



## FLUSH SUBMERSIBLE LEVEL TRANSMITTER

### MODEL BR313F



Model BR313F  
Flush Submersible Level Transmitter

#### FEATURES:

- Large flush ceramic diaphragm
- 0 to 2 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 1.575" diameter ceramic sensor 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
- Titanium, or 316L SS housing



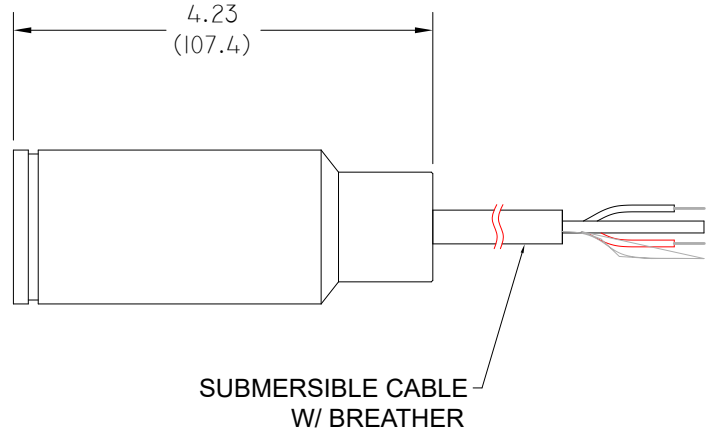
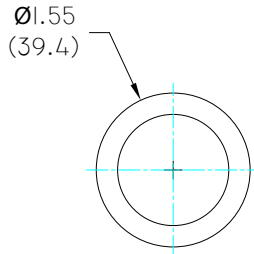
# FLUSH SUBMERSIBLE LEVEL TRANSMITTER

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

| WIRE   | MODEL 313F |
|--------|------------|
| RED    | +EXC/SIG   |
| BLK    | -EXC/SIG   |
| GRN    | N/C        |
| WHT    | N/C        |
| SHIELD | OPEN       |



## REFERENCE SPECIFICATIONS

| ELECTRICAL  | MECHANICAL   |
|---|--|
| <ul style="list-style-type: none"> <li>Supply Voltage: 12 to 36 Vdc</li> <li>Output Signal: 4-20 mA output</li> <li>Circuit Protection: Short circuit or reversed wired – Indefinite</li> <li>Load Resistance: 100 Ω max. at 50 Vdc excitation</li> <li>Response Time: ≤3 ms to 90%</li> <li>Connection: ½" NPT (M) w/8 ft 18 AWG Hytrel® jacketed cable (Tefzel® jacketed cable optional)</li> </ul> | <ul style="list-style-type: none"> <li>Zero Balance and FSO: ±0.75% FSO @ +70 °F</li> <li>Process Connection: Flush ceramic</li> <li>External Pressure: Rated to 500 PSI (1,153 ft WC) max.</li> <li>Proof Pressure: 1.5X FSO</li> <li>Burst Pressure: 4X FSO</li> <li>Approximate Weight: 10 oz (240 g) nominal, options may increase weight</li> <li>Diameter: 1.575"</li> </ul> |
| MATERIALS OF CONSTRUCTION   | PRESSURE RANGES  |
| <ul style="list-style-type: none"> <li>Housing: 304 SS (Optional 316L or Titanium)</li> <li>Sensor: Ceramic Al2O3 - 96%</li> <li>Cable: PTFE, PUR or PE available</li> <li>Cable Seal: FKM flourine</li> </ul>  | <ul style="list-style-type: none"> <li>20 INWC to 0-285 PSI</li> </ul>   |
| STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)  | THERMAL SPECIFICATIONS   |
| <p>Standard: ±0.5% FSO</p> <p>Improved: ±0.25% FSO, and ±0.1% FSO</p> <p>Zero &amp; Span Balance: ±0.1% FSO @ +70 °F</p>  | <ul style="list-style-type: none"> <li>Compensated: +14 °F to +158 °F (-10 °C to +70 °C)</li> <li>Operating: -4 °F to +158 °F (-20 °C to +70 °C)</li> <li>Storage: -40 °F to +180 °F (-40 °C to +82 °C)</li> <li>Effect on Zero/Span: &lt;±2.0% FSO/100 °F at full</li> </ul>  |

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.

