

Sumo I

Water Softener

Installation Instructions



Contents

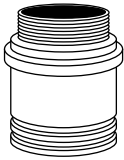
Contents of Box	03
Safety Information	04
Specifications	06
Typical Installation	07
Installation Instructions	09
Installation Review	14

Contents of box

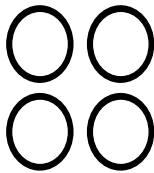
Please ensure you have all of the following items before proceeding with an installation.



1 x Water softener



2 x 3/4" BSP
in/out adaptor



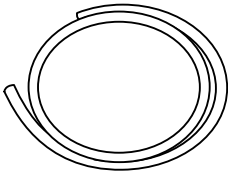
4 x O-ring



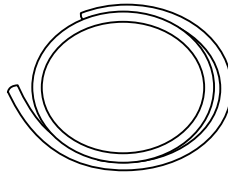
1 x In/out
retaining bracket



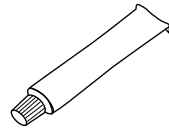
1 x Bracket
retaining pin



1 x 2m of 5/8"
overflow tubing



1 x 2m of 1/2"
drain tubing



1 x 2cc silicone
tube

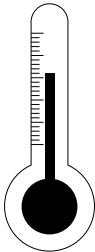
Safety information

Read all information carefully before installing and using the softener. Check WRAS Information and Guidance Note, no. 9-07-01 for regulatory advice.

Qualified Installer

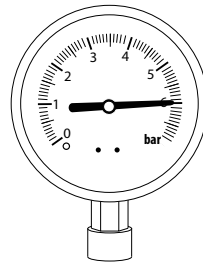
We recommend that a qualified installer or engineer performs the installation. Failure to do so could invalidate the warranty.

Water Temperature



Do not install the water softener in an area where the water temperature can cause the unit to freeze. Freezing temperatures will damage the system.

Water Pressure



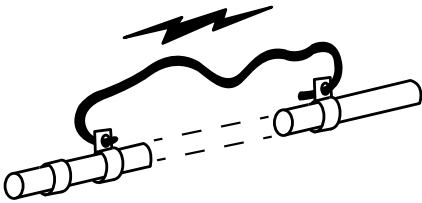
Do not install if the supply water pressure exceeds 6 BAR (87 psi), unless a suitable pressure regulating valve has been installed on the softener water supply.

Overflow

VERY IMPORTANT:

You must install the 5/8" O.D overflow tubing to the barbed fitting on the back of the cabinet and run to a suitable position that is visible and capable of taking water away from the unit (i.e. through an outside wall). The tubing **MUST** remain lower than the barbed fitting and must **NOT** be connected to a drain.

Copper/Plastic Pipework



When installing a plastic component on a copper pipe in line, earth continuity straps must be placed ACROSS the component being fitted to ensure that the earth continuity is never broken.

WRAS Approval

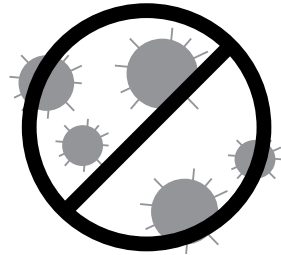


WRAS approval for the Sumo I applies to cold water (max 23 °C) installs only.

Installation Kit

A Sumo Installation kit includes a by-pass assembly which conforms to BS14743 and enables the softener to be isolated from the water service lines for maintenance and service. This also maintains the water supply when the system is disconnected.

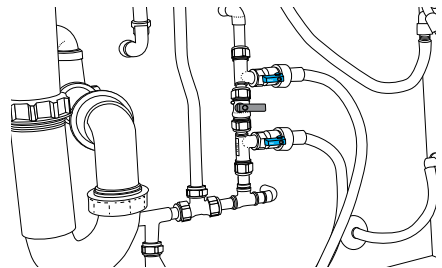
Intended Use



These systems are not intended to be used for treating water that is microbiologically unsafe or water that has an unknown quality without adequate disinfection before or after the system.

Important:

Refer to the plumbing schematic in Typical Installation before beginning installation.



Specifications

Sumo I Water Softener

Hardness Level mg/L	100	125	150	200	250	350	525
Litres between regenerations	1,358	1,083	905	689	531	394	256

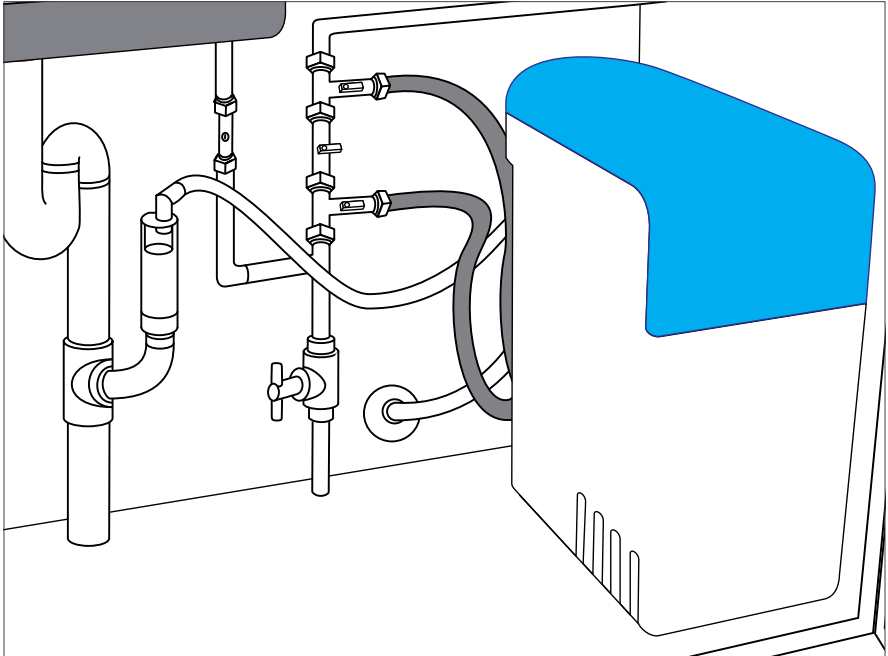
Maximum Hardness	525 mg/L
Cabinet Dimensions @ base	H 492mm x D 425mm x W 235mm
Salt used per regeneration	0.27kg
Water used per regeneration	25 litres
Regeneration Time	12 minutes
Flow Rate @ 1 bar pessure drop	30 litres per minute
Flow Rate @ 2 bar pessure drop	40 litres per minute
Pipe connections - in/out	3/4" BSP male
Drain	Drain Kit and hose suitable for 32mm & 40mm. Waste Pipe supplied.
Overflow	5/8" OD Barb - Hose supplied
Minimum/Maximum Operating Temperature	2° - 23°C
Minimum pressure	1.5 bar (dynamic)
Maximum pressure	8 bar*

*Recommend PRV fitted if above 6 bar.

Typical installation

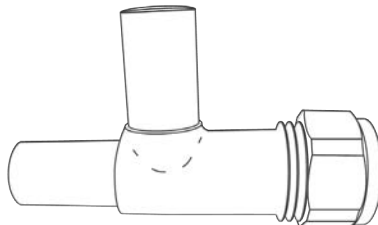
Your installation may vary. Image for illustrative purpose only.

Note: Air gap waste fitting contains a water trap.



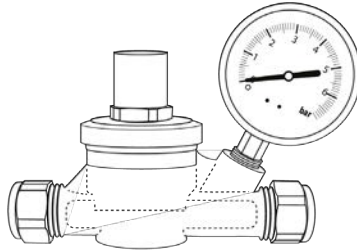
Non-return Valve

A non-return valve (included in the by-pass set) is required on the mains water supply to the softener.



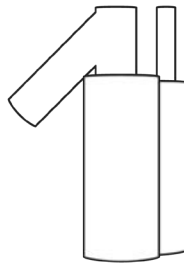
Pressure Regulating Valve

Fit a pressure regulating valve, where water supply pressure exceeds 6 bar on the mains water supply to the softener.



Drain Line

Plumb a drain line from the softener to a waste pipe through an appropriate water regulations compliant air gap, such as the one provided. The extension piece MUST be and cut no shorter than 100mm.



WRAS

Consult WRAS Information and Guidance Note, no. 9-07-01 for regulatory advice.



Installation instructions

1 Locate:

Determine location to install equipment. Make sure that the unit will be on a flat surface. If the unit is sited in a warm environment or next to a heat-generating appliance, you may experience salt build up on the inside of the cabinet. This may need to be periodically cleaned. Alternatively, site the unit in cooler, ventilated position.

2 Test pressure:

Test incoming pressure to the unit. A pressure reducing valve is recommended if the pressure is above 6 bar.

3 Install:

Plumb pipe work as necessary to accommodate a by-pass valve set.

CAUTION:

Do not solder any fittings whilst connected to the unit adaptors. Excessive heat may result in damage to the plastic and rubber parts. The materials used in the soldering process may attack certain types of plastics. Care should be taken during the installation process to ensure that solder and flux do not come in contact with media tank, control module and related plastic components.

NOTE:

Verify installation complies with regulations before continuing.

4 Flush:

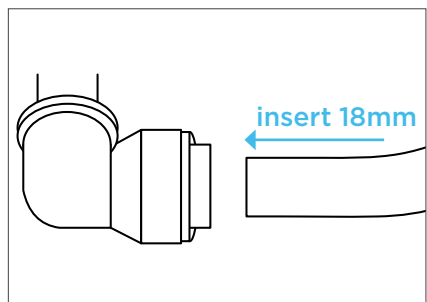
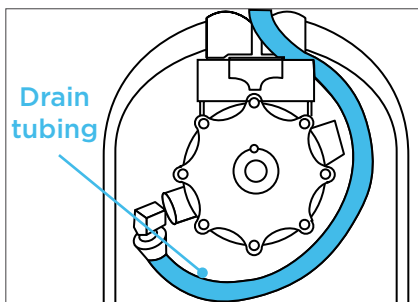
After all the plumbing has been completed, but before connecting the water softener, flush the pipe work allowing water to rinse out any residual debris.

5 Attach drain and overflow tubing:

Insert the 1/2" tubing into the drain elbow. Tug on it to ensure it is fully inserted. Route the tubing around the softener module, exiting in the aperture below the inlet and outlet connections on the back of the cabinet. Make sure the tubing is inserted 18mm into fitting.

NOTE:

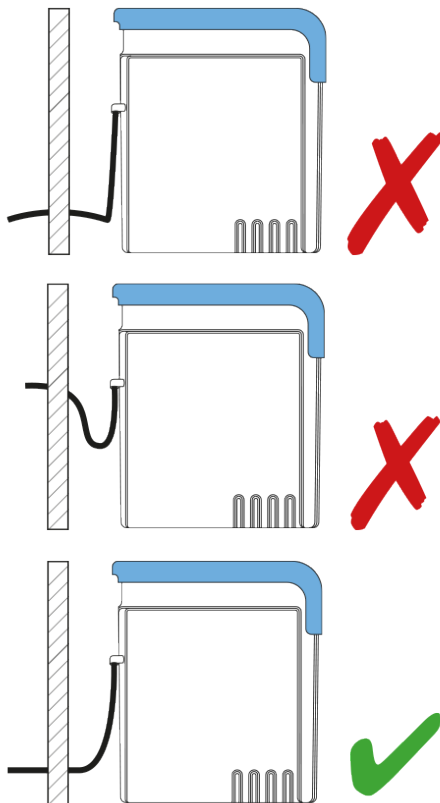
The drain tubing should be run no more than 2 metres vertically and 9 metres horizontally, before connecting to the main drain. Make sure there are no obstructions or kinks in drain tubing before connecting to softener.



Colour of tubing for illustration purposes only.

6 Attached overflow tubing:

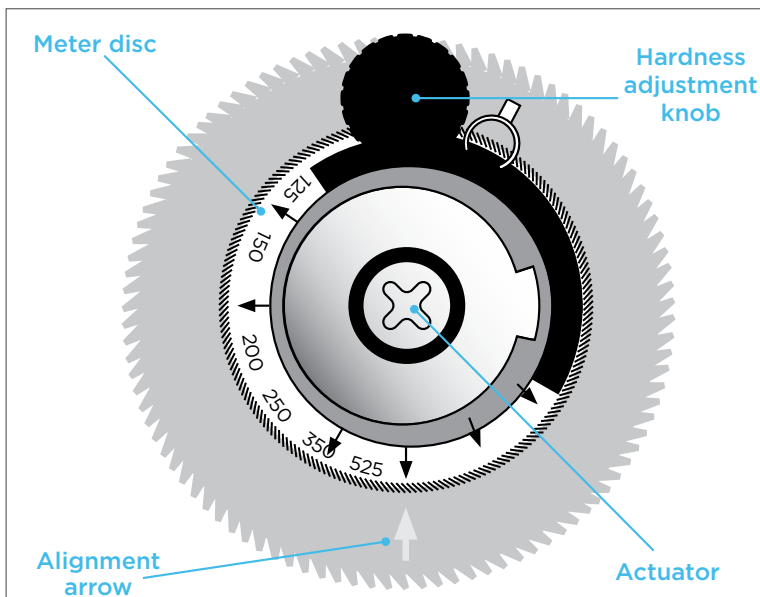
Run the drain line to the discharge point then install the 5/8" O.D overflow tubing to the barbed fitting on the back of the cabinet and run to a suitable position that is visible and capable of taking water away from the unit (i.e. though an outside wall). The tubing MUST remain lower than the barbed fitting and must NOT be connected to a drain.



7 Set regeneration frequency:

You must ensure the unit is fully reset before adjusting the hardness.

Resetting procedure: Put a cross headed screwdriver into the recess on the top of the unit and whilst keeping the screw driver pushed down, turn at least one full rotation to reset the metering system. Determine the hardness of your water supply in PPM or Mg/l by using a hard water test kit or contacting your water supplier. Locate the closest higher valve on the meter and having removed the blue protection clip from underneath the Hardness Adjustment Knob, push down and turn the knob so the chosen hardness value is positioned above the alignment arrow. **YOU MUST NOT SET THE ALIGNMENT ARROW IN THE BLACK AREA.**



8 Fit the adapters:

Fit 2 O-rings to each in/out adaptor then lubricate with supplied silicone grease. Connect the inlet/outlet adapters to the supply and return hoses remembering to use screened washers. Install adapters into control valve in/out ports, ensuring that they are fitted into the correct ports (see flow arrows on valve for reference). Attach the retaining bracket and pin to the control valve.

Installation review and startup

1 Test pressure:

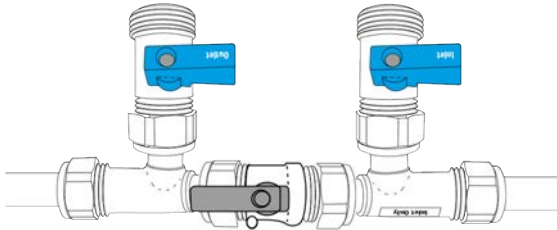
Test incoming pressure to the unit and adjust pressure reducing valve if the pressure is still above 6 bar.

2 Secure drain line:

Make sure the drain line is secure, using an airgap that is compliant.

3 Main inlet valve:

With the by-pass in position (inlet closed, outlet closed, by-pass open), open the main inlet valve slowly and check for leaks in the plumbing.



4 Finish system set up:

If cabinet does not fill up with water, add 6 litres of water to the Sumo I cabinet. Add a quality grade of block or tablet salt.

5 Start a manual regeneration:

Using a #2 Phillips screwdriver, push down firmly on the actuator and slowly turn clockwise, listening for four clicks to start the regeneration. At this point you should hear water begin to run through the system. If you do not hear water running through the system, the disc may not have been advanced far enough, continue to turn.

After 12 minutes the regeneration will be complete and the softener is ready for service.

6 Salt Options:

You have the option of using block or tablet salt.

IMPORTANT:

On no account should granular salt be used in this Kube Water Softener

7 Leave in service:

Open outlet valve and close bypass.

