

## SL17 Submersible Pressure Transmitter



### APPLICATIONS

*Because of its small 17mm diameter and rugged 316L SS construction, the Ashcroft SL17 submersible pressure transmitter is ideal for level applications, particularly in situations where size or chemical compatibilities are an issue. The SL17 utilizes piezo-resistive technology (PRT) that is known for its proven reliability and stability. Notably, these transmitters can offer all ranges equivalent from 1.5 psig through 300 psig while all units of measure and cable lengths are customer-defined for individualized specifications.*

### FEATURES

- Complete 316L SS Construction
- IP68 / NEMA 6P Housing
- Excellent Long-Term Stability
- 4-20 mA Output (2-wire)
- Unit of Measure Selection (Psig, Feet or Meters of H<sub>2</sub>O)
- Optional NIST Traceable Calibration Chart (9-point)

### TYPICAL APPLICATIONS

- Level (Groundwater / Bore)
- Wastewater
- Tank Level Measurement

### PERFORMANCE SPECIFICATIONS

**Reference Condition:** 21°C (70°F)

**Humidity:** 0-100%RH\*

**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% FS/year

**Engineering Units:** psi, bar, ftH<sub>2</sub>O, mH<sub>2</sub>O and customer defined

**Ranges:** 1.5-300 psi & equivalent (see table); gauge pressure only

\*Based on cable vented to clean, dry, non-corrosive atmosphere or proper use of termination desiccant box

### ENVIRONMENTAL SPECIFICATIONS

#### Temperature Limits†

**Compensated:** -10/40°C (14/104°F)

**Operating:** -10/40°C (14/104°F)

**Storage:** -20/60°C (14/140°F)

**Temperature Effects (-10 to 40°C):** ±1% TEB (>5 psi) ±1.5% span, terminal point (<5 psi)

† For non-frozen liquid applications only

### FUNCTIONAL SPECIFICATIONS‡

Overpressure (FS):	Proof	Burst
1.5-5 psi	300%	500%
10 psi	300%	750%
15-30 psi	200%	500%
75 psi	187%	470%
150 psi	200%	400%
300 psi	200%	300%

**Maximum Turndown:** 2:1 from original sensor pressure range

**Vibration & Shock:** IEC 60068-2-6

‡ Based on sensor range

### ELECTRICAL SPECIFICATIONS

**Output Signal:** 4-20mA (2 wire)

**Supply Voltage:** 10-36Vdc

**Insulation Resistance:** 50Vdc (100Mohm)

**Withstand Voltage:** 350Vdc

#### CE Compliance:

- EMI Class A/EMS Table 2 EN61326-1:2006
- Annex BB (Pressure Transducer) EN61326-2-3:2007
- ESD EN61000-4-2
- Burst EN61000-4-4
- Surge EN61000-4-5

### MECHANICAL SPECIFICATIONS

**Pressure Connection:** M14 × 1.5

**Weight:** Sensor (120g)

**Nose Cones:** standard (13g), weighted (225g)

**Enclosure:** 316L SS

**Labels:** Laser-etched with customer part number

**Cable External Jacket:** Coated (.03") black polyurethane

**Cable Internal Construction:** 4-wire 22 AWG conductors (red, black, green, white)

**Vent tube:** 0.060" ID polyethylene Semi-rigid PVC with shield and Kevlar strength member

**Cable Pull Strength:** 180 lb

**Cable Voltage Rating:** 300V

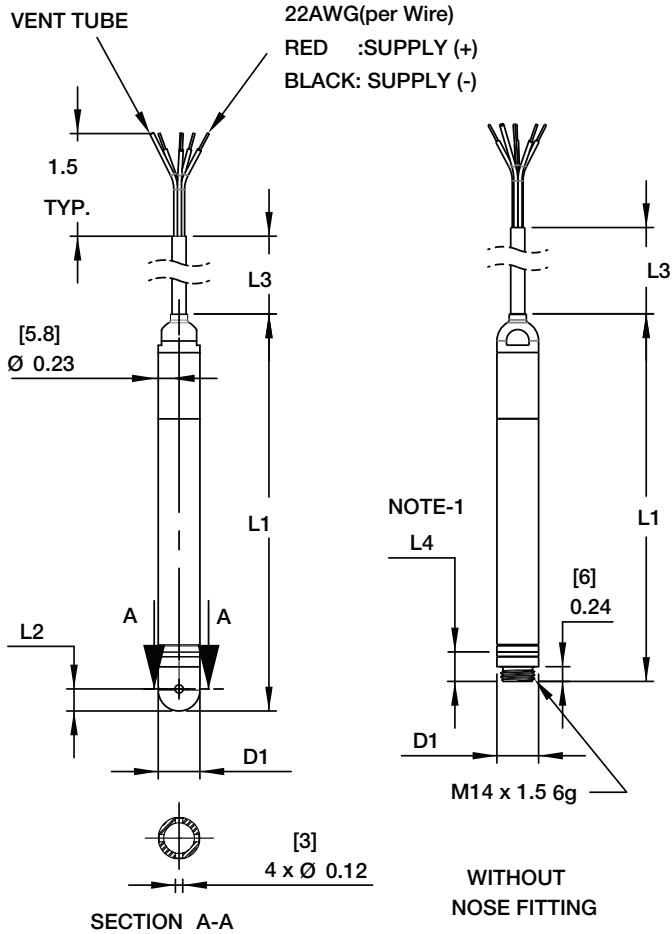
**Load Limitation:** 4-20mA Output Only

**Wetted Materials:** 316L SS and polyurethane



## Model SL17 Submersible Transducer

### Dimensions



DIMENSIONS, Inches (Millimeter)					
NOSE FITTING	D1	L1	L2	L3	L4
Without Nose Cone		5.90 (150)	N/A		0.47 (12)
(SNC) Standard Nose Cone	0.67 (17)	6.37 (162)	0.35 (9)	Per Order	0.94 (24)
(P5C) 0.5LBS Nose Cone		10.98 (279)	4.96 (126)		5.55 (141)

### How To Order

<b>SL17</b>	<b>3</b>	<b>SNC</b>	<b>T</b>	<b>42</b>	<b>030</b>	<b>F</b>	<b>P</b>	<b>30#</b>	<b>XC4</b>
Model Type (SL17)	Accuracy Class (3) (5)* *1.5" range only	Nose Fitting (SNC) Standard NC (P5C) Weighted NC	Joint Type (T) Threaded (W) Welded	Output Signal (42) 4-20mA	Cable Length† (001)* (002)* (005) (010) (015) (020) (025) (030) (050) (060) (075) (100) (120) (150) (200) (300)† (400)† (500)† (700)†	Measurement of Cable (F) Feet (M) Meters	Cable Type (P) Polyurethane	Pressure Range	Variations (XC4) Calibration Chart

\* Available in meters only

† Available in feet only

‡ Custom cable lengths available, example for 35 feet, code as (035).

psi	Ft H <sub>2</sub> O	Mt H <sub>2</sub> O	Bar
(1P5#) 1.5	(10FW) 10' H <sub>2</sub> O	(5LW) 5 m H <sub>2</sub> O	(0.6BR) 0.6 Bar
(5#) 5	(20FW) 20' H <sub>2</sub> O	(10LW) 10 m H <sub>2</sub> O	(1BR) 1 Bar
(10#) 10	(30FW) 30' H <sub>2</sub> O	(15LW) 15 m H <sub>2</sub> O	(1.6BR) 1.6 Bar
(15#) 15	(50FW) 50' H <sub>2</sub> O	(20LW) 20 m H <sub>2</sub> O	(2.5BR) 2.5 Bar
(20#) 20	(100FW) 100' H <sub>2</sub> O	(30LW) 30 m H <sub>2</sub> O	(4BR) 4 Bar
(30#) 30	(150FW) 150' H <sub>2</sub> O	(50LW) 50 m H <sub>2</sub> O	(6BR) 6 Bar
(50#) 50	(200FW) 200' H <sub>2</sub> O	(75LW) 75 m H <sub>2</sub> O	(10BR) 10 Bar
(75#) 75	(300FW) 300' H <sub>2</sub> O	(100LW) 100 m H <sub>2</sub> O	
(100#) 100	(400FW) 400' H <sub>2</sub> O	(125LW) 150 m H <sub>2</sub> O	
(150#) 150	(500FW) 500' H <sub>2</sub> O	(150LW) 200 m H <sub>2</sub> O	
(200#) 200			
(300#) 300			