

We UVCare...



PROLINE PQ IL

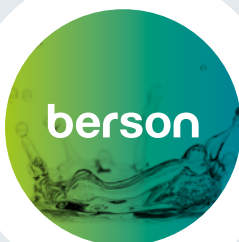
## Application Optimized UV for Drinking Water

**RODEM**<sup>®</sup>  
SMART SANITARY PROCESSES  
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Validated UV treatment  
for drinking water

Our ProLine PQ IL systems are aimed specifically at providing USEPA third party validated UV disinfection for municipal drinking water. By using a USEPA third party validated UV system, you can be assured that the UV dose being produced will disinfect the water from harmful micro-organisms and lower operating costs. Each system comes with one certified dry UV sensor per lamp, allowing checking of UV performance. The UV sensor measures the germicidal output of the UV system and a UV dose read out makes it easy to monitor and log performance. The control system also has the ability to take flow and transmittance meter inputs and calculate the UV dose based on real time operating conditions.



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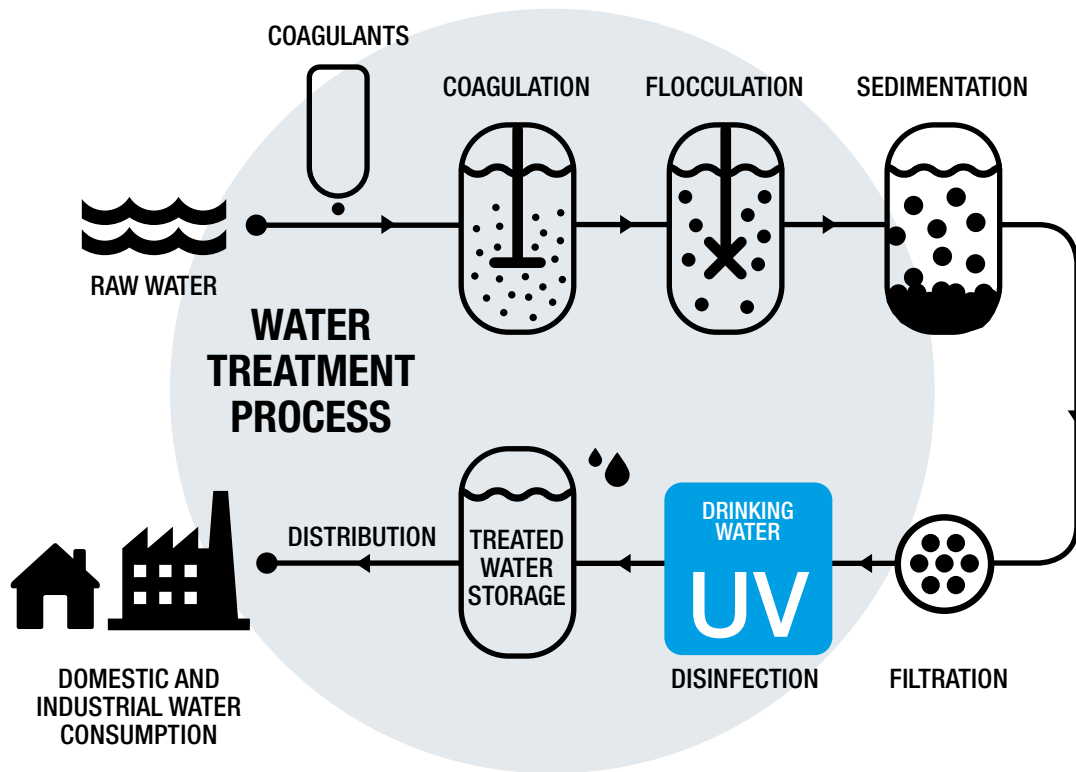


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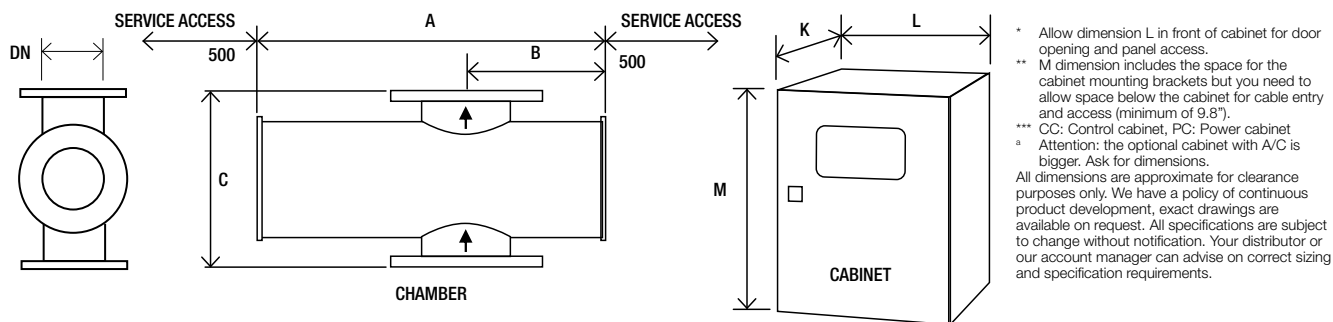


**aquionics**

# Potential location of the ProLine PQ IL™ in drinking water treatment process



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
<b>INTELLIGENCE</b>		
Dry DVGW approved UV sensor measuring germicidal wavelengths	Continuous verification of performance with real time RED dose reading and in-built low dose warning	Easy to monitor and log system performance
Flow and UV transmittance (UVT) meter inputs	Dose reading based on actual process conditions when meters are connected	Accurate UV dose reading guaranteed under wide range of operating conditions
<b>OPTIMIZATION</b>		
Third party validated UV systems tested in accordance with the USEPA UV Disinfection Guidance Manual	UV system dose equations and sizing have been independently derived	Confidence the system will perform as stated
UV water disinfection	Protects your drinking water from microbiological contamination including chlorine resistant <i>Cryptosporidium</i> and <i>Giardia</i>	Does not affect taste and odour
		No chemicals
Designed for the treatment of drinking water	NSF-61 approved materials used for all wetted parts	Industry compliant materials
	Flanged connections, high standard internal finish	Designed to international standards
	Automatic wiper (quartz cleaning)	Self cleaning to maintain performance
<b>INTEGRATION</b>		
Compact design	Can be retrofitted to existing process	Easy integration



			Dimensions (Inches)								Approx weight (lb)	
			Chamber				Cab.	Cabinet (fan cooled) <sup>a</sup>			Chamber	Cabinet
Model Number	Max. power (kW)	No of lamps	A	B	C	DN	No***	K*	L	M**	Empty	Fan cooled
ProLine PQ IL 450	5.6	2	30.7	12.2	15.7	8	1	11.8	39.4	47.2	172	176
ProLine PQ IL 1000	11	4	30.7	12.2	15.7	8	1	11.8	39.4	47.2	172	220
ProLine PQ IL 4000	17.5	4	35.3	14.5	21.7	14	1	23.6	39.4	82.7	331	397
ProLine PQ IL 4500	26	6	35.3	14.5	21.7	14	1	23.6	39.4	82.7	331	441
ProLine PQ IL 12000	39	6	41.4	17.6	26.8	20	1 CC	15.7	23.6	78.7	529	287
							1 PC	23.6	47.2	82.7		573
ProLine PQ IL 14000	52	8	41.4	17.6	26.8	20	1 CC	15.7	23.6	78.7	529	287
							1 PC	23.6	47.2	82.7		639

#### 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:	ANSI 150#
Drain connection:	BSP or NPT if ANSI flange
Air vent connection:	BSP or NPT if ANSI flange
End plate:	Removable end plate
Degree of protection:	IP54 equivalent to NEMA 12
Wiper:	Automatic (electrically driven)
UV lamp:	Medium pressure
Quartz sleeve:	Doped quartz (F240)
Number of UV lamps:	See table above
Expected lamp life:	12,000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor (one per lamp)
Working fluid temperature:	33.8°F to 140°F
Hydrostatically pressure tested:	Yes
Chamber mounting:	Flow horizontal or vertical (lamps 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
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: PN16, ANSI 150, JIS, Table 'E'
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
Water leak detection: Detects water leaks from quartz sleeve
Water level sensor: UV chamber full water detection

\* See sales drawings for dimensions

#### OPTIONS (CONTINUED)

UL 508 A shop approval

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

Allen Bradley AB850 & UV Touch HMI (Brian: UVtronic)

Welder pack

#### CABINET (CONTROLLER UVTRONIC)

Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	PQ IL 450-1000: 200-277 V (+/- 10%) (2ph L1,L2 or 1ph L1+N) PQ IL 4000-14000: 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)

#### HMI / CONTROL

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

#### CUSTOMER OUTPUTS

4-20 mA passive output:	UV dose, UV intensity, 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, water leak, water temperature warning, Full water detection, water & cabinet temperature alarm

#### CUSTOMER INPUTS

4-20 mA active or passive inputs:	Flow meter and UVT transmittance meter inputs:
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, USEPA (UVDGM), NSF 61



## PROLINE PQ IL

Also available in our Drinking Water product range...



### PROLINE PQ AF

Small community, low energy amalgam range with USEPA validation.



### PROLINE PQ AL

Small to mid-sized community, low energy multi-lamp amalgam range with USEPA validation and built in UVT compensation



### PROLINE PQ EO

Energy Optimized medium pressure range, USEPA validated with built in UVT compensation



### PROLINE PQ IL DVGW

Compact medium pressure range with DVGW certification, for use where space is tight in small to mid-sized communities



[www.weuvcare.com](http://www.weuvcare.com)

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A **Halma** company