



Model 8500 Precision Submersible Combination Series Pressure and Temperature Level 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% 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
- Multiple Temperature Outputs – TC, RTD, 4-20 mA, 0-5 VDC, 0-10 VDC
- 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

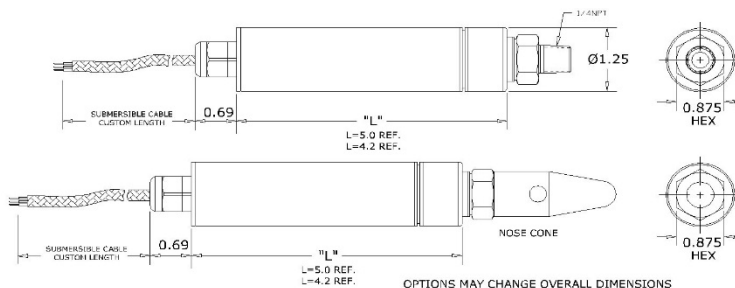
Sensor Wetted Material Machined from Stainless Steel Bar Stock (No Welds)

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:





Model 8500 Precision Submersible Combination Series

Ordering Guide: 8500-A-(0-50"WC)-2-D-1-05-SCV

A	(0-50"WC)	2	D	1		SCV
PRESSURE PORT	RANGE ¹	TYPE	PRESSURE OUTPUT	TEMPERATURE OUTPUT	ACCURACY (BFSL)	CONNECTOR ²
A = 1/4" MNPT	PSI	1 = ABSOLUTE	D = 4-20 mA	0 = NONE	05 = 0.05% BFSL	SCV = 1/2" MNPT WITH VENTED CABLE
B = NOSE CONE	BAR	2 = GAUGE	E = 0-5 VDC	1 = 4-20 mA		SCN = 1/2" MNPT WITH NON-VENTED CABLE
C = OTHER	kPA	4 = SEALED	F = 0-10 VDC	2=0-5 VDC		ECX = OTHER
	INCHES WC	6 = OTHER	M = mV/V	3 = TC		
	TORR			4 = RTD		
				X = OTHER		

¹ OTHER RANGES 1 AVAILABLE, CONSULT FACTORY

² 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: $\pm 0.05\%$ BFSL

Stability: (2 year): $\pm 0.10\%$ FSO, Typical

Overpressure Protection: 2X Rated Pressure

Burst Pressure: 5X Minimum

Pressure Cycles: > 50 Million

Temperature Range: -40 °C to 100°C

Response: ≤ 2 ms to 90%

Environmental Data

Temperature

Operating: -40°C to 85°C

Storage: -50°C to 125°C

Thermal Limits

Compensated Range: -40°C to 85°C

Thermal Effect Zero: Negligible ³

Thermal Effect Span: Negligible ³

Electrical Data

Excitation: 13-36 VDC

Current Consumption: < 5 mA

Zero Offset: $\pm 0.1\%$ of FS

Span Tolerance: $\pm 0.1\%$ of FS

Output Load: > 10K Ω

Physical Data

Sensor

Wetted Material: 316 SS

Housing: 316 SS

Connections

Pressure: 1/4" MNPT (Others on request)

Electrical: 1/2" MNPT with vented or non-vented Hytrel cable

³ THERMAL CHANGES WILL NOT AFFECT OVERALL ACCURACY