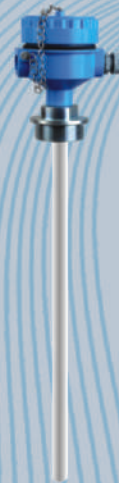
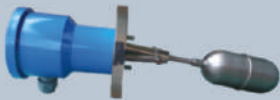


High Performance | High Quality  
Cost effective | Versatile | Flexible

# LIQUID LEVEL SENSORS



## LIQUID LEVEL INDICATOR

Level Indicator consists of a Float, Metal structure & transparent tube. The transparent tube is provided above the mounting flange to visually indicate the liquid level inside the tank. The Indicator is a simple robust design to know the liquid level as well as to sense High, Low or multi level of the liquid in the tank using Reed Proximity Sensors. Also available with temperature controllers.

Indicator Length	: 100mm to 2000mm
Reed Proximity sensor	: PNP, NPN types in 24V DC NO type in 230V AC
Wetted parts	: Nylon Foam, SS304, SS316
MOC	: Standard (MS Flange, SS Frame, Acrylic tube), SS 304, SS 316

**Application :** Coolant Oil , Hydraulic Oil, Water, Diesel, Furnace Oil, Edible Oil, Chemicals.



## MAGNETIC LEVEL INDICATOR

The operating principle is based on magnetic field coupling. Float chamber is typically constructed with non magnetic pipe having process connections that matches to the vessel connections. Float size and weight is determined by the process fluid, pressure, temperature and the specific gravity of the process fluid. Float contains magnets to provide 360° magnetic flux field.

Mounting Orientation	: Top-Side & Top- Bottom	Float	: SS 304, SS 316, SS 316L, PP, Titanium
Indicator System	: Bi-colour Rotating Roller / Capsule	Scale	: Aluminium / SS / Polycarbonate
Float Chamber	: Non Magnetic Standard pipe	Process Connection	: Flanged in various sizes
MOC of Float Chamber	: SS 304, SS 316, SS 316L, PP, Titanium	Limit Switch Assy	: SPDT Micro switch or Reed Switch

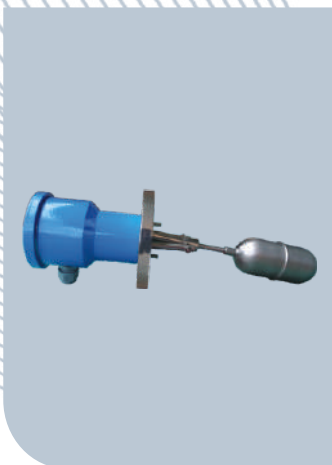
**Application :** Solvent Tank, Filler Tank, Brine Tank, Water Tank, Bulk Storage Tank, Oil & Crude Tank, Acidic & Alkaline Tank,

## TUBULAR LEVEL INDICATOR

Tubular level indicator allows easy viewing of the liquid in the low to medium pressurised vessels/Tank. These gauges are fitted parallel to the process vessel/tank.

Indicating Gauge	: Borosilicate glass	Pressure Rating	: Upto 10kg/cm <sup>2</sup>
Connection	: Flanged ASA 150#/ ASA 300#	Temperature	: Upto 200°C
Protective Channel	: Rectangular - CS / SS 304 / SS 316	Indicating Range	: 300 to 3000mm
Valve	: CS / SS 304 / SS 316 / PP	Mounting	: Side

**Application :** Water Tank, acidic and alkaline Tank, bulk storage Tank, filter Tank, oil and crude Tank



## SIDE MOUNTED LEVEL SWITCH

The float lever carries a permanent magnet which is repelled by similar magnet mounted in the switch housing. The magnet having the same pole directed towards each other are separated by a non-magnetic diaphragm. The gland less construction offers excellent sealing.

Switch Type	: Micro Switch, SPDT, 240V AC, 5A	Flange	: Standard Dia 120, 92 pcd
Enclosure	: Weatherproof, Flameproof	MOC	: SS 304, SS 316, PP
MOC	: Cast Aluminum, SS, PP	Max. Temp.	: 150° C
Float	: Dia 50, 60, 75	Max. Pressure	: 20kg / cm <sup>2</sup>

**Application :** Hydraulic Oil, Boilers, Chemical and Pharma





## FLOAT OPERATED LEVEL TRANSMITTER

Stem carrying series of reed switches and resistors forms a "Potentiometer" circuit which extends to the full indicating length of the transmitter. As the float travels through the indicating distance, the magnet located within it tap off the reed switches there by varying the resistance fed to the electronics which in turn converts the change in resistance to industry standard analog output.

Housing	: SS 304, SS316	Probe Length	: up to 3000mm
Float	: SS 316	Maximum Temp.	: 125°C
Mounting	: Flange, Threaded	Input	: 24V DC
Enclosure	: Weather, Flame & Water Proof	Output	: 4 - 20mA / 0 - 10V

**Application :** Diesel Tank, Solvent Tank, Hydraulic Tank, Water Tank (RO, DM, Soft, Raw), Acidic & Alkaline Tank, STP Tank

## CAPACITANCE LEVEL TRANSMITTER

Capacitance level transmitter works on the principle of change in capacitance value, due to change in liquid level. Here the liquid acts as the dielectric, the probe and tank wall as electrodes. The change in capacitance value is converted to 4 - 20mA analogue output. It is available for conductive as well as nonconductive liquids. PTFE sleeve is provided to the electrodes for better insulation & to withstand high temperature.

Type	: 2 wire, 3 wire, 4 wire	Probe Length	: up to 15000mm
Input	: 24V DC	Maximum Temp.	: 105°C
Output	: 4 - 20mA / 0 - 10V	Mounting	: Flange / Threaded

**Application :** Diesel Tank, Solvent Tank, STP Tank, Water Tank (RO, DM, Soft, Raw), Acidic & Alkaline Tank



## ULTRASONIC LEVEL TRANSMITTER

Ultrasonic level transmitters are used to measure level of all kinds of liquids. The sensor generates ultrasonic sound waves which strikes the medium and returns. The electronics measures the time taken and then computes the distance of measured surface to the sensor. The transmitter generates a 4 to 20 mA current signal proportional to the liquid level, or to the distance of liquid from sensor.

Type	: 3 wire, 4 wire	Maximum Temp.	: 65°C
Input	: 24V DC	Mounting	: Flange / Threaded
Output	: 4 - 20mA / 0 - 10V	Measuring Range	: 10000mm

**Application :** Diesel Tank, Solvent Tank, STP Tank, Water Tank (RO, DM, Soft, Raw), Acidic & Alkaline Tank

## ADJUSTABLE LEVEL SWITCH

Adjustable Level Switch consists of separate Level Switch assembly for each level like Low, High, Middle or Multi-level. These individual level switch assy, are suspended through SS Rope & are freely adjustable along the SS rope. The level switch assy, are provided with adjustable disc which can slide through the SS rope & are secured to SS rope with stopper or cable tie at required levels. The cables are terminated inside a weatherproof enclosure. The adjustable Level Switch is provided with mounting flange of standard size.

Reed Housing	: SS 304	Maximum Temp.	: 70°C
Float	: PU, SS316	No. of Switches	: 1 to 10
Mounting	: Flange	Maximum Pressure	: Atmospheric
Enclosure	: Weather Proof	Maximum Switching Voltage	: 24V DC
Probe Length	: up to 5000mm	Maximum Switching Current	: 0.5A

**Application :** Water Tanks



## MAGNETIC LEVEL SWITCH

Magnetic Level Switch consists of non-abrasive float carrying permanent magnet and non-ferrous stem carrying one, two, or multiple reed switches. The float glides along the stem and when the float nears the vicinity of reed switch, the magnetic field of permanent magnet forces the reed contact to close. The reed switch output are provided as potential free contacts.

Housing	: SS 304, SS316, PP	Maximum Temp.	: 125°C
Float	: PP, PU, SS 316	No. of Switches	: 1 to 10
Mounting	: Flange, Threaded	Maximum Pressure	: 10Kg/Cm <sup>2</sup>
Enclosure	: Weather, Flame & Water Proof	Maximum Switching Voltage	: 230VAC
Probe Length	: up to 5000mm	Maximum Switching Current	: 0.7A

**Application** : Water, Cooling Tower, Hydraulic Oil, Diesel, Edible Oil, Chemicals & Pharma.



## MINIATURE FLOAT SWITCH

Miniature Float Switch is suitable for single level sensing. It consists of a Reed Switch housed inside the SS housing & a permanent magnet inside the Float assembly. The Float moving with the liquid level makes (NC) & breaks (NO) the Reed Switch contact. It is used for sensing Low, High or point level in Tank. The mounting is through a M10 male thread.

Housing	: SS 304, SS316	Maximum No. of Switches	: 2
Float	: PP, SS 316	Maximum Pressure	: 3Kg/Cm <sup>2</sup>
Mounting	: M10 Male Thread with a nut	Maximum Switching Voltage	: 230VAC
Maximum Temp.	: 125°C	Maximum Switching Current	: 0.7A

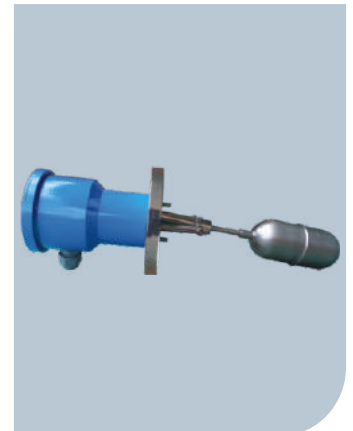
**Application** : Hydraulic Oil, Water Boilers, Chemical & Pharma

## HORIZONTAL FLOAT SWITCH

The float lever carries a permanent magnet which is repelled by similar magnet mounted in the switch housing. The magnet having the same pole directed towards each other are separated by a non magnetic diaphragm. The gland less construction offer excellent sealing.

Switch Type	: Micro Switch, SPDT, 240V AC, 5A	Flange	: Standard Dia 120, 92 pcd
Enclosure	: Weather proof, Flame proof	MOC	: SS 304, SS 316, PP
MOC	: Cast Aluminum, SS, PP	Max Temperature	: 1500 C
Float	: Dia 50, 60, 75	Max Pressure	: 20Kg/Cm <sup>2</sup>

**Application** : Hydraulic Oil, Water Boilers, Chemical & Pharma



## CABLE FLOAT SWITCH

The cable Float Level Switch is structured from chemical resistant polypropylene. Electrical switching circuit comprises of micro switch and Iron ball to control the contact. The switches are operated through an iron ball which enables ON or OFF contact signal when the floating angle is larger than a certain degree where the state of the iron ball and micro switch will be changed for actuation.

Switch Rating	: 10A, 250V AC	Maximum Temp.	: 50°C
Contact	: Micro Switch with NO/NC Contact	Cable	: Neoprene
MOC	: Copolymer polypropylene	Protection	: IP 68

**Application** : Hydraulic Oil, Water Boilers, Chemical & Pharma

# Filpro Sensors Pvt. Ltd.

No 130, 10th Cross, Petechennappa Industrial Estate, Kamakshipalya, Magadi Main Road, Bangalore - 560 079. Phone : 080 23286463

E-mail : sales@filprosensors.com

Website : www.filprosensors.com

