

# Clack®

# WS1.5CI

**WATER  
SPECIALIST  
CONTROL  
VALVE**



- **1.5" top mount control valve suited for mid-size commercial/industrial applications**
- **Lead free brass valve body**
- **Economical stainless steel optional meter assembly**
- **Service flow rate of 265 lpm (15.9 m<sup>3</sup>/h) (70 gpm), backwash 197 lpm (11.8 m<sup>3</sup>/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**
- **12-volt output AC Adapter 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**
- **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 m <sup>3</sup> /h) (70 gpm) |
| Backwash @ 1.7 bar/25 psi drop.....                | 197 lpm (11.8 m <sup>3</sup> /h) (52 gpm) |

## OPERATING PRESSURES

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

## OPERATING TEMPERATURES

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

## METER SPECIFICATIONS

|                      |   |
|----------------------|---|
| Accuracy.....        | ± 5%  |
| Flow Rate Range..... | 2 - 284 lpm (0.5 - 75 gpm)                              |
| Volume Range .....   | 0.02 - 5,700 m <sup>3</sup>                             |
| Totalizer .....      | 1 - 99,999 m <sup>3</sup><br>(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

|                        | 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" - 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 - 95.00 Kg     |
| Refill (filter) .....   | 0.05 - 95.00 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 m<sup>2</sup> 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 5gpm BLFC) , 1" air check, or 494 brine valve assembly, and minimum ¾" hard pipe PVC brine line.