

# Clack®

# WS2EI/QC

## WATER SPECIALIST CONTROL VALVE



- 2" top mount or side mount control valve suited for commercial/industrial applications
- Lead free brass construction
- Economical stainless steel optional meter assembly
- Service flow rate of 473 lpm (28.4 m<sup>3</sup>/h) (125 gpm), backwash 322 lpm (19.3 m<sup>3</sup>/h) (85 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 treated 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



Side Mount Adapter

# Water Specialist 2" EI/QC 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 .....	473 lpm (28.4 m <sup>3</sup> /h) (125 gpm)
Backwash @ 1.7 bar/25 psi drop.....	322 lpm (19.3 m <sup>3</sup> /h) (85 gpm)
Cv Service .....	32.3
Cv Backwash .....	17.0

## OPERATING PRESSURES

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

## OPERATING TEMPERATURES

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

## METER SPECIFICATIONS

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

## DIMENSIONS & WEIGHT

Distributor Pilot	
Valve Bodies with 2" Female NPT Inlet & Outlet.....	2.375" OD (2" NPS)
Valve Bodies with 2" Female BSPT Inlet & Outlet .....	63mm OD
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, 6" Flange or Side Mount
Height From Top Of Tank with 4" - 8 UN QC Base.....	284.5mm (11.2")
Height From Top Of Tank with 6" Flange QC Base .....	287 (11.3")
Shipping Weight With Meter .....	14 Kg (30 lbs.)

## ELECTRICAL SPECIFICATIONS

### AC Adapter

	<u>International</u>	<u>U.S.</u>
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

	<u>Softener</u>	<u>Filter</u>
Cycle	Range of time in minutes	
1. Backwash 1 <sup>st</sup> (upflow) .....	1-20.....	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow) .....	1-180	
3. Backwash 2 <sup>nd</sup> (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 m<sup>2</sup> of bed area/10 gpm of backwash per square foot of bed area