formerly Aquionics, Berson, Hanovia and Orca GmbH

SwimLine PQ IL

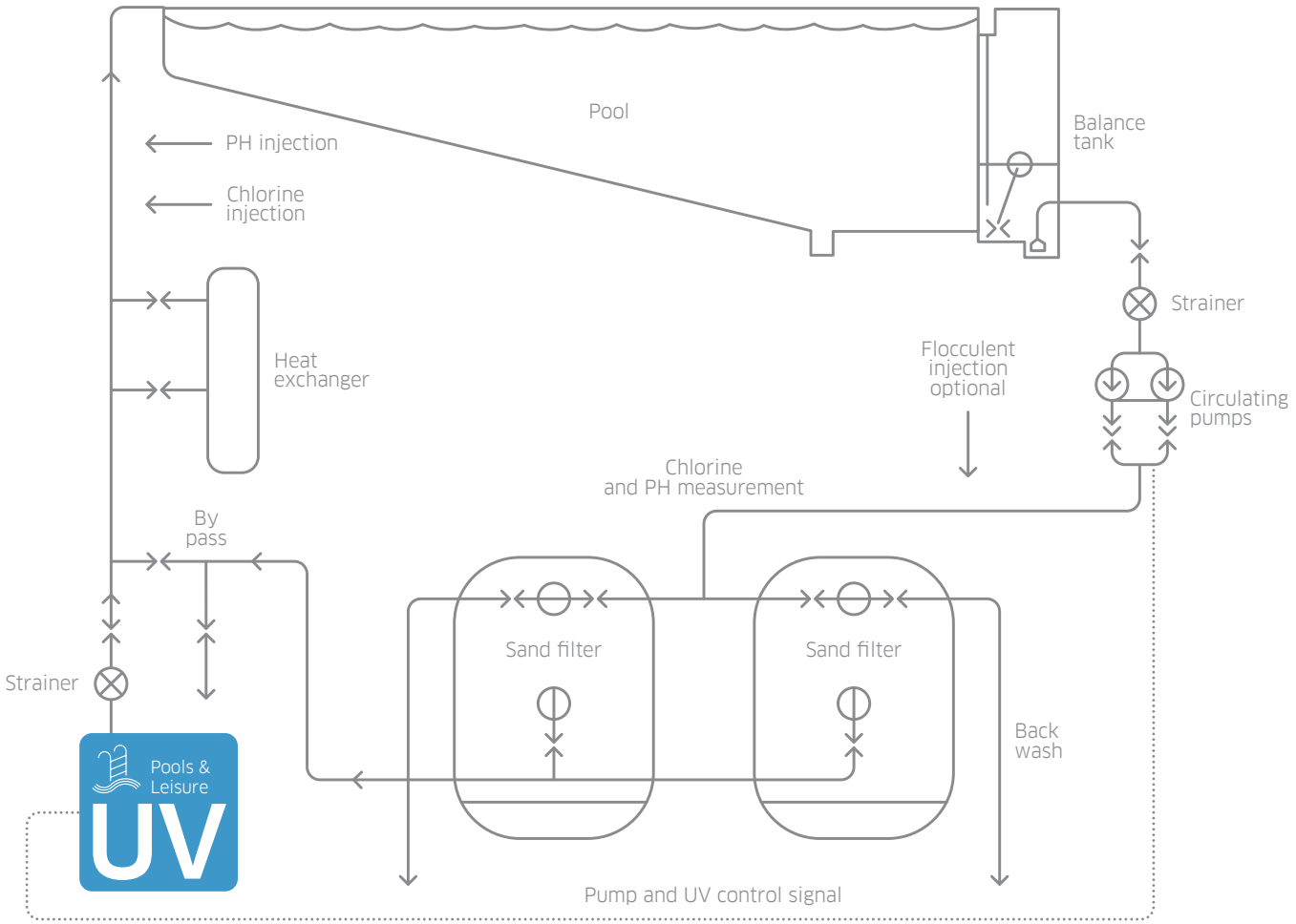
OPTIMISED UV TREATMENT FOR POOLS AND SPAS

Our **SwimLine PQ IL** UV systems are optimised to deliver effective chloramine removal and treatment for all leisure facilities, from spas to large competition pools. UV lamps break down monochloramine, di- and trichloramine, which can cause eye and skin irritation, headaches and unpleasant odours.

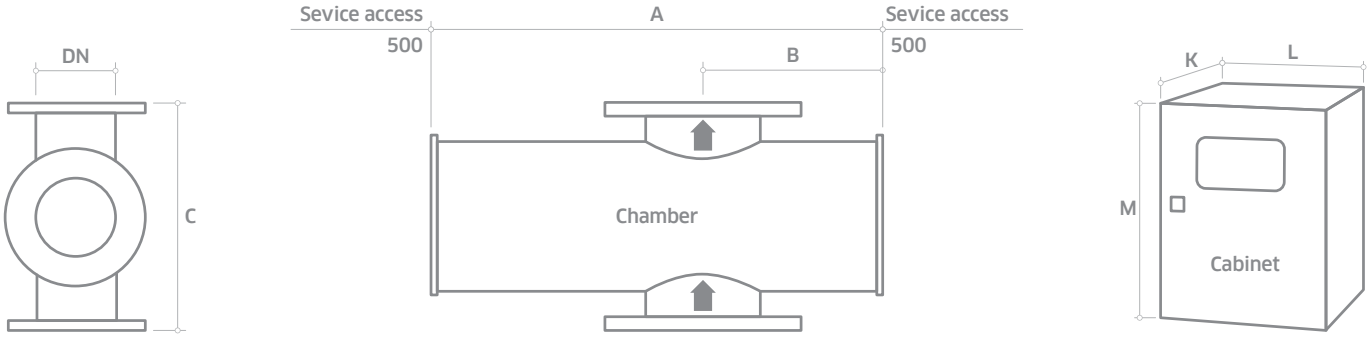
UV also has the added advantage of deactivating chlorine resistant Cryptosporidium and is up to 5 times cheaper to maintain and occupies only 1/10th of the space of ozonation equipment.

Application
Optimised UV for
Pools & Leisure

SWIMLINE PQ IL™ - SINGLE POOL WITH UV TREATMENT



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV sensor	Continuous verification of performance with in-built low dose alarm	Easy to monitor and log system performance
Flow and UV transmittance (UVT) 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 building corrosion risk
		Minimises bathers' eye and skin irritation
	Provides active wavelengths to treat the water	Protects bathers from chlorine resistant Cryptosporidium and 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



MODEL NUMBER	MAX POWER (KW)	NO OF LAMPS	DIMENSIONS (MM)								APPROX WEIGHT (KG)	
			Chamber				Cab.	Cabinet (fan cooled)a			Chamber	Control Cabinet
			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

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.
* 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).

UV CHAMBER

Material:	StSt 316L / 1.4404
Internal finish:	< 0.8 µm Ra, welds ground out, electropolished and passivated
External finish:	Brushed to K280, electropolished and passivated
Process (mating) connections:	Flange EN 1092-1 PN10
Drain connection:	BSPT Socket or NPT if ANSI flange
Air vent connection:	BSPT Socket or NPT if ANSI flange
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 (F240)
Number of arc tubes (lamps):	see table above
Expected lamp life:	12000 hours
Temperature sensor:	Yes
UV sensor:	Calibrated DVGW compliant dry sensor
Working fluid temperature:	1°C to 60°C
Strainer	Yes
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

Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German & Spanish
Flange options: PN16, ANSI 150, JIS, Table 'E'
Lead length: 20 and 29 m
In-field UV reference sensor kit
UL 508A
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 (CONTROLLER UVTRONIC)

Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	PQ IL 100: 208-277V (+/-10%) 1L+N, 2L, 3L 50/60 Hz 360-480V (-5/+10%) 3L+N, 50/60 Hz PQ IL 4000: 380-480V (-5/+10%) 3L, 3L+N 50/60 Hz
Operating temperature range:	5°C to 35°C
Relative humidity:	<85% 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, UV dose
VFC outputs:	Standby in remote, system standby, system cooling down, any trip, any warning, UV intensity or dose 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 and UV transmittance 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

SwimLine PQ

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

SWIMLINE PH

Standard treatment and dechloramination

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A Halma company

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