

## DIFFERENTIAL PRESSURE

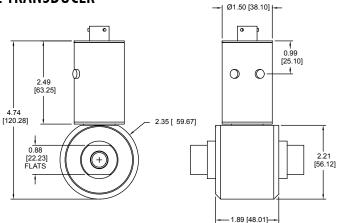
**REF DIMENSIONS ONLY.** 

**CONSULT FACTORY FOR ACTUAL DIMENSIONS** 



# MODEL 216 / 316 LOW RANGE HIGH LINE DIFFERENTIAL PRESSURE TRANSDUCER

MODEL 316 +EXC/SIG
+EXC/SIG
N/C
N/C
-EXC/SIG
N/C
N/C
OPEN



#### **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.

#### 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

#### **APPLICATIONS:**

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

#### **FIELD OPTIONS:**

- Temperature and line pressure outputs available
- Wide selection of process and electrical connections
- Submersible options (Meets IP67)
- Alternate wetted materials
- Custom calibrations



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# GP:50 MODEL 216 / 316

### **REFERENCE SPECIFICATIONS**

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

ELECTRICAL	
Output Signal: (at +70 °F)	(Model 216) 0 to 5 Vdc, 0 to 10 Vdc (Model 316) 4-20 mA
Excitation Voltage:	9.0 to 32 Vdc
Connection:	36" long PVC jacketed, 18 AWG, 4 conductor cable (or equivalent)
Circuit Protection:	RFI, EMI & Reverse polarity protected
Response Time:	10 mSec Typ

MATERIALS OF CONSTRUCTION		
Wetted Parts:	316 Stainless Steel (Hastelloy available)	
Housing:	316L Stainless Steel	
Internal Fill:	Silicone (other options available, consult factory)	

ACCURACY (BFSL): Hysteresis, Non-Linearity & Repeatability @ +70 °F	
Standard:	±0.5% FSO
Improved:	$\pm 0.2\%$ FSO, $\pm 0.1\%$ and $\pm 0.05\%$ FSO
Zero & Span Balance:	Adjustable to ±10% FSO

MECHANICAL	
Process Connection:	1/4" NPT (F)
Proof Pressure:	500 PSI (35 BAR) single ended
Burst Pressure:	750 PSI (52 BAR) for welded port; 2.5K PSI (172 BAR) w/Flanges
Static Line Pressure:	
Standard Flanges:	2K PSI (138 BAR)
<b>Optional Flanges:</b>	5K PSI (345 BAR)
Welded Ports:	500 PSI (35 BAR)
Static Line Shift:	$<\pm1.0\%$ FSO/1000 PSI for ranges $>20"$ WC $<\pm2.0\%$ FSO/1000 PSI for ranges $\leq20"$ WC
Orientation Shift (90°):	Up to 6%, range dependent
Approximate weight:	2.0 lbs (0.06 kg)
Environmental:	Designed to IP67 (some options may affect this)

#### PRESSURE RANGES

2.5" WCD thru 200 PSID (alternate ranges available)

THERMAL SPECIFICATIONS	
Operating Range:	0 °F to +185 °F (-17.7 °C to + 85 °C) (Unit will operate to -40 °F with delayed response time)
Compensated Range:	+32 °F to +180 °F (0 °C to +82 °C)
Storage Ambient:	-20 °F to 200 °F (-29 °C to +93 °C)
Effects on Zero & Span:	±0.5% FSO/100 °F ±0.3% FSO/100 °F with 0.05% accuracy
Improved or expanded temperature compensation available	



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