# 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 Stainless Steel wetted parts
- Base pressure to 10,000 psi (with option HM)
- Explosion Proof & Intrinsically Safe Approvals

## PRESSURE RANGES:

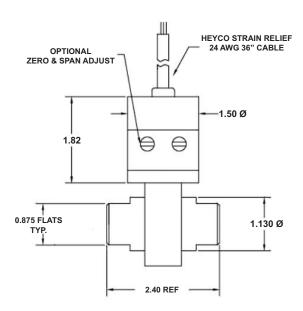
- From 30 to 5000 psid
- From 2 to 300 bar
- (Bi-directional available see ordering guide.)

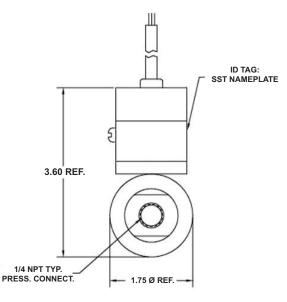






(Shown with "315X" + "HM" option)





Some options will affect dimensions. Consult factory if important.

# WIRING CODE

#### Some connector options will affect wiring.

	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

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

**NDUSTRIAL GRAD** 

Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more info.

Temperature Compa	neation *		
Temperature Compensation * Zero ≤ ±2% FSO/100°F			
Span		≤ ±2% FSO/100°F	
Temperature Limits	*		
Compensated		+70° to +180° F	
Operating		-20° to +190° F	
Storage		-65° to +250° F	
Electricals	(Consult	factory for ATEX approval)	
Excitation Voltage (Model 115) (Models 215/215) (Models 315/315) (Model 315X)	K)	3.5-15 Vdc 9-40 Vdc / 10.5-32 Vdc 9-36 Vdc 13-36 Vdc	
Output at 70° F (Model 115) (Models 215/215) (Models 315/315)	K) K/315Z)	3 mV/V ±2% FSO 0 ±5 Vdc ±2% FSO 4-20 mA ±2% FSO	
(Model 215)	0.0 Vdc ±2	:2% FSOat 70°F at 10 Vdc :% FSO at 70°F at 24 Vdc % FSO at 70°F at 24 Vdc	
Input Impedance (Model 115)	5000 ohm	s nominal	
Input Current (Model 215)	10 mA nominal		
Load Impedance (Model 115)	50,000 ohms minimum for less than 0.1% FSO attenuation.		
(Model 215)	750 ohms maximum at 24 Vdc and 1350 ohms at 36 Vdc.		
Output Current			
(Model 215)	2.0 mA maximum for less than 0.1% FSO attenuation.		
Mechanicals			
Proof Pressure * Burst Pressure		10 times full scale pressure range or 3000 psi, whichever is less 15 times full scale pressure range or 4000 psi, whichever is less.	
Weight Static Line Pressure *		16 oz. nominal. 2000 psi maximum (10,000 psi option)	
Static Line Shift (Zero Shift) Wetted Materials * Enclosure Material Mounting			
Connections  Pressure *  Electrical *  Cable		1/4" NPT (F)	
(Models 1	15, 215)	36" long, 4 conductor	

<sup>\*</sup> See modifications on ordering guide.

### **ORDERING GUIDE:**

(Model 315)

MODEL	SERIES	RANGE	OPTIONS
• -	-	•	- •/•/•

36" long, 2 conductor

Example: 215-B-PV-CA/GJ

### MODEL

115	3 1110/0
215	0-5 Vdc
315	4-20 mA

215X 0-5 Vdc Explosion Proof
315X 4-20 mA Explosion Proof
315Z 4-20 mA Intrinsically Safe

#### **SERIES (ACCURACY)**

Α	1.0% FSO
В	0.5% FSO
С	0.2% FSO

#### PRESSURE RANGE

PSI				
30	RF	300	RS	2500
50	RH	500	RT	3000**
75	RJ	600	RV	5000**
100	RK	750	RW	6000**
150	RM	1000	RX	7500**
200	RO	1500	SZ	Other
	50 75 100 150	30 RF 50 RH 75 RJ 100 RK 150 RM	30 RF 300 50 RH 500 75 RJ 600 100 RK 750 150 RM 1000	30 RF 300 RS 50 RH 500 RT 75 RJ 600 RV 100 RK 750 RW 150 RX

**RR** 2000

#### **OPTIONS**

**RE** 250

AA	None (standard connector)	
<b>ALTERN</b>	ATE CONNECTOR OR CABLE	

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

**CE** Terminal Block

CF 1/2" NPT(M) thread with 24" potted leads. (Std. on explosion

proof models)

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

CJ DIN 43650 (includes mate)

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

(options CH, CL, DE)

## ALTERNATE PRESSURE PORT

**FA** MS33649-4 (1/4 AND-10050, [F])

FC 3/8" NPT (F)

FZ Non-Standard Pressure Port

#### **GENERAL**

GG

GL

**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

**GE** Improved Temperature Compensation to ±0.5% FSO/100°F for

Zero and Span respect.

**GF** Expanded process temperature range, -65 to 250°F

(±2% FSO/100°F)

Alternate Calibration Resistor Signal

GH Internal Calibration Resistor, set to 100% ±0.5% FSO
 GJ Zero and Span Controls (Approximately ±20% FSO)

Models 215 and 315 only

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

times full scale range or 10,000 psi, whichever is less. Burst presssure 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).

<sup>\*\*</sup>Available with option HM only