



# **Installation and Operating Instructions**

#### Introduction

The AcquaSaver<sup>™</sup> 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 application with automatic mains backup.

The AcquaSaver<sup>™</sup> valve is designed to operate with a pump with an electronic pressure controller with auto restart not requiring a float

switch. The AcquaSaver<sup>™</sup> valve is can also operate with any pump with a pressure controller with a float switch.

The AcquaSaver<sup>™</sup> valve comes with dual 1" outlets which give the consumer flexibility to use one or both outlets, which makes AcquaSaver<sup>™</sup> unique and ideal for domestic and commercial applications

#### Operation

The AcquaSaver<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> valve is a unique patent design, it works by hydraulic water pressure created by the pump to close the mains inlet fully so stored water from a water tank will be used without restriction of flow. This ensures an extremely reliable mechanism using few moving parts and no electronic components and no energy consumption.

#### Features

- Easy to install
- Full flow 1" Dual Outlets
- Patented design
- Does not require regular 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
- No float required for auto restart pumps
- Certified dual check valve for backflow prevention
- 5 Year warranty
- Limited lifetime warranty on brass components

### Connection

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

#### Step 1

The AcquaSaver<sup>™</sup> Valve is fitted onto the pump controller as shown in Fig 1. lock up the 1" BSP F loose nut with the rubber washer supplied.

#### Step 2

Connect mains water to the AcquaSaver™ Fig 2. using the 1" BSP F connection.

#### Step 3

Connect outlet to the household Fig 2. using the 1" BSP F connection. Fig. 4 shows a typical installation for a submersible pump. **NOTE:** when using a pump with an automatic restart controller, allow for the outlet on the tank to be higher than the pump inlet to allow air to escape when tank is refilling shown in Fig 3. The AcquaSaver<sup>™</sup> Valve can be installed any distance from the pump or controller e.g. attached to a wall.

Connection of the pump should be carried out to manufacturers instructions.

### **Specifications**

Max mains pressure	1050 KPa
Max pump pressure	1050 KPa
Flow rate	>200 LPM
Max Water Temperature	50C
Rainwater Inlet	25mm 1" BSP F
Mains Water in	25mm 1" BSP F
Outlets	25mm 1" BSP F
Weight	1.7 kg

Certified to: WaterMark ATS 5200.477 WMK 60075.

Complies with AS/NZS 3500.1 when installed by a licensed plumber.

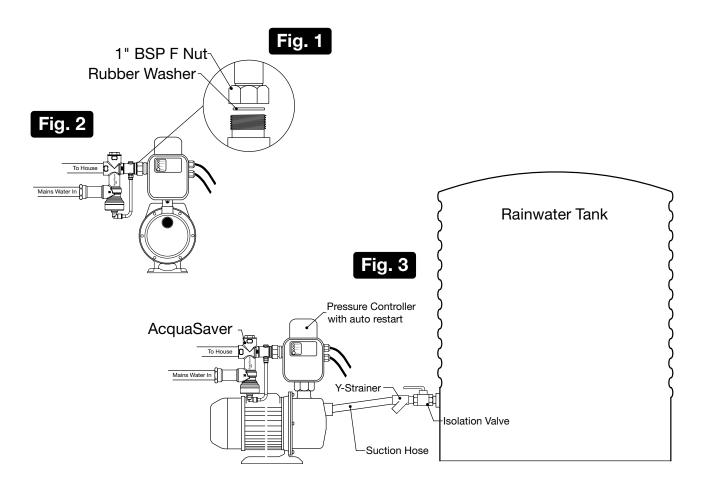
**NOTE:** Not for Drinking water - According to plumbing code AS/NZS 3500.1 Only drinking water shall be supplied to plumbing fixtures or outlets for human consumption, bathing, food preparation, or utensil washing.

The health authority, which determines water quality standards & may set guidelines on the use of water from rainwater tanks.

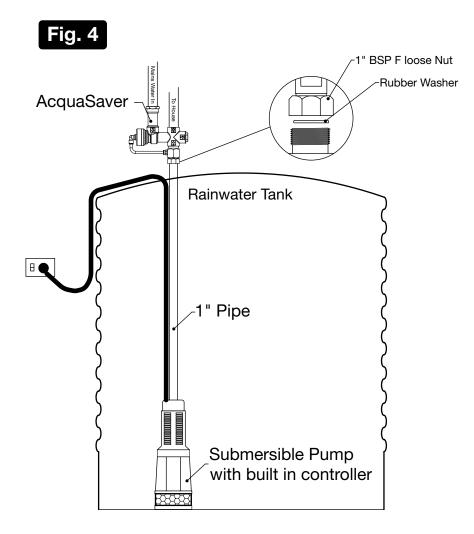
**NOTE:** Should the static mains supply be greater than 400 kPa above the supply pressure

of the pump the device will not completely isolate mains water.

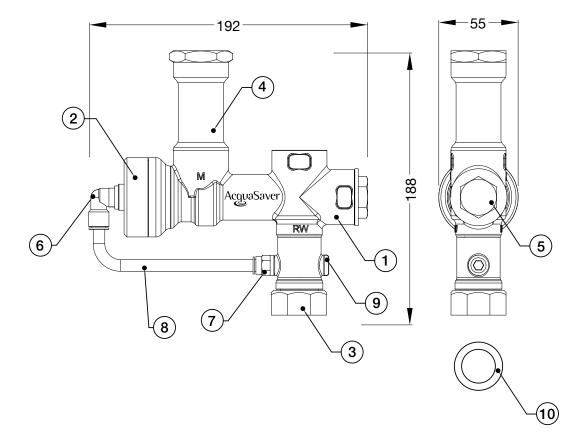
#### Installation for Surface Pump



### Installation for Submersible Pumps



#### Parts List



No.	Component	Qty	Material	Part No.
1	Valve Body	1	DZR Brass - N/P	WDV25-BB
2	Actuator Cap	1	DZR Brass - N/P	WDV25-BC
3	Nut & Tail Assembly	1	DZR Brass - N/P	WDV-NT2520
4	1" Dual Check Valve	1	DZR Brass - N/P	WDV25-DCV
5	DN25 Cap	1	DZR Brass - N/P	N/A
6	Push Fit Elbow	1	DZR Brass - N/P	MA 16 08 14
7	Push Fit Union	1	DZR Brass - N/P	MA 12 08 14
8	Brass Pipe	1	Brass - Nickel Plated	N/A
9	1/8" Plug	1	DZR Brass - N/P	RA46 00 18
10	1" Rubber Washer	1	EPDM	N/A

## Troubleshooting

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 owner's manual on priming pump. Refer to installation instructions. Clean Y-Strainer.
No water is delivered from mains.	No water from mains. Air Lock Pipes Blocked	Check isolation valve on water meter. Close Mains, prime & then restart pump, flush toilet or open tap to release air. Open 1/8" plug Remove blockage.
Pump continually runs.	Leak in the plumbing system. E.g. Toilet or tap leaking.	Repair Leak.

#### Maintenance

The AcquaSaver<sup>™</sup> 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

#### Warranty Information

#### AcquaSaver<sup>™</sup> warranty for Australia and New Zealand.

The AcquaSaver<sup>™</sup> valve is guaranteed for a period of 5 years from the date of original purchase to be free of material or manufacturing defects. Should any part fail as a result of such defects within this period, the AcquaSaver<sup>™</sup> valve will be repaired or replaced free of charge.

The AcquaSaver<sup>™</sup> valve also has a LIMITED LIFETIME WARRANTY on all brass components, any brass component will be replaced free of charge if it fails in normal use during its life.

This warranty applies in all states and territories in Australia and New Zealand. The warranty period commences on the day of the original purchase of the AcquaSaver<sup>™</sup> valve.

Evidence of this purchase must be provided when claiming repairs or replacement, it is recommended you retain all receipts.

Both warranties are subject to conditions by the original purchaser with all conditions set out in the installation and operating instructions. Failure to comply with these instructions, damage or breakdown caused by fair wear and tear, negligence, misuse, incorrect installation, chemical or additives in the water, corrosive or abrasive water, inadequate conditions, attempting repairs or accidents, are not covered by this warranty.



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