



SUBMERSIBLE LEVEL TRANSMITTER FOR HAZARDOUS LOCATIONS

MODEL 313AI



Model 313AI
Submersible Level Transmitter
for Hazardous Locations

FEATURES:

- ATEX & IEC approvals
- Submersible to 700 FTWC (213.4 meters WC)
- 1" diameter
- FM & CSA approvals pending
- All 316L stainless steel construction
- Lightning suppression standard

APPLICATIONS:

- Wet wells, ponds, rivers and tank level
- Water treatment
- Ground water monitoring
- Irrigation

PRODUCT OVERVIEW:

The GP:50 Model 313AI for Blue Ribbon Corp. is an ATEX intrinsically safe submersible level transmitter, providing high-accuracy level measurements for hazardous locations. The corrosion-resistant 316L stainless steel construction, integrated lightning suppression and hydrophobic breather vent help provide years of maintenance-free service.

APPROVALS:

Currently Available:

- ATEX/IEC Intrinsically Safe: II 1 G Ex ia IIC T5 Ga

Pending:

- ATEX/IEC Zone 2: II 3 G Ex nA/ic IIC T5 Gc
- FM, CSA Intrinsically Safe: Class I, Division 1, Groups A-G, T5, Ex ai IIC T5
- FM/CSA: Division/ Zone 2: Class I Division 2, Groups A-G, T5, Ex nC/nA/nL T5

Current Approvals:



Pending Approvals:



BR5SL-TX-005
REV-A

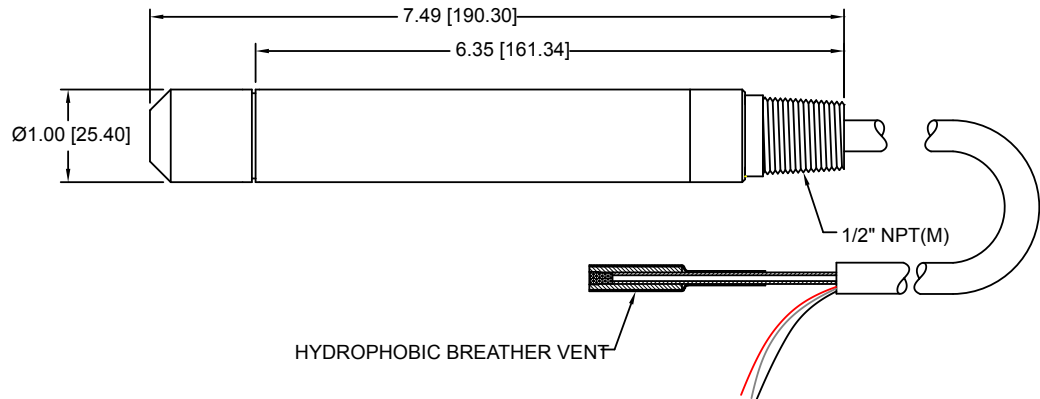
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DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

WIRE	MODEL 313AI
RED	+EXC/SIG
BLK	-EXC/SIG
DRN	CASE GND



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage:** 9 to 36 Vdc
- **Output Signal:** 4-20 mA
- **Circuit Protection:** Lightning and surge protection optional
- **Response Time:** <5 ms
- **Connection:** 1/2" NPT (M) conduit with 8.5' of 18 AWG, 4 conductor, shielded, Hytrel jacketed cable with integral vent tube and hydrophobic filter

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

Standard: $\pm 0.5\%$ FSO
 Improved: $\pm 0.2\%$ FSO
 Zero & Span Balance: $\pm 2.0\%$ FSO

MATERIALS OF CONSTRUCTION

- **Housing and Pressure Cavity:** 316 stainless steel (Optional Titanium)
- **Cable:** Hytrel (Optional Tefzel)

MECHANICAL

- **Process Connection:** 7/16-20 (M) with PVC bullet nose
- **Proof Pressure:** 1.5X FSO
- **Burst Pressure:** 3X FSO
- **Weight:** <12 oz (340 g)
- **Diameter:** 1" (25.4 mm)

PRESSURE RANGES

- 0 to 5 PSI thru 0 to 300 PSI (344 mBAR thru 21 BAR)
- 0 to 12 FTWC thru 0 to 700 FTWC (762 mm thru 213 m WC)

THERMAL SPECIFICATIONS

- **Compensated:** 0° F to +140 °F (-7 °C to +60 °C)
- **Operating Temperature:** -40 °F to +185 °F (-40 °C to +85 °C)
- **Storage:** -40 °F to +195 °F (-40 °C to +90.6 °C)
- **Effect on Zero/Span:** < $\pm 2.0\%$ FSO/100 °F

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.

