



## Model 8000 Precision Submersible Series Transducer

- Highest performance transducer over temperature. Zero thermal error/drift
- Units are individually calibrated from -40°C to 85°C for pressures ranging from 0-10" WC to 500 PSI
- 0.05% & 0.03% BFSL (STANDARD) – Contact Factory for other options
- 16 Point Calibration with Certificate (STANDARD)
- Unparalleled thermal stability from -40°C to 100°C
- Transducer maintains stated accuracy throughout entire temperature compensated range
- Duplicate any customer process and electrical connector for transparent replacement
- Digital temperature correction at operating conditions

*Spectre's ZERO Drift High Performance Submersible Transducer is the world's only pressure transmitter that maintains performance over temperature by eliminating the largest sources of error:*

*Zero & Thermal Drift*



### FEATURES:

Proprietary Fused Bond Sensor

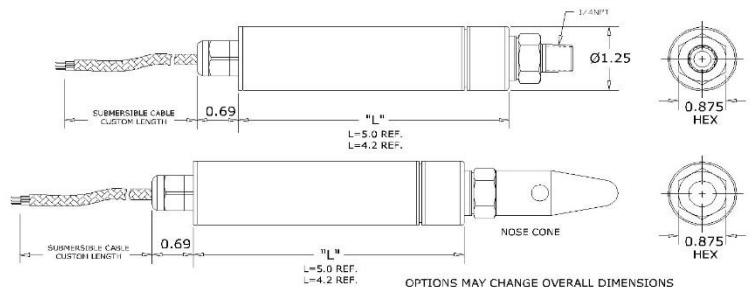
Sensor Wetted Material Machined from Stainless Steel Bar Stock (No Welds)

RFI/EMI Protection

Digital Correction for non-linearity and inaccuracies within the sensing element

Multiple Temperature and Pressure Output Options (Custom on Request)

### REFERENCE DIMENSIONS:



Spectre Corp  
7912 Root Road  
Suite C/D  
North Ridgeville, Ohio 44039



[www.SpectreCorp.com](http://www.SpectreCorp.com)  
Phone: (440) 250-0616  
Fax: (440) 353-0269  
E-Mail: [info@spectresensors.com](mailto:info@spectresensors.com)



## Model 8000 Precision Submersible Series Transducer

Ordering Guide: 8000-A-(0-15PSI)-2-D-05-SCV

| A             | (0-15PSI)          | 2            | D               | 05              | SCV                                   |
|---------------|--------------------|--------------|-----------------|-----------------|---------------------------------------|
| PRESSURE PORT | RANGE <sup>1</sup> | TYPE         | PRESSURE OUTPUT | ACCURACY (BFSL) | CONNECTOR <sup>2</sup>                |
| A = 1/4" MNPT | PSI                | 1 = ABSOLUTE | D = 4-20 mA     | 05 = 0.05%      | SCV = 1/2" MNPT WITH VENTED CABLE     |
| B = NOSE CONE | BAR                | 2 = GAUGE    | E = 0-5 VDC     | 03 = 0.03%      | SCN = 1/2" MNPT WITH NON-VENTED CABLE |
| C = OTHER     | kPA                | 4 = SEALED   | F = 0-10 VDC    |                 | ECX = OTHER                           |
|               | INCHES WC          | 6 = OTHER    | M = mV/V        |                 |                                       |
|               | TORR               |              |                 |                 |                                       |

<sup>1</sup> OTHER RANGES 1 AVAILABLE, CONSULT FACTORY

<sup>2</sup> HYTREL JACKETED CABLE STANDARD, CONSULT FACTORY FOR OTHER OPTIONS

| TYPICAL APPLICATIONS    |                          |
|-------------------------|--------------------------|
| Ground Water Monitoring | Wet-Well Monitoring      |
| Ocean Research          | Level Control            |
| Soil Remediation        | Surface Water Monitoring |

| Performance @ 25 °C                                       |
|---|
| Accuracy: <math>\pm 0.05\%</math> BFSL to 0.02% BFSL      |
| Stability: (2 year): <math>\pm 0.10\%</math> FSO, Typical |
| Overpressure Protection: 2X Rated Pressure                |
| Burst Pressure: 5X Minimum                                |
| Pressure Cycles: > 50 Million                             |
| Temperature Range: -40 °C to 100°C                        |
| Response: $\leq 2$ ms to 90%                              |

| Environmental Data                           |
|--|
| <b>Temperature</b>                           |
| Operating: -40°C to 85°C                     |
| Storage: -50°C to 125°C                      |
| <b>Thermal Limits</b>                        |
| Compensated Range: -40°C to 85°C             |
| Thermal Effect Zero: Negligible <sup>3</sup> |
| Thermal Effect Span: Negligible <sup>3</sup> |

| Electrical Data                        |
|--|
| Excitation: 13-36 VDC                  |
| Current Consumption: < 5 mA            |
| Zero Offset: $\leq \pm 0.1\%$ of FS    |
| Span Tolerance: $\leq \pm 0.1\%$ of FS |
| Output Load: > 10K $\Omega$            |

| Physical Data  |
|--|
| <b>Sensor</b>  |
| Wetted Material: 316 SS                                      |
| Housing: 316 SS  |
| <b>Connections</b>   |
| Pressure: 1/4" MNPT (Others on request)                      |
| Electrical: 1/2" MNPT with vented or non-vented Hytrel cable |

<sup>3</sup> THERMAL CHANGES WILL NOT AFFECT OVERALL ACCURACY

Spectre Corp  
 7912 Root Road  
 Suite C/D  
 North Ridgeville, Ohio 44039



[www.SpectreCorp.com](http://www.SpectreCorp.com)  
 Phone: (440) 250-0616  
 Fax: (440) 353-0269  
 E-Mail: [info@spectresensors.com](mailto:info@spectresensors.com)