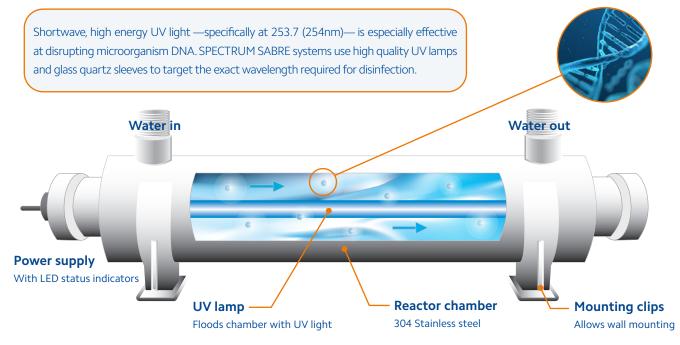
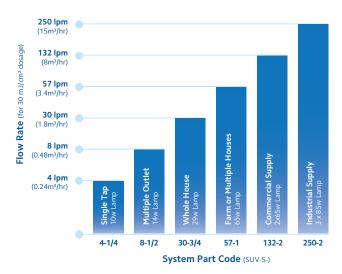
## **UV Disinfection Systems**

UV light is effective against contaminants, such as bacteria, viruses, mould spores, algae and other microorganisms, preventing growth and reproduction. If left untreated, these organisms will remain in water, producing a bio-film coating throughout the system; harbouring more bacteria and making the water less safe to drink.

### **UV Systems**

The unique natural properties of ultraviolet light have the ability to inactivate bacteria by destroying (or disassociating) the DNA of harmful organisms. This act of destroying the DNA means that the organism is unable to function, which in turn disables the replication process and prevents the ability to multiply and cause illness.





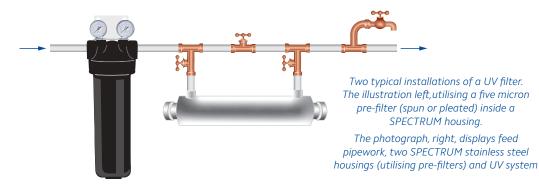
How to Select your UV System

SPECTRUM Sabre systems have been designed to provide an effective dosage of 30mJ/cm<sup>2</sup> at the stated system flow rate. Each system is tailored to provide both a higher or lower dosage at different flow rates.

Product	Flow rate in lpm (m <sup>3</sup> /hr)				
	@ 16 mJ/cm <sup>2</sup>	@ 30 mJ/cm <sup>2</sup>	@ 40 mJ/cm <sup>2</sup>		
SUV-S-4-1/4	6 (0.36)	3.8 (0.24)	3 (0.18)		
SUV-S-8-1/2	13 (0.78)	7.6 (0.48)	5 (0.3)		
SUV-S-30-3/4	52 (3.1)	30 (1.8)	23 (1.4)		
SUV-S-57-1	100 (6.0)	57 (3.4)	43 (2.6)		
SUV-S-132-2	232 (13.9)	132 (8.0)	100 (6)		
SUV-S-250-2	441 (26.5)	250 (15)	191 (11.5)		



### **Recommended Pre-filtration System**

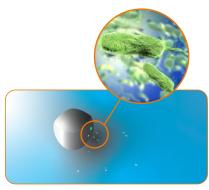




#### **Pre-Filtration**

Effective pre-filtration is essential before a UV system to maximise the exposure of microorganisms to disinfecting UV light. Organisms attached to suspended solids, such as dirt, sediment and debris, can be protected from UV light as they pass through the system by a phenomenon known as 'shadowing'. Fileder recommends using five micron pre-filtration prior to all UV system installations, to reduce the possibility of shadowing and optimise system performance.

Designed primarily for use as an excellent safeguard in private water supplies and UV applications, the specialist antimicrobial spun (AMS) prevents premature blocking from biofilm. Using impregnated silver ion technology, the AMS inhibits the growth of trapped bacteria and micro-organisms. The chart (see right) is a guide to the typical prefiltration system required.



Microorganisms (green) attached to particulate, protected from UV light (blue) by shadowing.

Product	Flow rate @ 30 mJ/cm <sup>2</sup>	Housing	Cartridge
SUV-S-4-1/4	3.8 (0.24)	EFHS-PK-1-10-1/4	AMS-5-97/8
SUV-S-8-1/2	7.6 (0.48)	EFHS-PK-1-10-3/4	AMS-5-97/8
SUV-S-30-3/4	30 (1.8)	EFHS-PK-1-20-3/4	AMS-5-20
SUV-S-57-1	57 (3.4)	SFH-SPC-3-20-2-GP-ML	AMS-5-20
SUV-S-132-2	132 (8.0)	SFH-SPC-5-20-2-GP-ML	AMS-5-20
SUV-S-250-2	250 (15)	SFH-SPC-5-40-2-GP-ML	AMS-5-40

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# Commercial UV Disinfection Systems



## SPECTRUM

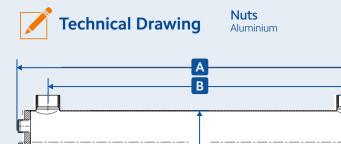
### SPECTRUM Sabre 132 and 250

#### Commercial, up to 250 lpm

For higher flow rate demands associated with commercial and industrial applications, the SPECTRUM Sabre range can answer the most challenging of high capacity requirements, increasing the quantity and power output of associated UV lamps.



- Separate control box with audible and visual indicators of system operation
- High dosage UV lamps
- Quality stainless steel construction



D



**Reactor Chamber** 304 Stainless Steel

Sleeve Quartz

**O-Rings** Silicone (SUV-54/8/30) Viton (SUV-557/132/250)







**Operating Temperature Range** 2-40°C

#### Frequency 2-40°C

**Operating Pressure Range** 0.7-6.8 bar

#### Lamp Life 9,000 hours

Voltage Po

oncage	
ower Supply 240V / 50 Hz	

#### Flow (lpm) Port Size (") Lamp (W) SUV-S-132-2 132 2 65 x 2 SUV-S-250-2 250 2 85 x 3

### **Typical Applications**

- Food and beverage
- General industrial process water
- Commercial borehole supplies

### **Part Number & Dimensions**

Code	Dimensions			
	А	В	С	D
SUV-S-132-2	890	760	127	89
SUV-S-250-2	890	750	197	159

C