

LOW RANGE HIGH LINE DIFFERENTIAL PRESSURE TRANSDUCER

MODEL 216 / 316

FEATURES:

- 2.5" WCD thru 200 PSID (14 BAR)
- Up to 5K PSI (345 BAR) line pressure options available
- Up to $\pm 0.05\%$ FSO accuracy
- Unidirectional and bidirectional outputs
- Wet/wet design
- All welded 316L stainless steel wetted parts
- Compact size
- Fast response time

APPLICATIONS:

- Automotive test stands
- Leak decay
- In-laboratory R&D
- Energy management
- Emissions management
- HVAC

PRODUCT OVERVIEW:

The Model 216/316 from GP:50 is a family of low range, high line, differential pressure transducers. Their compact design incorporates GP:50's own digital correction circuit technology, for high accuracy and extended service life across a variety of applications.

FIELD OPTIONS:

- Wide selection of process and electrical connections
- Submersible options (Meets IP67)
- Alternate wetted materials
- Custom calibrations



Model 216 / 316
Low Range High Line
Differential Pressure Transducer



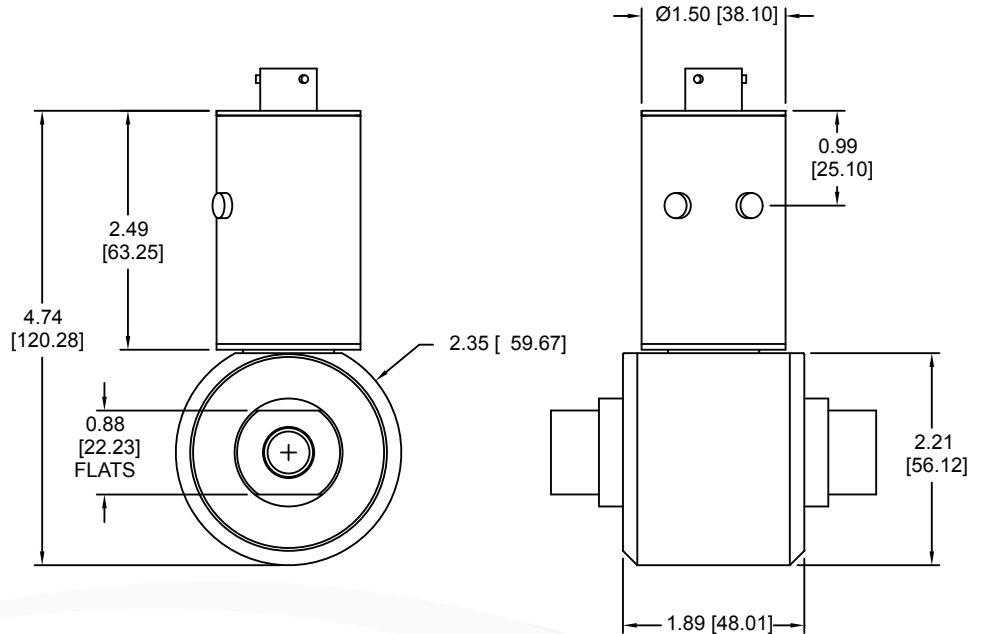
GP:50 MODEL 216 / 316

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

PIN	MODEL 216	MODEL 316
1/RED	+EXC	+EXC/SIG
2/GRN	+SIG	N/C
3/WHT	N/C	N/C
4/BLK	-EXC/SIG	-EXC/SIG
5/BLU	N/C	N/C
6/BRN	N/C	N/C
SHIELD	OPEN	OPEN



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Excitation Voltage:** 8.0 to 32 Vdc
- **Output Signal (at +70 °F):**
(Model 216) 0 to 5 Vdc, 0 to 10 Vdc
(Model 316) 4-20 mA
- **Load Impedance:**
(Model 316) 750 Ω maximum
(Model 216) ≤ 10K Ω
- **Zero/span adjustable to ±10%**

MATERIALS OF CONSTRUCTION

- **Wetted Parts:**
316 stainless steel (Hastelloy available)
- **Housing:**
316L stainless steel

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

- ±0.5% FSO standard
- Improved ±0.2, ±0.1, ±0.05% FSO

STATIC LINE SHIFT

- Less than ±1% FSO/1K PSI (69 BAR) for ranges ≥0-21" WC
- Less than ±2% FSO/1K PSI (69 BAR) for ranges ≤0-20" WC

MECHANICAL

- **Proof Pressure:** 500 PSI (35 BAR) single ended
- **Burst Pressure:** 4K to 5K PSI (276 to 345 BAR);
750 PSI (52 BAR) for welded port
- **Static Line Pressure:** 2K PSI (138 BAR) standard
5K PSI (345 BAR) optional (consult factory)
500 PSI (35 BAR) for welded pressure ports (LB option)
- **Response Time:** <50 ms for 90% FSO
- **Frequency Response:** flat to 100 Hz
- **Resolution:** infinite
- **Orientation shift (90°): zero:** ±1 in WC
- **Silicone oil filled** (Krytox and other options available)
- **Approximate weight:** 2.0 lbs (0.06 kg)

PRESSURE RANGES

- 2.5" WCD thru 200 PSID (alternate ranges available)

THERMAL SPECIFICATIONS

- **Compensated (ambient):** +32 °F to +180 °F (0 °C to +82 °C)
(expanded ranges available)
- **Operating (ambient):** 0 °F to +185 °F (-17 °C to +85 °C)
- **Zero Balance and Span:** Adjustable
- **Zero & Span shift:**
Std on 0.50% & 0.20%: ±1.0%/100 °F
Std on 0.10%: ±0.50%/100 °F
Std on 0.05%: ±0.30%/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.