



INTRINSICALLY SAFE PRESSURE TRANSDUCER

MODEL 311Z, I, GI, AI



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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

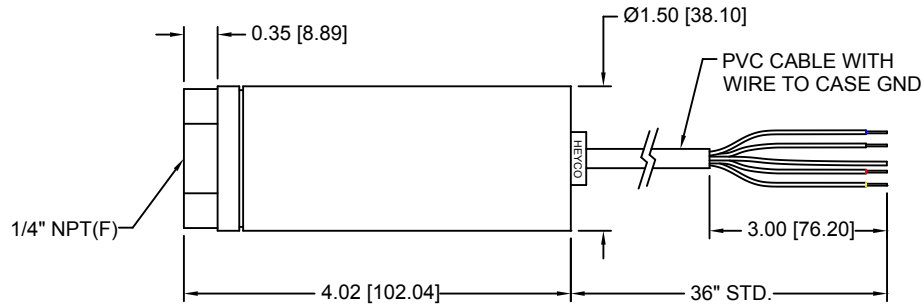
GP:50 MODEL 311Z, I, GI, AI

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

- **Excitation Voltage:**
(311Z) 9 to 36 Vdc excitation
(311I, GI, AI) 10 to 28 Vdc excitation
- **Output Signal:** 4-20 mA output
- **Circuit Protection:** RFI and EMI
- **Load Impedance:** 750 Ω max. to 24 Vdc
- **Insulation Resistance:** >10 M Ω @ 50 Vdc, +70 °F
- **Response Time:** <5 ms 10% to 90%
- **Connection:** 36" long PVC Jacketed, 18 AWG, 4 conductor cable (or equivalent)

MATERIALS OF CONSTRUCTION

- **Wetted Parts:** 316 or 17-4 PH stainless steel (options available consult factory)
- **Housing:** 316 stainless steel

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

Standard $\pm 0.5\%$
Improved $\pm 0.2\%$ and $\pm 0.1\%$

MECHANICAL

- **Zero Balance and FSO:** $\pm 1\%$ FSO at +70 °F
- **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:** 2X FSO or 22,500 PSI (1,551 BAR), whichever is less
- **Burst Pressure:** 5X FSO or 22,500 PSI (1,551 BAR), whichever is less
- **Approximate Weight:** 10 oz (0.3 kg) nominal, options may increase weight

PRESSURE RANGES

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

THERMAL SPECIFICATIONS

- **Compensated:** 0 °F to +180 °F (-18 °C to +82 °C)
- **Operating Process:** -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:** $\pm 2.0\%$ 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.

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