

CLACK WS₁ SPEC SHEET

WS₁

WATER SPECIALIST CONTROL VALVE



Certified to NSF/ANSI 44, 61 and 372.

- 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
- Capable of 36 pre-programmed regeneration cycles based on control valve setting
- 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
- Level VI 15-volt output DC power supply 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
- Reliable and proven DC drive



est. 1947

DUFFco.



201 E Lafayette St
Norristown, PA 19401



610-275-4453



duffco.com



info@duffco.com

WATER SPECIALIST 1™ 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
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OPERATING TEMPERATURES

Minimum/Maximum	40° – 110° F
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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

POWER SUPPLY

	U.S.	International
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	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 - 12
2. Regenerate Draw/Slow Rinse (downflow)	45 - 75
3. Backwash 2 nd (upflow)	3 - 12
4. Fast Rinse (downflow)	3 - 8
5. Regenerant Refill (in service with treated water).....	As Programmed
6. Service (downflow)	

Options: Backwash Filter, Bypass, Weather Cover

Compatible with the following typical concentration 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