

# 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
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**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 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.

