



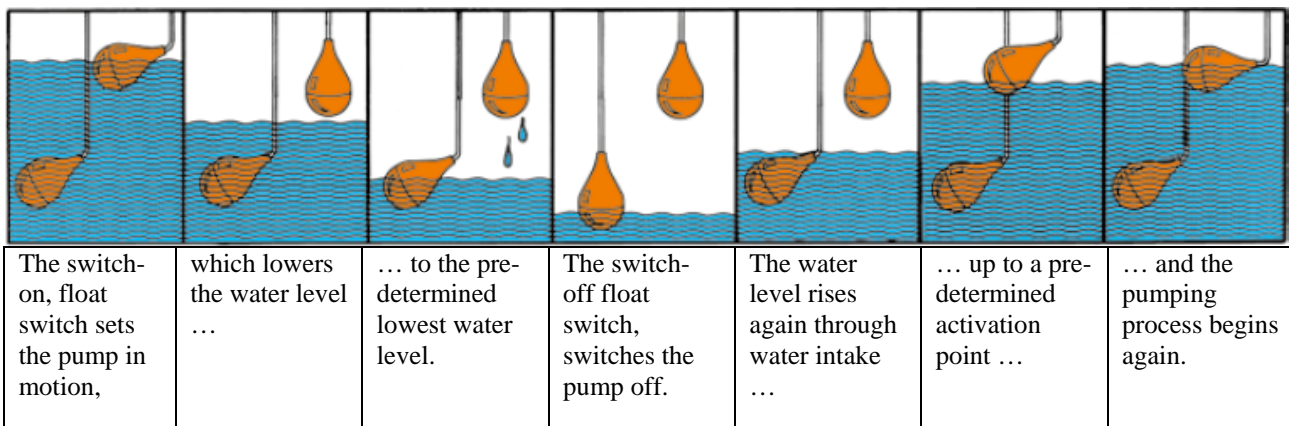
## Float switch

The float switch is freely suspended from a highly flexible, heavy-duty cable and set at the required level “ON”, “OFF” and “ALARM”.

The position of the float switch changes with the rise and fall of the water level. A micro switch opens and closes the circuit, for example, switching a pump on or off or triggering an alarm.

One float switch is required respectively for each switching impulse.

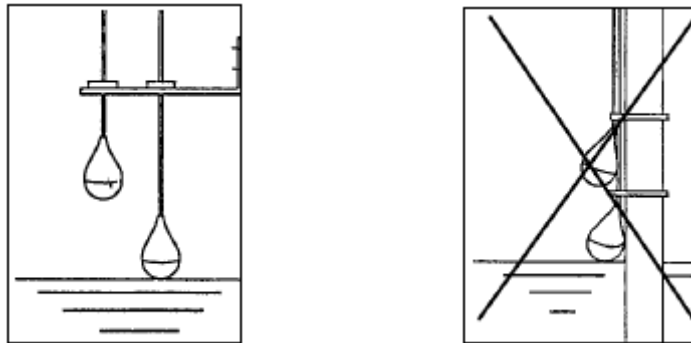
The float switch is however, equipped with a change-over contact, that is, depending on the electrical connection, the float switch can be used both to empty and fill a tank.



### Installation

When installing the float switch it is important to see that they can hang freely vertically, that they don't rest on the base, that they can float without interference from the shaft walls, pipes, and fittings etc. and that they don't lie directly current.

For simple mounting we offer a cable support. The stainless steel support is mounted on the wall. This support, two float switches that can be suspended at exactly the required height by means of cable screw-joints.





### Electrical connection

The electrical connection of the float switch takes normally place on a low voltage control circuit by a control unit. It may not operate directly on an electrical supply line, e.g. not directly on a pump motor

	Connection of float switch	1 grey	2 black	3 brown
	For emptying a tank	insulate	X	X
	Alarm high level	insulate	X	X
	For filling a tank	X	insulate	X
	Alarm low level	X	insulate	X

If correct installed and mounted, the float switch function is practically maintenance-free. Depending on the medium's pollution level, the installation must be checked for dirt deposits from time to time and cleaned if necessary.

**Product data**


	<b>MS1</b>	<b>MS1 elec. Ex</b>	<b>MS1 C</b>
			
<b>Specific density (in liquid)</b>	0,95 – 1,05	0,95 – 1,05	0,95 – 1,05
<b>Breaking capacity</b>	1mA/4V - 5A/250V	1-100mA 4-40V	1mA/4V - 5A/250V
<b>Max. temperature</b>	80° C	80° C	100° C
<b>Protect system</b>	IP 68 / 2 bar	IP 68 / 2 bar	IP 68 / 2 bar
<b>Angle function</b>	10°	10°	10°
<b>EX classification</b>		II 1G EEx ia IIC T6	
<b>Housing material</b>	Polypropylene	Polypropylene Pre-elec.	Polypropylene Stamylan
<b>Cable material</b>	TPK/PVC	TPK/PVC	Teflon FEP
<b>Housing color</b>	Orange	Black	Grey
<b>Cable color</b>	Orange	Dark blue	Black
<b>Height [mm]</b>	180	180	180
<b>Diameter [mm]</b>	100	100	100
<b>Cable cross section [mm]</b>	3 x 0,75	3 x 0,75	3 x 0,75


**Resistance list**


MS1 / MS1 elec. Ex	MS1 C
sewage water	accumulator acid
faecal water	fuel
liquid manure	oil bore / turbine / engine / lube
domestic sewage	oil gear / fuel / diesel / transformer
sewage of washing machine	degreaser
bathes and showers	ATE – brake fluid
suds	petroleum
emulsion with parts of diesel oil / grease / oil / acids etc.	non-freeze liquid
rain water	solvent containing fluids
ground water	lactic acid, watery
sea water / river water	sulphuric acid containing fluids
mineral water	hydrochloric acid containing fluids
chlorine water	ethyl alcohol
salt water	galvanic bath
brine	
vegetable oils	
fruit acids	
alcohol	


These lists were made to the best of one's knowledge and information's from our material suppliers. As there is no plastic, which is resistant against all medias and temperatures, mix ratio, surface tension, pressure ratio etc. is also important, in critical applications practical attempts have to be done.

*Product numbers*

	<b>Product name</b>	<b>Cable length</b>	<b>Product number</b>
	1 float switch MS1	10 meter	96003332
	1 float switch MS1	20 meter	96003695
	1 float switch MS1	30 meter	91073205
	2 float switch MS1, w.wallhanger	10 meter	62500013
	3 float switch MS1, w.wallhanger	10 meter	62500014
	4 float switch MS1, w.wallhanger	10 meter	62500015

	<b>Product name</b>	<b>Cable length</b>	<b>Product number</b>
	1 float switch MS1 elec. Ex	10 meter	96003421
	1 float switch MS1 elec. Ex	20 meter	96003536
	1 float switch MS1 elec. Ex	30 meter	91072782
	2 float switch MS1 elec. Ex	10 meter	62500016
	3 float switch MS1 elec. Ex	10 meter	62500017
	4 float switch MS1 elec. Ex	10 meter	62500018

	<b>Product name</b>	<b>Cable length</b>	<b>Product number</b>
	1 float switch MS1 C	10 meter	96652869

	Product name	Product number
	Cable support for 2 float switches	96003338