

UV254

SSE Range of UV Sterilisation Systems

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Maximum Flow Rate 45LPM

Discover the FilterLogic™ UV Water Treatment System

Whether your home's water supply is from the mains, borehole, river or well, all surface water can harbour micro-organisms that are potentially dangerous to health. Ultraviolet (UV) light can effectively treat microbiological contamination by destroying 99.99% of micro-organisms in water. FilterLogic offer a range of UV water treatment systems designed to make the water in your home safer.

UV light applied in the water in a very controlled manner produces a photo chemical reaction in the DNA (Deoxyribonucleic Acia) which either destroys the micro~organisms or their ability to increase.

Product Overview

The FilterLogic SSE range has been carefully designed to provide effective sterilisation as the water passes through the disinfection (reactor) chamber, where it is exposed to the germicidal ultraviolet lamp. The exposure time is the total amount of time that it takes for the water to flow through the sterilisation chamber. The rate of exposure is determined by flow rate within the property.

- > The **higher** the flow rate, the **lower** the exposure time
- > The **lower** the flow rate, the **higher** the exposure time

The ultraviolet intensity is the amount of energy, per unit time, emitted by the germicidal lamp. The dosage is the product of ultraviolet intensity and the exposure time.

The operation of the SSE series is as follows:

- Water enters the purifier and flows into the space between the quartz sleeve and the chamber wall.
- Suspended micro-organisms are exposed to the ultraviolet rays emitted by the germicidal lamp.
- > The LED indicator light located on the ballast, provides a visual indication of lamp operation.
- Water leaving the purifier is ready for immediate use, no further contact time is required.
- When the ballast is working normally, simply turn on the water supply. If the green indicator light is illuminated the system is functioning correctly.
- However, when the UV system is not functioning correctly, the red indicator light will flash and you will be able to hear a beeping alarm. The water will still flow, do not drink the water until the UV system is fixed.

The UV steriliser is intended for indoor use only and should be protected from the elements and from temperatures below freezing. The ambient temperature surrounding the water purifier, should be between 5°C and 40°C.

Electrical power supplied to the UV system must match the power requirements listed on the sterilisation unit. The use of a surge protector is highly recommended.

CAUTION: This UV system will need to be electrically grounded to reduce the risk of electric shock.

The system should be located in a dry, well-lit area, which provides enough room to perform routine maintenance. This includes a minimum distance of one chamber length from the chamber end, to allow for cleaning and/or the changing of the lamp and quartz sleeve.

The UV steriliser should always be located closest to the point of use. This reduces the chance of the purified water being re-contaminated by bacteria. The UV steriliser should be located after all other water devices, such as De-ionizers, Water Softeners, Carbon Filters, Pre-Filters, Reverse Osmosis, Pressure Tanks, and Pumps. This reduces the chance of the purified water being re-contaminated by bacteria in any of these units.

Product Description

This compact and economically priced range of UV systems utilises a well designed stainless steel (304) housing along with simple control equipment which incorporates a 'lamp failure audible alarm'. This is important as you are immediately alerted if the system stops working (expired bulb). Bulb changes are simple as is cleaning the quartz sleeve.

UV sterilisation is an extremely efficient method of killing micro-organisms – bacteria (legionella), viruses, cysts etc. in water without using chemicals. For the UV light to transmit through the water correctly the feed water should be clear and relatively free from solids. Pre-filtration down to 5 microns normally achieves this. See our range of pre-filtration filters at www.filterlogic.co.uk/undersink-filters/

Benefits of UV Sterilisation

- **Effectively destroys** 99.99% of microorganisms
- > Reliable
- Cost effective >
- **Chemical free** >
- No water wastage >
- Low energy usage >
- Safe >
- Does not change the taste or odour of water
- Quick method of sterilisation
- Low maintenance

Product Dimensions

UV254-SSE-4

314mm

The UV254-SSE range of UV systems are available in four sizes. The dimensions, wattage and flow rate can be found below. The system can be installed either horizontal or

vertically, we would recommend that for ease of access that it is mounted in the vertical position. For further information please call or email enquiries@filterlogic.co.uk.

12W UV SYSTEM 4LMP 16W UV SYSTEM 8LMP Ø 50.8mm 14.5mm 374mm



UV254-SSE-8



Legionello

UV254-SSE-45 40W UV SYSTEM 45LMP



Please Note: Dimensions shown are approximate. images are not to scale and are for illustration purposes only.

Maintenance

This system is designed to operate with

a minimal amount of maintenance required, providing the water quality does not exceed the maximum concentration levels.

It is advised that the lamp is replaced after 8,000 hours or 12 months of continuous use.

If required the quartz sleeve may need to be cleaned. We recommend that you inspect the quartz sleeve after one month of use. If the quartz sleeve is found to have deposits, then the frequency of cleaning may need to be increased.

Deposits or discolouration on the surface of the quartz sleeve are likely to be caused by excessive levels of a contaminant within the water that has come into contact with the quartz sleeve. Most often the deposits are caused by an excess of calcium (hardness), iron or manganese.



- Highly effective treatment of water in order to destroy micro-organisms
- Available at four different maximum flow rates, the UV254 systems can be used in a wide variety of applications
- Maintenance is minimal and simple; the systems use a single end bulb connection with replacement parts being UK stocked and affordable
- Every system comes equipped with an advanced electronic ballast which alarms on lamp failure and bulb end of life, and features an electropolished 304 stainless reactor for maximum efficiency
- The systems are CE approved and come with UK mains plug, mounting brackets and full instruction manual.

Limitation of Use

The water purifier is intended for the use with visually clear water, not coloured, cloudy or turbid. The UV steriliser is NOT intended for the treatment of water that has severe contamination, such as raw sewage; nor is the unit intended to convert waste water to safe drinking water.

APPLICATIONS: Drinking water, residential and commercial water purification.

FUNCTION: Disinfect bacteria, viruses, moulds and algae in water.

Inspection

We recommend that you regularly inspect the UV system to ensure that the lamp is still in operation

The LED indicator light, located on the ballast provides a visual indication of germicidal lamp operation.

This light is an indication to the operation of the lamp and does not indicate the level of ultra violet intensity or transmission through the water.

Additional laboratory testing should

take place when modifications, changes or additions are made to the system to ensure there is adequate disinfection under the new conditions.

Regular inspection must include the review of the earth to ensure earthing wires are secure to both the UV system and the earthing point originally installed and meet local regulations.

Any damaged or broken components must be replaced immediately.

Technical Information

Model	UV254-SSE-4	UV254-SSE-8	UV254-SSE-30	UV254-SSE-45	
Lamp Power	12W	16W	32W	40W	
Flow Rate	4LPM	8LPM	30LPM	45LPM	
Quartz Tube Code	QT5-300	QT5-360	QT5-600	QT5-875	
Inlet / Outlet Port	1/4" Female	1/2″ Male	3/4" Male	3/4" Male	
Ballast Code	ZAP2-425-16	SSEB 12-16D	SSEB 25-55D	SSEB 25-55D	
Chamber Material	304SS				
Maximum Operating Pressure	8 Bar (116 PSI)				
Ambient Water Temperature	5 - 40°C (41°F - 104°F)				
Voltage	230V 50/60Hz				

Schematic of Typical Installation



2 20" Big Blue 5 Microns

Double (or Single) Non-return Valve where local restrictions apply

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Shut-off Valve







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