



MODEL 'PS181' SUBMERSIBLE PRESSURE TRANSDUCER

- Flush diaphragm transducer with debris avoidance stand-off
- Built-in, lightning and surge protection supplied as standard
- Unparalleled long-term stability
- Hytrel jacketed cable

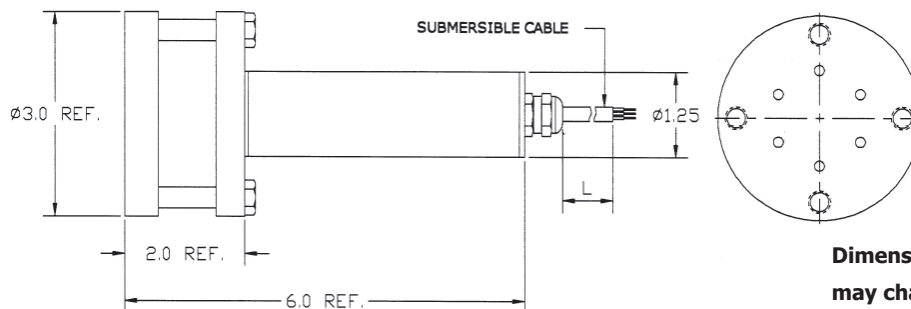


PRODUCT DESCRIPTION

Model PS181 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 0-1 PSIG to 0-100 PSIG
- Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc and mV/V
- Standard accuracy of 0.5% 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): $\pm 0.5\%$ Best Fit Straight Line (BFSL)
 Stability (2 year): $\pm 0.05\%$ FS, typical
 Over pressure protection: 2X Rated Pressure
 Burst Pressure: 2.5X Minimum
 Pressure Cycles: >50 Million
 Temperature Range: 1 to 40°C (33 to 104°F)
 Temperature Accuracy: $\pm 1^\circ\text{C}$ ($\pm 1^\circ\text{F}$)

Environmental Data

Temperature

Operating: -55 to 125°C (-65 to 250°F)
 Storage: -55 to 125°C (-65 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: <5mA
 Zero offset: $\pm 0.25\%$ of FS
 Span tolerance: $\pm 1.0\%$ of FS
 Output Load: > 10K Ohms

Physical Data

Sensor (wetted material): 316 Stainless Steel
 Body material: 316 Stainless Steel
 Pressure Connection: Flush diaphragm transducer
 with debris stand-off
 Electrical Connection: Vented and non-vented Hytrel cable

Ordering Guide: Example - PS181-A-(0-15 PSIG)-2-D-5-SCV

A	(0-15 PSI)	2	D	5	SCV
Pressure Port	Range	Units	Output	Accuracy	Connector
A = Debris stand-off	Specify pressure range	1=Absolute	D = 4-20 mA	5 = 0.50% BFSL*	SVC = 1/2" MNPT w/vented cable**
	in: inches (mm) water,	2 =Gauge (vented cable)	E = 0-5 Vdc	2 = 0.20% BFSL*	SCN = 1/2" MNPT no vented cable**
	feet (meters) water,	4 =Sealed	F = 0-10 Vdc	1 = 0.10% BFSL*	ECX = Other
	PSI or BAR	6 =Other	M = mV/V		

*BFSL = Best Fit Straight Line

**Standard cable jacket is Hytrel. Other available on request - contact factory.

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NOTE:
 Specified dimensions, materials and product options and availability may change without prior notice. Please verify ordering information (technical data - range - size - connection - extra options) at time of order.



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