

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, SPST / SPDT in 230V AC
Wetted parts	: Nylon Foam, SS304, SS316, PP
MOC	: Standard (MS Flange, SS Frame, Acrylic tube), SS 304, SS 316, PP

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



SS LEVEL INDICATOR

It consists of a float, metal structure & glass tube / SS Tube. The glass 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 low, high or multilevel of liquid using reed proximity sensor.

Indicator Length	: 100mm to 2000mm
Float	: SS 316
MOC	: SS 304 / SS 316
Visual Indicator	: Glass / SS 304 / SS 316
Sensor	: Reed proximity PNP/ NPN

Application : Hot Water, Viscous Liquids, Paint, Chemical, Edible Oil, Furnace Oil

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	: Flange / Thread / Triclover
MOC of Float Chamber	: SS 304, SS 316, SS 316L, PP, Titanium	Accessories	: Switch, Transmitter

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 ²
Connection	: Flanged / Thread	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 & Alkaline Tank, Bulk Storage Tank, Filter Tank, Oil and Crude Tank.



FLOAT 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, PP, Titanium	Probe Length	: up to 5000mm
Float	: SS 316, PP, Titanium, Nylon Foam	Maximum Temp.:	125°C
Mounting	: Flange, Threaded, Triclover	Input	: 24V DC
Enclosure	: Weatherproof / Flameproof / IP68	Output	: 4-20mA / 0-10VDC/RS485/Hart

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

HYDROSTATIC LEVEL TRANSMITTER

Hydrostatic Level Transmitter with flush diaphragm is designed for a wide variety of liquid level measurement. The pressure transducer is protected inside a SS 316 housing. Featuring the flush diaphragm makes it suitable for viscous media or media with small particles, so as to have diverse measurement applications.

The standard reference pressure is gauge (or relative) pressure realized through a vent tube in the cable.

measuring media	: Water, Oil, Chemical	operating temp. range	: -20 to 85°C
Input	: 24V DC	measuring ranges	: 3m, 5m, 6m, 8m, 10m, 12m, 15m
output signal	: 4-20mA (standard)	membrane material	: SS 316L
overload	: 150 %fs	housing material	: SS 316
accuracy	: $\leq \pm 0.5$ %fs	environment protection	: IP68

Application : Water, Oil, Chemical



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 analog output proportional to the liquid level, or to the distance of liquid from sensor.

Type	: 2 Wire, 3 Wire	Maximum Temp. :	65°C
Input	: 24V DC	Mounting	: Flange / Threaded
Output	: 4-20mA / 0-10VDC/RS485/Hart	Measuring Range :	5 mtr, 10 mtr, 15 mtr, 20 mtr

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



RADAR LEVEL TRANSMITTER

Radar level transmitter emits microwave signal which hits the liquid surface and returns to the receiver. The time taken for the wave to travel & return is calculated. It is then converted into distance of liquid level. Radar level transmitter is not affected by vacuum, dust, temperature, pressure change, steam & falling gases.

Type	: 2 wire	Maximum temp	: 350°C
Input	: 24V DC	Mounting	: Flange / Thread
Output	: 4-20 mA / Hart / RS 485	Measuring Range	: 10Mtr, 30Mtr , 70Mtr

Application : Water, Oil, Chemical, Coal, Grains, Powder, Petroleum, Acids.



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



FUEL SENSOR

Fuel sensor is capacitance based sensor which measure the capacitance of fuel & is converted in to accurate fuel level measurement. These are integrated with GPS device for vehicle fuel level monitoring or to PLC/electronic device to monitor generator fuel tank.

Range	: 150mm to 3000mm
Input	: 12 to 24V DC
Output	: 0-5V, 0-10V, RS 232, RS 485
Resolution	: 12bit
Protection	: IP67
Operating Temperature	: -40°C to 85°C

Application : Vehicle Fuel Tank, Bowser, Generator Fuel Tank



MAGNETIC LEVEL INDICATOR TRANSMITTER

Reed chain transmitters are used widely along with Magnetic level indicator for continuous level monitoring. Reed Level transmitter is mounted directly on the float chamber. To provide analogue output proportional to liquid level inside the tank.

Input	: 24V DC
O/P	: 4-20mA / 0-10V / RS 485 / Hart
Resolution	: 5mm / 10mm
Enclosure	: Weatherproof / Flameproof
Max temperature	: 150°C
Length	: 100mm to 6000mm

Application : Storage Tanks, Process Tanks



RF ADMITTANCE LEVEL SWITCH

RF admittance type level switch is rugged point level switch designed for level detection of Bulk materials in bins or silo.

Input	: 24V DC / 240VAC	MOC	: SS 304 / SS 316
Output	: Relay rated 5A 240V AC	Enclosure	: Weatherproof / Flameproof
Probe	: Rigid with Coat Guard	Temperature	: 0 - 100°C for integral
Insulation	: Teflon / Ceramic		: 0 - 250°C for integral with Stand off
Probe length	: 300mm to 1000mm		: 0 - 450°C for remote with Stand off
Mounting	: Flange / Thread		

Application: Cement Industry, Chemical Industry, Food Industry, Pulp / Paper Industry, Pharmaceutical, Water.





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.

Stem	: SS 304, 316, PP, Titanium	Maximum Temp.	: 125°C
Float	: PP, NF, SS 316	No. of Switches	: 1 to 10
Mounting	: Flange, Threaded, Triclover	Maximum Pressure	: 40Kg/Cm ²
Enclosure	: Weather, Flame & Water Proof	Maximum Switching Voltage	: 230VAC
Probe Length	: up to 5000mm	Maximum Switching Current	: 3A

Application: Water, Acids, Solvents, Hydraulic Oil, Diesel, Edible Oil & Chemicals

ADJUSTABLE LEVEL SWITCH:

Adjustable level switch consists of separate level switch assembly for each level like low, high, middle or multi - level. These individual levels switch assembly, are suspended through SS Rope & are freely adjustable along the SS rope. The level switch assembly, are provided with adjustable disc which can slide through the SS rope & are secured to SS rope with grub screw at required levels. The cable is terminated inside a weatherproof enclosure. The adjustable level switch is provided with mounting flange of standard size.



Reed Housing	: PP	Max. Temperature	: 70°C
Float	: Nylon Foam / SS316	No. of Switches	: 1 to 10
Mounting	: Flange	Max. Pressure	: Atmospheric
Enclosure	: Weatherproof	Max. Switching Voltage	: 24V DC
Probe Length	: upto 10Mtr	Max. Switching Current	: 0.5A

Application: Water, Oil, Non Corrosive Liquids



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.	: 70°C
Contact	: Micro Switch with 1NO+1NC Contact	Cable	: PVC
MOC	: Copolymer polypropylene	Protection	: IP 68
Cable Length	: 3 Mtr, 5 Mtr, 10 Mtr		

Application: Water, WTP Plant, STP Plant, Slurry, Chemical, Oil,

MINIATURE LEVEL SWITCH

Level Switch consists of non-abrasive float carrying permanent magnet and non ferrous stem inserted with one, two or multiple Reed Switches. The Float glides along the stem and when float is in the axis of Reed switch, the reed contact changes due to magnet in the float.



Float	: Nylon Foam , PP, SS 316	Max. Temperature	: 85°C (NF , PP) , 125°C (SS)
Float size	: 25mm (NF,PP) , 28mm (SS 316)	No. of Switches	: 1 to 5
Mounting	: Flange , Thread	Max. Pressure	: 2kg/cm ² (NF, PP), 5Kg/Cm ² (SS)
Enclosure	: Lead wire , Weatherproof, Flameproof	Max. Switch Voltage	: 24V DC / 240V AC
Stem	: 8mm , SS 304 / SS 316	Max. Switch Current	: 0.5A / 0.7A
Probe length	: 50mm to 1000mm		

Application: Water, Oil, Petrochemical, Chemical, Fuels.

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	Cable Length	: 0.5 Mtr
Float	: SS 316	Maximum Pressure	: 3Kg/Cm ²
Mounting	: M10 Male Thread with a nut	Maximum Switching Voltage	: 230VAC
Maximum Temp.	: 125°C	Maximum Switching Current	0.7A

Application: Water, Acids, Solvents, Hydraulic Oil, Diesel, Edible Oil & Chemicals



PP MINIATURE FLOAT SWITCH

Miniature Float Switch is suitable for single level sensing. It consists of Reed Switch housed inside a PP housing & a permanent Magnet inside the float assembly. The float moving with the liquid level makes (NC) & break (NO) the reed switch contact. It is used for sensing low, high or point level in tank. The mounting is through M12 male thread.

Housing	: PP	Max. pressure	: 2kg/cm ²
Float	: Nylon Foam, PP	Max. Switching Voltage	: 24V DC/240V AC
Mounting	: M12 Thread with Nut	Max. Switching Current	: 0.5A/0.7A
Maxtemperature	: 80°C	Wire length	: 0.5 Mtr

Application: Water, Oil, Chemical



MINIATURE SS HORIZONTAL FLOAT SWITCH

It consists of reed switch housed inside the main body & a permanent magnet inside the float assembly. The float rises & falls with the liquid level, thereby operating the reed switch.

Switch Type	: Reed switch	Max. Current	: 0.7A (Max)
Float	: Dia16 ,SS 316	Max. Temperature	: 100°C
Mounting	: 1/2" BSP	Max. Pressure	: 3kg/cm ²
Max. Voltage	: 240VAC		

Application: Water, Oil, Chemical



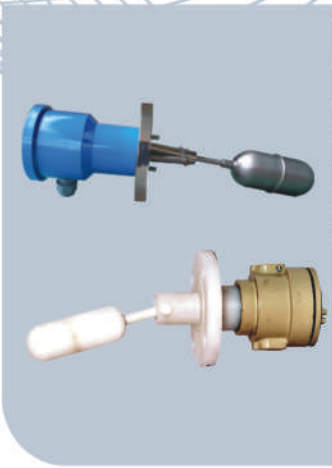
PP HORIZONTAL FLOAT SWITCH

Horizontal Miniature Float switch with complete PP construction suitable for mounting on tank side wall. The construction is Compact hence the name Horizontal Miniature Float Switch. It consists of a Reed Switch housed inside the main body & 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 tanks.

Housing Material	: PP	Mounting	: M16 Thread
Lead Wire	: 0.5 Mtr	MOC	: PP
Switch Rating	: 24V DC / AC, 1.5A	Max Temperature	: 70°C
Float	: Dia 18	Max Pressure	: 3Kg / cm ²

Application : Hydraulic Oil, Water, Chemical & Pharma





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 ²

Application: Oil, Chemical, Water, Diesel, Acids, Solvents

VIBRATING FORK LEVEL SWITCH

The principle is Vibrating "Fork" is kept vibrating at its mechanical resonant frequency by piezo elements. When the service material covers the tines of the probe, it resists its movement, damping the vibration. This change in vibration frequency is sensed & relay or control o/p is generated.

Input	: 24V DC/240V AC
Output types	: Relay: SPDT/DPDT, Open Collector : PNP/NPN
Output Rating	: Relay: 6A , 230V AC, Open Collector : 200mA
Mounting	: 1" , 1 1/2" BSP , Flange Any Std Size
Material	: SS 304 / SS 316
Enclosure	: Cast Aluminum , IP66

Application : Water, Oil, Chemical, Powder, Granules



ROTARY PADDLE LEVEL SWITCH

Rotary Paddle Level Switch consists of electro-mechanical assembly with geared motor, which drives a connected paddle wheel through a special clutch mechanism. The rotating paddle's rotation gets restricted when material fills its vicinity. This activates the relay which is used for material detection.

Input	: 230V AC	Temperature	: 80°C (High Temperature on request)
Output	: Relay contact rated 5a @ 230V AC	Mounting	: 1 ½" BSP, SS304/316 (others on request)
Sense Probe	: 12mm Dia , SS 304/316	Enclosure	: Weatherproof , Cast Aluminum
Probe length	: 150mm, Others on request	Paddle	: 4 Vane / 2 Vane SS 304/316

Application: Cement, Ash, Rice, Husk, Food Grains, Powders, Granules, Bulk Solids.

FLOAT & BOARD TYPE LEVEL INDICATOR

Float & Board Level Indicator consists of a "Float" connected to a pointer through a rope & set of Pulleys. The pointer glides over a scale "Board". The Board is mounted parallel to the tank. The "Float" floats on the liquid surface, moves up & down, moving the pointer on the scale "Board".

Indicator Length	: 0.5 Mtr. to 20 Mtr.
Float size / Material	: 300 mm / SS316
Board size / Material	: 150 mm / SS304, Aluminium powder coated
Rope size	: 2 mm

Application: Water, Oil, Diesel, Chemical, Solvents, Acids, Fuels



Filpro Sensors Pvt. Ltd. is an ISO 9001:2015 Company incorporated in 2002 in Bangalore .Filpro manufactures all type of level measuring instruments catering to process Industries , Petrochemicals , Oil & Gas ,Refineries ,Food & Beverages , Machine tool, Pharmaceutical, Water treatment Plants .Filpro has CE marking & ATEX approval for some products .

Other Products by us :

- ◆ Optical Level Switch
- ◆ Leak Detector
- ◆ Pump Controller
- ◆ Digital Indicator / Controller
- ◆ Pressure Sensor
- ◆ Temperature Controller
- ◆ IOT Device
- ◆ Flow Meters



Certificates & Approvals



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

