

Clack®



WS1CS

WATER SPECIALIST CONTROL VALVE



shown with optional bypass

- Solid state microprocessor with easy access front panel settings
- Three modes of operation; meter immediate, meter delayed, or time clock delayed
- Double backwash feature offers optimum regeneration, cleaning ability, and efficiency
- 73 selectable pre-programmed regeneration cycles
- Days override feature; 1 – 28 days available
- Backwash and brining ability to 21" diameter tanks
- Downflow/upflow regeneration
- Stores system configuration and operation data in nonvolatile memory
- Coin Cell Lithium battery back-up with an 8 hour carry over
- 12-volt output AC Adapter provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- Pre or 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
- Patented quiet drain line flow control assembly U.S. Patent 6,776,901
- Reliable and proven DC drive

Water Specialist 1" CS Control Specifications

| | |
|----------------------------|-------------------------|
| Inlet/Outlet Fittings..... | ¾" to 1.5" NPS |
| Cycles | up to 6 |
| Valve Material | Noryl (1) or equivalent |
| Regeneration | downflow/upflow |

FLOW RATES

| | |
|--|--------|
| Service @15 psi drop (includes bypass and meter) | 27 gpm |
| Backwash @ 25 psi drop (includes bypass) | 27 gpm |
| Cv Service | 7.0 |
| Cv Backwash | 5.4 |

OPERATING PRESSURES

| | |
|-----------------------|------------------|
| Minimum/Maximum | 20 psi – 125 psi |
|-----------------------|------------------|

OPERATING TEMPERATURES

| | |
|-----------------------|--------------|
| Minimum/Maximum | 40° – 110° F |
|-----------------------|--------------|

METER

| | |
|----------------------|--------------------------|
| Accuracy | ± 5% |
| Flow Rate Range..... | 0.25 – 27 gpm |
| Gallon Range..... | 20 – 50,000 gallons |
| Totalizer | 1000 - 9,999,000 gallons |

DIMENSIONS & WEIGHT

| | |
|------------------------------|-------------------------|
| Distributor Pilot..... | 1.050" OD Pipe (¾" NPS) |
| Drain Line | ¾" or 1" NPT |
| Brine Line | ¾" or ½" OD Poly Tube |
| Mounting Base..... | 2 ½" - 8 NPSM |
| Height From Top Of Tank..... | 7 ¾" |
| Weight | 4.5 lbs. |

ELECTRICAL SPECIFICATIONS

AC Adapter

| | <u>U.S.</u> | <u>International</u> |
|------------------------|--------------|----------------------|
| 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 | 6" – 21" Diameter |
| Water Filter (2) | 6" – 21" Diameter |

CYCLES OF OPERATION (Softener Downflow)

| Cycle | Range of times minutes |
|---|------------------------|
| 1. Backwash 1 st (upflow) | 6 - 16 |
| 2. Regenerate Draw/Slow Rinse (downflow) | 45 - 75 |
| 3. Backwash 2 nd (upflow) | 3 - 12 |
| 4. Fast Rinse (downflow) | 3 - 10 |
| 5. Regenerant Refill (in service with treated water)..... | As Programmed |
| 6. Service (downflow) | |

Options: Backwash Filter, Bypass, Weather Cover

Compatible with the following typical concentrations of regenerants or chemicals: Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite, chlorine and chloramines

1. Noryl is a trademark of Sabic Innovative Plastics IP B.V. Company
2. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area