

DIFFERENTIAL PRESSURE TRANSDUCER/TRANSMITTER

Models 115, 215, 315



FEATURES:

- Rugged, all-welded, totally encapsulated electronics
- Leakproof. No O-ring construction
- Small size
- All stainless steel wetted parts
- Many easy-to-order options
- Base pressure to 10,000 psi (with option HM)

PRESSURE RANGES:

- From 30 to 5000 psid
- From 2 to 300 bar
- (Bi-directional available, see ordering guide.)

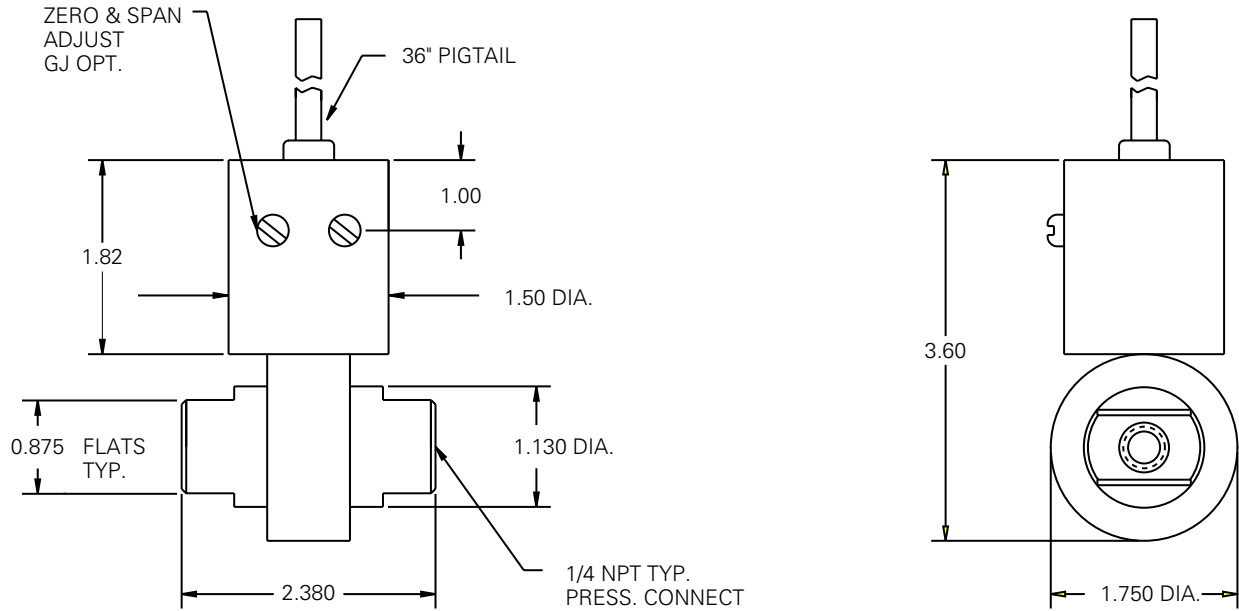
MODEL	OUTPUT @ 70° F*	EXITATION
115	3 mV/V \pm 2% FSO	3.5-15 Vdc
215	0 \pm 5 Vdc \pm 2% FSO	9-40 Vdc
315	4-20 mA \pm 2% FSO	9-40 Vdc
215X 315X*	Explosion-Proof rated Class I, II, III Division I, Groups A, B, D, E, F, & G. (*13-37 Vdc Exitation)	
315Z	FM Intrinsically Safe, See 311Z for layout	

GENERAL PURPOSE

OUTLINE



Some options will affect dimensions.
Consult factory if important.



WIRING CODE

WIRING CODE

		115	215	315
A/1	Red	+ Excit.	+ Excit.	+ Excit./Signal
B/2	Green	+ Signal	+ Signal	NC
C/3	White	- Signal	NC	NC
D/4	Black	- Excit.	- Excit./Signal	- Excit./Signal
E/5	Blue	NC Option GH	NC Option GH	NC Option GH
F/6	Brown	NC Option GH	NC Option GH	NC Option GH
	Shield	Open	Open	Open

SPECIFICATIONS

Unless otherwise stated, these specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. We invite your inquiry.

SPECIFICATIONS

Base (Line) Pressure*	2000 psi maximum (10,000 psi option)
Wetted Materials *	15-5 and 316 stainless steel
Zero Shift With Base Pressure	$\leq \pm 1\%$ FSO/1000 psib
Resolution	Infinite (practical minimum of 0.02% on 115, 215 and 0.06% on 315)
Temperature Limits*	
Compensated	+70 to +180°F
Operating	-20 to +190°F
Storage	-65 to +250°F
Temperature Compensation*	
Zero	$\leq \pm 2\%$ FSO/100°F
Span	$\leq \pm 2\%$ FSO/100°F
Electricals	
Zero Balance*	
Model 115	0.0 mV/V $\pm 5\%$ FSO at 70°F @ 10 Vdc
Model 215	0.0 Vdc $\pm 5\%$ FSO at 70°F @ 24 Vdc
Model 315	4.0 mA $\pm 5\%$ FSO at 70°F @ 24 Vdc
Input Impedance	
Model 115	5000 ohm nominal
Input Current	
Model 215	10 mA nominal
Load Impedance	
Model 115	50,000 ohms minimum for less than 0.1% FSO attenuation.
Model 315	1000 ohms maximum at 29 Vdc and 250 ohms maximum at 14 Vdc.
Output Current	
Model 215	2.0 mA maximum for less than 0.1% FSO attenuation.
Insulation Resistance	Greater than 1000 megohms at 50 Vdc and 70°F
Mechanicals	
Proof Pressure*	10 times full scale pressure range or 3000 psi, whichever is less
Burst Pressure	15 times full scale pressure range or 4000 psi, whichever is less.
Weight	16 oz. nominal.
Connections	
Pressure*	1/4" NPT (F)
Electrical*	
Cable	
Model 115, 215	Belden 9536, 6 conductor (or equivalent), 24" long
Model 315	Belden 8723, 4 conductor (or equivalent), 24" long
Enclosure Material	316 Stainless Steel
Mounting	Pressure Port

* See modifications on ordering guide.

ORDERING GUIDE

Ordering: Specify model, and pressure range and indicate modifications or accessories required.

Use The Following Codes To Identify Desired Item.

MODEL	ACCURACY	RANGE	OPTIONS
•	—	•	—
•	—	•	•/•/•

Example
215-B-PV-CA/GJ

MODEL

- 115 3 mV/V
- 215 0-5 Vdc
- 315 4-20 mA
- 215X 4-20 mA
- 315X 4-20 mA
- 315Z 4-20 mA Consult factory for approved options

SERIES

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

PRESSURE RANGE

psi		bar	
PT	30	UL	2
PV	50	UM	3
PX	75	UN	5
PZ	100	UP	7.5
RB	150	UQ	10
RD	200	UR	15
RE	250	US	20
RF	300	UT	30
RH	500	UV	50
RJ	600	UX	75
RK	750	UY	100
RM	1000	UZ	150*
RO	1500	VA	200*
RR	2000	VB	300*
RS	2500		
RT	3000*		
RV	5000*		
RX	7500*		
SZ	Other		

*Available with option HM only

GP:50 New York Ltd. reserves the right to make product improvements and amendments to the product specification stated throughout this brochure without prior notification Please contact the factory on all critical dimensions and specifications for verification.

OPTIONS

AA - None (standard connector)

ALTERNATE CONNECTOR OR CABLE

- Note: Explosion-proof rated models are only available with 1/2" NPT (M) Conduit Thread (Option CF)
- CA Bendix PTIH-10-6P (Mate: PT06E-10-6S [SR] (not supplied)
 - CB Bendix CF3102E-14S-6P (Mate: CF 3106E-14S-6S (not supplied))
 - CE Terminal Block
 - CF 1/2" NPT (M) thread with 24" potted leads
 - CJ DIN 43650 (includes mate)
 - CO Junction Box (thermocouple type) and Terminal Block

ALTERNATE PRESSURE PORT

- FA MS33649-4 [1/4" AND-10050, (F)]
- FC 3/8" NPT (F)
- FZ Non-Standard Pressure Port

GENERAL

- GA Standardized Output to $\pm 0.5\%$ FSO
- GB Alternate Full Scale Outputs that are non-standard
- GE Improved Temperature Compensation to $\pm 0.5\%$ FSO/100°F for Zero + Span respectively
- GF Expanded Temperature Range, -20 to +200°F (Compensated to $\pm 2\%$ FSO/100°F)
- GG Alternate Calibration Resistor Signal
- GH Internal Calibration Resistor, set to 100% $\pm 0.5\%$ FSO unless otherwise specified
- GJ Zero and (+) Span Controls (Approximately $\pm 20\%$ FSO) Models 215 and 315 only
- GK Inconel Pressure Cavity
- GL Cleaned for Oxygen Service
- GM Submersible Housing, w/ 8' polyurethane jacket cable, neoprene grommet, and conduit fitting.
- 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 times full scale range or 10,000 psi, whichever is less. Burst pressure 15 times 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.
- MS Bi-Directional Differential Pressure allows for both Positive and + Negative signal. (Model 315 has A 12 mA zero).
- GZ Customer special.