SYS1400-1BB

Water Treatment System

Description

The SYS1400-1xBB is an All-in-One Water Treatment System that is very compact but designed for the needs of larger households or small commercial operations to provide purified drinking water. Typically installed at the point of entry, it is used for treating municipal water as well as ground water from drilled or dug wells, and surface water from lakes, ponds or rivers. It will purify the water from most contaminants such as sediments, rust and more with filtration down to 5 micron. Harmful microbiological contaminants, 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 featuring an alarm system which sounds an audible alarm if the UV lamp is not functioning properly. The system remembers when it is time to install a new UV replacement lamp with an automatic countdown display and alarm.

This residential/commercial 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.

1 x 20”BB Pre-filter 1 x 10”BB Pre-filter

Gauge optional

Features

- **Chemical-Free Water Purification and Disinfection**
- **Robust Construction - Pre-Assembled**
- **316L SS Ultra-Violet Sterilizer**
- **Digital Display, Lamp-Out Alarm, Day Count**
- **20” Full Flow Design Filtration**
- **Filter Housing with Pressure Relief Valve**

Benefits

- **Efficient Disinfection, Low Cost per Litre**
- **High UV Dose, 99.99% Destruction of Pathogens**
- **Extremely Simple to Use and Maintain**
- **Very Small Footprint**
- **Ideal for Use in Light Commercial Applications**

We Stand On Guard

UV Water Sterilizer

WE KILL HARMFUL BACTERIA

Specifications

Part # SYS1400/QD4E-1BB10(20)/1

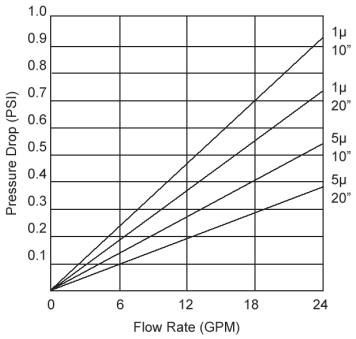
Flow Range (limited by filter selection):	Up to 53 litres per minute (14 GPM) 3,180 litres/hour, 76.3 m^3/day (840 gallons/hour, 20,160 gallons/day)
Initial UV Dose at Max. Flow (95% UVT):	40 mJ/cm^2 (40,000 µWsec/cm^2) @ 53 LPM / 14 GPM
Electrical:	110 Volt AC / 50 - 60 Hz 240 Volt AC / 50 - 60 Hz
Ballast:	Electronic Ballast w/ Lamp Out Alarm, Power LED, Running Days Countdown on LCD Display (Resettable) Model RH51-800-95L (Wyckomar Part # 4-BE-800-14/30ECO)
Replacement Lamp:	Low-Pressure UV Lamp, Part # RL-51/540T5
Filtration:	10" or 20" BigBlue Full-Flow (OD 4-1/2") w/ Pressure Relief
Sediment Filter Standard:	Polypropylene/Polyester Melt Blown or Pleated Cell, 5 Micron
Min/Max. Operating Temperature:	$T_{min.}$ = 3 °C (37 °F), $T_{max.}$ = 40 °C (104 °F)
Max. Operating Pressure:	125 psi - 8.6 bar (UV), 90 psi - 6.2 bar (Filter)
Plumbing:	1" MNPT In/Out
Shipping Size and Weight:	1 box 30x19x9 inches, 25 lbs

Specifications subject to change

Pressure Drop Chart

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

Sediment Filter



Additional Features (Optional):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber (Salt-Less Alternative to a Softener)
- Additional Sediment Filtration with Spin Down Separator for Lake Water Applications
- Additional Filtration for Most Common Contaminants and Pollutants
- Purge Valve at Out Port for Overheat Protection

For **UV Dose Applied** please refer to the graph in the specification sheet for the UV-1400 sterilizer. At the maximum flow rate of 14 GPM / 53 LPM and 95% UVT, this UV system provides a UV dose of 40 mJ/cm^2

Assumed Water Quality Parameters and Filtration

This UV System comes equipped with pre-filtration, to help meet the water quality parameters for proper operation (Turbidity < 1 NTU). Before being treated in the UV reaction chamber, the water first enters the filter housing, where a sediment filter cartridge (made from Polypropylene/Polyester pleated cell) removes dirt, rust and other sediments down to 5 micron (cartridge Part # 14-WFS20BB-5PL). The filter cartridge has an excellent chemical resistance in all food and beverage purification applications and a low pressure drop. Hardness can be removed by installation of a softening device before the filter or after the hot water line behind the UV. Heavy metals and dissolved minerals are not targeted, if there are elevated levels in the source water, additional filtration has to be considered (see SYS1400/QD4E-2BB10(20)/2).

Additional filtration stages can be installed, such as a self-cleaning Spin Down Separator which can extend filter cartridge life if elevated sediment levels are present (Part # 13-SDF-2).

Manufactured in Canada by **Wyckomar Canada Inc.** 111 Malcolm Road, Guelph, ON Canada N1K 1A8
Phone ++1-519-822-1886 Fax ++1-519-763-6580 sales@wyckomaruv.com www.wyckomaruv.com