

UV Filtration System

WSC4P



Connections	40mm / 1.5"
Flowrate	175 Lpm @ 125psiG
Dosage	60 mJcm ² / 95% UVT Manufacturer Rated
Filtration	Rain water cartridges
Feed Water	Min 1°C (33°F) Max 25°C (77°F)
Weight	62 kg dry

General overview

- Designed for **high flow** locations, typically reticulated with 40mm piping
- Designed for **untreated water sources** that typically contain harmful organisms, a moderate amount of silt / debris, possibly some sprays and may from time to time develop odor / taste issues.
- Fitted with a **NSF certified NSF55A UV Kit**, (WSUVK200N)

Annual Service Kit (WSC4SK) containing:

- WSI-100-1000-T5L qty 2 (100w 800mA UV Lamp)
- WSI-T5S qty 2 (1 set of Silicon Wedge Seals - replace after cleaning quartz sleeve)
- WSI-T5B qty 2 (1 set of Nylon Spacer Rings – allows end caps to smoothly tighten against the seals)
- WSI-PTC45-2020 qty 1 (Jumbo 20" 20m Pleated cartridge)
- WSI-PTC45-2005 qty 1 (Jumbo 20" 5m Pleated cartridge)
- WSI-32-450-20 qty 1 (Jumbo 20" 5m Carbon cartridge)
- WSI-PPC45-2020 qty 1 (Jumbo 20" 1m Meltblown cartridge)

***Hang on its 3 x SS brackets, connect to the inlet /outlet and plug in.
Simplicity at its best***

Major features include:

- **Filters:** 100% Stainless Steel for superior life at the higher pressures available on commercial ring mains
- **UV Chamber:** Extended length double welded internally polished twin lamp chamber
- **Connections:** UV Chamber via SS 1.5" Unions: Filters via Oring Spigots
- **Sealing:** All connections sealed with either 3.2mm N90 Nitrile washers or Nitrile Orings
- **Assembly** All Stainless Steel frame that is fully adjustable for aligning to inlet/outlet piping

Compliance to NZ Drinking Water Standards Tables 5.6 & 10.1

- Rigid 5m final cartridge– **Complies** – MeltBlown 1 micron fitted as **Standard**
- Continuous alarm monitoring lamp life & outage– **Complies** - Digital controller fitted as **Standard**
- UV Sensor low light alarm– **Does not comply**
- Dosage to always exceed 40 mJ/cm² @ 70% UVT– **Does not comply**



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Installation example

Specifications

- Quartz Sleeves (2): 1090 x 23 mm (T5)
- Lamps: 2 x Powerful Hi Output 100 watt UV sterilizing lamps (extended length at 1000mm) 365-daylife to safeguard against water borne diseases, bacteria, E. coli, Giardia and Crypto.
- Power Supplies: 2 x Gel filled UV ballast /controllers each encased in IP rated boxes to protect from all forms of moisture, includes a built in RCBO and Surge Protector. RCM Licensed
- Filtration: Four 20" Jumbo Filters
- Piping: 304SS pipe fittings& Unions and UV chamber; 1.5" BSP connections (F);
- Mounting: Stainless Steel Frame;
- Dimensions: 1300 x 841 x 330; 62 kg
- Shipping Carton: 1.4 x 0.9 x 0.4 (0.5 m3); 70kg

Typical Installation

- Do not mount close to the ground – chest height is recommended
- Systems should not be installed outside even with a cover in freezing conditions
- Fix the three SS brackets to studs, then hang the system onto the brackets
- Inlet and outlet pipes connect to the 1½" (F) ball valves
- Ideally position system with 1.1 meter clearance to the left (for removal of the lamp/quartz sleeve)
- If this is not possible, the chamber itself can be easily removed & refitted (Hex Unions)

Maintenance

- 6 monthly for replacing cartridges. If cartridges prematurely block then pre-filtration may be required.
- 12 monthly for replacing UV lamps & removal/cleaning of the quartz sleeves; replace seals.
- End of Lamp life signaled by digital countdown display (then alarm) at 12 months usage.

Warranty

- We warrant the ultraviolet disinfection and filtration system's hardware and electrical systems to be free from defects in material and workmanship for a period of three (3) years from the date of purchase (invoice date) by the original owner (consumer).
- The ultraviolet lamps and sensor probes to be free from defects in material and workmanship for a period of 10000 hours (1 year).
- We will at our option and expense, either repair or replace such items subject to certain conditions, exceptions, and exclusions as detailed in the System Manual.



Water Quality

Do not use the System with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

If this System is to be used for the treatment of untreated surface waters or ground water under the direct influence of surface water, a device found to be in accordance with Cyst Reduction under the appropriate NSF/ANSI Standard shall be installed upstream of the System.

Water passed through the unit must fall within the following parameters:

- Iron: < 0.3 ppm (0.3mg/L)
- Hardness* :< 7 gpg (120 mg/L)
- Turbidity: <5 NTU
- Manganese: < 0.05 ppm (0.05 mg/L)
- Tannins: < 0.1 ppm (0.3 mg/L)
- UV Transmittance: > 75% (call factory for recommendations on applications where UVT < 75%)



This System has been fitted with many of the components used in the WSUVK200N UV Chamber Kit that has been tested up to 114 Lpm by NSF International against NSF/ANSI Standard 55 for Class A Disinfection Performance.

NSF/ANSI 55 information

- NSF certify Systems intended for the disinfection of microbiologically contaminated water that meets all other Public Health standards. Such Systems are not intended to convert waste water or raw sewage into drinking water. Such Systems are intended to be installed on visually clear water.
- NSF/ANSI 55 defines wastewater to include human and/or animal body waste, toilet paper, and any other material intended to be deposited in a receptacle designed to receive urine and/or feces (blackwaste), and other waste materials deposited in plumbing fixtures (greywaste).

NSF Testing

- While NSF testing was performed under standard laboratory conditions, actual performance may vary.

End

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