



## EXPLOSION PROOF & ZONE 2 / DIV 2 PRESSURE TRANSMITTER



Model 111X/P, 211X/P, 311X/P  
& 311N//AN//GN

Intrinsically Safe Pressure Transducer



## MODEL 111X/P, 211X/P, 311X/P/N/AN/GN

### 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.

### APPROVALS:

- **FM, FM/CSA:** Class I/II/III, Div 1, Grps A-G, T6 at  $T_a=40C$
- **Zone 2 / Division 2:**
- **FM:** Class I, Zone 2 AEx nC IIC T5, Class I, Div. 2, Grp. A, B, C, D Class II, Grp. E, F, G, Class III T5,  $T_a = 80C$
- **CSA:** Ex nA IIC T5, Ex nL IIC T5, Class I Div. 2 Grp. A, B, C, D Class II Div. 2 Grp. E, F, G Class III T5,  $T_a=80C$
- **ATEX:** CE0575 II 3 G Ex nA IIC, Ex ic IIC T5,  $T_a=80C$
- **IEC:** Ex na IIC, Ex ic IIC T5,  $T_a=80C$

(all Zone 2/Div 2 approvals are electrical connector dependent)

For Intrinsically Safe Approval see 311Z, I, GI, AI Data Sheet



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A5SL-066

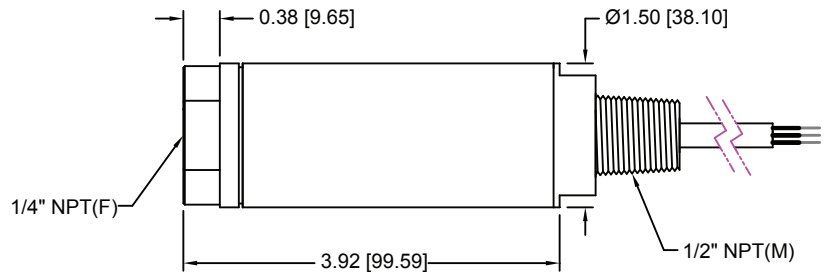
# GP:50 MODEL 111X/P, 211X/P, 311X/P/N/AN/GN

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

WIRE	MODEL 111X/P	MODEL 211X/P	MODEL 311X/P/N/AN/GN
RED	+EXC	+EXC	+EXC/SIG
GRN	+SIG	+SIG	N/C
WHT	-SIG	N/C	N/C
BLK	-EXC	-EXC/SIG	-EXC/SIG
GRN/YEL	CASE GND	N/C	N/C



## REFERENCE SPECIFICATIONS

<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Excitation Voltage:</b> (Model 111X/P) 3.5 to 15 Vdc (Model 211X/P) 10.5 to 32 Vdc (Model 311X/P) 9 to 36 Vdc (Model 311 N/AN/GN) 10 to 28 Vdc</li> <li>• <b>Output Signal:</b> 4-20 mA</li> <li>• <b>Load Impedance:</b> (Model 111) 50 Ω min. (Model 211) 1350 Ω max. 36 Vdc (Model 311) 750 Ω max. 24 Vdc</li> <li>• <b>Input Impedance:</b> (Model 111) 350 Ω nominal (Model 211) 8 mA nominal</li> <li>• <b>Insulation Resistance:</b> &gt; 10 MΩ at 50 Vdc and +70 °F</li> <li>• <b>Response Time:</b> &lt; 5 ms 10% to 90%</li> <li>• <b>Connection:</b> 1/2" NPT M conduit w/ 6ft 18 AWG multi-conductor cable</li> </ul> <p><b>MATERIALS OF CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• <b>Wetted Parts:</b> 17-4 PH stainless steel (Hastelloy C-276 and Inconel available, consult factory)</li> <li>• <b>Housing:</b> 316 stainless steel</li> </ul>	<p><b>STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY &amp; REPEATABILITY @ +70 °F)</b></p> <p>Standard ±0.5% Improved ±0.2% and ±0.1%</p> <p><b>Zero Balance and FSO:</b> ±1% FSO at +70 °F</p> <p><b>MECHANICAL</b></p> <ul style="list-style-type: none"> <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> 1 lb (0.5 kg) nominal, options may increase weight</li> </ul> <p><b>PRESSURE RANGES</b></p> <ul style="list-style-type: none"> <li>• 0 to 5 PSI thru 0 to 75K PSI (0 to 0.3 BAR thru 0 to 5,171 BAR) (PSIG, PSIS, PSIA, PSIV &amp; compound ranges available)</li> </ul> <p><b>THERMAL SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• <b>Compensated:</b> 0 °F to +180 °F (-17.7 °C to +82 °C)</li> <li>• <b>Operating:</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>
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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.