

RESIDENTIAL SPECIALIST SERIES II™

CITY WATER SOFTENERS

- Softeners with:
- MediaGuard™ Insert with KDF® 55 Process Media
- Premium or HE Resins
- John Guest Adapters

WS1EE Specialist Series II™
Clack Control Valve
Isolation Bypass Valve
Round Brine Tank

MODEL NUMBER SERIES	BMS32	BMS48	HE32	HE48
Maximum capacity (grains per recharge) ¹	30,000	45,000	30,000	45,000
Minimum capacity (grains per recharge)	20,000	30,000	20,000	30,000
Salt required per max. recharge (lbs.)	15	22.5	15	22.5
Salt required per min. recharge (lbs.)	6	9	6	9
Mineral tank size (fiberglass) (inches)	9 x 48	10 x 54	9 x 48	10 x 54
Salt storage capacity (lbs.)	375	375	375	375
Service flow rate (G.P.M.) C/P ²	5 / 8	7.5 / 10.5	5 / 8	7.5 / 10.5
Backwash flow rate (G.P.M.)	4.2	6.5	4.2	6.5
I.P.S. Pipe Size (inches)	3/4 or 1	3/4 or 1	3/4 or 1	3/4 or 1
Maximum height (inches) ³	56	62	56	62
Floor space required (inches)	18 x 33	18 x 33	18 x 33	18 x 33

Part #	Description	Weight
WS1EE Valve with Meter, Bypass, & 3/4" John Guest Adapters		
BMS32CK55	City Softener 9" x 48"	120
BMS48CK55	City Softener 10" x 54"	140
HE32CK55	HE City Softener 9" x 48"	120
HE48CK55	HE City Softener 10" x 54"	140

WS1EE Valve with Meter, Bypass, & 1" John Guest Adapters		
BMS321CK55	City Softener 9" x 48"	120
BMS481CK55	City Softener 10" x 54"	140
HE321CK55	HE City Softener 9" x 48"	120
HE481CK55	HE City Softener 10" x 54"	140



STANDARD FEATURES:

All BWS pre-assembled Specialist Series II™ city softeners utilize the Clack WS1EE control valve, and are provided with the following standard features:

- Premium or HE Grade NSF 61 Certified Resin
- MediaGuard™ Insert
- Polyglass Resin Tank
- Brine Tank w/ Safety Float
- Brine Tank Overflow Fitting
- Brine Draw Air Check Valve
- Isolation / Bypass Valve
- John Guest Adapters



OPTIONS:

- Other Pipe Adapter Sizes and Materials

NOTES:

- TDS, application and flow rates will influence the performance of the system.
- Pressure drop at flow rates listed is less than 15 PSI.
- Premium Resin units will handle 1 PPM clearwater iron. Use HE Resin, and/or iron filter on higher amounts.

¹All units are shipped from factory set at maximum capacity and salt usage. To afford a 40% salt savings, use the minimum capacity and salt usage.

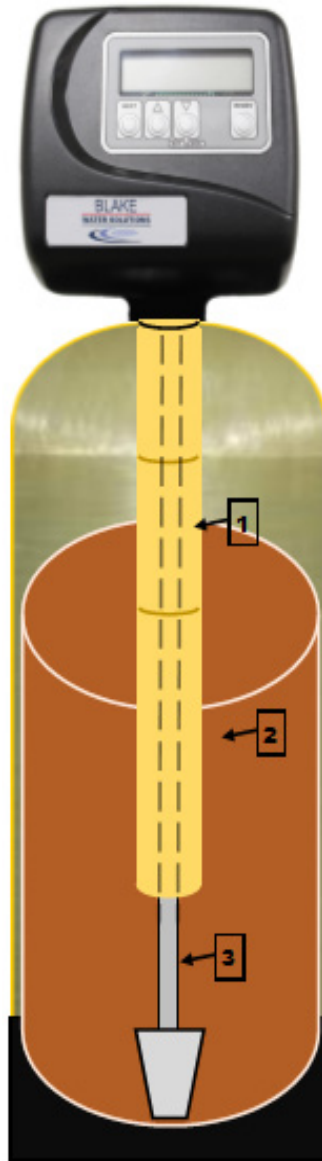
² C= Continuous P= Peak

³ Allow additional headroom of 7-1/2 inches for valve removal.

RESIDENTIAL SPECIALIST SERIES II™

CITY WATER SOFTENER

Softens hard water & removes unpleasant chlorine taste and odor



- 1 - MediaGuard™ Insert
- 2 - Premium of HE Resin
- 3 - Standard Riser Tube

Authorized Dealer:

BWS Specialist Series II™ city water softeners are suitable for applications ranging from 32,000 to 48,000 grains of hardness removal capacity at flow rates of up to 9 gpm continuous (12 gpm peak).

Operation of the Softener

Hard water contains dissolved minerals in the form of Calcium (Ca), Magnesium (Mg), and Iron (Fe). Removal of these minerals is accomplished by softening the water through an ion exchange process. As water flows through the mineral tank, the dissolved minerals become attached to the resin. Over a period of time the resin will become exhausted, and the softener will regenerate using a brine solution.

Softening Media

BWS Specialist Series II™ softeners feature NSF certified non-solvent strong acid (Cation) resins in the sodium form. The resins have very high whole bead count, no color throw, and combine high operating capacity with excellent chemical and physical stability for long dependable life. The “HE” resin employs the additional features of an inert core and uniform functional depth. This means the resin beads have a shorter diffusion path that results in more rapid softening and regeneration and a higher resistance to iron fouling.

MediaGuard™ Insert

The MediaGuard™ is an insert device that attaches to the control valve and fits inside a regular pressure tank with standard riser. Untreated water passes through the MediaGuard™ before contacting the resin contained in the tank. The KDF® media housed inside the MediaGuard™ insert reduces the chlorine levels in the feed water before it contacts the softening resin. This effectively removes the unpleasant chlorine taste and odor while prolonging the life of the primary media. Pressure drops through the MediaGuard™ are nominal. When the regular system backwashes, the MediaGuard™ also backwashes to minimize packing and added pressure drop.

Control Valve

BWS Specialist Series II™ water softener control valves incorporate the latest user -friendly solid state microprocessor technology and unparalleled flexibility. The weatherproof NEMA 3R Solid State microprocessor controller has easy access front panel touch pads for setting time of day, hardness levels, and days override, as well as diagnostic and installer functions for initial system set up and troubleshooting. The units have three modes of operation — meter immediate, meter delayed, and time clock delayed. A double backwash option facilitates optimum system capacity, resin cleaning ability and softener efficiency. BWS Specialist Series II™ control valves include fully programmable regeneration cycles and a days override feature selectable from 1 to 28 days. The non-volatile memory stores system configuration and operation data. A 3V coin cell lithium battery back-up with an 8 hour carry over and a 12 volt transformer provides for safe and easy installation. Soft water brine make-up has selectable pre-regeneration tank fill (normally dry brine tank) or post regeneration fill.

Media Tank

BWS Specialist Series II™ softeners feature a non-corrosive tank design made up of a continuous seamless inner HDPE liner with composite fiberglass filament winding over the liner. The tank has a maximum working pressure of 150 psi and a working temperature of up to 120° F. The tank is certified to NSF/ANSI 61 and exceeds NSF/ANSI 44. All fiberglass tanks 12” diameter or less carry a 10 year warranty.

Brine System

Brine refill is automatically controlled by the timer/ controller to provide the correct amount of brine for each regeneration. The brine tank is equipped with a brine grid, safety shut-off valve, and overflow.

4 New Park Road
East Windsor, CT 06088
860-243-1493
860-528-8057 FAX
www.blakeequip.com