The Series 681 Sanitary Pressure Transmitter is designed to meet sanitary standards for applications in food, dairy, beverage and pharmaceutical processing, liquid level control, and sanitary pipelines. The unit is fully sealed to withstand high pressure washdown in Clean-in-Place (CIP) and Sterilize-in-Place (SIP) installations. The Series 681 is designed with a unique, no liquid fill diaphragm and a sanitary clamp pressure fitting for easy installation with negligible clamping effect. A conduit fitting, shielded cable with vent tube and sealed screws for zero and span adjustment combine to make the Series 681 completely watertight.

### Specifications

#### Service
Compatible liquids and gases.

#### Wetted Parts
316L SS.

#### Accuracy
±0.20% FS (includes non-linearity, hysteresis and non-repeatability).

#### Temperature Limits
-40 to 260°F (-40 to 125°C) 10 to 90% RH, non-condensing.

#### Pressure Limits
See table.

#### Compensated Temperature Range
20 to 180°F (-7 to 80°C).

#### Thermal Effect
Zero and span shift: ±2.0% FS/100°F.

#### Power Requirements
9 to 30 VDC.

#### Output Signal
4 to 20 mA, 2-wire.

#### Zero and Span Adjustment
±0.5 mA, non-interactive.

#### Response Time
≤ 10 ms.

#### Loop Resistance
800 Ω.

#### Electrical Connections
1/2˝ conduit fitting and strain relief with 15 ft (4.5 m) cable.

#### Process Connection
2˝ or 1-1/2˝ sanitary clamp fitting male NPT.

#### Clamping Effect
Zero and span shift: ±0.15% FS for ranges up to 30 psi; ±0.25% FS for ranges >30 psi.

#### Weight
8 oz (227 g).

#### Agency Approvals
CE.

### Table

<table>
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<tr>
<th>Model</th>
<th>Range</th>
<th>Overpressure</th>
<th>Sanitary Clamp Connection</th>
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<tr>
<td>681-02</td>
<td>0-1 psi</td>
<td>50 psi</td>
<td>2˝</td>
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<tr>
<td>681-12</td>
<td>0-2 psi</td>
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<tr>
<td>681-22</td>
<td>0-15 psi</td>
<td>150 psi</td>
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<tr>
<td>681-52</td>
<td>0-30 psi</td>
<td>150 psi</td>
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<tr>
<td>681-62</td>
<td>0-60 psi</td>
<td>180 psi</td>
<td>2˝</td>
</tr>
</tbody>
</table>

### Low Cost, Durable Sanitary Pressure Transmitter

Low cost, durable sanitary pressure transmitter is designed for use in food, dairy, beverage and pharmaceutical industries. This unit features superior 0.25% accuracy and up to 5:1 turndown. Calibration is quick and easy with field accessible zero and span adjustments. All stainless steel construction resists the corrosive effects of caustic washes used in most food processing cleaning procedures. 1-1/2” sanitary clamp process connection is suitable for Clean-in-Place (CIP) applications, eliminating the need for expensive bypass piping, valving or removal requirements for steam cleaning.

### Specifications

- **Service**: Liquid, gas or vapor.
- **Wetted Materials**: 316L SS.
- **Body**: 316 SS.
- **Accuracy**: ±0.25% of calibrated span.
- **Temperature Limits**: Process interface -40 to 212°F (-40 to 100°C).
- **Pressure Limits**: 300% full-scale.
- **Compensated Temperature Range**: -20 to 180°F (-25 to 80°C).
- **Thermal Effect**: (Includes zero and span) ±1% of upper range limit per 50°F (30 to 130°F) ±1.6% of upper range limit per 50°F (10 to 180°F).
- **Power Requirements**: 12 to 40 VDC with reverse polarity protection.
- **Output Signal**: 4 to 20 mA DC, max. 30 mA DC (2-wire).
- **Zero and Span Adjustments**: ±10% each.
- **Response Time**: Time constant, 20 ms.
- **Loop Resistance**: 600 Ω @ 24 VDC, max. Ω = (supply voltage -12) x 50.
- **Electrical Connection**: 1/2˝ female NPT.
- **Process Connection**: 1-1/2˝ sanitary clamp.
- **Weight**: 1.67 lb (752 g).
- **Agency Approvals**: CE.