

CLARK

Series L312 & L500 Custom Level Switches

Compact, 1-6 Reed Switch Outputs

DESCRIPTION

The L312 series level switches are individually designed from over 360 component parts to create a custom switch available in lengths from one foot (304mm) to four feet (1.2m). Switch point tolerance is +/- 1/8" (3mm).

The L500 series level switches are individually designed from over 1,400 component parts to create a custom switch available in lengths from one foot (304mm) to 11 feet (3.3m). Switch point tolerance is +/- 1/8" (3mm).

To specify, review the choices in mounting types, stem material, float size and material, switching points, and electrical specifications. Fax or call us to review.



L500



L312

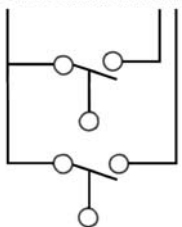
Table 1, Mounting Types Model L312		Model L500	
Code	Mounting	Code	Mounting
00	No Mounting	04	1/2" NPT
01	1/8" NPT	07	1 1/4" NPT
02	1/4" NPT	09	2" NPT
03	3/8" NPT	75	3" 150# ANSI Flange
05	3/4" NPT		
06	1" NPT		
07	1 1/4" NPT		

Table 2, Stem Materials Model L312		Model L500	
Code	Material	Code	Material
BR	Brass	BR	Brass
PV	PVC	SS	316SS
SS	316SS		
TF	Teflon (max. 24")		
PS	Polysulfone		

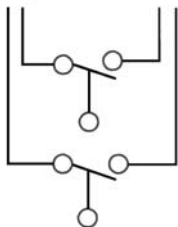
Table 3, Float Materials and Dimensions Model L312			Model L500		
Code	Material	Dimensions	Code	Material	Dimensions
1010BN	Buna N	1" x1"	1217BN	Buna N	1.25" x1.875"
1010PV	PVC	1" x1"	1817BN	Buna N	1.875" x1.75"
1010STD	316SS	1" x1"	2000	316SS	2" Sphere
1410	316SS	1.5" x1"	1513	316SS	1.5" x1.3"
1000LW	316SS	1" Sphere			
0815LSG	316SS	0.9" x1.5"			

Table 4, Reed Switch Electrical Specifications Model L312		Model L500	
Code	Description	Code	Description
G1	SPST switches, share a common wire, max 5 switch points	G1	SPST switches, circuits share a common wire, max 6 switch points
G2	SPST switches, independent circuits, max 3 switch points	G2	SPST switches, independent circuits, max 6 switch points
		G3	SPDT switches, circuits share a common wire, max 6 switch points
		G4	SPDT switches, independent circuits, max 6 switch points

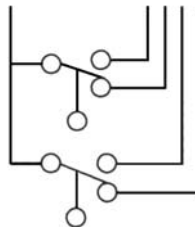
Group 1 SPST
One Common Wire



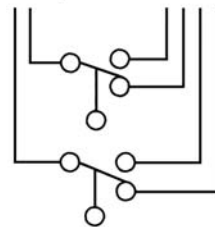
Group 2 SPST
Independent Circuits



Group 3 SPDT
One Common Wire



Group 4 SPDT
Independent Circuits



Only two actuation points are shown

Each reed switch requires one float except in certain special applications (consult factory). For special applications, a single float can be used to activate two switch points, though these points must have a minimum separation of 1/4" (6 mm). The maximum number of actuation levels depends on the wiring type selected.

Ratings:

L312: 20 VA@120VAC SPST
50VA@240 VAC SPST

L500: 20,50 or 100 VA@120 VAC SPDT
50VA @240 VAC SPST

Connection: 24" Free Leads #22 AWG
Mounting Attitude: Vertical ±30°

Table 5. Operating Specifications for Material Combinations						Model L500				
Model L312						Float Code	Mounting Code	Temperature	Pressure	*SG
1010BN	00, 01, 02, 03, 06, 07		-40 to +180°F	150 PSIG	0.80	1217BN	04, 07, 09, 75	-40 to +180°F	150 PSIG	0.65
1010PV	00, 01, 02, 03, 06, 07		-40 to +140°F	50 PSIG	0.95	1817BN	04, 09, 75	-40 to +180°F	150 PSIG	0.65
1010STD	00, 01, 02, 03, 06, 07		-40 to +300°F	600 PSIG	0.95	2000	04, 09, 75	-40 to +300°F	750 PSIG	0.75
1410	00, 01, 02, 03		-40 to +300°F	100 PSIG	0.70	1513	04, 09, 75	-40 to +300°F	120 PSIG	0.85
1000LW	00, 01, 02, 03, 06, 07		-40 to +300°F	275 PSIG	0.80					
0815LSG	00, 01, 002, 03, 05, 06, 07		-40 to +300°F	200 PSIG	0.85					

*SG refers to recommended minimum liquid specific gravity

ACTUATION LEVEL DIMENSIONS

- A= Minimum distance from actuation point to bottom of mounting.
 B= Minimum distance between actuation levels.
 C= Minimum distance from end of unit to lowest actuation point.
 D= Minimum distance between actuation point when a single float is used to actuate two switches.

Notes:

- 1) A, B, and C dimensions are based on a specific gravity of 1.0.
- 2) One float for two actuation levels can be used only with a 20VA switch.
- 3) Actuation levels are calibrated on descending fluid level, with water as the fluid, unless otherwise specified.
- 4) Standard tolerance on actuation levels is $\pm 1/8"$ (3mm).

Dimensions					Model L500				
Float Code	A	B	C	D	Float Code	A	B	C	D
1010BN	1"	1 3/4"	1"	1/8"	1217BN	1 1/2"	3"	2"	1/4"
1010PV	1"	1 3/4"	1"	1/8"	1817BN	1 1/2"	3"	2"	1/4"
1010STD	1"	1 3/4"	1"	1/8"	2000	1 1/2"	3"	2"	1/4"
1410	1"	1 3/4"	1"	1/8"	1513	1 1/2"	3"	2"	1/4"
1000LW	1"	1 13/16"	1"	1/8"					
0815LSG	1"	2 7/16"	1 7/16"	1/8"					

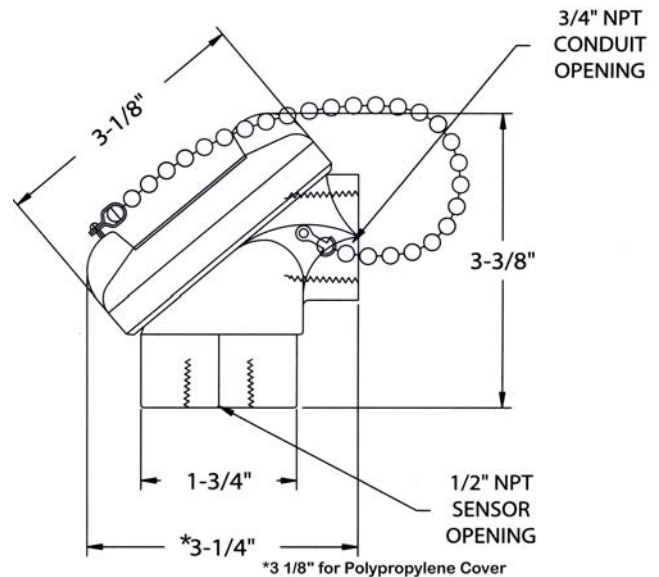
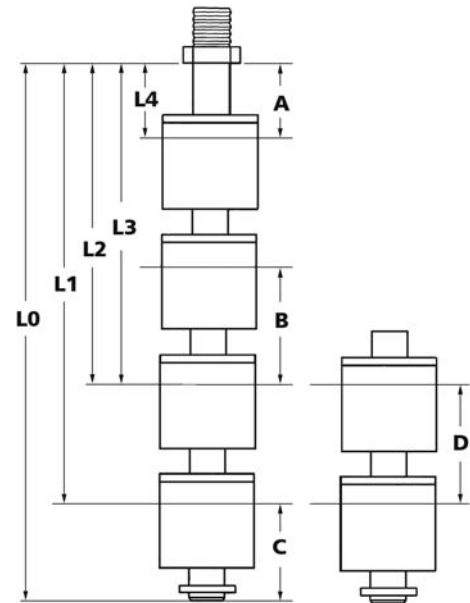
ORDERING INFORMATION

- 1) Select Model Series: L312 or L500
- 2) Select Mounting Type: Table 1
- 2) Select Stem Material: Table 2
- 4) Select Float Material: Table 3
- 5) Select Wiring Type: Table 4
- 6) Select Switch Rating:

L312	L500
3 VA SPDT	30 VA SPDT
20 VA SPST	50 VA SPST
50 VA SPST	100 VA SPST
- 7) Select Lead Wire Length: 12", 24" or other (specify)
- 8) Advise Switch Actuation Levels:

Level	Distance to Actuation level (Inches)*	SPST Switch Operation** (Check Type)	
		N.O.	N.C.
L6			
L5			
L4			
L3			
L2			
***L1			
****L0			

- * Measured from the bottom of the mounting plug or flange
 ** Switch position is "normal" with unit dry (empty tank)
 *** L1 is the distance to the lowest actuation level with mounting "up" and is the distance to the highest actuation level with mounting "down"
 **** L0= length overall, measured from the bottom of the mounting plug or flange to the end of the unit



White Polypropylene & Die Cast Aluminum Junction Boxes

- 9) Specify if junction box option required:
 WP= White Polypropylene rated NEMA 4X (excellent resistance to acids, alkalines and many process chemicals. Temperature rating is 198°F).
 AL= Die cast Aluminum rated NEMA 4, 7, & 9