

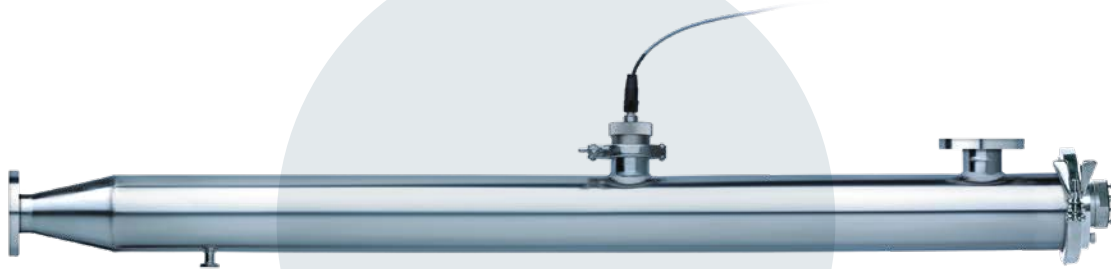
We UVCare...



PROLINE PQ AF

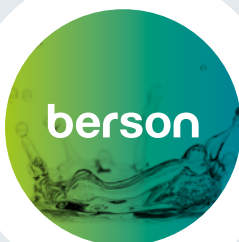
## Application Optimized UV for Drinking Water

**RODEM**<sup>®</sup>  
SMART SANITARY PROCESSES  
[www.Rodem.com](http://www.Rodem.com) | (800) 543-7312

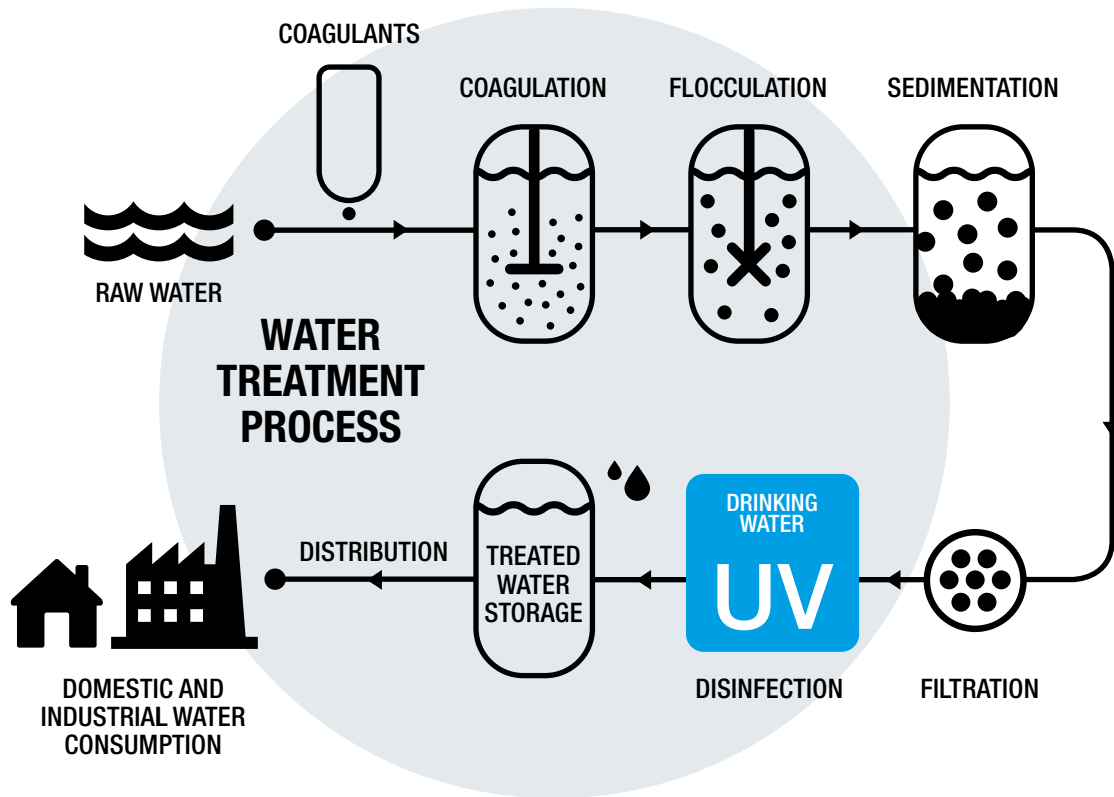


## Validated UV treatment for drinking water

Our ProLine PQ AF range of Drinking Water UV solutions has been third party validated to the USEPA Ultraviolet Disinfection Guidance Manual (UVDGM) and has been protecting people from harmful contamination from bacteria and viruses for decades. Even at low doses UV provides protection against Chlorine resistant pathogens such as Cryptosporidium and Giardia. UV is therefore used for Drinking Water worldwide as a Cryptosporidium barrier. Often used in conjunction with Chlorine UV provides an additional level of safety and allows lower Chlorine consumption at much lower costs than Ozone or membrane filtration. At higher doses UV provides general disinfection and at higher doses still it can provide Virus protection, depending on your design philosophy. The PQ AF integrates a single low pressure lamp chamber design with sensors and intelligent control technology to automatically deliver optimum disinfection performance with high operational efficiency. 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.

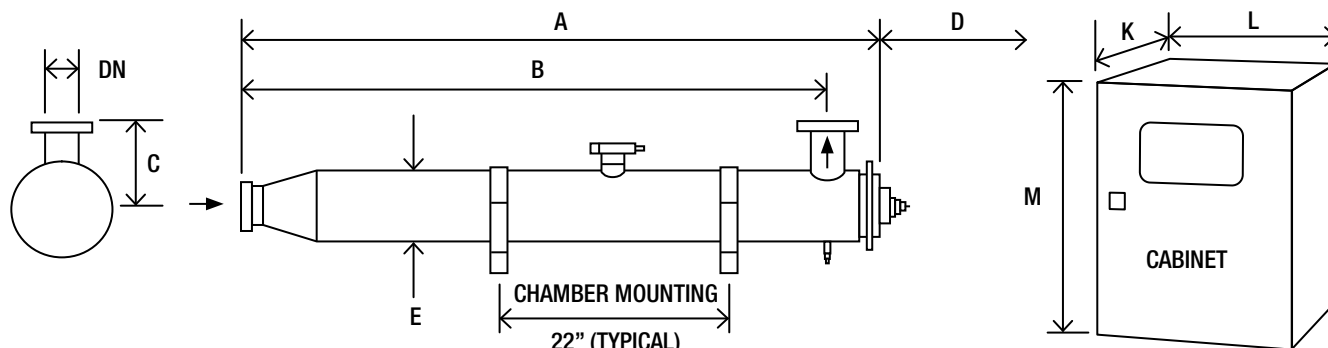


# Potential locations of the ProLine PQ AF™ in drinking water treatment process



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
Ease of use	Only uses one lamp	Easy to use and maintain
<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 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	*Skid mountable	Easy to install
	Can be retrofitted to existing process	
RS 485 interface	Single cable connection to customer control system	Easy integration to SCADA or plant control systems

\* Option



Model Number	Maximum Power (W)	UVT (%)	Dimensions (Inches)									Approx weight (lb)	
			A	B	C	D	E	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
ProLine PQ AF 0008	200	60	54.6	50.1	3.2	51.2	4	2	8.8	23.6	35	20	79
ProLine PQ AF 0016	350	60	54.6	50.1	3.2	51.2	4	2	8.8	23.6	35	20	79
ProLine PQ AF 0090	750	60	78	71.9	7.9	74.8	8.1	6	8.8	23.6	35	101	79

\* 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").

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, welds as laid, electropolished and passivated
External finish:	Sateen polish (120 grit) electropolished and passivated
Process (mating) connections:	ANSI 150#
Drain connection:	BSPT
End plate:	Removable tri-clamp except PQ AF 0090 which is flanged
Degree of protection:	IP65 equivalent to NEMA 4 but not for outside use
UV lamp:	Low pressure amalgam
Wiper:	Automatic (pneumatically driven)
Quartz sleeve:	Pure quartz (F200)
Number of lamps:	1
Expected lamp life:	12000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor with UVGuard™ window
Working fluid temperature:	41°F to 104°F
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
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	
Transmittance compensating dose equation	
Document Support Pack	
Cabinet material: Stainless steel 304 or 316 with sloping roof	
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish	
Wiper: Automatic (pneumatically driven)	
Flange options: PN16 JIS, Table 'E'	
UVShield™	
Water leak detection	
UL listing	
UL 508A panel shop	
Bleed: BSPT connection and valve	
Lead length: 65.6 ft & 95.1 ft PQ AF 0008, 46 ft PQ AF 0016 - 0090	

OPTIONS (CONTINUED)	
In-field UV reference sensor kit	
Welder Document Pack for chamber construction	
Skid mounting (not ship board or earthquake zone)	
CABINET (CONTROLLER UVTRONIC)	
Material:	Polyester coated carbon steel
Degree of protection:	IP66 / NEMA 4
Supply voltages (nominal):	230 V (+/-10%), 50/60 Hz
Operating temperature range:	41°F to 104°F
Relative humidity:	<95% non-condensing
Cooling fans:	No
Interconnecting cable:	32.8 ft
Variable power:	Variable power on PQ AF 0090 only (40% reduction from max ballast power, 20% dose reduction)

HMI / CONTROL	
Display:	4 line LCD, indicating system status including alarms
Operating menu:	3 levels with password protection
Fault finding:	Event log

CUSTOMER OUTPUTS	
4-20 mA active outputs:	UV dose and UV intensity
24 V dc 10 mA max outputs:	Lamp ON, any trip, any warning, system ready, system in remote, bleed valve

CUSTOMER INPUTS	
4-20 mA active or passive inputs:	Flow meter and transmittance meter
VFC inputs:	Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT	
RS 485:	Modbus

APPROVALS	
USEPA (UVDGM), CE marked	



## PROLINE PQ AF

Also available in our Drinking Water product range...



### PROLINE PQ EO

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



### PROLINE PQ AL

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



### 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)

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



A **Halma** company