We UVCare...

PROLINE WW IL

Application Optimized
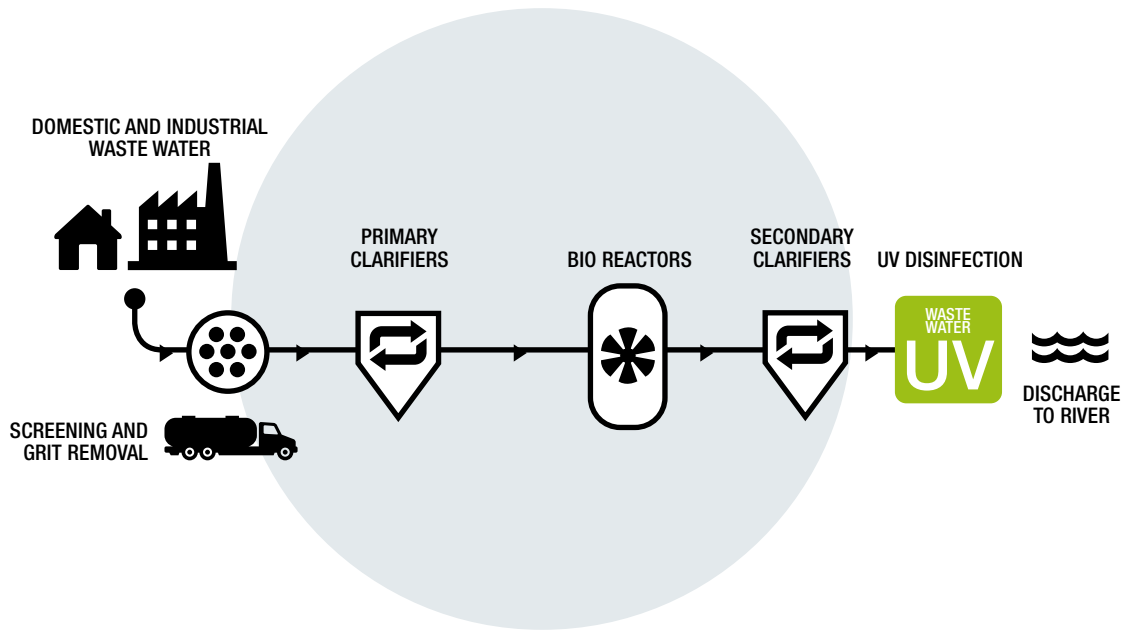# UV for Waste Water

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 non filtered applications, traditional secondary treatment 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

DOMESTIC AND INDUSTRIAL WASTE WATER

PRIMARY CLARIFIERS

BIO REACTORS

SECONDARY CLARIFIERS

UV DISINFECTION

WASTE WATER **UV**

DISCHARGE TO RIVER

SCREENING AND GRIT REMOVAL

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
OPTIMIZATION		
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

DN

SERVICE ACCESS

500

A

B

SERVICE ACCESS

500

C

CHAMBER

K

L

M
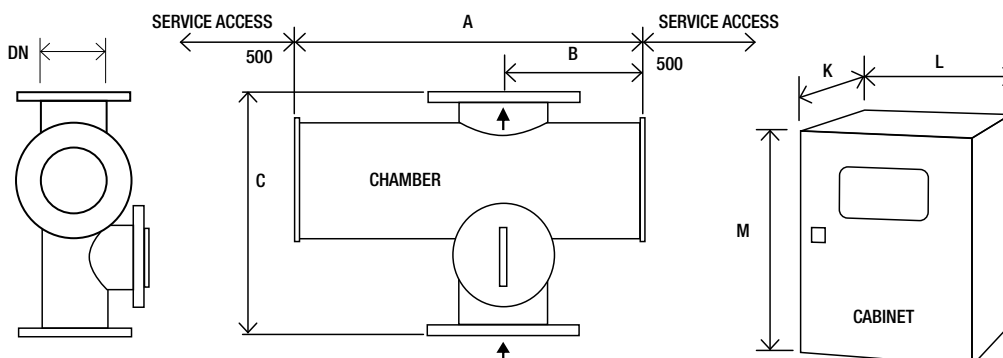
CABINET

* 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 9.8").
*** 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.

Model Number	Max Power (kW)	No of lamps	Chamber A	B	C	DN	Cab. No***	Cabinet (fan cooled)[a] K*	L	M**	Chamber Empty	Cabinet Fan Kg/pc
ProLine WW IL 100	1.8	2	30.7	12.2	15.7	4	1	11.8	31.5	39.4	93	110
ProLine WW IL 250	5.6	2	30.7	12.2	21.3	6	1	11.8	39.4	47.2	121	176
ProLine WW IL 400	11	4	30.7	12.2	18.3	6	1	11.8	39.4	47.2	121	220
ProLine WW IL 1000	11	4	30.7	12.2	23.6	8	1	11.8	39.4	47.2	176	220
ProLine WW IL 1250	16.5	6	30.7	12.2	23.6	8	1	11.8	47.2	47.2	176	364
ProLine WW IL 4500	26	6	35.3	14.5	31.5	14	1	23.6	39.4	82.7	375	441
ProLine WW IL 5000	35	8	35.3	14.5	31.5	14	1	23.6	47.2	82.7	375	507
ProLine WW IL 7500	52	12	35.3	14.5	31.5	14	1 CC	15.7	23.6	78.7	375	287
							1 PC	23.6	47.2	82.7		683
ProLine WW IL 14000	52	8	41.4	17.6	35.4	20	1 CC	15.7	23.6	78.7	573	287
							1 PC	23.6	47.2	82.7		639
ProLine WW IL 15000	52	12	41.4	17.6	35.4	20	1 CC	15.7	23.6	78.7	573	287
							1 PC	23.6	47.2	82.7		683
ProLine WW IL 16000	78	12	41.4	17.6	35.4	20	1 CC	15.7	23.6	78.7	573	287
							2 PC	23.6	47.2	82.7		573
ProLine WW IL 18000	117	18	41.4	17.6	35.4	20	1 CC	23.6	39.4	79.1	595	287
							3 PC	23.6	47.2	82.7		573

UV CHAMBER

Material:	StSt 316L / 1.4404
Internal finish:	< 0.8 µm Ra, welds ground out out out, electropolished and passivated
External finish:	Brushed to K280, electropolished and passivated
Process (mating) connections:	ANSI 150#
Drain connection:	BSP or NPT if ANSI flange
Air vent connection:	BSP 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)
UV Lamp:	Medium pressure
Quartz Sleeve:	Pure quartz (F200)
Number of lamps:	See table above
Expected lamp life:	12,000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor (one per UV chamber)
Working fluid temperature:	33.8°F to 140°F
Hydrostatically pressure tested:	Yes
Chamber mounting:	Flow horizontal or vertical (lamps horizontal only)
Operating pressure:	Higher pressure available upon request 6 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

Cabinet material: Stainless steel 304 with air conditioning (41-122°F), IP66 (NEMA 4x), relative humidity <95% non condensing*

Cabinet material: Stainless steel 316 with air conditioning slooping roof (41-122°F), 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: ANSI 150, JIS, Table 'E', PN16

Lead length: 65.6 ft and 95.1 ft

In-field UV reference sensor kit

Bleed: valve with BSP connection or NPT if ANSI flange

Operating pressure: Higher pressure available upon request (Brian: 10 bar)

Ultrawipe (for WW IL 250-18000)

UL 508A shop approval

Allen Bradley AB850 & UV Touch HMI (UVtronic?)

OPTIONS (CONTINUED)

Water level sensor: Full water detection UV chamber

Water leak detection: Detects water leaks from quartz sleeve

Quartz sleeve F240 (reduces performance)

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:	41°F to 95°F
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	32.8 ft
Variable power:	Variable power, 70% reduction from maximum ballast power (not on IL 100+)

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

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 wiht NWRI validation for waste water reuse

PROLINE PQ WW IL

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

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