



DUAL PRESSURE & TEMPERATURE TRANSDUCER

MODEL 243 / 343



Model 243 / 343
Dual Pressure & Temperature
Transducer

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

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.

FIELD 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.

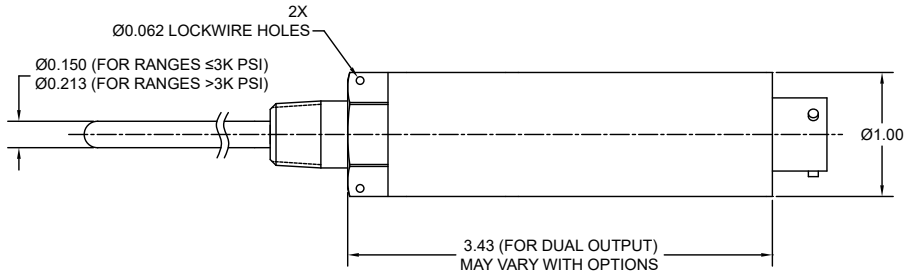
GP:50 MODEL 243 / 343

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING CONFIGURATION

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



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage:** 9.0 to 36 Vdc
- **Output Signal:**
(243) 0 to 5 Vdc
(343) 4-20 mA
- **100 or 1000 Ohm Platinum RTD output options for Temperature**
- **Output Current:** 2.0 mA max. for <0.1% FSO attenuation
- **Load Impedance:** 1,350 Ω max. at 36 Vdc and 750 Ω max. Vdc
- **Insulation Resistance:** >100 M Ω at 50 Vdc and +70 °F (+21 °C)
- **Connection:** 6-pin bendix PT1H-10-6P stainless steel options available

MATERIALS OF CONSTRUCTION

- **Wetted Parts:** 316L or 17-4PH SST
- **Housing:** 300 series stainless steel

ACCURACY (NON-LINEARITY @ +70 °F (BFSI))

- **Temperature:** ± 3.0 °F
- **Zero Balance:** $\pm 1\%$ FSO
- **Pressure:** Standard: $\pm 0.5\%$ FSO
Improved: Optional $\pm 0.2\%$ FSO or $\pm 0.1\%$ FSO

MECHANICAL

- **Process Connection:** 1/4" NPT (M) (other ports available)
- **O-Ring:** Buna-N (Nitrile) is standard. For expanded temp ranges -65 °F to 250 °F Fluorosilicone is standard.
- **Probe Length:** 3/4" thru 7"
- **Proof Pressure:** 2X FSO (optional 5X)
- **Burst Pressure:** 5X FSO
- **Approximate Weight:** 5 ounces
- Optional ports and probe lengths available

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

- **Thermal Response Time:** <2 secs
- **Compensated Pressure:** +30 °F to -185 °F (-1 °C to -120 °C)
- **Operating Ambient:** -40 °F to +185 °F (-40 °C to +85 °C)
- **Operating Process:** -40 °F to +250 °F (-40 °C to +121 °C)
- **Storage:** -65 °F to +250 °F (-55 °C to +121 °C)
- **Effect on zero/span pressure:** $< \pm 0.5\%$ FSO/100 °F

**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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