



# GENERAL PURPOSE FLUSH DIAPHRAGM TRANSMITTER

**Models 117, 217, 317, 317Z (FM/CSA Intrinsically Safe)**

## FEATURES:

- Flush Diaphragm
- All-welded type 316 & 15-5 ph stainless steel
- Rugged, all encapsulated electronics
- Minimal zero installation effect

## PRESSURE RANGES:

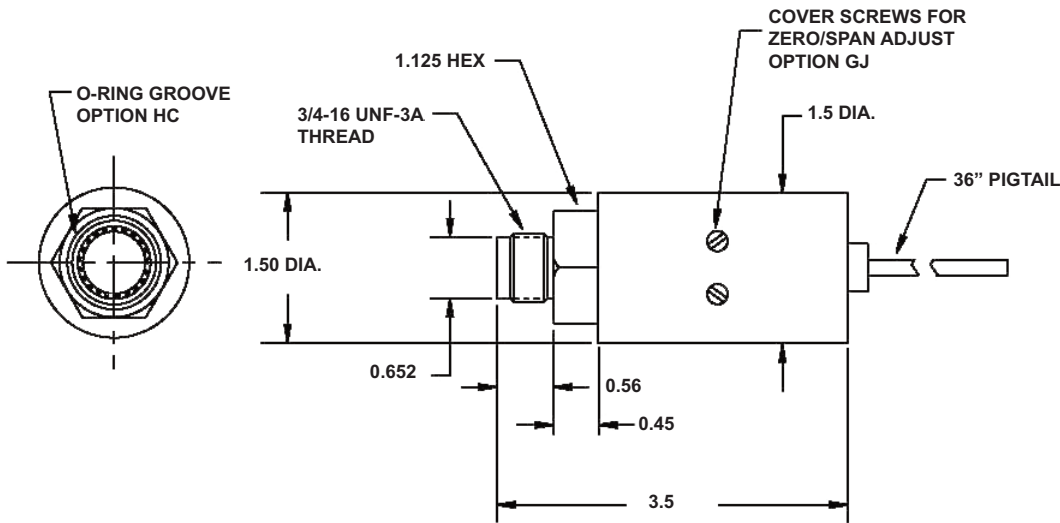
- From 0-50 to 0-10,000 psi  
(See ordering guide)

## ACCURACY:

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



FLUSH DIAPHRAGM



Some options will affect dimensions. Consult factory if important.

## WIRING CODE

	117	217	317
A/1 RED	+ EXC.	+ EXC.	+ EXC./SIGNAL
B/2 GREEN	+ SIGNAL	+ SIGNAL	NC
C/3 WHITE	- SIGNAL	NC	NC
D/4 BLACK	- EXC.	- EXC./SIGNAL	- EXC./SIGNAL
E/5 BLUE	CAL. OPTIONAL	CAL. OPTIONAL	CAL. OPTIONAL
F/6 BROWN	CAL. OPTIONAL	CAL. OPTIONAL	CAL. OPTIONAL
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.

A5SL-17.00 Rev A



# Pressure, Level & Temperature Transmitters & Transducers

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

<b>Accuracy</b>	(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)
<b>Wetted Parts</b>	Type 316 & 15-5 ph stainless steel
<b>Temperature Limits *</b>	Compensated 0°F to +180°F Operating -20°F to +250°F (tip temperature)
<b>Temperature Compensation *</b>	Zero Less than ±2.0% FSO/100°F Span Less than ±2.0% FSO/100°F
<b>Electricals</b>	Excitation Voltage (Model 117) 3.5-15 Vdc (Models 217) 9-40 Vdc (Models 317) 9-40 Vdc  Output at 70° F (Model 117) 3.0 mV/V ±2% FSO (Models 217) 0 -5.0 Vdc ±2% FSO (Models 317) 4-20 mA ±2% FSO  Zero Balance (Model 117) 0.0 mV/V ±2% FSO at 70°F (Model 217) 0.0 Vdc ±2% FSO (Model 317) 4.0 mA ±2% FSO at 70°F  Input Impedance (Model 117) 350 ohms nominal  Input Current (Model 217) 8 mA nominal  Load Impedance (Model 117) 50,000 ohms minimum for less than 0.1% FSO attenuation. (Model 317) 1350 ohms max. at 36 Vdc & 750 ohms max. Vdc  Output Current (Model 317) 2.0 mA maximum for less than 0.1% FSO attenuation.  Insulation Resis. Resolution Greater than 10 megohms at 50 Vdc & 70°F Infinite.
<b>Mechanicals</b>	Proof Pressure 1.5 times full scale pressure or 12 kpsi whichever is less Burst Pressure 5 times full scale pressure or 15 kpsi whichever is less Case Materials Type 316 stainless steel Weight 8 oz. nominal
<b>Identification</b>	Etched stainless steel nameplate welded to body.
<b>Connections</b>	Pressure 3/4" - 16UNF-3A thread with Teflon O-ring with retaining rim (included)  Electrical * Cable (Model 117, 217) 6 conductor, 24 AWG 36" long (Model 317) 4 conductor, 24 AWG 36" long

\*See modifications on ordering guide.

## ORDERING GUIDE:

MODEL	ACCURACY	RANGE	TYPE	OPTIONS
•	•	•	•	•/•/•

Example: 317-B-PZ-2-CA

<b>MODEL</b>	117 3 mV/V 217 0 - 5 Vdc 317 4 - 20 mA 317Z 4 - 20 mA Intrinsically Safe
<b>ACCURACY (Series)</b>	A 1.0% FSO B 0.5% FSO C 0.2% FSO
<b>PRESSURE RANGE (PSI)</b>	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 RE 250 RX 7,500 RF 300 RZ 10,000 RH 500 SZ Other RK 750
<b>PRESSURE TYPE</b>	2 Gauge 3 Absolute 6 Sealed Gauge (Hermetic) 7 Sealed Gauge (non-hermetic)

### OPTIONS

Other Options Available Consult Factory

### 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 36" potted leads
CH	Vented cable 8' long (NEMA 4 termination)
CJ	DIN 43650 connector (includes mate)
CL	1/2" NPT (M) thread with 24" vented cable (for ranges less than 299 psi).
CT	Teflon jacketed cable, Tefzel used on submersible units (options CH, CL, CW, DE, GM)
CZ	Other

### GENERAL

CW	Submersible housing, 8' non-vented submersible polyurethane jacket cable, neoprene grommet, 1/2" NPT (M) conduit.
DE	IP-67 (NEMA-6) vented polyurethane jacket cable, neoprene grommet.
GA	Standardized output to ±0.5% FSO
GB	Alternate pressure range, pressure units, or full scale outputs that are non-standard
GE	Improved temperature compensation to ±0.5% FSO/ 100°F for zero and span respectively
GG	Alternate shunt calibration signal
GH	Internal shunt calibration resistor set to 100 ±0.5% FSO unless otherwise specified
GJ	Zero & span adjust. (~ ±20% FSO). Not on 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 retaining ring)
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

### MODEL 17 ACCESSORIES

Mating Electrical Connector:	PN# MEC - Connector Code*
Mating Electrical Connector Assembly:	PN# MECA - Connector Code - Output Code - Shunt Calibration Code - wiring Code - Cable Code*
	<b>PN# Material Seal Type Pressure Port</b>
Weld Nipple	WN17 AA(316 SS) AA (Retaining Ring) AA (3/4" - 16 UNF-3B)
Weld Plug	WP17 AA(316 SS) AA (Retaining Ring) AA (3/4" - 16 UNF-3A)
O-Ring with Retaining Ring	OR17 AA(Teflon) AA (Retaining Ring)

\*Consult factory for option code.

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