Model 8950/8951 “Undrownable” Submersible Transducer

With digitally compensated electronics for precision accuracy

- Models 8950 and 8951 can withstand moisture, condensation or liquid ingress through the vent tube with no damage to the electronics.**
- Customized to your specific temperature and pressure conditions
- Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc. Optional digital communications available. (Consult factory)
- Pressure ranges 0-2 PSI to 100 PSI
- Standard accuracy of 0.05% BFSL (optional 0.03%)
- Built-in, proprietary design, lightning and surge protection supplied as standard
- Unparalleled long-term stability
- Digital temperature correction at operating conditions

Performance @ 25°C (77°F)
Accuracy: <±0.05% Best Fit Straight Line (BFSL)
Stability (2 year): <±0.05% FS, typical
Over pressure protection: 2X Rated Pressure
Burst Pressure: 2.5X minimum
Pressure Cycles: >50 Million
Temperature range: -55 to +85°C (-65 to +185°F)
Temperature Accuracy: ±1°C (±1°F)
Total Error Band: ±1.5% (includes zero, span, static accuracy and temperature)

Environmental Data
Storage temp: -50 to +125°C (-60 to +250°F)
Compensated range: 1 to 30°C (+33 to +86°F)

Electrical Data
Excitation:
6-36 Vdc - 4-20mA output
9-36 Vdc – 0-5 Vdc output
14-36 Vdc – 0-10 Vdc output
Option C29: Max 29 Vdc excitation

Current consumption: 0.12 Watt
Zero offset: <±0.2% of FS
Span tolerance: <±0.2% of FS
Output load: >10K Ohm

Physical data
Sensor wetted material: 316SS
Body material: 316SS
(Other materials on application)

Pressure connection: ½” Male NPT (8950)
Stainless debris stand-off (8951)
Electrical Connection: ½ MNPT with Hytrel vented cable

**Though internally accumulated liquid will not harm the transducer, a slight inaccuracy in readings may be experienced by its presence. Invasive liquid must be compatible with 316 stainless steel. Use of a desiccant filter or aneroid bellows is still strongly recommended.
# Model 8950 Ordering guide – Example: 8950-A-(0-15 PSI)-2-D-05-SCV

<table>
<thead>
<tr>
<th>A</th>
<th>(0-15PSI)</th>
<th>2</th>
<th>D</th>
<th>05</th>
<th>SCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Port</td>
<td>Range</td>
<td>Units</td>
<td>Output</td>
<td>Accuracy</td>
<td>Connector</td>
</tr>
<tr>
<td>A=1/4” MNPT</td>
<td>Specify pressure range in: inches (mm) water, feet (meters) water, PSI or BAR</td>
<td>1=Absolute</td>
<td>D=4-20mA</td>
<td>05=0.05% BFSL*</td>
<td>SCV= 1/2” MNPT with Vented Cable***</td>
</tr>
<tr>
<td>B=Nose cone</td>
<td></td>
<td>2=Gauge (vented cable)</td>
<td>E=0-5VDC</td>
<td>03=0.03% BFSL*</td>
<td>ECX=Other</td>
</tr>
<tr>
<td>C=Other</td>
<td>X=Other</td>
<td>F=0-10VDC</td>
<td>X=Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* BFSL = Best Fit Straight Line

*** Standard cable jacket is Hytrel. Others may be available on request – contact factory.

# Model 8951 Ordering guide – Example: 8951-A-(0-15 PSI)-2-D-05-SCV

<table>
<thead>
<tr>
<th>A</th>
<th>(0-15 PSI)</th>
<th>2</th>
<th>D</th>
<th>05</th>
<th>SCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Port</td>
<td>Range</td>
<td>Units</td>
<td>Output</td>
<td>Accuracy</td>
<td>Connector</td>
</tr>
<tr>
<td>A=Debris stand-off</td>
<td>Specify pressure range in: inches (mm) water, feet (meters) water, PSI or BAR</td>
<td>1=Absolute</td>
<td>D=4-20mA</td>
<td>05=0.05% BFSL*</td>
<td>SCV= 1/2” MNPT with Vented Cable***</td>
</tr>
<tr>
<td></td>
<td>2=Gauge (vented cable)</td>
<td>E=0-5VDC</td>
<td>03=0.03% BFSL*</td>
<td>ECX=Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X=Other</td>
<td>F=0-10VDC</td>
<td>X=Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# Dimensions:

(For reference only. Actual dimensions may vary. Standard configuration includes 1/2” MNPT conduit connection)

---

## Model 8950

![Diagram of Model 8950](image)

---

## Model 8951

![Diagram of Model 8951](image)

---