# FLUSH SUBMERSIBLE LEVEL TRANSMITTER




Model BR313F
Flush Submersible Level Transmitter

## MODEL BR313F

### FEATURES:

- Large flush ceramic diaphragm
- 0 to 20 INWC thru 0 to 285 PSI
- Corrosion resistant, leak-proof construction
- PTFE, PUR or PE cable with FKM flourine seal
- Designed to 500 PSI external pressure
- Flush design saves cost and down time by eliminating sensor clean up

### APPLICATIONS:

- Submersible pump lift station level monitoring
- Water tanks and reservoirs
- Process sumps
- Water and wastewater level monitoring
- Water recycling
- Sludge or slurry levels
- Other aggressive media

### PRODUCT OVERVIEW:

Model BR313F utilizes a flush 1.06" flush ceramic diaphragm that inhibits grease and biosolid buildup typically found in water treatment level applications. This flush ceramic design saves cost by eliminating sensor clean-out found with many other non flush designs. The corrosion-resistant 304SS construction, and an integrated hydrophobic breather vent help provide years of maintenance-free service.

### FIELD OPTIONS:

- PTFE, PUR, or Polyurethane jacketed cable



© 2016 Blue Ribbon Corp. **Adaptive Industrial Solutions**
sales@adaptiveind.com | (877) 818-5009

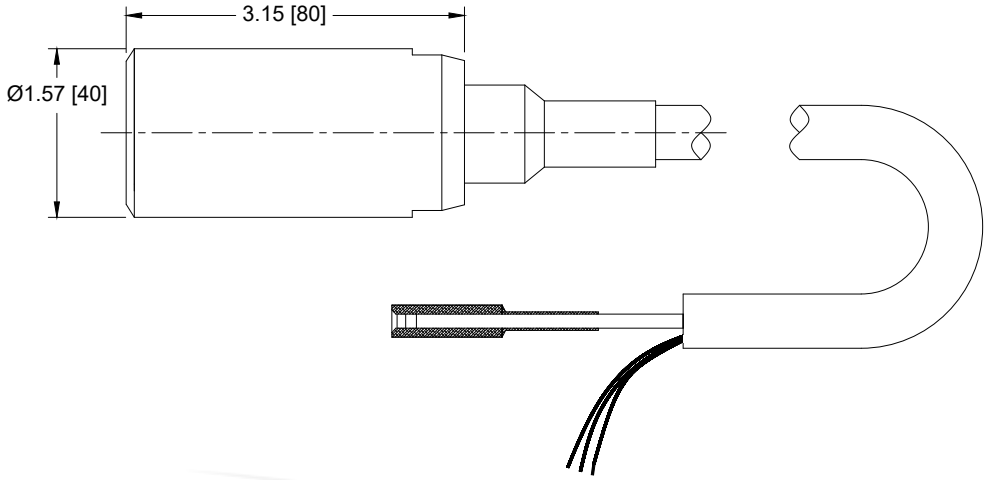
# FLUSH SUBMERSIBLE LEVEL TRANSMITTER

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

**WIRING CONFIGURATION**

| PIN/WIRE COLOR | DESCRIPTION |
|---|---|
| RED | +EXC/SIG |
| YEL | -EXC/SIG |
| DRAIN | CASE GND |




## REFERENCE SPECIFICATIONS

### ELECTRICAL

- **Output Signal:** 4-20 mA output
- **Supply Voltage:** 12 to 36 Vdc
- **Load Resistance:** 100 MΩ at 50 Vdc excitation
- **Circuit Protection:** Short circuit or reversed wired – Indefinite
- **Response Time:** ≤3 ms to 90%

### MATERIALS OF CONSTRUCTION

- **Housing:** 304 SS (Optional 316L or Titanium)
- **Sensor:** Ceramic Al203 - 96%
- **Electrical Connection:** 40 ft Polyurethane jacketed cable with integrated vent tube and hydrophobic filter. Teflon cable option.
- **Cable Seal:** FKM flourine

### STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

**Standard:** ±0.5% FSO

**Improved:** ±0.25% FSO

**Zero & Span Balance:** ±0.1% FSO @ +70 °F

### MECHANICAL

- **Zero Balance and FSO:** ±0.75% FSO @ +70 °F
- **Process Connection:** 1.06" flush ceramic diaphragm
- **External Pressure:** Rated to 500 PSI (1,153 ft WC) max.
- **Proof Pressure:** 1.5X FSO
- **Burst Pressure:** 4X FSO
- **Approximate Weight:** 10 oz (240 g) nominal, options may increase weight
- **Diameter:** 1.575"

### PRESSURE RANGES

- 20 INWC to 0-285 PSI

### THERMAL SPECIFICATIONS

- **Compensated:** +14 °F to +158 °F (-10 °C to +70 °C)
- **Operating:** -4 °F to +158 °F (-20 °C to +70 °C)
- **Storage:** -40 °F to +180 °F (-40 °C to +82 °C)
- **Effect on Zero/Span:** <±2.0% FSO/100 °F at full

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact Blue Ribbon Corporation for assistance with your application.

© 2016 Blue Ribbon Corp.
**Adaptive Industrial Solutions**
sales@adaptiveind.com | (877) 818-5009