



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

### 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 Ta=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, Ta = 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, Ta=80C
- **ATEX:** CE0575 II 3 G Ex nA IIC, Ex ic IIC T5, Ta=80C
- **IEC:** Ex na IIC, Ex ic IIC T5, Ta=80C

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

For Intrinsically Safe Approval see 311Z, I, GI, AI Data Sheet (A5SL-024)

Model 111X/P, 211X/P, 311X/P  
& 311N//AN//GN  
Intrinsically Safe Pressure Transducer



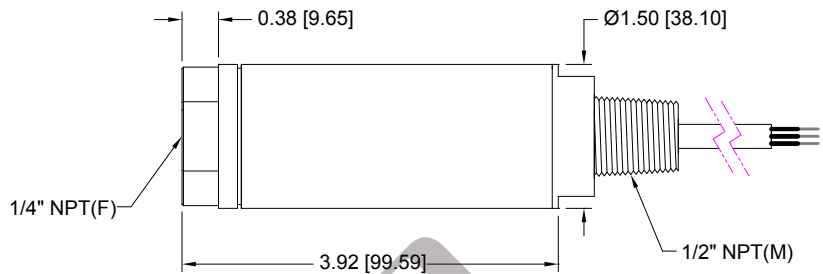
# GP:50 MODEL 111X/P, 211X/P, 311X/P/N/AN/GN

## 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	CASE GND	N/C
WHT	-SIG	+SIG	N/C
BLK	-EXC	-EXC/SIG	-EXC/SIG
GRN/YEL	CASE GND	N/C	N/C



## REFERENCE SPECIFICATIONS

### ELECTRICAL

- Excitation Voltage:**  
(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
- Output Signal:**  
(Model 111) 3 mV/.V  
(Model 211) 0 to 5 Vdc, 0 to 10 Vdc (alternate outputs available)  
(Model 311) 4-20 mA
- Load Impedance:**  
(Model 211) 50 Ω max. 24 Vdc  
(Model 311) 750 Ω max. 24 Vdc
- Input Impedance:**  
(Model 111) 5K or 350 Ω nominal
- Input Current:**  
(Model 211) 8mA nominal
- Insulation Resistance:** > 10 MΩ at 50 Vdc and +70 °F
- Response Time:** < 5 ms 10% to 90%
- Connection:** 1/2" NPT M conduit w/ 6ft 18 AWG multi-conductor cable

### MATERIALS OF CONSTRUCTION

- Wetted Parts:** 17-4 PH stainless steel (Hastelloy C-276 and Inconel available, consult factory)
- Housing:** 316 stainless steel

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

Standard ±0.5%  
Improved ±0.2% and ±0.1%

**Zero Balance and FSO:** ±1% FSO at +70 °F

### MECHANICAL

- Process Connection:** 1/4" NPT (F) for ranges < 20 KPSI (1.4 BAR) High pressure coned fittings for ranges 20K to 75K PSI (1,379 to 5,171 BAR)
- Proof Pressure:** 1.5X FSO ≤ 30K PSI, 1.2X FSO > 30K PSI
- Burst Pressure:** 2.5X FSO ≤ 10K PSI, 5X FSO > 10K PSI and ≤ 30K PSI, 1.5X ≤ 75K PSI
- Approximate Weight:** 1 lb (0.5 kg) nominal, options may increase weight
- Unit designed to meet or exceed IP67 Rating.** (Some options may affect rating, consult factory)

### PRESSURE RANGES

- 0 to 5 PSI thru 0 to 75K PSI (0 to 0.3 BAR thru 0 to 5,171 BAR) (PSIG, PSIS, PSIA, PSIV & compound ranges available)

### THERMAL SPECIFICATIONS

- Compensated:** 0 °F to +180 °F (-17.7 °C to +82 °C)
- Operating:** -40 °F to +176 °F (-40 °C to +80 °C)
- Storage:** -65 °F to +250 °F (-53 °C to +121 °C)
- Effect on Zero/Span:** ±2.0% FSO/100 °F

**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.