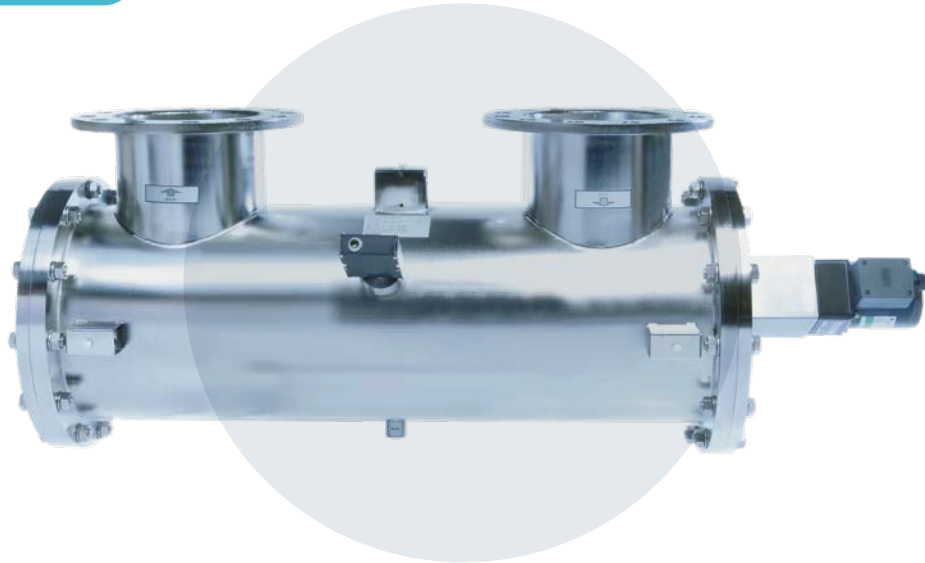


We UVCare...



RASLINE D PH

Application Optimized UV for Aquaculture



UV treatment for aquaculture

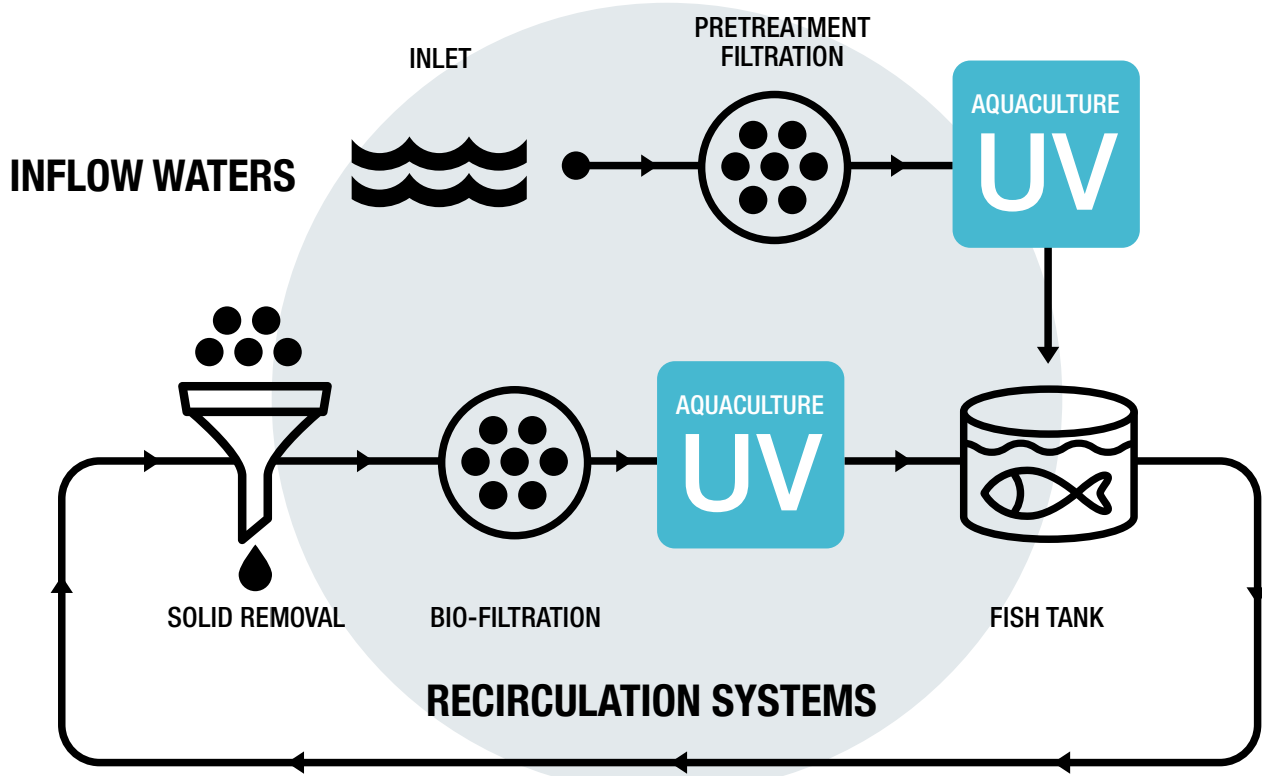
Our RASLine D PH systems are aimed specifically at providing UV disinfection for product and process waters used in the aquaculture industry. By using a UV system you will disinfect the water, eliminate harmful micro-organisms, reduce the bio-burden, protect against bio-fouling and lower operating costs. Each system comes with a UV monitor to measure the germicidal output of the UV system and make it easy to monitor and log performance.

berson

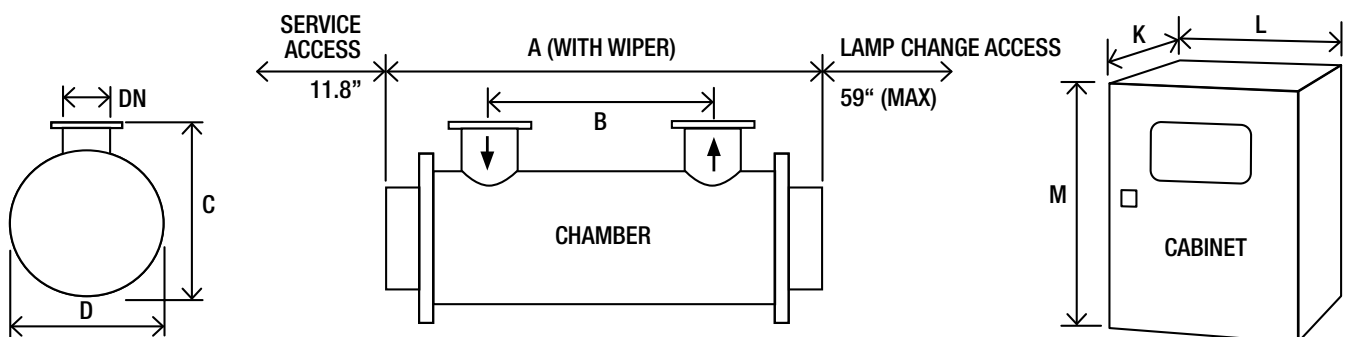
hanovia

aquionics

Potential locations of the RASLine D PH™ in a recirculating aquaculture system (RAS)



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring germicidal wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
OPTIMIZATION		
UV water disinfection	Protect your fish, your processes and the environment from harmful contamination without resorting to chemicals.	Proven performance No chemicals
Designed for the treatment of aquaculture water	Constructed of 316L stainless Steel wetted parts, also available in Super Duplex construction for sea water applications Automatic wiper (quartz cleaning)	Industry compliant materials Self cleaning
INTEGRATION		
Compact design	Can be fitted to skids Can be retrofitted to existing process	Easy integration



Model Number	Maximum Power (kW)	UVT (%)	Dimensions (Inches)								Approx weight (lb)	
			A	B	C	D	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
RASLine D PH 0060	1.6	85	33.5	9.4	12.6	9.4	3	13	29.5	33.5	88	187
RASLine D PH 0080	2.7	91	51.2	28	12.6	9.4	3	13	29.5	33.5	110	187
RASLine D PH 0083	2.7	91	51.2	28	12.6	9.4	4	13	29.5	33.5	110	187
RASLine D PH 0095	4.4	81	51.2	28	12.6	9.4	3	13	29.5	33.5	110	187
RASLine D PH 0100	4.4	81	51.2	28	12.6	9.4	4	13	29.5	33.5	110	187
RASLine D PH 0209	4.4	90	51.2	26	16.5	11.4	6	13	29.5	33.5	143	187
RASLine D PH 0240	5.8	84	51.2	26	16.5	11.4	6	13	35.4	43.3	143	187
RASLine D PH 0300	5.8	93	51.2	24	19.9	16.1	8	13	35.4	43.3	309	364
RASLine D PH 0400	16.5	62	51.2	26	16.5	11.4	6	13	43.3	63	143	622
RASLine D PH 0530	7.8	90	51.2	21.7	19.9	16.1	10	13	35.4	43.3	309	364
RASLine D PH 0550	16.5	62	51.2	24	19.9	16.1	8	13	43.3	63	309	622
RASLine D PH 0900***	25.2	62	51.2	21.7	19.9	16.1	10	13	35.4	43.3	309	364
								13	43.3	63		
RASLine D PH 0950***	33	62	51.2	24	19.9	16.1	10	13	43.3	63	309	622
								13	43.3	63		
RASLine D PH 0970***	33	76	51.2	19.7	19.9	16.9	12	13	43.3	63	353	622
								13	43.3	63		

* Allow dimension L in front of cabinet for door opening and panel access.

** M dimension includes the space for the cabinet mounting brackets but you need to allow space below the cabinet for cable entry and access (minimum of 9.8").

*** System consists of two cabinets; separate dimensions K, L, M and weights are given for each cabinet.

All dimensions are approximate for clearance purposes only. We have a policy of continuous product development, exact drawings are available on request.

All specifications are subject to change without notification. Your distributor or our account manager can advise on correct sizing and specification requirements.

UV CHAMBER	
Material:	Stainless steel 316L / 1.4404
Internal finish:	As made pipe and tube, welds as laid, electropolished and passivated
External finish:	Sateen polish (120 grit) electropolished and passivated
Process (mating) connections:	Flange EN 1092-1 PN16
Drain connection:	BSPT or NPT if ANSI flange
End plate:	Removable end plate
Degree of protection:	IP65 equivalent to NEMA 4 but not for outside use
Wiper:	Automatic (electrically driven)
UV lamp:	Medium pressure
Quartz sleeve:	Pure quartz (F200)
Number of UV lamps:	1 (D PH 0060-0300 and 0530), 4 (D PH 0400, 0550), 6 (D PH 0900), 8 (D PH 0950, 0970)
Expected lamp life:	8000 hrs, 4000 hrs D PH 0240, 0300 and 0530
Temperature sensor:	Yes
UV intensity sensor:	Wet UV monitor (if above minimum UVT)
Working fluid temperature:	33.8°F to 140°F
Hydrostatically pressure tested:	Yes
Chamber mounting:	Horizontal only
Operating pressure:	6 bar (positive pressure only)
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

OPTIONS	
Document Support Pack	
Cabinet material: Stainless steel 316	
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish	
Flange options: ANSI 150, JIS, Table 'E'	
Lead length: 65.6 ft, 98.4 ft or 164 ft cabinet to chamber	
Welder Document Pack for chamber construction	
Bleed valve (BSP or NPT if ANSI flange)	
Skid mounting (no ship board or earthquake valve)	
Operating pressure: 10 bar	
Power adjustment: 4 level power switching	
Halogen free cables	
Air vent connection: BSPT blanked off or NPT if ANSI flange	

OPTIONS (CONTINUED)	
Stainless steel cabinet with air to air heat exchangers IP 56, NEMA 4X, relative humidity <95% non condensing. If fitted no UL listing. See sales drawings for sizes.	
Aggressive water package: For 400 ppm to 20000 ppm chloride water	
UVShield™: Power cut-out for lamp access, for D PH 0060-0300 and 0530	
Water leak detection: Detects water leaks from quartz sleeve, for D PH 0060-0300 and 0530	
Quartz sleeve: doped quartz F240 (reduces performance)	

CABINET (CONTROLLER PHOTON)	
Material:	Polyester coated carbon steel
Degree of protection:	IP54 NEMA 12
Supply voltages:	D PH 0060-0083 95 V to 260 V (+/-10%) D PH 0095-0300 and 0530 190 V to 480 V (+/-10%) D PH 0400-0970 380 V to 480 V (+/-10%) 50/60 Hz
Operating temperature range:	41°F to 104°F
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	32.8 ft cabinet to chamber

CUSTOMER OUTPUTS	
4-20 mA passive or active output:	UV intensity % or dose if Power stepping option
VFC outputs:	System warning, lamp ready, low UV intensity, common trip, remote reset, ELCB or water leak, system available, local or remote mode

CUSTOMER INPUTS	
4-20 mA passive or active output:	Flow meter
VFC inputs:	Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT	
None	

APPROVALS	
CE marked, UL Listed E14 9108	



RASLINE D PH

Also available in our Aquaculture product range...



RASLINE D EO

Energy Optimized general disinfection
suitable for clear waters



RASLINE PQ IL

3rd party NVI validated systems for
critical disinfection requiring approvals
and a wide range of UVT applications.



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