MODEL 1171

FEATURES:

- Magnetic coupling provides field calibration with 5:1 turndown ratio
- 0 to 15 PSIV thru 0-100K PSIG, PSIA (1 BAR V thru 6895 BAR)
- 4-20 mA (loop powered) output
- FM, CSA intrinsically safe and explosion proof ratings
- IP67 & NEMA 6 rated housing

APPLICATIONS:

- Offshore rigs and pumping platforms
- Pipelines and processing
- Shipboard and marine
- Plastics and polymer processing
- Pulp and paper

PRODUCT OVERVIEW:

The Model 1171 series from GP:50 is a rugged, hermetically sealed pressure transmitter which features magnetic coupling adjusts for full field calibration with 5:1 turndown ratio. Their compact, corrosion-resistant, all-welded stainless steel construction provides reliable, maintenance-free service life within harsh marine and offshore oil and gas environments.

FIELD OPTIONS:

- Magnetically-coupled zero and span adjusts
- 5:1 turndown ratio, both fine and coarse
- Shunt calibration
- Hermetically sealed design
**DIMENSIONAL DRAWING**

All dimensions are in inches (mm)

**ELECTRICAL**

- **Supply Voltage:** 9 to 36 Vdc
- **Output Signal:** 4-20 mA, two-wire loop powered
- **Load Impedance:** 500 Ω
- **Insulation Resistance:** Better than 10 MΩ at 50 Vdc
- **Circuit Protection:** Reverse polarity above 45 V to 20 A at 0.02 milliseconds
- **Response Time:** 5 ms, 10 to 90% FSPR
- **Connection:** 1/2” NPT (M) conduit with 6 ft 18 AWG multi-conductor cable
- **Enclosure Classification:** IP67

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

>0.25% FSO

**APPROVALS**

- FM/CSA Explosion Proof:
  - Class I, II, III Division I / Groups A, B, C, D, E, F, G
- FM/CSA Intrinsically Safe:
  - Class I, II, III Division I / Groups A, B, C, D, E, F, G
- CE Compliant
- EMC 89/336/EEC
- PED 97/23/EC

**MATERIALS OF CONSTRUCTION**

- **Wetted Parts:** 17-4 PH stainless steel (other options available)
- **Housing:** 316L stainless steel
- **Bonded foil strain gauge**

**REFERENCE SPECIFICATIONS**

**MECHANICAL**

- **Process connection:**
  - 0 thru 15K PSI: 1/4” NPT (F)
  - 20K thru 50K PSI: Autoclave type F-250-C
  - 60K thru 75K PSI: Autoclave type F-312-C150
- **Proof Pressure:**
  - (0 thru 15K PSI) 2X FSO or 20K PSI (1,379 BAR), whichever is less
  - (20K to 100K PSISG,A) 1.2X FSO or 125K PSI (8,618 BAR), whichever is less
- **Burst Pressure:**
  - 15 thru 50 PSI: 250 PSI (17 BAR)
  - 75 thru 15K PSI: 5X FSO or 22.5K PSI (1,551 BAR), whichever is less
  - 20K thru 100K PSIS: 1.5X FSO or 125K PSI (8,618 BAR), whichever is less
- **Longterm Stability:** 0.25% FSPR over six months
- **Weight:** <28 oz (0.8 kg)

**PRESSURE RANGES**

- 0 to 15 PSIV, 0 to 2 PSIG, A thru 0 to 100K PSISG, PSIA
  - (1 BAR V thru 6,895 BAR)
  - 5:1 on ranges >5 PSI (0.3 BAR)

**THERMAL SPECIFICATIONS**

- **Compensated:** 0 to +185 °F (-17.8 °C to +85 °C)
- **Operating Ambient:** -10 °F to +185 °F (-23 °C to +85 °C)
- **Effect on Zero/Span:** <±1.0% FSO/100 °F
- **At 5:1 Ranging:** <3.5% FSO/100 °F
- **Zero Balance:** Fine and course adjustable

**STANDARD WIRING**

<table>
<thead>
<tr>
<th>WIRE</th>
<th>MODEL 1171</th>
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</thead>
<tbody>
<tr>
<td>1/RED</td>
<td>+EXC/SIG</td>
</tr>
<tr>
<td>2/BLK</td>
<td>-EXC/SIG</td>
</tr>
<tr>
<td>3/GRN</td>
<td>CASE GND</td>
</tr>
</tbody>
</table>

**F-250-C**

**MAGNETICALLY COUPLED ADJUSTS**

±1.50 [38.10]

**Ø1.50 [38.10]**

5.68 [144.40]

Standard configurations shown. Please consult factory for other options.