

# SYS-1

## POU Water Treatment System

### Description

The SYS1 is an All-in-One Water Treatment System that is sized for the needs of the average household to provide purified drinking water at the point of use. Typically installed under the sink, it is used for treating municipal water in apartments and cottages, at laboratories or dental offices. It will purify the water from most contaminants such as sediments, rust and pesticides with filtration in 2 stages down to 0.5 micron. Carbon filtration reduces taste and odour, including sulphur smell and chlorine residuals, as well as cysts. Harmful microorganisms such as viruses, bacteria and protozoa are killed with a powerful UV disinfection dose that will inactivate the pathogens at a kill rate of > 99.99% (log4) (*Giardia*, *E. coli*, *Cryptosporidium*, *Vibrio cholerae*, *Legionella*, *Salmonella*, *Shigella*, *Streptococcus* and many others).

This purifier comes equipped with an electronic ballast that features an alarm system which sounds an audible alarm if the UV lamp is not functioning properly. The filter housings come with pressure relief valves. A 12 V DC ballast for the use on boats and RVs is also available.

An integrated faucet set is included for the provision of the purified drinking water. All installation hardware (mounting bracket, saddle valves and tubing) are supplied with the system.

This residential water purification system offers very efficient water treatment at a low cost per unit volume. The system is designed for ease of installation and is fully tested prior to shipment.



### Features

- ▶ Robust Construction
- ▶ 304L SS Sterilizer (316L optional)
- ▶ Sediment + Carbon Filtration
- ▶ Electronic Ballast w/ Lamp-Out Alarm
- ▶ Self Contained
- ▶ Energy Efficient



*Typical Installation for drinking water under the sink*

### Benefits

- ▶ Chemical-Free Disinfection, Low Cost per Litre
- ▶ High UV Dose for Peace of Mind
- ▶ Extremely Simple to Use and Maintain
- ▶ Fully Assembled for Easy Installation
- ▶ Ideal for Use on Houseboats, RV's and Condo's

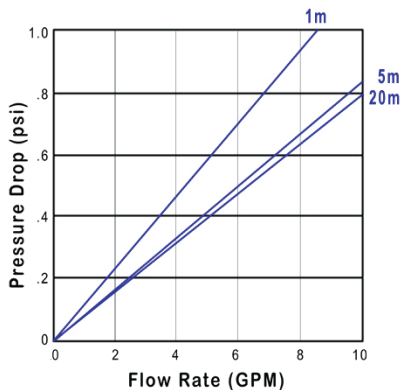


<b>Rated Flow:</b>	4 litres per minute (1 GPM) 240 litres/hour, 5.7 m <sup>3</sup> /day (60 gallons/hour, 1440 gallons/day)
<b>Initial UV Dose at Rated Flow:</b>	63 mJ/cm <sup>2</sup> (63,000 μWsec/cm <sup>2</sup> ) @ 95% UVT 43 mJ/cm <sup>2</sup> (43,000 μWsec/cm <sup>2</sup> ) @ 70% UVT
<b>Electrical:</b>	110 Volt AC / 50-60 Hz (Part # SYS1/QD4E-1) 240 Volt AC / 50-60 Hz (Part # SYS1/QD4E-2) 12 V DC (Part # SYS1/QD4E-12V)
<b>Power Consumption:</b>	44 VA @ 110 V, 20 VA @ 240 V, 22 VA @ 12 V
<b>Ballast:</b>	Electronic Ballast w/ Lamp Out Alarm, Power LED, Count of Total Running Days on LCD Display Model RH51-425-40L (Wyckomar Part # 4-BE-425-ECO)
<b>Replacement Lamp:</b>	Low-Pressure UV Lamp, Part # RL-12/254T5
<b>Filtration:</b>	10" SlimLine (L 9-3/4", OD 2-1/2"), w/ Pressure Relief
<b>Stage 1, Sediment Filter:</b>	Melt-Blown Polypropylene ("Spun Poly"), 5 Micron
<b>Stage 2, Carbon Filter:</b>	Coconut Shell Carbon (Extruded Carbon Block), 5/10 Micron
<b>Max. Operating Temperature:</b>	40°C (104 °F)
<b>Max. Operating Pressure:</b>	125 psi - 8.6 bar
<b>Plumbing:</b>	3/8" In/Out, comes w/ Saddle Valves & Tubing (PVC)
<b>Shipping Size and Weight:</b>	1 box 19x17x7 inches, 15 lbs / 6.8 kg

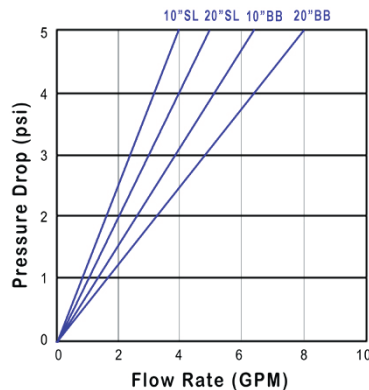
## Pressure Drop Charts

The filter cartridges in this system have a great surface area for long life and reduced filtration costs.

### Sediment Filter



### Carbon Block Filter



## Additional Features

### (Optional):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber
- Additional Filtration for Most Common Contaminants and Pollutants
- Purge Valve at Out Port for Overheat Protection

## Filtration

This UV System comes equipped with dual pre-filtration. The water first enters the sediment filter housing, where a sediment filter cartridge (made from melt-blown Polypropylene) removes dirt, rust and other sediments down to 5 micron (cartridge Part # 14-WFS10-5SP). This is followed by a second filter housing with a carbon block filter cartridge at 10 micron (made from Coconut Shell Carbon), which removes chlorine, taste and odour from the water (cartridge Part # 14-WFC10-5CB). Additional filtration stages can be installed, such as a self-cleaning Spin Down Separator that keeps the filter cartridges from clogging up if elevated sediment levels are present (Part # 13-SDF-3/4). The filter cartridges are NSF certified and have an excellent chemical resistance in all food and beverage purification applications.