

HIGH-PRESSURE, HIGH-TEMPERATURE PROCESS TRANSMITTER



1171-LDPE
High-Pressure, High-Temperature
Process Transmitter





MODEL 1171-LDPE

FEATURES:

- One piece sensor design
- External G³/₄, G¹/₂ & G³/₈ process connections
- Magnetically coupled adjustment
- Hermetically sealed
- Process temperature rated to +350 °F (+175 °C)

APPLICATIONS

- Low-density polyethylene (LDPE)
- Steam cracking furnaces
- Ethylene gas production
- High-pressure reactors

PRODUCT OVERVIEW:

Model 1171-LDPE from GP:50 is a high-pressure, high-temperature process transmitter. Its process connections are directly compatible with all G-type threads or lens seals, as well as high pressure coned connections. A highly robust transmitter design incorporates an integral high-temperature sensor that further offers minimal thermal shift over a broad temperature range. Its single piece, non-welded construction eliminates weld failure risks.

APPROVALS:

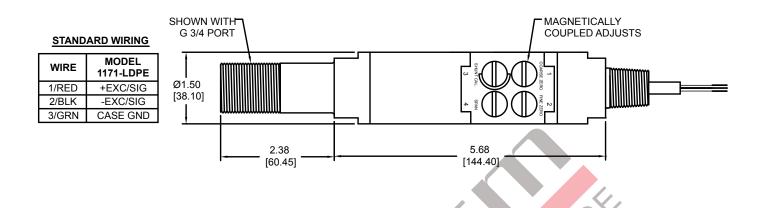
- Hazardous Location FM/CSA Explosion Proof:
 Class I, II, III Division I / Groups A, B, C, D, E, F, G
 (FM Standard / CSA requires P option code)
- FM/CSA Intrinsically Safe:
 Class I, II, III Division I / Groups A, B, C, D, E, F, G



GP:50 MODEL 1171-LDPE

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



REFERENCE SPECIFICATIONS

ELECTRICAL

- Voltage Input: 9 to 36 Vdc
- Output Signal: 4-20 mA, two-wire loop powered
- Load Impedance: 500Ω
- Insulation Resistance: Better than 10 M Ω at 50 Vdc
- Circuit Protection: Reverse polarity
- Response Time: 5 ms, 10 to 90% FSPR
- Connection: 1/2" NPT (M) with 72" leads

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

• < 0.25% FSO

MATERIALS OF CONSTRUCTION

• Wetted Parts:

Inconel 718, K12X, or 13-8 Monel

• Housing:

300 series stainless steel

MECHANICAL

- Process connection: G 3/4", G1/2" or G 3/8" (M) metal-to-metal "Lens" seal
- Proof Pressure: 1.2X full-scale or 108K PSI (7,446 BAR) whichever is less
- Burst Pressure: 1.5X full-scale or 108K PSI (7,446 BAR) whichever is less
- Weight: 2 lbs (0.9 kg) nominal

PRESSURE RANGES

• 0 to 1,000 PSI thru 0 to 90K PSI (69 thru 6,100 BAR)

THERMAL SPECIFICATIONS

- Operating Ambient: -40 °F to +200 °F (-40 °C to +100 °C)
- Operating Process: -40 °F to -350 °F (-40 °C to +175 °C)
- Storage Ambient: -65 °F to +250 °F (-53 °C to +121 °C)
- Effect on Zero/Span: $<\pm1.0\%$ FSO/100 °F
- Zero Balance: Adjustable

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.