

**Clack**<sup>®</sup> 

**WS1EI**

**WATER  
SPECIALIST  
CONTROL  
VALVE**



- Solid state microprocessor with easy access front panel settings
- Front panel display for time of day, days until next regeneration, volume remaining, current flow rate and total volume used (Totalizer)
- Four methods to initiate regeneration; meter immediate, meter delayed, time clock delayed or pressure differential
- Optional double backwash feature offers optimum regeneration, cleaning ability and efficiency
- Fully adjustable cycle times with 6-cycle control delivers controlled backwash, downflow brining/slow rinse, second backwash, fast rinse, refill and downflow service
- Coin Cell Lithium battery back-up with an 8 hour carry over
- Backwash and brining ability to 21" diameter tanks
- Downflow or upflow brining regeneration
- 12-volt output AC Adapter provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- 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" EI Control Specifications

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

## FLOW RATES

Service @15 psi/1 bar drop (includes bypass and meter).....	102 lpm (6.12 m <sup>3</sup> /h) (27 gpm)
Backwash @ 25 psi/1.7 bar drop (includes bypass).....	102 lpm (6.12 m <sup>3</sup> /h) (27 gpm)

## OPERATING PRESSURES

Minimum/Maximum .....	20 - 125 psi (1.4 - 8.6 bar)
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## OPERATING TEMPERATURES

Minimum/Maximum .....	40° - 110° F (4° - 43°C)
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## METER

Accuracy .....	± 5%
Flow Rate Range.....	0.95 - 102 lpm
Volume Range .....	0.02 - 5,700 m <sup>3</sup>
Totalizer .....	0.001 - 9,999,000 m <sup>3</sup>

## 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" (187 mm)
Weight .....	4.5 lbs. (2 kg)

## 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

Cycle	Softener	Filter
	Range of time in minutes	
1. Backwash 1 <sup>st</sup> (upflow) .....	1-95.....	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow) .....	1-180	
3. Backwash 2 <sup>nd</sup> (upflow).....	1-95.....	Rinse 1-95
4. Fast Rinse (downflow) .....	1-95	
5. Regenerant Refill (in service with treated water).....	0.1-99.0	
6. Service (downflow)		

### Options: Backwash Filter, 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/407 lpm per m<sup>2</sup> of bed area