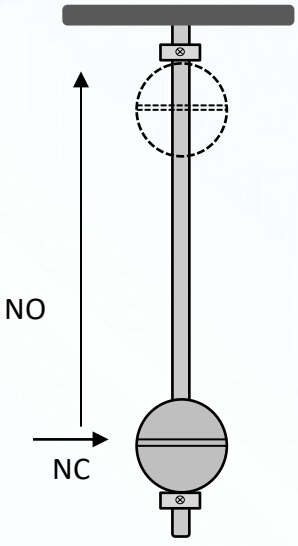
Top Mount Float Level Switch

We are introducing our Magnetic Level Switch to sensing the liquid level inside the tank, which offers trouble free in conductive & non-conductive liquids under widely varying temperatures, pressures, liquid viscosity and corrosive liquids.

Application :

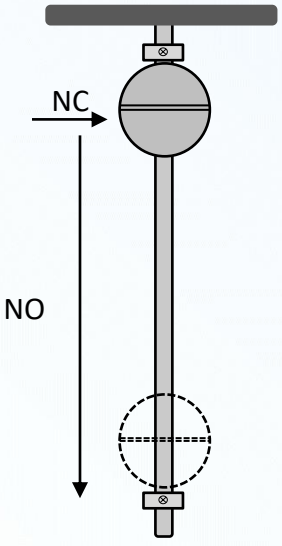
Magnetic Level Switches are suitable for measurement of every application like Water Tanks, Storage Tanks, Process Tanks, Hydraulic Power Pack Tanks, Cooling Tower Tanks, Power generation, Utility Tanks, Automobile, Pharmaceutical etc (within the pressure & temperature limitations).

Working of Level Switch With Single Float



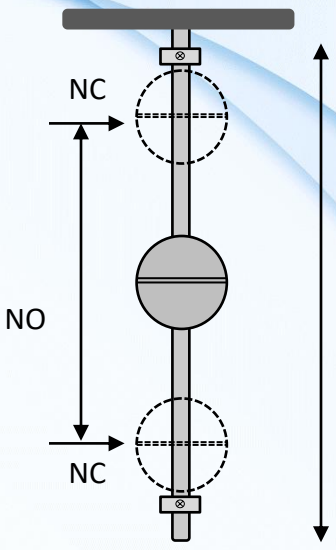
Low

The Contact is NO, when Liquid Level reaches the Low Level Contact actuates it gives NC.



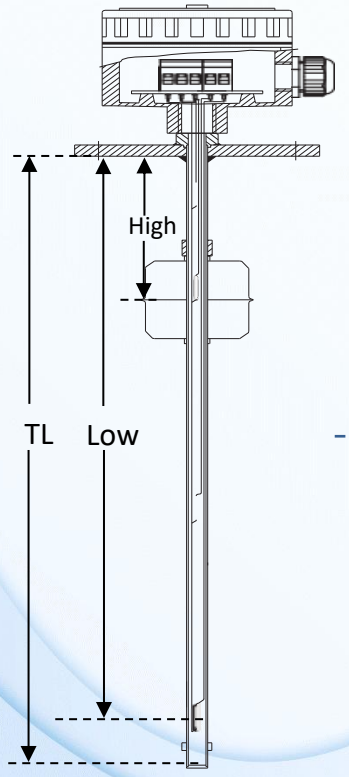
High

The Contact is NO, when Liquid Level reaches the High Level Contact actuates it gives NC.

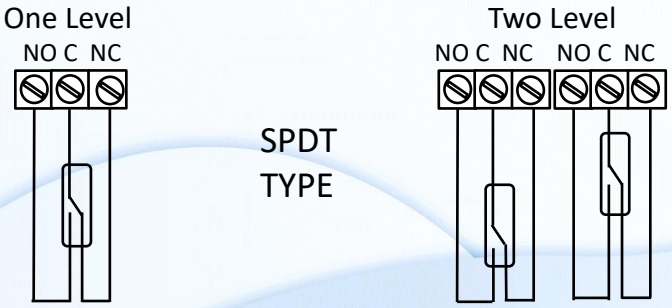


Low & High

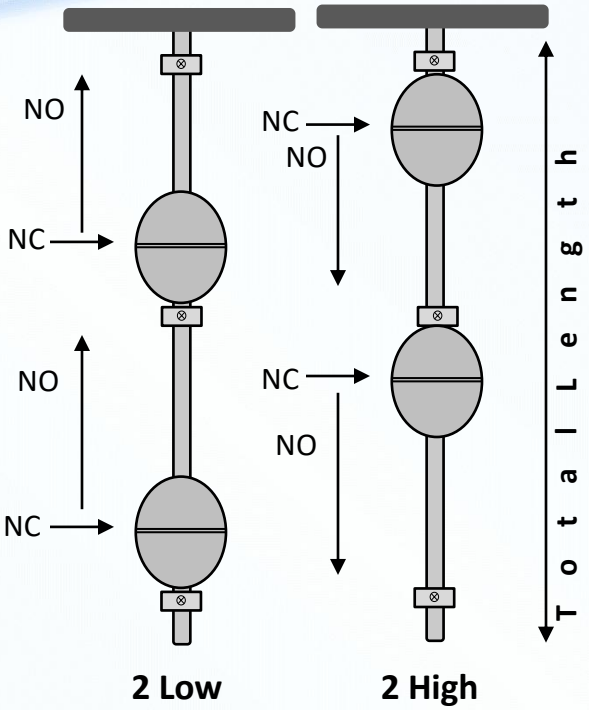
The Contacts of High & Low level are NO, when Liquid Level reaches the Low or High Level Contact actuates it gives NC. Between High & Low Level Points Contacts are NO.



Reed Switch With PCB Terminal Circuit Diagram



Working of Level Switch With Multiple Float (Maxi. Four Floats)



Multiple Float Level Switch is useful for Low & High Level Sensing.

2Low : The Contacts of both Low is NO when Liquid Level is above the Low Level & when Liquid Level reaches the Low Level Contact actuates it gives NC.

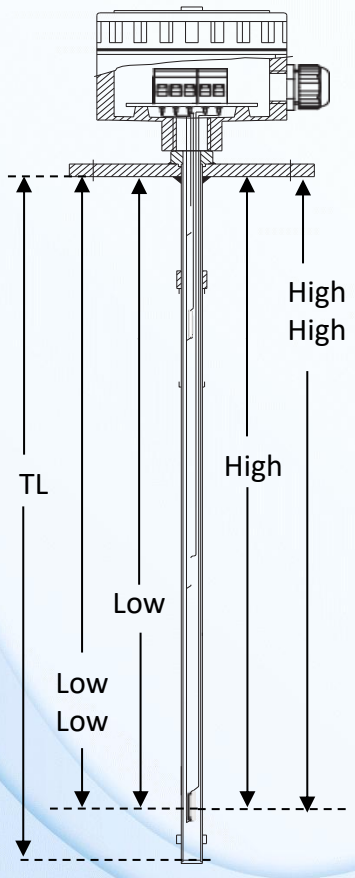
2High : The Contact of both High is NO when Liquid Level is below the High Level & when Liquid Level reaches the High Level Contact actuates it gives NC.

We can combine 2 Low & 2 High Level Points with Four Floats.

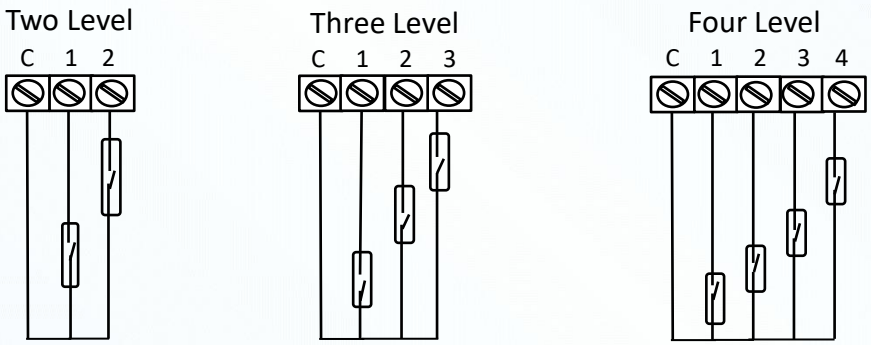
The numbers 1,2,3,4, Indicates the number of floats to be used in switch

NC Point Must be at least 50 mm from both Stem End.

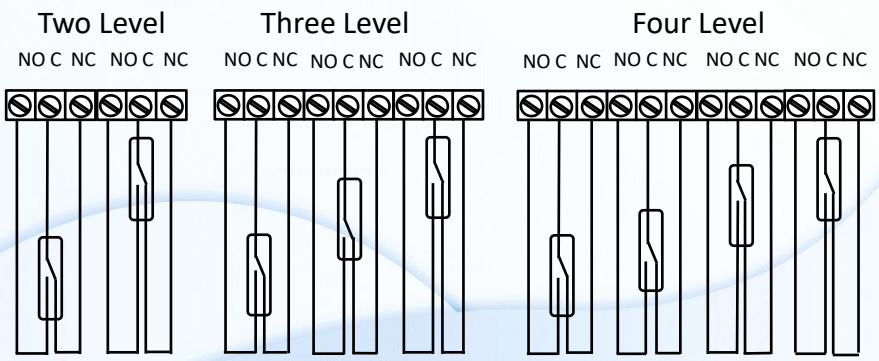
Reed Switch With PCB Terminal Circuit Diagram

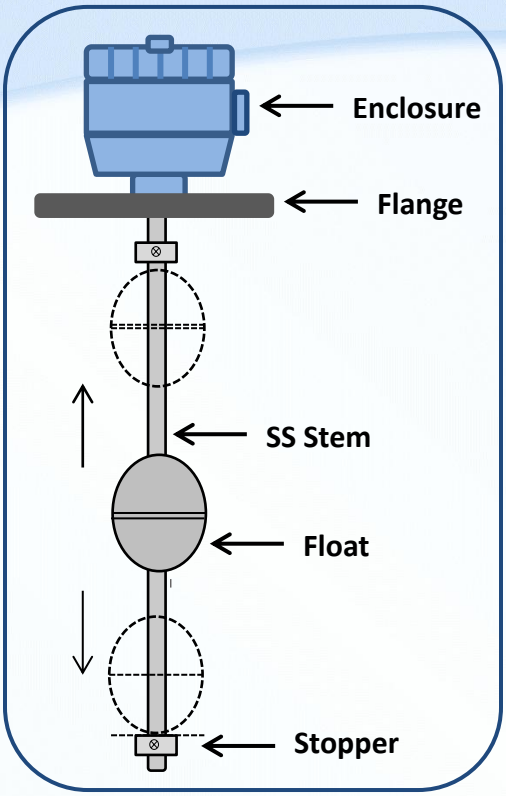


SPST TYPE



SPDT TYPE





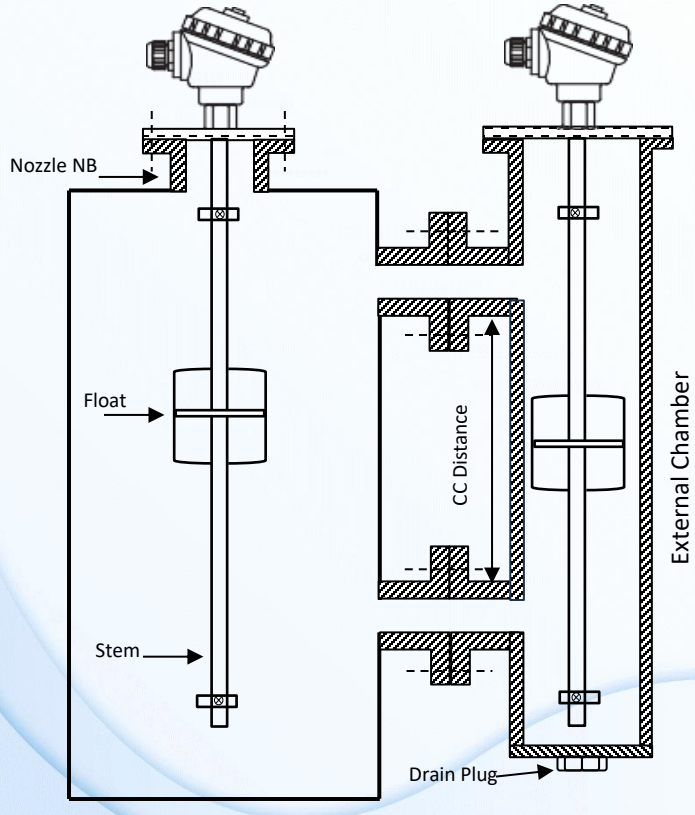
Level Switch Construction

Types of Enclosure :

DC : Din Connector made of polyamide suitable for indoor applications only.
WP : Weatherproof made of Cast Aluminum suitable for High Temperature & Open Environment.
FP : Flameproof made of Cast Aluminum suitable for Explosive Liquid Tanks.
IP : IP 68 Epoxy Potted for under water applications.
ESP : Special Enclosure (Design provided by customer)

Types of Process Connection :

Flange : All Types of Standard Flanges ASME 150#, ASME 300#, Table D, BSP Thread , TC Clamp
Threading : All Types of Standard Threading BSP , NPT, SMS
Stem : SS 304, SS 316, SS 316L, Titanium, PP, PTFE
Floats : SS316, SS316L, Titanium, PP, PTFE



Level Switch Installation

Level Switch can be mounted directly on the Tank Top or externally through a chamber as shown in drawing.

- In Tank Top Mounting ensure that ID of mounting nozzle is greater than float diameter. We are recommend Stillwell for liquids under turbulence.

- In External Mounting the Level Switch is fitted on the chamber. It can be used when space limitation in the tank or any mechanical device operate in the tank.

- Ensure that ID of mounting nozzle is greater than float diameter. In case of float diameter is greater than nozzle then remove the float from bottom side of the Stem & reinsert the float on the Stem, after installation

Model Identification

TFLS - | | | | |

1.Enclosures	
IP-68 Epoxy Potted (Indoor Application)	**IP**
Din Connector (Indoor Application & Max. Two Levels)	**DC**
Cast Aluminium Weatherproof	**WP**
Cast Aluminium Flameproof	**FP**

2.Process Connection Size	
60 Sqmm X 50 PCD, 4H X 6 mm Dia Flange	**A**
1”	**B**
1-1/2”	**C**
2”	**D**
2-1/2”	**E**
3”	**F**
4”	**G**
Other	**O**

3. Process Connection Type	
ASME 150# Flange	**1**
ASME 300# Flange	**2**
TABLE D Flange	**3**
BSP (M) Screwed	**4**
Triclover Ferrule	**5**
Other	**0**

4. Process Connection Material	
CS	**H**
SS 304	**I**
SS 316	**J**
SS 316L	**K**
PP Cladding on CS	**L**
PTFE Lined on CS	**M**
Other	**O**

5.Floats MOC X Size (mm)	
SS 316 X Ø 24	**N**
NYLON X Ø 25	**O**
SS 316 X Ø 28	**P**
SS 316 X Ø 40	**Q**
PP X Ø 50	**R**
PTFE LINED X Ø 42	**S**
SS 316 X Ø 52	**T**
SS 316 X Ø 60	**U**

6. Number of Floats	
One	**1**
Two	**2**
Three	**3**
Four	**4**

7. Electrical Rating	
200 V DC/125 V AC – 0.5A (SPST) 10 VA	**ST1**
300 V DC/240 V AC – 1 A (SPST) 50 VA	**ST2**
200 VDC/125 VAC - 0.5A (SPDT) 10 VA	**DT1**
230 VDC/230 VAC – 1A (SPDT) 60 VA	**DT2**

8. Number of Levels	
One Low Level	**L**
One High Level	**H**
Low & High Level	**HL**
Two Low Level	**2L**
Two High Level	**2H**
Three Level	**3**
Four Level	**4**

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