pozzani®
Water Treatment Products

Filter Logic

UV254
UV STERILISATION SYSTEMS

UV254
UV STERILISATION SYSTEMS

Suitable for domestic and commercial use

ST11

ST22

ST45

ST75

OVERVIEW

The UV254 range of UV sterilisation systems from Filter Logic offer highly effective treatment of water in order to destroy microorganisms.

Available at four different maximum flow rates, the UV254 systems can be used in a wide variety of applications.

Every system comes equipped with an advanced electronic ballast which alarms on lamp failure and bulb end of life, and features an electro-polished 304 stainless reactor for maximum efficiency.

Maintenance is minimal and simple; the systems use a single end bulb connection with replacement parts being UK stocked and affordable.

The systems are CE approved and come with UK mains plug, mounting brackets and full instruction manual.

TECHNICAL SPECIFICATIONS

	ST11	ST22	ST45	ST75
System Power (watts)	20	30	48	85
Bulb Power (watts)	16	25	40	75
Maximum Flow at 400mj/s (litres per minute)	7.5	17.0	34.0	60.5
Maximum Flow at 300 mj/s (litres per minute)	11.0	22.7	45.4	75.7
Diameter (mm)	63.5	63.5	63.5	63.5
Length (mm)	410	640	938	938
Pack Weight	2.70	3.25	3.98	4.05
Connections: Inlet/ Outlet	½ BSP-F & ¾ BSP-M	½ BSP-F & ¾ BSP-M	½ BSP-F & ¾ BSP-M	¾ BSP-F & 1" BSP-M
External Relay Model	ST11V	ST22V	ST45V	ST75V

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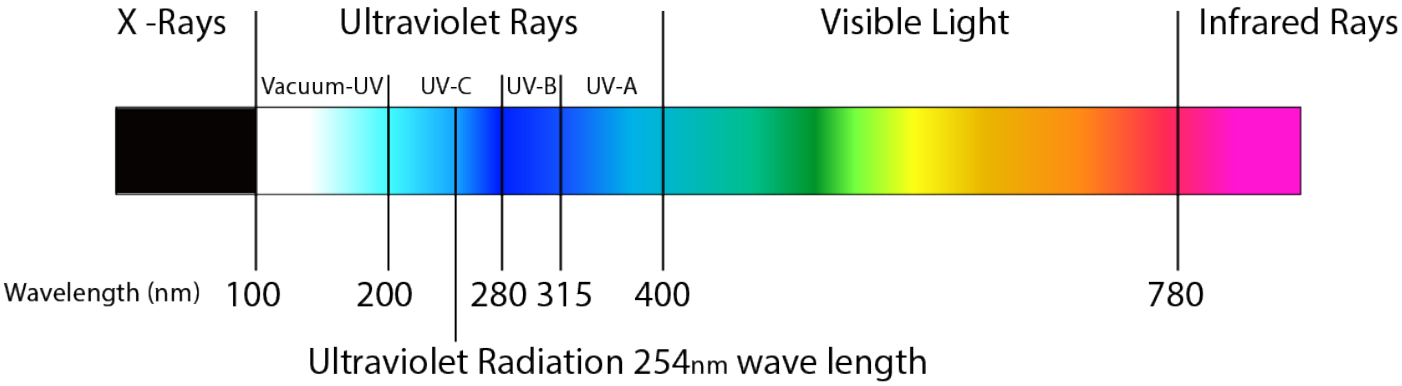
BENEFITS OF UV STERILISATION

- 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

HOW UV STERILISATION WORKS

UV or ultraviolet energy is a form of invisible radiation that is found on the electromagnetic spectrum between visible light and x-rays. It has a wavelength of between 10 nanometers to 400 nanometers. Although we cannot see UV light, we are infact exposed to it on a daily basis as it is present in sunlight and is the cause behind sunburn.

UV water treatment systems make use of UV light through use of a special lamp which emits radiation of a particular wavelength. The spectrum of UV light is itself divded into subtypes. UV-C light is short-wave and germicidal and it is this form of UV light at a specific wavelength of 254 nanometers whch is used to destroy microorganisms.



As water passes through a UV sterilisation system, the light emitted from the bulb strikes the cells of microorganisms. The light penetrates the outer cell membranes and through the cell bodies in order to damage the cells' nucleic acid (DNA), and this renders the microorganisms incapable of growing or reproducing. Unable to function, the microorganisms cannot replicate and therefore, are unable to infect any other organisms that they come into contact with.

UV treatment does not chemically alter the water as nothing is being added except energy. It is a simple but highly effective process which can destroy 99.99% of microorganisms so long as the incoming water quality is sufficient and the flow rate of the water is within the system's specified parameters. If the incoming water contains certain contaminants these can reduce the transmission of the UV light through the water and shield the microorganisms from the required exposure. Similarly, if the flow rate of the water is too high, it will pass through the system without having adequate time where it is subjected to the UV light. For these reasons, it is highly recommended that UV sterilisation treatment is used following a suitable pre-filtration process and that the flow rate of the incoming water is taken into consideration when selecting a system.

CONTAMINANTS UV STERILISATION ADDRESSES

- Algae
- Bacteria
- Coliform
- Cryptosporidium
- Cysts
- E.Coli
- Giardia
- Mould spores
- Protozoa
- Salmonella
- Viruses
- Yeasts

INDUSTRIES AND APPLICATIONS

UV sterilisation systems are used in many different industries for a huge variety of applications. The type of UV system and the pre-filtration that is required will be based upon several factors including incoming water flowrate and what the treated water will be used for. The UV254 range of systems are generally suitable for the following industries and applications as examples:

- Private water supplies
- Whole house treatment
- Food processing and manufacturing
- Farms
- Aquariums and hatcheries
- Laboratories
- Bottling manufacture
- Water storage tanks
- Ponds
- Swimming Pools
- Pharmaceuticals and cosmetics
- Nurseries

TYPICAL EXAMPLE OF UV AND PRE-FILTRATION INSTALLATION