

WS1 Automatic Valves

Clack's WS1 Automatic valve is a state of the art control head designed for residential and commercial applications requiring flow rates up to 27 GPM (6.1 m³/hr). It has a backwash ability capable of servicing up to 22" diameter tanks.

The valve acts as a primary center that directs and regulates all cycles of water softening or filtration. It can be set to perform downflow regeneration or simply backwash and rinse.

The valve comes in different program versions and is controlled by a solid state microprocessor with front panel setting and screen display.

The WS1 has 9 injector sizes to choose from for different draw rates.



WS1 TC

- 10 selectable pre-programmed backwash/regeneration cycles (time controlled)
- Economical and simple to operate
- Two Calendar options: 1-99 days (or 7 days)
- Double backwash feature available
- Treated water regenerate refill
- Stores system configuration and data in non-volatile memory
- Front panel display
- Downflow regeneration



WS1 EI

- Four modes of operation: meter immediate, meter delayed, time clock, or pressure differential
- Adjustable 6-cycle controls (time clock or meter control)
- Twin alternating operation (with optional motorized valve)
- Solar powered option
- Mixing valve option
- Double backwash feature available
- Treated water regenerate refill
- Front panel display with totalizer
- Downflow regeneration



WS1 CI

- Three modes of operation: meter immediate, meter delayed, or time clock
- Fully programmable backwash & regeneration cycles (up to 9 cycles)
- Program in PPM, French & German degrees, or cubic meter
- Low salt alarm
- 24hr. battery back-up
- Mixing valve option
- Treated water regenerate refill
- Stores system configuration and data in non-volatile memory
- Downflow or Upflow regeneration

WS1 Valve Specifications

Application.....	Softener or Filter
Valve material.....	Noryl (1) or Equivalent
In/Out fitting.....	¾", 1", 1.25" NPT/BSPT
Service rate (at 15 PSI drop w/bypass).....	27 GPM (US) 6.1 m3/hr
Backwash flow rate (at 25 PSI drop w/bypass).....	27 GPM (6.1 m3/hr)
Operating pressure.....	20-125 PSI (1.4-8.6 bar)
Operating water temperature.....	40 – 110F (4-43C)
Supply voltage (2).....	120V/60Hz or 230V/50Hz
Output voltage.....	12VAC
Tank size.....	6" – 22" diameter (3)
Time clock.....	Switches to 50 or 60Hz
Distributor pilot.....	1.05"(OD) ¾"NPS
Drain line.....	¾" standard, 1" optional
Brine line.....	3/8" or ½" Polytube
Mounting base.....	2 ½" - 8 NPSM

WS1 Options & Accessories



Motorized Alternating Valve Configuration

Drain Controls & Injectors

Softener/Filter tank size	Softener/Filter drain control	Softener injector size
8 x 44	017	C (Violet)
9 x 48	022	D (Red)
10 x 54	027	E (White)
12 x 52	042	F (Blue)
13 x 54	042	G (Yellow)
14 x 65	053	H (Green)
16 x 65	075	I (Orange)
18 x 65	090	J (Lt. Blue)
20 x 62	110	K (Lt. Green)
22 x 60	130	K (Lt. Green)

Above data is for guidance only. Draw rates vary with flow & pressure.



No Hard Water Bypass



Weather Covers



Manual Bypass