

# Model 375

## Submersible Level Transmitter



### Description

The Model 375 Low Cost Submersible Level Transmitter is specially designed to provide the convenience of direct submergence in many types of liquids for quick, accurate and reliable level measurement. The SDT provides a lower cost, lighter weight option for submersible level applications. The simple design and rugged construction of this solid state instrument provide long lasting service with virtually no maintenance.

The Model 375 Transducer indicates the level of liquid by continuously measuring hydrostatic pressure via its isolated sensing element, an ion implanted silicon semiconductor sensor. The output signal is 4-20 mA. For other input / output options, consult factory. This design provides for excellent linearity and repeatability, low hysteresis and long term stability at an economical price.

The Model 375 is easy to install; simply lower the transducer into a vessel or well. It's that easy. All the electronics are mounted in a submersible 316 stainless steel housing. A special cable support bracket is also available. This gives extra stability to the transducer when used with longer lengths of cable (up to 2500 feet) or when used in an agitated liquid. A conduit adapter is also available.

A specially designed cable is factory installed and sealed to insure liquid tight performance. The customer connection end of the cable is sealed and a desiccant package is installed to limit the amount of moisture allowed to enter the barometric reference of the sensor.

The transducer is available calibrated for any span needed, from 6 psi (13.8 ft of water) to 300 psi (692 ft of water)

### Features

- Low cost
- Solid state sensor for accuracy and reliability
- Lightweight and compact size
- Rugged 316 stainless steel housing with excellent environmental protection to IP68
- Advanced digital compensation
- Easy to install and use
- Vented to the atmosphere through the surface end of the cable (desiccant package supplied)
- Reverse polarity and surge protected
- 2 wire, 4 to 20 mA output standard; other outputs available - consult factory

### Applications

- Tanks
- Ponds
- Rivers
- Lakes
- Water wells
- Landfills
- Flood channels
- Pump Control
- Lift Stations

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## Specifications

**Pressure Range:**  
0-6 psi to 0-300 psi

**Accuracy at 25°C Including Linearity (BFSL), Hysteresis, Repeatability:**  
±1% FS MAX

**1 Yr. Stability:**  
< 0.25% FS

**Load Limitation:** 50K OHM MIN (All Voltage Outputs) 600 OHM MAX (4-20MA)

**Operating Temperature \*:**  
**Pressure Ranges up to 150 PSI**  
-25 to 60°C (-13 to 140°F)  
**Pressure Ranges Above 150 PSI**  
-25 to 25°C (-13 to 77°F)

**Compensated Temperature:**  
**Pressure Ranges up to 150 PSI**  
0 to 50°C (32 to 122°F)  
**Pressure Ranges Above 150 PSI**  
0 to 25°C (32 TO 77°F)

**Zero Offset:** ±1% FS

**Temperature Effects within Compensated Range:**  
6 PSI: ±2% FS  
All Other Ranges: ±1.25% FS

**Burst Pressure:** 3X FS or 450 PSI  
whichever is less

**Vibration:** 10G, 55 – 2000 HZ

**Shock:** 30G

**Wetted Materials:** 316L Stainless Steel, Polyurethane Cable, Viton / Neoprene Seal, Delrin

**Process Connection:**  
¼ -18 NPT Male with Delrin Snubnose

**Electrical Connection:** #22AWG Cable, Options N, R, C Include Desiccant Canister.

**Pressure Code:**  
0006 0-6PSI (0-0.4BAR), 13.8 ft Water (4.2 m)  
0015 0-15PSI (0-1BAR), 34.6 ft Water (10.5 m)  
0030 0-30PSI (0-2BAR), 69.2 ft Water (21.1 m)  
0060 0-60PSI (0-4BAR), 138.4 ft Water (42.2 m)  
0100 0-100PSI (0-7BAR), 230.7 ft Water (70.3 m)  
0150 0-150PSI (0-10BAR), 346.1 ft Water (105.5 m)  
0300 0-300PSI (0-21BAR), 692 ft Water (211m)

*Other Ranges Are Available. Consult Factory.*

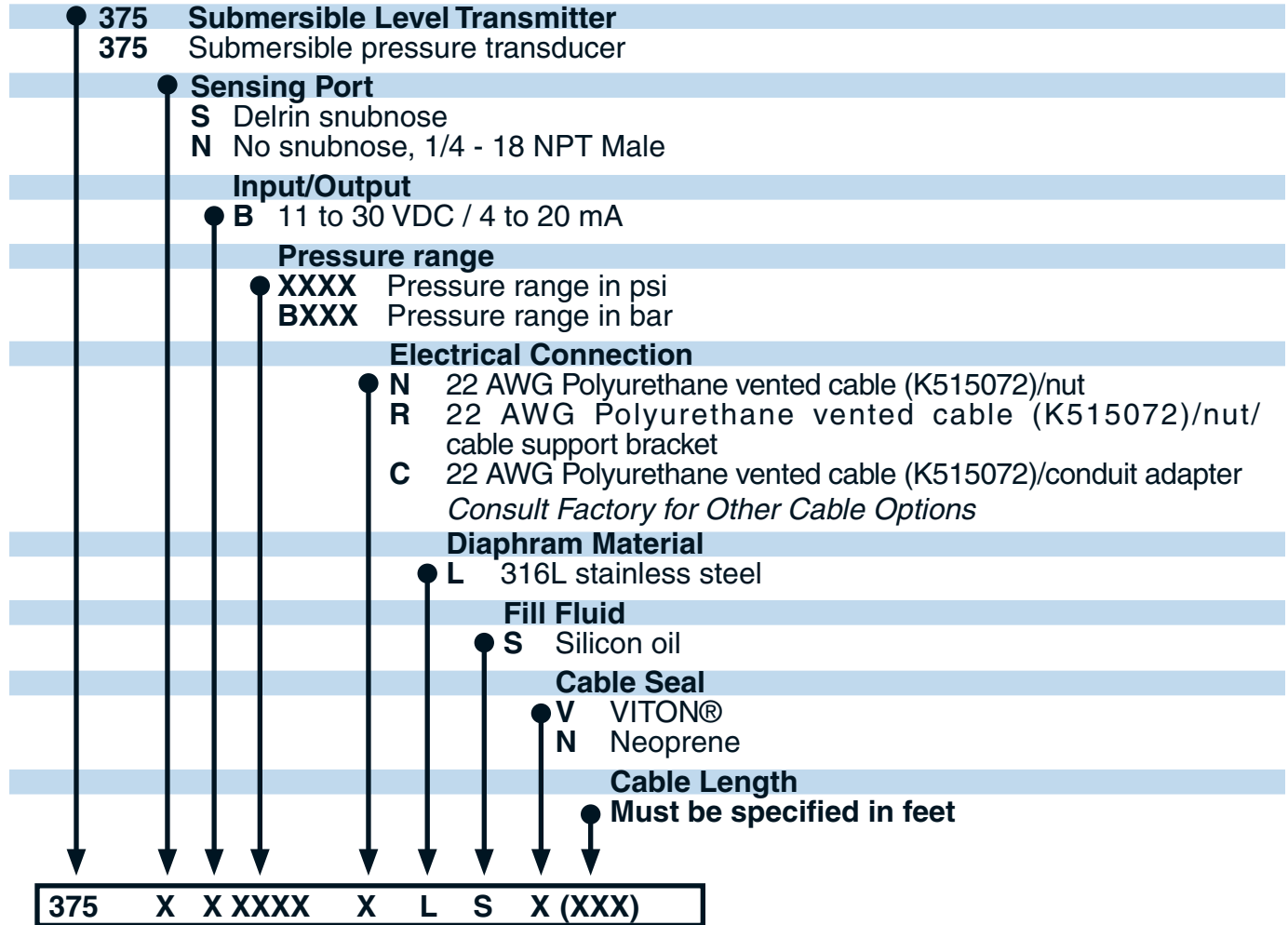
*\* Do Not Subject Unit To Freezing Water, Or Damage May Result.*

*For Unspecified Pressure Ranges, Errors Are Based On Turndown Of The Next Higher Range.*

*Affected Specifications Include 1 Yr Stability & Total Error Band. Example: 9 PSI Range is (15 PSI Sensor ÷ 9 PSI Range) X 1% = 1.67% Total Error Band*

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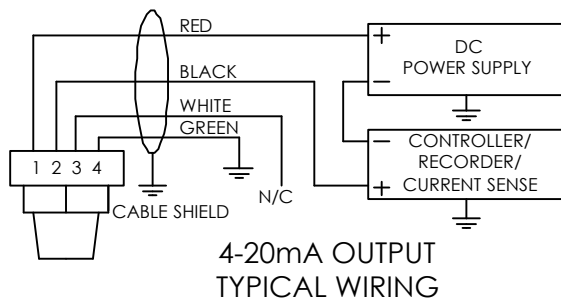
## Model Numbering



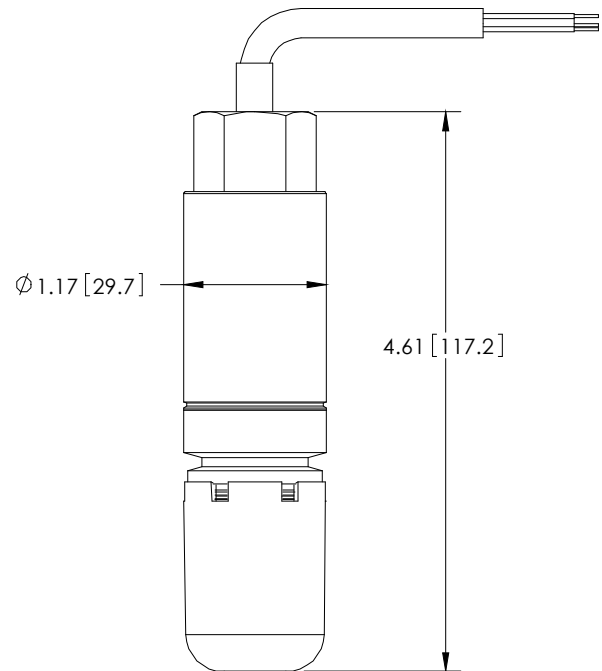
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## Wiring Diagram

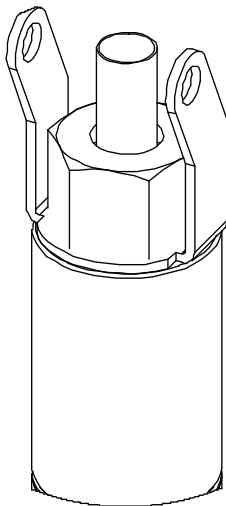
Color Polyurethane	Current (4-20mA) Output
Red	+Vin
Black	-Vin
Green	Case Ground



## Dimensions



## Cable Support Option



Desiccant Filter  
Vent Kit  
K234436

