

## Data Sheet

# SL17 Submersible Pressure Transmitter

### FEATURES

- Predefined and custom cable lengths
- Small OD diameter design to fit narrow bore applications
- Utilizes Piezo-Resistive Technology (PRT)
- Optional NIST traceable calibration chart (9-point)
- IP68/NEMA 6P Housing
- Unit of measure selection (psig, bar, feet or meters of H<sub>2</sub>O, customer defined)
- Complete 316L stainless steel construction
- 4-20 mA Output (2 wire)

### TYPICAL USES

- Well monitoring
- Pump protection
- Tank level monitoring
- Municipal and industrial water
- Level (ground/bore)
- Wastewater
- Specialized OEM equipment

### PERFORMANCE SPECIFICATIONS

Reference Temperature:	70 °F (21 °C)
Engineer Units:	psi, bar, ft/m H <sub>2</sub> O and customer defined
Ranges:	1.5 to 300 psi & equivalent (see table), gauge pressure only (Based on cable vented to clean, dry, non-corrosive atmosphere or proper use of termination desiccant box)
Accuracy:	±0.25% of span, terminal point (>5 psi); ±0.5% of span, terminal point (<5 psi); Includes effects of linearity, hysteresis and repeatability
Stability:	±0.25% of span

### ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:	Storage: -20 °C to 60 °C (-4 °F to 140 °F) Compensated: -10 °C to 40 °C (14 °F to 104 °F) Operating: -10 °C to 40 °C (14 °F to 104 °F) (For non-frozen liquid applications only)
Temperature Effects (-10 °C to 40 °C):	±1% TEB (>5 psi) ±1.5% of span, terminal point (<5 psi)
Humidity:	0-100% RH (*Based on cable vented to clean, dry, non-corrosive atmosphere or proper use of termination desiccant box)
Enclosure Ratings:	NEMA 6P, IP68

### FUNCTIONAL SPECIFICATIONS

Overpressure (FS):	Proof:	Burst:
1.5 to ≤5 psi	3 X Range	5 X Range
10 psi	3 X Range	7.5 X Range
15 to ≤30 psi	2 X Range	5 X Range
75 psi	1.8 X Range	4.7 X Range
150 psi	2 X Range	4 X Range
300 psi	2 X Range	3 X Range
Maximum Turndown:	2:1 from original sensor pressure range	
Vibration & Shock:	IEC 60068-2-6 (Based on sensor range)	



SL17



### KEY BENEFITS

- Provides a highly reliable platform for accurate control and monitoring of level and pressure
- Rugged construction
- Units of measure and cable lengths are customized for individual specifications
- Excellent long-term stability

### ELECTRICAL SPECIFICATIONS

Output Signal:	4-20 mA (2 wire)
Supply Voltage:	10-36 Vdc
Insulation Resistance:	50 Vdc (100MΩ)
CE Compliance:	<ul style="list-style-type: none"> <li>• EMI Class A/EMS Table 2 EN61326-1:2006</li> <li>• Annex BB (Pressure Transducer) EN61326-2-3:2007</li> <li>• ESD EN61000-4-2</li> <li>• Burst EN61000-4-4</li> <li>• Surge EN61000-4-5</li> </ul>
Withstand Voltage:	350 Vdc

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### PHYSICAL SPECIFICATIONS

Weight:	Sensor (120g)
Nose Cones:	standard (13g), weighted (225g)
Labels:	Laser-etched with customer part number
Pressure Connection:	M14 x 1.5
Vent Tube:	0.060" ID polyethylene, Semi-rigid PVC with shield and Kevlar strength member
Cable Internal Construction:	4-wire 22 AWG conductors (red, black, green, white)
Cable Pull Strength:	180 lb
Cable Voltage Rating:	300 V
Load Limitation:	4-20mA Output Only

### WETTED COMPONENTS

Enclosure	Cable External Jacket
316L stainless steel	Coated black polyurethane

### OPTIONAL FEATURES

Calibration Chart:	<a href="#">Traceable calibration certificate</a> (9-point)
Consult factory for:	Custom cable lengths

### ORDERING CODE

Example:

<b>Model</b>	SL17	3	SNC	T	42	010	F	P	10#	XC4
SL17 - Submersible Transmitter	SL17									
<b>Accuracy</b>		3								
3 - ±0.25% of span										
5 - ±0.5% of span (1.5 psi range only)										
<b>Nose Fitting</b>			SNC							
SNC - Standard nose cone										
P5C - Weighted nose cone										
<b>Joint Type</b>				T						
T - Threaded										
W - Welded										
<b>Output Signal</b>					42					
42 - 4-20 mA										
<b>Cable Length</b> (custom length available ex. for 35 feet code as 035)										
001 - Meters only										
002 - Meters only										
005										
010						010				
015										
020										
025										
030										
050										
060										
075										
100										
120										
150										
200										
300 - Feet only										
400 - Feet only										
500 - Feet only										
700 - Feet only										
<b>Measurement of Cable</b>							F			
F - Feet										
M - Meters										
<b>Cable Type</b>								P		
P - Polyurethane										
<b>Pressure Range</b> (coding examples only, see range table on page 3 for all standard ranges)										
<b>PSI</b>										
10# - 0-10 psi									10#	
<b>Optional Features</b> (if including an option(s) must include an "X")										X
C4 - <a href="#">Traceable calibration certificate</a>										C4

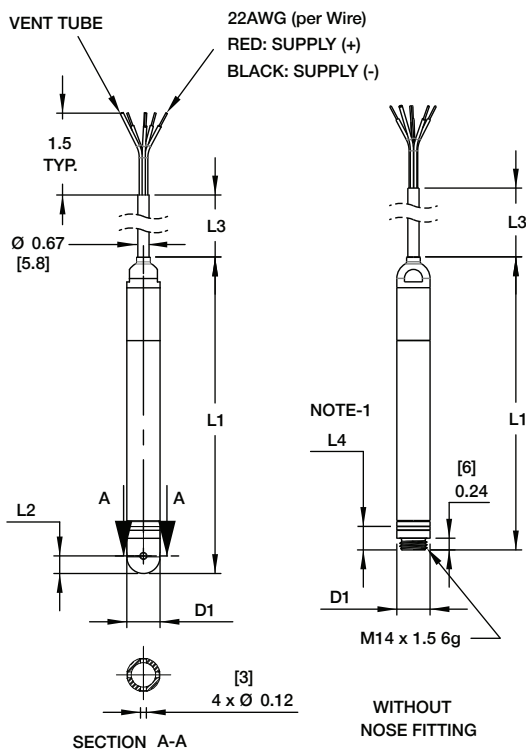
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### DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

NOSE FITTING	D1	L1	L2	L3	L4
Without Nose Cone	0.67 [17]	5.90 [150]	NA		0.47 [12]
Standard Nose Cone (SNC)	0.67 [17]	6.37 [162]	0.35 [9]	Per Order	0.94 [24]
0.5 LBS Nose Cone (P5C)	0.67 [17]	10.98 [126]	4.96 [126]		5.55 [141]



RANGE TABLE			
PSI	Ft H <sub>2</sub> O	Mt H <sub>2</sub> O	BAR
1P5# - 0-1.5 psi	10FW - 10 ft. H <sub>2</sub> O	5LW - 5m H <sub>2</sub> O	0.6BR - 0.6 Bar
5# - 0-5 psi	20FW - 20 ft. H <sub>2</sub> O	10LW - 10m H <sub>2</sub> O	1BR - 1 Bar
10# - 0-10 psi	30FW - 30 ft. H <sub>2</sub> O	15LW - 15m H <sub>2</sub> O	1.6BR - 1.6 Bar
15# - 0-15 psi	50FW - 50 ft. H <sub>2</sub> O	20LW - 20m H <sub>2</sub> O	2.5BR - 2.5 Bar
30# - 0-30 psi	100FW - 100 ft. H <sub>2</sub> O	30LW - 30m H <sub>2</sub> O	4BR - 4 Bar
60# - 0-60 psi	150FW - 150 ft. H <sub>2</sub> O	50LW - 50m H <sub>2</sub> O	6BR - 6 Bar
100# - 0-100 psi	200FW - 200 ft. H <sub>2</sub> O	75LW - 75m H <sub>2</sub> O	10BR - 10 Bar
160# - 0-160 psi	300FW - 300 ft. H <sub>2</sub> O	100LW - 100m H <sub>2</sub> O	
200# - 0-200 psi	400FW - 400 ft. H <sub>2</sub> O	125LW - 125m H <sub>2</sub> O	
300# - 0-300 psi	500FW - 500 ft. H <sub>2</sub> O	150LW - 150m H <sub>2</sub> O	