

BLUE RIBBON Sales & Services Corp.

SUBMERSIBLE / LEVEL TRANSMITTER “LOW PRESSURE”

Model BR313L

APPLICATIONS:

- Weirs, Wells, Pond Level Reservoirs / Dams
- Ground Water Wells
- Shipboard Level Control
- Rig Ballast Control

FEATURES:

- Rugged, Welded Stainless Steel Construction
- Voltage Surge Protection
- Lightning Protection-Available upon request
- Encapsulated electronics
- Polyurethane or Tefzel Reinforced Cable with Integral vent tube
- 4-20 mA standard (3mV/V, 0-5 VDC optional)



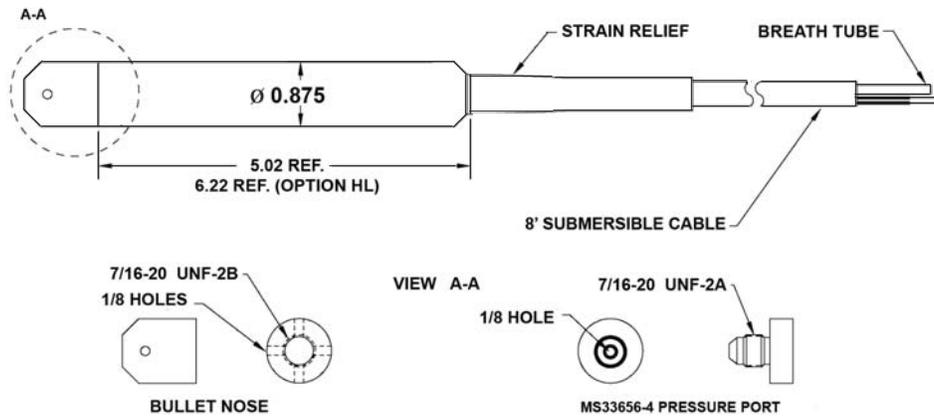
Standard

PRESSURE RANGES:

- 0-20 In.WC to 0-500 PSI
(see ordering guide.)

ACCURACY:

- From ±0.5% (0.10% Optional)
(see specifications & ordering guide.)



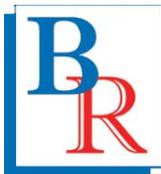
- WETTED PARTS:
- * 316 SS Housing
 - * Neoprene Grommet
 - * Polyurethane Jacketed Cable
 - * PVC Bullet Nose

WIRING CODE

	313L
RED	+ EXC./SIGNAL
BLACK	- EXC./SIGNAL
SHIELD	OPEN

Blue Ribbon 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.

A5BR-13L.00



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Standard Specifications listed below.

Consult factory for further options, which may change the overall dimensions.

Output (at 70°F)	Model 313L 4-20mA ±2.0% FSO			
Accuracy	Option B ±0.5% FSO (RSS)	Option C ±0.2% FSO (RSS)	Option D ±0.1% FSO (RSS)	
Pressure Ranges	0-20 In.WC to 0-500 PSI			
Pressure Types	2 Gauge 7 Gauge/non-hermetic	6 Sealed gauge 8 Elevated		
Zero Balance	4mA ±2.0% FSO at 70°F			
Span	16mA ±2.0% FSO at 70°F			
Temperature Limits	Compensated 0°F to +140°F	Operating -40°F to +150°F	Storage -40°F to +150°F	
Temperature Compensation	Zero / Span (Standard) Less than ±2.0% FSO/100°F at FSPR and/or URL			
Electricals	Excitation 9 – 40 VDC	Load Impedance 1400 ohms maximum at 40 VDC excitation	Circuit Protection Short Circuit – Indefinite	Resolution Infinite
Reversed Wire - Indefinite	Voltage Surge Protection (Standard)			
Insulation Resistance	> 10 megohms at 50 VDC and 70°F			
Standard Connections	Process Connection PVC Bullet Nose	Electrical Connection Polyurethane or Tefzel Reinforced Cable with integral vent tube (8 Ft. Standard – other lengths available upon request)		
Mechanicals	Proof Pressure 2X FSPR (or URL)	Burst Pressure 4X FSPR (or URL)	External Pressure 500 PSI maximum	
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	6.2" (adding options will vary the length)			
Diameter	0.875			
Weight	2.5 oz. Nominal, adding options may increase weight			
Wetted Material	Case 316 Stainless Steel			

ORDERING GUIDE:

MODEL	ACCURACY	PRESSURE RANGE	PRESSURE TYPES	OPTIONS
•	•	•	•	•/•/•

Example: 313L-B-PZ-LJ

MODEL: 313L 4-20mA

ACCURACY

B ±0.5% FSO (RSS)
C ±0.2% FSO (RSS)
D ±0.1% FSO (RSS)

PRESSURE RANGE (PSI)

PG 3	PX 75	XB 20
PJ 5	PZ 100	XD 30
PL 7.5	RB 150	XF 50
PN 10	RD 200	XH 75
PP 15	RE 250	XK 100
PR 20	RF 300	XM 150
PO 25	RH 500	XO 200
PT 30	SZ Other	XQ 300
PV 50		

PRESSURE TYPES

2 Gauge/direct/<300 psi (vented)
6 Sealed gauge (Hermetic seal/non-vented)
7 Gauge/non-hermetic seal/300 psi & Above (non-vented)

CONNECTOR

AA 8' Vented submersible cable (direct gauge ref. units) <300 PSI
AA 8' Non-vented submersible cable ≥300 PSI
CT Tefzel jacketed cable
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

GA Standardized output to ±0.5% FSO.
GB Alternate output, pressure units, or full scale outputs that are non-standard.
GE Improved temperature compensation to ±0.5% FSO unless otherwise specified.
GG Alternate calibration signal.
GH Internal calibration resistor set to 100 ±0.5% FSO unless other wise 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
G2 Lightning Protection

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