

Watercare 1100

Domestic Rainwater Harvesting
Control System

PRODUCT OPERATION

The rainwater is distributed via an intelligent pump control system which pumps stored water from the tank to chosen appliances inside and outside the home.

When a connected appliance is used (e.g. flushing a toilet), a pressure switch operates the pump located at the bottom of the storage tank. The pump then draws water which is dual filtered to ensure the best quality water possible, the pump continues to operate until the water in the system has been restored.

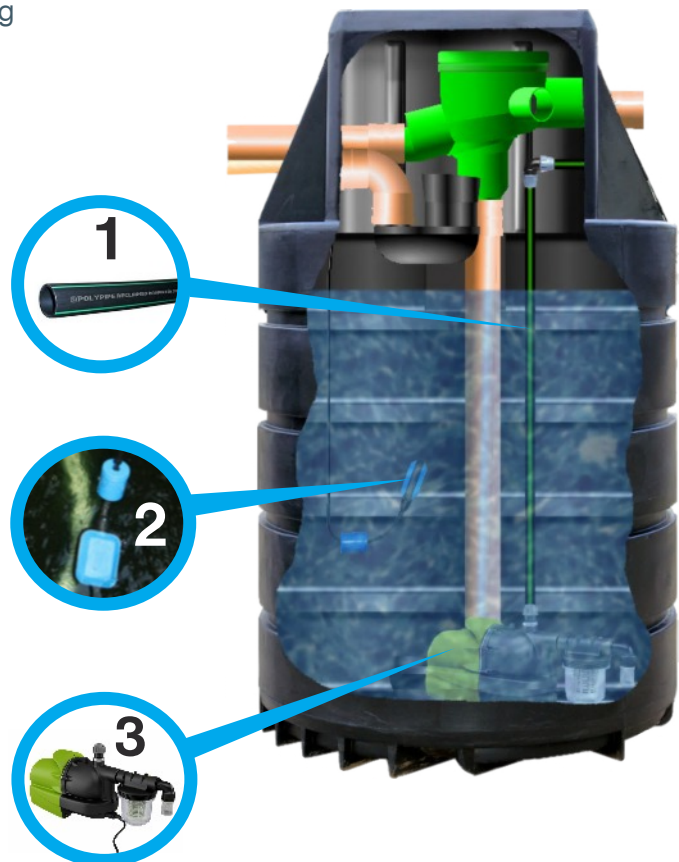
When the storage tank is full, it will overflow to surface water drain via the overflow at the top of the tank, however if the water level is low, the low level float switch in the tank will activate the controller solenoid valve to provide mains water back up and ensure a continuous supply of water in the tank to continue operation, but leaving considerable capacity in the tank to collect rainwater.

In the unlikely event of there being no water present in the tank, the system is equipped with dry run protection which automatically switches off the pump to prevent it from burning out.

ADVANTAGES

- Simple installation with Plug in devices
- Dual filtration - ensuring the best quality water is drawn from the tank
- Low power consumption - only 0.8Kw when the pump is running
- Dry run protection - for long pump life
- Pump thermal cut out - prevents overheating
- 2 year guarantee

1. MDPE delivery pipe to appliances
2. Low level float switch
3. Submersible pump
4. Control panel with mains water back up and tundish



General specification - Control Panel

Control Unit consists of:-

- Mains Water Inlet
- Mains water back-up solenoid valve
- Pressure valve (for monitoring water flow)
- Tundish
- Junction Box
- Water outlet with overflow

Technical specification - Control Panel

- Power supply: 230Vac, 50Hz
- Max. Liquid Temperature: 90° C
- Water connections: 15mm pipe
- Max. Pressure: 10Bar
- Material: ABS
- Degree of Protection: IP65
- Dimensions: 344 x 289 x 117mm

General specification - Float Switch

- Max. Contact Voltage: 250Vac
- Max. Contact Current: 15A
- Casing Material: Polypropylene
- External Length: 103mm
- External Width: 81mm
- Cable Material: CPE Synthetic Rubber
- Cable Length: 15 Metres
- Max. Operating Temperature: 70°C
- Specific Gravity: 0.9 to 1.3
- Max. Submerged Depth: 20 Metres

General specification - Solenoid Valve

- Coil Voltage: 230Vac, 50Hz
- Media Temperature: 90°C
- Ambient Temperature: +40°C
- Inlet Connection: 15mm Pushfit
- Min. Operating Pressure: 0.2 Bar
- Max. Operating Pressure: 10 Bar
- Flow Rate: 1.7 cu.m/hour (1,700 litres/hour)

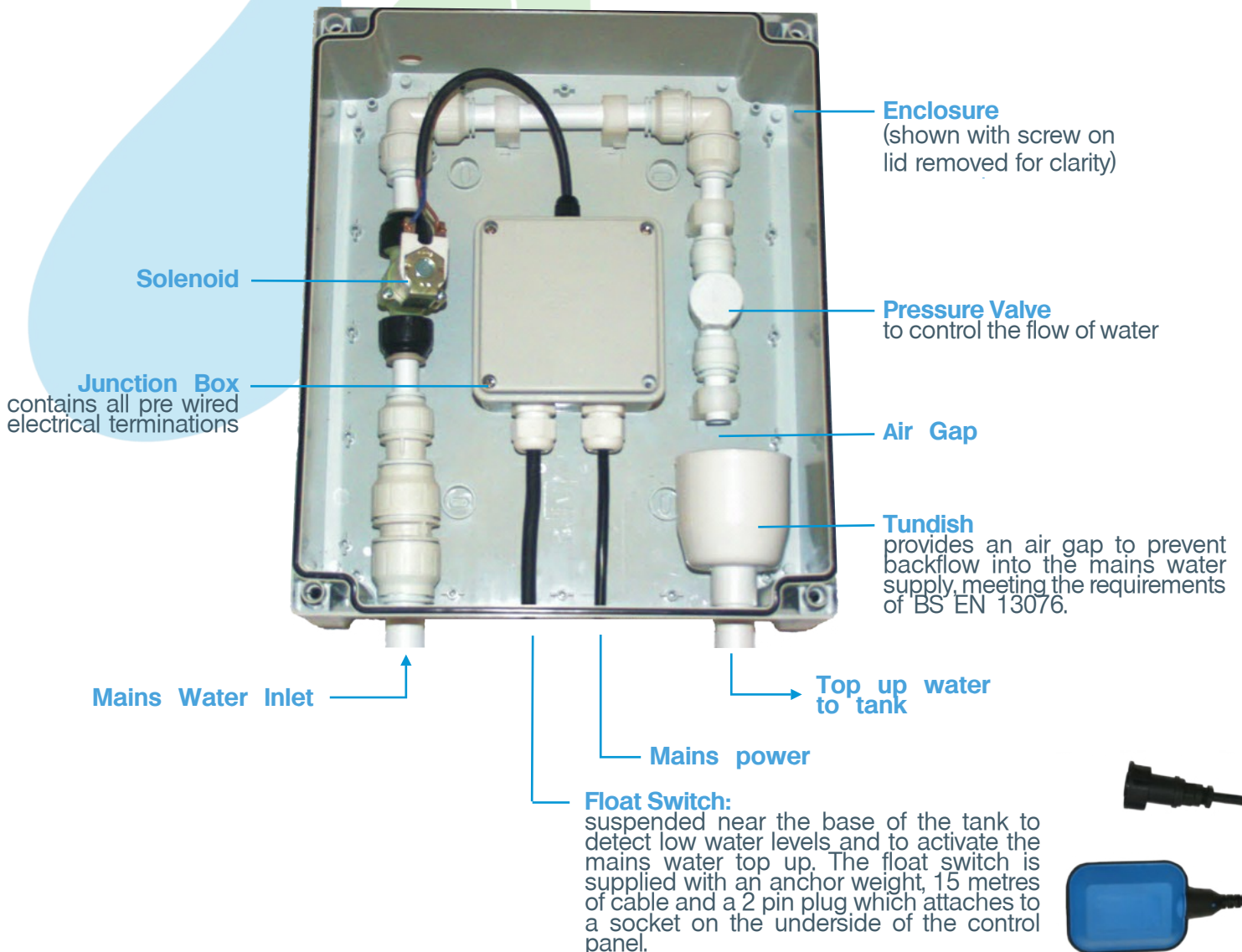
General specification - Submersible Pump

- Equipped with all electronic safety device that protects the pump from dry running.
- Built-in non-return valve
- Automatically Starts and Stops when appliances are opened and closed.
- Automatic manual reset.
- Constant pressure and flow rate.
- Strainer and Cartridge Filter
- Power cable supplied with plug.

Technical specification - Submersible Pump

- Power Supply: 230Vac, 50Hz
- Power Consumption: 0.8KW
- Max. Suction Head: 3 metres
- Max. Delivery Head: 35 metres
- Cable Length: 10 metres (longer lengths available)
- Connections: OUT - 1" BSP Female
- Pump pressure (nominal) at outlet: 3.5 bar

CONTROL PANEL



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