



## TITANIUM SUBMERSIBLE LEVEL TRANSMITTER



Model BR313L-NI  
Titanium Submersible Level Transmitter

### MODEL BR313L-NI

#### FEATURES:

- 0 to 20" WC thru 0 to 300 PSI (692 FTWC)
- 4-20 mA output
- Rugged, welded, leak-proof construction
- Slim 1.0" (2.5 cm) diameter titanium housing
- Up to 0.10% FSO accuracy

#### APPLICATIONS:

- Deep well and borehole
- Groundwater monitoring
- Reservoirs / dams
- Rig ballast control
- Weirs, wells, pond, reservoir, and dam level

#### PRODUCT OVERVIEW:

Model BR313L-NI from Blue Ribbon Corporation utilizes an all-titanium design to provide long-term stability and continued performance under the harshest conditions, including corrosive and hazardous applications. The slim design and high media resistance perform exceptionally well in downhole applications that often have tight space constraints and caustic environmental conditions.

#### FIELD OPTIONS:

- Remote zero-span adjust
- Lightning suppression
- Additional lengths, Tefzel® or Hytrel jacketed cable

**BR5SL-TX-004**  
REV-B

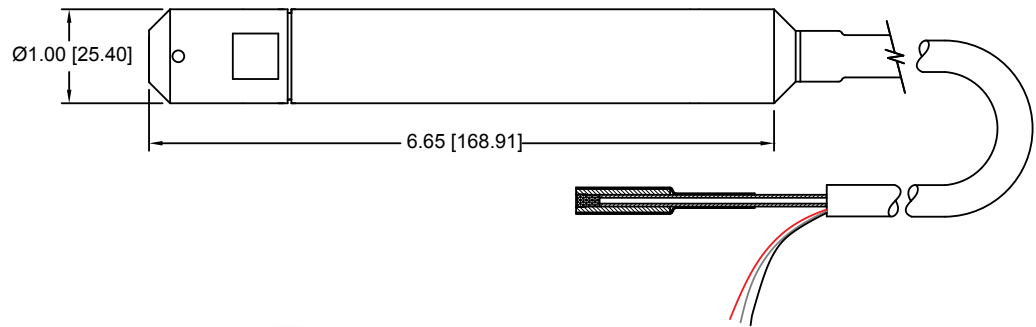
# TITANIUM SUBMERSIBLE LEVEL TRANSMITTER

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

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



## REFERENCE SPECIFICATIONS

<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Supply Voltage:</b> 9 to 36 Vdc</li> <li>• <b>Output Signal:</b> 4-20 mA output</li> <li>• <b>Circuit Protection:</b> Short circuit or reversed wired – Indefinite</li> <li>• <b>Load Resistance:</b> 1400 <math>\Omega</math> max. at 40 Vdc excitation</li> <li>• <b>Response Time:</b> <math>\leq 5</math> ms to 90%</li> <li>• <b>Connection:</b> Molded Hytrel jacketed, 6-conductor with breather tube, 24 AWG, 8' long, optional lengths available, Tefzel<sup>®</sup> jacketed cable optional</li> </ul>	<p><b>MECHANICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Process connection:</b> 1/4" NPT (F) with PVC bullet nose</li> <li>• <b>External Pressure:</b> Rated to 500 PSI (1,153 FTWC) max.</li> <li>• <b>Proof Pressure:</b> 2X FSO</li> <li>• <b>Burst Pressure:</b> 4X FSO</li> <li>• <b>Approximate Weight:</b> 10 oz (0.3 kg) nominal, options may increase weight</li> <li>• <b>Diameter:</b> 1.0" (2.5 cm)</li> </ul>
<p><b>MATERIALS OF CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• <b>Housing:</b> Titanium</li> <li>• <b>Wetted Material:</b> Titanium / Ceramic and Viton</li> </ul>	<p><b>PRESSURE RANGES</b></p> <ul style="list-style-type: none"> <li>• 0-20" WC thru 300 PSI (50 MBAR to 35 BAR)</li> </ul>
<p><b>STATIC ACCURACY</b> (HYSTERESIS, NON-LINEARITY &amp; REPEATABILITY @ +70 °F)</p> <ul style="list-style-type: none"> <li>• <b>Standard:</b> <math>\pm 0.5\%</math> FSO</li> <li>• <b>Improved:</b> <math>\pm 0.2\%</math> FSO, and <math>\pm 0.1\%</math> FSO</li> <li>• <b>Zero/Span Balance:</b> <math>\pm 1.0\%</math> FSO @ +70 °F</li> </ul>	<p><b>THERMAL SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• <b>Compensated:</b> 0 °F to +140 °F (-17.7 °C to +60 °C)</li> <li>• <b>Operating:</b> -40 °F to +150 °F (-40 °C to +65.5 °C)</li> <li>• <b>Storage:</b> -40 °F to +150 °F (-40 °C to +65.5 °C)</li> <li>• <b>Effect on Zero/Span:</b> <math>&lt; \pm 2.0\%</math> FSO/100 °F at full scale</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.

