

Ensuring the Safety of your Water with Confidence

Aqualight™ PUV

ULTRAVIOLET DISINFECTION SYSTEM

Ultraviolet (UV-C rays/253.7nm) water disinfection system is a unique and rapid method of water disinfection without the use of heat or chemicals to effectively destroys bacteria,virus,mold & algae.Ultraviolet (UV) light treatment is a widely recognized and proven method of disinfection of water and has several advantages over other disinfection methods such as chlorination,ozonation,etc.UV light does not add anything to the water,such as undesirable color,odor,taste or flavor,nor does it generate harmful byproducts.It adds only energy in the form of ultraviolet radiation .Also,UV disinfection requires only a fraction of the contact times required by other disinfection methods.It is fast,efficient,effective,economical and environmentally-friendly.

Advantages: Effective Economical Safe Fast & Easy Automatic Chemical Free
Applications: Drinking Water Food Processing Medical Industries



Residential/Commercial Application

SPECIFICATIONS						
Model	PV1 / PV1T	PV2 / PV2T	PV4 / PV4T	PV6 / PV6T	PV8 / PV8T	PV12 / PV12T
Flow Rate @30mJ/cm ²	1gpm, 3.78 lpm, 0.25 m3/hr	2gpm, 7.5 lpm, 0.5 m3/hr	4gpm, 15.1 lpm, 1 m3/hr	6gpm, 22.7 lpm, 1.4 m3/hr	8gpm, 30.2 lpm, 1.8 m3/hr	12gpm, 45.4 lpm, 3 m3/hr
Flow Rate @NSF 40mJ/cm ²	0.5gpm, 1.8 lpm, 0.1 m3/hr	1.5gpm, 5.5 lpm, 0.3 m3/hr	3gpm, 11.2 lpm, 0.6 m3/hr	4.5gpm, 17 lpm, 1 m3/hr	5.5gpm, 20.8 lpm, 1.3 m3/hr	8.5gpm, 32.1 lpm, 1.9 m3/hr
Inlet/Outlet	1/4"	1/4"	1/2"	1/2"	3/4"	3/4", 1"
Dimensions	28x5.1cm(11"x2.0")	36x6.5cm(14"x2.5")	42x6.5cm(17"x2.5")	56x6.5cm(22"x2.5")	70x6.5cm(28"x2.5")	92x6.5cm(36"x2.5")
Lamp Watts	10W	14W	19W	24W	32W	39W
► Flow Rate Stated at 95% UVT of EOL (End of Lamp Life)						



Electronic Controller, Power Supply	Part# BAP4011, BAP4022 for PV1 to PV12	Part# BAP40365 for PV1T to PV12T
Operation	Lamp Operating Indicators, Audible Alarm	Lamp Operating Indicators, Audible Alarm, Lamp Life Time-365 Days Countdown/ Resettable, Lamp Replacement Reminder, Total Running Days Dry Contacts (operate remote equipments)
Input Power	BAP4011: 110V., BAP4022: 220V. / 50-60Hz., Detachable Power Cord	Universal Voltages, 100V.-250V. / 50-60Hz., Detachable Power Cord
Dimensions	11.6x6.0x2.6cm (4.6"x2.4"x1.03")	18.0x9.5x4.9cm (7.08"x3.7"x1.9")



PV1-PV12



PV1T-PV12T



DOSAGE = INTENSITY x TIME = microW/cm2 x time = microWsec/cm2

Note: 1000 microWsec/cm2 = 1 mJ/cm2

SPECIFICATIONS					
Model	PV18T	PV24T	PV35T	PV42T	PV52T
Flow Rate @30mJ/cm ²	18gpm, 68.1 lpm, 4.1 m3/hr	24gpm, 90.8 lpm, 5.5 m3/hr	35gpm, 132.4 lpm, 7.9 m3/hr	42gpm, 158.9 lpm, 9.5 m3/hr	52gpm, 196.8 lpm, 11.8 m3/hr
Flow Rate @NSF 40mJ/cm ²	13gpm, 49.2 lpm, 2.9 m3/hr	17gpm, 64.3 lpm, 3.8 m3/hr	26gpm, 98.4 lpm, 5.9 m3/hr	31gpm, 117.3 lpm, 7 m3/hr	39gpm, 147.6 lpm, 8.8 m3/hr
Inlet/Outlet	1"	1"	1"	1-1/2"	1-1/2"
Dimensions	49x8.9cm(19"x3.5")	57x8.9cm(23"x3.5")	76x8.9cm(30"x3.5")	92x8.9cm(36"x3.5")	111x8.9cm(43"x3.5")
Lamp Watts	40W	50W	65W	80W	100W
► Flow Rate Stated at 95% UVT of EOL (End of Lamp Life)					



Electronic Controller, Power Supply		Part# BAP100365 for PV18T to PV52T
Operation	Lamp Operating Indicators, Audible Alarm, Lamp Life Time-365 Days Countdown/ Resettable, Lamp Replacement Reminder, Total Running Days Dry Contacts (operate remote equipments)	
Input Power	Universal Voltages, 100V.-250V. / 50-60Hz., Detachable Power Cord	
Dimensions	18.0x9.5x4.9cm (7.08"x3.7"x1.9")	



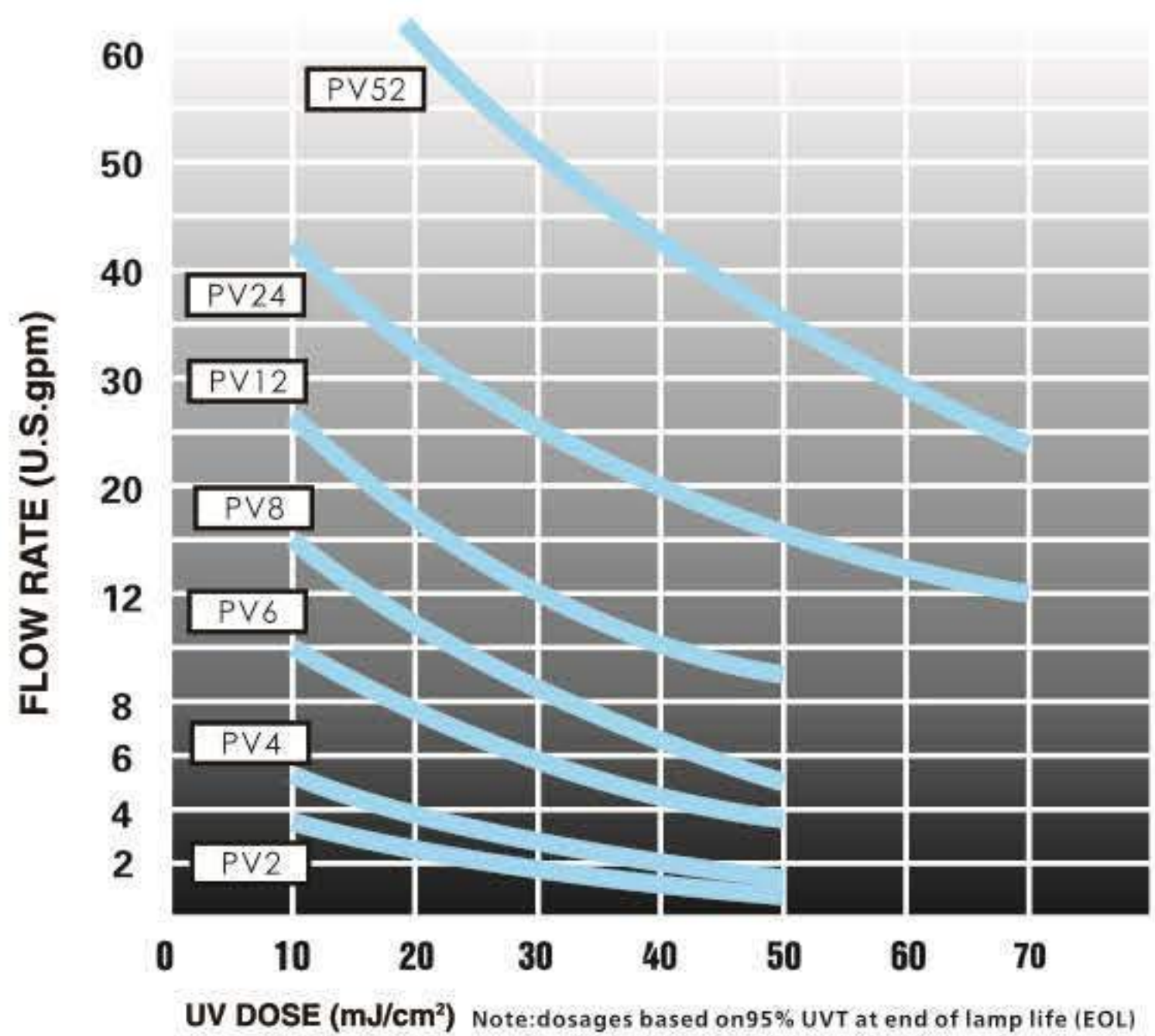
Aqualight™ PUV series

General

- ✦ Compact Design, Easy for Installation
- ✦ One Lamp Operation, Flow Rate 1gpm to 52gpm
- ✦ Ultraviolet Lamp Replacement without Interrupting the Water Flow
- ✦ SS304 Construction Material, SS316 on Request
- ✦ CE Certification , Grounding Wire Construction

Operating Parameters

- ✦ Max. Operating Pressure: 125psi (8.63 bar), Ambient Temperature: 2-40 °C (36-104 °F)
- ✦ Iron < 0.3ppm (0.3 mg/L), Hardness < 7gpg (120mg/L), Turbidity < 1 NTU, UV Transmittance > 75%
- ✦ 4-Log(99.99%) Reduction in Bacteria, Viruses and Protozoan Cysts
- ✦ Installation: Vertical or Horizontal



BAP40365/BAP100365 IC Controller Operation Manual

- **Default Screen Display:** Lamp Life Days (365 days to 1 day) 365
- **Total Running Days of Ballasts Controller:** Press "setting" button less than 2 seconds 1600
- Press "setting" button again or after 10 seconds, then screen will return default display

1) End of Lamp Life: At "0" day, screen will display "A3"

- i. Alarm: Red Light Flashing, Buzzer 1 second ON, 5 seconds OFF
- ii. Deferred Alarm up to 4 times: Press and Hold On "setting" Button 5 second till screen display "dELy" then release Button will display "7" days and none audible chirp but Red Light still Flashing
- iii. Must replace a new lamp to manually resetting Lamp Life Valid Days (365 days) of controller for system to terminate alarm after the final "7" days

2) Change Lamp instructions

- i. Disconnect Power Supply
- ii. Remove expired (or failure) lamp then Install new lamp
- iii. Press and Hold On "setting" button 10 seconds, screen display "rSEt", after 2 seconds, you can read "365" again from screen and hear an audible tone, then release "setting" button.

3) **Lamp Failure:** Screen display valid days freeze, Red Light Flashing, Buzzer 1 second ON, 1 second OFF. The system will remain in this state until change new lamp.

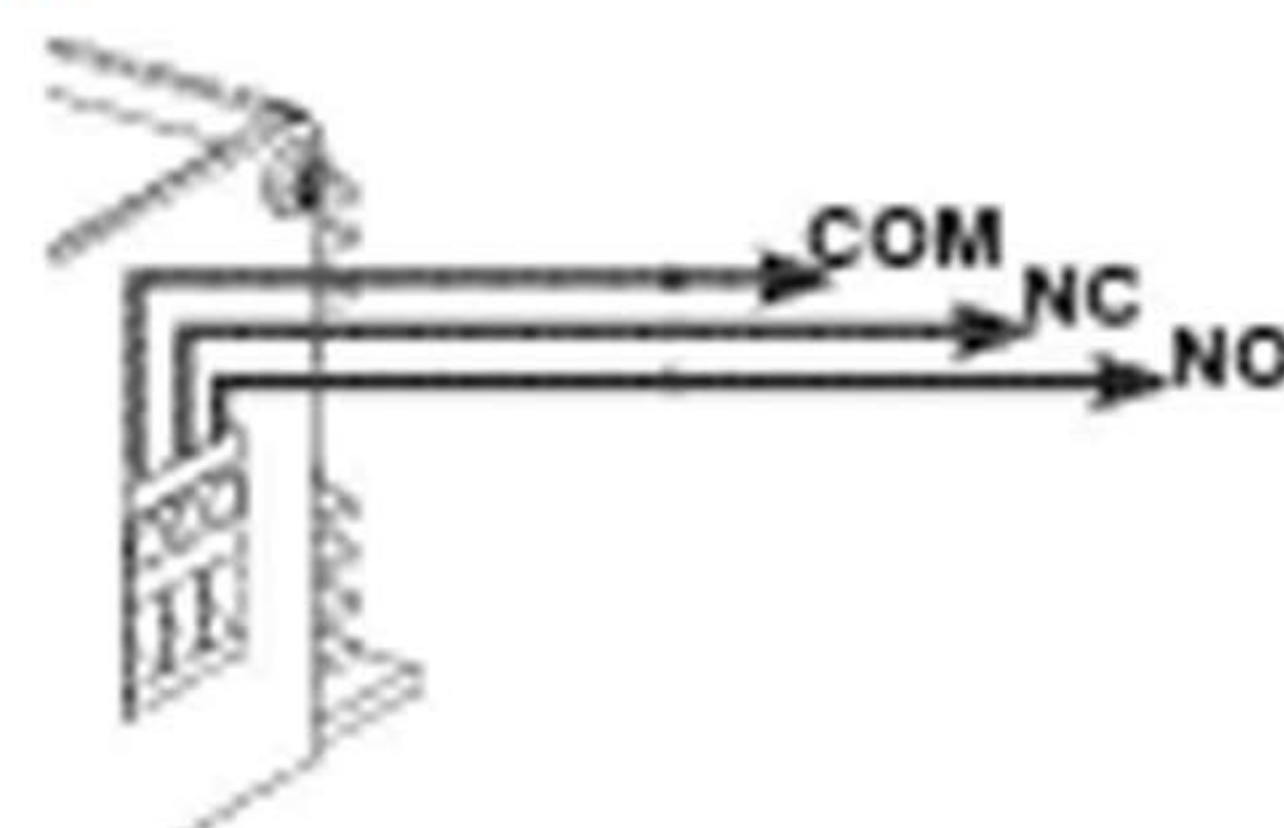
4) **Ballasts Failure:** Blank Screen

DRY CONTACTS

The Dry Contacts are typically used to operate solenoid valve. When lamp fails, the dry contact relay will be activated to operate solenoid valve, horn, buzzer or remote light. (NOTE: Any remote piece of equipment hooked up to the dry contacts must obtain their power from another source.)

These dry contacts can be wired for a normally open (NO) or normally closed (NC) operation. The dry contacts will remain either closed (NC) or open (NO) until UV lamp in normal operation.

Example: solenoid valve(normal closed) can be wired (NO), the valve will be closed when lamp fails.



Germicidal Lamp/Quartz Sleeve/Spring



Model	UV Lamp Part#	Power	BF to BF	Current	Quartz Sleeve Part#	Length	Spring Part#
PV1/PV1T	GPH212T5L/4-LT	10W	212mm	425mA	QS245	245mm	AB3177
PV2/PV2T	GPH287T5L/4-LT	14W	287mm	425mA	QS331	331mm	AB5288
PV4/PV4T	GPH330T5L/4-LT	19W	330mm	425mA	QS375	375mm	AB5288
PV6/PV6T	GPH436T5L/4-LT	24W	436mm	425mA	QS535	535mm	AB8255
PV8/PV8T	GPH645T5L/4-LT	32W	645mm	425mA	QS665	665mm	AB2006
PV12/PV12T	G36T5L/4-LT	39W	843mm	425mA	QS890	890mm	AB5288
PV18T	GHO422T5L/4-LT	40W	422mm	800mA	QS452	452mm	SP4446
PV24T	GHO512T5L/4-LT	50W	512mm	800mA	QS542	542mm	SP4446
PV35T	GHO702T5L/4-LT	65W	702mm	800mA	QS732	732mm	SP4446
PV42T	GHO36T5L/4-LT	80W	843mm	800mA	QS890	890mm	AB5288
PV52T	GHO1052T5L/4-LT	100W	1052mm	800mA	QS1082	1082mm	SP4446

- ★ Ultraviolet radiation in the 200-300 nanometer range is extremely effective in killing microorganisms
- ★ Aqualight low-pressure, mercury-arc germicidal lamps are specially designed to produce the highest amounts of UV radiation - typically about 90% of the total rated energy is at 253.7nm.
- ★ Lamp tube diameter 15mm, 10,000 hours Rated Life, 254nm Wavelength (185nm on Request), Standard Output Lamp 425mA, High Output Lamp 800mA



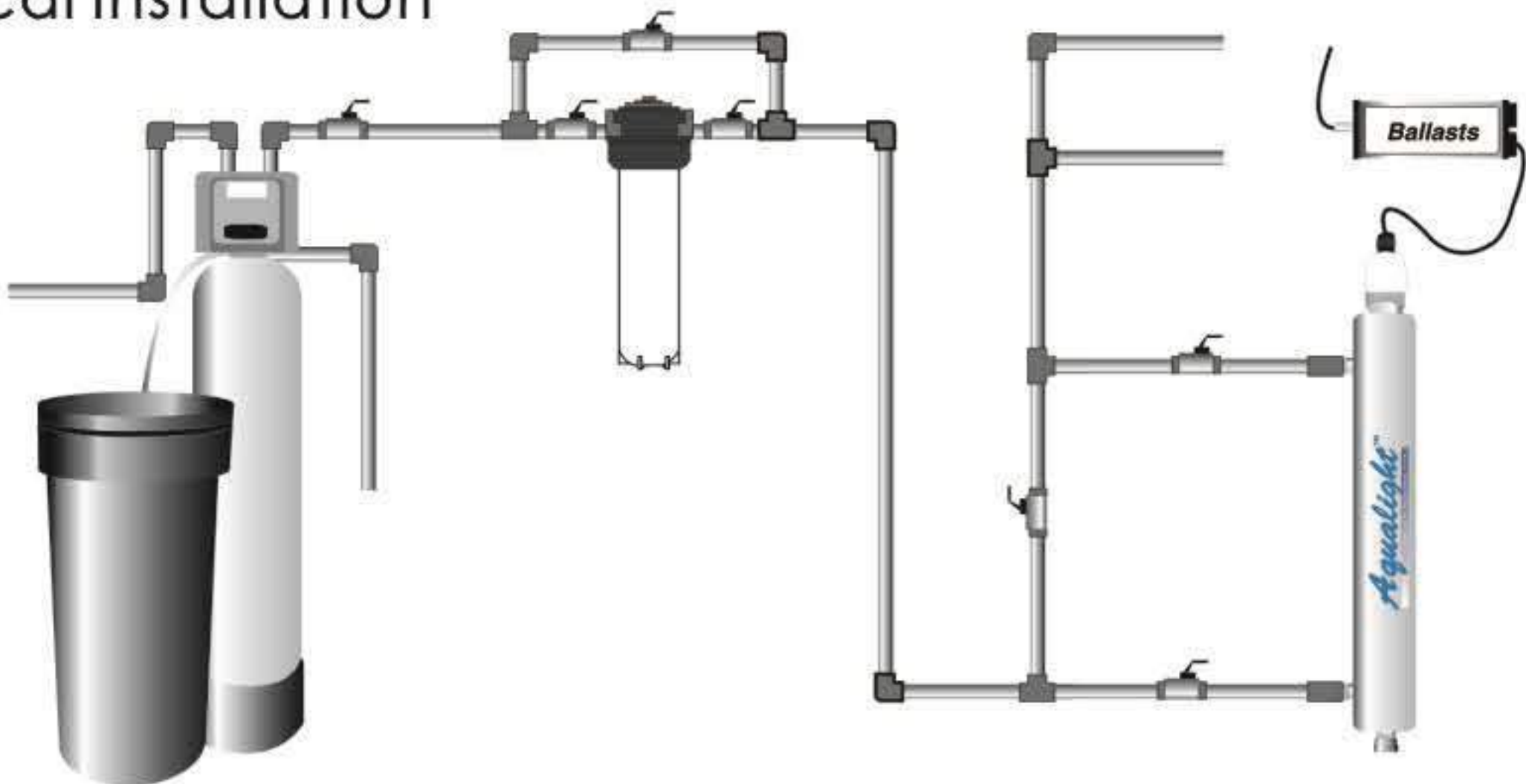
Accessories

 Sealing O-ring, Part#AB3022, , EPDM	 Protection Ring (washer), Part# AB3222, , Teflon	 Plastic Clips Mounting Bracket , Part#AB2000W for PV1 (T) Part#AB2500W, for PV2(T)-PV12(T)	 Aluminum Clamps Mounting Bracket, Part# ALC6320 for PV2(T)-PV12(T)
 Aluminum Clamps Mounting Bracket, Part# ALC8925 for PV18(T)-PV52(T)	 Gland Sealing Nut, Part#AB30140195	 Ended Sealing Nut, Part#AB30130190	 Insert Cap, Part#AB19

For Sales,Spare parts and Service Support Contact:



Typical Installation



Warranty Aqualight™ ultraviolet disinfection systems carry a TWO year warranty on the stainless steel reactor chamber, a one year warranty on UV lamp, quartz sleeve and other components.

