



## INTRINSICALLY SAFE PRESSURE TRANSDUCER

### MODEL 311Z, I, GI, AI



Model 311Z, I, GI, AI  
Intrinsically Safe Pressure Transducer



#### 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:

GP:50's Model 11 series provides a rugged solution in hazardous approved 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

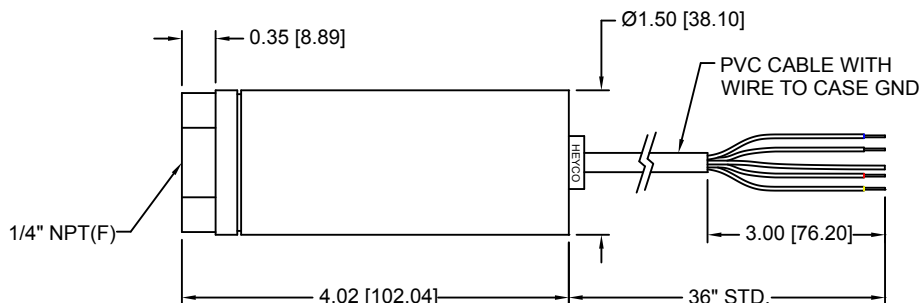
# GP:50 MODEL 311Z, I, GI, AI

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

WIRE	MODEL 311Z/I/GI/AI
1/RED	+EXC/SIG
2/GRN	CASE GND
3/WHT	N/C
4/BLK	-EXC/SIG



## REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> <li>• <b>Excitation Voltage:</b> (311Z) 9 to 36 Vdc excitation (311I, GI, AI) 10 to 28 Vdc excitation</li> <li>• <b>Output Signal:</b> 4-20 mA output</li> <li>• <b>Circuit Protection:</b> RFI and EMI</li> <li>• <b>Load Impedance:</b> 750 Ω max. to 24 Vdc</li> <li>• <b>Insulation Resistance:</b> &gt;10 MΩ @ 50 Vdc, +70 °F</li> <li>• <b>Response Time:</b> &lt;5 ms 10% to 90%</li> <li>• <b>Connection:</b> 36" long PVC Jacketed, 18 AWG, 4 conductor cable (or equivalent)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Zero Balance and FSO:</b> ±1% FSO at +70 °F</li> <li>• <b>Process Connection:</b> 1/4" 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> 2X FSO or 22,500 PSI (1,551 BAR), whichever is less</li> <li>• <b>Burst Pressure:</b> 5X FSO or 22,500 PSI (1,551 BAR), whichever is less</li> <li>• <b>Approximate Weight:</b> 10 oz (0.3 kg) nominal, options may increase weight</li> </ul>
MATERIALS OF CONSTRUCTION	PRESSURE RANGES
<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> </ul>	<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>
STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)	THERMAL SPECIFICATIONS
Standard ±0.5% Improved ±0.2% and ±0.1%	<ul style="list-style-type: none"> <li>• <b>Compensated:</b> 0 °F to +180 °F (-18 °C to +82 °C)</li> <li>• <b>Operating Process:</b> -40 °F to +176 °F (-40 °C to +80 °C)</li> <li>• <b>Storage:</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>

**Standard configurations shown.  
Please consult factory for other options.**

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

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