INDUSTRIAL GRADE FLUSH DIAPHRAGM PRESSURE TRANSMITTER

Model 117 / 217 / 317 / 317Z
Industrial Grade Flush Diaphragm
Pressure Transmitter

MODEL 117 / 217 / 317 / 317Z

FEATURES:

- Flush diaphragm eliminates plugging
- Pressure ranges from 0 to 50 thru 0 to 10K PSI (3.4 to 689 BAR)
- Operating temperature range from -20 °F to +250 °F (-29 °C to +121 °C)
- Installs flush to tank wall
- 316L stainless steel wetted parts with optional Hastelloy C alloy alternative

APPLICATIONS:

- Adhesives and sealants
- Paint and oils
- Food processing
- Petrochemical
- Wastewater
- Viscous, corrosive or sticky media

PRODUCT OVERVIEW:

The 17 series flush diaphragm eliminates clogging of the process port in applications where a viscous or sticky media is used. The 316L wetted parts with optional Hastelloy-C make this impervious to corrosive medias and provide standard operating temperatures to +250 °F (+121 °C), with a +350 °F (+177 °C) option.

FIELD OPTIONS:

- FM / CSA Intrinsically Safe approval (317Z)
- Zero and span adjustments
- IP67 / NEMA 6 rating
- Comprehensive list of alternative electrical and process connections
- mV/V, 0 to 5 Vdc, 0 to 10 Vdc, 4-20 mA output
- Hastelloy C alloy wetted parts

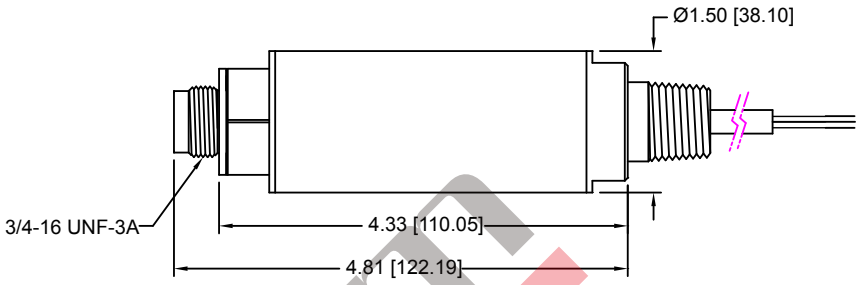
GP:50 MODEL 117 / 217 / 317 / 317Z

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

WIRE	MODEL 117	MODEL 217	MODEL 317(Z)
1/RED	+EXC	+EXC	+EXC/SIG
2/GRN	+SIG	+SIG	N/C
3/WHT	-SIG	N/C	N/C
4/BLK	-EXC	-EXC/SIG	-EXC/SIG
5/BLU	+SHUNT (OPT)	+SHUNT (OPT)	+SHUNT (OPT)
6/BRN	-SHUNT (OPT)	-SHUNT (OPT)	-SHUNT (OPT)
SHIELD	OPEN	OPEN	OPEN



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage:**

(Model 117) 3.5 to 15 Vdc max.

(Model 217/317) 9 to 40 Vdc

- **Output Signal (@ +70 °F):**

(Model 117) 3 mV/V

(Model 217) 0 to 5 Vdc, 0 to 10 Vdc

(Model 317) 4-20 mA

- **Input Current:** (Model 217) 8 mA nominal
- **Output Current:** (Model 317) 2.0 mA max. for <0.1% FSO attenuation
- **Input Impedance:** (Model 117) 350 Ω nominal
- **Load Resistance:**

(Model 117) 50K Ω min. for <0.1% FSO attenuation

(Model 317) 1,350 Ω max. at 36 Vdc and 750 Ω max. at 24 Vdc

- **Circuit Protection:** RFI and EMI
- **Insulation Resistance:** >10 MΩ at 50 Vdc and +70 °F
- **Connection:** 36" long PVC jacketed, 24 AWG, 4-conductor cable

MATERIALS OF CONSTRUCTION

- **Wetted Parts:**

316 stainless steel (Optional Hastelloy C alloy)

- **Housing:**

316 stainless steel

STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

Standard: ±1.0 % FSO

Improved: ±0.5% and ±0.2% FSO

- Zero Balance and FSO: ±2.0% FSO @ +70 °F

MECHANICAL

- **Process Connection:** 3/4" - 16 UNF-3A thread with Teflon O-ring and retaining rim
- **Proof Pressure:** 1.5X full scale pressure range or 12K PSI (827 BAR), whichever is less
- **Burst Pressure:** 5X full scale pressure range or 15K PSI (1,034 BAR), whichever is less
- **Approximate weight:** 8 oz. (0.2 kg) nominal

PRESSURE RANGES

- From 0 to 50 thru 0 to 10K PSI (3.4 to 689 BAR)

THERMAL SPECIFICATIONS

- **Compensated:** 0 °F to +180 °F (-17.7 °C to +82 °C)
- **Operating Process:** -20 °F to +250 °F (-29 °C to +121 °C)
- **Effect on Zero/Span:** <±2% FSO/100 °F
- **Orientation Shift:** ±1" WC, option GJ or JH is recommended on ranges ≤ 200" WC

Standard configurations shown.
Please consult factory for other options.

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.