

We UVCare...

Application Optimised UV for Waste Water Reuse



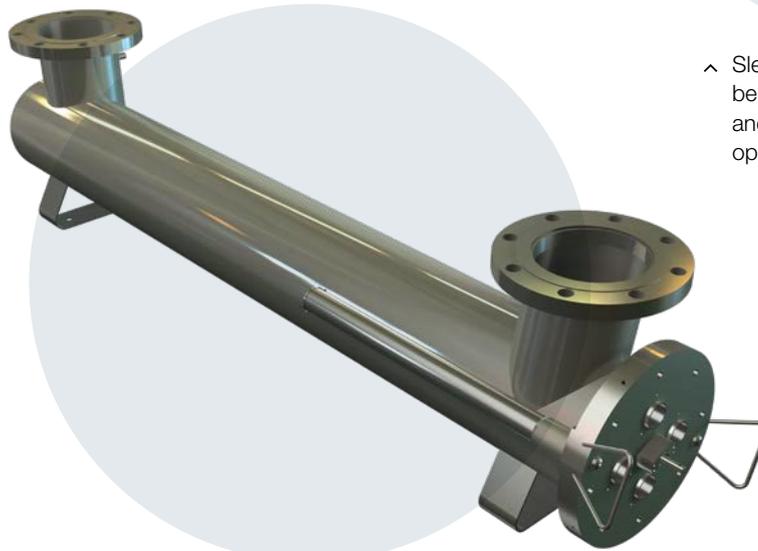
PROLINE PQ WW AL



^ Sleeves and wiper can be changed quickly and easily by a single operator



^ Patented lamp connector provides user safety and easy servicing

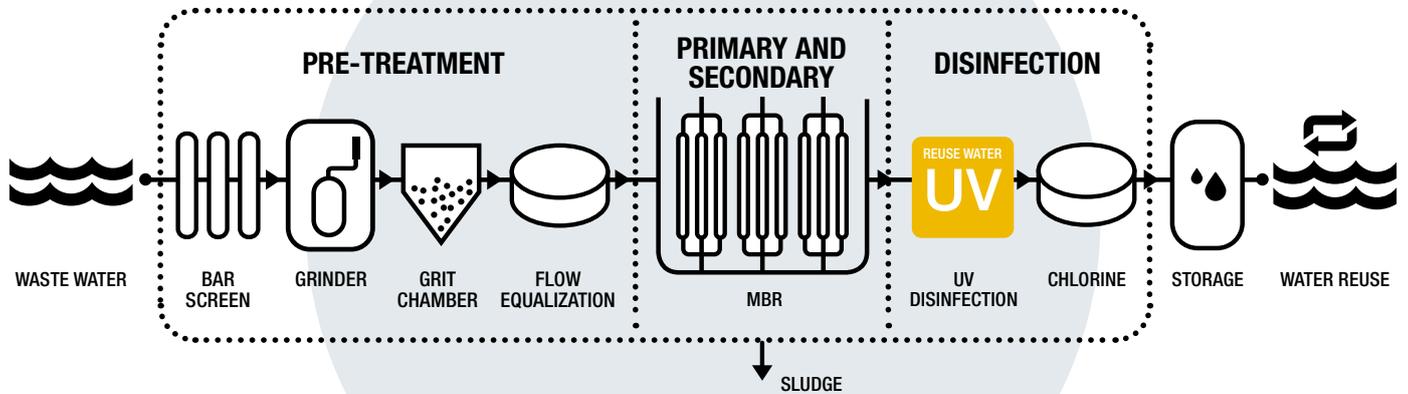


NWRI validated UV Treatment for Waste Water Reuse

Our ProLine PQ WW AL UV systems are low energy, amalgam lamp systems optimised to deliver effective UV disinfection for waste water reuse. The PQ WW AL is third party validated to NWRI and integrates an innovative multiple low pressure lamp chamber design with sensors and intelligent control technology to automatically deliver optimum disinfection performance with high operational efficiency. The PQ WW AL will eliminate harmful micro-organisms, reduce the bio-burden, protect against bio-fouling and lower operating costs. Each system comes with a certified dry UV sensor that measures the germicidal output of the UV system and a UV dose read out makes it easy to monitor and log performance.

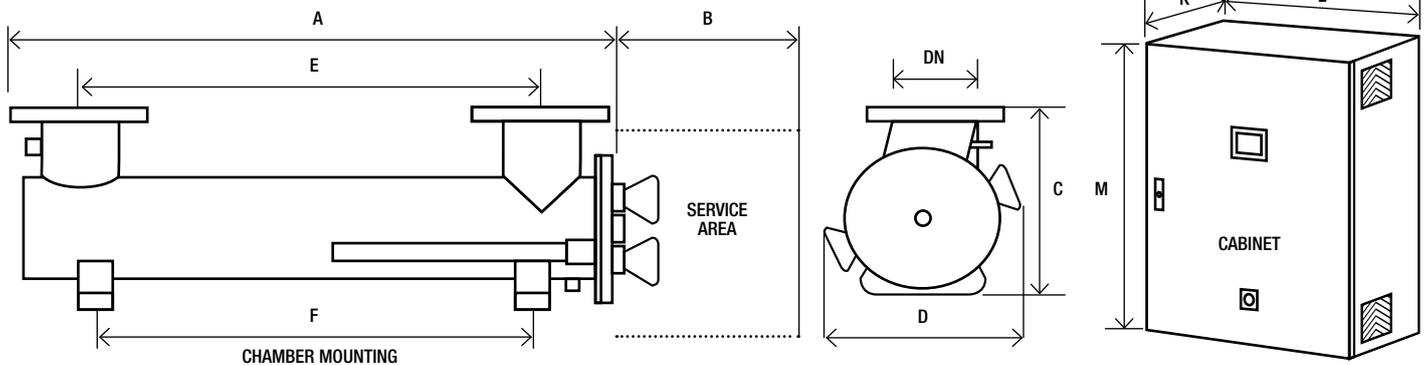


Potential location of ProLine PQ WW AL™ in decentralized treatment system



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV sensor	Continuous verification of performance with real time red UV dose reading and in-built low UV dose alarm	Easy to monitor and log system performance
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		
Multiple low pressure lamps	Provides optimum wavelength to disinfect your reuse and waste water	No chemicals
	High treatment capacity	Compact footprint and reduced operating cost
Innovative chamber design	Maximises the water's exposure to UV light	Reduces energy costs
Designed for reuse and waste water applications	Flanged connections, high standard internal finish	Designed to international standards
	Automatic wiper	Self cleaning to maintain performance
INTEGRATION		
Designed for your process	*Skid mountable	Easy to install

* Option



Model	Max Power (kW)	Dimensions (mm)										Approx weight (Kg)		
		Chamber								Control		Chamber (Empty)	Control Cabinet	
		A	B	C	D	E	F	DN	K*	L	M**			
		Starting	Running											
ProLine PQ WW AL 100	2.4	1.2-2.4	1710	1500	420	400	1417	1372	150	300	800	1000	150	70
ProLine PQ WW AL 300	7.2	3.6-7.2	1800	1500	605	560	1372	1475	250	400	1200	1200	300	140

* 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).
 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:	As made pipe and tube, <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 PN16
Drain connection:	BSP socket
End plate:	Removable end plate
Degree of protection:	IP54 equivalent to NEMA 12 but not for outside use
Arc tube (lamp):	Low pressure
Arc tube enclosure:	Pure quartz (F200)
Number of arc tubes (lamps):	4 (PQ WW AL 100), 12 (PQ WW AL 300)
Expected lamp life:	9000 hours
Temperature sensor:	Yes
UV sensor:	Calibrated DVGW compliant dry sensor
Working fluid temperature:	5°C to 40°C
Hydrostatically pressure tested:	Yes
Wiper:	Automatic (electrically driven)
Chamber mounting:	Horizontal only
Operating pressure:	10 bar (positive pressure only)
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

OPTIONS

Document Support Pack
Cabinet material: Stainless steel 304, IP54 (NEMA 12)
Cabinet material: Stainless steel 304 with air conditioning (5-50°C), IP66 (NEMA 4x), relative humidity <95% non condensing. See sales drawings for sizes
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish
Flange options: ANSI 150, JIS, Table 'E'
Lead length: 20 and 29 m
Welder Document Pack for chamber construction
Skid mounting (not ship board or earthquake zone)
Air vent connection
In field UV reference sensor kit
UL 508A labeled for cabinet

CABINET (CONTROLLER UVTOUCH)

Material:	Polyester coated carbon steel
Degree of protection:	IP54 / NEMA 12
Supply voltages:	230 V (+/- 10%), 50/60 Hz
Operating temp range:	5°C to 40°C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Variable power:	Stepless variable power (50% reduction from maximum ballast power)
Interconnecting cable lengths:	10 m to chamber

CUSTOMER OUTPUTS

4-20 mA outputs:	UV RED dose, lamp driven output power (%)
VFC outputs:	System ready, system stand by, system running, common warning, common trip, system in remote

CUSTOMER INPUTS

4-20 mA active or passive inputs:	Flow meter and transmittance meter
VFC inputs:	Remote stop/start, remote reset/clear message, remote set power high

CUSTOMER COMMUNICATIONS PORT

Modbus RS 485 serial RTU for SCADA connection

APPROVALS

CE marked, NWRI validated (PQ WW AL 100 only)



PROLINE PQ WW AL

Also available in our Waste Water product range...



PROLINE PQ WW IL

Range of medium pressure products with NWRI validation for waste water reuse



PROLINE WW IL

Range of compact medium pressure products for waste water disinfection



www.weuvcare.com

BERSON, HANOVIA & AQUIONICS WORKING TOGETHER AS PART OF THE HALMA GROUP.

Netherlands

t: +31 40 2907777
e: sales@bersonuv.com

China

t: +86 21 61679599
e: china@hanovia.com

USA

t: +1 980 256 5700
e: sales@aquionics.com

Germany

t: +49 800 5892779
e: verkauf@hanovia.com

Malaysia

t: +60 16 440 8834
e: asia@hanovia.com

Canada

t: +1 980.256.5700
e: sales@aquionics.com

United Kingdom

t: +44 1753 515300
e: sales@hanovia.com

Mexico

t: +1 980.256.5700
e: sales@aquionics.com