



SYS3000

The Great Bear | Basic System

Description

The SYS3000 is an All-in-One Water Treatment System that is sized for the needs of commercial and light industrial applications to provide complete purified drinking or process 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 pesticides with filtration down to 5 micron. Carbon filtration reduces taste and odour, including sulphur smell and chlorine residuals, as well as cysts. 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 that features 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.

All installation hardware (mounting brackets, filter wrench and S-pipe for the connection between filtration and UV) are supplied with the system.

This commercial/industrial 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

- ▶ **Chemical-Free Water Treatment**
- ▶ **Robust Construction, Pre-Assembled**
- ▶ **20" BigBlue Sediment + Carbon Filtration**
- ▶ **Filter Housings with Pressure Relief Valves**
- ▶ **316L SS Ultra-Violet Sterilizer**
- ▶ **Electronic Ballast with Lamp-Out Alarm**



The system ships complete with all necessary components and installation hardware



Benefits

- ▶ **Efficient Disinfection, Low Cost per Litre**
- ▶ **High UV Dose for Peace of Mind**
- ▶ **Extremely Simple to Use and Maintain**
- ▶ **Pre-Assembled Filter Set for Easy Installation**
- ▶ **Ideal for Use in Many Commercial Applications**

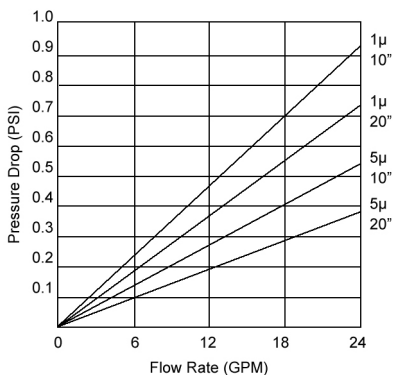
Flow Range (limited by filter selection):	Up to 57 litres per minute (15 GPM) 3,420 litres/hour, 82 m ³ /day (900 gallons/hour, 21,600 gallons/day)
Initial UV Dose at Max. Flow (95% UVT):	73 mJ/cm ² (73,000 μWsec/cm ²) @ 57 LPM / 15 GPM
Electrical:	110-130 Volt AC / 50-60 Hz (Part # SYS3000/QD4E-1) 220-240 Volt AC / 50-60 Hz (Part # SYS3000/QD4E-2)
Ballast:	Electronic Ballast w/ Lamp Out Alarm, Power LED, Running Days Countdown on LCD Display (Resettable) Model RH51-800-95L (Wyckomar Part # 4-BE800-14/30ECO)
Replacement Lamp:	Low-Pressure UV Lamp, Part # RL-100/1197T6
Filtration:	20" BigBlue (L 20", OD 4-1/2"), w/Pressure Relief
Stage 1, Sediment Filter:	Polypropylene/Polyester Pleated Cell, 5 Micron
Stage 2, Carbon Filter:	Carbon Impregnated Polyester (Pleated Carbon)
Connection betw. UV and Filter (S-Pipe):	Hose Flexible SS (Part #10-FF15-36) (PVC S-Pipe optional)
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:	1.5" MNPT In/Out
Shipping Size and Weight:	1 box 52x9x9 inches, 24 lbs / 10.9 kg 1 box 52x9x9 inches, 40 lbs / 18.2 kg

Specifications subject to change

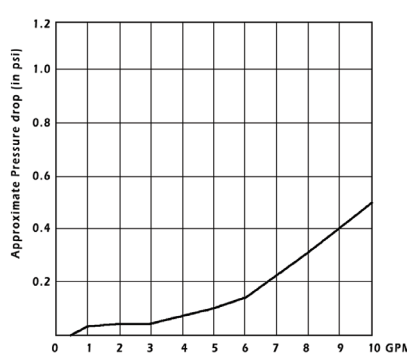
Pressure Drop Charts

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

Sediment Filter



Pleated Carbon



Additional Features (Optional):

- AquaFlow Deposit Control System with Stainless Steel Reaction Chamber (Salt-Free Descaling)
- 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

Assumed Water Quality Parameters and 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 Polypropylene/Polyester pleated cell) removes dirt, rust and other sediments down to 5 micron (cartridge Part # 14-WFS20BB-5PL). This is followed by a second filter housing with a pleated carbon filter cartridge at 10 micron (made from Carbon-Impregnated Polyester), which removes chlorine, taste and odour from the water (cartridge Part # 14-WFC20BB-10PLC). The filter cartridges have an excellent chemical resistance in all food and beverage purification applications and a low pressure drop.

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-2).