

Clack®

WS1EI TWIN ALTERNATING CONTROL VALVE

WATER SPECIALIST CONTROL VALVE



Certified to NSF/ANSI 44, 61 and 372.

- Service flow 106 lpm (6.36 m³/h) (28 gpm), backwash flow 57 lpm (3.40 m³/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 or upflow brining regeneration
- Level VI 15-volt output DC power supply 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" El 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 m³/h) (28 gpm)
Backwash @ 25 psi/1.7 bar drop (includes bypass)..... 57 lpm (3.40 m³/h) (15 gpm)
Cv Service 7.28
Cv Backwash 2.96

OPERATING PRESSURES

Minimum/Maximum 1.4 - 8.6 bar (20 psi – 125 psi)

OPERATING TEMPERATURES

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

METER

Accuracy ± 5%
Flow Rate Range..... 0.95 - 102 lpm
Gallon Range..... 0.02 - 5,700 m³
Totalizer 0.001 - 9,999,000 m³

DIMENSIONS & WEIGHT

Distributor Pilot..... 1.050" OD Pipe (¾" NPS)
Drain Line ¾" or 1" Male NPT
Brine Line ⅜" or ½" OD Poly Tube Compression
Mounting Base..... 2 ½" - 8 NPSM
Height From Top Of Tank..... 187 mm (7 ⅜")
Weight 7.25 kg (16 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" – 16" diameter

CYCLES OF OPERATION (Softener / Filter Downflow)

	<u>Softener</u>	<u>Filter</u>
Cycle	Range of time in minutes	
1. Backwash 1 st	1-120 or off	Backwash 1-120 or off
2. Regenerate Draw/Slow Rinse	1-180 or off	
3. Backwash 2 nd	1-120 or off	
4. Fast Rinse	1-120 or off	Rinse 1-120 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