

# Clack®



# WS1SQ

## WATER SPECIALIST CONTROL VALVE



Battery Valve w/ Solar Panel  
V1SQDME-P03



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



shown with optional bypass

- 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
- Solid state microprocessor with easy access front panel settings
- Service flow rate of 102 lpm (6.12 m<sup>3</sup>/h) (27 gpm), backwash 102 lpm (6.12 m<sup>3</sup>/h) (27 gpm)
- 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
- 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
- Control valve design provides optimum service and backwash rates
- Post treated water regenerant refill
- Reliable and proven DC drive
- One piece expanding seal spacer stack assembly
- Linearly reciprocating piston operation
- Mixing valve option available

# Water Specialist 1” SQ Control 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) ..... 102 lpm (6.12 m³/h) (27 gpm)  
 Backwash @ 25 psi drop (includes bypass) ..... 102 lpm (6.12 m³/h) (27 gpm)  
 Cv Service ..... 7.0  
 Cv Backwash ..... 5.4

## OPERATING PRESSURES

Minimum/Maximum ..... 20 psi – 125 psi (1.4 - 8.6 bar)

## OPERATING TEMPERATURES

Minimum/Maximum ..... 40° – 110° F (4° - 43°C)

## METER

Accuracy ..... ± 5%  
 Flow Rate Range..... 0.95 - 102 lpm  
 Volume Range ..... 0.02 - 5,700 m³  
 Totalizer ..... 0.001 - 9,999,000 m³

## VALVE 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..... 2 ½" - 8 NPSM  
 Height From Top Of Tank..... 7 ⅜" (187 mm)  
 Weight ..... 4.5 lbs. (2 kg)

## SOLAR PANEL & BATTERY SPECIFICATIONS

Amorphous silicon solar panel  
 Modular snap together Solar Panel capable of three tilt angles  
 Solar panel recharges 6 replaceable AA nickel metal hydride batteries  
 Batteries mounted behind circuit board  
 Smart charger circuitry turns on and off to extend battery life

## TANK APPLICATIONS

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

## CYCLES OF OPERATION (Softener Downflow)

Cycle	Softener	Filter
	Range of time in minutes	
1. Backwash 1 <sup>st</sup> (upflow) .....	1-95.....	Backwash 1-95
2. Regenerate Draw/Slow Rinse (downflow or upflow).....	1-180	
3. Backwash 2 <sup>nd</sup> (upflow).....	1-95	
4. Fast Rinse (downflow) .....	1-95.....	Rinse 1-95
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.  
 Outdoor applications require weather cover.

Options: Backwash Filter, Bypass

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