



# WS1 CS

**WATER  
SPECIALIST  
CONTROL  
VALVE**



Certified to NSF/ANSI 44, 61 and 372.



- 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
- 73 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
- Level VI 15-volt output DC power supply provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- Pre or Post treated water regenerant refill
- Patented one piece expanding seal spacer stack assembly U.S. Patent 6,402,944
- Patented linearly reciprocating piston operation U.S. Patent 6,444,127
- Reliable and proven DC drive

# Water Specialist 1" CS Control Specifications

Inlet/Outlet Fittings.....	3/4" 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 (3/4" NPS)
Drain Line .....	3/4" or 1" NPT
Brine Line .....	3/8" or 1/2" OD Poly Tube
Mounting Base.....	2 1/2" - 8 NPSM
Height From Top Of Tank.....	7 3/8"
Weight .....	4.5 lbs.

## ELECTRICAL SPECIFICATIONS

### POWER SUPPLY

	<u>U.S.</u>	<u>International</u>
Supply Voltage .....	100VAC to 120VAC.....	200VAC to 240VAC
Supply Frequency .....	50/60 Hz.....	50/60 Hz
Output Voltage .....	15VDC .....	15VDC
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 <sup>st</sup> (upflow) .....	6 - 16
2. Regenerate Draw/Slow Rinse (downflow) .....	45 - 75
3. Backwash 2 <sup>nd</sup> (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