

# RTSCELBKP - Professional Utility Tank System (pump inside tank)

## Included components:

- 1500L Utility Tank
- SteelPump with:
  - 2m Float Switch (attached to threaded bar)
  - Floating Intake
  - 2m Pump Turret Set of Hose, Hose Bung, stainless clips and Holesaw Set.
  - 3m Lifting Rope and securing cleat.
- Filter Collector Universal



## 1. About your Utility Tank

- 1.1. The tank must be installed on a flat, level surface.
- 1.2. The Utility Tank holds 1500L of water. This equates to 1500Kg (1.5 tonnes) when full.
- 1.3. It is approximately 1200mm wide x 780mm deep x 2080mm high. It has a 480mm diameter neck (with lid) at the top.
- 1.4. Where the water butt cannot be located within 30 cm of the down pipe, longer kits (Universal Long Link Kits) are available from your Supplier.
- 1.5. The Utility Tank is supplied with 2 x  $\frac{3}{4}$ " threaded ports. The lower one can be used either as a drain-down point or to connect the tank to another tank with a connecting hose. The higher threaded hole is generally used to connect an outlet hose or tap for filling a watering can.
- 1.6. All other tank holes need to be drilled (using the parts supplied) at points convenient for your rainwater harvesting or water storage needs.
- 1.7. As with any water tank, if the tank is to be used in an unheated area where there is a risk of complete freezing throughout, it should be emptied during cold weather and the pump removed and drained of water to minimise the risk of frost damage.

## 2. About your SteelPump

- 2.1. Your pump is a Horizontal X-AJE80BFH Automatic SteelPump. It has a unique Serial Number.
- 2.2. The instructions for installing and using your SteelPump are included with the pump along with supplemental notes for installing the SteelPump with a Float Switch.

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- 2.3. The Float Switch cuts the power to the SteelPump when the water goes below the Red Switch. This ensures the pump doesn't run when there is no water in the tank.
- 2.4. Your pump will be installed inside the tank (sitting on the floor of the tank).
- 2.5. The inlet (1") for your pump is on the side of the pump, the outlet (1 ¼") on the top. The Non-return Valve (NRV) included in the SteelPump box **MUST** be fitted to the pump inlet.
- 2.6. The pump comes with 10m of electrical cable with plug as standard. The cable will be routed through the top lid of the tank, nestled through the side notch in the lid. It therefore gives you approximately 7.9m of cable length from the top of the tank to your electrical socket.
- 2.7. It is essential for your warranty (and peace of mind) that your SteelPump installation is fully commissioned before use. This should be done by a professional person if necessary.

### **3. About your Filter Collector**

- 3.1. This RTSCELBKP Kit comes with a 3P Filter Collector Universal (FCU).
- 3.2. The FCU filters the rainwater and also diverts the water from your downpipe to your Utility Tank.
- 3.3. Full installation instructions for the FCU are included in the FCU packaging.

### **4. Installing your Professional Utility Tank System – Before you begin**

**Note:** This is not a comprehensive electrical installation document and is intended as guidance only. It is assumed that any necessary electrical installation works will be carried out by qualified personnel with a full understanding of electrical regulations and the requirements concerning the installation of mains voltage equipment.

- 4.1. Read these instructions through in full before you begin.
- 4.2. Check screw-terminal connections and earth bonding.
- 4.3. Install a suitable residual current device to isolate and protect in the event of leakage to earth. The RCD must break live and neutral.
- 4.4. Do not apply power to the completed installation until all supplied items are fully installed.
- 4.5. Whilst IP68 components are suitable for immersion it is nonetheless good practice to install the three-way cable joiner out of the water.
- 4.6. Final determination of the suitability of any information or material for your intended use and manner of use is your sole responsibility and you must assume all risk and liability in this regard.
- 4.7. If in any doubt during installation, please consult a professional tradesman.**

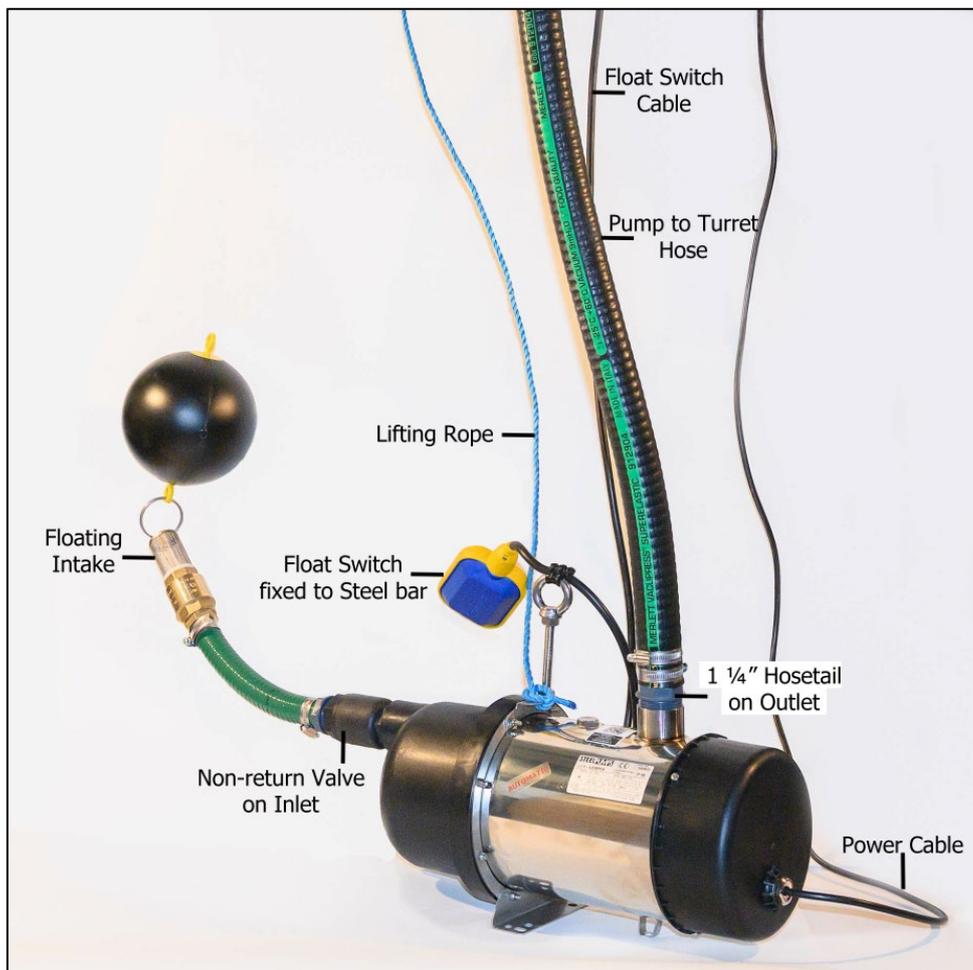
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## 5. How to determine where to install the tank

5.1. Determine the optimum position of your utility tank bearing in mind;

- it must be installed on a flat even surface,
- it can be no more than 30cm from your downpipe (unless a Long Link Kit has been purchased),
- the side of the tank you want the water to be pumped out from,
- the pump may need to be accessed from time to time for maintenance using the lifting rope to pull the pump up to the top of the tank,
- the length of the electricity cable in relation to your socket.

## 6. Prepare your SteelPump



**SteelPump assembly prior to placing inside the Tank**

(note SteelPump may look slightly different)

6.1. Connect the Non-return Value to the inlet of the pump (side threaded port). Use PTFE tape to ensure a watertight connection.

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- 6.2. Prime the SteelPump following the instructions in the SteelPump manual.
- 6.3. Prime the floating intake (by filling the hose with water) and connect it to the Non-return valve.



**SteelPump showing Threaded bar, Float Switch and Lifting Rope**

(note Float may be fixed to Handle and may look different to the above image)

- 6.4. Thread the threaded bar into one hole in the steel bracket on the top of the Pump. Secure with one nut above the bracket and another below the bracket.
- 6.5. Ensure the Float Switch is in the “off” position (down) when the water level in the tank falls as low as the pump inlet (see SteelPump Float Switch Installation instructions). The Float Switch weight does not need to be used in this installation (and therefore is not included in this kit).
- 6.6. Attach the pump lifting rope to the other hole in the pump bracket, or to the steel ring at the top of the threaded bar if it doesn’t interfere with the movement of the float at that position.
- 6.7. Fit the 1 ¼” hosetail to the water outlet port. Ensure it is fully watertight. Use PTFE tape.

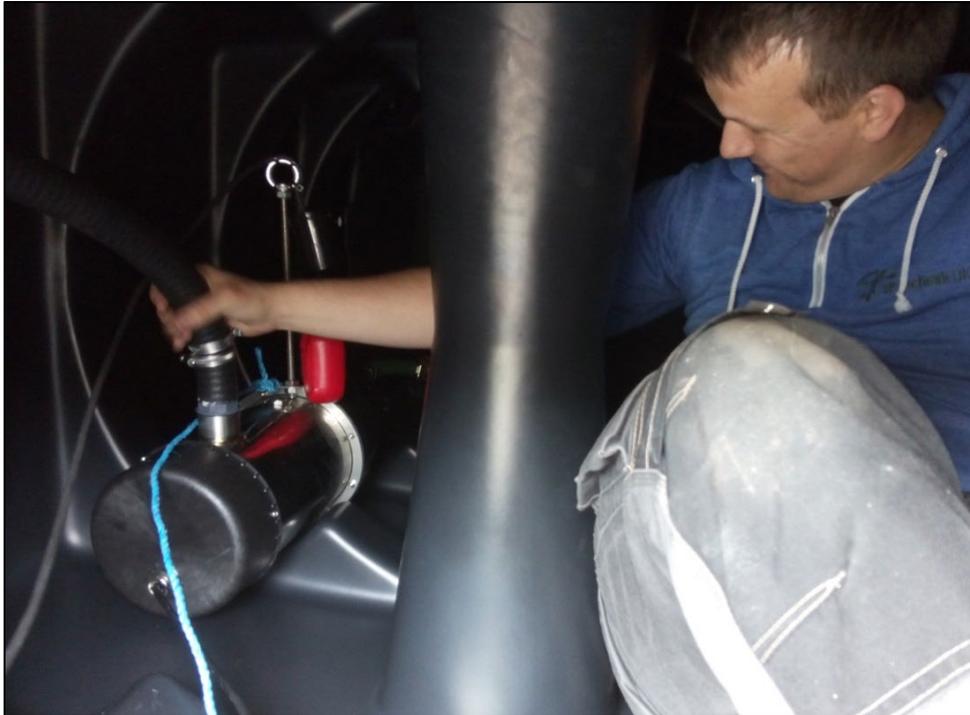
### 7. Prepare your Tank

- 7.1. Drill a 76mm diameter hole for the water outlet hose (black pump to tank top hose) on a horizontal or vertical plane at the top of your Utility Tank at the optimum position for your system, leaving at least 20mm from the edges of the tank and/or lid opening. Holesaw set is provided in this kit. This might easier be done when the tank is on its side, see 8.1.

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- 7.2. Make sure the bungs at the bottom two ports of the tank are tight and secure if you are not installing taps etc.

### 8. Install the Pump in the Tank



**Securing the Hose to the Hosetail inside the Tank prior to final placement of the SteelPump at the base of the Tank**  
(note float switch is now Mac3 Key – Blue and Yellow)

- 8.1. Put the tank on its side. CAUTION: HEAVY OBJECT: This is a two-person operation. You can re-use the plastic bag that the tank arrived in as a ground sheet to protect the tank if necessary.
- 8.2. With the tank on its side. Place the pump just inside the tank with the water outlet port to the side closest to the hose hole you drilled in step 7.1.
- 8.3. Push the black Pump to Tank Hose through the 76mm hole, ensuring the securing bung (grommet) is on the outside of the tank and the stainless steel hoseclips are on the inside of the tank.
- 8.4. Push the black hose onto the pump outlet hosetail and secure with the two stainless steel hoseclips. Both hoseclips should be used, see the clips at the top of the Hose for reference.
- 8.5. Manoeuvre the pump to the bottom of the tank (this is easiest to do when you are inside tank), and place in its final position. Allow room for the Floating Intake to operate.
- 8.6. Make sure the Hose Bung (Grommet) is secure within the tank hole.

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- 8.7. Carefully move the tank to its final upright position. CAUTION: HEAVY OBJECT: This is a two-person operation.
- 8.8. You may need to further adjust the position of the Pump in the tank using the lifting rope, if and as required. DO NOT climb into or onto the Tank once it is vertical.
- 8.9. Ensure all electric cables and the lifting rope are through the lid hole of the tank (through the small notch in the side of the lid).
- 8.10. Attach the rope cleat at a suitable position and secure the lifting rope around it.



Push the Hose Bung (Grommet) into the hole



Attach the Rope Cleat outside the Tank

### 9. Connect your tank to your downpipe

- 9.1. Connect your tank to your downpipe following the instructions included with your Filter Collector Universal.

### 10. Check the system

- 10.1. Fill the tank half full with water
- 10.2. Check the tank/lower connection ports for leaks.
- 10.3. Turn on the pump and check for leaks.
- 10.4. Commission the installation.