

We UVCare...

# Application Optimised UV for Drinking Water



**PROLINE PQ IL DVGW**



## Certified UV treatment for drinking water

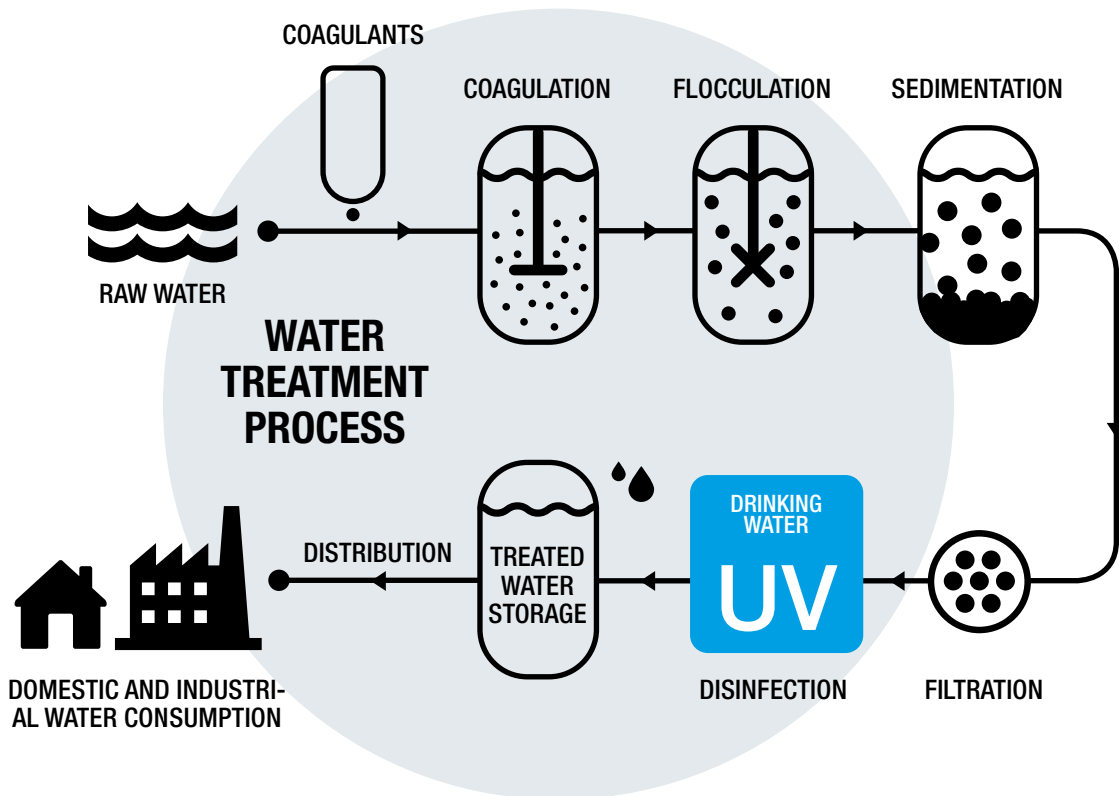
Our ProLine PQ IL DVGW systems are aimed specifically at providing third party certified UV disinfection for municipal drinking water. By using a third party certified UV system you can be certain that the UV dose being produced will disinfect the water, eliminate harmful micro-organisms, reduce the bio-burden, protect against bio-fouling and lower operating costs. Each system comes with a certified dry UV sensor 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.

**berson**

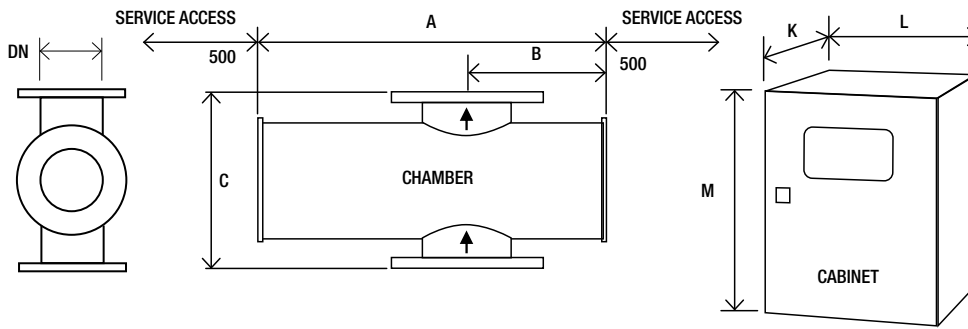
**hanovia**

**aquionics**

# Potential locations of the ProLine PQ IL DVGW™ 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 and in-built low dose warning	Easy to monitor and log system performance
Flow meter input	UV Intensity monitoring based on actual process conditions when meters are connected	Accurate UV intensity reading guaranteed under wide range of operating conditions
<b>OPTIMISATION</b>		
DVGW certified UV systems	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 treatment of drinking water	FDA-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



\* 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	Dimensions (inches)					Approx weight (lb)				
			Chamber	Cab.	Cabinet (fan cooled) <sup>a</sup>	Chamber	Cabinet					
			A	B	C	DN	No***	K*	L	M**	Empty	Fan cooled
ProLine PQ IL DVGW 100	1.8	2	30.7	12.2	15.7	3.9	1	11.8	31.5	39.4	92	110
ProLine PQ IL DVGW 200	2.9	1	30.7	12.2	15.7	5.9	1	11.8	31.5	39.4	110	121
ProLine PQ IL DVGW 450	5.6	2	30.7	12.2	15.7	7.9	1	11.8	39.4	47.2	172	176
ProLine PQ IL DVGW 1000	11.0	4	30.7	12.2	15.7	7.9	1	11.8	39.4	47.2	172	220
ProLine PQ IL DVGW 4000	17.5	4	35.3	14.5	21.6	13.8	1	23.6	39.4	82.7	331	397
ProLine PQ IL DVGW 5000	34.8	8	35.3	14.5	21.6	13.8	1	23.6	47.2	82.7	331	507

### 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
Degree of protection:	IP54 equivalent to NEMA 12
Wiper:	Automatic (electrically driven)
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Doped quartz (F240)
Number of arc tubes (lamps):	See table above
Expected lamp life:	12000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor
Working fluid temperature:	33.8°F to 140°F
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 (41°-122°C), IP66 (NEMA 4X), relative humidity <95% non condensing*
Cabinet: Stainless steel 316 with air conditioning with 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
Water leak detection: Detects water leaks from quartz sleeve
Water level sensor: UV chamber full water detection
UL 508A shop approval
Welder pack
Operating pressure: 10 Bar

\* See sales drawings for dimensions

### CABINET (CONTROLLER UVTRONIC)

Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	PQ IL DVGW 100-1000: 200-277V (+/-10%), (2ph L1,L2 or 1ph L1+N) PQ IL DVGW 4000-5000: 380-480V (-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:	Stepless 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 intensity, ballast power
VFC outputs:	Standby in remote, system standby, system cooling down, any trip, any warning, UV intensity failure, system ready, wiper failure, lamp failure, water leak, water temperature warning, water & cabinet temperature alarm

### CUSTOMER INPUTS

4-20 mA active or passive inputs:	Flow 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, DVGW certified



## PROLINE PQ IL DVGW

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 Optimised medium pressure range, USPA validated with built-in UVT compensation



### PROLINE PQ IL

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



**berson**



**hanovia**



**aquionics**

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