

# SANITARY FLUSH DIAPHRAGM PRESSURE TRANSDUCER/TRANSMITTER

Models 218, 318



FLUSH DIAPHRAGM

## FEATURES:

- Flush Diaphragm for slurry measurement and cleanability
- Wet-wet true gauge pressure measurement that does not require vented cable
- Rugged, All-welded, corrosion-resistant type 316 Stainless Steel construction
- NEMA-4X enclosure
- 3A Approved

## PRESSURE RANGES:

- From 0-20" wc through 0-1000 psi  
(See ordering guide)

## ACCURACY:

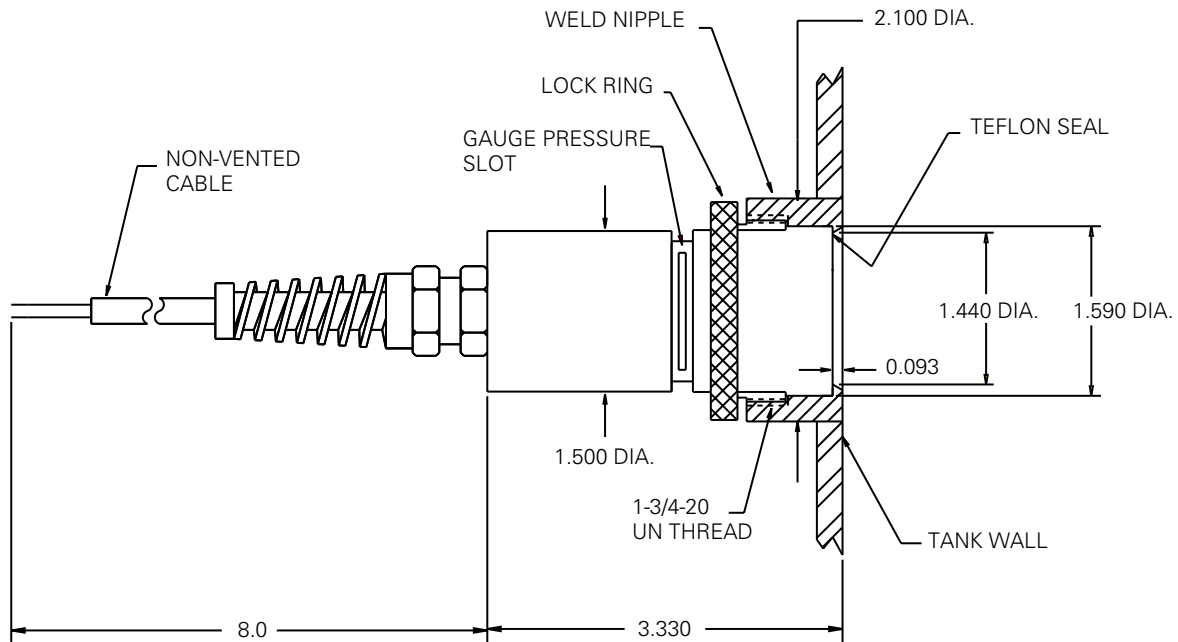
- To  $\pm 0.1\%$  FSO (RSS).

MODEL	OUTPUT @ 70° F	EXCITATION
218	5.0 Vdc $\pm 2\%$ FSO	10.5-32 Vdc
318	4-20 mA $\pm 2\%$ FSO	13.37-37 Vdc

# OUTLINE



Some options will affect dimensions.  
Consult factory if important.



# WIRING CODE

## WIRING CODE

	218	318
A/1 Red	+ Excit.	+ Excit./Signal
Green	+ Signal	NC
White	NC	NC
Black	- Excit./Signal	- Excit./Signal
Blue	NC	NC
Brown	NC	NC
Shield	Open	Open

\* \* - Signal and - Excitation are common to each other.

# 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

Accuracy (Non-linearity, hysteresis, RSS Non-repeatability) RSS	B $\pm 0.5\%$ FSO, RSS C $\pm 0.2\%$ FSO, RSS D $\pm 0.1\%$ FSO, RSS
Materials in contact with Measured fluids	Type 316 Stainless Steel
Resolution	Infinite, 0.02% FSO practical minimum
Temperature Limits Compensated Operating	30°F to + 170°F 0°F to + 185°F
Temperature Compensation Zero Span	Within $\pm 2\%$ FSO/100°F Within $\pm 2\%$ FSO/100°F
Orientation Shift Zero	1 in CW
Electricals Output Loading (Model 218) Load Impedance (Model 318) Zero Balance (Model 218) (Model 318)	3000 ohms minimum 1200 ohms maximum at 37 Vdc 0.0 Vdc $\pm 5\%$ FSO @ 70°F 4.0 mA $\pm 5\%$ FSO @ 70°F
Mechanicals Proof Pressure Burst Pressure Case Materials Weight	3 times full scale pressure 5 times full scale pressure Type 316 Stainless Steel 12 oz. nominal (not including Weld Nipple)
Connections Pressure  Electrical Cable	1-3/4" - 20 UNF thread to 316 Stainless Steel Weld Nipple. (Weld Nipple not included)  NEMA-4x with molded 6 conductor, polyurethane jacket, 8' long.
Enclosure	All-welded type 316 Stainless Steel. Rated NEMA-4X. Approved 3A.
Identification	Etched stainless steel nameplate welded to body

\* 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	REFERENCE	OPTIONS
•	—	•	—	•
•	—	•	—	• / • / •

Example  
318-D-XQ-GA/GK

## MODEL

218 5 Vdc  
318 4-20 mA

## SERIES

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

## PRESSURE RANGE

in wc		psi	
XB	20	PC	1
XC	25	PE	2
XD	30	PG	3
XF	50	PJ	5
XH	75	PL	7.5
XK	100	PN	10
XM	150	PP	15
XO	200	PR	20
XQ	300	PT	30
XS	500	PV	50
XU	750	PX	75
XW	1000	PZ	100
XY	1500	RB	150
YA	2000	RD	200
SZ	Non-stand.	RF	300
		RH	500
		RJ	600
		RK	750
		RM	1000

No reference slots, cable vented

## PRESSURE CODE

2 Gauge  
3 Absolute (0-5 psi @ above)  
4 Vacuum  
8 Elevated  
10 Compound

## OPTIONS

AA - None (standard connector)

## ALTERNATE CONNECTOR OR CABLE

CA Bendix PTIH-10-6P (Mate: PT06E-10-6S [SR] not included)  
CF 1/2" NPT (M) thread with 8" potted leads (Non-Vented).  
CJ DIN 43650 (Hirshmann) w/Mate.  
CZ Alternate Connector/Cable/Other.

## ALTERNATE PRESSURE PORT

FQ M44 X 1.25 Metric thread.  
FZ Non-standard pressure port.

## GENERAL

GA Standardized Full Scale Output, (FSO = (Full Scale Reading)-(Zero Reading)  $\pm$ 0.5% FSO).  
GB Alternate Electronic Output (specify Zero and Span output values).  
GE Improved Temperature Compensation to  $\pm$ 0.5% FSO/100°F for Zero & Span Respectively, (from 30°F to 180°F).  
GF Expanded Temperature Range, max. 0°F to +200°F (Compensated to  $\pm$  2% FSO/100°F).  
GJ Add Zero & Span Controls. (Approx.  $\pm$  20% FSO adjustment).  
GK Inconel Diaphragm and Diaphragm Housing.  
GM Submersible Housing w/8' Std Cable  
GP Hastelloy Diaphragm and Diaphragm Housing.  
GS 0-10 Vdc FSO, Model 218. (Requires 16 - 32 Vdc excitation).  
HL RFI Protection (for unit in proximity to radio transmitter).  
JH Remote Cable-Mounted Zero & Span Controls. (Model 318 only).  
GZ Customer Special.

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.