

Installation, Operation and Maintenance Manual

Ultra Violet Disinfection System

Series PWUV

PURE WATER

Important

Please read the entire manual before proceeding with the installation and startup. Your failure to follow any attached instructions or operating parameters may lead to the product's failure. Water must be prefiltered by a minimum of 5 micron filtration.

Save manual for future reference.



Series PWUV

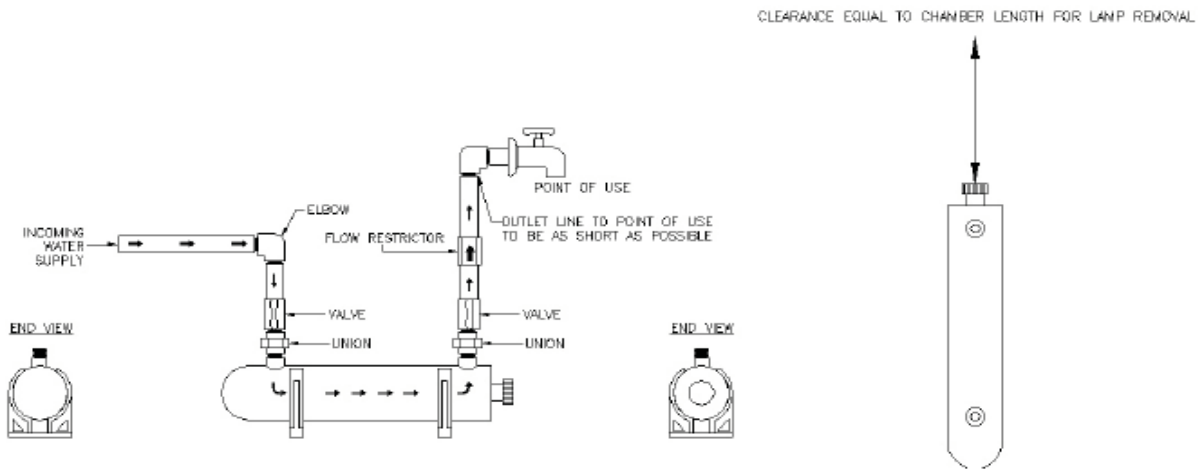
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Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Typical Installation



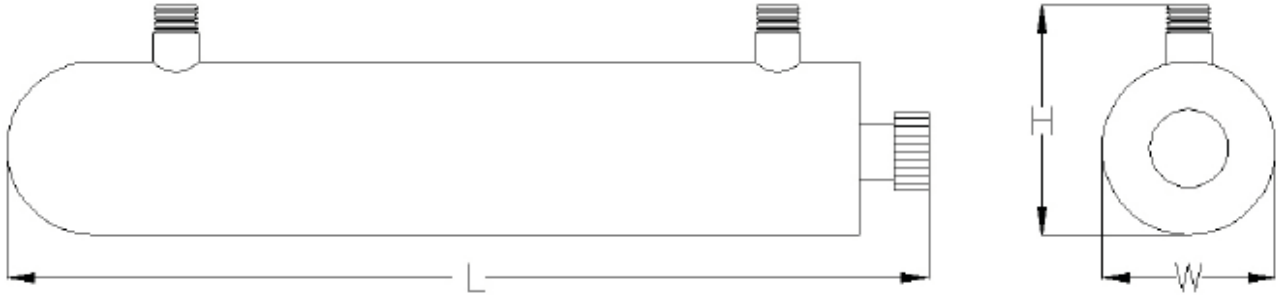
Installation Instructions

1. Install sterilizer equipment in a readily accessible and well lit location to facilitate inspection and maintenance.
2. Inspect for hidden electrical wiring or plumbing prior to drilling holes.
3. Attach mounting clips to the wall.
4. Insert chamber through mounting clips.
5. Connect to plumbing.
6. Install quartz sleeve and lamp.

Note: Avoid touching the sides of the quartz sleeve and lamp, handle by the ends only.

- a) Remove the retainer nut.
 - b) Slide the quartz sleeve into the chamber - closed end first.
 - c) Slide the O-ring over the open end of the quartz sleeve.
 - d) Tighten the retainer nut, hand tight.
 - e) Slide the lamp into the quartz sleeve.
 - f) Connect the lamp to the plug in transformer.
 - g) Cover the lamp connection with the vinyl cap.
7. Turn on the water and inspect for leaks. Repair if necessary.
 8. a) For 110 VAC Units – Plug the transformer into an electrical outlet. An electrical outlet protected by a Ground Fault Circuit Interrupt (GFCI) circuit is recommended.
 - b) For 220 VAC Units – Obtain the appropriate plug for your type of receptacle and attach it to the end of the power cord and plug it in.

Specifications



PRODUCT CODE	FLOW RATE (GPM)	PIPE SIZE	DIMENSIONS (L X W X H)	ELECTRICAL	SHIPPING (LBS.)
PWUV-2GPM-1/2IN-110VAC	2	1/2" MNPT	18" x 6" x 5 5/8"	110-130 v / 50-60 Hz	6
PWUV-2GPM-1/2IN-220VAC	2	1/2" MNPT	18" x 6" x 5 5/8"	200-250 v / 50-60 Hz	6
PWUV-6GPM-1/2IN-110VAC	6	3/4" MNPT	25 1/2" x 6" x 5 5/8"	110-130 v / 50-60 Hz	7
PWUV-6GPM-1/2IN-220VAC	6	3/4" MNPT	25 1/2" x 6" x 5 5/8"	200-250 v / 50-60 Hz	7
PWUV-8GPM-1/2IN-110VAC	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	9
PWUV-8GPM-1/2IN-220VAC	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	9
PWUV-12GPM-1/2IN-110VAC	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	17
PWUV-12GPM-1/2IN-220VAC	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	17

Notes: Line cord and lamp lead wire omitted for clarity.

Replacing UV Lamp and Servicing UV System

Note: Avoid touching the sides of the quartz sleeve and lamp, handle by the ends only.

- Step 1 Disconnect power.
- Step 2 Turn water off and open valve downstream of system to relieve pressure.
- Step 3 Remove vinyl cap and unscrew the nut.
- Step 4 Carefully withdraw lamp approximately 2 inches from chamber.
- Step 5 While holding lamp end carefully remove lamp socket on end now exposed.
- Step 6 Carefully withdraw lamp from chamber.
- Step 7 Carefully remove O-ring from the end of quartz sleeve.
- Step 8 Carefully remove quartz sleeve.
- Step 9 To reinstall follow Steps 8 through 1 in reverse.

Maintenance Suggestion

To operate the sterilizer properly and attain its maximum efficiency, the following maintenance is recommended:

1. Quartz sleeve cleaning or replacement:
 - a) Quartz sleeve is to be cleaned every 6-12 months, clean with glass cleaner.
 - b) Quartz sleeve is to be replaced every 24 months.
2. UV lamp replacement is recommended every 8000-9000 hours of operation (approx. 12 months of continuous service).

CAUTION: Ultraviolet lamp and quartz sleeve are easily damaged. Pay attention when removing or replacing lamp and quartz sleeve.

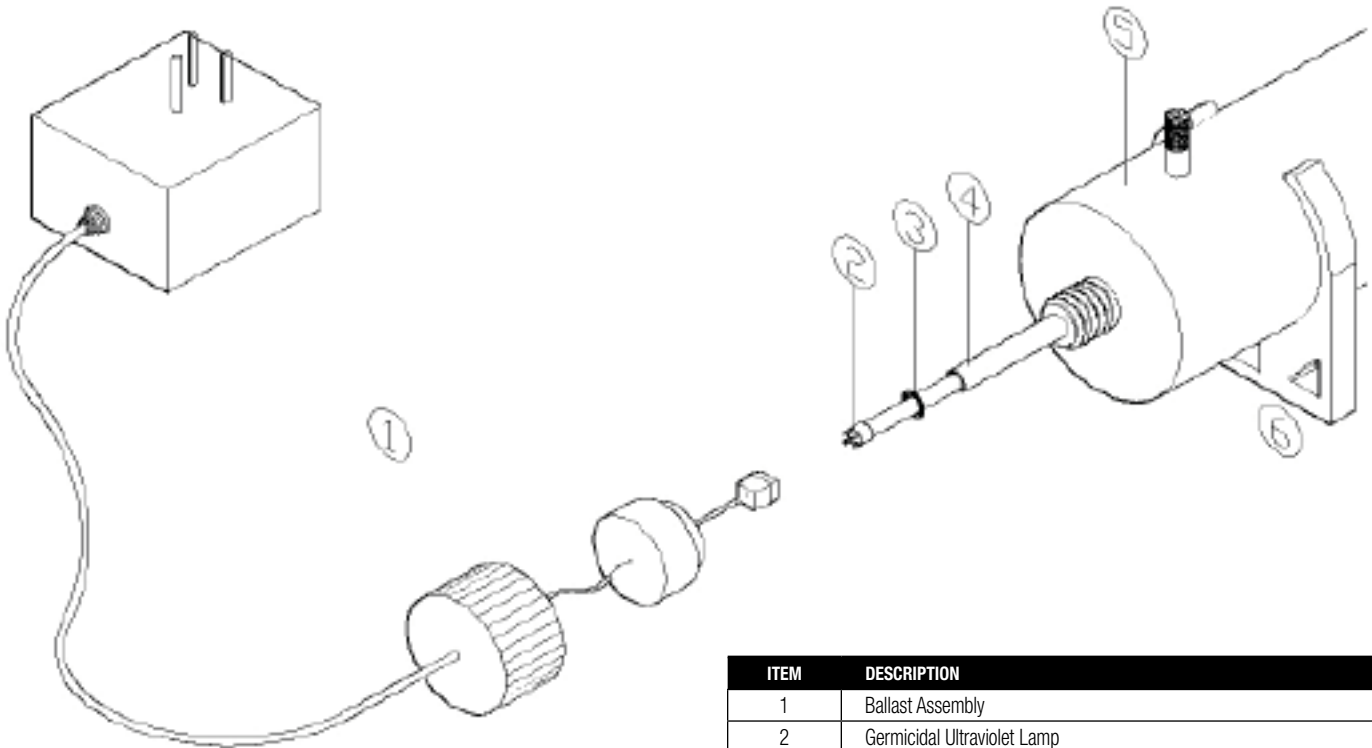
Operating Conditions

Maximum Operating Pressure: 125psi (8.9 bar)
 Maximum Operating Temperature: 104°F (40°C)
 Minimum Operating Temperature: 36°F (2°C)
 UV Dose At End Of Lamp Life (1 year or 9,000 Hours): 30mj/cm²
 Maximum Iron: Less Than .3 PPM
 Maximum Manganese: Less Than .05 PPM
 Maximum Turbidity: Less Than 5 NTU
 Maximum Hydrogen Sulfide: Less Than .05 PPM
 Maximum Hardness: Less Than 7 Grains Per Gallon as CaCO₃

Replacement Parts

FLOW RATE (GPM)	BULB MODEL	BALLAST MODEL	QUARTZ SLEEVE MODEL
2	PWUV-BULB-2GPM	PWUV-BALLAST-2GPM	PWUV-QUARTZ SLEEVE-2GPM
6	PWUV-BULB-6GPM	PWUV-BALLAST-6-12GPM	PWUV-QUARTZ SLEEVE-6GPM
8	PWUV-BULB-8GPM	PWUV-BALLAST-6-12GPM	PWUV-QUARTZ SLEEVE-8GPM
12	PWUV-BULB-12GPM	PWUV-BALLAST-6-12GPM	PWUV-QUARTZ SLEEVE-12GPM

Parts List



ITEM	DESCRIPTION
1	Ballast Assembly
2	Germicidal Ultraviolet Lamp
3	Rubber O-ring
4	Quartz Sleeve
5	Chamber
6	Mounting Clip

CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

LIMITED WARRANTY: Certain Watts Pure Water products come with a limited warranty from Watts Regulator Co. Other products may have no warranty or are covered by the original manufacturer's warranty only. For specific product warranty information, please visit www.watts.com or the published literature that comes with your product. Any remedies stated in such warranties are exclusive and are the only remedies for breach of warranty. **EXCEPT FOR THE APPLICABLE PRODUCT WARRANTY, IF ANY, WATTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, WATTS HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND IN NO EVENT SHALL WATTS BE LIABLE, IN CONTRACT, TORT, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY, FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR PROPERTY DAMAGE, REGARDLESS OF WHETHER IT WAS INFORMED ABOUT THE POSSIBILITY OF SUCH DAMAGES.**



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