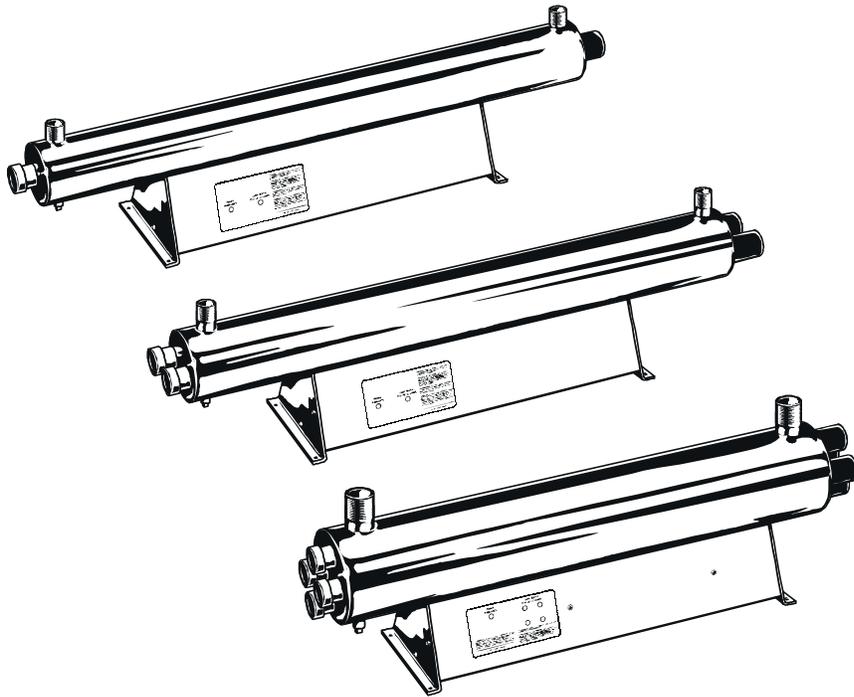


ULTRAVIOLET WATER STERILIZER



INSTALLATION INSTRUCTIONS & OWNER'S MANUAL



P/N 520019

SAFETY INSTRUCTIONS

WARNING - to guard against injury, basic safety precautions should be observed, including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. **DANGER** - To avoid possible electric shock, special care should be taken since water is present near electrical equipment. Unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections, do not attempt repairs yourself, refer to an authorized service facility.
3. Carefully examine the water sterilizer after installation. It should not be plugged in if there is water on parts not intended to be wet.
4. Do not operate the water sterilizer if it has a damaged cord or plug, if it is malfunctioning or if it is dropped or damaged in any manner.
5. Always disconnect water flow and unplug a water sterilizer before performing cleaning or maintenance activities. Never yank the cord to remove from an outlet grasp the wall plug and pull to disconnect.
6. Do not use this water sterilizer for other than intended use (potable water applications). The use of attachments not approved, recommended or sold by the manufacturer / distributor may cause an unsafe condition.
7. Intended for indoor use only. Do not install this water sterilizer where it will be exposed to the weather or to temperatures below freezing. Do not store this water sterilizer where it will be exposed to the weather. Do not store this water sterilizer where it will be exposed to temperatures below freezing unless all water has been drained from it and the water supply has been disconnected.
8. Read and observe all the important notices and warnings on the water sterilizer.
9. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less Amperes or Watts than the water sterilizer rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
10. **SAVE THESE INSTRUCTIONS.**

WATER CHEMISTRY

Water quality is extremely important for the optimum performance of your UV system. The following levels are recommended for installation:

- **TOTAL IRON** count is less than 0.3 ppm (0.3 mg/l)
- **HYDROGEN SULPHIDE** count is less than 0.05 ppm (0.05 mg/l)
- **SUSPENDED SOLIDS** count is less than 10 ppm (10 mg/l)
- **MANGANESE** count is less than 0.05 ppm (0.05 mg/l)
- **HARDNESS** count is less than 7 gpg (Where total hardness is less than 7 gpg, the UV unit should operate efficiently provided the quartz sleeve and/or sensor probe is cleaned periodically. If total hardness is over 7 gpg, the water should be softened.)

If your water chemistry contains levels in excess of those mentioned above, proper pretreatment is recommended to correct these water problems prior to the installation of your sterilizer.

INSTALLING YOUR STERILIZER

- The complete water system, including any pressure or hot water tanks, must be sterilized before start up by flushing with chlorine (household bleach) to destroy any residual contamination.
 - The sterilizer should be connected to a ground fault interrupter.
 - The sterilizer is intended for indoor use only, do not install sterilizer where it may be exposed to the weather.
 - Install the sterilizer on cold water line only.
 - If treating the entire house, install the sterilizer before any branch lines. Ideally, your sterilizer should be the last treatment your water receives prior to use.
 - A 5 micron sediment filter must precede the sterilizer.
1. Remove the sterilizer from the shipping carton. For shipping purposes, the UV lamp (or lamps) is packed in a separate tube. Set the lamp aside for use later. The sterilizer should be mounted in the horizontal position. Mount the unit in a clear space with at least 36" (91.5 cm) of space at the lamp end to facilitate lamp and or quartz sleeve removal. Fasten sterilizer to a

suitable mounting platform with secure fasteners.

2. It is recommended to install suitable flow regulators in order that the flow rate not exceed the manufacturers recommended flow rating. The use of a by-pass and shut-off valves are recommended for emergency use of untreated water when your sterilizer is being serviced. **Please Note** : When the UV unit is by-passed for service, the complete water system must be sterilized once again with chlorine to destroy any contamination that may have passed during by-pass. Apply two turns of Teflon tape around the port threads to ensure a tight joint.
3. **Very carefully** slide the UV lamp into the UV chamber making sure the lamp pins are accessible for connection with the lamp connector cable. Attach the lamp connector to the lamp pins and press fit into aluminum gland nut.
4. When all plumbing connections are made, **slowly** turn on the water supply and check for leaks. The most likely cause for leaks is from the o-ring seal. In case of a leak, shut water off, drain cell, remove the retainer nut, wipe the o-ring and threads clean and re-install.
5. Once it is determined that there are no leaks, re-install lamp connectors, plug the sterilizer into the ground fault interrupter, and check to see if the UV lamp is illuminated. **NEVER LOOK DIRECTLY AT THE BURNING UV LAMP**. Allow the water to run for a few minutes to clear any air or dust that may be in the cell.

PLEASE NOTE: When there is no flow, the water in the cell will become warm as the UV sterilizer lamp is always on. To remedy this, run a cold water tap anywhere in the house for a minute to flush out the warm water.

OPERATING AND MAINTENANCE INSTRUCTIONS

I/ Regularly inspect your sterilizer unit to ensure that the UV light is still glowing. The green LED indicator (or indicators) should be illuminated.

II/ Replace the UV lamp with a new lamp after one year of continuous use to ensure a high bacteria and virus kill rate.

III/ Mineral deposits and sediment may accumulate on the quartz sleeve decreasing UV output and on the sensor face reducing the detection rate. Good maintenance of filtration equipment will reduce the accumulation of residues. Remove the quartz sleeve and sensor after a few months and clean with a commercially available scale remover (CLR, Lime-Away, etc.) and a lint free cloth. Repeat the process as often as necessary to keep the quartz sleeve and sensor clean.

IV/ To remove the quartz sleeve, first disconnect the UV lamp and remove from the UV chamber. Remove the aluminum gland nuts as well as the two o-ring seals. Carefully slide the quartz sleeve out of the chamber (either side) being careful not to let the end drop inside the chamber. When re-assembling the quartz sleeve, make sure the sleeve protrudes an equal distance from both ends of the cell. Wet the o-rings with water or a silicone based grease and slide onto each end of the sleeve. Re-install the gland nuts and hand tighten to achieve a water tight seal. Re-assemble the power source as per the instructions supplied in the INSTALLATION SECTION.

V/ Always drain the UV cell when closing a cottage or leaving the unit in an area subject to freezing temperatures.

AUDIBLE ALARM SYSTEM (Basic Models)

The audible alarm and indicator light on these systems continuously monitor the lamp operation. If the lamp does not start at any time, the indicator light will not glow GREEN and the audible alarm will sound . This alarm indicates that the UV lamp is no longer operating and must be corrected. Please refer to Troubleshooting Guide for corrective procedures.

UV MONITORING SYSTEM (Monitor Models)

The ultraviolet sensor system features a complete warning system for continuous water protection by constantly sensing the **UV INTENSITY** at the inside surface of the cell. The system features a single LED indicator light, which will show three distinct colours, GREEN, AMBER, and RED. When the UV output level changes, the warning system will operate in the following manner:

GREEN indicates that the UV intensity is satisfactory and the unit is in good working order.

AMBER indicates that the UV intensity is reduced, which could be due to any of the following factors :

- The lamp is losing strength and will soon need to be replaced.

- The quartz sleeve and/or the sensor probe have become dirty. Mineral deposits or sediment in the water that was not detected during the original water analysis causes this.
- Intermittent voltages drop in the household power supply reducing the lamp output. The lamp will return to normal when the power is restored to full voltage. Note : The monitoring system will not operate during power failures.
- Air trapped on sensor lens will affect sensor calibration. Fully wet sensor lens and re-install.

The quartz sleeve and sensor probe should be cleaned and the system re-installed to determine if dirt was the cause of the amber light. If the LED light switches to amber soon after the unit is installed or the lamp has been replaced, dirt accumulation is most likely the cause.

FLASHING RED indicates that system cut-off is imminent. Immediate action is required.

RED indicates that the unit needs immediate attention, the audible alarm will automatically sound when the LED monitor light switches to red. If the lamp has been in service for a year or more it should be replaced. The quartz sleeve and/or sensor probe may require cleaning. The alarm will continue until the sensor detects adequate UV intensity. When a lamp is replaced it is recommended to clean the quartz sleeve and sensor probe prior to returning the system to service.

SOLENOID CONTACTS (Standard on monitored models)

The unit comes equipped with the capability of adding an optional line voltage solenoid valve available from your dealer. This normally closed solenoid will work in conjunction with the UV monitoring system physically stopping the effluent water flow if the UV sensor determines that the water is not being adequately treated. The LED indicator will be red and the audible alarm will be sounding. Water will only be allowed to flow when the UV sterilizer senses that the quality of the water has returned to a safe state.

Ideally, the solenoid valve should be installed on the influent side of the sterilizer. To install, disconnect power supply prior to opening sterilizer cover. Plumb solenoid valve into existing plumbing (1" for 12 & 24 gpm models). Install "normally-closed" solenoid valve within three (3) feet of sterilizer. Remove the screws on the left and right side of the front aluminum panel allowing this panel to swing open. Remove the circuit board cover plate to expose the circuit board. Remove the round, black plastic cap covering the access hole for the solenoid wire (cap located on back panel next to main power cord). Slide the solenoid power cord through the hole and affix the connector to the exposed contacts on the circuit board marked "SOLENOID". The connector will only slide onto the mating pins in one direction. Attach the ground wire (green or green/yellow) to the ground lug on the sterilizer to finish the wiring connections.

To complete the installation, push the strain relief into the hole on the back side of the unit. The strain relief allows for the wire to run through its centre and can easily be installed using pliers. Once all the parts are connected, reattach the circuit board cover plate and secure the front panel of the sterilizer. Plug the sterilizer into the electrical outlet to return it to service. Please remember that the unit must have power in order to allow any water to pass through the unit. If an outside tap is required at all times, including those where there may be no power, plumb that line prior to the solenoid and remember that this line will not be protected from microbiological contaminants. The solenoid valve will only open when the UV sensor detects adequate UV intensity within the reactor chamber.

Note: If a normally closed solenoid valve is purchased from another source, the use of the manufacturers solenoid cord is strongly recommended as it comes with the necessary connectors to mate with the circuit board. This cord can be purchased from a dealer under the part number CS-MOL.

INFRARED OUTPUT - REMOTE ALARM (Standard on monitored models)

The electronics incorporated in the monitored units incorporate a micro controller which operates an infrared (IR) LED. This IR output can be used for diagnostic purposes as well as acting as an interface for an optional remote audible/visual alarm package available from your dealer. This IR-ALARM comes with the IR interface and 15.24 meters (50') of cable for remote monitoring of the audible and visual signals given off by the UV monitoring mechanism.



THIS ADVANCED WARNING SYSTEM HAS BEEN INSTALLED TO PROVIDE YOU WITH THE OPTIMUM PRECAUTIONS TO ENSURE HIGH EFFICIENCY IN THE PROTECTION AGAINST MICROBIOLOGICAL CONTAMINATION IN YOUR WATER. DO NOT DISREGARD THE WARNING LIGHTS.

THE BEST WAY TO CHECK UV OPERATION IS TO HAVE THE WATER TESTED FOR BACTERIA BY A RECOGNIZED TESTING AGENCY ON A REGULAR BASIS.

MANUFACTURER'S WARRANTY

Manufacturer warrants the ultraviolet water sterilizer's hardware and electrical systems to be free from defects in material and workmanship for a period of five (5) years from the date of purchase by the original owner (consumer) on a pro-rated basis. Manufacturer warrants the ultraviolet lamps and sensor probes to be free from defects in material and workmanship for a period of one (1) year and the reactor chamber for a period of seven (7) years. The warrantor will at its option and expense, either repair or replace such units subject to the following conditions, exceptions, and exclusions. No other warranties with respect to the units other than those expressly included in this one year warranty, have been made by the Warrantor.

CONDITIONS, EXCEPTIONS, AND EXCLUSIONS

The foregoing limited Warranty is subject to the following terms and conditions:

1. Water passed through the unit must not contain:
 - a/ sulphur
 - b/ filterable solids
 - c/ greater than 0.3 ppm iron
 - d/ excessive hardness *

* where total hardness is less than 7 gpg, the UV unit should operate efficiently provided the quartz sleeve is cleaned periodically. If total hardness is over 7 gpg, the water should be softened.

Warranty will be void, if the proper steps are not taken to ensure that these impurities are not present.

2. This limited Warranty shall not apply to any unit which has been repaired or altered by anyone other than the Warrantor or by a person authorized by the Warrantor, nor to any units which have been subject to misuse, neglect, or accident.
3. This limited Warranty runs exclusively to the original Consumer and with respect to the original installation only.
4. **WARRANTOR SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**
5. This limited Warranty excludes the cost of labour in removing any defective unit or installing any replacement unit. This limited Warranty applies only to a unit when returned to the Warrantor at the owners expense and in accordance with shipping instructions received from the Warrantor.

TROUBLESHOOTING GUIDE

Caution: When performing any work on the Sterilizer unplug the unit first and never look directly at the burning UV lamp.

General

SYMPTOM	POSSIBLE CAUSES	REMEDY
Pressure Drop	<ul style="list-style-type: none"> the sediment pre-filter is clogged 	<ul style="list-style-type: none"> replace filter cartridge with appropriate five micron cartridge, Note: check source water supply as fluctuations may occur in source pressure
High Bacteria Counts	<ul style="list-style-type: none"> quartz sleeve is stained or dirty 	<ul style="list-style-type: none"> clean sleeve with scale cleaner and eliminate source staining problem
	<ul style="list-style-type: none"> the UV lamp is spent 	<ul style="list-style-type: none"> replace UV lamp
	<ul style="list-style-type: none"> change in feedwater quality 	<ul style="list-style-type: none"> have the source water tested to ensure it is still within the allowable parameters for use with this unit
	<ul style="list-style-type: none"> contamination after the sterilizer 	<ul style="list-style-type: none"> it is imperative that the effluent water stream be shocked with chlorine after the water leaves the sterilizer - the sterilizer must have a bacteria free distribution system to work effectively
Warm Product Water	<ul style="list-style-type: none"> common problem caused by infrequent use 	<ul style="list-style-type: none"> run water until it returns to ambient temperature
Water Appears "Milky"	<ul style="list-style-type: none"> caused by air in the water lines 	<ul style="list-style-type: none"> run water until air is purged
Unit Leaking Water	<ul style="list-style-type: none"> problem with o-ring seals (on gland nuts and/or sensor probe on monitored units) 	<ul style="list-style-type: none"> ensure the o-ring is in place, check for cuts or abrasions, clean o-ring, moisten with water and re-install, replace if necessary (Part #OR-212)
	<ul style="list-style-type: none"> condensation on reactor chamber caused by excessive humidity 	<ul style="list-style-type: none"> check location of sterilizer and control humidity
	<ul style="list-style-type: none"> inadequate inlet / outlet port connections 	<ul style="list-style-type: none"> check thread connections, reseal with Teflon tape and re-tighten

12 GPM Basic Units				
VISUAL SYMPTOMS			REMARKS	
LAMP STATUS (GREEN LED)	AUDIBLE ALARM	UV LAMP		
ON	OFF	ON	<ul style="list-style-type: none"> Proper operating conditions unit is functioning properly. 	
OFF	ON	OFF	<ul style="list-style-type: none"> The UV lamp is spent requires replacement lamp 	
			<ul style="list-style-type: none"> UV lamp not connected to power source. Check connection and reconnect lamp. 	
			<ul style="list-style-type: none"> Ballast has switched off. To reset ballast remove power to unit by disconnecting power cord from electrical plug for a minimum of 10 seconds then reapply power. 	
OFF	OFF	ON	<ul style="list-style-type: none"> LED Indicator burnt out or wire lead broken. Replace LED assembly. 	
24 and 40 GPM Basic Units				
VISUAL SYMPTOMS				REMARKS
POWER ON (RED LED)	LAMP(S) STATUS (GREEN LED)	AUDIBLE ALARM	UV LAMP	
ON	ON	OFF	ON	<ul style="list-style-type: none"> Proper operating conditions unit is functioning properly.
OFF	OFF	OFF	OFF	<ul style="list-style-type: none"> The unit is not plugged into the electrical outlet. Plug unit into receptacle and ensure proper power source.
				<ul style="list-style-type: none"> Power cord is disconnected at the circuit board. Reconnect 2-pin header to circuit board.
				<ul style="list-style-type: none"> Circuit board is defective, Contact authorized dealer.
				<ul style="list-style-type: none"> The GFI or one of the circuit breakers is tripped. Re-set the GFI or circuit breaker.
ON	OFF	ON	OFF	<ul style="list-style-type: none"> The UV lamp is spent, replace UV lamp
				<ul style="list-style-type: none"> UV lamp not connected to power source. Check connection and reconnect lamp.
				<ul style="list-style-type: none"> Ballast not "warmed-up". Allow at least 5 minutes for the ballast to fully start
				<ul style="list-style-type: none"> Defective ballast. Contact authorized dealer
ON ON ON	OFF OFF ON	OFF ON ON	ON ON ON	<ul style="list-style-type: none"> Defective Circuit board. Contact authorized dealer.
ON	OFF	ON	ON	<ul style="list-style-type: none"> Connection from ballast to circuit board connector T5 bad. Check connectors to ensure proper connection.
				<ul style="list-style-type: none"> Defective Circuit board. Contact authorized dealer.
OFF	OFF	OFF	ON	<ul style="list-style-type: none"> Connector T3 jumper missing or improperly inserted. Check and reinsert.
				<ul style="list-style-type: none"> Defective Circuit board. Contact authorized dealer.

MONITORED UNITS			
VISUAL SYMPTOMS			REMARKS
UV INTENSITY (LED)	AUDIBLE ALARM	UV LAMP	
GREEN	OFF	ON	<ul style="list-style-type: none"> • Proper operating conditions unit is functioning properly.
YELLOW	OFF	ON	<ul style="list-style-type: none"> • System performance has declined due to stained or dirty quartz sleeve and or sensor lens, or the lamp is beyond its useful life. <ul style="list-style-type: none"> - Clean sleeve and sensor probe lens or replace if required. - Replace lamp with manufacture replacement. - Replace sensor with manufacturer replacement. - Always Wet Sensor Lens prior to inserting sensor.
FLASHING RED	INTERMITTENT	ON	<ul style="list-style-type: none"> • System failure is imminent due to stained or dirty quartz sleeve or lamp is beyond useful life <ul style="list-style-type: none"> - Clean sleeve and sensor probe lens or replace if required. - Replace lamp with manufacture replacement. - Replace sensor with manufacturer replacement. - Always Wet Sensor Lens prior to inserting sensor.
RED	ON	ON	<ul style="list-style-type: none"> • UV Sensor has not detected enough UV Intensity to adequately protect the water due to stained or dirty quartz sleeve or the lamp is beyond its useful life. <ul style="list-style-type: none"> - Clean sleeve and sensor probe lens or replace if required. - Replace lamp with manufacture replacement. - Replace sensor with manufacturer replacement. - Always Wet Sensor Lens prior to inserting sensor.
RED	ON	OFF	<ul style="list-style-type: none"> • Ballast not functioning, <ul style="list-style-type: none"> - Check wiring to ensure ballast is plugged into circuit board. - Replace ballast with manufacture replacement • Lamp is spent. Replace lamp with manufacturer replacement
GREEN	OFF	OFF	<ul style="list-style-type: none"> • Possible short-circuits on Cal board or sensor. Replace Sensor assembly with manufacturer • Cal board improperly seated. Check board to ensure proper engagement with main circuit board.

PARTS BREAKDOWN FOR ALL 12 GPM BASIC UNITS

S36RL..... UV LAMP
 QS-012 QUARTZ SLEEVE
 OR-212 O RING
 BA-120 BALLAST (115V./60Hz.)
 CB-12Q..... CIRCUIT BOARD FOR 115V UNITS ONLY
 BA-ICE-3F ELECTRONIC BALLAST (200-250V./50-60Hz.)
 RN-001 ALUMINUM RETAINING NUT
 CS-001/Q CORD SET (120V.)
 CS-EU/Q EUROPEAN "SCHUKO" CORD SET (230V.)
 DP750 RETAINING NUT PLUG
 SP-1/8 1/8" DRAIN PLUG
 SPO08 QUARTZ SLEEVE SPRING

PARTS BREAKDOWN FOR ALL 12 GPM MONITORED UNITS

S36RL..... UV LAMP
 QS-012 QUARTZ SLEEVE
 OR-212 O RING
 BA-120 BALLAST (115V./60Hz.)
 BA-ICE-3F ELECTRONIC BALLAST (200-250V./50-60Hz.)
 CB-1240UV CIRCUIT BOARD (for 115V. unit)
 CB-1240UV/2 CIRCUIT BOARD (for 230V. unit)
 RN-001 ALUMINUM RETAINING NUT
 CP-1240 CIRCUIT BOARD COVER
 CS-001/Q CORD SET (115V.)
 CS-EU/Q EUROPEAN "SCHUKO" CORD SET (230V.)
 DP750 RETAINING NUT PLUG
 SP-1/8 1/8" DRAIN PLUG
 SPO08 QUARTZ SLEEVE SPRING
 254NM-08 UV SENSOR ASSEMBLY
 C-OM O-RING FOR SENSOR ASSEMBLY
 C-MC UV MONITOR NUT

PARTS BREAKDOWN FOR ALL 24 GPM BASIC UNITS

S36RL..... UV LAMP
 QS-012 QUARTZ SLEEVE
 OR-212 O RING
 BA-E3612 ELECTRONIC BALLAST (100-130V./50-60Hz.)
 BA-E3622 ELECTRONIC BALLAST (200-250V./50-60Hz.)
 CB-2440A CIRCUIT BOARD (for 115V. unit)
 CB-2440A/2 CIRCUIT BOARD (for 230V. unit)
 CP-1240 CIRCUIT BOARD COVER

RN-001..... ALUMINUM RETAINING NUT
 CS-001/Q CORD SET (115V.)
 CS-EU/Q EUROPEAN "SCHUKO" CORD SET (230V.)
 DP750 RETAINING NUT PLUG
 SP-1/8 1/8" DRAIN PLUG
 SPO08 QUARTZ SLEEVE SPRING

PARTS BREAKDOWN FOR ALL 24 GPM MONITORED UNITS

S36RL..... UV LAMP
 QS-012 QUARTZ SLEEVE
 OR-212 O RING
 BA-E3612 ELECTRONIC BALLAST (100-130V./50-60Hz.)
 BA-E3622 ELECTRONIC BALLAST (200-250V./50-60Hz.)
 CB-1240UV CIRCUIT BOARD (for 115V. unit)
 CB-1240UV/2 CIRCUIT BOARD (for 230V. unit)
 CP-1240 CIRCUIT BOARD COVER
 RN-001 ALUMINUM RETAINING NUT
 CS-001/Q CORD SET (115V.)
 CS-EU/Q EUROPEAN "SCHUKO" CORD SET (230V.)
 DP750 RETAINING NUT PLUG
 SP-1/8 1/8" DRAIN PLUG
 SPO08 QUARTZ SLEEVE SPRING
 254NM-09 UV SENSOR ASSEMBLY
 C-OM O-RING FOR SENSOR ASSEMBLY
 C-MC UV MONITOR NUT

PARTS BREAKDOWN FOR ALL 40 GPM BASIC UNITS

S36RL..... UV LAMP
 QS-012 QUARTZ SLEEVE
 OR-212 O RING
 BA-E3612 ELECTRONIC BALLAST (100-130V./50-60Hz.)
 BA-E3622 ELECTRONIC BALLAST (200-250V./50-60Hz.)
 CB-2440B CIRCUIT BOARD (for 115V. unit)
 CB-2440B/2 CIRCUIT BOARD (for 230V. unit)
 RN-001 ALUMINUM RETAINING NUT
 CP-1240 CIRCUIT BOARD COVER
 CS-001/Q CORD SET (115V.)
 CS-EU/Q EUROPEAN CORD SET (230V.)
 DP750 RETAINING NUT PLUG
 SP-3/8 3/8" DRAIN PLUG
 SPO08 QUARTZ SLEEVE SPRING

SPECIFICATIONS

MODEL TYPE		12 gpm Basic Units	12 gpm Monitored Units	24 gpm Basic Units	24 gpm Monitored Units	40 gpm Basic Units
FLOW RATE		45 L/min (12 gpm) (2.7 m ³ /Hr.)	45 L/min (12 gpm) (2.7 m ³ /Hr.)	90 L/min (24 gpm) (5.5 m ³ /Hr.)	90 L/min (24 gpm) (5.5 m ³ /Hr.)	150 L/min (40 gpm) (9.1 m ³ /Hr.)
DIMENSIONS	LENGTH	94 cm (37")	94 cm (37")	94 cm (37")	94 cm (37")	97 cm (38")
	WIDTH	17.8 cm (7")	17.8 cm (7")	17.8 cm (7")	17.8 cm (7")	22.9 cm (9")
	HEIGHT	20 cm (8")	20 cm (8")	24.1 cm (9 ½")	24.1 cm (9 ½")	30.5 cm (12")
	CELL DIAMETER	9 cm (3 ½")	9 cm (3 ½")	10.2 cm (4")	10.2 cm (4")	15 cm (6")
SHIPPING WEIGHT		10.5 kg (23 lbs.)	10.5 kg (23 lbs.)	10.5 kg (23 lbs.)	10.9 kg (24 lbs.)	23.1 kg (51 lbs.)
ELECTRICAL	VOLTS	100-130V./ 50-60Hz. ¹				
	POWER CONSUMPTION	42	42	95	95	190
	LAMP WATTS	39	39	78	78	156
MAXIMUM OPERATING PRESSURE		8.62 bar (125 psi)				
AMBIENT TEMPERATURE RANGE		2 - 40°C (36 - 104°F)				
QUARTZ SLEEVE		YES (1)	YES (1)	YES (2)	YES (2)	YES (4)
DRAIN PLUG		1/8"	1/8"	1/8"	1/8"	3/8"
INLET/OUTLET PORT SIZE		1" MNPT	1" MNPT	1" MNPT	1" MNPT	1 ½" MNPT
LAMP FAILURE SYSTEM	VISUAL	YES	YES	YES	YES	YES
	AUDIBLE	YES	YES	YES	YES	YES
254 nm UV MONITOR		NO	YES	NO	YES	NO
REMOTE ALARM OUTPUT		NO	YES, use IR-ALARM	NO	YES, use IR-ALARM	NO
SOLENOID OUTPUT (line voltage)		NO	YES, use optional solenoid	NO	YES, use optional solenoid	NO
HOUR METER		NO	YES, use IR-ALARM	NO	YES, use IR-ALARM	NO
CELL MATERIAL		304 S.S. ²	304 S.S. ²	316L S.S.	316L S.S.	316L S.S.
HOUSING MATERIAL		ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM

1. 200-250V./50-60Hz available on request

2. 316L stainless steel available on request