

Clack™ 

**WS1
CS**

WATER SPECIALIST 1" CS CONTROL VALVE



shown with optional bypass

- **Solid state microprocessor with easy access front panel settings**
- **Three modes of operation; meter immediate, meter delayed, or time clock delayed**
- **Double backwash feature offers optimum regeneration, cleaning ability, and efficiency**
- **66 selectable pre-programmed regeneration cycles**
- **Days override feature; 1 – 28 days available**
- **Backwash and brining ability to 21" diameter tanks**
- **Downflow/upflow regeneration**
- **Stores system configuration and operation data in nonvolatile memory**
- **Coin Cell Lithium battery back-up with an 8 hour carry over**
- **12-volt output AC Adapter provides safe and easy installation**
- **Control valve design provides optimum service and backwash rates**
- **Pre or Post treated water regenerant refill**
- **Reliable and proven DC drive**

Water Specialist 1" CS Control Specifications

Inlet/Outlet Fittings.....	¾" to 1.5" NPS
Cycles	up to 6
Valve Material	Noryl (1) or equivalent
Regeneration	downflow/upflow

FLOW RATES

Service @15 psi drop (includes bypass and meter)	27 gpm
Backwash @ 25 psi drop (includes bypass)	27 gpm
Cv Service	7.0
Cv Backwash	5.4

OPERATING PRESSURES

Minimum/Maximum	20 psi – 125 psi
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OPERATING TEMPERATURES

Minimum/Maximum	40° – 110° F
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METER

Accuracy	± 5%
Flow Rate Range.....	0.25 – 27 gpm
Gallon Range.....	20 – 50,000 gallons
Totalizer	1000 - 9,999,000 gallons

DIMENSIONS & WEIGHT

Distributor Pilot.....	1.050" OD Pipe (¾" NPS)
Drain Line	¾" or 1" NPT
Brine Line	¾" or ½" OD Poly Tube
Mounting Base.....	2 ½" - 8 NPSM
Height From Top Of Tank.....	7 ¾"
Weight	4.5 lbs.

ELECTRICAL SPECIFICATIONS

	AC Adapter	
	U.S.	International
Supply Voltage	120V AC.....	230V AC
Supply Frequency	60 Hz.....	50 Hz
Output Voltage	12V AC.....	12V AC
Output Current	500 mA.....	500 mA

TANK APPLICATIONS

Water Softener	6" – 21" Diameter
Water Filter (2).....	6" – 21" Diameter

CYCLES OF OPERATION (Softener Downflow)

Cycle	Range of times minutes
1. Backwash 1 st (upflow).....	6 - 16
2. Regenerate Draw/Slow Rinse (downflow)	45 - 75
3. Backwash 2 nd (upflow)	3 - 12
4. Fast Rinse (downflow)	3 - 10
5. Regenerant Refill (in service with treated water).....	As Programmed
6. Service (downflow)	

Options: Backwash Filter, Bypass, Weather Cover

Compatible with the following typical concentrations of regenerants or chemicals: Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite, chlorine and chloramines

1. Noryl is a trademark of Sabic Innovative Plastics IP B.V. Company
 2. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area