



## INTRINSICALLY SAFE PRESSURE TRANSDUCER

### MODEL BR311 I, GI, AI

#### FEATURES:

- 0 to 5 PSI thru 0 to 75K PSI (75 mBAR to 1,034 BAR)
- FM, CSA, ATEX & IEC approvals
- Welded, rugged construction
- Optional high overpressure protection

#### APPLICATIONS:

- Rig safety systems
- Well head control
- Gas pipeline
- Control Panels
- On-board transmission & engine monitoring

#### PRODUCT OVERVIEW:

The GP:50 Model 11 series for Blue Ribbon Corporation provides a rugged solution in hazardous areas. The all-welded, stainless steel design provides years of reliable service in some of the harshest applications.

#### FIELD OPTIONS:

- FM, CSA, ATEX, IEC Intrinsically Safe
- Zero & Span adjust
- Alternate connectors & pressure ports
- For explosion-proof, see Model 311X/P



Model BR311 I, GI, AI  
Intrinsicly Safe Pressure Transducer

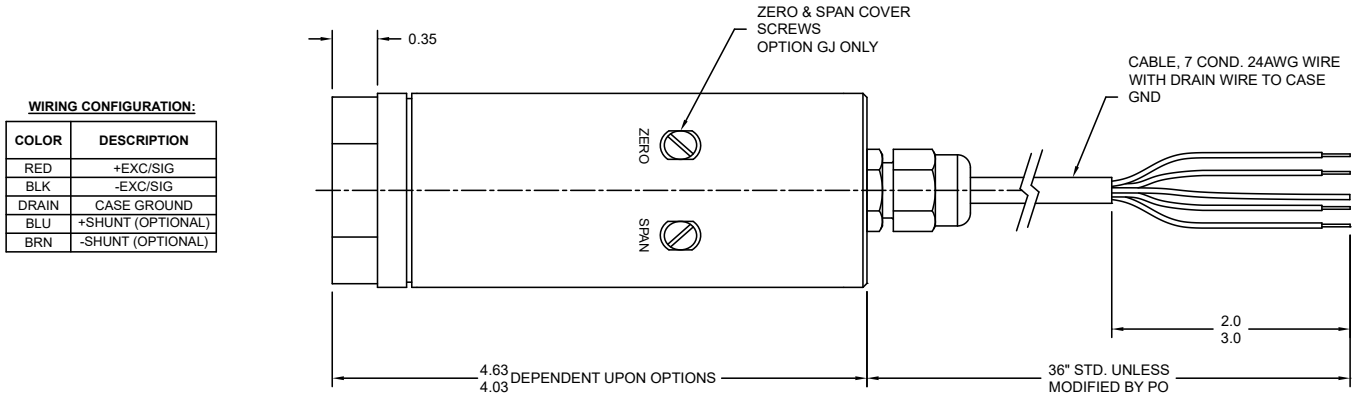


**BR5SL-014**  
REV-B

# INTRINSICALLY SAFE PRESSURE TRANSDUCER

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)



## REFERENCE SPECIFICATIONS

<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Excitation Voltage:</b> 10 to 28 Vdc excitation</li> <li>• <b>Output Signal:</b> 4-20 mA output</li> <li>• <b>Insulation Resistance:</b> &gt; 10 MΩ @ 50 Vdc, +70 °F</li> <li>• <b>Circuit Protection:</b> RFI, EMI &amp; Reverse polarity protected</li> <li>• <b>Response Time:</b> &lt;5 ms 10% to 90%</li> <li>• <b>Connection:</b> 36" long PVC Jacketed, 24 AWG , 7 conductor cable with drain wire</li> </ul>	<p><b>MECHANICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Process Connection:</b> ¼" NPT (F) for ranges &lt;20 KPSI (1.4 BAR) High pressure coned fittings for ranges 20K to 75K PSI (1,379 to 5,171 BAR)</li> <li>• <b>Proof Pressure:</b> 1.5X FSO ≤30K PSI range, 1.2X FSO &gt;30K PSI range</li> <li>• <b>Burst Pressure:</b> 2.5X FSO ≤10K PSI; 5X FSO &gt;10K PSI and ≤30K PSI; 1.5X ≤75K PSI</li> <li>• <b>Approximate Weight:</b> 10 oz, (0.3 kg) nominal (options may increase weight)</li> </ul>
<p><b>MATERIALS OF CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• <b>Wetted Parts:</b> 316 or 17-4 PH stainless steel (Options available, consult factory)</li> <li>• <b>Housing:</b> 316 stainless steel</li> <li>• <b>Internal Fill:</b> ≤2000 PSI Silicone Oil (Fomblin optional)</li> </ul>	<p><b>PRESSURE RANGES</b></p> <ul style="list-style-type: none"> <li>• 0 to 5 thru 0 to 75K PSI (0 to 0.3 thru 0 to 5,171 BAR) (PSIG, PSIS, PSIA, PSIV &amp; Compound ranges available)</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> ±0.5%</li> <li>• <b>Improved:</b> ±0.20% and ±0.1%</li> <li>• <b>Zero &amp; Span Balance:</b> ±1.0% FSO @ +70 °F, 0.5% optional</li> </ul>	<p><b>THERMAL SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• <b>Compensated Range:</b> 0 °F to +180 °F (-18 °C to +82 °C)</li> <li>• <b>Operating Range:</b> -40 °F to +176 °F (-40 °C to +80 °C)</li> <li>• <b>Storage Ambient:</b> -65 °F to +250 °F (-53 °C to +121 °C)</li> <li>• <b>Effect on Zero/Span:</b> ±2.0% FSO/100 °F</li> </ul> <p>Improved or expanded temperature compensation available</p>

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.

