

# Pressure, Level & Temperature Transmitters & Transducers

2770 Long Road, Grand Island, NY 14072 USA Tel. (716) 773-9300 • Fax (716) 773-5019 sales@gp50.com · www.gp50.com

# DIFFERENTIAL PRESSURE TRANSMITTER

Models 115, 215, 315, 115X/P, 215X/P, 315X/P/Z



#### **FEATURES:**

- Rugged, all welded, totally encapsulated electronics
- Leakproof. No O-ring construction
- Small size
- All SST wetted parts
- Base pressure to 10,000 psi (with option HM)
- Explosion Proof & Intrinsically Safe Approvals

#### PRESSURE RANGES:

- From 30 to 5000 psid
- From 2 to 300 bar
- (Bi-directional available)

#### **Approvals**





# **WIRING:**

A/1 RED +EXC. +SIGNAL B/2 GREEN C/3 WHITE -SIGNAL D/4 BLACK -EXC. E/5 BLUE

NC OPTION GH NC OPTION GH F/6 BROWN SHIFI D OPFN

115

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

215

OPFN

NC -EXC./SIGNAL NC OPTION GH NC OPTION GH NC OPTION GH **OPFN** 

NC

315

+EXC./SIGNAL

#### Zero Balance:

(Model 115) 0.0 mV/V ±2% FSOat 70°F at 10 Vdc (Model 215) 0.0 Vdc ±2% FSO at 70°F at 24 Vdc (Model 315) 4.0 mA ±2% FSO at 70°F at 24 Vdc

### **Temperature Compensation:**

• Effect on Zero / Span ≤ ±2.0% FSO/100°F for each

#### Electricals:

(Consult factory for ATEX approval)

Excitation Voltage:

(Model 115) 3.5-15 Vdc

(Models 215/215X) 9-40 Vdc / 10.5-32 Vdc

(Models 315/315Z) 9-36 Vdc (Model 315X) 13-36 Vdc

Output Current:

(Model 215) 2.0 mA maximum for less than 0.1% FSO attenuation.

Output at 70°F:

(Model 115) 3 mV/V ±2% FSO

(Models 215/215X) 0 ±5 Vdc ±2% FSO

(Models 315/315X/315Z) 4-20 mA ±2% FSO

· Load Impedance:

(Model 115) 50,000 ohms min. for less than 0.1% FSO attenuation (Model 215) 750 ohms maximum at 24 Vdc & 1350 ohms at 36 Vdc

· Input Impedance:

(Model 115) 5000 ohms nominal

Input Current:

(Model 215) 10 mA nominal

#### **Temperature Limits:**

- Compensated: +70° to +180° F
- Operating: -20° to +190° F
- Storage: -65° to +250° F

#### **Mechanicals:**

- Proof Pressure: 10 X full scale pressure range or 3000 psi, whichever is less.
- Burst Pressure: 15 X full scale pressure range or 4000 psi, whichever is less.
- · Weight: 16 oz. nominal.
- Static Line Pressure: 2000 psi maximum (10,000 psi option)
- Static Line Shift (Zero Shift): ≤ ±1% FSO/1000 PSI
- · Wetted Materials: 316 SST
- Enclosure Material: 17-4 and 316 SST
- · Mounting: Pressure Port

#### **Connections:**

- Pressure: 1/4" NPT (F)
- · Electrical Cable:

(Model 115, 215) 36" long, 4 conductor (Model 315) 36" long, 2 conductor

A5SL-15.00 Rev C



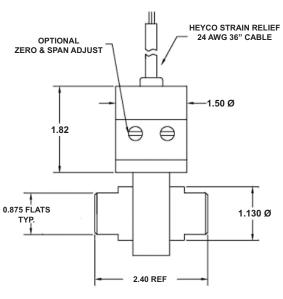
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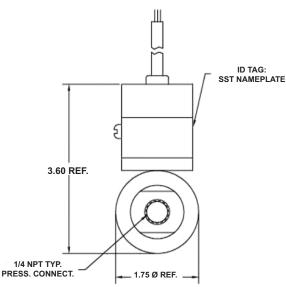
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Some options will affect dimensions. Consult factory if important.





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

Modifications may alter specs, consult factory for more information.

#### MODEL:

115 3 mV/V 215 0-5 Vdc 4-20 mA 315 215X

0-5 Vdc Explosion Proof 315X 4-20 mA Explosion Proof 4-20 mA Intrinsically Safe 315Z

#### ACCURACY:

A - 1.0% FSO / B - 0.5% FSO / C - 0.2% FSO

PRESSURE RANGE (PSI): \*\*Available with option HM only 30 RF RS 2500 PV 50 RH 500 RT 3000\*\*

PX 75 5000\*\* 600 RV RJ100 RK 750 RW 6000\*\* **RX** 7500\*\* RR 150 **RM** 1000 200 1500 RD RO SZ Other RE 250 RR 2000

#### **OPTIONS**

AA None (standard connector)

## ALTERNATE CONNECTOR OR CABLE

Bendix PTIH-10-6P (Mate:PTO6E-10-6S [SR], not supplied) CA СВ Bendix CF3102E-14S-6P(Mate: CF 3106E-14A-6S (not supplied))

CE

CF 1/2" NPT(M) thread w/24" potted leads. (Std. on exp. proof models)

CH NEMA-4X cable, 8' vented polyurethane jacket cable

DIN 43650 (includes mate) CJ

CL 1/2" NPT (M) conduit, 2' vented polyurethane jacket cable CO Junction Box (thermocouple type) and Terminal Block Teflon jacketed cable, Tefzel used on submersible units,

(Options CH, CL, DE)

#### ALTERNATE PRESSURE PORT

FΑ MS33649-4 (1/4 AND-10050, [F])

FC 3/8" NPT (F)

FΖ Non-Standard Pressure Port

#### **GENERAL**

CW Submersible non-vented cable (max. 500 psi external)

DE IP-67 (NEMA-6) vented polyurethane cable, neoprene grommet GA

Standardized Output to ±0.5% FSO

GB Alternate Full Scale, Outputs that are non-standard

Improved Temp. Compensation to ±0.5% FSO/100°F for Zero & Span GE GF

Expanded process temperature range, -65 to 250°F (±2% FSO/100°F) GG Alternate Calibration Resistor Signal

GH Internal Calibration Resistor, set to 100% ±0.5% FSO

GJ Zero & Span Controls (Approximately ±20% FSO) 215 & 315 only GL

Cleaned for Oxygen Service GS

0-10 Vdc FSO, Model 215. (Requires 16-40 Vdc excitation)

HK NEMA-4X rating

HL RFI Protection (for unit in proximity to radio transmitter). HM

10,000 psi Base Pressure Flange Girdle.

Proof pressure 10 x full scale range or 10,000 psi, whichever is less. Burst pressure 15 x full scale range or 10,500 psi, whichever is less.

HR ±15 Vdc Excitation, Model 215

MD Zero and Span Controls for Explosion-Proof Units.

Bi-Directional Differential Pressure allows for both positive & Negative signal MS

(Model 315 has a 12 mA zero)