



Ultra Violet Water Disinfection Kits

Model Number: KUV24, KUV57, KUV80, KUV151

Applications

Davey Microlene UV water disinfection kits are a proven 3 stage treatment solution for a safe and effective means of eliminating harmful bacteria from drinking water supplies.

- Kit options utilising separate housings and UV units provide flexibility for installs where rack systems may not be suitable. Also allows for easy add-ons such as an additional single housing for utilising a carbon filter for taste and odour if required.
- Filtration and disinfection of rainwater
- Small cottage through to large homes and small commercial applications.
- Suitable for bore and surface water – subject to water quality

Benefits of Microlene's UV Systems and Housing Kits

Microlene's proven three-stage Filtration and Ultraviolet disinfection kits can provide continuous clean, safe and fresh tasting water from your rainwater tank. In conjunction with pre-filtration, UV is the best practical option for treating drinking water and is widely used in disinfecting the drinking supplies of not just individual homes, but entire towns.

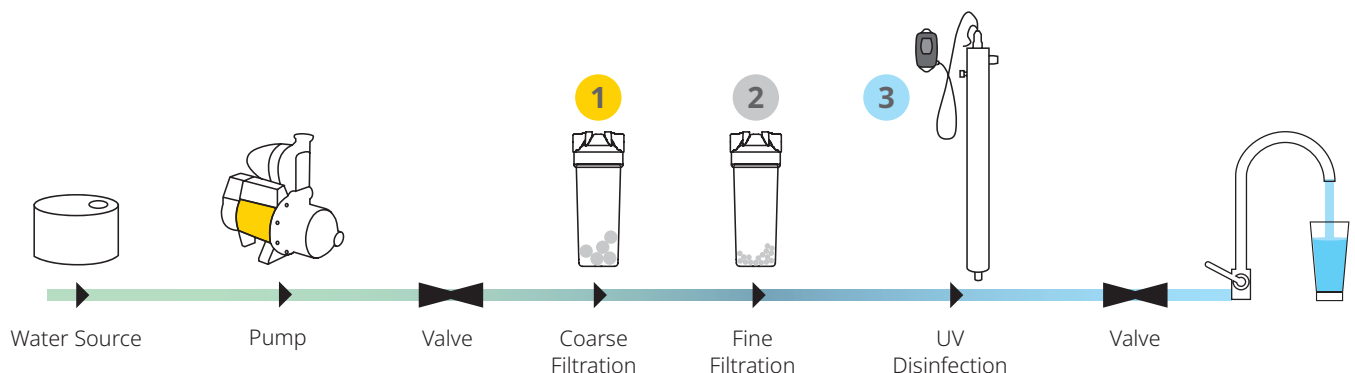
The KUV kits are supplied as individual components for flexibility during installs where a normal rack system may not be suitable. The UV kits consists of:

- 20 micron pre-filtration for the removal of dirt, rust, sediment and debris reduction **step 1**
- 1 micron depth filtration for parasitic cyst reduction and further sediment reduction to reduce 'shadowing' of pathogens **step 2**

- Microlene UV water disinfection kits with low pressure lamp and tube quartz sleeve for easy cleaning and high performance **step 3**
- Universal flow direction. Flexibility for installing in the space and direction as required.
- LED lamp count down timer and audible alarm, with set limit of 9,000 hours continuous use on UV24, UV57, UV80 (which is 12 months), and 10,000 hours continuous use on the UV151 (14 months) ensuring only disinfected water is delivered*
- Microlene kits should be connected via PVC plumbing which is not included with the kits as every install is different.

Note: Cannot treat water contaminated by metals, chemicals or algal toxins.

*Subject to routine maintenance outlined



Microlene UV Water Disinfection Kits

Operating Limits				
Model	KUV24	KUV57A	KUV80A	KUV151A
Flow	Standard Output			High Output
16mj/cm ² @ 95% UVT	41 lpm	110 lpm	150 lpm	295 lpm
30mj/cm ² @ 95% UVT	23 lpm	57 lpm	79 lpm	151 lpm
40mj/cm ² @ 95% UVT	17 lpm	45 lpm	59 lpm	120 lpm
Max System Pressure	860kPa (125psi)			
Electrical	90-265V/50-60Hz. 1A Max.			
Operating Water Temperature	0 - 40° C			
Maximum Ambient Temperature	50° C			
Lamp Life (Hours)	9,000			10,000

Service	
Intervals will vary depending on incoming water quality	
20 micron Poly Pleated filter	Wash every 3 months, replace every 12
1 micron Polyspun filter	Non-washable, replace every 6 – 12 months
UV Lamp	Replace every 9,000 hours on UV24, UV57 & UV80, and every 10,000 hours on UV151
Quartz Sleeve	Clean every 3 – 6 months
Lamp Life (Hours)	9,000 10,000

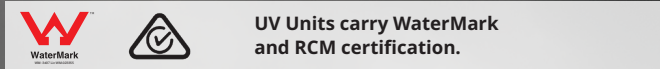
Materials of Construction	
Part	Material
Filters	
Filter housing	Glass reinforced polypropylene
20 micron filter	Pleated polyester fabric
1 micron filter	Polyspun fabric
Microlene UV Water Disinfection Unit	
Chamber	304 Stainless Steel (UV151 has 316 Stainless Steel)
Lamp	Low pressure – high intensity
Sleeve	Quartz

Electrical Data				
Model	KUV24	KUV57A	KUV80A	KUV151A
Supply Voltage	90-265V			
Supply frequency	50-60Hz. 1A Max.			
Lamp	22	50	42	101

Sizing				
Model	KUV24	KUV57A	KUV80A	KUV151A
Filter housings	10" standard (W10PR x 2)	10" Jumbo (AS10J x 1)	20" Jumbo (AS20J x 1)	20" Jumbo (AS20J x 2)
Filter housing connections	20mm (3/4") F	25mm (1") F	25mm (1") F	25mm (1") F
Pre filter	10" Standard 20 Micron x 1	10" Jumbo 20 Micron x 1	20" Jumbo 20 Micron x 1	20" Jumbo 20 Micron x 2
Secondary filter	10" Standard 1 Micron x 1	10" Jumbo 1 Micron x 1	20" Jumbo 1 Micron x 1	20" Jumbo 1 Micron x 2
UV Connections	20mm (3/4") M	25mm (1") M	25mm (1") M	40mm (1 1/2") M

Water Quality	
Water quality is extremely important for optimum UV performance. Maximum recommended parameters are as follows:	
Parameter	Level
Hardness	< 120 mg/L (120 ppm)
Iron (Fe)	< 0.3 mg/L (ppm)
Manganese (Mn)	< 0.05 mg/L (ppm)
Tannins	< 0.1 mg/L (ppm)
Turbidity	< 1 NTU
Transmittance	> 75% UVT

Note: UVT of the water can be tested by your local Dealer or by undertaking an appropriate water test.



Refer to UV data sheets for further in-depth information (UV24, UV57, UV80 and UV151).

