ALMEG CONTROLS

# SR SERIES

## Large Multi Level Switch

## DESCRIPTION

The Multi Level Switch has many configurations. The level control can be used to control pumps, control alarms, including high level liquid and low level liquid. A magnetic equipped float follows the process level. As the level rises or falls the switch changes state giving a contact signal. Economically maintains a level, operates a single or dual pumps and can activate high alarms and low alarms.

## PRINCIPLE OF OPERATION

The switching action is achieved through the use of an internal magnet within the float assembly and its interaction with the switch mechanism. As the liquid level fluctuates inside the tank, the float moves. Its magnetic field actuates each reed switch inside the stem and completes an electrical circuit.

### KEY FEATURES

**Max Length: 180"**
**Operating Temperature: -40° C ~ 80° C (HT: 120°C)**
**SPST Reed Switch: 70 watt; 200VDC / 150VAC @0.5A**
**SPDT Reed Switch: 20 wattl; 150VDC / 150VAC @0.5A**
**Max Pressure: 80 PSIG**

### APPROVALS

**Conforms to UL STD 61010-1**
**Certified to CSA STD C22.2#61010-1-12**

## SELECTION GUIDE

| Fitting Type (1-1/4" and above, 1/2" NPT Conduit Up) | FITTING/STEM MATERIAL | NUMBER OF LEVELS | FLOAT OPTIONS | OPTIONS |
|---|---|---|---|---|
| 25 = (1/4") | 1 = 316 Stainless Steel | 1 = 1 Switch Level | N = Ø52mm Ball; S/S, S.G.=0.65 | N4 = NEMA 4X with terminal block |
| 38 = (3/8") | 2 = 360 Brass | 2 = 2 Switch Levels | P = Ø40 X 35mm; S/S, S.G.=0.68 | SPDT = Single Pole, Double Throw |
| 50 = (½") | | 3 = 3 Switch Levels | Q = Ø46 X 76mm; S/S (DIFERENTIAL FLOAT) S.G.=0.96 | HT = high temp 125°C max |
| 75 = (¾") | | 4 = 4 Switch Levels | R = Ø47 X 48mm; PP, S.G.=0.5 | ADJ = Adjustable |
| 100 = (1") | | 5 = 5 Switch Levels | T = Ø47 X 47mm; BUNA, S.G.=0.42 | |
| 140 = (1¼") | | 6 = 6 Switch Levels | U = Ø40 X 45mm; BUNA, S.G.=0.4 | |
| 150 = (1½") | | | W = Ø30 X 45mm; BUNA, S.G.=0.4 | |
| 200 = (2") | | | X = Ø52mm Ball; S/S, Weighted | |
| 250 = (2 ½") | | | | |
| 300 = (3") | | | | |
| F100 = 1" FLANGE | | | | |
| F150 = 1-1/2" FLANGE | | | | |
| F200 = 2" FLANGE | | | | |
| F300 = 3" FLANGE | | | | |
| SAE5 = SAE5 FLANGE | | | | |
| SANF = SANITARY FLANGE | | | | |
| T = TUBE END | | | | |

**EXAMPLE: SR200-1-6-U-N4**
2"npt, stainless fitting, 6 levels, 52mm Ball s/s float, NEMA 4X Enclosure with terminal block. (Levels and switch state to be selected by customer.)

**OTHER OPTIONS:**
**Custom mounts**
**90 degree bend (for side mount application)**
**Cable options**
**Custom Lead lengths**
**IF YOU DO NOT SEE A SOLUTION FOR YOUR APPLICATION, PLEASE CONTACT US DIRECTLY. WE ARE HERE TO HELP!**

info@almegcontols.com www.almegcontrols.com 1-800-823-4577

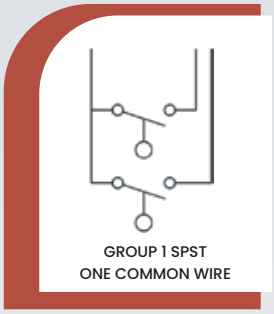
ALMEG CONTROLS

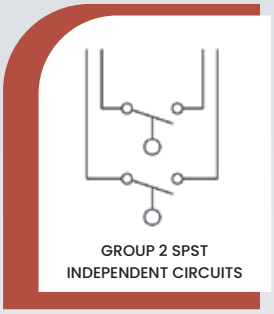
# SR SERIES

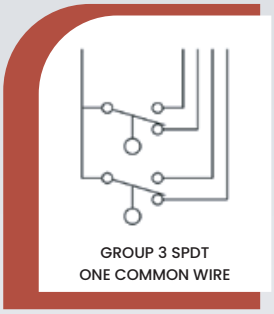
## Large Multi Level Switch

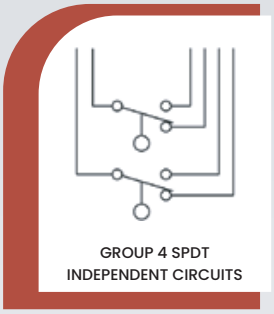
## SWITCH WIRING & ELECTRICAL SPECIFICATIONS

**Each switching point requires one float. For special applications, a single float can be used to activate two switching points with a minimum separation space of 1/8" (3 mm). The maximum number of actuation levels depends on the wiring.**


GROUP 1 SPST
ONE COMMON WIRE


GROUP 2 SPST
INDEPENDENT CIRCUITS


GROUP 3 SPDT
ONE COMMON WIRE


GROUP 4 SPDT
INDEPENDENT CIRCUITS

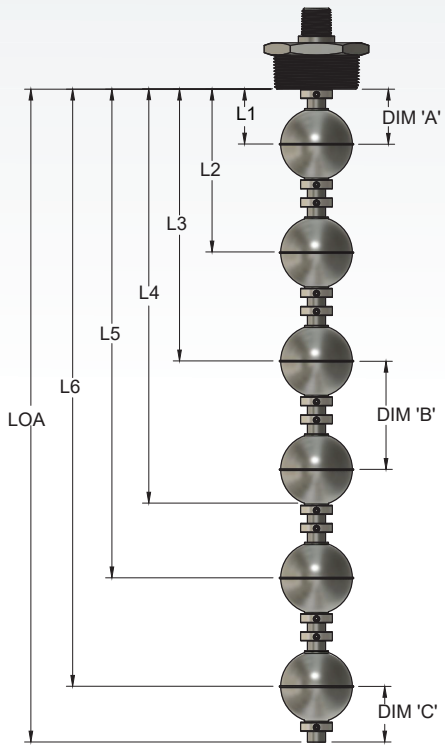
## SWITCH WIRING & COLOR CODE

| LEVELS | GROUP 1 SPST | GROUP 2 SPST | | GROUP 3 SPDT | | GROUP 4 SPDT | | |
|---|---|---|---|---|---|---|---|---|
| Common Wire | Black | None | | Black | | None | | |
| | NO/NC | NO/ NC | | NO | NC | Common | NO | NC |
| L1 | Red | Red | Red | Red/Wht | Red/Wht/Blk | Red | Red/Wht | Red/Blk/Wht |
| L2 | Yellow | Yellow | Yellow | Yel/Wht | Yel/Wht/Blk | Yellow | Yellow/Wht | Yellow/Blk/Wht |
| L3 | Blue | Blue | Blue | Blue | Orange | Blue | Black | Orange |
| L4 | Brown | Brown | Brown | Brown | Gray | Brown | White | Gray |
| L5 | Orange | Orange | Orange | | | | | |
| L6 | Gray | Gray | Gray | | | | | |

## ACTUATION LEVEL DIMENSIONS

### NOTE:

- Dimensions are based on a specific gravity of 1.0. When using one float for two actuation points, contact the factory for the available switch ratings.
- Actuation levels are calibrated on descending fluid levels with water, unless otherwise specified.
- Standard tolerance on actuation levels is ± 1/8" (3 mm).
- Minimum distance dimension 'A' = 1.5"
- Minimum distance dimension 'B' = 3.0"
- Minimum distance dimension 'C' = 2.0"
- Standard wire lead length without enclosure is 24"




Levels are dimensioned from the bottom of the fitting. The switch state is selected in an empty condition.
Normally Open (N/O): Contact is open when the tank is empty.
Normally Closed (N/C): Contact is closed when the tank is empty.

*One float can activate two switches when the lower switch is NC and the upper switch is NO.*

info@almegcontols.com www.almegcontrols.com 1-800-823-4577