

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 H₂O, 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 ₂ 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)	



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:	• 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
Withstand Voltage:	350 Vdc

Data Sheet

SL17 Submersible Pressure Transmitter

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:	NIST traceable (9-point)
Consult factory for:	Custom cable lengths

ORDERING CODE

Example:

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

X
C4

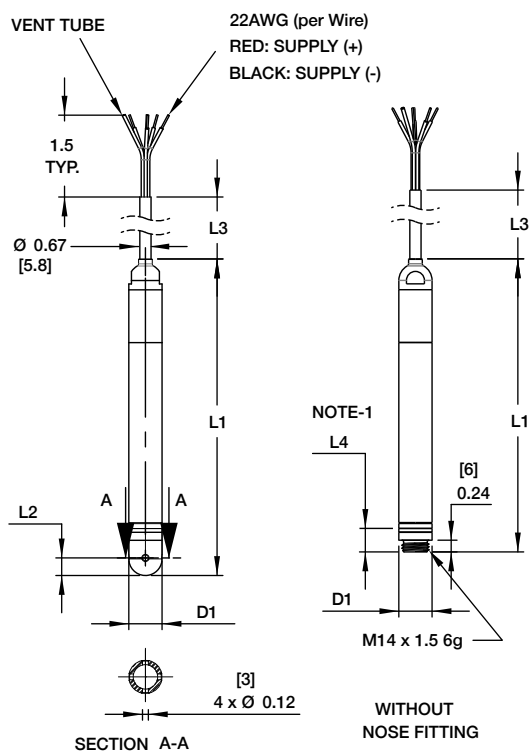
Data Sheet

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