



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:

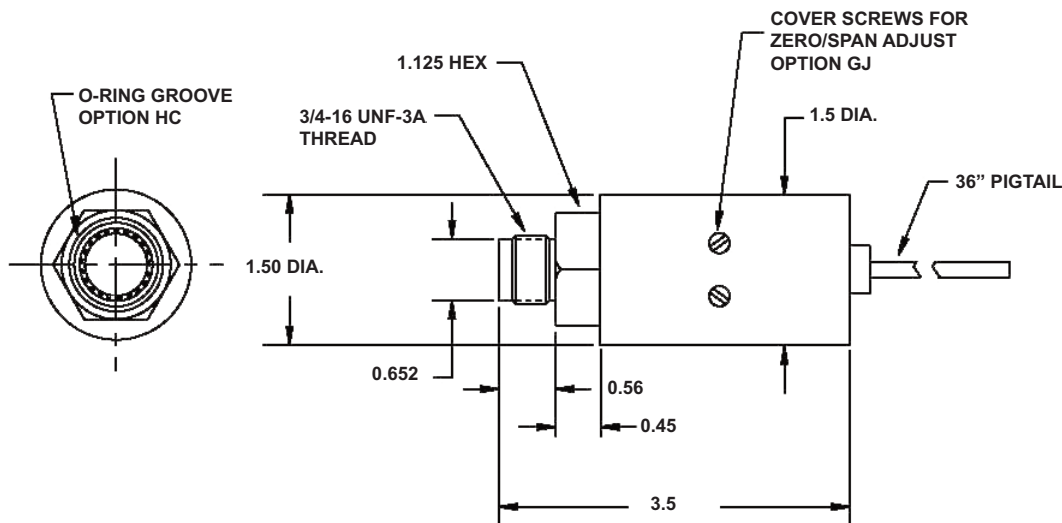
- From 0-50 to 0-10,000 psi
(See ordering guide)

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.

| | |
|-----------------------------------|---|
| 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) |
| Wetted Parts | Type 316 & 15-5 ph stainless steel |
| Temperature Limits * | Compensated 0°F to +180°F Operating -20°F to +250°F (tip temperature) |
| Temperature Compensation * | Zero Less than ±2.0% FSO/100°F Span Less than ±2.0% FSO/100°F |
| Electricals | 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. |
| Mechanicals | 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 |
| Identification | Etched stainless steel nameplate welded to body. |
| Connections | 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

| | |
|-----------------------------|---|
| MODEL | 117 3 mV/V 217 0 - 5 Vdc 317 4 - 20 mA 317Z 4 - 20 mA Intrinsically Safe |
| ACCURACY (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 RE 250 RX 7,500 RF 300 RZ 10,000 RH 500 SZ Other RK 750 |
| PRESSURE TYPE | 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* |
| | PN# Material Seal Type Pressure Port |
| 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.

2770 Long Road, Grand Island, NY 14072 USA

Tel. (716) 773-9300 Fax (716) 773-5019 E-mail:sales@gp50.com website:www.gp50.com