



ULTRA HIGH DIFFERENTIAL PRESSURE TRANSMITTER

Models 114, 214, 314



FEATURES:

- Rugged
- No fill
- Intrinsically Safe

PRESSURE RANGES:

- From 500 to 0-20,000 psid

ACCURACY:

- From $\pm 1.0\%$ FSO to $\pm 0.2\%$ FSO (RSS)
(See specifications)

WIRING:

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

114

+EXC.
+SIGNAL
-SIGNAL
-EXC.
NC OPTION GH
NC OPTION GH
OPEN

214

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

314

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

Accuracy:

Static error band (Includes Hysteresis, Non-linearity, Non-Repeatability)

- Series A: $\pm 1.0\%$ FSO (RSS)
- Series B: $\pm 0.5\%$ FSO (RSS)
- Series C: $\pm 0.2\%$ FSO (RSS)

Full Scale Differential Pressure Ranges:

- $\pm 500, 600, 750, 1000, 1500, 2000, 2500, 3000, 5000, 7500, 10K, 15K, 20K$ psid

Static Line Pressure:

- 5X differential pressure range or 22,500 psi, whichever is less.

Temperature Limits:

- Compensated: 0° F to +180° F
- Operating: -20° F to +190° F
- Storage: -65° F to +250° F

Temperature Compensation:

- Zero & Span: $\pm 2.0\%$ FSO/ 100° F

Full Scale Output (Span) High Side (at 0 psid):

- (Model 114) 3.0 mV/V $\pm 2\%$ at 70° F
- (Model 214) 5.0 Vdc $\pm 2\%$ at 70° F
- (Model 314) 16.0 (4-20mA) $\pm 2\%$ at 70° F

Zero Shift with Line Pressure:

- Less than $\pm 1.0\%$ FSO/1000 psid

Electricals:

- Excitation Voltage:
 - (Model 114) 3.5-15 Vdc
 - (Model 214) 9-40 Vdc
 - (Model 314 & Model 314Z) 9-36 Vdc
- Output at 70° F:
 - (Model 114) 3 mV/V $\pm 2\%$ FSO
 - (Model 214) 5.0 Vdc $\pm 2\%$ FSO
 - (Model 314) 16.0 (4-20mA) $\pm 2\%$ FSO
 - (Model 314Z) 4-20mA $\pm 2\%$ FSO
- Zero Balance:
 - (Model 114) 0.0 mV/V $\pm 5\%$ FSO at 70° F
 - (Model 214) 0.0 Vdc $\pm 5\%$ FSO at 70° F
 - (Model 314) 4.0 mA $\pm 5\%$ FSO at 70° F
- Range Calibration Signal: Shunt resistance value provided on calibration card for 100% FSO. (Standard on Model 114)

Mechanicals:

- Proof Pressure: 5 x rated Differential Pressure Range, or 22,500 psi, whichever is less.
- Burst Pressure: 10 x rated Differential Pressure Range, or 22,500 psi, whichever is less.

Pressure Connections:

1/4" NPT (F)

Electrical Connections:

6 conductor cable, 24 AWG 36" long, stand. optional connectors available.

Identification:

Imprinted SST nameplate welded to body

Wetted Materials:

Types 316 and 17-4 PH SST

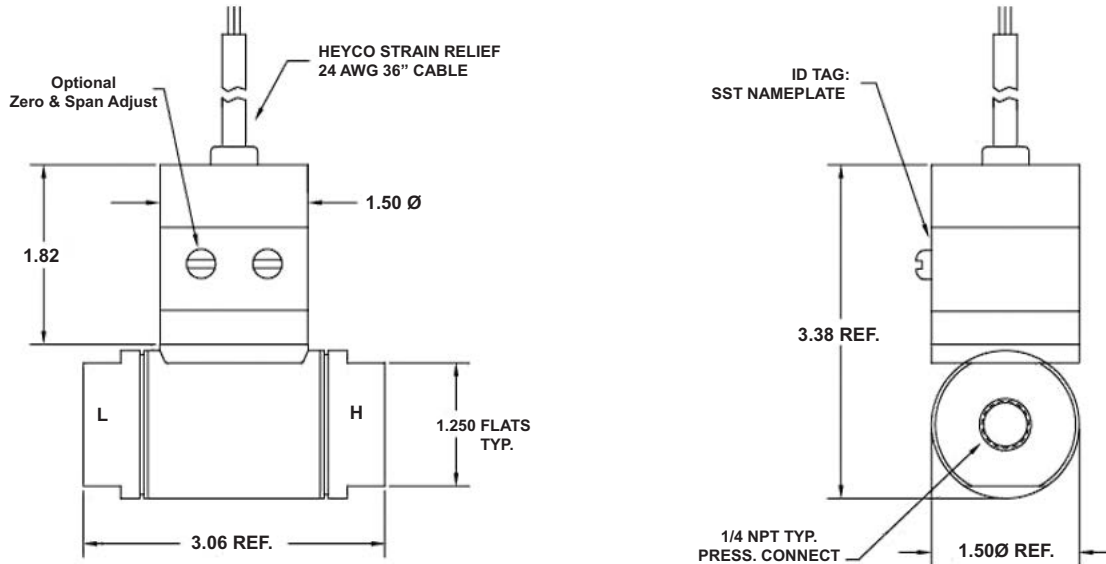
Enclosure Materials:

316 SST



ULTRA HIGH DIFFERENTIAL PRESSURE TRANSMITTER

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Typical configurations
(consult factory for more options)

MODELS

114	3 mV/V
214	5 Vdc
314	4 - 20 mA
314Z	4 - 20 mA (Intrinsically Safe)

ACCURACY (Series)

A	±1.0% FSO (RSS)
B	±0.5% FSO (RSS)
C	±0.2% FSO (RSS)

PRESSURE RANGE (PSID)

RH 500	RT 3000
RJ 600	RV 5000
RK 750	RX 7500
RM 1000	RZ 10,000
RO 1500	SB 15,000
RR 2000	SD 20,000
RS 2500	SZ Other

NOTE:

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

Modifications may alter specs, consult factory for more information.

OPTIONS

- AA** None
- ALTERNATE CONNECTOR OR CABLE**
- CA** Bendix PTIH-10-6P (Mate: PT06E-10-6S [SR] not included)
- CB** MS3102E-14S-6P
- CD** Cannon WK6-32S (Mate WK6-21C not supplied)
- CE** Terminal Block
- CF** 1/2" NPT (M) thread with 36" potted leads
- CJ** DIN 43650 (includes mate) (Hirschmann type)
- CK** Lumberg RSF-3/12 mm
- CM** Bendix PTIH-8-4P, or equal
- CO** Junction Box (thermocouple type) with terminal block
- CP** Cannon WK4-32S
- CW** Summersible housing, 8' polyurethane jacket non-vented cable, neoprene grommet & 1/2" NPT(M) Conduit fitting (0-500 psi max. for non-vented units only.)
- CZ** Alternate Connector/Cable/Other
- HK** NEMA-4X w/24" Cable

PRESSURE PORT

- FA** MS33649-4 (1/4" AN-10050, female)
- FC** 3/8" NPT (F)
- FD** MS33656-4 (7/16-20 UNF-3A, for 1/4" tube)
- FH** 1/8" NPT (F)
- FJ** 1/4" NPT (M)
- FL** 1/8" NPT (M)
- LG** SAE-4 (F) O-ring seal thread
- LH** SAE-6 (M) O-ring seal straight thread (with O-ring)
- LP** 1/4" BSPP (F)
- LT** SAE-4 (M) O-ring seal straight thread (with O-ring)
- FZ** Other

GENERAL

- GA** Standardized output to ±0.5% FSO
- GB** Alternate outputs. Specify zero and span
- GE** Improved temp. compensation to ±0.5% FSO/ 100°F for zero & span respectively
- GG** Alternate shunt calibration signal
- GH** Internal shunt calibration resistor set to 100 ±0.5% FSO (N/A with 314Z)
- GJ** Add zero and span controls
- GK** Inconel Pressure cavity
- GS** 0-10 Vdc FSO, (Required 16-32 Vdc exc.)
- HL** RFI protection (for unit in proximity to radio transmitter)
- MA** 1-5 Vdc FSO
- GZ** Customer special



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