

**Clack**<sup>®</sup> 

# **WS1EI TWIN ALTERNATING CONTROL VALVE**

## **WATER SPECIALIST CONTROL VALVE**



- Service flow 106 lpm (6.36 m<sup>3</sup>/h) (28 gpm), backwash flow 57 lpm (3.40 m<sup>3</sup>/h) (15 gpm) with meter and bypass installed
- 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), and Tank in Service Indication
- 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 a 8 hour carry over
- Backwash and brining ability to 21" diameter tanks
- Downflow regeneration
- 12-volt output AC Adapter provides safe and easy installation
- Treated/Soft water post fill and regeneration cycles
- 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 drives

# Water Specialist 1" EI Twin Alternating 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).....	106 lpm (6.36 m <sup>3</sup> /h) (28 gpm)
Backwash @ 25 psi/1.7 bar drop (includes bypass).....	57 lpm (3.40 m <sup>3</sup> /h) (15 gpm)
Cv Service .....	7.28
Cv Backwash .....	2.96

## OPERATING PRESSURES

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

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

Accuracy .....	± 5%
Flow Rate Range.....	0.95 - 102 lpm
Gallon 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" Male NPT
Brine Line .....	¾" or ½" OD Poly Tube Compression
Mounting Base.....	2 ½" - 8 NPSM
Height From Top Of Tank.....	187 mm (7 ¾")
Weight .....	7.25 kg (16 lbs.)

## ELECTRICAL SPECIFICATIONS

	<b>AC Adapter</b>
	<u>International</u>
Supply Voltage .....	230V AC
Supply Frequency .....	50 Hz
Output Voltage .....	12V AC
Output Current .....	500 mA

## TANK APPLICATIONS

Water Softener .....	6" – 21" diameter
Water Filter (2).....	6" – 16" diameter

## CYCLES OF OPERATION (Softener / Filter Downflow)

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

*Options: Backwash Filter, Bypass, Weather Cover*

Compatible with the following typical concentration 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