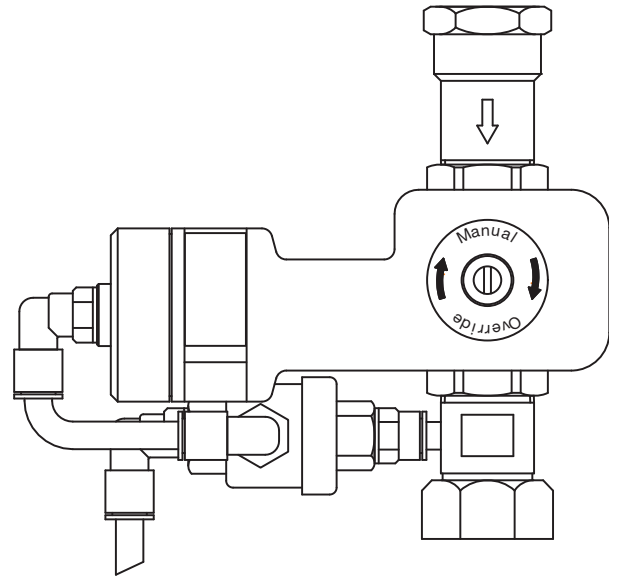


# AcquaSaver



## Installation and Operating Instructions

### Surface Pumps

#### Introduction

The AcquaSaver valve is a fully automatic mechanical rainwater/mains water changeover device designed for pressure pump supply systems for harvesting rainwater for the toilet, laundry and household applications with automatic mains backup.

The AcquaSaver valve is designed to operate with a pump with an electronic pressure controller with auto restart not requiring a float switch.

The AcquaSaver valve can also operate with any pump with a pressure controller with or without a float switch.

#### Operation

The AcquaSaver valve will always prioritize the use of rainwater over mains water when rainwater is available and will automatically switch over to mains water in the event of the rainwater tank running low or electrical failure. When water has been replenished or power has been restored to the pump, the AcquaSaver valve will automatically prioritize back to rainwater.

The pump is only active when rainwater is being drawn from the water tank, it does not operate when the AcquaSaver valve has switched to mains position.

The pump controller starts and stops the pump when it detects a demand, for example flushing a toilet or using a washing machine.

The operating mechanism of the AcquaSaver valve is a unique patent design, it works by hydraulic water pressure created by the pump to close one inlet fully before opening the other inlet without restriction of flow. This ensures an extremely reliable mechanism using few moving parts, no electronic components and no energy consumption.

#### Features

- Easy to install
- Patented design
- Does not require maintenance
- No electrical consumption - No electronic components
- Solid brass construction - Fully weatherproof - Built to last
- Suitable for any pressure pump with sufficient head pressure
- Can be mounted in any position
- Dual check valve for back flow prevention (WaterMark Approved)
- Manual override
- 2 Year warranty

#### Connection

All plumbing connections should be carried out by a licensed plumber.

**Step 1.** The AcquaSaver Valve is fitted onto the pump controller as shown in Fig 1.

Lock up the 1" BSP F loose nut with the fibre washer supplied.

**Step 2.** Connect mains water to the AcquaSaver Fig 2. using the 3/4" BSP F connection.

**NOTE:** Mains water should flow through AcquaSaver Valve before rainwater, to avoid air being trapped in pipes.

**Step 3.** Connect outlet to the household Fig 2. using the 3/4" BSP F connection.

**Step 4.** Installation of float switch refer to Fig 3.

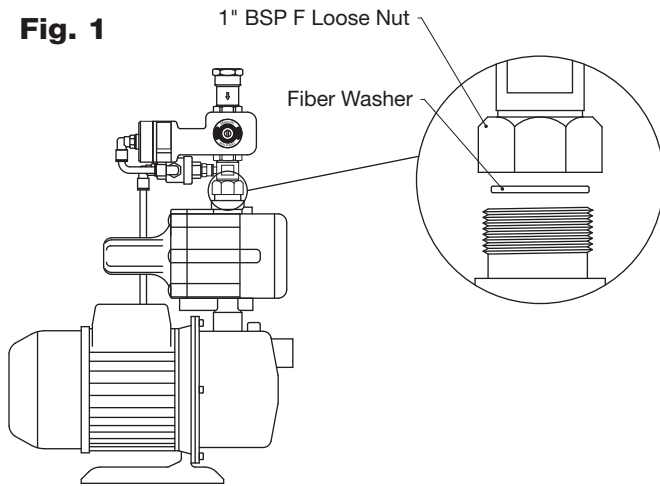
**NOTE:** When using a float switch with a piggy back plug Fig 4a, plug into electrical outlet and pump lead into the back of piggy back plug Fig 4b.

Connection of the pump should be carried out to manufacturers instructions, It is recommended a Y-Strainer be fitted between the tank and pump.

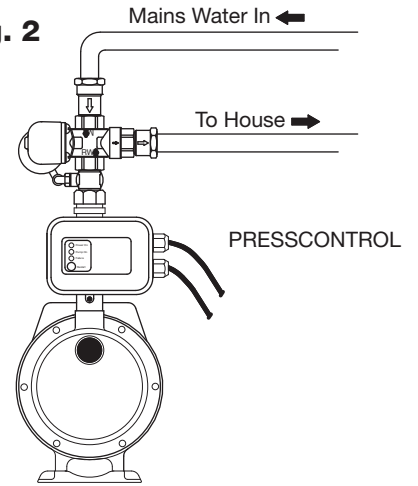
#### Specifications

- Max mains pressure 500 KPa
- Max pump pressure 700 KPa
- Max flow rate 100 LPM
- Cold water applications only
- Rainwater Inlet 25mm 1" BSP F
- Mains Water in 20mm 3/4" BSP F
- Outlet 20mm 3/4" BSP F
- Weight 2.2 kg
- Certified to: WaterMark ATS 5200.477 WMK 60075
- Complies with AS/NZS 3500.1 when installed by a licensed plumber
- NOTE:** According to AS/NZS 3500.1 maximum allowable pressure in buildings is 500 KPa

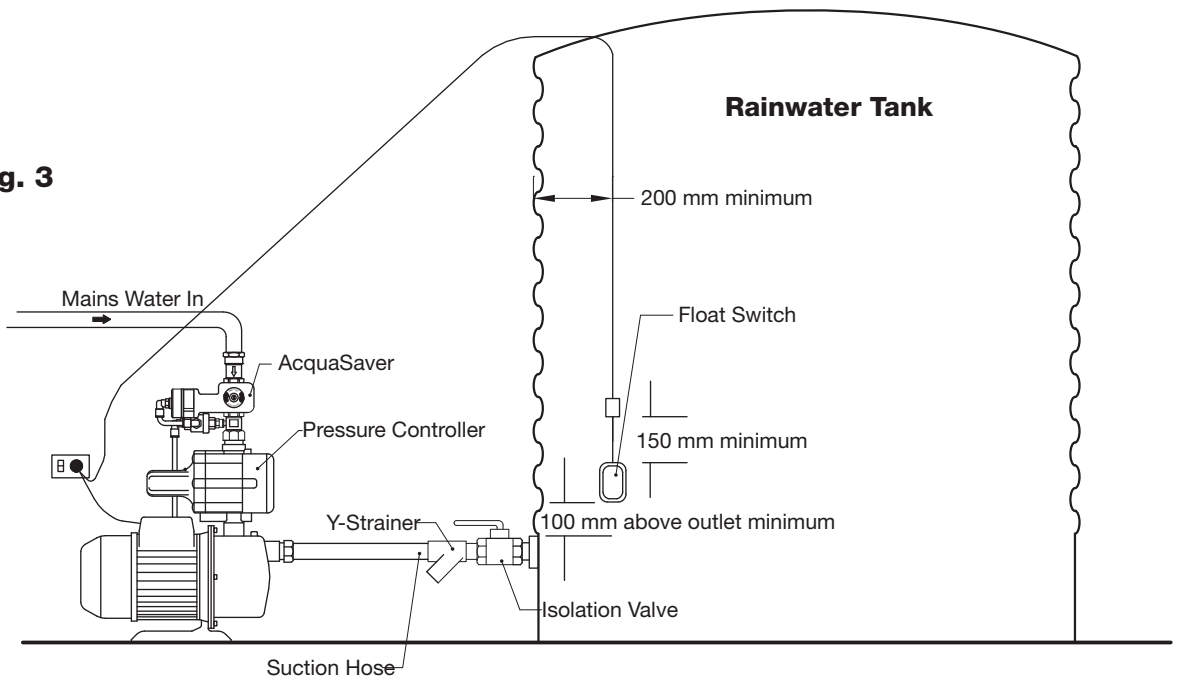
**Fig. 1**



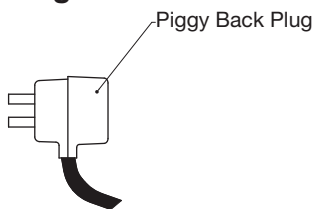
**Fig. 2**



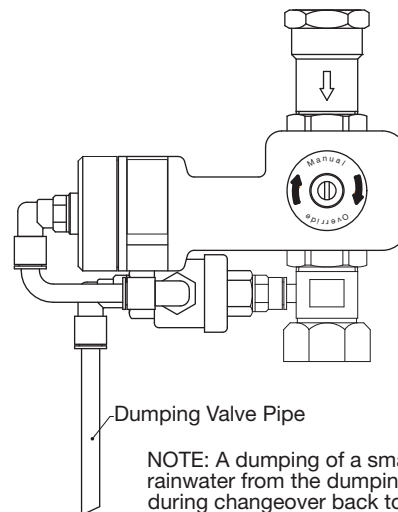
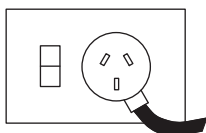
**Fig. 3**



**Fig. 4a**



**Fig. 4b**



NOTE: A dumping of a small amount of rainwater from the dumping valve pipe is normal during changeover back to mains water. E.g. When rainwater tank is empty or there is no electrical power.

# Submersible Pumps

## Connection

All plumbing connections should be carried out by a licensed plumber.

**Step 1.** Fill pipe with water until full to remove air before connecting AcquaSaver Valve as shown in Fig 1.

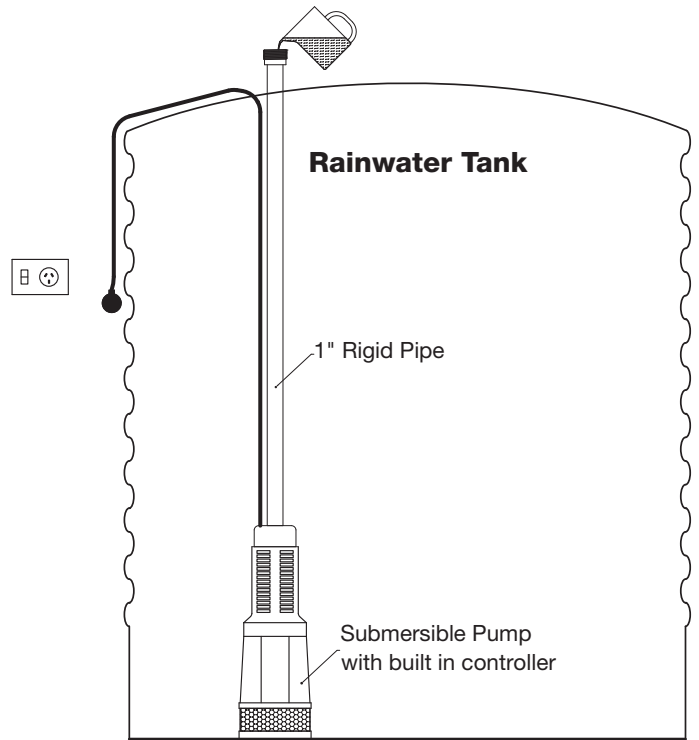
**Step 2.** The AcquaSaver Valve is fitted onto a 1" BSP male union fitted on top of pipe Fig 2. lock up tight the 1" BSP F loose nut with the fibre washer supplied.

**Step 3.** Connect mains water to the AcquaSaver Fig 3. using the 3/4" BSP F connection.

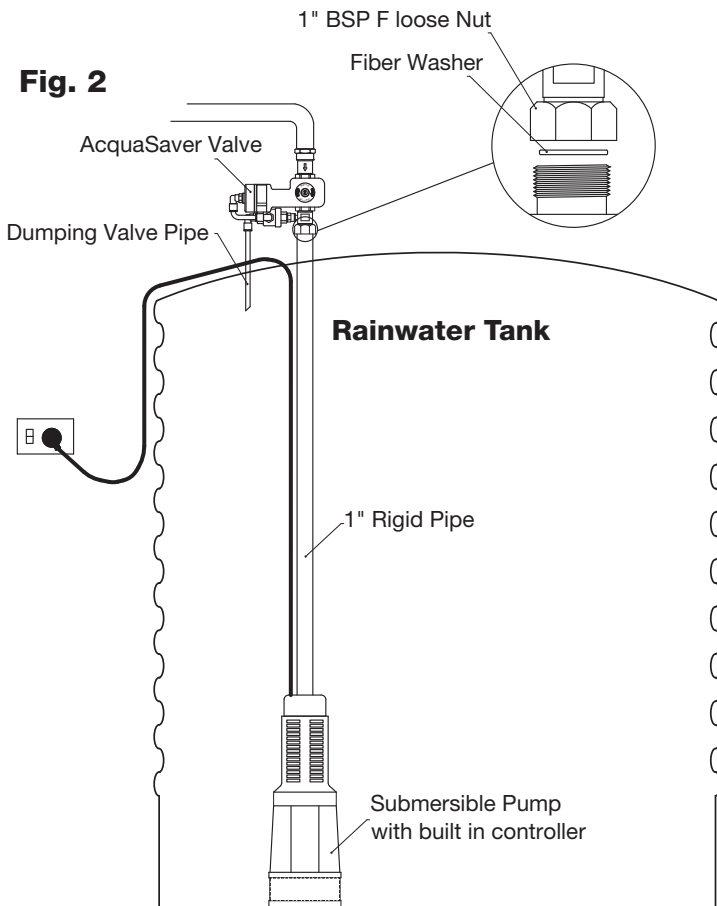
**Step 4.** Connect outlet to the household Fig 3. using the 3/4" BSP F connection.

**Warning! Mains water should flow through AcquaSaver Valve before pump is turned on to avoid air being trapped in pipes.**

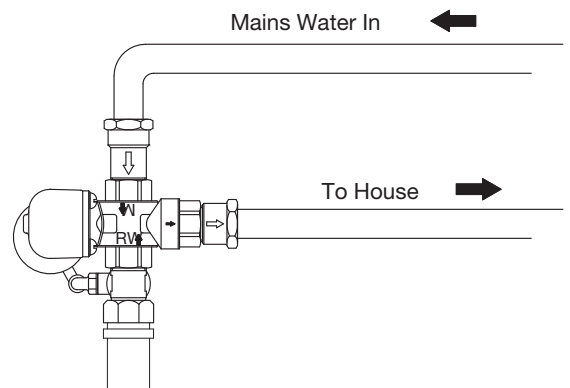
**Fig. 1**



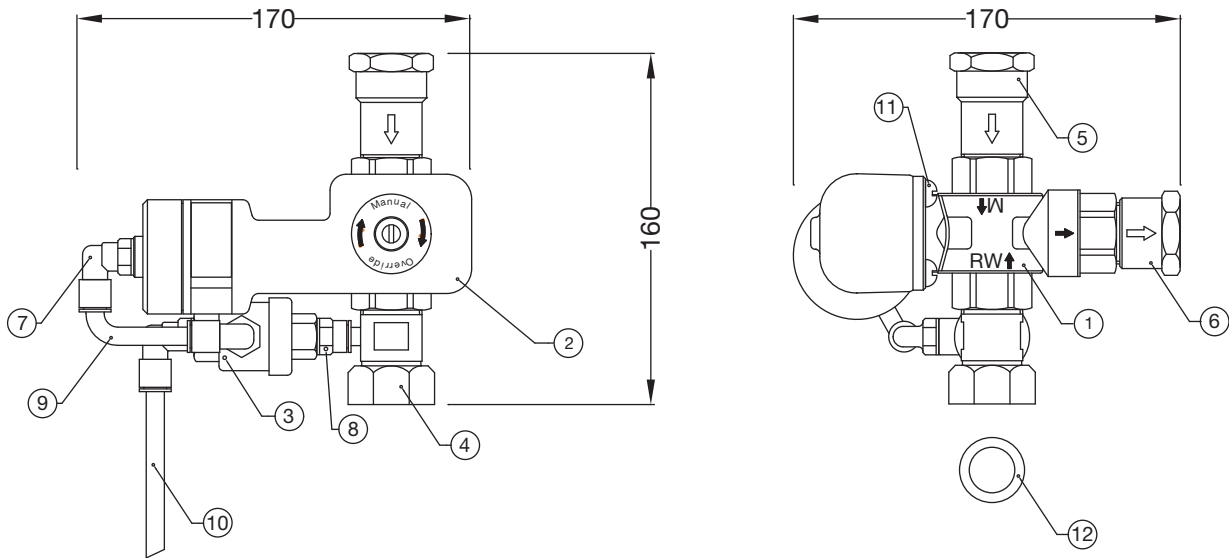
**Fig. 2**



**Fig. 3**



## Parts List



12	Fiber Washer	1	N/A	N/A
11	M6 Screws	4	Stainless Steel	N/A
10	Dumping Valve Pipe	1	Anti UV Elastollan Tube	PU 1198
9	Copper Pipe	1	Copper - Nickel Plated	N/A
8	Push Fit Union	1	DR Brass - Nickel Plated	MA 12 08 14
7	Push Fit Elbow	3	DR Brass - Nickel Plated	MA 16 08 14
6	Check Valve	1	DZR Brass	20 CVF
5	Dual Check Valve	1	DZR Brass	7179
4	Nut & Tail Assembly	1	DZR Brass	WDV-NT2520
3	Dumping Valve	1	Brass - Nickel Plated	MV 27 00 14
2	Actuator Body	1	DZR Brass	WDV-CBA
1	3 Way Ball Valve	1	DZR Brass	F32TBT020
No.	Component	Qty	Material	Part No.

## Trouble Shooting

Symptom	Cause	Remedy
No water is delivered from pump.	Rainwater tank is empty. No Power. Isolation Valve is shut. Pump is not primed. Incorrect Installation of float switch. Y-Strainer is blocked.	Wait for tank to fill. Check power supply & plug. Restart pump. Open isolation Valve. See pump owners manual on priming pump. Refer to instalation instructions. Clean Y-Strainer.
No water is delivered from mains.	No water from mains. Air Lock. Mains pressure above 500 KPa. Dumping valve pipe blocked.	Check isolation valve on water meter. Manually override. Install a pressure limiting valve (manually override). Remove blockage.
Pump continually runs.	Leak in the plumbing system. E.g. Toilet or tap leaking.	Repair Leak.

## Maintenance

The AcquaSaver Valve does not require any maintenance, however there are things you can do to ensure its most reliable operation.

- Fit a Y-Strainer
- Cleaning your gutters
- Cleaning the inlet strainer on rainwater tank