Setra's Model 280 is a high accuracy transducer for measuring gauge, absolute and compound pressure offering superior performance at an affordable price. Its single piece machined capacitance sensor enables accuracies up to ±0.073% FS giving the 280 superior linearity to competitive sensors that use two-piece welded sensing elements. The 280’s design offers customers a low-cost solution for measuring absolute pressure in Test and Measurement applications. The slim design and simple electrical interface allow users to install the unit in many difficult applications. The Model 280 has standard pressure ranges from 25 PSI to 10,000 PSI, including a 3 PSI to 15 PSI range for drop-in replacement for existing pneumatic systems.

**High Accuracy For Demanding Applications**
The Model 280 pressure transducer’s variable capacitance design uses a single piece machined sensor eliminating failures from insufficient welds. The sensor is linearized and thermally compensated during manufacturing to optimize the sensor’s linearity for maximum accuracy in demanding applications.

**Low Cost Absolute Sensor**
The Model 280 is Setra’s highest price to performance sensor for measuring absolute pressure. The simple configurable design enables the transducer to be configured for an absolute reference by adding a hermetically sealed pressure reference cap to the existing sensor design, allowing for an affordable price without sacrificing quality.

**P/I Pressure Range**
The Model 280 is Setra’s only sensor that offers a 3 PSI to 15 PSI pressure range. This range allows users to drop in the Model 280 into legacy pneumatic systems without the need to alter the existing system, saving both design and installation time on the job.
# Model 280
Gauge, Compound & Absolute Pressure Transducer

## Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Pressure Range</th>
<th>Pressure Type</th>
<th>Fitting</th>
<th>Output</th>
<th>Termination</th>
<th>Accuracy</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>280E</td>
<td>0 to 15 PSI</td>
<td>Gauge</td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>025P</td>
<td>0 to 25 PSI</td>
<td>Compound</td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>050P</td>
<td>0 to 50 PSI</td>
<td>Absolute</td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td></td>
<td>0 to 100 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>250P</td>
<td>0 to 250 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>500P</td>
<td>0 to 500 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>1000P</td>
<td>0 to 1000 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>3000P</td>
<td>0 to 3000 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>5000P</td>
<td>0 to 5000 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
<tr>
<td>10000P</td>
<td>0 to 10000 PSI</td>
<td></td>
<td>1/4&quot; NPT Female</td>
<td>4 to 20 mA</td>
<td>T1</td>
<td>T1</td>
<td>±0.11% FS</td>
</tr>
</tbody>
</table>

### Performance Data
- **Accuracy**: ±0.11% FS (at constant temperature)
- **Pressure Fitting**: See Ordering Information
- **Non-Linearity (BFSL)**: ±0.1% FS, ±0.2% FS
- **Response Time**: 10 milliseconds
- **Long Term Stability**: 0.5% FS/1 YR
- **Zero/Screen Adjustments**: Top External Access
- **Weight**: (approx.) 6 oz

### Thermal Effects
- **Compensated Range**: -4 to +176°F (-20 to +80ºC)
- **Excitation/Output**: 12 to 28 VDC
- **Zero Shift**: ±1.0 (0.9)
- **Span Shift**: ±1.5 (1.4)

### Pressure Media
- **Gases or Liquids compatible with 17-4 PH or 15-5 PH Stainless Steel**: Yes
- **Circuit**: 3-Wire (Exc, Out, Com)

### Environmental Data
- **Output Noise**: 0.0068V RMS
- **Temperature**: Operating: -40 to +185°F (-40 to +85ºC)
- **Excitation**: 0 to 5 VDC

### Specifications
- **PSIG Ranges**
- **BAR Ranges**
- **Electrical Data (Voltage)**
- **Electrical Data (Current)**

### Note:
- Setra quality standards are based on ANSI-Z540-1.
- The calibration of this product is NIST traceable.