

# SUBMERSIBLE LEVEL TRANSMITTER

## Model 313L

### FEATURES:

- All-welded, stainless steel construction
- Rugged, all encapsulated electronics.
- Leakproof
- 1/2" NPT conduit thread standard

### PRESSURE RANGES:

- From 0-3 through 0-100 psig  
(See ordering guide.)

### ACCURACY:

- From  $\pm 0.1\%$  FSO (RSS) to  $\pm 0.5\%$  FSO (RSS)  
(See specifications & ordering guide.)



## ORDERING GUIDE

Ordering: Specify model, and pressure range and indicate modifications or accessories required.  
Use the following codes to identify desired item. Example 313L-B-PZ-LJ

| MODEL | SERIES | RANGE | OPTIONS   |
|-------|--------|-------|-----------|
| •     | —      | •     | • / • / • |

**MODEL**  
313L 4-20mA

**SERIES**  
B  $\pm 0.5\%$  FSO (RSS)  
C  $\pm 0.2\%$  FSO (RSS)  
D  $\pm 0.1\%$  FSO (RSS)

**PRESSURE RANGE**

| psi    | in wc  |
|--------|--------|
| PG 3   | XK 100 |
| PJ 5   | XM 150 |
| PL 7.5 | XO 200 |
| PN 10  | XQ 300 |
| PP 15  |        |
| PR 20  |        |
| PO 25  |        |
| PT 30  |        |
| PV 50  |        |
| PX 75  |        |
| PZ 100 |        |

**OPTIONS**  
AA None (standard connector)  
CZ Alternate cable length (specify)

**ALTERNATE PRESSURE PORT**  
FH 1/8" NPT (F)  
FL 1/8" NPT (M)  
LD Tapered inlet  
LJ Tapered inlet with standoff plate

**GENERAL**  
CT Tefzel jacketed cable  
GA Standardized output to  $\pm 0.5\%$  FSO  
GB Alternate output, pressure units, or full scale outputs that are non-standard  
GE Improved temperature compensation to  $\pm 0.5\%$  FSO unless otherwise specified  
GG Alternate calibration signal  
GH Internal calibration resistor set to  $100 \pm 0.5\%$  FSO unless otherwise specified  
JH Remote cable mounted (in-line) zero & span controls. 3' cable on open side. Length of cable on closed side as required. (500' maximum)  
GZ Customer special

Specifications printed on reverse side of this brochure.

GP:50 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.

# 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.

|  |   |
|--|---|
| Accuracy (Static error band includes non-linearity, hysteresis, non-repeatability) |   |
| Series B   | ±0.5% FSO (RSS)   |
| Series C   | ±0.2% FSO (RSS)   |
| Series D   | ±0.1% FSO (RSS)   |
| Temperature Limits*  |   |
| Compensated  | 0°F to +140°F   |
| Operating  | -40°F to +150°F   |
| Storage  | -40°F to +150°F   |
| Temperature Compensation*  |   |
| Zero   | Less than ±2% FSO/100°F at full scale pressure range and/or upper range limit |
| Span   | Less than ±2% FSO/100°F at full scale pressure range and/or upper range limit |
| Electricals  |   |
| Excitation   | 12 - 40 Vdc   |
| Zero Balance   | 4.0mA ±2% FSO at 70°F   |
| Span   | 16.0mA ±2% FSO at 70°F  |
| Load Impedance   | 1400 ohm maximum at 40 Vdc excitation   |
| Circuit Protection   | Short Circuit - Indefinite<br>Reverse Wired - Indefinite                      |
| Insulation Resistance  | Greater than 10 M ohm at 50 Vdc and 70°F                                      |
| Resolution   | Infinite  |
| Mechanicals  |   |
| Proof Pressure   | 2 times rated full scale pressure   |
| Burst Pressure   | 4 times rated full scale pressure   |
| External Pressure  | 500 psi maximum   |
| Case Materials   | Type 316 stainless steel  |
| Pressure Response  | ≤ 5 ms to 90%   |
| Long Term Stability  | ≤ +0.5% FSO / year  |
| Position Effect  | ±0.01% FSO for a 90° change in orientation                                    |
| Calibration Orientation  | Horizontal unless specified   |
| Cycle Life   | 1 million pressure cycles   |
| Fluid Fill   | 200 CS. Dow Corning 200. (Silicon Oil)  |
| Length   | 6.1 inches  |
| Diameter   | 1.0 inches  |
| Connections  |   |
| Pressure   | PVC bullet nose   |
| Electrical Cable   | Molded polyurethane jacket, 6 conductor with breather tube, 24 AWG, 8' long   |
| Identification   | Etched onto housing   |

\* See modifications on ordering guide.

## WIRING CODE

| 313L   |                 |
|--------|-----------------|
| Red    | + Excit./Signal |
| Green  | NC              |
| White  | NC              |
| Black  | - Excit./Signal |
| Blue   | NC Option GH    |
| Brown  | NC Option GH    |
| Shield | Open            |

Some options will affect dimensions.  
Consult factory if important.  
Note: Altering option codes will alter the unit length.

