

UV System Sizing Questionnaire

for Aquatic Life Support Systems

Our sales representative will assist you with completing our UV Sizing Questionnaire. Once completed, we will have sufficient information about your unique application to begin the equipment sizing process. The information you will provide will be used to assess the appropriateness of using UV technology, and if so, the scope of a system that will meet your budgetary needs and germicidal disinfection objectives.

Submit this questionnaire with most recent water analysis and site drawing(s) with particular emphasis on hydraulic data.

CONTACT INFORMATION

Company: _____

Address: _____

Province/State: _____ Postal/Zip Code: _____ Country: _____

Primary Contact

Alternate Contact

Name: _____ Name: _____

Phone: _____ Phone: _____

Mobile: _____ Mobile: _____

Email: _____ Email: _____

FACILITY / APPLICATION INFORMATION

Facility Name: _____ Project Phase (1-100%) _____

Activity (check all that apply)

Broodstock ☐ Egg Production ☐ Hatchery ☐ Smolt/Nursery ☐ Grow-out ☐

Live Haul ☐ Retail ☐ Aquarium ☐ Water Feature ☐ Other ☐

WATER PROCESS DETAILS

Freshwater ☐ OR Saltwater ☐ (salinity _____ ppt)

Flow Through ☐ OR Recirc/Re-use ☐

Total Facility Volume: _____ Total Water Flow-rate: _____

Water Source

Well/Borehole ☐ Spring ☐ River ☐ Lake ☐ Open Sea ☐

Delivery System

Pump/s (size & type) _____ Gravity (head) _____ (ft ☐ m ☐)

Notes: _____

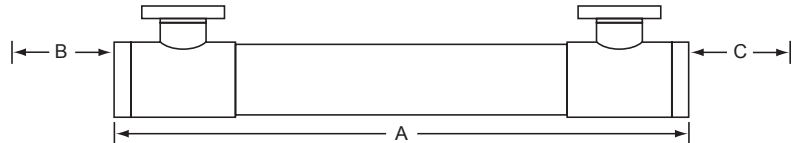
UV SYSTEM STYLE SELECTOR

Shell & Tube Style UV Systems are typically used in applications not exceeding 3,000 GPM (11,355 LPM). Shell & Tube UV Systems operate in-line and under pressure.

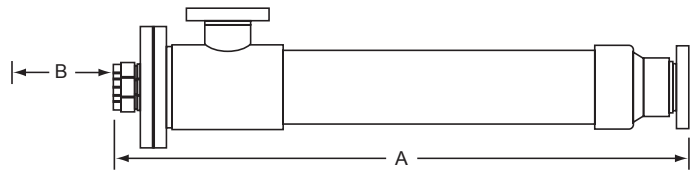
1. Required UV Dose: _____ mJ/cm²
2. Water Flow Rate: _____ mt/3h _____ U.S. GPM
3. Application Percent UV Transmittance: _____ %UVT
4. Electrical Requirement: _____ (3 Phase Supplied by Customer)

Dimensional

5. Required Space for Installation of UV Vessel is determined by evaluating: (A) Vessel Length, (B) Required Clearance for Lamp Change-Out and (C) Clearance Required for Quartz Sleeve Removal.



6. Required Space for Installation of UV System Remote Power Supply Enclosure is determined by evaluating enclosure dimensions, Input power cord length and lamp cable(s) length.



7. Establish Port Size/Style based on existing/planned plumbing.
8. Above diagrams demonstrate recommended vessel positioning. Failing to follow recommendation may result in damage to the vessel. *Always follow OEM/Instruction Manuals when installing/operating equipment systems.*

See Catalog or www.rk2.com for specific model specifications

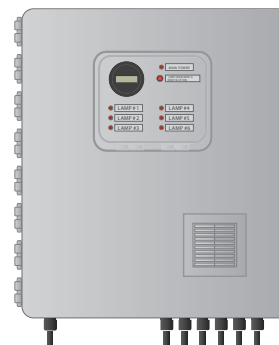
9. Select Control/Monitor

9A. Basic Control w/ Vessel Over-Temp. Safety Cut-off Switch

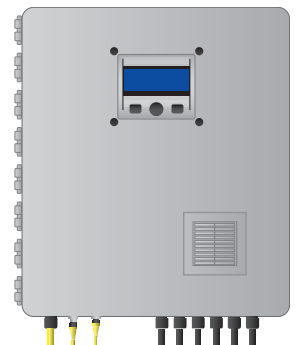
See Catalog or www.rk2.com for stand Basic Control features

9B. PLC (Programable Logic Control)

See Catalog or www.rk2.com for Standard and Optional controls



Basic Controls



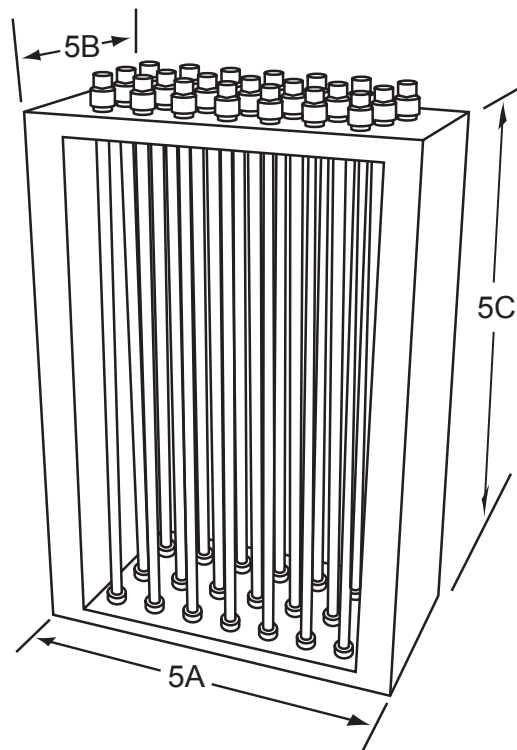
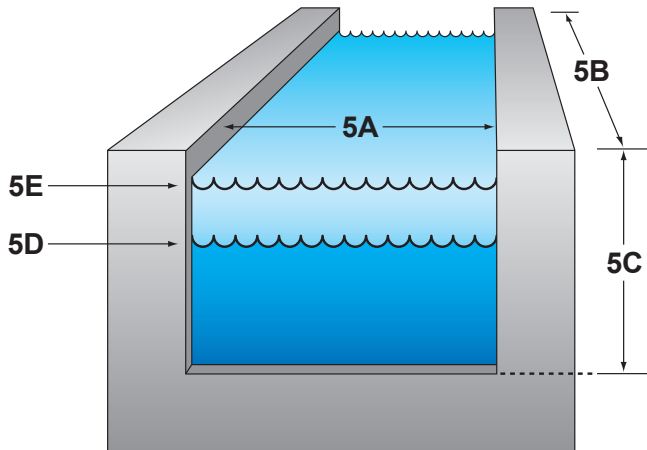
PLC Controls

Notes: _____

Open-Channel Style UV Systems are typically used with water flows exceeding 3,000 GPM (11,355 LPM). A channel is required to house the UV System “Channel-Frame”. The Channel-Frame is manufactured using the applications channel dimensions. The Channel-Frame is delivered to the customer and ready for installation into waiting channel. Weir(s) may be required to maintain a constant water level within the lamp array.

1. Required UV Dose: _____ mJ/cm2
2. Water Flow Rate: _____ mt/3h _____ U.S. GPM
3. Application Percent UV Transmittance: _____ %UVT
4. Electrical Requirement: _____ (3 Phase Supplied by Customer)

Dimensional



5. Channel Dimensions
 - 5A. Channel Width _____
 - 5B. Channel Length _____
 - 5C. Channel Depth _____
 - 5D. Minimum Water Level _____
 - 5E. Maximum Water Level _____

Note: Above information is required for calculating UV Lamp Array and frame dimensions.

6. Required Space for Installation of UV System Remote Power Supply Enclosure is determined by evaluating enclosure dimensions, Input power cord length and lamp cable(s) length.

7. Select Control/Monitor

- 7A. Basic Control w/ Vessel Over-Temp.
Safety Cut-off Switch

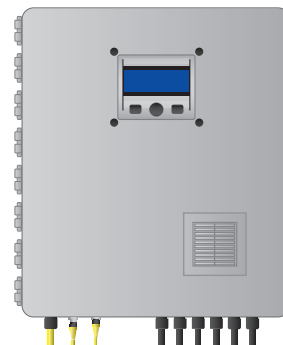
See *Catalog* or www.rk2.com
for stand **Basic Control** features

- 7B. PLC (Programable Logic Control)

See *Catalog* or www.rk2.com
for **Standard and Optional controls**



Basic Controls



PLC Controls

Notes: _____

Low-Head UV Reactors are considered when the applications water flow rate exceeds 3,000 GPM (11,355 LPM) and when a channel is not available.

1. Required UV Dose: _____ mJ/cm2
2. Water Flow Rate: _____ mt/3h _____ U.S. GPM
3. Application Percent UV Transmittance: _____ %UVT
4. Electrical Requirement: _____ (3 Phase Supplied by Customer)

Dimensional

5. Required Space for Installation of UV Vessel is determined by evaluating:
(A) Reactor Width, (B) Reactor Length, (C) Reactor Height and
(D) Clearance for UV Lamp & Quartz Sleeve Change-Out.

6. Required Space for Installation of UV System Remote Power Supply Enclosure is determined by evaluating enclosure dimensions, Input power cord length and lamp cable(s) length.

7. Establish Reactor effluent Head – Pressure Differential (not to exceed 12 ft./5 PSI).

8. Establish Port Size/Style based on existing/planned plumbing.

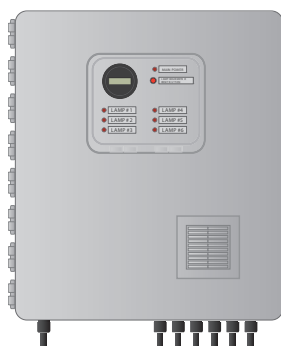
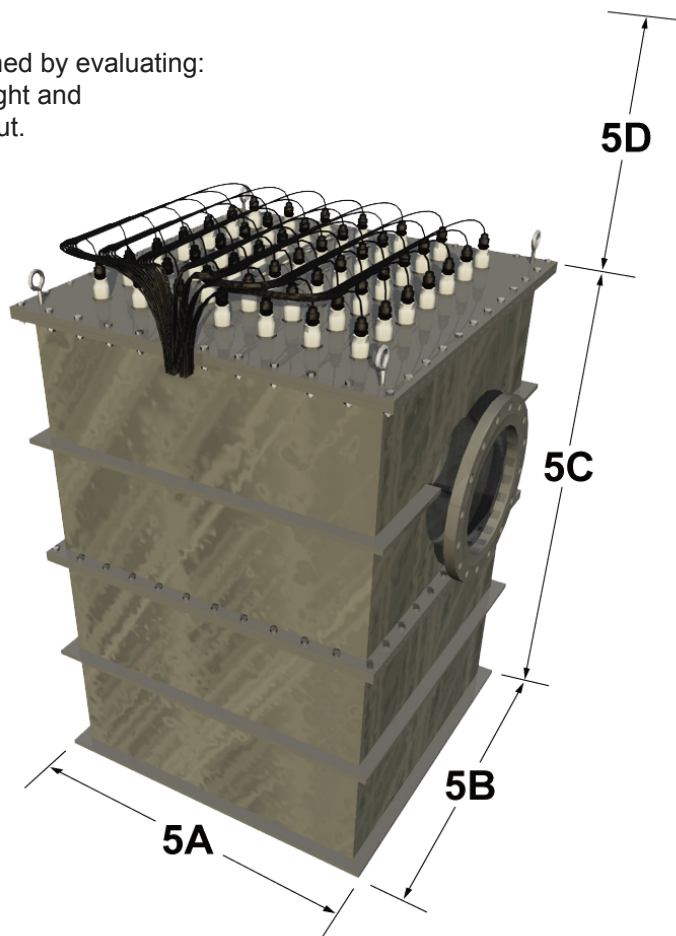
9. Select Control/Monitor

9A. Basic Control w/ Vessel Over-Temp.
Safety Cut-off Switch

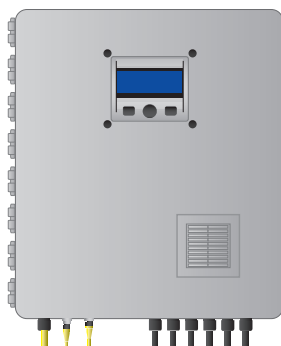
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9B. PLC (Programmable Logic Control)

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Basic Controls



PLC Controls

Notes: _____

