | N/C |



**REF DIMENSIONS ONLY.
CONSULT FACTORY FOR ACTUAL DIMENSIONS.**

PRODUCT OVERVIEW:

The Model 243 / 343 Series from GP:50 is an all-stainless steel, dual pressure and temperature transducer with 4-20 mA and 0-5 V output. Its compact design reduces I/O and insertion points where size and weight are considerations. Units are available in a variety of pressure and temperature ranges.

FEATURES:

- Pressure and temperature in a single device
- Dual 4-20mA, 0 to 5 Vdc or RTD Temperature outputs
- Maximum process temperatures from -65 °F to +250 °F (-54 °C to +121 °C)
- Probe lengths from 3/4" to 7" (19mm to 178mm)
- Compact 1-inch (25.4 mm) diameter
- Rugged all-welded stainless steel design
- Standard ranges from 0-50 PSI thru 0-10K PSI (3.5 thru 690 bar)
- Calibrated Temperature ranges from -40°F to +250 °F (-40°C to +121 °C)

APPLICATIONS:

- Vehicle, engine and transmission oil monitoring
- Oil rig topside controls
- Automotive test stands
- Process skids
- Medical equipment
- Laboratory R&D

OPTIONS:

- Alternate probe lengths, process ports and electrical connections
- Optional improved temperature specifications available
- Dual 0-5 Vdc or 4-20 mA outputs
- 0-5 Vdc or 4-20 mA pressure and RTD temperature output options
- ATEX/IEC Intrinsically Safe (AI) and ATEX Zone 2 Non-incendive (AN) approvals available. Note: these options will increase length of housing to 5.83" for dual output unit.

GP:50 MODEL 243 / 343

REFERENCE SPECIFICATIONS

Standard configurations shown, consult factory for other options

| ELECTRICAL | |
|---------------------|---|
| Output Signal: | (243) 0 to 5 Vdc (343) 4-20 mA |
| Temperature Output: | 100 Ohm 2 wire Platinum RTD 0.00385 Alpha $\Omega/\Omega/\text{deg C}$, Class B 1000 Ohm 2 wire Platinum RTD 0.00385 Alpha $\Omega/\Omega/\text{deg C}$, Class B |
| Excitation Voltage: | 9.0 to 36 Vdc |
| Circuit Protection: | RFI, EMI & Reverse polarity protected |
| Response Time: | ~2 mSec Pressure / <2 Sec Temperature |

| MATERIALS OF CONSTRUCTION | |
|---------------------------|--|
| Wetted Parts: | 316L or 17-4PH SST |
| Housing: | 300 Series stainless steel |
| O-Ring (if needed): | Buna-N (Nitrile) is standard. For temp ranges -65 °F to 350 °F Fluorosilicone is standard. |
| Internal Fill: | Fomblin oil |

| ACCURACY (BFSL): Non-Linearity @ +70 °F | |
|---|------------------------------------|
| (Pressure) Standard: | $\pm 0.5\%$ FSO |
| (Pressure) Improved: | $\pm 0.2\%$ FSO or $\pm 0.1\%$ FSO |
| (Temperature) Standard: | $\pm 3.0\%$ FSO |
| Zero & Span Balance: | $\pm 1\%$ FSO |

| MECHANICAL | |
|------------------------|--|
| Process Connection: | 1/4" NPT (M) (other ports available) |
| Electrical Connection: | 6-pin Bendix PT1H-10-6P stainless steel options available |
| Probe Length: | 3/4" thru 7" |
| Proof Pressure: | Pressure: 2X FSO (optional 5X) Temperature: Std unit rated to 3000 PSI (Optional 10K PSI - Increases Probe Dia) |
| Burst Pressure: | 5X FSO |
| Approximate Weight: | 5 ounces |

| PRESSURE RANGES | |
|--|--|
| 0-50 thru 0-10K PSI (3.5 thru 690 BAR) gauge, sealed gauge, absolute | |

| TEMPERATURE RANGES | |
|--|--|
| Calibrated ranges from -40 °F to +250 °F (-40 °C to +121 °C) (Consult factory for other ranges - Electronics rated to 250 °F) | |

| THERMAL SPECIFICATIONS | |
|-------------------------------|---------------------------------------|
| Operating Range: | -40 °F to +250 °F (-40 °C to +121 °C) |
| Compensated Range: | +30 °F to +185 °F (-1 °C to +85 °C) |
| Storage Ambient: | -65°F to +250 °F (-54 °C to +121 °C) |
| Effect on Zero/Span Pressure: | < $\pm 0.5\%$ FSO/100 °F |

