

GUIDELINE TO NON-COMPLIANT FLOAT SWITCHES

When a customer requires a warranty replacement for a product supposed to be defective, the float switch must be checked as to identify the problem. Some of the functioning test (1-2) can be done by your after-sales department before contacting TecnoPlastic:

1. VISUAL
2. ELECTRICAL
3. PRESSURE TANK (exclusively by TecnoPlastic)
4. DE-PRESSURE TANK (exclusively by TecnoPlastic)
5. SECTION (need TecnoPlastic permission)

1. VISUAL CHECK:

- **External conditions: float switch body and cable**

It is necessary to check how the float switch looks like, it often happens that float switches have worked in critical conditions even for short period.

Most of the problems occur on the cable.

Customer may have shortened the cable or added it to another one to make it longer. In this case the joint may have been made with resins or heat-shrink tubing: these procedures are not safe and sometimes badly done.

Should the joint have been held with insulating tape, the cable may no longer be waterproof.

Capillary action make water entering easier, so water reaches the inner part of the float switch and damages it. For the same reason, it necessary to be sure that there are no cuts on the entire length of the cable from which water may have entered.

If copper has turned to a dark / black shade, this is a clear signal that it was in contact with water.

In the event of changes made to the cable, and for the above-mentioned cases, warranty expires.



- **Date of production**

Sealing is the last stage of production process. At this stage the float switches are stamped with a mark that indicates the date in which production has ended.

The mark has a circular shape, in the center there is the current year number, while the numbers of months are written radially on the perimeter. An arrow cut through the year's numbers and points the month when the production of that float switches batch was finished.



Warranty is effective from the day the float switch is bought and it will last 24 months according to European law. After-sales office will care for asking customer an invoice or a sale receipt as purchase proof. Without a proof stating the date of purchasing the product is considered out of warranty.

Date of production should anyway be taken into consideration because the product can be put on the market several months after it has been produced.

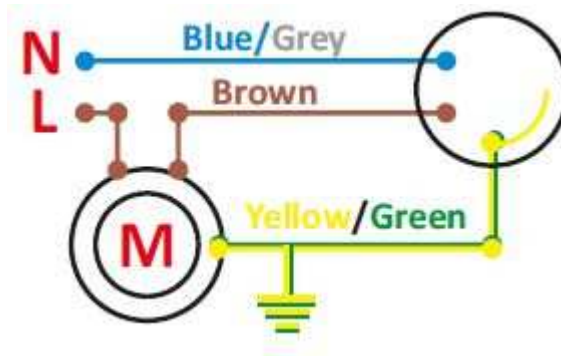
2. ELECTRICAL CHECK:

- **Multimeter, multitester or simply tester:**

Set “continuity mode” (often indicated by + ◀ – symbol) to check the continuity of the electrical circuit and know if the micro-switch inside is working properly. Please refer to the wiring diagram included in the instructions and given here below:

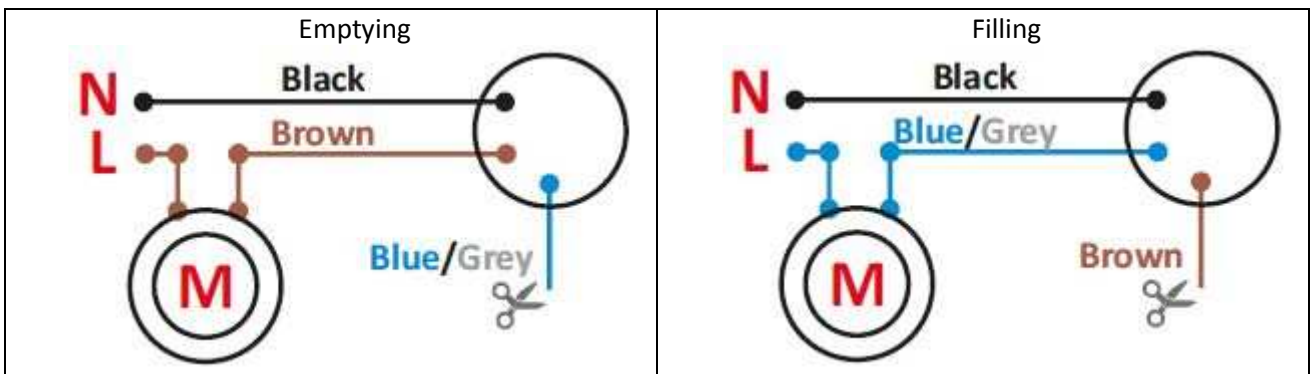
Single function (cables type 3G1 – 3G0,75)

Usually produced only for **emptying** (if not otherwise requested by customer)

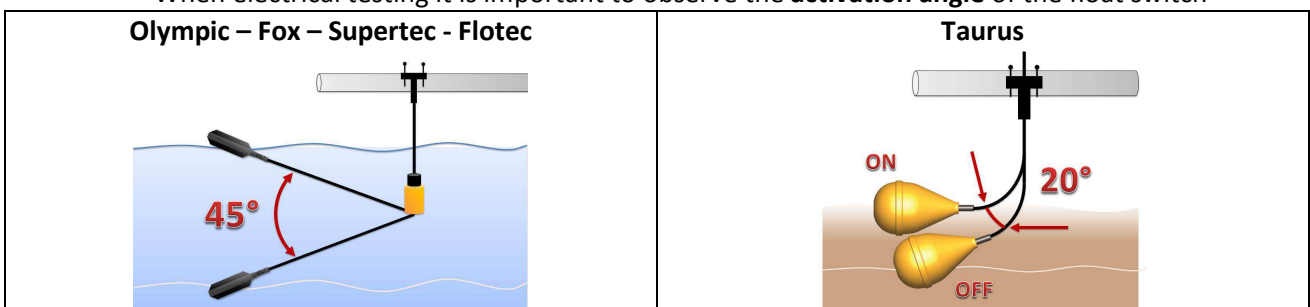


Double or Dual function (cables type 3X1 – 4G0,75 – 4G1)

Produced to allow the customer to choose between **emptying** or **filling** while installing the float switch.



When electrical testing it is important to observe the **activation angle** of the float switch



6. PRESSURE TANK

7. DE-PRESSURE TANK

The 2 following tests must be done **exclusively** by **Tecnoplasic** due to the necessary equipment and complexity.

8. CUTTING

This test can be performed by the after-sales service upon agreement with Tecnoplasic technical assistance.

PLEASE NOTE: this test will cause the destruction of the float switch. If customer returns a product already cut the warranty expires immediately.

Special attention is needed together with skill in precision cutting as to not jeopardize the test by damaging the inner parts of the float switch.

PROCEDURE FOR OLYMPIC, FOX AND SUPERTEC MODEL

- 1) Secure the float switch horizontally in a vise, parallel to the floor, and do not hold too tightly on the sealing.
- 2) By using a hacksaw cut the float switch cover in parallel just some millimeters deep and remove the upper part.

After being cut, float switches with **single room** like **Olympic** and **Fox** allow direct access to the microswitch chamber. If water is found inside the switch chamber it is necessary to check the copper wires in order to understand whether it has entered through the cable or the sealing (test n. 1).

By observing the condition of rails where the ball runs, it is possible to know if the float switch has been damaged by accidental impacts.

It is also possible to check if lever and microswitch are working properly.



With reference to double chamber float switches like **Supertec** it is necessary to do two cuts.

If water is found in the outer chamber, it has entered through the grommet (production problem), while if it is only in the inner micro-switch chamber, it means that water got in through the cable thanks to capillary action (see page 1).



PROCEDURE FOR FLOTEC AND TAURUS MODEL

Flotec float switch or Taurus level regulator require two cuts

- Secure the float vertically in a vise perpendicular to the floor with the round side pointing upward
- Do the first cut under the rim of the external sealing, as to verify if there is water inside.
 - o For Taurus model, some water among the metallic grit inside the cone does not affect its operation, thanks to the airtight third chamber the allows the float rotation (patented).
To pull the Olympic out from Taurus, take away the grit then push hard the cable from below. It is not necessary to remove the screws from the bottom.
- For both models cutting the Olympic is required as to check water entering and mechanical damages.



PLEASE NOTE:

It is mandatory **to provide documentary evidence (photos or video), and a description of each test performed**, this will help TecnoPlastic to assess warranty replacement requests. If no proof is given TecnoPlastic will not agree for a product replacement.

For any further questions or explanation, our technical assistance is at your disposal:

e-mail: sales@tecnoplastic.it

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