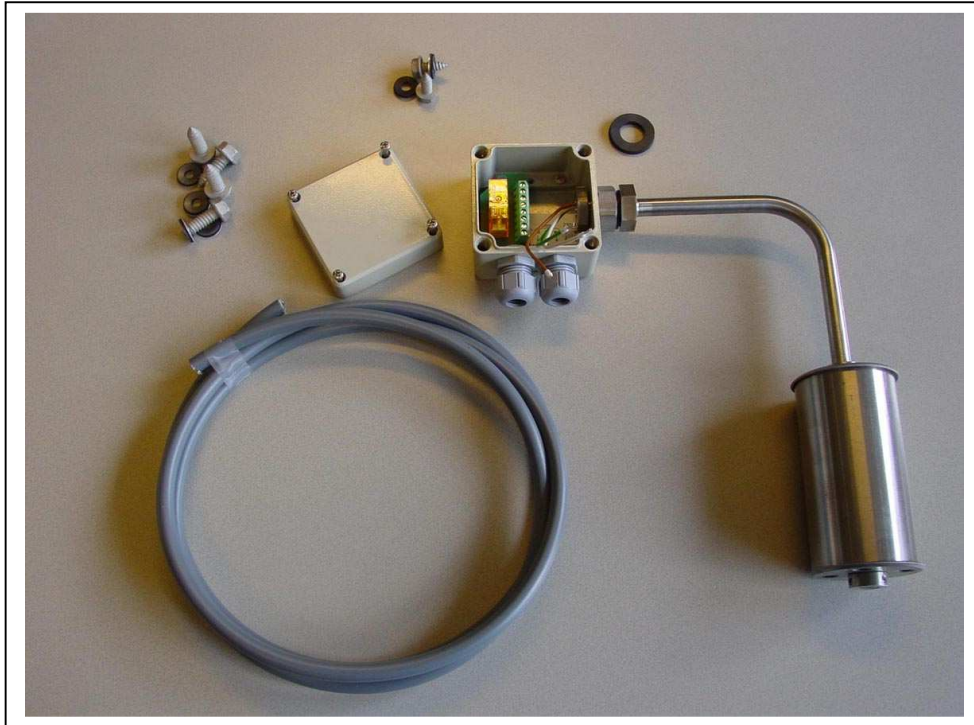




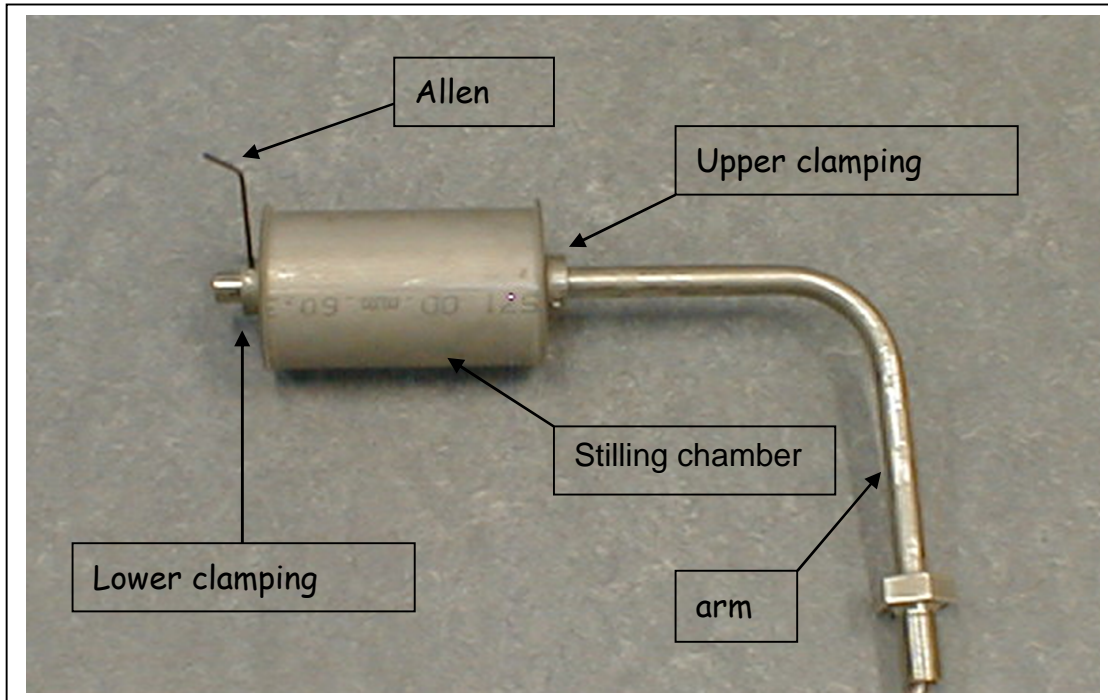
Maintenance for electrical float switch Barksdale



1. Disconnect electrical supply from connection box of the Barksdale
2. Check if the floating ball can travel freely by moving it manually
3. Check visually if the stilling chamber is clean and free of dirt
4. Check orientation of float ball (NC marking on ball should be above NO marking.)
5. Unscrew the Allen screw of the lower clamping collar.



6. The upper clamping collar must stay on the exact same spot. So it is better not to touch this one! The end-switches are located at the inside of the arm. When the stilling chamber is moved, the set points might not be reached.



7. The float ball can now be removed. Pay attention how the float ball was installed on the arm of the Barksdale switch. (See remark 4)





8. This is the float ball. As you can see, there is a "normal open" and a "normal closed" set point on the float ball. When the ball is reversed, the operation is also reverse.



9. Now the float switch can be cleaned. Cleaning can be executed with a tissue and/or a non-aggressive cleaning product.
10. When the Barksdale is cleaned, the switch can be reinstalled.
11. If needed, the trouble shooting instructions can be applied.



Trouble shooting instructions

Barksdale electrical water level control (testing-procedure)

When having a problem with the electrical water level control the following items should be checked.

- Is the water supply connected to the make-up and are all the valves open?
- Measure the supply-voltage to the Barksdale connection box and check if this voltage corresponds to the voltage suitable for the Barksdale. (24V or 230V)
- Check if all the connections in the connection box are corresponding with the electrical drawing EL-MUP-1
- Check if the electrical valve operates (apply voltage to the coil and see if it opens).

Testing the Barksdale float switch

- Disconnect electrical supply from connection box of the Barksdale.

Mechanical

- Check if the floating ball can travel freely by moving it manually.
- Check visually if the stilling chamber is clean and free of dirt.
- Check orientation of float-ball (NC marking on ball should be above NO marking)

Electrical

- Disconnect the three wires that are coming from the sensing-element (=float-ball) (4-5-6 ; green-brown-white).
- Use your electrical tester to test the wires as follows (Ω -measurement).
- Floating-ball down:
 - white - brown : closed circuit ($\approx 0 \Omega$)
 - white - green : closed circuit ($\approx 0 \Omega$)
- Floating-ball in middle position:
 - white - brown : open circuit
 - white - green : closed circuit ($\approx 0 \Omega$)
- Floating-ball in top position:
 - white - brown : open circuit
 - white - green : open circuit
- When your testing results are the same as the ones mentioned above, the float switch is OK.



Testing the Barksdale connection box

- Check if box is still watertight/dry on the inside.
- Check correct mounting: *) Glands for wires should be pointing downwards
 - *) Is threaded connection well tightened to the panel
- Check visually the electrical print for damaged circuits.
- Reconnect the wires from the sensor and the power-supply: 4-5-6-7-8.
- Move the floating ball of the float-switch and measure the voltage on the output-contacts.
 - o Floating ball bottom-position: between 1-2 = 230VAC (=supply Voltage)
 - o Floating ball top-position: between 1-2 = 0VAC (supply Voltage)
- If the measured values are the same as mentioned above (for a 230V Barksdale system) the connection box is OK.