



## The "ANCHOR" Submersible Transducer

Model 8100 For Lift-Station and Sewage Level Applications

- Oversized Diaphragm Sensing Element
- All 316 Stainless Steel Construction
- Temperature Compensation at sensor element
- Digitally Mapped Output provides highest possible accuracy
- Suitable for high shock and vibration applications
- Ranges 0-1 PSI to 0-500 PSI
- Available in Gage, Sealed Gage and Absolute Pressure ranges
- Available with digital communications – RS232, RS485 and USB 2.0

### DESCRIPTION

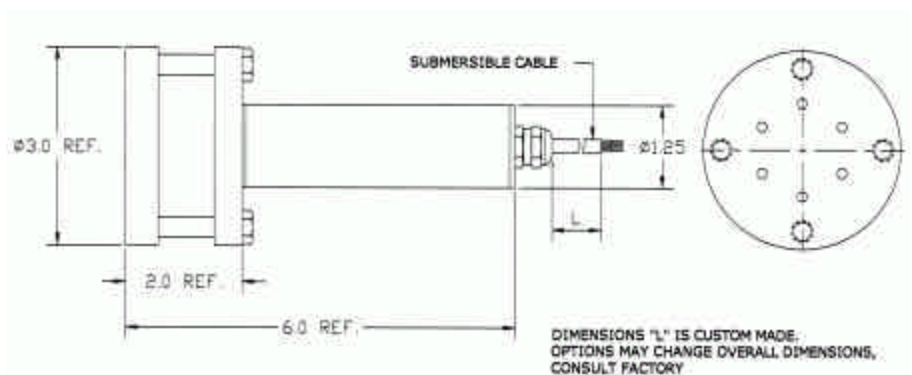


Spectre's "ANCHOR" (Model 8100) submersible series of industrial pressure transducers is specifically designed to operate in applications that are problematic for traditional submersible level transmitters. The conditions encountered in many process sumps, sewage wet-wells and dirty applications may cause plugging and erroneous readings with standard designs. The ANCHOR has an oversized diaphragm and flow-through standoff which helps to prevent clogging and build-up which may cause inaccuracies.

### FEATURES

- Proprietary Fused Bond Sensor
- Accuracy 0.10% TEB
- RFI/EMI Protection
- Temperature compensation at sensor element. (Faster, automatic, more accurate)
- Unparalleled Long Term Stability

### DIMENSIONS





# Model 8100 Submersible Transducer

## ANCHOR Pressure/Level Transducer

### Ordering Guide – Example 8100-A-(0-15)-2-D-05-SCV

Please inquire for specials or options

A	(0-15)	2	D	1	SCV
Pressure Port	Range	Units	Output	Accuracy	Connector
A=Anchor	Specify Pressure Range	1=Absolute 2=Gauge (vented cable) 4=Sealed 6=Other	D=4-20mA E=0-5VDC F=0-10VDC G=RS232 H=RS485 UA=USB+4-20mA*	1=0.10% TEB	SCV=Vented Cable (gauge units) SCN=Non-vented Cable ECX=Other

\*Requires USB-to-Analog converter (p/n USB1A) for computer access

#### Performance @ 25°C (77°F)

Accuracy: <math>\pm 0.10\% \text{ TEB}</math>
Stability (1 year): $\pm 0.25\% \text{ FS}$ , typical
Over range 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: $\pm 1^\circ \text{ F}$ ( $\pm 1^\circ \text{ C}$ )

#### Electrical Data

Excitation: 14-36Vdc (0-10Vdc), 9-36Vdc (4-20mA and 0-5Vdc) Option C29 – Maximum 29 Vdc excitation
Output: Serial RS485, RS232, USB 2.0
Current Consumption: <math>< 25 \text{ mA}</math>
Zero Offset: $< \pm 0.2\% \text{ of FS}</math>$
Span Tolerance: $< \pm 0.2\% \text{ FS}</math>$
Output load: > 10K Ohm

#### Environmental Data

<b>Temperature</b>
Operating: -40 to 85°C (-40 to 185°F)
Storage: -50 to 125°C (-60 to 250°F)
<b>Thermal Limits</b>
Compensated Range: 0 to 55°C (-32 to 130°F)
Temp Comp Zero: $< \pm 0.2\% \text{ FS}</math>$
Temp Comp Span: $< \pm 0.2\% \text{ FS}</math>$

#### Physical Data

Sensor: Wetted Material 316 SS (others on request)
Pressure Connection: Flush diaphragm with stand-off
Electrical Connection: Cable. Specialty submersible connectors on request

#### Applications

The Model 8100's custom calibration (digitally mapping the output to the specific application temperature and pressure conditions) make the 8100 the ultimate choice for any high accuracy submersible level applications.

#### Contact Information

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