

Clack®

WS2EI

WATER SPECIALIST CONTROL VALVE



- 2" Top mount control valve suited for commercial/industrial applications
- Lead free brass construction
- Economical stainless steel optional meter assembly
- Service flow rate of 435 lpm (26.1 m³/h) (115 gpm), backwash 303 lpm (18.2 m³/h) (80 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 an 8 hour carry over
- 12-volt output AC Adapter provides safe and easy installation
- Post treatment water regenerant refill
- 24 Hour Clock
- Reliable and proven DC drive
- 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
- Patented quiet drain line flow control assembly U.S. Patent 6,776,901



Optional 2" Meter

Water Specialist 2" EI Control Specifications

Inlet/Outlet (1)	2" 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	435 lpm (26.1 m ³ /h) (115 gpm)
Backwash @ 1.7 bar/25 psi drop.....	303 lpm (18.2 m ³ /h) (80 gpm)
Cv Service	29.7
Cv Backwash	16.0

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 SPECIFICATIONS

Accuracy	± 5%
Flow Rate Range.....	5.7 - 568 lpm (1.5 - 150 gpm)
Volume Range	0.02 - 5,700 m ³ (5 - 1,500,000 gallons)
Totalizer	0.001 - 4,294,000 m ³ (.26 - 1,134,355,000 gallons)

DIMENSIONS & WEIGHT

Distributor Pilot	
Valve bodies with 2" Female BSPT Inlet & Outlet.....	50mm OD
Valve bodies with 2" Female NPT Inlet & Outlet	1.90" OD (1.5" NPS)
Drain Line Connection	1.5" Female NPT
Brine Line Adapters Included.....	1" Male NPT elbow, ¾" x 1" solvent weld elbow and ½" OD Poly Tube Compression
Mounting Base	4" - 8 UN
Height From Top Of Tank.....	216 mm (8.5")
Shipping Weight With Meter	13 Kg (29 lbs.)

ELECTRICAL SPECIFICATIONS

	AC Adapter	
	International	U.S.
Supply Voltage	230V AC.....	120V AC
Supply Frequency	50 Hz.....	60 Hz
Output Voltage	12V AC.....	12V AC
Output Current	500 mA.....	500 mA

TANK APPLICATIONS

Water Softener	12" - 48" diameter
Water Filter (2)	12" - 36" diameter

CYCLES OF OPERATION

	Softener	Filter
Cycle	Range of time in minutes	
1. Backwash 1 st (upflow)	1-20.....	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow)	1-180	
3. Backwash 2 nd (upflow).....	1-20.....	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. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area