



SYS-1

The Athabasca | Basic 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 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 DC ballast in 12V or 24V 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. The faucet requires installation in the counter top.

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.



Includes Saddle Valves and Faucet Set

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 Condos

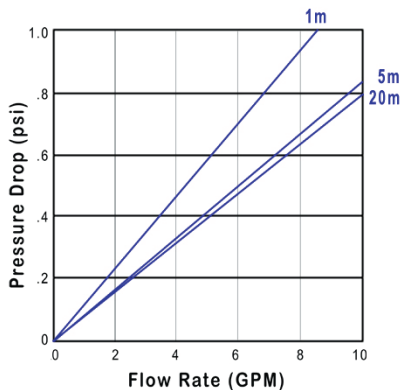
Flow Range (limited by filter selection):	Up to 4 litres per minute (1 GPM) 240 litres/hour, 5.7 m ³ /day (60 gallons/hour, 1440 gallons/day)
Initial UV Dose at Max. Flow (95% UVT):	96 mJ/cm ² (96,000 μWsec/cm ²) @ 4 LPM / 1 GPM
Electrical:	110 - 240 Volt AC / 50 - 60 Hz (Part # SYS1/QD4E-1 or -2) 12 V DC (Part # SYS1/QD4E-12V)
Ballast:	Electronic Ballast w/ Lamp Out Alarm, Power LED, Count of Total Running Days on LCD Display (Resettable) Model RH51-425-40L (Wyckomar Part # 4-BE-425-ECO-R) 12V Ballast (Part #4-BE-12V) w/ Lamp-Out Alarm, no Count
Replacement Lamp:	Low-Pressure UV Lamp, Part # RL-12/254T5
Filtration:	10" SlimLine (L 9-3/4", OD 2-1/2"), w/ Pressure Relief
Stage 1, Sediment Filter:	Melt-Blown Polypropylene ("Spun Poly"), 5 Micron
Stage 2, Carbon Filter:	Carbon Block (Bitouminos), 0.5 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
Plumbing:	3/8" In/Out Includes Saddle Valves & Tubing (PVC) and Faucet Set
Shipping Size and Weight:	1 box 19x17x7 inches, 15 lbs / 6.8 kg

Specifications subject to change

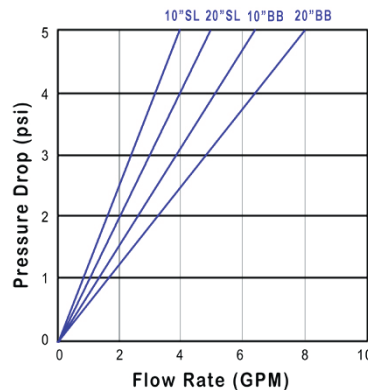
Pressure Drop Charts

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

Sediment Filter



Carbon Block Filter



Additional Features

(Optional):

- Additional Filtration for Most Common Contaminants and Pollutants
- Thermosensitive Purge Valve at Out Port for Overheat Protection
- 12V and 24V DC version available

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 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 0.5 micron (made from Bituminous Coal), which removes chlorine, taste and odour and cysts from the water (cartridge Part # 14-WFC10-05CB).

The filter cartridges are NSF/ANSI 42 certified for materials and have an excellent chemical resistance in all food and beverage purification applications.