

Clack®

WS1.5EI

**WATER
SPECIALIST
CONTROL
VALVE**

NSF

Certified to NSF/ANSI 61 and 372.



- 1.5" top mount control valve suited for mid-size commercial/industrial applications
- Epoxy coated lead free brass valve body*
- Economical optional meter
- Service flow rate of 265 lpm (15.9 m³/h) (70 gpm), backwash 197 lpm (11.8 m³/h) (52 gpm)
- 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 or upflow brining, slow rinse, second backwash, fast rinse, refill and downflow service
- Coin Cell Lithium battery back-up with a 8 hour carry over
- Level VI 15-volt output DC power supply provides safe and easy installation
- Post treated water regenerant refill
- 24 hour clock
- 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



Optional 1.5" Meter

Water Specialist 1.5" EI Control Specifications

Inlet/Outlet (1)	1.5" Female BSPT or NPT
Cycles	up to 6
Valve Material	Lead free brass
Regeneration	Downflow

CONTROL VALVE FLOW RATES

Service @ 1 bar/15 psi drop (includes meter)	265 lpm (15.9 m ³ /h) (70 gpm)
Backwash @ 1.7/25 psi bar drop	197 lpm (11.8 m ³ /h) (52 gpm)

OPERATING PRESSURES

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

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

Accuracy	± 5%
Flow Rate Range	2 - 284 lpm (0.5 - 75 gpm)
Volume Range	0.02 - 5,700 m ³
Totalizer	0.001 - 4,294,000 m ³ (.26 - 1,134,355,000 gallons)

DIMENSIONS & WEIGHT

Distributor Pilot	
Valve bodies with 1.5" Female BSPT Inlet & Outlet	50 mm OD
Valve bodies with 1.5" Female NPT Inlet & Outlet	1.90" OD (1.5" NPS)
Drain Line Connection (2)	1.25" Female NPT
Adapter Included	¾" Male NPT Elbow
Brine Line Connection	¾" Female NPT
Adapter Included	½" OD Poly Tube Compression
Mounting Base	4" - 8 UN
Height From Top Of Tank	191 mm (7.5")
Shipping Weight With Meter	9.5 kg (21 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	12" - 30" Diameter (4)
Water Filter (3)	12" - 30" Diameter

CYCLES OF OPERATION

	<u>Softener</u>	<u>Filter</u>
Cycle	Range of time in minutes	
1. Backwash 1 st (upflow)	1-95	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow)	1-180	
3. Backwash 2 nd (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. See Distributor Pilot.

2. Casting comes with a 1.25" Female NPT drain connection. An adapter is provided to accept existing WS1 drain line ¾" Male NPT flow controls up to 38 lpm (10 gpm). Other drain line flow controls are available for flow rates above 38 lpm (10 gpm).

3. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area

4. Requires a V3158-02 installed for a brine elbow on the control valve, use of a 454 controlled flow brine valve assembly H7070-36CF-5 or H7070-54CF-5 (designed with 5 gpm BLFC), 1" air check, or 494 brine valve assembly, and minimum ¾" hard pipe PVC brine line.