

# Clack®

## WS3

### **WATER SPECIALIST CONTROL VALVE**



**Certified to NSF/ANSI 44 and NSF/ANSI/CAN 61 and 372**

- **Control Valve Flow Rates: Service 250 gpm (946 lpm) (56.8 m<sup>3</sup>/h)  
Backwash 220 gpm (833 lpm) (50.0 m<sup>3</sup>/h)**
- **Epoxy coated lead free brass valve body**
- **Fully programmable regeneration cycle times and sequences (maximum 9)**
- **Network up to 16 valves using Cat5 cable or better**
- **Methods to initiate regeneration: Meter Delayed, Meter Immediate, Time Clock Delay, Remote Input**
- **Add up to 2 relay expansion boards to circuit board (sold separately)**
- **Top-mount or side-mount capabilities for commercial and industrial applications**
- **Programmable System types: Alternating, Progressive Flow, Series, Single**
- **Days override feature; 1-28 days or day/s of the week**
- **Blue backlight front display shows: Time and Date, Current Flow Rate, Volume Used, Volume Remaining, Days Remaining**
- **Diagnostics and history viewing**
- **Modbus RS485 duplex to communicate with building automation systems**
- **Remote circuit board software update capability**
- **Reliable and proven DC drive**
- **One piece expanding seal spacer stack assembly**

# Water Specialist 3" Control Specifications

Inlet/Outlet (1) .....	3" Female NPT or BSPT
Cycles .....	up to 9
Valve Material .....	Lead free brass
Regeneration .....	Downflow
<b>CONTROL VALVE FLOW RATES</b>	
Service @ 15 psi/1 bar drop.....	250 gpm (946 lpm) (56.8 m <sup>3</sup> /h)
Backwash @ 25 psi/1.7 bar drop.....	220 gpm (833 lpm) (50.0 m <sup>3</sup> /h)
Cv Service.....	64.6
Cv Backwash.....	44.0
<b>OPERATING PRESSURES</b>	
Minimum/Maximum .....	20 - 125 psi (1.4 - 8.6 bar)
<b>OPERATING TEMPERATURES</b>	
Minimum/Maximum .....	40° - 110°F (4° - 43°C)
<b>METER SPECIFICATIONS</b>	
Accuracy.....	± 5%
Flow Rate Range.....	3.5 - 350 gpm (13.3 - 1325 lpm)
Volume Range .....	10 - 999,000 gallons (38 - 3,796.2 liters x1000)
Totalizer .....	1,000 - 999,999,000 gallons (3,786 - 3,785,407.9 liters x1000)
<b>DIMENSIONS &amp; WEIGHT</b>	
Distributor Pilot	
Valve Bodies with 3" Female NPT Inlet & Outlet.....	3.5" OD (3" NPS)
Valve Bodies with 3" Female BSPT Inlet & Outlet .....	90mm OD
Drain Line Connection .....	3" Female NPT/BSPT "No Groove Lock"
Brine Line Adapters Included.....	1" Male NPT elbow and ¾" x 1" solvent weld elbow
Mounting Base.....	6" Flange or Side Mount
Height From Top Of Tank with 6" Flange QC Base .....	12.5" (318mm)
Shipping Weight Without Optional Meter .....	57 lb (25.9 kg)
<b>ELECTRICAL SPECIFICATIONS</b>	
<b>POWER SUPPLY</b>	
	<u>U.S.</u> <u>International</u>
Supply Voltage .....	120VAC ..... 240VAC
Supply Frequency .....	60 Hz ..... 60 Hz
Output Voltage .....	24VDC ..... 24VDC
Output Current .....	800 mA..... 800 mA
<b>TANK APPLICATIONS</b>	
Water Softener .....	18" - 63" Diameter with standard injectors, to 96" with Brine Pump
Water Filter (2).....	18" - 63" Diameter
<b>CYCLES OF OPERATION</b>	
Choose up to nine regeneration cycles, in any order, with a wide range of available values:	
Cycle .....	Range of values
Backwash.....	1 - 95 minutes
Brine (draw) .....	1 - 180 minutes
Slow Rinse .....	1 - 95 minutes
Fast Rinse .....	1 - 95 minutes
Refill .....	0.1 - 99 minutes
Hold (service) .....	1 - 480 minutes

**Options: Backwash Filter**

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 @ 10 gpm of backwash per square foot of bed area/407 lpm per m<sup>2</sup> of bed area