

Clack®

WS1.5CI

**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 stainless steel optional meter assembly
- 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 and current flow rate
- Four methods to initiate the downflow regeneration; meter immediate, meter delayed, time clock delayed or pressure differential
- Program in ppm, French degrees, German degrees, or cubic meters
- Fully programmable regeneration cycle sequence (maximum 9)
- Programmable regeneration cycle times
- Days override feature; 1-28 days available
- Level VI 15-volt output DC power supply provides safe and easy installation
- Pre or Post treated water regenerant refill
- Low salt alarm
- 24 hour clock
- Coin Cell Lithium battery back-up with a 24 hour carry over
- 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" CI Control Specifications

Inlet/Outlet (1)	1.5" Female BSPT or NPT
Cycles	up to 9
Valve Material	Lead free brass
Regeneration	Downflow

CONTROL VALVE FLOW RATES

Service @ 1 bar/15 psi drop (includes meter)	265 lpm (15.9 m³/h) (70 gpm)
Backwash @ 1.7 bar/25 psi drop	197 lpm (11.8 m³/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 m³
Totalizer	1 - 99,999 m³ (264 - 26,417,000 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

Choose up to nine regeneration cycles, in any order, with a wide range of available values:

Cycle	Range of values
Backwash	1 - 120 minutes
Rinse	1 - 120 minutes
Pause (service)	1 - 480 minutes
Brine (co-current)	1 - 180 minutes
Refill (softener)	0.05 - 90.00 Kg / .1 - 99 minutes
Refill (filter)	0.2 - 76.00 Liters

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.