



## HIGH RANGE DIFFERENTIAL PRESSURE TRANSMITTER

### MODEL 115 / 215 / 315



Model 115 / 215 / 315  
High Range Differential  
Pressure Transmitter



#### FEATURES:

- Ranges from 30 PSID (2 BAR D) to 7,500 PSID (317 BAR D)
- Line pressure to 10K PSI (690 BAR)
- Rugged, all welded, 316L construction
- No seals or o-rings
- Compact size
- Bi-directional operation
- Optional FM & CSA Explosion-proof approval
- Optional FM, CSA or ATEX Intrinsically safe approval

#### APPLICATIONS:

- Pump and compressor skids
- Hydraulic test stands
- Drilling Rig top drive controls

#### PRODUCT OVERVIEW:

The Model 115/215/315 from GP:50 is a family of compact, high-range differential pressure transducers. Series units are offered in ranges as low as 0 to 30 PSID (0 to 2 BAR D), with a line pressure range to 10K PSI (690 BAR). Their all-welded, corrosion-resistant, 316L stainless steel construction is without seals or o-rings, helping to ensure their continued reliability within demanding environments. Optional FM, CSA, ATEX intrinsic safety approvals are also available.

#### FIELD OPTIONS:

- mV/V, Vdc and 4-20 mA output
- Zero & span adjustments
- Alternate process and electrical connections
- Bi-directional operation
- Line pressure to 10K PSI (690 BAR)

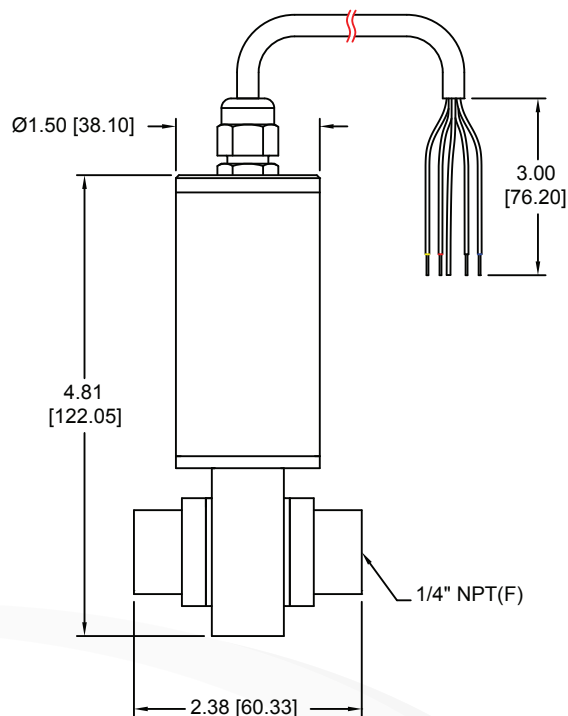
# GP:50 MODEL 115 / 215 / 315

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

| WIRE   | MODEL 115    | MODEL 215    | MODEL 315    |
|--------|--------------|--------------|--------------|
| 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  | +SHUNT (OPT) | +SHUNT (OPT) | +SHUNT (OPT) |
| 6/BRN  | -SHUNT (OPT) | -SHUNT (OPT) | -SHUNT (OPT) |
| SHIELD | OPEN         | OPEN         | OPEN         |



## REFERENCE SPECIFICATIONS

| ELECTRICAL   |
|--|
| <ul style="list-style-type: none"> <li><b>Supply Voltage:</b><br/>(Model 115) 3.5 to 15 Vdc excitation<br/>(Model 215) 9.0 to 40 Vdc excitation<br/>0 to 10 Vdc output requires 13 to 40 Vdc excitation<br/>(Model 315/315Z) 9.0 to 36 Vdc excitation</li> <li><b>Zero Balance and FSO:</b> <math>\pm 2\%</math> FSO at <math>+70\text{ }^\circ\text{F}</math></li> <li><b>Output Signal:</b><br/>(Model 115) 3 mV/V<br/>(Model 215) 0 to 5 Vdc (alternate outputs available)<br/>(Model 315) 4-20 mA</li> <li><b>Input Impedance:</b> (Model 115) 5K <math>\Omega</math> nominal</li> <li><b>Load Impedance:</b><br/>(Model 115) 50K <math>\Omega</math> min. for <math>&lt;0.1\%</math> FSO attenuation<br/>(Model 215) 750 <math>\Omega</math> max. at 24 Vdc and 1,350 <math>\Omega</math> at 36 Vdc</li> <li><b>Circuit Protection:</b> RFI and EMI</li> <li><b>Connection:</b> 36" long PVC jacketed, 24 AWG, 4 conductor cable with shield</li> </ul> |
| MATERIALS OF CONSTRUCTION  |
| <ul style="list-style-type: none"> <li><b>Wetted Parts:</b><br/>316 stainless steel (options available consult factory)</li> <li><b>Housing:</b> 316 stainless steel</li> </ul>  |

| STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ $+70\text{ }^\circ\text{F}$ )   |
|---|
| Standard: $\pm 1.0\%$ FSO<br>Improved: $\pm 0.5\%$ FSO or $\pm 0.2\%$ FSO   |
| MECHANICAL  |
| <ul style="list-style-type: none"> <li><b>Process Connection:</b> 1/4" NPT (F)</li> <li><b>Static Line Pressure:</b> 2000 PSI<br/>(10,000 PSI optional with flange girdle)</li> <li><b>Zero shift with line pressure:</b> <math>&lt; \pm 1.0\%</math> FSO/1K PSID</li> <li><b>Proof Pressure:</b> 10X FSO or 3K PSI (207 BAR) whichever is less, 10K PSI (690 BAR) optional</li> <li><b>Burst Pressure:</b> 15X FSO or 4K PSI (276 BAR) whichever is less, 10.5K PSI (724 BAR) optional</li> <li><b>Approximate Weight:</b> <math>&lt; 1.5</math> lbs (0.7 kg)<br/>(some options may affect weight)</li> </ul>  |
| PRESSURE RANGES   |
| <ul style="list-style-type: none"> <li>30 PSID (2 BAR D) to 7,500 PSID (317 BAR D)</li> </ul>   |
| THERMAL SPECIFICATIONS  |
| <ul style="list-style-type: none"> <li><b>Compensated:</b> <math>+70\text{ }^\circ\text{F}</math> to <math>+180\text{ }^\circ\text{F}</math> (<math>+21\text{ }^\circ\text{C}</math> to <math>+82\text{ }^\circ\text{C}</math>)</li> <li><b>Operating:</b> <math>-20\text{ }^\circ\text{F}</math> to <math>+190\text{ }^\circ\text{F}</math> (<math>-29\text{ }^\circ\text{C}</math> to <math>+88\text{ }^\circ\text{C}</math>)</li> <li><b>Storage:</b> <math>-65\text{ }^\circ\text{F}</math> to <math>+250\text{ }^\circ\text{F}</math> (<math>-53\text{ }^\circ\text{C}</math> to <math>+121\text{ }^\circ\text{C}</math>)</li> <li><b>Effect on Zero/Span:</b> <math>\pm 2.0\%</math> FSO/100 <math>^\circ\text{F}</math></li> </ul> |

**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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