

3P TSR Series Controllers

Electronic Header Tank Controllers with Emergency Shut-off

- Increased Reliability vs Float Switches
- High Precision of Level Control
- Increased Efficiency vs Ball-Cocks
- LED status indication options
- Control of Pumps, Solenoids and Motorised Valves up to 10Amps



A replacement for float switch or ball valve control, allowing a header tank to be filled at high speed and vastly improved efficiency compared with twin ball-cock systems.

Pumps run with reduced temperature and runtime, reducing failures.

A reed sensor detects a low water level and activates the pump allowing it to run on for a period of time after reaching the sensor. In this way the system behaves in a manner similar to a float switch, but with far greater reliability, accuracy, and ease of construction. The problem of overlapping float switches is also eliminated.

TSR series controllers remove the need to pump through the narrow orifice of a ball-cock, giving a substantial increase in efficiency, allowing smaller header tanks to be selected, and eliminating pump failures due to persistent overheating.

Sensors are operated at extra low voltage (12v) and low current, preventing contact burning and voltage drop issues which affect float switches.

There are no cables within the header tank, no loose floats to become jammed or entangled.

TSR Controllers also work well in conjunction with float valve mains water top-up in a hybrid configuration, allowing for mains water to be provided in the event of a power outage.

TSR23012A operates a single sensor and output, with additional emergency shut-off sensor. For controlling either pump or mains top-up solenoid.

TSR23012DA operates twin sensors and outputs, with additional emergency shut-off sensor, and can control both a pump and solenoid together.

3P TSR Series Controllers

Electronic Header Tank Controllers with Emergency Shut-off

Technical Specifications

Control Unit

Width	180mm
Height	94mm
Depth	57mm
Time Delay	0 - 30sec
Supply Voltage	230V _{AC}
Operating Temp Range	0 - 40°C
Material	Polystyrene
Protection Class	IP66

Sensors

Minimum Level Differential	20mm
Overall Length	80mm
Fitting Hole Diameter	16mm
Material	Polypropylene
Seal	NBR
Operating Voltage	12v
Protection Class	IP68

Power Consumption

Model	TSR23012A	TSR23012DA
Standby	1.9w	3.8w
Maximum	2.7w	5.4w
Protection Class	2	2

A typical example schematic of a TSR23012A operating a pump supply to a header tank, while mains top-up remains manually operated.

