

INDUSTRIAL GRADE PRESSURE TRANSDUCER



Model 111 / 211 / 311 Industrial Grade Pressure Transducer

MODEL 111 / 211 / 311

FEATURES:

- Available ranges from 0 to 30" WC thru 0 to 15K PSI (75 MBAR to 1,034 BAR)
- Choice of mV/V, Vdc & 4-20 mA output
- Rugged, welded, stainless steel construction
- High proof pressure
- Economically priced

APPLICATIONS:

- Hydraulic & pneumatic controls
- Die casting
- Rolling & steel mills
- Compression skids
- Irrigation pumps pressure
- Oilfield truck pressures
- Skidded process systems

PRODUCT OVERVIEW:

The Model 111/211/311 from GP:50 is a family of industrial grade pressure transducers. These strain gauge-based sensors are expressly designed to withstand the shock, vibration and pressure spikes common to most hydraulic and pneumatic control systems.

The highly rugged, all-welded stainless steel design of the Model 111/211/311 offers high corrosion resistance, making the sensors an ideal choice for demanding oil & gas, steelworks, rolling mills and process control applications. Units are further available with optional 10X proof pressure for extended worry-free service life within challenging environments.

FIELD OPTIONS:

- Zero and span adjustments
- 80% and 100% shunt calibration
- Alternate connectors and pressure ports
- For Intrinsically Safe and Explosion Proof approvals, see specially designated datasheet for Model 111/211/311 hazardous location



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DIMENSIONAL DRAWING

All dimensions are in inches (mm)

- Ø1.50 [38.10] STANDARD WIRING – 0.35 [8.89] MODEL MODEL MODEL PVC CABLE WITH WIRE WIRE TO CASE GND 111 211 311 +EXC 1/RED +EXC +EXC/SIG 2/GRN +SIG +SIG N/C ____ 3/WHT -SIG N/C N/C 4/BLK -EXC -EXC/SIG -EXC/SIG 1/4" NPT(F)-5/BLU +SHUNT (OPT) +SHUNT (OPT) +SHUNT (OPT) 3.00 [76.20]ł 6/BRN -SHUNT (OPT) -SHUNT (OPT) -SHUNT (OPT) - 4.02 [102.04]-36" STD.-

REFERENCE SPECIFICATIONS

| ELECTRICAL | MATERIALS OF CONSTRUCTION |
|--|--|
| Excitation Voltage: | Wetted Parts: |
| (Model 111) 3.5 to 15 Vdc | ≤2000 PSI 316LSST w/silicon oil fill |
| (Model 211) 9.0 to 36 Vdc | (Fomblin oil available, consult factory) |
| (Optional outputs may affect excitation) | >2000 PSI: 17-4 PH SST |
| (Model 311) 9.0 to 36 Vdc | (Inconel available, consult factory) |
| Output Signal: | Housing: 300 series stainless steel |
| (Model 111) | STATIC ACCURACY (BFSL) (Hysteresis, non-linearity & repeatability @ +70 °F) |
| ≤ 1 PSI: to 3.0 mV/V 2 PSI: 8.0 mV/V 3 PSI - 2,000 PSI: 7-10 mV/V | Standard: ±0.5% FSO Improved: ±0.2% FSO or ±0.1% FSO • Zero Balance and FSO: ±1% FSO at +70 °F (+21.1 °C) for each |
| 2,500 - 15,000 PSI: 2 to 3 mV/V | MECHANICAL |
| >15K: 2 to 2.5 mV/V (Model 211) 0 to 5 Vdc, 0 to 10 Vdc (other outputs available) (Model 311) 4-20 mA | Process Connection: 1/4" NPT (F) Proof Pressure: 2X FSO or 22.5K PSI (1,551 BAR), whichever is less |
| Input Impedance: (Model 111) 4K to 6K Ω Input Current: (Model 211) 8 mA nominal | Burst Pressure: 5X FSO or 23K PSI (1,586 BAR), whichever is less, Vacuum 5X FSO in gauge pressure |
| • Circuit Protection: (Model 211/311) RFI & EMI | • Approximate weight: 10 oz. (0.3 kg) nominal (options may increase weight) |
| (Model 211/311) Reverse polarity protected | PRESSURE RANGES |
| Response Time: <3 ms 10% to 90% Connection: 36" long PVC Jacketed cable, 4-conductor | • 0 to 30" WC thru 0 to 15K PSI (0 to 1,034 BAR) PSIG, PSIS, PSIA, PSIV & compound ranges available. |
| | THERMAL SPECIFICATIONS |
| | • Compensated: 0 °F to +180 °F (-17.7 °C to +82 °C) |
| | • Operating: -20 °F to +190 °F (-29 °C to +88 °C) |
| Standard configurations shown. | • Storage: -65 °F to +250 °F (-53 °C to +121 °C) |
| Please consult factory for other options. | • Effect on Zero/Span: ±1.0% FSO/100 °F |

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact



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