Setra System's Model 528 high performance pressure transducer is designed for robust industrial and submersible applications that require high performance in extreme environments.

The Model 528's CVD strain gauge design is resistant to aging and virtually insensitive to thermal transients and pressure cycling. The stability of this technology assures the user of high reliability with less than 0.2% drift per year.

All wetted parts are constructed of corrosion-resistant 17-4 PH stainless steel, which makes this unit ideal for use with corrosive media.

The Model 528 offers 0.1% FS accuracy, compensated temperature range of -20°F to +212°F (-30°C to 100°C), and gauge, absolute, vacuum or compound pressure ranges from -14.7 psi up to 6000 psi.

The Model 528’s modular design is offered in a wide range of voltage or current outputs, and a variety of pressure and electrical connections, enabling this unit to be custom configured for your OEM application.

Depending upon the electrical connection selected, when coupled with the Model 528 enclosure, which is fabricated in 316 SS/17-4 PH SS, this unit is rated for IP40, IP65, IP66 or IP68 operation.

**Principle of Operation**

Using the well proven Wheatstone Bridge principle, a chemical vapor is deposited in thin layers of silicon and silicon dioxide onto a stainless steel sensor to form a very sensitive and accurate polysilicon strain gauge. The elements of the strain gauge are fused together at the atomic level, assuring the strength and integrity of the bond, which exceeds the adhesives used in common bonded strain gauge pressure sensors. A custom designed ASIC performs signal amplification and temperature compensation. This technology offers the user the option of configurable output and pressure ranges, sets the zero and span tolerance, and ensures interchangeability from unit to unit.
**Performance Data**

- **Accuracy RSS (at constant temp)**: ±0.1% Full Scale
- **Thermal Effects**
  - Compensated: Range °F (°C)
    - 20 to +212 (-30 to +100)
- **Zero Shift % FS**: 100°F (100°C) 0.5 (1.0)
- **Span Shift % FS**: 100°F (100°C) 0.5 (1.0)
- **Long-Term Stability**: 0.2% FS/year
- **Proof Pressure**: 2 x FS (1.5 x FS for 400 Bar, Long-Term Stability 0.2% FS/year)
- **Burst Pressure**: >35 x FS (≤ 100 Psi (6 Bar))
- **Molded Case**: 316 Stainless Steel, Plastic Nose Cone
- **Electrical Connection**: 10-6 Bayonet, IP66 Weatherproof Cable
- **Wetted Parts**: 17-4 PH Stainless Steel

**Environmental Data**

- **Temperature Operating**: °F (°C)
  - for Elec. Codes B1, B3, VA: -40 to + 260 (-40 to + 125)
  - for Elec. Codes UA: -5 to + 125 (-20 to + 50)
- **Storage**: °F (°C)
  - for Elec. Codes B1, B3, VA: -40 to + 260 (-40 to + 125)
  - for Elec. Codes UA: -5 to + 125 (-20 to + 50)
- **Vibration**: 35g peak sinusoidal, 5 to 2000 Hz
- **Shock**: Withstands Free Fall to IEC 68-2-32 Procedure 1

**Pressure Media**

- Liquids or gases compatible with 17-4 PH Stainless Steel.*
  *Note: Hydrogen not recommended for use with 17-4 PH Stainless Steel.

**Specifications subject to change without notice.**

**Model 528 Specifications**

<table>
<thead>
<tr>
<th>Physical Description (Cont'd)</th>
<th>Electrical Data (Voltage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical Connection</strong></td>
<td>Circuit 3-Wire (Exc, Out, Com)</td>
</tr>
<tr>
<td>10-6 Bayonet</td>
<td>Output 0 to 5VDC, 0 to 10VDC</td>
</tr>
<tr>
<td>IP66 Weatherproof Cable</td>
<td>0.5 to 5.5VDC, 1 to 5VDC</td>
</tr>
<tr>
<td>Molded Cable Immersible (1 Meter Length)</td>
<td>1 to 6 VDC, 1 to 11VDC</td>
</tr>
<tr>
<td>Pressure Fitting</td>
<td>Excitation 15VDC Above Span to 35VDC @ 6mA**</td>
</tr>
<tr>
<td>See Ordering Information Below</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>3.5oz (100g)</td>
</tr>
</tbody>
</table>

**Environmental Data**

- **Temperature Operating**: °F (°C)
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  - for Elec. Codes UA: -5 to + 125 (-20 to + 50)
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**Pressure Media**

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  *Note: Hydrogen not recommended for use with 17-4 PH Stainless Steel.

**Specifications subject to change without notice.**

**Outline Drawings**

**ORDERING INFORMATION**

- **Code all blocks in table.**

**Example**: Part No 5281060PGM11B3T - For a Model 528 Pressure Transducer, 60 PSI, Gauge Pressure, 1/8-27 NPT Male Pressure Fitting, 4-20 mA Output, 10-6 Bayonet, 0.1% Accuracy

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**Appendix**

- **Model 299 Specifications**
- **Electrical Data (Current)**
- **Accessory: Model 299 Dri-Sense Termination Enclosure**
- **Performance Data**
- **Environmental Data**
- **Pressure Media**
- **Specifications subject to change without notice.**

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**Please contact factory for configurations not shown.**

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**Setra**

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