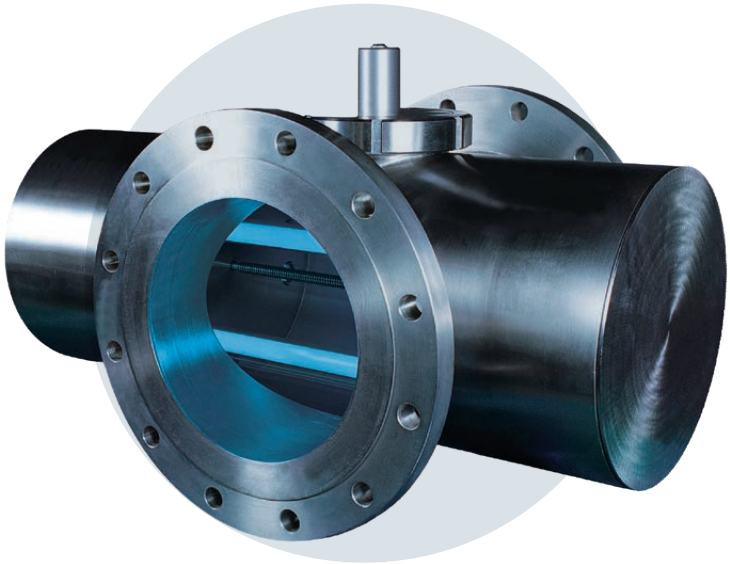
We UVCare...

Application Optimised UV for Pools & Leisure

SWIMLINE PQ IL

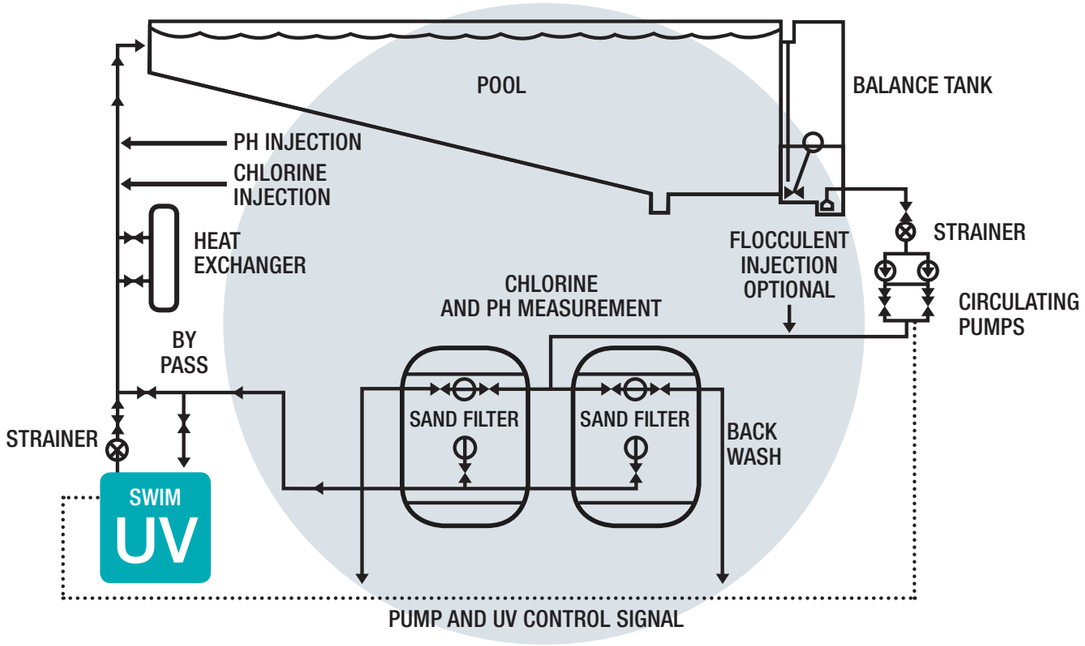


Optimised UV treatment for pools and spas

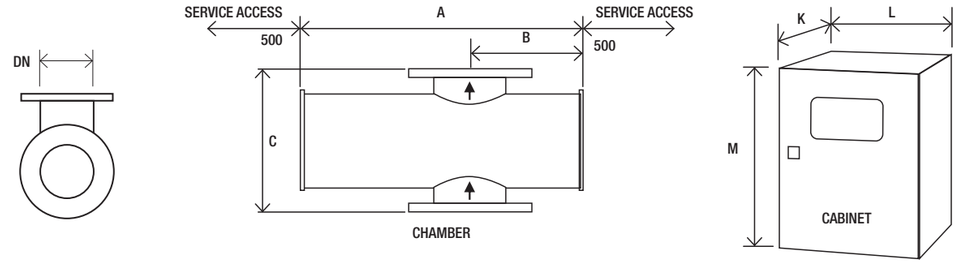
Our SwimLine PQ IL UV systems are optimised to deliver effective treatment (chloramine removal and disinfection) for all leisure facilities from spas through to large competition pools. By using medium pressure lamps we break down not only monochloramine but also di- and trichloramine which are responsible 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

SwimLine PQ IL™ Flow diagram for single pool with UV treatment



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
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	Stepless adjustment of lamp power based on real time operating conditions	Optimised use of energy, saving operating costs
OPTIMISATION		
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 corrosion risk
		Minimises bathers' eye and skin irritation
	Provides germicidal wavelengths to disinfect the water	Protect bathers from chlorine resistant microorganisms such as *Cryptosporidium* or *Giardia*
	Lower maintainance cost compared to multi-lamp system	Reduced operating costs
Automatic wiper (quartz cleaning)	Self cleaning	
INTEGRATION		
Designed specifically for pools	Compact design	Easy integration



			Dimensions (mm)								Approx weight (Kg)	
			Chamber				Cab.	Cabinet (fan cooled)[a]			Chamber	Cabinet
Model Number	Max. power (kW)	No of lamps	A	B	C	DN	No***	K*	L	M**	Empty	Fan cooled
SwimLine PQ IL 100	1.8	2	780	310	400	100	1	300	800	1000	42	50
SwimLine PQ IL 4000	17.5	4	896	368	550	350	1	600	1000	2100	150	180

* 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 250 mm).
*** CC: Control cabinet, PC: Power cabinet
[a] 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.

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:	Flange EN 1092-1 PN10
Drain connection:	BSPT Socket
End plate:	Removable end plate
Degree of protection:	IP54 equivalent to NEMA 12, but not for outside use
Wiper:	Automatic (electrically driven)
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Doped quartz
Number of arc tubes (lamps):	see table above
Expected lamp life:	9000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor
Working fluid temperature:	1°C to 60°C
Hydrostatically pressure tested:	Yes
Chamber mounting:	Flow horizontal or vertical (lamps horizontal only)
Operating pressure:	6 bar
Pressure loss:	Typically < 70 mbar
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

OPTIONS
Document Support Pack
Cabinet material: Stainless steel 304 IP56 (NEMA 4x)
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German & Spanish
Flange options: PN16, ANSI 150, JIS, Table 'E' and tri-clamp
Lead length: 20 and 29 m
In-field UV reference sensor kit
Aggressive water package: For 400 ppm to 20000 ppm chloride water
Control cabinet: Air conditioning in stainless steel raises control ambient limit to 50°C (in shade) IP rating 65 (NEMA 4X)
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:	PQ IL 100: 200-277 V (2ph L1,L2 or 1ph L1+N) PQ IL 4000: 400-480 V (3ph L1, L2, L3) 50/60 Hz (voltage tolerance ±10% of nominal)
Operating temperature range:	5°C to 35°C
Relative humidity:	<95% non-condensing
Cooling fans:	Yes
Interconnecting cable:	10 m 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
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
CE marked, UL 508A shop

SWIMLINE PQ

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

SWIMLINE PH

Standard disinfection and dechloramination

www.weuvcare.com

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