

# Clack®

# WS1.5EE

## WATER SPECIALIST CONTROL VALVE



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 stainless steel optional meter assembly
- Service flow rate of 70 gpm, backwash 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/ slow rinse, second backwash, fast rinse, refill and downflow service
- Coin Cell Lithium battery back-up with a 8 hour carry over
- 12-volt output AC Adapter provides safe and easy installation
- 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



Optional 1.5" Meter

# Water Specialist 1.5" EE Control Specifications

Inlet/Outlet (1) .....	1.5" Female NPT
Cycles .....	Up to 6
Valve Material .....	Epoxy coated brass
Regeneration .....	Downflow

## CONTROL VALVE FLOW RATES

Service @15 psi drop (includes meter).....	70 gpm
Backwash @ 25 psi drop .....	52 gpm
Cv Service .....	18.1
Cv Backwash .....	10.4

## OPERATING PRESSURES

Minimum/Maximum .....	20 psi – 125 psi
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## OPERATING TEMPERATURES

Minimum/Maximum .....	40° – 110° F
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## METER SPECIFICATIONS

Accuracy .....	± 5%
Flow Rate Range.....	0.5 – 75 GPM
Gallon Range.....	20 – 1,500,000 gallons
Totalizer .....	1 – 9,999,000 gallons

## DIMENSIONS & WEIGHT

Distributor Pilot	
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.....	7.5"
Shipping Weight With Meter .....	21 lbs.

## 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 .....	12" – 30" diameter (4)
Water Filter (3).....	12" – 30" 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	
4. Fast Rinse (downflow) .....	1-95.....	Rinse 1-95
5. Regenerant Refill (in service with treated water).....	0.1-99.0 or off	
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

- See Distributor Pilot.
- 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 10 gpm. Other drain line flow controls are available for flow rates above 10 gpm.
- Filter tank size calculated @ 10 gpm of backwash per square foot of bed area
- 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.