

Sabre UV Disinfection



Filter-Online
Nordic Filtration Solution



UV Disinfection SABRE

High quality stainless steel UV system provide assurance of safe water due to their high dosage rates of 30mj/cm². Whether the water source is from mains supply, borehole, well or river, microbiological contamination can be treated with Ultraviolet light.

UV Light is effective against contaminants such as bacteria, cruses, mould spores, algae and other micro-organisms as it prevents growth and reproduction.

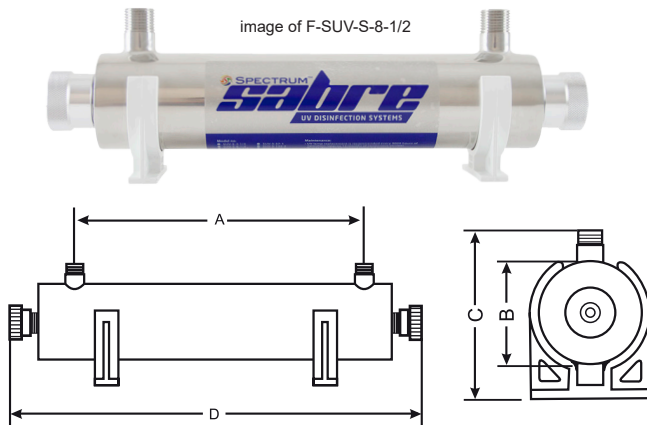
If left untreated, these organisms remain in the water and produce a bio-film coating throughout the water system which harbours more bacteria and makes the water less safe to use or drink.

Benefits

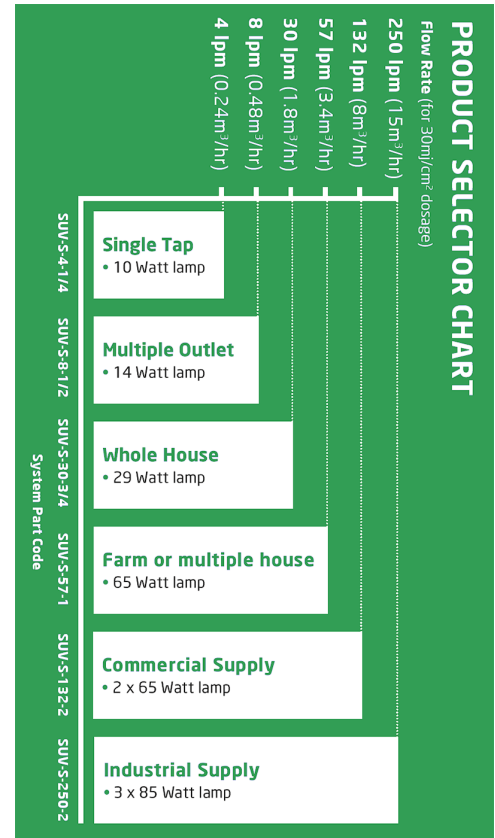
- Shortwave UV light dissociates the DNA within living cells which prevents further growth and reproduction.

Recommended

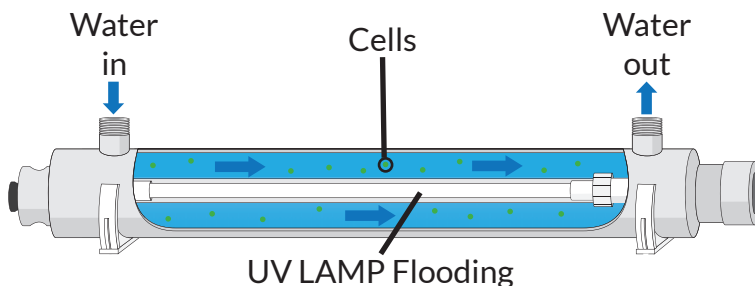
- It is recommended that pre-filtration is carried out to a level of 5 micron before the UV system. This removes visible particulate and reduces the 'shadowing' effect whereby organisms can be protected from the light by the presence of dirt, sediment and debris.



Technical Features	
Flow rate, lmp (m ³ /hr)	4 - 250
Voltage V/Hz	100-240/50-60
Max. Pressure	6,8 Bar
Port sizes (BSP M ("))	1/4 - 2
Temperature range	2°C - 40°C



Dimensions								
System	A (mm)	B (Ø mm)	C (mm)	D (mm)	Connections (" BSP M)	Flow rate l/min	Lamp Power (W)	Ballast
F-SUV-S-4-1/4	168	51	83	264	1/4	4	10	F-SUV-S-4BALLAST
F-SUV-S-8-1/2	238	64	112	350	1/2	8	14	F-SUV-S-4BALLAST
F-SUV-S-30-3/4	588	64	112	704	3/4	30	29	F-SUV-S-30BALLAST
F-SUV-S-57-1	800	88	170	962	1	57	65	F-SUV-S-57BALLAST
F-SUV-S-132-2	762	90	174	962	2	132	2 x 65	F-SUV-S-132BALLAST
F-SUV-S-250-2	750	158	244	970	2	250	3 x 85	F-SUV-S-132BALLAST



Pre-filter to Use	
..S-4-1/4 (4 l/min)	5" 5µm
..S-8-1/2 (8 l/min)	5" 5µm
..S-30-3/4 (30 l/min)	10" 5µm - Medium
..S-57-1 (57 l/min)	10" 5µm - Jumbo
..S-132-2 (132 l/min)	20" 5µm - Jumbo
..S-250-2 (250 l/min)	2x20" 5µm - Jumbo



UV Dosage

If the UV-system is used at it's standard rated flow-rate the UV Dosage will be 30 mJ/cm² .
If the Flow rate of water is increased the mJ/cm² dosage will decrease.

Below tabel shows different type of Bacteria and Virus and how much dosage they require to destroy.

Energy required to destroy micro-organisms			
Micro-organism	Type	Ailment caused	Energy mJ/cm ² to destroy
Streptococcus	Bacteria	Strep Throat	3,8
Dysentery Bacilli	Bacteria	Diarrhoea	4,2
S. Paratyphi	Bacteria	Paratyphoid Fever	6,1
Influenza	Virus	Flu	6,6
Staphylococcus	Bacteria	Boils	6,6
Fecal Coliform	Bacteria	Diarrhoea	6,6
Polio Type 1	Virus	Polio	7,0
Salmonella	Bacteria	Food Poisoning	10,0
Pseudomonas Aeruginosa	Bacteria	Skin infection	10,5
Legionella	Bacteria	Legionnaire's Disease	12,3
S. Typhi	Bacteria	Typhoid Fever	15,2

