Model S950 Precision Sanitary Series
Pressure/Temperature Transducer

- Transducer is customized to your specific temperature and pressure conditions.
- Maximum RFI/EMI protection supplied as standard
- All welded stainless steel construction
- Outputs - 4-20mA, 0-5V, 0-10V, TC, RTD, RS232, RS485, USB 2.0
- Pressure ranges 0-10”WC to 0-1,000 PSI
- Accuracies to 0.03% BFSL
- Unparalleled long-term stability
- Temperature compensation at the sensor element.
- Custom designs available (contact factory)

Spectre’s S950 Sanitary Series Pressure Transducers offer the first available sensors that are manufactured, designed and calibrated to each customers specific operating conditions. The Model S950 is ideal for critical pharmaceutical and chemical applications where product contamination is unacceptable.

Each Model S950 transducer output is digitally mapped to correct for any non-linearity or inaccuracies in the sensor.

**Performance @ 25°C (77°F)**
- Accuracy: <±0.05% BFSL (0.03% optional)
- Stability (2 year): <±0.05% FS, typical
- Over pressure protection: 2X Rated Pressure
- Burst Pressure: 2.5X minimum
- Pressure Cycles: >50 Million
- Temperature range: -40 to +100°C (-40 to +212°F)
  - Optional: -60 to +130°C (-76 to +266°F)
- Temperature Accuracy: ±1°C (±1°F)

**Electrical Data**
- Excitation:
  - 9-36 Vdc (4-20mA and 0-5 Vdc outputs)
  - 13-36 Vdc (0-10 Vdc output)
- Option: C29: Maximum 29 Vdc excitation
- Current consumption: <5 mA (voltage outputs)
- Zero offset: <±.25% of FS
- Span tolerance: <±1.0% of FS
- Output load: >100K Ohm

**Environmental Data**
- Operating temp: -40 to +85°C (-40 to +185°F)
  - (Optional to +275°F – con sul t factory)
- Storage temp: -50 to +125°C (-60 to +250°F)
- Compensated range: 0 to 50°C (+32 to +125°F)
- Temp comp Zero: <±1.5% FS
- Temp comp Span: <±1.5% FS

**Physical Data**
- Sensor wetted material: 316 stainless steel)

- Pressure connection: 2” Tri-clover
  - (other sizes optional)

- Electrical Connection: Cable, DIN, Cannon, Bendix
  - (others available on application)
Ordering guide – Example: S950-D-(0-500PSI)-2-D-1-05-EC1

<table>
<thead>
<tr>
<th>D</th>
<th>(0-500)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>EC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Port</td>
<td>Range</td>
<td>Units</td>
<td>Pressure Output</td>
<td>Temperature Output</td>
<td>Accuracy BFSL</td>
<td>Connector</td>
</tr>
<tr>
<td>C=1.5&quot;</td>
<td>Specify Pressure</td>
<td>1=Absolute</td>
<td>D=4-20mA</td>
<td>0=None</td>
<td>05=0.05%</td>
<td>EC1=36&quot; pigtail</td>
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<tr>
<td>D=2&quot;</td>
<td>Range in PSI, BAR or kPa</td>
<td>2=Gauge</td>
<td>E=0-5mA</td>
<td>1=4-20mA</td>
<td>03=0.03%</td>
<td>EC2=DIN 43650 with mate-Large</td>
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<tr>
<td>E=2.5&quot;</td>
<td>3=Vacuum</td>
<td>F=0-10VDC</td>
<td>2=0-5VDC</td>
<td>3=Thermocouple</td>
<td></td>
<td>EC3=Mini DIN</td>
</tr>
<tr>
<td>F=3&quot;</td>
<td>4=Sealed</td>
<td>G=RS232</td>
<td>3=Thermocouple (specify J or K)</td>
<td>4=RTD, 100 ohm Platinum, 2-wire.</td>
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<td>EC4=Bendix 6-pin</td>
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<td></td>
<td>5=Compound</td>
<td>H=RS485</td>
<td>X=Other</td>
<td>X=Other</td>
<td></td>
<td>EC8=J-box with terminal block</td>
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<td></td>
<td>6=Other</td>
<td>UC=USB 2.0</td>
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<td></td>
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<td>EC9=1/2&quot; NPT conduit connection with 36&quot; leads</td>
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*BFSL = Best Full Scale Line

Dimensions

OPTIONS MAY CHANGE OVERALL DIMENSIONS, CONSULT FACTORY