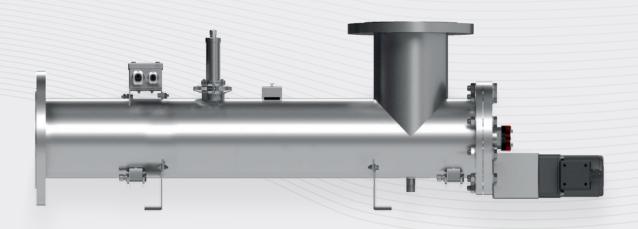


formerly Aquionics, Berson, Hanovia and Orca GmbH



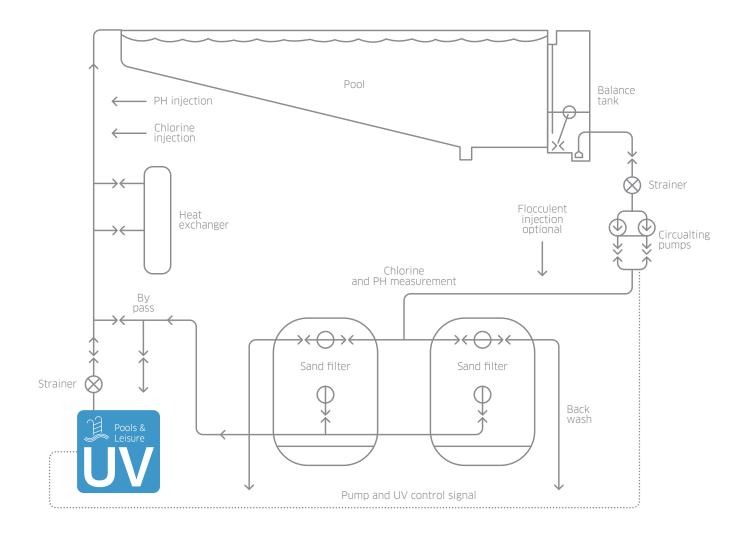
SwimLine PQ EO

INDEPENDENTLY
VALIDATED AND
OPTIMISED UV
TREATMENT FOR
POOLS AND SPAS

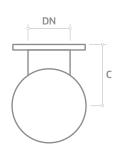
Our SwimLine PO EO UV systems are optimised to deliver effective treatment (chloramine removal and treatment) for all leisure facilities from spas through to large competition pools. By using medium pressure lamps we break down not only monochloramine but also di- and trichloramine which are responsible for eye and skin irritation, headaches and unpleasant odours. 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. Energy optimisation and single lamp designs provide the lowest cost of ownership whilst validations provide peace of mind.

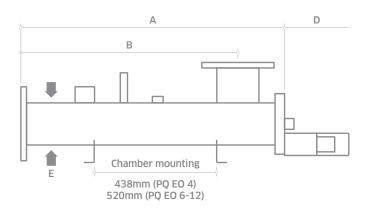


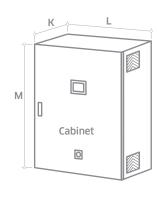
SWIMLINE PQ EO™ SINGLE POOL WITH UV TREATMENT



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				
UVGuard™ on UV sensor window	Protects against UV exposure when checking a UV duty sensor with a reference sensor while the system is operating	Ability to safely audit the UV performance without interrupting production				
Flow and UV transmittance (UVT) meter inputs	Stepless adjustment of lamp power based on real time operating conditions	Optimised use of energy, saving operating costs				
OPTIMISATION						
Single medium pressure lamp	Provides UV light at 200 to 400 nm wavelengths ideal	Visibly clear water with reduced odours				
	for the destruction of mono-, di- and trichloramine	Reduced building corrosion risk				
		Minimises bathers' eye and skin irritation				
	Provides germicidal wavelengths to treat 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	UVShield™ power cut-out for lamp access (option)	Enhanced operator safety when changing a lamp				
	Water leak detection (option)	Increased bather safety when used with a strainer				
	RS 485 Industrial Ethernet	Easy integration to building management systems				







MODEL NUMBER	MAX POWER (KW)	MIN T10(%)	DIMENSIONS (MM)						APPROX	APPROX WEIGHT (KG)				
	Starting		Chamber			Control Cabinet (fan cooled)			Chamber	Control Cabinet				
			А	В	С	D	E	DN	K*	L	M**	(Empty)	Fan cooled	With A/C
SwimLine PQ EO 4	4.5	80	1009/1232 with motor	823	165	900	114	100	400	800	1200	30	96	120
SwimLine PQ EO 6	4.5	80	1035/1286 with motor	850	245	950	168	150	400	800	1200	44	96	120
SwimLine PQ EO 8	4.5	80	1110 /1361 with motor	875	320	1000	210	200	400	800	1200	65	96	120
SwimLine PQ EO 10	4.5	80	1190/1441 with motor	903	430	1100	273	250	400	800	1200	96	96	120
SwimLine PQ EO 12	6.8	80	1430 /1685 with motor	1093	475	1325	324	300	400	800	1200	145	96	120

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:	As made pipe and tube, welds as laid, electropolished and passivated
External finish:	BS EN 10088-2 or 10088-3, 1J or 2J and ASTM No. 4
Process (mating) connections:	Flange EN 1092-1 PN16
Drain connection:	BSPT
End plate:	Removable end plate
Degree of protection:	IP65 equivalent to NEMA 4 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):	1
Expected lamp life:	9000 hours
Temperature sensor:	Yes
UV sensor:	Calibrated DVGW compliant dry sensor with UVGuard™ sensor window
Working fluid temperature:	1°C to 60°C
Strainer:	Yes
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
Chamber mounting:	Horizontal only
Operating pressure:	6 bar (positive pressure only)
Seals:	EPDM, DVGW-W270 D1 and D2, NSF 51 and 61 approved

Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish Flange options: ANSI 150 (NPT drain), JIS and Table 'E' Lead length: 20 and 29 m Skid mounting (not ship board or earthquake zone) Air vent: connection capped UVShield™: Power cut-out for lamp access Water leak detection Aggressive water package: For 400 ppm to 20000 ppm chloride water UL 508A In field UV reference sensor kit

CABINET (CONTROLLER UVTC)UCH™)
Material:	Polyester coated carbon steel
Degree of protection:	IP55 / NEMA 12
Supply voltages:	380 V to 480 V (-5% to +10%), 50/60 Hz
Operating temp range:	5°C to 40°C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
CABINET (GENERAL)	
Ballast power adjustment:	Stepless variable power (30 to 100% of maximum ballast rating)
Interconnecting cable:	10 m cabinet to chamber
CUSTOMER OUTPUTS	
4-20 mA passive outputs:	UV intensity, UV dose and chamber temperature
VFC outputs:	Lamp ready (enable flow), System running, Common warning, Common trip, Low UV warning, Water leak detected, System in remote
CUSTOMER INPUTS	
4-20 mA passive inputs:	Flow meter and transmittance meter
VFC inputs:	Remote stop/start, Remote reset, Reduce power
24 V dc pulsed inputs:	Start and stop
CUSTOMER COMMUNICATION	IS PORT
RS 485:	Industrial Ethernet
ADDBOVALS	

CE marked, USEPA (UVDGM) for Cryptosporidium reduction



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



Standard treatment and dechloramination

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A Halma company

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