



LOW RANGE, HIGH LINE DIFFERENTIAL PRESSURE TRANSMITTER Models 216, 316

"LB" Welded Port
Option Shown



FEATURES:

- Wet-wet DP
- High Line Pressure rating
- Compact size
- 316 SST wetted parts
- Fast frequency response

PRESSURE RANGES:

- From 0-5 to 0-2,000 in. wcd and 0-1 to 0-200 psi

LINE PRESSURE:

- 2000 psi standard, others available
- 500 psi on Welded Port option LB

ACCURACY:

- See options

Accuracy:

- (Includes Hysteresis, Non-linearity, Non-Repeatability)
- Option B Standard: $\pm 0.5\%$ FSO (RSS)
- Option C Standard: $\pm 0.2\%$ FSO (RSS)
- Option D Standard: $\pm 0.1\%$ FSO (RSS)

Base (Line) Pressure:

- 2000 psi, maximum / 3000 psi, maximum, options FP & LA, 500 psi, maximum, option LB

Static Line Shift:

- Less than $\pm 1\%$ FSO/1000 psi for ranges 0-21" wc & higher
- Less than $\pm 2\%$ FSO/1000 psi for ranges 0-20" wc & lower

Orientation Shift: (90°)

- Zero: ± 1 in wc

Resolution:

- Infinite (0.02% FSO practical minimum)

Temperature Limits:

- Compensated: +70° F to +180° F
- Operating: 0° F to +180° F
- Storage: -20° F to +200° F
- Effect on Zero & Span: $< \pm 2.0\%$ FSO/100°F for each

Electricals:

- Supply Voltage:
 - (Model 216) 10.2-42 Vdc
 - (Model 316) 13-37 Vdc
- Output at 70°F:
 - (Model 216) 0 \pm 5 Vdc FSO
 - (Model 316) 4-20 mA FSO
- Output Loading:
 - (Model 216) 3000 ohms, minimum
- Load Impedance:
 - (Model 316) 3000 ohms, minimum
- Zero Balance / Span: Adjustable to $\pm 20\%$ FSO

Mechanicals:

- Response Time: <100 milliseconds for 90% FSO/70°F
- Frequency Response: Flat to 10HZ
- Stability: Less than $\pm 0.25\%$ FSO/6 months
- Silicon Oil fill

Proof Pressure at 70°F:

- 1000 psi single ended is standard / 1000 psi single ended for options FP & LA / 500 psi single ended for option LB

Burst Pressure at 70°F:

- 4000 psi is standard / 5000 psi for options FP & LA/750 psi for option LB

Weight:

- 5.4 lbs. normal (std.) / 6.5 lbs. options FP & LA/2.0 lbs. option LB

Connections:

- Pressure: 1/4" NPT (F)
- Electrical: Cable (24 AWG) 36" long

Enclosure Materials:

- 316 SST

Pressure Cavity Material:

- 316 SST and Viton O-Ring

* All 316 SST on Welded Ports. Option LB

WIRING:

A/1 RED
B/2 GREEN
C/3 WHITE
D/4 BLACK
E/5 BLUE
F/6 BROWN
SHIELD

216

+EXC.
+SIGNAL
NC
-EXC./SIGNAL
NC
NC
OPEN

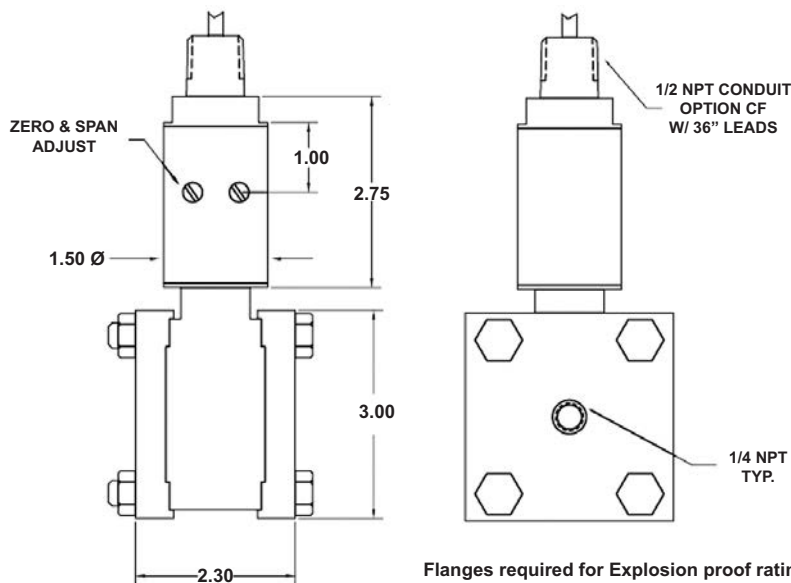
316

+EXC./SIGNAL
NC
NC
-EXC./SIGNAL
NC
NC
OPEN

Approvals



Some options will affect dimensions. Consult factory if important.



Flanges required for Explosion proof rating

A5SL-16.00 Rev C



LOW RANGE, HIGH LINE DIFFERENTIAL PRESSURE TRANSMITTER

Models 216, 316

Typical configurations (consult factory for more options)

MODEL

- 216** 0-5 Vdc
- 316** 4-20 mA
- 216X** 0-5 Vdc FM Explosion Proof
- 316X** 4-20 mA FM Explosion Proof
- 216P** 0-5 Vdc FM & CSA Explosion Proof
- 316P** 4-20 mA FM & CSA Explosion Proof

ACCURACY

- B** 0.5% FSO
- C** 0.2% FSO
- D** 0.1% FSO

PRESSURE RANGE

IN. WCD

- | | |
|---------------|----------------------|
| WT 5 | XM 150 |
| WV 7.5 | XO 200 |
| WX 10 | XQ 300 |
| WZ 15 | XS 500 |
| XB 20 | XU 750 |
| XD 30 | XW 1000 |
| XF 50 | XY 1500 |
| XH 75 | YA 2000 |
| XK 100 | SZ Non-Stand. |

PSID

- | | |
|----------------------|---------------|
| PC 1 | PR 20 |
| PE 2 | PO 25 |
| PG 3 | PT 30 |
| PJ 5 | PX 75 |
| PL 7.5 | PZ 100 |
| PP 15 | RB 150 |
| SZ Non-Stand. | RD 200 |

OPTIONS

ELECTRICAL CONNECTIONS

Note: Explosion Proof models require 1/2" NPT (M) electrical connection (CF)

- AA** 36" 22 AWG wire leads w/strain relief
- CA** Bendix PTIH-10-6P
- CB** Bendix MS3102E-14S-6P
- CE** Terminal Block
- CF** 1/2" NPT(M) with 36" leads, Standard on Explosion Proof models
- CJ** DIN 43650 Form A (Mate Included)
- CL** 1/2" NPT (M) conduit, 2' vented polyurethane jacket cable
- CO** Al-ALY Junction Box - 1/2" NPT F Connection with terminal block
- CT** Teflon jacketed cable
- DE** IP-67 vented Poly cable (24 AWG)
- CW** Submersible Housing w/1/2" NPT (M) & 8' poly 24 AWG non-vented cable
- CZ** Alternate connector/cable/other

ALTERNATE PRESSURE PORT

- FA** MS33649-4 (F)
- FC** 3/8" NPT (F)
- FH** 1/8" NPT (F)
- LA** 3,000 psi flanges, (std. pressure port)
- LB** Integral welded process ports (500 PSI Max line & proof) 1/4" NPT F-Std.
- FZ** Non-Standard Pressure Port

GENERAL

- GB** Alternate Electronic Output (specify Zero & Span output values)
- GE** Improved Temp. Compensation to $\pm 0.5\%$ FSO/100°F
- GH** 100% Shunt Calibration
- GL** Cleaned for Oxygen Service
- MH** 3:1 Max Ranging, (Model 316 only)
- MS** Bi-Directional Differential Pressure, (316 - 12 mA @ Zero PSID)
- GS** 0-10 Vdc FSO, (Model 216 Requires 16-42 Vdc excitation)
- HL** RFI Protection
- HZ** Teflon O-ring
- LO** 10-32 Bleed Screw both ports

NOTE:

Specifications reflect standard product, improved performance / mechanical options available.

Modifications may alter specs, consult factory for more information.



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