1 & 2 Stage Drinking Water Filter System

Product Manual

ULTRA SOFT

WATER SOFTENER SPECIALISTS

Before Installation

The following must be considered before you install one of our 1 or 2 stage drinking water filter systems:

- Incoming water pressure must be tested prior to installation, please note that your standing water pressure can increase by an additional 2 bar at night.
- We recommend the installation of a pressure reducing valve, which can protect all your plumbing and appliances from increases or spikes in water pressure which causes filter systems and other plumbing to leak.

Tools And Materials

Our range of drinking water filter systems can be installed on either 15mm copper pipe, 15mm speed fit plastic pipe or using hoses (with the addition of suitable ¾" male to 15mm compression fittings).

All our 1 and 2 stage drinking water filter systems come supplied with 15mm push fittings. You do not have to use these, you can install directly into the ¾" female BSP brass ports on the filter housing.

Before installation, please ensure that you have the following to hand:

- PTFE tape
- Silicone grease
- Spanner and plumbers wrench
- Philips and flat head screwdriver
- Electric drill
- Spirit level
- Marker pen
- Screws to mount the filter to the vertical surface (e.g. wood screws)
- Any other tools required for basic plumbing (e.g. pipe cutter, elbows, copper pipe etc)

Mounting The Bracket

Once you have planned your installation, first attach the bracket(s) to the top of the filter housing(s) using the screws provided. Note the arrows next to the ports on the filter housings showing the direction of flow. You can mount the bracket either way round according to where you are installing the system.

If you have a 2 stage drinking water filter system you should first affix the two filter housings together using the threaded connector nipple provided. You must make sure to adequately PTFE tape both male sides of the nipple to ensure a positive seal (we suggest 7 wraps per side). Once this step is complete you can then attach the bracket to each housing, lining the screw holes on the bracket up with the head of the housing.

Greasing The O-Rings

The O-Rings that sit between the head and the bowl of the filter housing(s) must be thoroughly greased using a Silicone grease. This will ensure a positive, leak-free seal of the filter housing when the head and bowl and screwed into one another. With clean hands remove the head and apply the grease to the O-Ring generously, running your finger around the whole O-Ring.

Inserting The Filter(s)

The filter housings are supplied with the manufacturers manual, which details the working parameters for the housing (max pressure, temperature etc). Please ensure the installation meets the required parameters. When you are ready to insert the filters, refer to the details for your specific system below:

1 Stage Drinking Water Filter System (1)
Drinking Water pH Correction System (2)

Min/Max Pressure: 8 Bar
Recommended Flow Rate: 300lph (1) 180lph (2)
Filter Change: 12 Months (1) 6-9 Months (2)

Remove the filter from its packaging. If you are installing the Drinking Water pH Correction System the cartridge has an arrow indicating the top of the filter, the filter included with the 1 Stage Drinking Water System is bi-directional so can be installed either way up.

Insert the filter cartridge into the housing, there is a male spigot in the base of the housing to help you locate the filter cartridge. When it is inserted correctly the filter should be centred and level.

2 Stage Drinking Water Filter System

Min/Max Pressure: 8 Bar
Recommended Flow Rate: 300lph
Filter Change: Sediment Filter 6 Months
Carbon Filter 12 Months

This system has two filters. Remove them both from their packaging. Both filters are bi-directional so can be installed either way up. The sediment filter should be inserted into the first housing where water will enter the system, it is important the sediment filter is first as it will help to protect the carbon filter. The carbon filter should be inserted into the second housing, where the filtered water will exit the housing.

Insert both filters into their respective housings as described above. There is a male spigot in the base of each housing to help you locate the filter cartridge. When it is inserted correctly the filter should be centred and level.

Attaching The Filter Bowls To The Head

Holding the bowl of the housing (with filter inserted) upright, position the bowl with the head of the filter housing. Hand tighten the collar of the filter housing to affix the head and bowl making sure that they are aligned and to not cross the threads. Once you have hand tightened, you can use the wrench provided in the kit to ensure it is tight.

Do NOT overtighten. Only turn ¼ of a turn at a time, the O-Ring will provide a water tight seal. If overtightened it will be extremely difficult to undo when you need to change the filters.

Connect The Fittings

The system is now ready to be installed. You can now connect it to the cold water supply underneath your sink (ensure that the supply is turned off at the stop cock before attempting this step):

15mm push fittings (supplied in kit): If you wish to use the 15mm push fittings supplied to connect to either 15mm copper or plastic pipe, PTFE tape the male side of the fittings (we recommend 7 wraps of tape) and screw them into the inlet and outlet ports on the system. Once in place you can push your pipework into the fittings.

The housing(s) has brass ¾" female BSP ports, so you can install ¾" hose straight in and out of the housing or use ¾" male to 15mm compression fittings if preferred. If you are using brass male fittings it is recommended to use Loctite 55 PTFE fibre.

Mounting The System

The filter system can now be mounted in your chosen location. Use your own screws (appropriate to the surface you are mounting it to e.g. wood screws for kitchen cupboards). Mark the holes first with your marker pen and use your spirit level to ensure it is perfectly horizontal.

Using a screwdriver ensure that the pressure relief screw on the top of the filter housing is fully closed. The pressure relief screw is used to release air pressure from the system.

Flushing The System

Once the system is in place and all pipework has been reconnected, you can now turn your stop cock back into the ‘open’ position. Turn on the tap downstream from the filter system and run the water at a good flow rate for at least 5 minutes. It is normal for the water to appear black at first (particularly with carbon filters), but this should quickly go away, smaller fines may still remain so be sure to flush the system for at least 5 minutes.

Once this is done you can close the tap and use your screwdriver to open the pressure relief screw at the top of the filter housing to release any air pressure from the system. As soon as water starts to bubble out around the pressure relief screw then screw it back in fully.

When finished flushing and after you have released any trapped air from the system, thoroughly check all the fittings and connections to ensure there are no leaks.

It is perfectly normal for the water to appear cloudy at first, this can last up to 5 days. This is caused by air in the water and to show this you can pour a glass of water and let it sit for 30 seconds, you will see it go clear.

Changing Filters

For average filter lifespan please refer to the information above or on our website. Please note that variations in conditions and water quality can cause filter lifespan to vary, so please use this information only as a guide. Filters can block due to variations in incoming water quality, situations surrounding supply zones and the nature of private water supplies.

- Step 1: Turn off the water supply to the system (usually at your stop cock) and open a tap downstream of the filter system (leave it open).

- Step 2: Use the wrench provided to turn the collar connecting the head to the bowl of the filter housing clockwise to loosen it. Use your hands to remove the collar until it drops down and you can move the bowl away from the head. It will be full of water and have the filter inside it, so pour any water down the drain and remove the old filter.

- Step 3: Remove the O-Ring from the bowl and set aside. Using a damp cloth (no bleach or abrasive products) wipe inside the bowl of the filter housing.

- Step 4: Replace the filter cartridge with your new one and inspect, re-grease and seat the O-Ring before attaching the bowl(s) back onto the filter housing head(s). Detailed steps can be found above under ‘inserting the filters’ and ‘attaching the filter bowls to the head’.

- Step 5: Once the filter housing bowl has been firmly re-attached to the head and the collar holding them together adequately tightened you can now turn your water supply back on. Be sure to flush the new filter for at least 5 minutes at a good flow rate to remove any fines. Once this has been done check all fittings for leaks.

Troubleshooting

In the rare instance that there is a problem with your drinking water filter system, you can follow the troubleshooting steps below. If you need any assistance, be sure to get in touch with a member of our team.

Problem	Possible Cause	Solution
Leak from between filter housing head and bowl	O-Ring in poor condition, not seated correctly or needs re-greasing.	Remove the bowl and ensure the O-Ring is in good condition and is correctly seated. If the O-Ring is not in good condition replace it with a new one. Thoroughly re-grease and re-seat the O-Ring before screwing the head and bowl of the housing back together. Re-check for leaks.
Leak from pressure relief valve screw	Screw has become loose.	Using a screwdriver tighten the screw up. Re-check for leaks.
Leak from inlet or outlet fittings	Pipework not seated in push fitting correctly or not enough PTFE on threaded connections.	If leaking from the push fitting side of the connector, remove the pipe and ensure the clean is clean and is cut straight, with no burring. Put the pipework back into the fitting thoroughly until the collet ring pops out then re-check for leaks. If leaking from the male/female threaded side it is most likely that there is not enough or too much PTFE tape on the thread, remove any taps and put 7 wraps around the male fitting. Re-connect (being sure not to cross thread) and check for leaks.