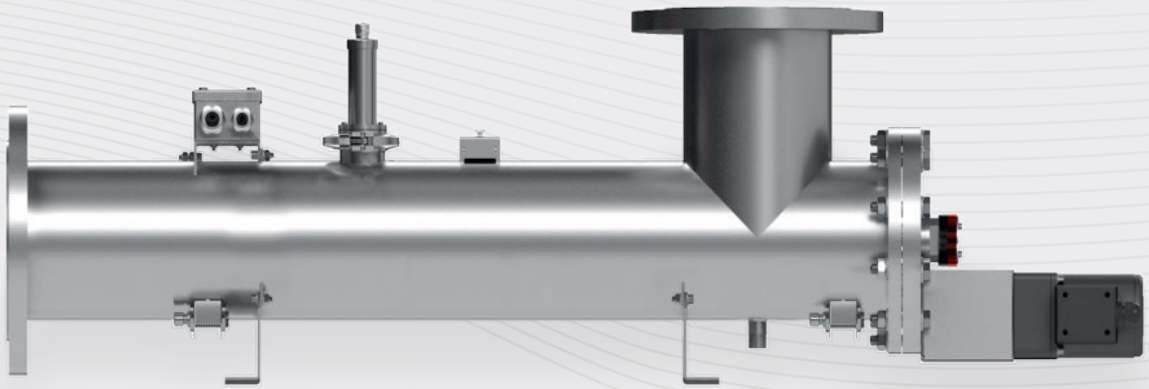
NUVONIC

formerly Aquionics, Berson, Hanovia and Orca GmbH



SwimLine PQ EO

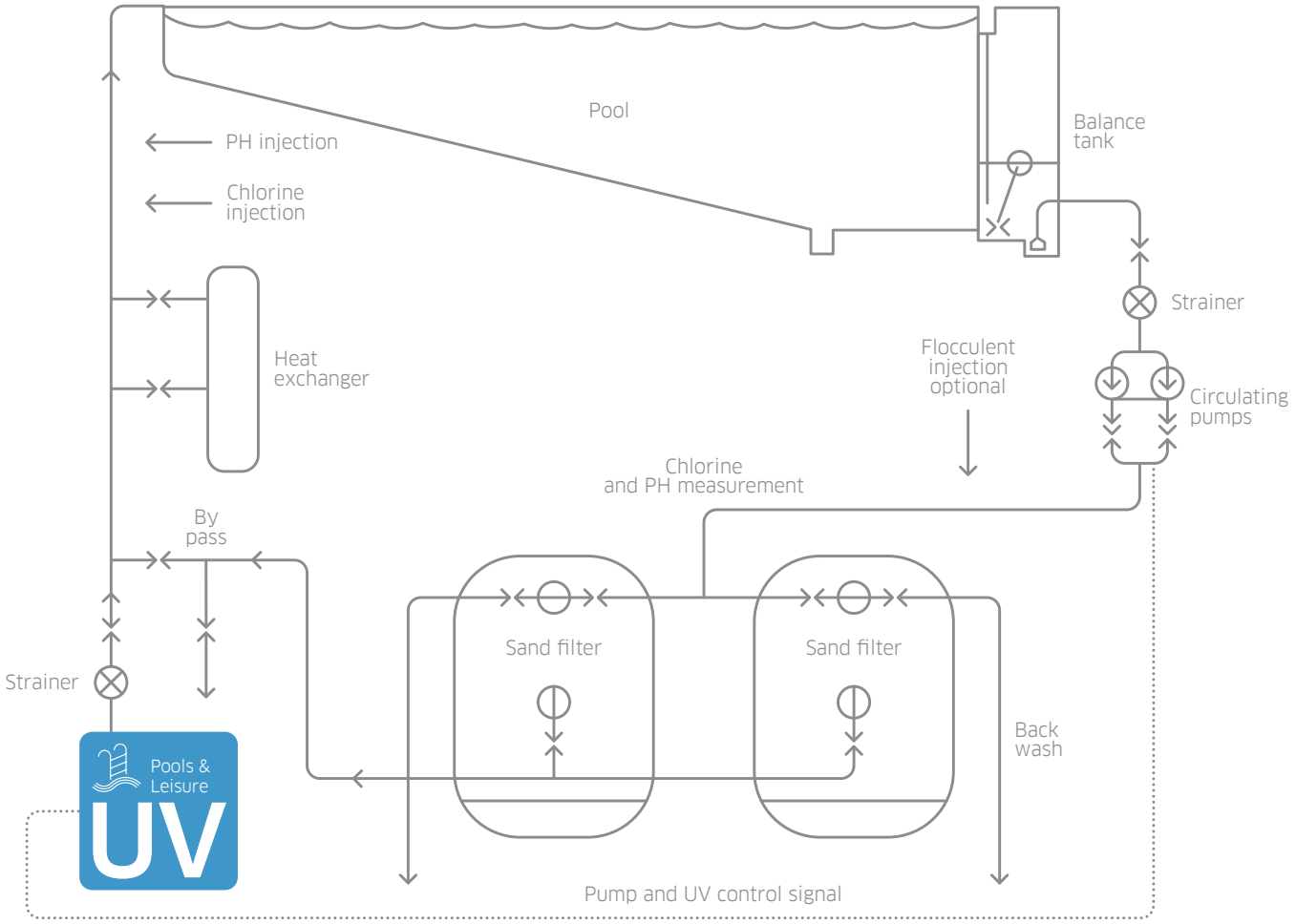
INDEPENDENTLY VALIDATED AND OPTIMISED UV TREATMENT FOR POOLS AND SPAS

Our **SwimLine PQ EO** UV systems are optimised to deliver effective chloramine removal and treatment for all leisure facilities, from spas to large competition pools.

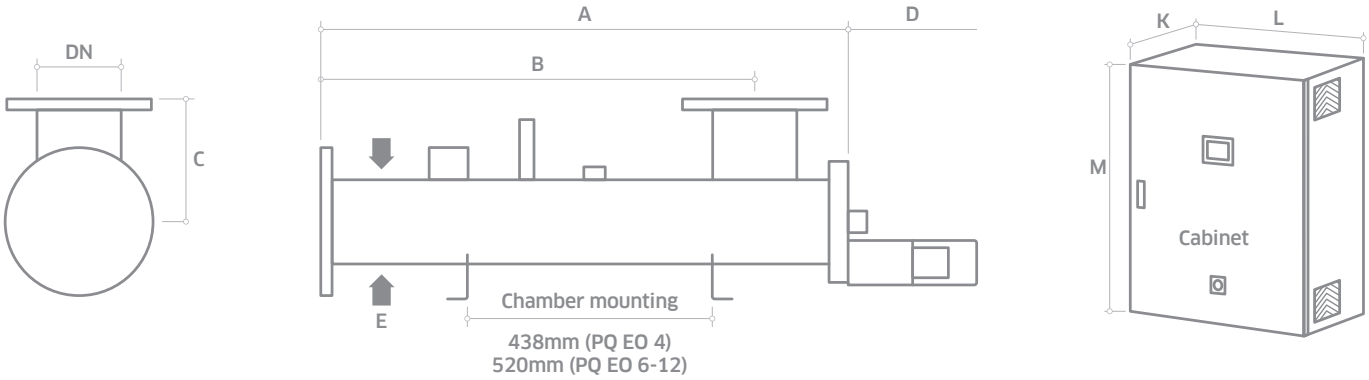
UV is effective against chlorine resistant microorganisms such as Cryptosporidium and is up to 5 times cheaper to maintain and occupies only 1/10th of the space of ozonation equipment. Energy optimisation and single lamp designs provide the lowest cost of ownership and validations provide peace of mind.

Application
Optimised UV for
Pools & Leisure

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 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	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 WEIGHT (KG)		
	Starting		Chamber						Control Cabinet (fan cooled)			Chamber	Control Cabinet	
			A	B	C	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:	Stainless Steel 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:	10,000 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

OPTIONS
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 shipboard 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 UVTOUCH™)	
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 COMMUNICATIONS PORT	
RS 485:	Industrial Ethernet

APPROVALS
CE marked, USEPA (UVDGM) for Cryptosporidium reduction

SwimLine PQ

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

Standard treatment and dechloramination

China
+86 21 6167 9599
apac@nuvonic.cn

Malaysia
+60 16 440 8834
sea@nuvonicuv.com

United Kingdom
+44 175 351 5300
emea@nuvonicuv.com

Germany
+44 175 351 5300
emea@nuvonicuv.com

NUVONIC

A Halma company

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