



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



Model BR313F
Flush Submersible Level Transmitter

BR5SL-TX-008
REV-H

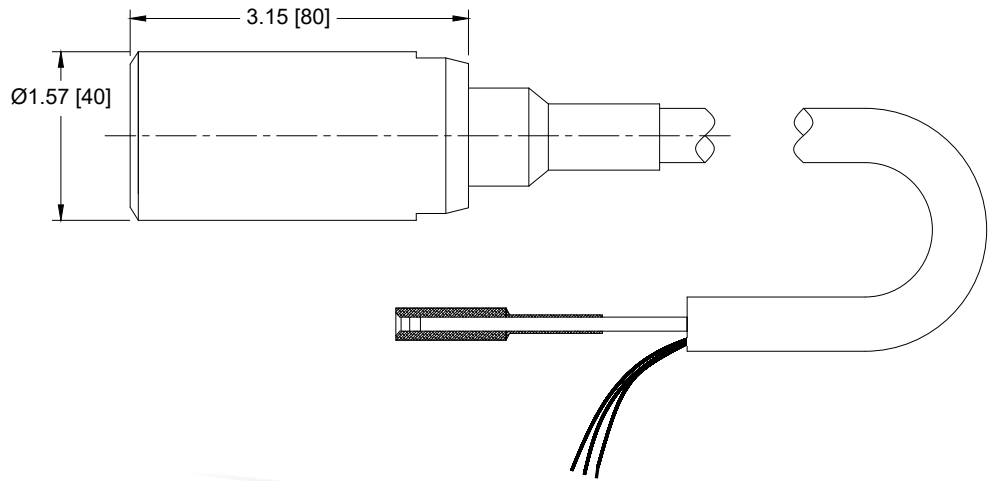
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DIMENSIONAL DRAWING

All dimensions are in inches (mm)

WIRING CONFIGURATION

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



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage:** 12 to 36 Vdc
- **Output Signal:** 4-20 mA output
- **Circuit Protection:** Short circuit or reversed wired – Indefinite
- **Load Resistance:** 100 Ω max. at 50 Vdc excitation
- **Response Time:** ≤3 ms to 90%
- **Connection:** ½" NPT (M) w/8 ft 18 AWG Hytel® jacketed cable (Tefzel® jacketed cable optional)

MATERIALS OF CONSTRUCTION

- **Housing:** 304 SS (Optional 316L or Titanium)
- **Sensor:** Ceramic Al2O3 - 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.

