



## MODEL 'PS182' SUBMERSIBLE PRESSURE TRANSDUCER

- Flush diaphragm transducer with debris avoidance stand-off
- Built-in, lightning and surge protection supplied as standard
- Food-Grade Glycerin-filled system (other fills on application)
- Hytrel jacketed cable with integral vent tube

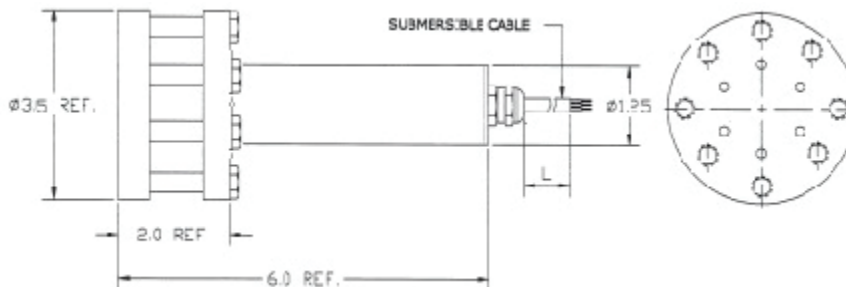


### PRODUCT DESCRIPTION

Model PS182 is one of our industrial submersible pressure transducers 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. This submersible transducer has an oversized diaphragm and flow-through standoff which helps to prevent clogging and build-up which may cause inaccuracies.

### FEATURES

- Pressure ranges 0-5 PSIG to 0-100 PSIG
- Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc and mV/V
- Standard accuracy of 0.25% BFSL (optional 0.1%)
- 1/2" Male NPT conduit connection supplied as standard



Dimension "L" is custom made. Options may change overall dimensions, consult factory when placing order.



# TECHNICAL SPECIFICATIONS

## Performance @ 25 °C (77 °F)

Accuracy(1):  $\pm 0.25\%$  Best Fit Straight Line (BFSL)  
 Stability (2 year):  $\pm 0.10\%$  FSO, typical  
 Over pressure protection: 2X Rated Pressure  
 Burst Pressure: 5X Minimum  
 Pressure Cycles: >50 Million  
 Temperature Range: 1 to 40°C (33 to 104°F)  
 Temperature Accuracy:  $\pm 1^\circ\text{C}$  ( $\pm 1^\circ\text{F}$ )  
 Response:  $\leq 5\text{ms}$  to 90%

## Environmental Data

### Temperature

Operating: -55 to 125°C (-65 to 250°F)  
 Storage: -50 to 125°C (-60 to 250°F)

### Thermal Limits

Compensated Range: 1 to 30°C (+33 to +86°F)  
 Temp Comp Zero:  $\pm 1.0\%$  FS  
 Temp Comp Span:  $\pm 1.0\%$  FS

## Electrical Data

Excitation: 9-36 Vdc (4-20mA and 0-5 Vdc output)  
 13-36 Vdc (0-10 Vdc output)  
 5-10 Vdc (mV/V output)  
 Option C29 - Max. 29 Vdc excitation  
 Current Consumption:  $< 5\text{mA}$   
 Zero offset:  $\pm 0.25\%$  of FS  
 Span tolerance:  $\pm 1.0\%$  of FS  
 Output Load:  $> 10\text{K Ohms}$   
 Range cal signal: Internal resistor 100% FS,  $\pm 5.0\%$  (optional)

## Physical Data

Sensor (wetted material): 316 Stainless Steel  
 Body material: 316 Stainless Steel  
 Pressure Connection: Flush diaphragm transducer  
 with debris stand-off (bird cage style)  
 Electrical Connection: Vented Hytrel cable (others available)

## Ordering Guide: Example - PS182-A-05-2-D-25-SCV40

A	05	2	D	5	SCV40
Pressure Port	Range	Units	Output	Accuracy	Connector***
A = Debris stand-off	05 = 0-5 PSIG	1=Absolute	D = 4-20 mA	25 = 0.25% BFSL*	SVC40 = 40-foot vented cable**
(bird cage style)	10 = 0-10 PSIG	2 =Gauge (vented cable)	E = 0-5 Vdc	1 = 0.10% BFSL*	SCVX = Custom cable length**
	15 = 0-15 PSIG	4 =Sealed	F = 0-10 Vdc		ECX = Other
	(others available)	6 =Other	M = mV/V		

\*BFSL = Best Fit Straight Line

\*\*Standard cable jacket is Hytrel. Other available on request - contact factory for custom cable length.

\*\*\*Units supplied with 1/2" Male NPT conduit connections as standard.

