



ULTRA HIGH DIFFERENTIAL PRESSURE TRANSMITTER

MODEL 114 / 214 / 314

FEATURES:

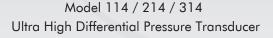
- Ranges from 500 to 20K PSID (35 to 1,379 BAR D)
- mV/V, Vdc and 4-20 mA output
- Compact welded, stainless steel construction
- Non-filled strain gauge technology
- Up to 0.20% FSO accuracy
- Intrinsically Safe (4-20 mA output only)

APPLICATIONS:

- Pump and compressors
- High pressure valve test
- Hydraulic test stand
- High pressure control systems
- High cyclic applications

PRODUCT OVERVIEW:

The Model 114/214/314 from GP:50 is a family of ultra-high range differential pressure transducers. The series offers +0.50% (BFSL) static accuracy over its standard ranges of 500 to 20K PSID (35 to 1,379 BAR D). Improved accuracy is available to +0.20%. Their rugged, compact design incorporates a unique, non-filled strain gauge sensing technology. These attributes allow the Model 114/214/314 to effectively support high-cycle pressure measurement requirements, even in space constrained environments. An all stainless steel construction, without seals or o-rings, provides high-corrosion resistance. Optional intrinsically safe versions are also available for extreme applications.



FIELD OPTIONS:

- mV/V, Vdc & 4-20 mA output
- Zero and span adjustment
- 80% and 100% shunt calibration
- Submersible option available
- Alternate connectors and pressure ports
- Intrinsically safe



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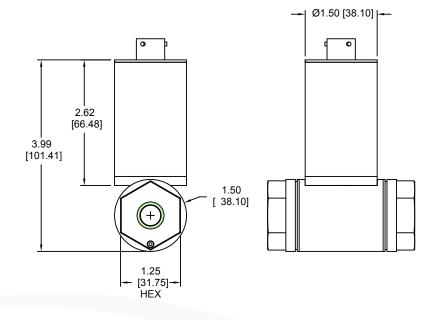
GP:50 MODEL 114 / 214 / 314

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

PIN	MODEL 114	MODEL 214	MODEL 314
1/RED	+EXC	+EXC	+EXC/SIG
2/GRN	+SIG	+SIG	N/C
3/WHT	-SIG	N/C	N/C
4/BLK	-EXC	-EXC/SIG	-EXC/SIG
5/BLU	N/C	N/C	N/C
6/BRN	N/C	N/C	N/C
SHIELD	OPEN	OPEN	OPEN



REFERENCE SPECIFICATIONS

ELECTRICAL

• Supply Voltage:

(Model 114) 3.5 to 15 Vdc excitation

(Model 214) 9.0 to 40 Vdc excitation, 0 to 10 Vdc, 13 to 40 Vdc excitation

(Model 314/314Z) 9.0 to 36 Vdc excitation

• Output Signal:

(Model 114) 3 mV/V

(Model 214) 0 to 5 Vdc, 0 to 10 Vdc (alternate outputs available)

(Model 314) 4-20 mA

• Zero Shift with Line Pressure: < ±1.0% FSO/1K PSID

• Circuit Protection: RFI and EMI

 \bullet Response Time: $<\!5$ ms 10% to 90%

 Connection: 36" long Belden 8723, 24 AWG, 4 conductor cable (or equivalent)

MATERIALS OF CONSTRUCTION

• Wetted Parts:

17-4 PH stainless steel (options available consult factory)

• Housing:

316 stainless steel

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

• Zero Balance and FSO: ±5% FSO at +70 °F

Standard: ±0.5% FSO Improved: ±0.2% FSO

MECHANICAL

- Process Connection: 1/4" NPT (F)
- Proof Pressure: 5X FSO or 22.5K PSI (1,551 BAR), whichever is less
- Burst Pressure: 10X FSO or 22.5K PSI (1,551 BAR), whichever is less
- Static Line Pressure: 5X differential pressure range or 22,500 psi, whichever is less
- Approximate weight: <1.5 lbs (0.7 kg), some options may affect weight

PRESSURE RANGES

500 PSID to 20K PSID (35 BAR D to 1,379 BAR D)

THERMAL SPECIFICATIONS

- Compensated: $0 \,^{\circ}\text{F}$ to $+180 \,^{\circ}\text{F}$ (-17.7 $^{\circ}\text{C}$ to $+82 \,^{\circ}\text{C}$)
- Operating: -20 °F to +190 °F (-29 °C to +88 °C)
- Storage: -65 °F to +250 °F (-53 °C to +121 °C)
- Effect on Zero/Span: ±2.0% 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 GP:50 for assistance with your application.

