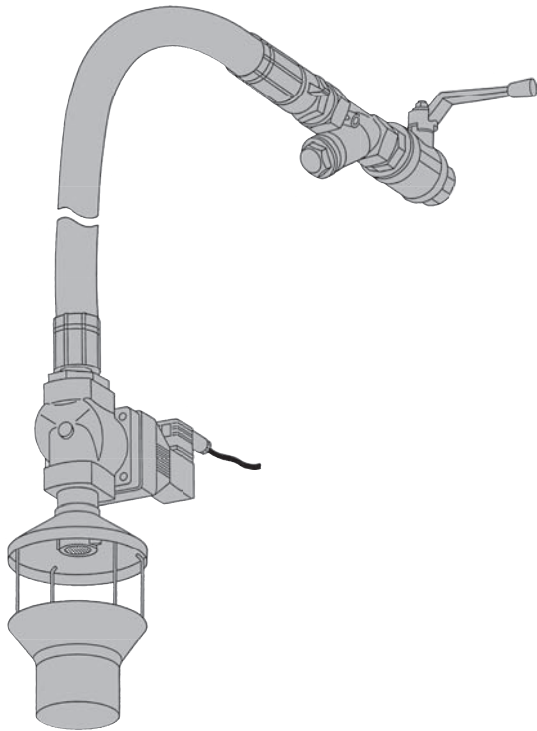


# Open potable water outlet / mains water top-up assembly

maintenance free potable/mains water feed unit for non-potable water storage tanks from WISY

**Please read these instructions carefully before installing the open potable water outlet / mains water top-up!**



## Instruction for installation and use

### Remark

It is necessary to thoroughly flush the supply pipework circuit according to DIN 1988 part 2 before installing the open potable water outlet/mains water top-up. It is necessary to guarantee a strict separation between potable/mains water and non-potable water.

Please ensure that the open potable water outlet/mains water top-up must be installed vertically. This means that the outlet of the tundish must always be installed in a vertical position. The potable/mains water connection will therefore be uppermost and the outlet of the tundish (with external diameter 50 mm) below. Potable/mains water connection and tundish must be placed in this way, (see illustration 1) in order to guarantee the correct functioning of the unit.

The outlet of the tundish must be inserted in the open end (with seal ring) of a DN 50 pipe. In order to guarantee trouble-free water flow there must be a vertical length of at least 300 mm below the outlet of the tundish.

In no event must the open potable water outlet/mains water top-up be installed in an enclosed space where an overflow of back flowing non-potable water over the tundish rim could be restricted or prevented! Shafts, tubes, ventilation towers or similar are enclosed spaces and therefore not permissible as installation locations for the open potable water outlet/mains water top-up. It is generally forbidden to install the open potable water outlet/mains water top-up inside a storage tank! The open potable water outlet/mains water top-up must be installed in such a way that potential overflow water can flow directly into the drainage system, for example by flowing into a floor drain. The following norms are valid: DIN 1988-4, EN 806 and DIN EN 1717.

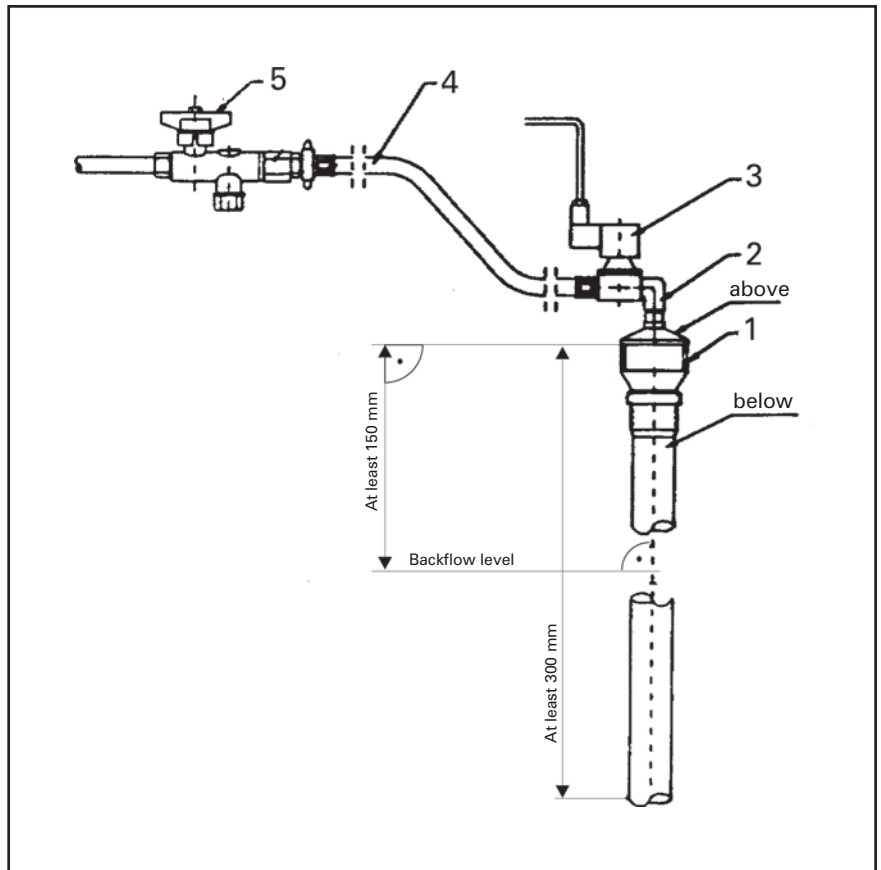
Furthermore the following remarks must be considered for the installation of an open potable water outlet/mains water top-up:

- The open potable water outlet/mains water top-up must not be subjected to high tensile, pressure or torsional loads. This may cause damage to the mechanical parts of the unit and the usability of the open potable water outlet/mains water top-up could be compromised. As a consequence of this, according to the regulations of DIN 1988 part 4, the effectiveness could be impaired.
- The open potable water outlet/mains water top-up must be installed at least 150 mm above the maximum possible non-potable water level (Backflow level). This is normally the external ground level - this point is especially important if the open potable water outlet/mains water top-up is installed within a basement (see illustrations 1 and 2).
- It is important to respect the DIN 1988 and the technical rules for potable/mains water installations (Trinkwasser-Installationen TRWI), the UK Water Regulations, British Standard BS 8515 Code of Practice for Rainwater Harvesting and European Standard EN 1717 and to carry out the installation according to best practice guidelines.

## Illustration 1

### Components

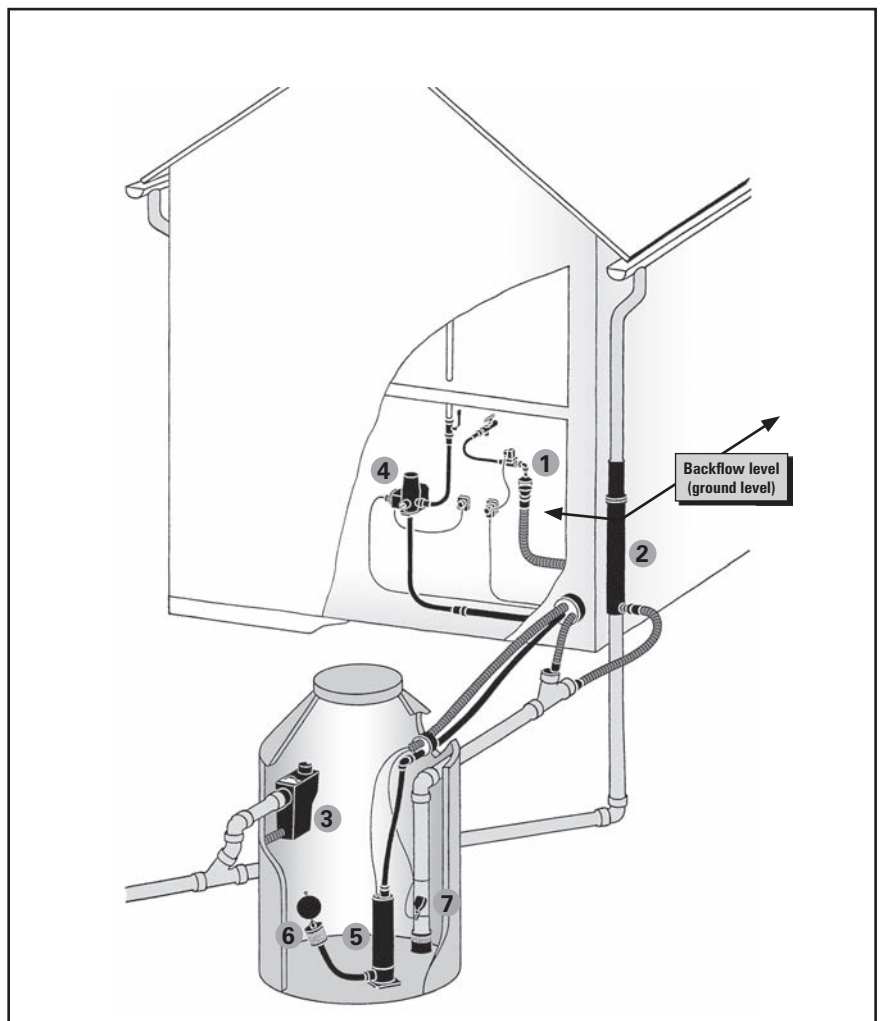
1. Open potable water outlet (tundish)
2. ½" 90° elbow union
3. Solenoid valve ½"
4. Flexible braided hose ½" x 500 mm
5. ½" isolating ball valve with dirt trap



## Illustration 2

Example for a non-potable water installation with potable water feed through the open potable water outlet/mains water top-up.

1. Open potable water outlet/Mains water top-up
2. Standpipe filter collector
3. Multisiphon overflow
4. Automatic switch
5. Submersible pressure pump
6. Floating suction filter
7. Float switch



# Float switch

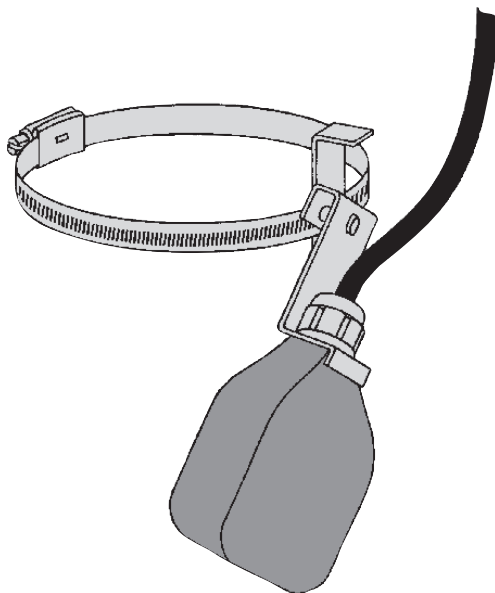
For water feed (yellow) or for dry-running protection (red)

**Please read these instructions carefully before installing the float switch!**

Float switches for submersible use in storage tanks. Controls the potable water feed or turns off the pump in case of low water level and therefore protects the pump against dry-running.

## Instruction for installation and use

### Mechanical installation



### Installation without pivot joint

Fix the cable of the float switch centered/centred between the lower and the upper water level with a cable clip or something similar (*illustration 1*). The switching angle of the float switch is 45°. Therefore the level difference is about 1.4 times of the free cable length (*illustration 2*).

Example: Free cable length 10 cm (3.94 in.): Level difference 14 cm (5.51 in.). Allow for the bending radius of the H07 cable of 13 cm (5.12 in.).

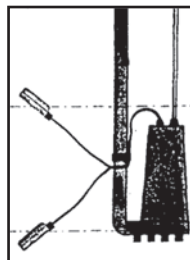


Illustration 1

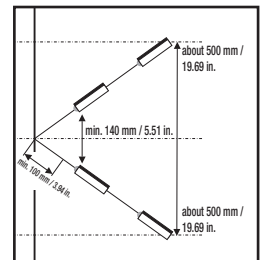


Illustration 2

### Installation with pivot joint

The pivot joint permits very small and precise level differences, depending on the installation 4 cm or 9 cm (*illustration 3*). The respective level difference is indicated on the pivot joint bracket. If for example a level difference of 4 cm (1.57 in.) is desired, the unit should be installed with the 4 uppermost. Fix the float switch centered/centred between the lower and upper water level with the hose clamp/worm-drive clamp (diameter 100-140 mm / 3.94 – 5.51 in.) either on the inlet pipe or on the submersible pump.

Please ensure that the cable doesn't restrict the movement of the float.

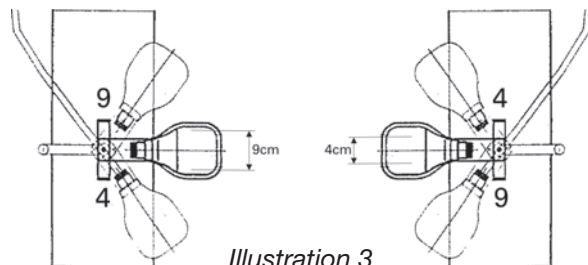


Illustration 3

### Electrical installation

The electrical capacity of the switch is 10 (8) A at 220 V, AC.

Wire assignment	Switch water feed (yellow)	Switch dry running protection (red)
Yellow-green	Earth conductor	Earth conductor
Brown	COM	COM
Blue	On when down	On when up

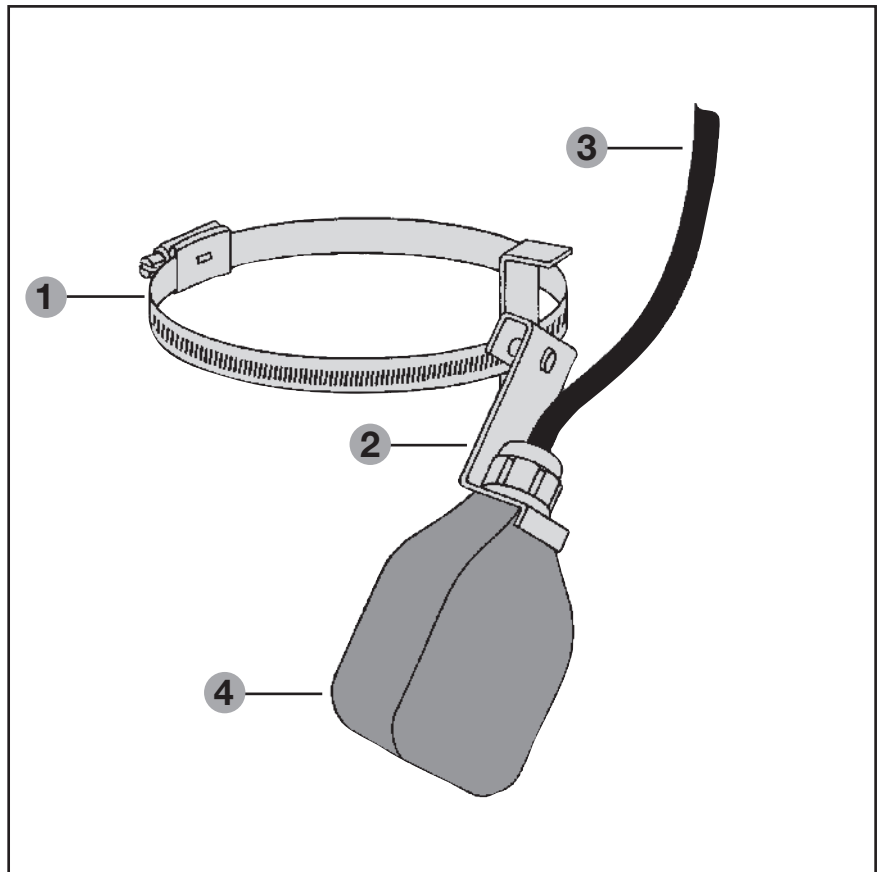
Important: It is possible that water can enter along the cable length and find its way into the switch. It is therefore important not to allow the free end of the cable to enter the water. The connection must be made in a dry area or into a socket protection class IP 65 (or better). It is advisable to use a fault current protection switch.

### Application temperatures

The operational temperature range is from -25° up to + 60°

## Components:

- 1 Hose/worm-drive clamp (diameter 100 – 140 mm / 3.94 – 5.51 in.)
- 2 Switch pivot joint
- 3 Connecting cable
- 4 Float switch



Example of a non potable water installation with potable water feed through the open potable water outlet/mains water top-up.

- 1 Open potable water outlet/mains water top-up
- 2 Standpipe filter collector
- 3 Multisiphon
- 4 Automatic switch
- 5 Submersible pressure pump
- 6 Floating suction filter
- 7 **Float switch**

