

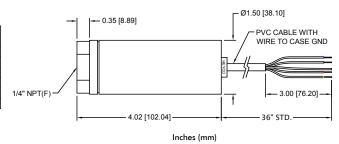




# MODEL 111/211/311

### INDUSTRIAL GRADE PRESSURE TRANSDUCER

STANDARD WIRING				
PIN OR WIRE COLOR	MODEL 111	MODEL 211	MODEL 311	
1/A/RED	+EXC	+EXC	+EXC/SIG	
2/B/GRN	+SIG	+SIG	N/C	
3/C/WHT	-SIG	N/C	N/C	
4/D/BLK	-EXC	-EXC/SIG	-EXC/SIG	
5/E/BLU	+SHUNT (OPT)	+SHUNT (OPT)	+SHUNT (OPT)	
6/F/BRN	-SHUNT (OPT)	-SHUNT (OPT)	-SHUNT (OPT)	



REF DIMENSIONS ONLY.
CONSULT FACTORY FOR ACTUAL DIMENSIONS.

#### 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.

#### **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

#### **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 datasheets for Models 311 I/GI/AI and 111/211/311XP



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# GP:50 MODEL 111/211/311

#### REFERENCE SPECIFICATIONS

### (Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	(Model 111) 0-1 thru 0-2000 PSI: to 3.0 mV/V (Optional 5 to 10 mV/V) >2000 - 15,000 PSI: from 1.0 to 3.0 mV/V >15K PSI: 1.0 to 2.5 mV/V (Model 211) 0-5 Vdc, 0-10 Vdc (Other outputs available) (Model 311) 4-20 mA
Excitation Voltage:	(Model 111) 3.5 to 15 Vdc (Model 211) 9.0 to 36 Vdc (Optional outputs may affect excitation) (Model 311) 9.0 to 36 Vdc
Bridge Resistance: (Values vary)	Silicone Sensor: 3 to $5K\Omega$ Strain Gage: $5K\Omega$ (350 $\Omega$ Option) (Some mV/V options are amplified, changes bridge resistance, consult factory)
Input Impedance:	(111): ~4K to 6K Ω Amplified Output
Circuit Protection:	(Model 211/311): RFI, EMI & Reverse polarity protected
Response Time:	(211/311): <3 ms 10% to 90% (111) Unamplified: 2-5 kHz

MATERIALS OF CONSTRUCTION	
Wetted Parts:	≤1,500 PSI 316L SST >2,000 PSI: 17-4 PH SST (Other materials available, consult factory)
Housing:	300 Series SS
Internal Fill:	Fomblin oil fill

ACCURACY (BFSL): Non-Linearity @ +70 °F	
Standard:	±0.5% FSO
Improved:	±0.2% FSO or ±0.1% FSO
Zero & Span Balance:	±1% FSO at + 70 °F for each

MECHANICAL	
Process Connection:	1/4" NPT (F) standard (options available)
Electrical Connection:	36" long PVC Jacketed cable, 4-conductor
Proof Pressure:	2X FSO or 22.5K PSI (1,551 BAR) (whichever is less)
Burst Pressure:	5X FSO or 23K PSI max. (1,586 BAR), whichever is less, Vacuum 5X FSO in gauge pressure
Approximate Weight:	10 oz. (0.3 kg) nominal (options may increase weight)

PRESSURE RANGES	
0 to 30" WC thru 0 to 15K PSI (1,034 BAR)	
PSIG, PSIS, PSIA, PSIV & compound ranges available	

THERMAL SPECIFICATIONS		
Operating Range:	-40 °F to +250 °F (-40 °C to +121 °C)	
Compensated Range:	0 °F to +180 °F (-17.7 °C to +82 °C)	
Storage Ambient:	-65 °F to +250 °F (-53 °C to +121 °C)	
Effect on Zero/Span:	±1.0% FSO/100 °F	
Improved or expanded temperature compensation available		

