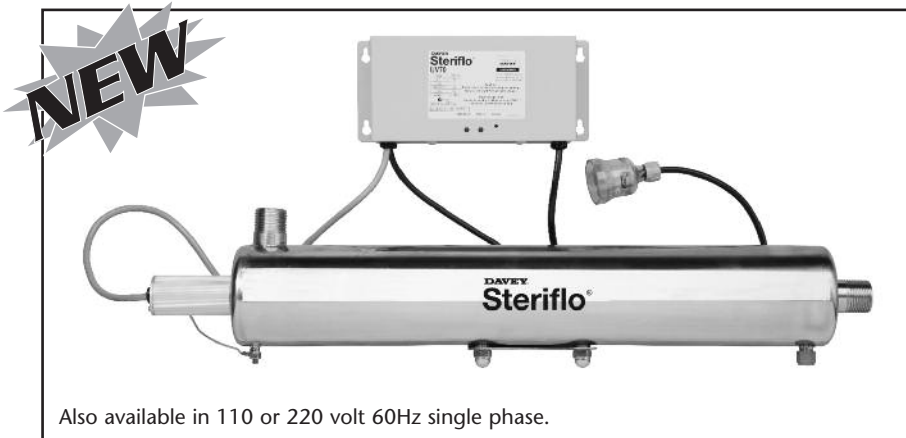


# DAVEY Steriflo®

**Model Numbers: UV50  
UV70**

DEPEND ON  
**DAVEY**

**WATER PRODUCTS**



## ULTRA VIOLET WATER TREATMENT SYSTEMS

### PRODUCT DESCRIPTION

Ultra violet system used for water treatment. Includes a durable stainless steel chamber, UV lamp and tamper-proof control box incorporating pump connection.

### APPLICATIONS

Davey Steriflo® domestic UV water disinfection systems are a safe and effective means of eliminating harmful bacteria from drinking water supplies. They can also be used for small scale waste water disinfection at reduced flow rates.

- No chemicals
- No taste
- No by-products
- Impossible to overdose

### PRINCIPLES OF OPERATION

UV is a common practice used for water disinfection on a wide range of water sources. Used by many local councils, food, dairy and brewing industries, UV is a very effective means of ensuring water is safe for consumption.

The UV light generated by the lamp in a Davey Steriflo® unit (254nm) penetrates most micro-organisms present in the water supply, damaging their ability to reproduce and cause illness. Organisms exposed to UV are no longer viable to cause infection nor can they be counted on a culture plate.

Water treated by the UV system should be very clean and free of particulate matter. This can be achieved by incorporating two stage pre-filtration down to one micron if used for drinking water supplies. Cysts such as Giardia and Cryptosporidium are best managed using this pre-filtration and disinfection process.

### FEATURES & BENEFITS

The Davey Steriflo® is designed to provide many years of reliable operation at an economical price. Suitable for potable water and food industry use, all wetted components are also USDA listed.

Steriflo® systems are designed for continuous operation treating water up to 40°C. Provided the chamber is full of water, the unit can handle flows from zero up to the design flow rate, based on very good water clarity. If water clarity cannot be improved, flow should be reduced accordingly or a larger flow UV model selected.

The L shaped chamber design offers improved water flow characteristics and is manufactured from 304 stainless steel for cleanliness and durability, handling water pressures up to 860kPa.

The power supply incorporates a 3-pin plug connection enabling power to a water pump. Should the unit require lamp replacement, power to the pump will be disabled, ensuring only safe, disinfected water is supplied. This feature can be over-riden if emergency water is required.

The power supply should be mounted in a dry location. 1 metre of lead to the lamp is provided.

The Steriflo can be installed horizontally or vertically and pipework should ensure that the chamber stays full of water. If horizontal, the outlet should point upwards, if vertical the outlet should point horizontally. Mounting brackets are provided for easy installation.

If the unit has been switched off, a 2 minute lamp warm-up time is required before accessing water. New lamps offer full UV output after 24 hours of operation and are single ended for ease of servicing and connection.

Disassembly for cleaning of the quartz sleeve is quick and user friendly with positive sealing at both ends.

**Warning:** UV light is harmful to eyes and exposed skin. A safety notice is included with the operating instructions. NEVER LOOK AT A UV LAMP WHEN IT IS SWITCHED ON.

#### Pre-treatment (drinking water)

Pre-filtration is normally required to ensure particles do not shield micro-organisms from the UV light. Minimum sand filtration or 20 micron cartridge filtration is preferred. If cysts like Giardia or Cryptosporidium are present 1 micron filtration is required for drinking water taps.

### OPERATING LIMITS

	UV50	UV70
Maximum effective flow (clean water)	50lpm	70lpm
Head loss @ maximum flow	< 0.5 metres	
Min / Max pressure	0kPa* / 860kPa	
*Installation prior to the pump is not recommended.		
Treatment chamber test pressure	1035kPa	
Min /max water temperature for lamp effectivity	8°C / 40°C	
Max ambient temperature	50°C	
Inlet/outlet size internal BSP(F)	3/4"	
Inlet/outlet size external BSP(M)	1"	

**Water quality is extremely important for optimum UV performance. Maximum recommended parameters are as follows:**

Iron: <0.3 mg/l	Hardness: <120 mg/l
Turbidity: < 1 NTU	Manganese: < 0.05mg/l
Tannins: < 0.1 mg/l	UVT: > 75% at 20°C

Note: If stated parameters are exceeded pre-filtration is required. UVT of the water can be tested by your local dealer or by undertaking an appropriate water test.



# TECHNICAL SPECIFICATIONS

## MATERIALS OF CONSTRUCTION

PART	MATERIAL
Material	304 stainless steel
Number of lamps	One
Number of sleeves	One
Sleeve material	High purity quartz
Number of orings	One
Oring material	EPDM rubber
Design lamp life	9000 hours (1 year continuous operation)

Note: Water quality is extremely important for optimum performance of your UV system. To ensure high transmissibility of UV into the water Davey recommends cleaning or replacing of any pre-filters and the quartz sleeve every 3 - 6 months subject to water quality.

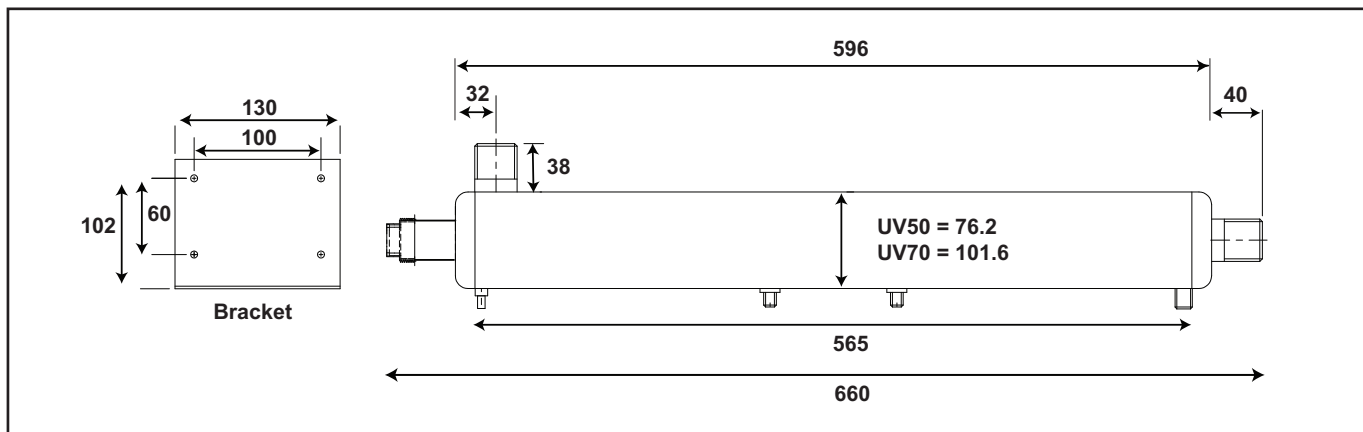
## ELECTRICAL DATA

	UV50 & UV70
Voltage/frequency (std)	230-240V/50Hz
Options	110V/60Hz or 220V/60Hz
Power consumption	55 watts
Lamp power	45 watts

## POWER SUPPLY ENCLOSURE

	UV50 & UV70
Fuse	1A
Protection rating	For use under cover IP24
Material	Polyester powder coated steel
Mains on indicator	Orange
Visible alarm indicator	Red
Audible lamp failure alarm	In-built

## DIMENSIONS



	UV50	UV70
Inlet / outlet size (internal)	20mm (3/4" F)	
Inlet / outlet size (external)	25mm (1" M)	
Treatment chamber weight	2.5kg	4.0kg
Treatment chamber mounting brackets	Stainless Steel fixed	
Power supply enclosure dimensions (WxHxD)	250 x 110 x 60mm	
Power supply enclosure weight	1.5kg	
Interconnecting cable supplied	1m standard	
Power supply lead	1.7m with 3 pin plug	
Pump supply lead	0.65m with 3 pin socket	

All dimensions in mm unless otherwise stated.

All Davey Steriflo® systems are designed and built in Australia and New Zealand. Technical support and parts are always available.



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This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product Installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.  
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