

Techtrol Float Operated Tilt Level Switch for Liquids - FTS



Salient Features :

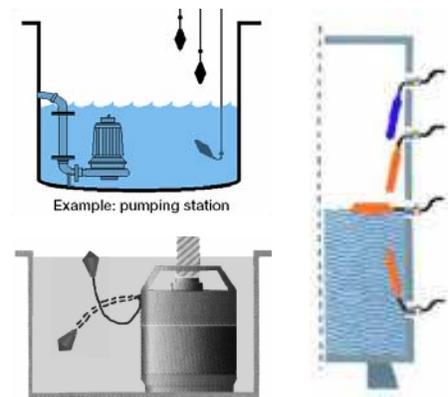
- ☑ Reliable performance & easy installation
- ☑ Site adjustable preset levels
- ☑ Single or multiple level detection
- ☑ Float (IP68) to suit most aggressive conditions.
- ☑ Wide specific gravity range from 0.75 to 1.5
- ☑ **ATEX** certified (IP 6X) for hazardous area
- ☑ **ACS** certified for sanitary applications

Specifications :

- Suspended Floats : Disc, Biconical (BC), BC Large, BC Asceptic, BC Ex-proof or Mini Tubular
- Float Protection : Flood proof IP68/ IP6X (Ex-proof)
- Min Liquid SG : 0.75
- Enclosure : Cast Al IP66
- Cable Entry : PG11(Polyamide) or 1/2"NPT(Brass) Cable Gland or 1/2"NPT(F)
- Process Flange : CS or PP (CS clad) 3"or 4"NB ANSI 150# or 1.5NB (M float)
- Cable Lengths : 2, 3, 5, 6 & 10 mtrs
- Cable MOC : Neoprene, EPDM, Hypalon
- Contact Type : Microswitch, SPDT
- Adjustable Stopper : PP, SS316 [BC(S)]
- Support Pipe : GI, SS304, SS316, PP
- Suspended Ballast : SS304, SS316 with Rope



Diverse Applications



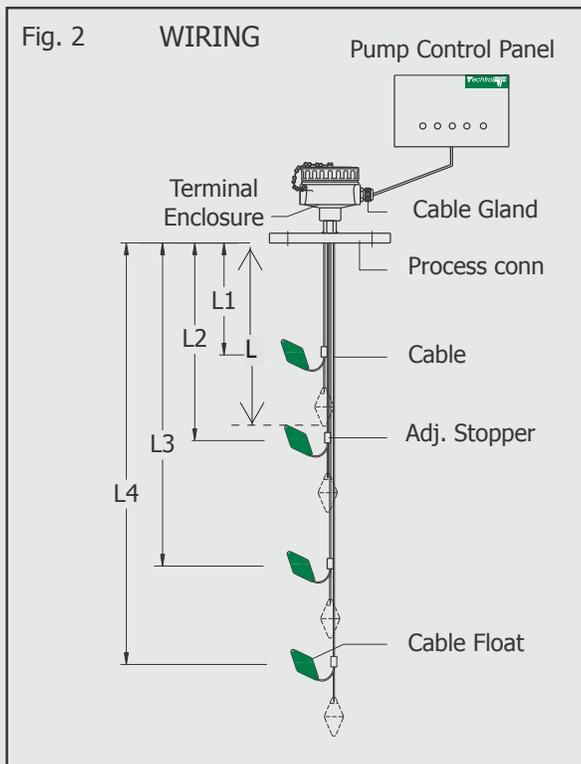
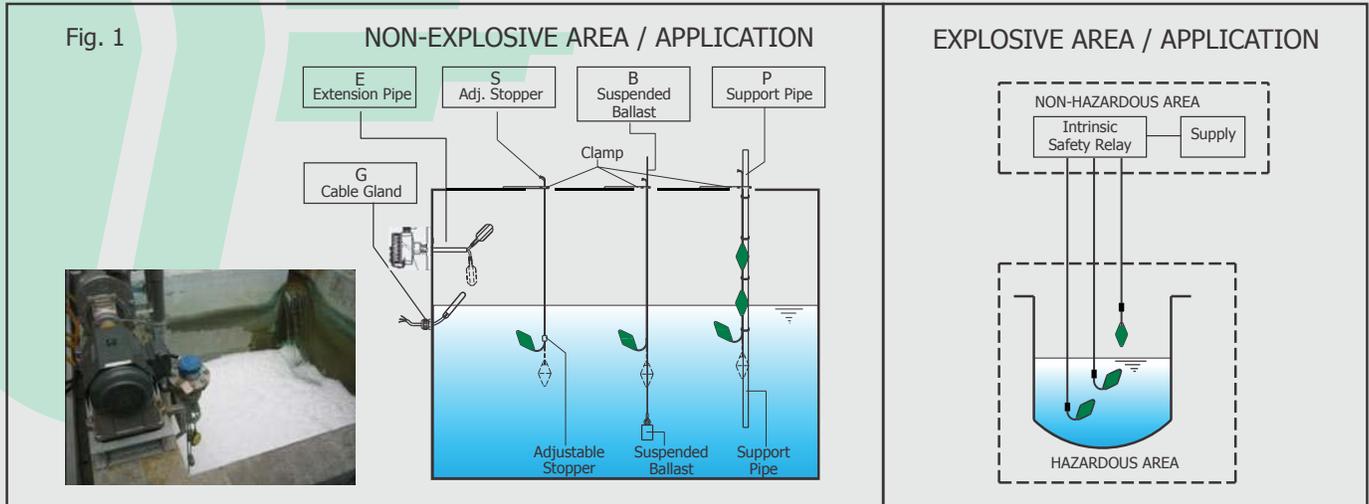
| Suspended floats | C OBCONICAL | B BICONICAL ECO | A BICONICAL LARGE | S BICONICAL ASCEPTIC | E BICONICAL EX PROOF | M MINI TUBULAR |
|---------------------|------------------------|------------------------|-------------------------------------------|----------------------------|--------------------------------------|-------------------------|
| | | | | | | |
| Shape | Obconical | Biconical | Biconical | Biconical | Biconical | Tubular |
| Service | Clear or dirty liquids | Clear or dirty liquids | Clear/ dirty/ viscous liquids (turbulent) | Drinking water (Sanitary) | Inflammable liquids/ hazardous areas | Tanks with small inlets |
| Contact Rating | 5A, 250VAC | 8A, 250VAC | 8A, 250VAC | 6A, 250VAC | 10mA, 24VAC | 3A, 250VAC |
| Max Temp | 70°C | 85°C | 85°C | 85°C | 70°C | 85°C |
| * Max Test Pressure | 1 Kg/cm ² | 3.5 Kg/cm ² | 3.5 Kg/cm ² | 3.5 Kg/cm ² | 4 Kg/cm ² | 2 Kg/cm ² |

* Max test pressure for float switches with process flange is limited upto 1 kg/cm² due to sealing between cable & flange

Side mounted systems : are configured & located on the tank through an extension pipe (E) or cable gland (G)

Top mounted systems : are configured & located on the tank through an adjustable stopper with 'o' ring (S) or support pipe (P) or suspended ballast (B).

Identify whether operational area or service is explosive or non-explosive area. For non-explosive area / service use conventional floats, however for explosive area, it is mandatory to use 'ATEX' certified switches viz hazardous liquids or effluent treatment plants or septic tanks.



Services :

Raw/ Filtered/ Polluted/ Drinking/ Waste Water, Sewage, Acidic & Alkaline Liquids, Coolants & Sludge

Model Identification :

| Float Type x Cable | FTS- | x Cable Lengths of each Float L1, L2.....L4 |
|----------------------------------------------------|-------|---------------------------------------------|
| Obconical x Neoprene | C | |
| Biconical Eco x Neoprene | B | |
| Biconical Large x Neoprene | A | |
| Biconical Aseptic x EPDM | S | |
| Biconical Ex-proof x Hypalon | E | |
| Mini Tubular x Neoprene | M | |
| Other | O | |
| Terminal Enclosure x Cable Entry | | |
| Without | W | |
| Cast Al IP66 x PG11 Cable Gland | J | |
| Cast Al IP66 x 1/2" NPT Double Comp'n Cable Gland | K | |
| Cast Al IP66 x 1/2" NPT (F) | L | |
| Other | O | |
| Process Connection MOC x Type | | |
| Not Provided | W | |
| CS x 1-1/2"NB ASME 150 # (M Float) | 1 | |
| CS x 3"NB ASME 150 # (B Float) | 2 | |
| CS x 4"NB ASME 150 # (C, A, S & E Float) | 3 | |
| PP (CS clad) x 1-1/2"NB ASME 150 # (M Float) | 4 | |
| PP (CS clad) x 3"NB ASME 150 # (B Float) | 5 | |
| PP (CS clad) x 4"NB ASME 150 # (C, A, S & E Float) | 6 | |
| Other | O | |
| No. of Floats | | |
| One, Two Four | 1...4 | |
| System Configuration | | |
| Adjustable Stopper | S | |
| Suspended Ballast with Rope | B | |
| Support Pipe | P | |
| Extended Flanged Pipe (Side Mtg) | E | |
| Cable Gland Polyamide (M float) | G | |
| Others | O | |

* All dimensions in mm except specified

Cable Suspended Float Switch 'Obonical' for Pump Control

Cable Suspended Float is provided with a counter weight and the cable tilts at an appropriate preset level, to trigger a switch fitted within the float to provide control action. The preset level is decided by the location of the counter weight along the cable length. Techtrol's 'Obonical' tilt switch is a preferred choice of customer due to its excellent quality and features.

- PP float is corrosion proof. It has a large buoyancy and unique shape resembling a balloon to ensure that no dirt or particles adhere to its surface
- Robust and durable float is shock & fracture proof under extreme working conditions
- The moulded float is designed as a double chamber system with IP68 protection
- The micro switch within the float is of excellent quality with high mechanical & electrical durability. It is rated for 5 A at 250 VAC and its potential free change over contacts can be directly connected to auxiliary devices like alarm, pump and solenoid valve for control action
- The switching action is reliable and positive as the micro switch is housed inside the inner chamber alongwith its actuating ball for smooth and guided motion
- Provided with a highly flexible neoprene cable for ease of installation and smooth float tilting to ensure positive action, which is not possible with PVC cable as it hardens with use resulting in improper functioning.
- Stable functioning with most liquids including sludgy, soily and oily, viscous or liquids with suspended powder or solid particles upto 70°C temperature at Atm pressure
- Easy installation on tank tops with limited headway
- Presets level are site adjustable by relocating the counter weight appropriately.
- Multiple cable switches with required process connection and terminal box can be provided for multiple preset levels (max 4)
- Standard switches are supplied in lengths upto 10 meters and longer lengths on request.
- It is suitable for services like Waste Water, Effluents, Sewage, Sludge, Backwash, Treated Water, Chemical Dosing Tanks of Poly, Alum, Lime, Antiscalent in WTPs, STPs and ETPs. River/ Reservoir Water, Acids/ Alkalis Tanks in DM Plants, Cooling Tower Water in Power Plants , Fire Water Tanks, Paper Pulp in Paper Industries

