

We UVCare...

Application Optimised UV for Waste Water



PROLINE WW IL



UV treatment for Waste Water

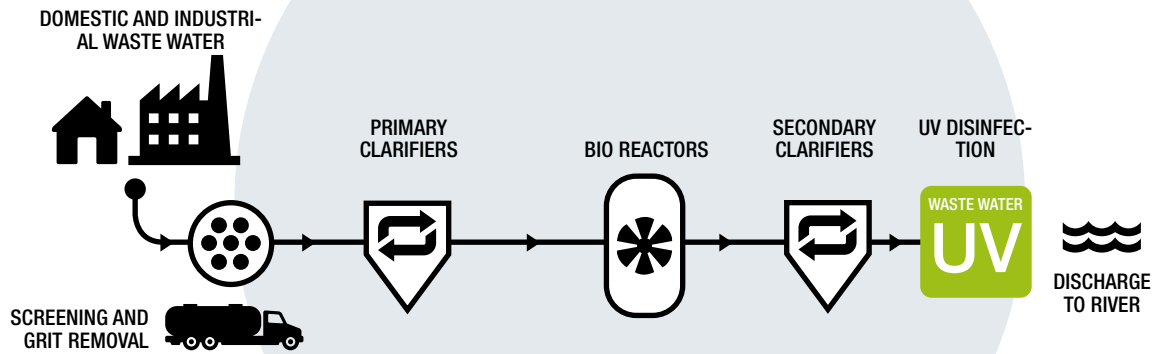
Our ProLine WW IL systems for UV treatment of waste water are particularly suited to low UVT applications and can be deployed after clarifiers, sand filters and membranes. With increasing urbanisation and water stress the need for tertiary treatment and disinfection of waste water is growing, particularly for discharge to sensitive environments. UV is also growing in popularity as it provides a proven alternative to Chlorination avoiding the generation of potentially harmful by-products. The ProLine WW IL are compact medium pressure lamp systems and are intended as a cost-effective treatment for less critical applications where there is no risk to people or the food chain. For more critical applications we recommend our reuse range.

berson

hanovia

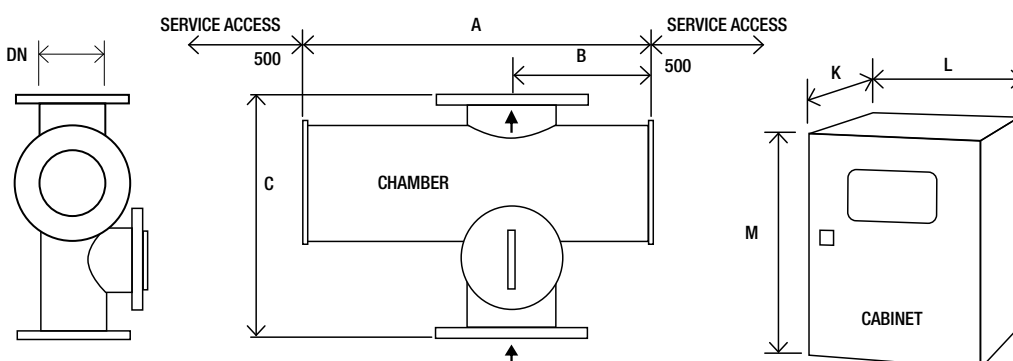
aquionics

Potential location of the ProLine WW IL™ in waste water treatment plant process



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
Dry DVGW approved UV sensor measuring germicidal wavelengths	Continuous verification of performance with real time dose reading and in-built low dose warning	Easy to monitor
Flow meter input	Dose reading based on actual flow conditions when meter is connected	Accurate UV dose reading guaranteed under wide range of operating conditions
OPTIMISATION		
UV waste water disinfection	Protects the environment from harmful microbiological contamination	No chemicals
Designed for municipal and industrial reuse and waste water applications	Flanged connections, high standard internal finish	Designed to international standards
	Automatic wiper (quartz cleaning)	Self cleaning to maintain performance
	*Ultrawipe (chemically enhanced wiper)	Clean quartz sleeves despite high fouling potential
INTEGRATION		
Compact design	Can be retrofitted to existing process	Easy integration

* Option



- * 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.

			Dimensions (mm)								Approx weight (Kg)	
			Chamber				Cab.	Cabinet (fan cooled)			Chamber	Cabinet
Model Number	Max. Power (kW)	No of lamps	A	B	C	DN	No***	K*	L	M**	Empty	Fan cooled Kg/pc
ProLine WW IL 100	1.8	2	780	310	400	100	1	300	800	1000	42	50
ProLine WW IL 250	5.6	2	780	310	540	150	1	300	1000	1200	55	80
ProLine WW IL 400	11	4	780	310	465	150	1	300	1000	1200	55	100
ProLine WW IL 1000	11	4	780	310	600	200	1	300	1000	1200	80	100
ProLine WW IL 1250	16.5	6	780	310	600	200	1	300	1200	1200	80	165
ProLine WW IL 4500	26	6	896	368	800	350	1	600	1000	2100	170	200
ProLine WW IL 5000	35	8	896	368	800	350	1	600	1200	2100	170	230
ProLine WW IL 7500	52	12	896	368	800	350	1 CC 1 PC	400 600	600 1200	2000 2100	170	130 310
ProLine WW IL 14000	52	8	1052	446	900	500	1 CC 1 PC	400 600	600 1200	2000 2100	260	130 290
ProLine WW IL 15000	52	12	1052	446	900	500	1 CC 1 PC	400 600	600 1200	2000 2100	260	130 310
ProLine WW IL 16000	78	12	1052	446	900	500	1 CC 2 PC	400 600	600 1200	2000 2100	260	130 260
ProLine WW IL 18000	117	18	1052	446	900	500	1 CC 3 PC	600 600	1000 1200	2010 2100	270	130 260

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:	BSP Socket or NPT if ANSI flange
Air vent connection	BSP Socket or NPT if ANSI flange
End plate:	Removable end plate
Inspection hatch	Removable plate (except WW IL 100)
Degree of protection:	IP54 equivalent to NEMA 12
Wiper:	Automatic (electrically driven)
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Pure quartz (F200)
Number of arc tubes (lamps):	See table above
Expected lamp life:	12000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor (one per UV chamber)
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 (positive pressure only)
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

OPTIONS

Document Support Pack
Cabinet: Stainless steel 304
Cabinet: Stainless steel 304 with air conditioning (5°-50°C), IP66 (NEMA 4X), relative humidity <95% non condensing*
Cabinet: Stainless steel 316 with air conditioning with slooping roof (5°-50°C), IP66 (NEMA 4X), relative humidity <95% non condensing*
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
Bleed: valve with BSP connection or NPT if ANSI flange
Operating pressure: 10 Bar
Ultrawipe (for WW IL 250-18000)

* See sales drawings for dimensions

OPTIONS (CONTINUED)

Water level sensor: Full water detection UV chamber
Water leak detection: Detects water leaks from quartz sleeve
Quartz sleeve F240 (reduces performance)
UL 508A shop approval
Welder pack

CABINET (CONTROLLER UVTRONIC)

Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	WW IL 100-1250: 200-277 V (+/-10%) (2ph L1,L2 or 1ph L1+N) WW IL 4500 - 18000: 380-480 V (-5% to +10%), (3ph L1, L2, L3) 50/60 Hz
Operating temperature range:	5°C to 35°C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	10 m
Variable power:	Stepless variable power (70% reduction from maximum ballast power)

HMI / CONTROL

Display:	4 Line LCD, indicating system status including general alarms
Operating menu:	3 levels (2 with password protection)
Fault finding:	Event log

CUSTOMER OUTPUTS

4-20 mA passive output:	UV dose, ballast power
VFC outputs:	Standby in remote, system standby, system cooling down, any trip, any warning, UV dose failure, system ready, wiper failure, lamp failure, full water level detection water leak, water temperature warning, water and cabinet temp. alarm

CUSTOMER INPUTS

4-20 mA active or passive inputs:	Flow meter and 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



PROLINE WW IL

Also available in our Waste Water product range...



PROLINE PQ WW AL

Range of amalgam products with NWRI validation for waste water reuse



PROLINE PQ WW IL

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



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: +49 611 44575375
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



FM 29365

©2019 Berson Hanovia Aquionics - 910434-3800-02-EN