

Clack®



WS1SD WS1SP

TWIN ALTERNATING BATTERY VALVE

WATER SPECIALIST CONTROL VALVE



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



SD



D Cell Battery Pack

SP



AA Rechargeable
Battery Pack

SP RECHARGING OPTIONS



DC Power Supply



Solar Panel

- Service flow 28 gpm, backwash flow 15 gpm with meter and bypass installed
- Solid state microprocessor with easy access front panel settings
- Front panel display for time of day, days until next regeneration, volume remaining, current flow rate and total volume used (Totalizer), and Tank in Service Indication
- Four methods to initiate regeneration; meter immediate, meter delayed, time clock delayed or pressure differential
- Adjustable cycle times with 6-cycle control delivers controlled backwash, downflow brining/slow rinse, second backwash, fast rinse, refill and downflow service
- Coin Cell Lithium battery back-up with a 8 hour carry over of time of day
- Backwash and brining ability to 21" diameter tanks
- Downflow regeneration/Upflow regeneration
- Post treated water regenerant refill
- Reliable and proven DC drives
- One piece expanding seal spacer stack assembly
- Linearly reciprocating piston operation

WS1SD and WS1SP Twin Alternating Specifications

Inlet/Outlet Fittings.....	¾" to 1.5" NPS
Cycles	up to 6
Valve Material	Fiber Reinforced Composite
Regeneration	Downflow

FLOW RATES

Service @15 psi drop (includes bypass and meter)	28 gpm
Backwash @ 25 psi drop (includes bypass)	15 gpm
Cv Service	7.28
Cv Backwash	2.96

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 – 30 gpm
Gallon Range.....	20 – 1,500,000 gallons
Totalizer	1000 - 9,999,000 gallons

DIMENSIONS & WEIGHT

Distributor Pilot.....	1.050" OD Pipe (¾" NPS)
Drain Line	¾" or 1" Male NPT
Brine Line	⅜" or ½" OD Poly Tube Compression
Mounting Base.....	2½" - 8 NPSM
Height From Top Of Tank.....	7⅜"
Weight	16 lb

BATTERY SPECIFICATIONS - 2 OPTIONS FOR OPERATION

- 6 AA nickel metal hydride batteries rechargeable for SP model
- 6 "D" cell alkaline batteries (**disposable when discharged**) for SD model - "D" batteries not included

CHARGING SPECIFICATIONS FOR SP MODEL- 2 OPTIONS FOR OPERATION

- Amorphous silicon solar panels capable of three tilt angles
- DC power supply with 15VDC output 500mA

TANK APPLICATIONS

Water Softener	6" – 21" diameter
Water Filter (1).....	6" – 16" diameter

CYCLES OF OPERATION (Softener / Filter Downflow)

Cycle	Softener	Filter
	Range of time in minutes	
1. Backwash 1 st	1-120.....	Backwash 1-120
2. Regenerate Draw/Slow Rinse (downflow or upflow).....	1-180	
3. Backwash 2 nd	1-120	
4. Fast Rinse	1-120.....	Rinse 1-120
5. Regenerant Refill (in service with treated water).....	0.1-99.0 or off	
6. Service (downflow)		

When replacing batteries follow state or local regulations for recycling and disposal.

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. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area.