

### Installation, Operation & Maintenance Guide

#### <u>Safety</u>

- CAUTION: DO NOT LOOK DIRECTLY AT THE UV LAMP OR EXPOSE SKIN DURING OPERATION. PERMANENT EYE DAMAGE AND SKIN BURNS WILL OCCUR FROM UV RADIATION EXPOSURE. APPROPRIATE UV BLOCKING SAFETY GLASSES MUST BE WORN DURING INSTALLATION, SERVICE OR ANY TIME THE LAMP MAY BE ILLUMINATED.
- The appropriate safety precautions and practices should be utilised when installing or maintaining the compact UV effluent filter in a wastewater treatment system.
- All electrical installations & and maintenance should be compliant with the relevant national requirements and completed by a suitably qualified person.
- Always turn off and isolate the electrical power supply before any operational or starting maintenance work on the UV lamp.



#### Installation:

#### Stage 1: Guidance steps to fit the UV lamp bulb (Reference Figure 1.0 Components):

- 1. Remove the filter cartridge (4) from the filter housing (1).
- 2. Remove the UV lamp assembly (6) from the filter cartridge (4).
- 3. Loosen the threaded gland on the UV lamp assembly (6) and remove the quartz glass tube taking care not to damage any of the components.
- 4. Remove the UV bulb from the packaging taking care to only touch the ceramic ends of the bulb and fit to the UV lamp connection within the UV Lamp Assembly (6). The UV bulb should only be
- 5. Refit the quartz glass tube over the UV bulb and fit into the gland assembly ensuring a sealed fit. The quartz glass tube should be pushed fully into the gland assembly when assembled.
- 6. Refit the UV Lamp Assembly (6) to the filter cartridge (4).
- 7. Refit the filter cartridge (4) into the filter housing (1).
- 8. Fit the filter cartridge handle (5) to the filter cartridge.

### POLYLOK COMPACT UV EFFLUENT FILTER

# Stage 2: Guidance steps for the Installation of the Compact UV Effluent filter (Reference Typical Applications):

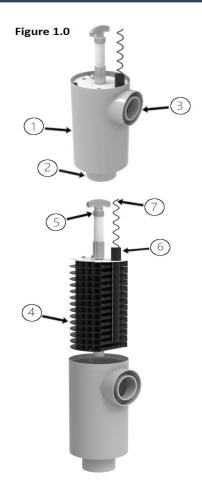
- 1. Locate the outlet pipe of the tank chamber where the compact UV filter is to be installed.
- 2. Remove the tank cover and ensure the tank is empty (if necessary).
- 3. Remove the filter cartridge (4) from the filter housing (1).
- 4. Fit the filter housing (1) onto the outlet pipe (using the 4" x 110mm bushing if required) while ensuring the filter housing (1) is positioned to allow the filter cartridge (4) and UV lamp (6) removal from the tank chamber for maintenance and servicing.
- 5. Insert the filter cartridge (4) with the UV lamp (6) assembly fitted.
- 6. Connect the power supply (240V AC) of the UV lamp ensuring all power supplies are isolated. All electrical installations should be completed by a suitably qualified person ensuring the best practice for a safe installation.
- 7. The electronic ballast is supplied with 5m of cable allowing it to be located in a suitably dry vented location.

#### **Operation & Maintenance of the Compact UV Effluent Filter:**

- 1. When the installation and electrical power supply is connected the filter can be power ON. Eyes or skin should never be directly exposed to the UV Lamp (6) when power illuminated. Always turn off and isolate the electrical power supply before any operational or starting maintenance work on the UV lamp.
- 2. The filter cartridge should be removed with the UV lamp for inspection and cleaning as required and a minimum of once every 12 months. For effective operation the filter cartridge and quartz glass tube of the UV lamp must be clean and free from scum, limescale or organic deposit build up.
- 3. The UV bulb has an effective life time of 8760 hours or 12 months. The UV bulb must be replaced when its effective life time is reached.
- 4. To replace the UV bulb, repeat the appropriate steps of Stage 1, how to fit the UV lamp bulb, detailed above.
- 5. When cleaning the filter cartridge (4) rinse with water into the inlet manhole or primary chamber of the treatment system.
- 6. When cleaning the quartz glass tube use an abrasive scrub pad and water with a suitable cleaning or descaling product if necessary.

# POLYLOK COMPACT UV EFFLUENT FILTER





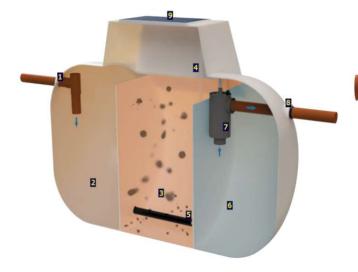
### Components

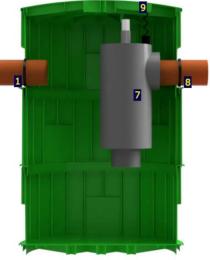
- 1: Filter Housing
- 2: Inlet
- 3: Outlet Pipe Connection 4: Filter Cartridge
- 5: Filter Cartridge Handle
- 6: UV Lamp
- 7: UV Lamp Power Cable

## POLYLOK COMPACT UV EFFLUENT FILTER



# **Typical Applications**





Fibreglass Tank Treatment Plant

Individual Chamber Installation

#### 1. Inlet

- 2. Primary Settlement Chamber
- 3. Aeration Chamber
- 4 Pressure Pipe for Diffuser(s)
- 5. Bio-media
- 6. Final Settlement Chamber
- 7. Polylok Compact UV Effluent Filter
- 8. Outlet
- 9. Access Lid



Concrete Tank Treatment Plant