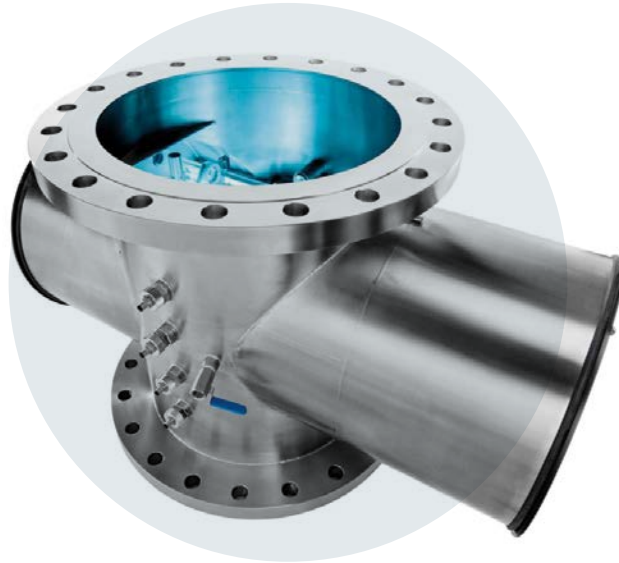


We UVCare...



UV SWIM I

## Application Optimized UV for Pools & Leisure



Optimized UV  
treatment for pools  
and spas

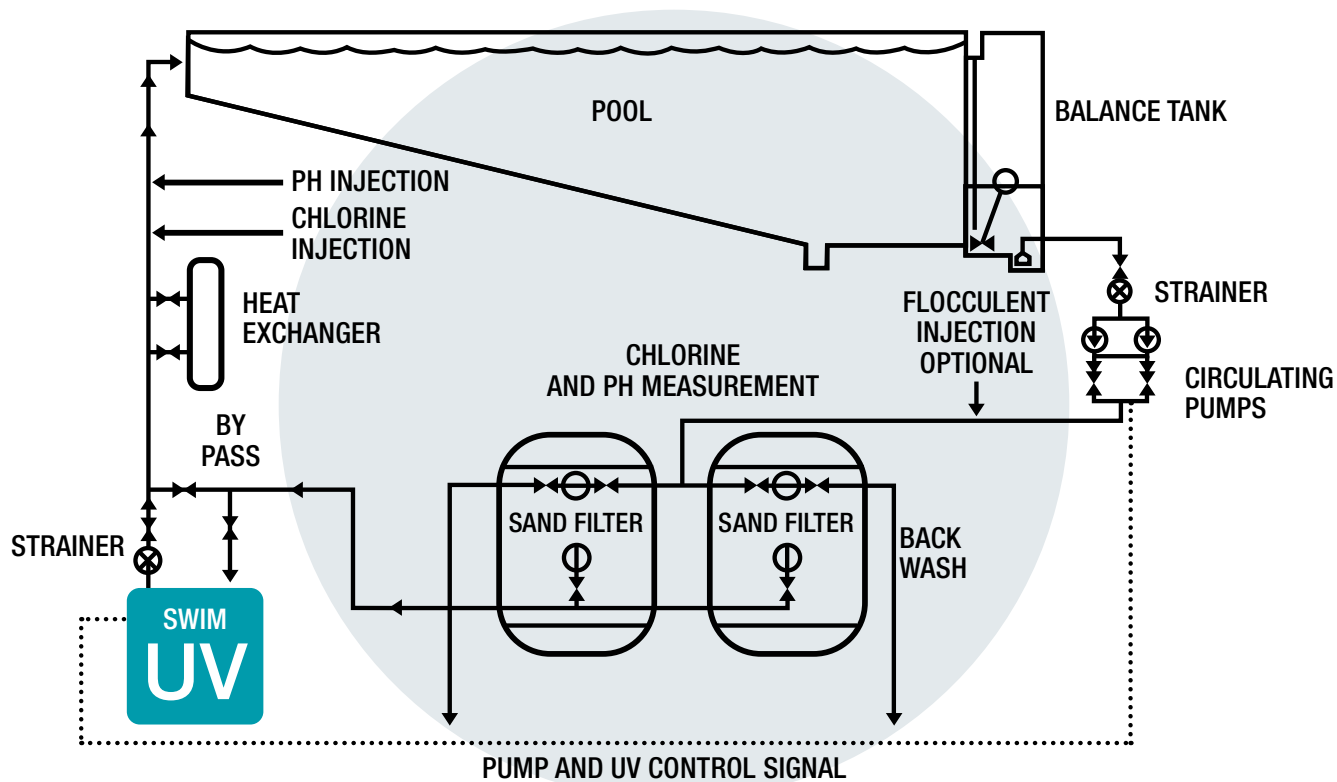
Our UV Swim I systems are NSF50 listed and are third party validated to meet the Model Aquatic Health Code (MAHC), US EPA UVDGM and DVGW requirements. The system are optimized to deliver effective treatment (chlorine removal and disinfection) for all leisure facilities from spas through to large competition pools. By using medium pressure lamps we break down not only monochloramine but also di- and trichloramine which are responsible for eye and skin irritation, headaches and unpleasant odours. Using UV in the water treatment process provides bathers and staff with a pleasant and safe environment. UV has the added advantage of being effective against chlorine resistant microorganisms such as *Cryptosporidium* and is up to 5 times cheaper to maintain and occupies only 1/10th of the space of ozonation equipment.

berson

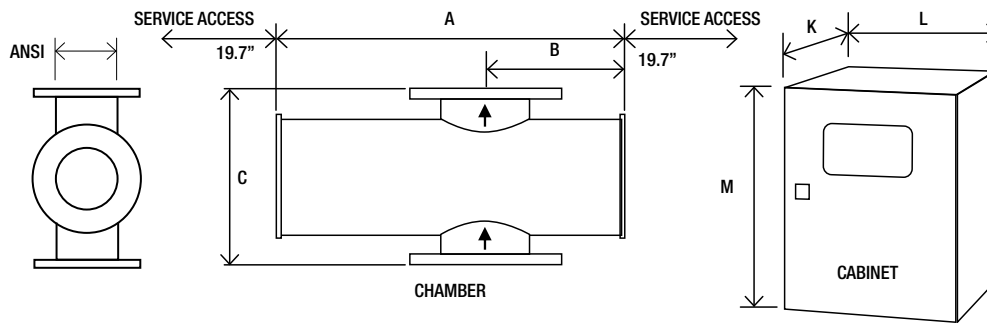
hanovia

aquionics

# UV Swim I Flow diagram for single pool with UV treatment



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
<b>INTELLIGENCE</b>		
Dry DVGW approved UV sensor measuring germicidal wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
Flow meter input and UV transmittance (UVT) meter input	Stepless adjustment of lamp power based on real time operating conditions	Optimized use of energy, saving operating costs
<b>OPTIMIZATION</b>		
Medium pressure lamps	Provides UV light at 200 to 400 nm wavelengths ideal for the destruction of mono-, di- and trichloramine	Visibly clear water with reduced odours
		Reduced building corrosion risk
Automatic wiper (quartz cleaning)	Self cleaning	Minimizes bathers' eye and skin irritation
		Protect bathers from chlorine resistant microorganisms such as <i>Cryptosporidium</i> or <i>Giardia</i>
	Lower Maintenance cost and maintenance time	Reduced operating costs
<b>INTEGRATION</b>		
Designed specifically for pools	Compact design	Easy integration



\* 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").  
 \*\*\* CC: Control cabinet, PC: Power cabinet  
 ⚠ Attention: the optional cabinet with A/C is bigger. Ask for dimensions.  
 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.

					Dimensions (Inches)								Approx weight (lb)	
					Chamber				Cab.	Cabinet (fan cooled) <sup>a</sup>			Chamber	Cabinet
Model Number	Max Flow (gpm) MAHC	Max Flow (gpm) 60mJ avg dose	Max power (kW)	No of lamps	A	B	C	ANSI	No <sup>***</sup>	K*	L	M**	Empty	Fan cooled
UV Swim I-100+	123	136	1.7	2	30.7	12.2	15.7	4	1	11.8	31.5	39.4	93	110
UV Swim I-200+	252	431	2.5	1	30.7	12.2	15.7	6	1	11.8	31.5	39.4	110	121
UV Swim I-450+	1453	933	5	2	30.7	12.2	15.7	8	1	11.8	39.4	47.2	172	176
UV Swim I-1000+	1734	1849	10	4	30.7	12.2	15.7	8	1	11.8	39.4	47.2	172	220
UV Swim I-4000+	5063	4755	16	4	35.3	14.5	21.6	14	1	23.6	39.4	82.7	331	397

UV CHAMBER	
Material:	StSt 316L / 1.4404
Internal finish:	< 0.8 µm Ra, welds as laid, electropolished and passivated
External finish:	Brushed to K280, electropolished and passivated
Process (mating) connections:	ANSI 150
Drain connection:	NPT
Air vent connection	NPT
End plate:	Removable end plate
Degree of protection:	IP54 equivalent to NEMA 12, but not for outside use
Wiper:	Automatic (electrically driven)
UV lamp:	Medium pressure
Quartz sleeve:	Doped quartz
Number of UV lamps:	see table above
Expected lamp life:	9000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor
Working fluid temperature:	33.8°F to 140°F
Hydrostatically pressure tested:	Yes
Chamber mounting:	Flow horizontal or vertical (lamps 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	
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German & Spanish	
Lead length: 65.5 ft and 95.1 ft	
In-field UV reference sensor kit	
Aggressive water package: For 400 ppm to 20000 ppm chloride water	
Water leak detection: Detects water leaks from quartz sleeve	
Water level sensor: UV chamber full water detection	

CABINET (FAN COOLED)	
Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	UV Swim I 100-1000 200-277V (+/- 10%) (2ph L1, L2 or 1ph L1+N) UV Swim I 4000 380-480V (-5/+10%) (3ph L1, L2, L3) 50/60 Hz
Operating temperature range:	41°F to 95°F
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	32.8 ft to chamber
Variable power:	Stepless variable power (70% reduction from maximum ballast power)

HMI / CONTROL	
Display:	4 line LCD, indicating system status including alarms
Operating menu:	3 levels (2 with password protection)
Fault finding:	Event log

CUSTOMER OUTPUTS	
4-20 mA passive output:	UV intensity, ballast power
VFC outputs:	Standby in remote, system standby, system cooling down, any trip, any warning, UV intensity failure, system ready, wiper failure, lamp failure, water leak, water temperature warning, water & cabinet temperature alarm

CUSTOMER INPUTS	
4-20 mA active or passive inputs:	Flow meter UVT meter
VFC inputs:	Remote stop/start, remote clear message, remote wipe, remote set power high

CUSTOMER COMMUNICATIONS PORT	
Modbus RS 485 serial RTU for SCADA connection	

APPROVALS	
UL 508A shop, CE Marked, US EPA UVDGM, MAHC, DVGW	



**UV SWIM I**

Also available in our Pools & Leisure product range...



**UV SWIM U**

Standard disinfection and  
dechloramination



**[www.weuvcare.com](http://www.weuvcare.com)**

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