

# GENERAL PURPOSE FLUSH DIAPHRAGM TRANSDUCER/TRANSMITTER

Models 117, 217, 317



with Option CF & GJ

Standard

## FEATURES:

- Flush Diaphragm
- All-welded type 316 & 15-5 ph stainless steel
- Rugged, all encapsulated electronics
- Low insertion sensitivity

## PRESSURE RANGES:

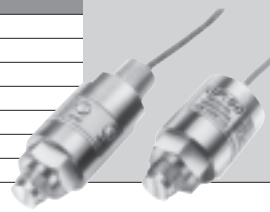
- From 0-50 to 0-10,000 psi
- (See ordering guide.)

## ACCURACIES:

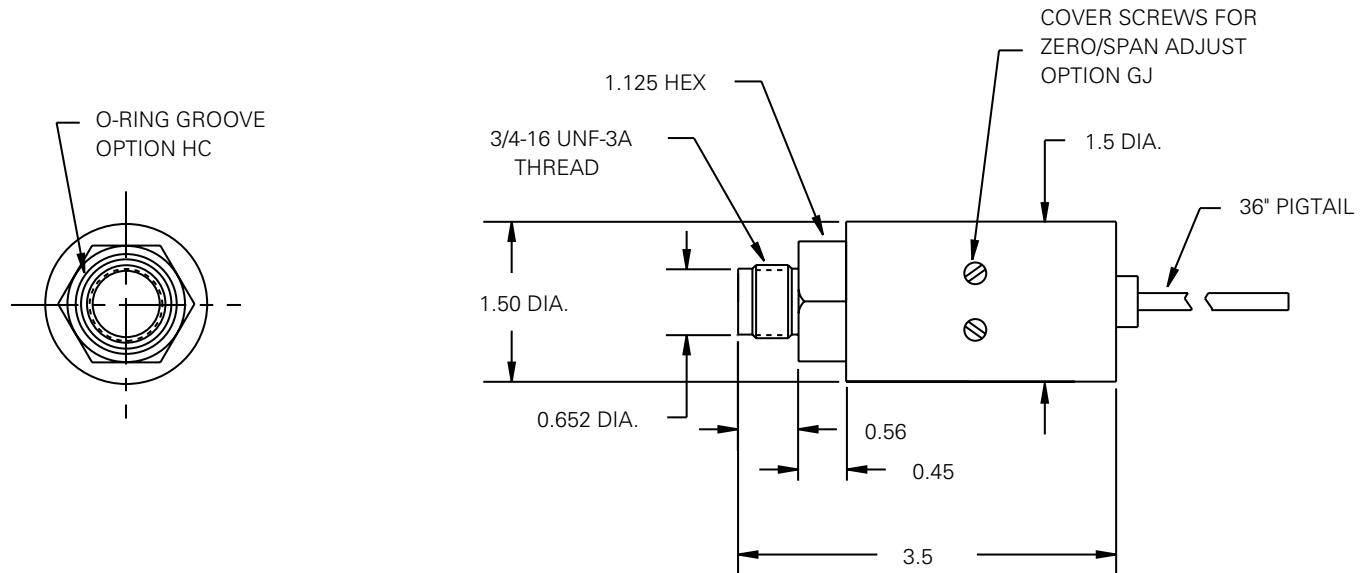
- From 0.2% FSO to 1.0% FSO
- (See specifications & ordering guide)

MODEL	OUTPUT @ 70° F	EXITATION
117	3 mV/V $\pm$ 2% FSO	3.5-15 Vdc
217	5.0 Vdc $\pm$ 2% FSO	10.5-32 Vdc
317	4-20 mA $\pm$ 2% FSO	13-37 Vdc

# OUTLINE



Some options will affect dimensions.  
Consult factory if important.



# WIRING CODE

## WIRING CODE

		117	217	317
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	Calibrate	Calibrate	NC Option GH
F/6	Brown	Calibrate	Calibrate	NC Option GH
	Shield	Open	Open	Open

Note: Gauge Pressure units below 300 psi are vented to the atmosphere through a porous plug located under the nameplate which may only be exposed to a clean, dry gas. Corrosive or wet environments may require a vented cable or a sealed gauge pressure configuration.

# SPECIFICATIONS

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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.

Accuracy		Static error band includes non-linearity, hysteresis, non-repeatability)
Series A		±1.0% FSO (RSS)
Series B		±0.5% FSO (RSS)
Series C		±0.2% FSO (RSS)
Materials in contact with measured fluids*		Type 316 and 15-5 ph stainless steel
Temperature Limits*		
Compensated		0°F to +180°F
Operating (tip temperature)		-20°F to +250°F
Temperature Compensation*		
Zero		Less than ±2.0% FSO/100°F
Span		Less than ±2.0% FSO/100°F
Electricals		
Input Impedance, Model 117		350 ohm, nominal
Load Impedance, Model 117		50,000 ohms minimum, for less than 0.1% FSO attenuation
Input Current, Model 217		35 mA, nominal
Output Current, Model 217		2.0 mA maximum for less than 0.1% FSO attenuation
Load Impedance, Model 317		1200 ohms maximum at 37 Vdc and 600 ohms at 24 Vdc
Zero Balance		
	Model 117	0.0 mV/V ±5% FSO at 70°F
	Model 217	0.0 Vdc ±5% FSO at 70°F
	Model 317	4.0 mA ±5% FSO at 70°F
Range Calibration Signal*		
	Model 117, 217	Internal resistor provides 80 ± 0.5% FSO signal by shorting calibrate leads NC. See option GH
	Model 317	
Insulation Resistance		Greater than 1000 megaohms at 50 Vdc at 70°F
Resolution		Infinite
Mechanicals		
Proof Pressure		1.5 times full scale pressure
Burst Pressure		5 times full scale pressure
Case Material		Type 316 stainless steel
Weight		8 oz. nominal
Identification		Etched stainless steel nameplate welded to body
Connections		
Pressure		3/4" - 16UNF-3A thread with Teflon O-ring face seal (included)
Electrical*		
	Cable	
	Model 117, 217	Belden 9536, 6 conductor, 24" long
	Model 317	Belden 8723, 4 conductor, 24" long

\* 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	SERIES	RANGE	PRESSURE TYPE	OPTIONS
•	—	•	—	• / • / •

Example  
317-B-PZ-2-CA

## MODEL

117 3 mV/V  
217 5 Vdc  
317 4-20mA

## SERIES

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

## PRESSURE RANGE

**psi**

PV 50	RM 1,000
PX 75	RO 1,500
PZ 100	RR 2,000
RB 150	RT 3,000
RD 200	RV 5,000
RF 300	RX 7,500
RH 500	RZ 10,000
RK 750	SZ Other

## SERIES

2 Gauge  
3 Absolute  
6 Sealed gauge

## OPTIONS

AA - None (standard connector)

## ALTERNATE CONNECTOR OR CABLE

CA PTIH-10-6P (Mate PT06E-10-6S [SR], not included)  
CE Terminal Block  
CF 1/2" NPT (M) thread with 24" potted leads  
CH Vented cable 8' long  
CJ DIN 43650 connector (includes mate)  
CL 1/2" NPT (M) thread with 24" vented cable (for ranges less than 299 psi)  
CZ Other

## GENERAL

GA Standardized output to  $\pm 0.5\%$  FSO  
GB Alternate pressure range, pressure units, or full scale outputs that are non-standard  
GE Improved temperature compensation to  $\pm 0.5\%$  FSO / 100°F for zero and span respectively  
GG Alternate calibration signal  
GH Internal calibration resistor set to  $100 \pm 0.5\%$  FSO unless otherwise specified  
GJ Add zero and span controls. (Approximately  $\pm 20\%$  FSO adjustment. Not available Model 117)  
GK Inconel thread and diaphragm  
GP Hastelloy thread and diaphragm  
HC Integral O-ring groove. Includes Teflon O-ring. (Eliminates need for O-ring face seal)  
HL RFI protection (For unit in proximity to radio transmitter)  
HX Hastelloy diaphragm only  
JG Viton O-ring  
GX Mineral oil fill  
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.