

Clack®

WS1.5SD WS1.5SP

**WATER
SPECIALIST
CONTROL
VALVE**



Certified to NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.



SD



D Cell Battery Pack

SP



**AA Rechargeable
Battery Pack**

SP RECHARGING OPTIONS



DC Power Supply



Solar Panel

- Solar panel or DC power supply recharges 6 "AA" re-chargeable Nickel Metal Hydride Batteries
- Can be programmed for automatic variable reserve, based on water usage history for high efficiency
- 1.5" top mount control valve suited for mid-size commercial/industrial applications
- Epoxy coated lead free brass valve body
- Economical stainless steel optional meter assembly
- Service flow rate of 70 gpm, backwash 52 gpm
- 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)
- Four methods to initiate regeneration; meter immediate, meter delayed, time clock delayed or pressure differential
- Optional double backwash feature offers optimum regeneration, cleaning ability and efficiency
- Fully adjustable cycle times with 6-cycle control delivers controlled backwash, downflow brining/slow rinse, second backwash, fast rinse, refill and downflow service
- Downflow regeneration/Upflow regeneration
- Coin Cell Lithium battery back-up with 8 hour carry over of time of day
- Level VI 15-volt output DC power supply provides safe and easy installation
- One piece expanding seal spacer stack assembly
- Linearly reciprocating piston operation
- Post treated water regenerant refill
- Reliable and proven DC drive



Optional 1.5" Meter

Water Specialist 1.5" SD/SP Control Specifications

Inlet/Outlet (1)	1.5" Female NPT
Cycles	Up to 6
Valve Material	Lead free brass
Regeneration	Downflow

CONTROL VALVE FLOW RATES

Service @15 psi drop (includes meter).....	70 gpm
Backwash @ 25 psi drop	52 gpm
Cv Service	18.1
Cv Backwash	10.4

OPERATING PRESSURES

Minimum/Maximum	20 psi – 125 psi
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OPERATING TEMPERATURES

Minimum/Maximum	40° – 110° F
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METER SPECIFICATIONS

Accuracy	± 5%
Flow Rate Range.....	0.5 – 75 GPM
Gallon Range.....	20 – 1,500,000 gallons
Totalizer	1 – 9,999,000 gallons

DIMENSIONS & WEIGHT

Distributor Pilot	
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.....	7.5"
Shipping Weight With Meter	21 lbs.

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	12" – 24" diameter
Water Filter (3).....	12" – 30" diameter

CYCLES OF OPERATION

Cycle	Softener	Filter
	Range of time in minutes	
1. Backwash 1 st (upflow)	1-95.....	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow or upflow).....	1-180	
3. Backwash 2 nd (upflow).....	1-95.....	Rinse 1-95
4. Fast Rinse (downflow)	1-95	
5. Regenerant Refill (in service with treated water).....	0.1-99.0	
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

- See Distributor Pilot.
- 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 10 gpm. Other drain line flow controls are available for flow rates above 10 gpm.
- Filter tank size calculated @ 10 gpm of backwash per square foot of bed area.