

# **SYS3000**

## **Water Treatment 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 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.

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
- 20" BigBlue Sediment + Carbon Filtration
- ► Filter Housings with Pressure Relief Valves
- ➤ 304L SS Ultra-Violet Sterilizer (316L optional)
- ► 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

Rated Flow: 113 litres per minute (30 GPM)

6,780 litres/hour, 162 m<sup>3</sup>/day

(1,800 gallons/hour, 43,200 gallons/day)

Initial UV Dose at Rated Flow:

49 mJ/cm² (49,000 μWsec/cm²) @ 95% UVT

34 mJ/cm² (34,000 μWsec/cm²) @ 70% UVT

**Electrical:** 110-130 Volt AC / 50-60 Hz (Part # SYS3000/QD4E-1)

220-240 Volt AC / 50-60 Hz (Part # SYS3000/QD4E-2)

**Power Consumption:** 85 VA @ 120 V, 89 VA @ 240 V

Ballast: Electronic Ballast (Part # 4-BE-800WL30-1/2)

w/ Lamp Out Alarm, Power LED

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: Melt-Blown Polypropylene ("Spun Poly"), 5 Micron Stage 2, Carbon Filter: Pleated Carbon NCP Series, 10 Micron

Connection betw. UV and Filter (S-Pipe): PVC S-Pipe (Part # 6-3000) (SS Optional)

Max. Operating Temperature: 37 °C (98.6 °F)

Max. Operating Pressure: 125 psi - 8.6 bar (tested to 500 psi)

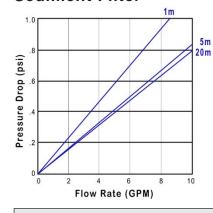
Plumbing: 1.5" MNPT In/Out

Shipping Size and Weight: 1 box 52x9x9 inches, 24 lbs / 10.9 kg 1 box 26x17x7 inches, 16 lbs / 7.3 kg

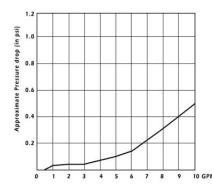
# **Pressure Drop Charts**

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):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber
- Additional Sediment Filtration with Spin Down Separator for High Turbidity Applications
- Purge Valve at Out Port for Overheat Protection
- Ballast with Hour Meter for Total Runtime Display
- Pressure Gauges

### **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-WFS20BB-5SP). 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 are NSF certified and 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).