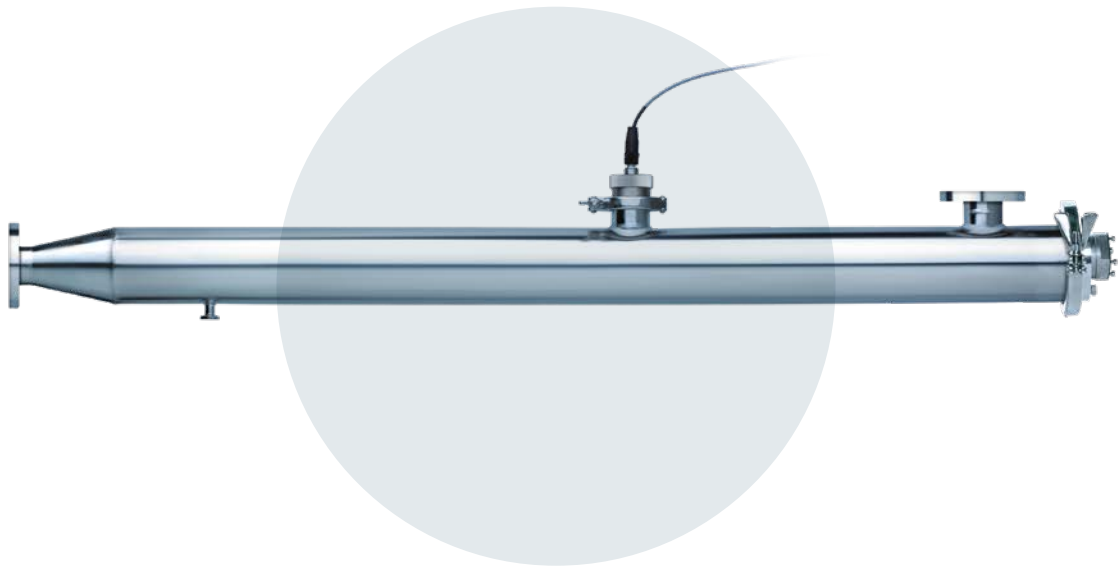


We UVCare...

Application Optimised UV for Drinking Water



PROLINE PQ AF



Validated UV treatment for drinking water

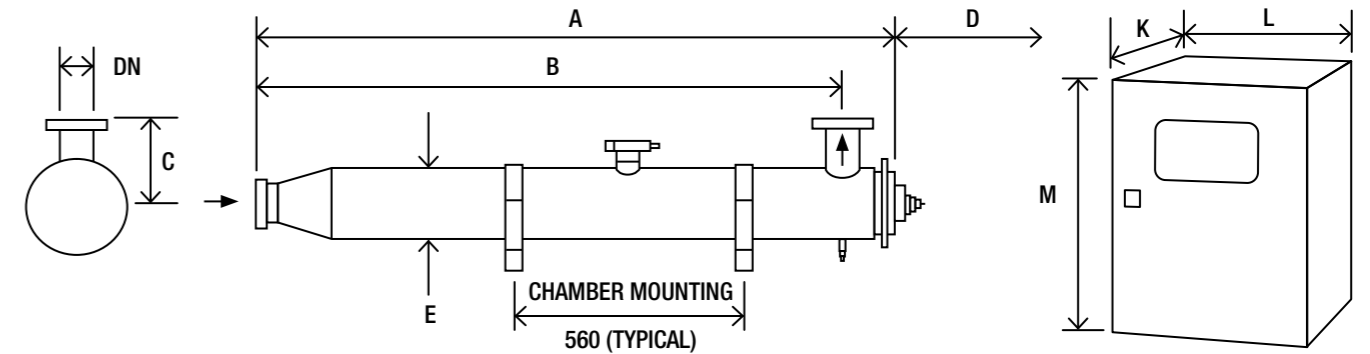
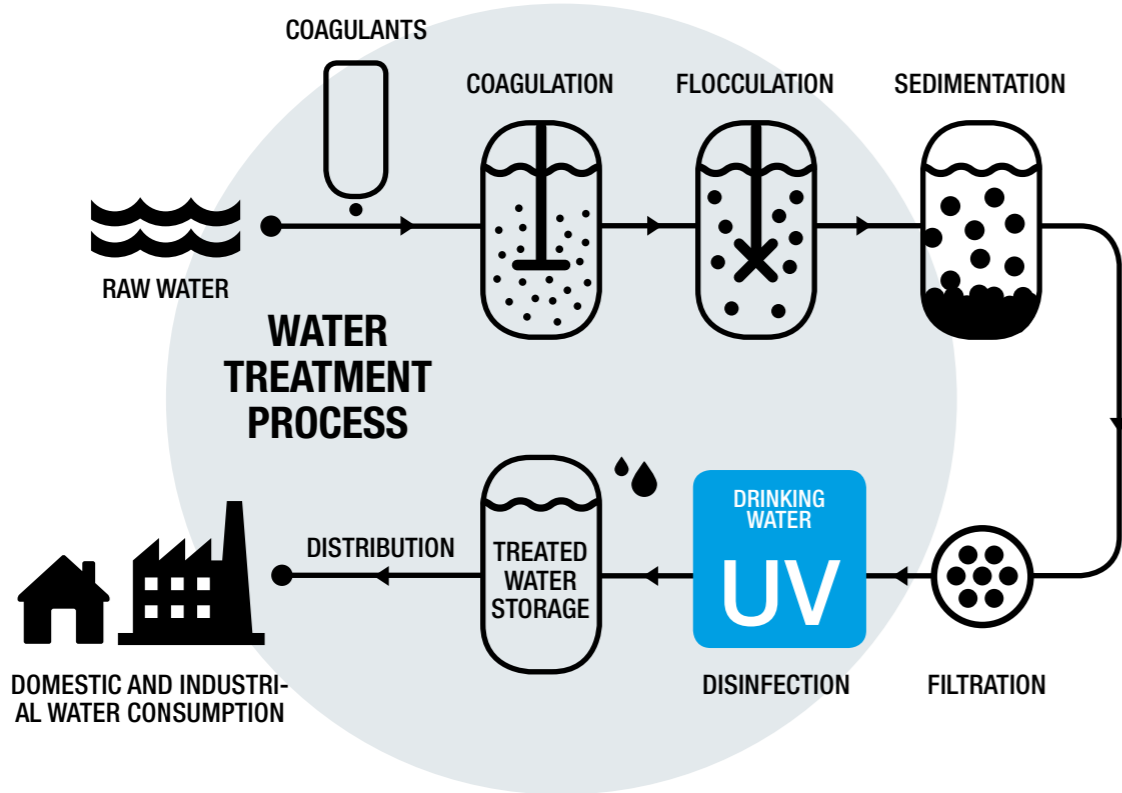
Our ProLine PQ AF range of Drinking Water UV solutions has been protecting people from harmful contamination from bacteria and viruses for decades. Even at low doses UV provides protection against Chlorine resistant pathogens such as Cryptosporidium and Giardia. UV is therefore used for Drinking Water 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.

berson

hanovia

aquionics

ProLine PQ AF™ drinking water treatment process



Model Number	Maximum Power (W)	Min T ₁₀ (%)	Dimensions (mm)									Approx weight (Kg)	
			A	B	C	D	E	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
ProLine PQ AF 0008	200	60	1388	1273	82	1300	102	50	224	600	890	9	36
ProLine PQ AF 0016	350	60	1388	1273	82	1300	102	50	224	600	890	9	36
ProLine PQ AF 0090	750	60	1980	1825	200	1900	206	150	224	600	890	46	36

* 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).
 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:	Flange EN 1092-1 PN16
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
Arc tube (lamp):	Low pressure amalgam
Arc tube enclosure:	Pure quartz
Number of arc tubes (lamps):	1
Expected lamp life:	12000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor with UVGuard™ window
Working fluid temperature:	5°C to 40°C
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
Chamber mounting:	Horizontal only
Operating pressure:	10 bar
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: ANSI 150 (NPT drain), JIS, Table 'E'	
Lead length: 20 & 28 m PQ AF 0008, 14 m PQ AF 0016 - 0090	

OPTIONS (CONTINUED)	
In-field UV reference sensor kit	
Welder Document Pack for chamber construction	
Skid mounting	
CABINET	
Material:	Polyester coated carbon steel
Degree of protection:	IP66 / NEMA 4
Supply voltages (nominal):	230 V (207 V to 253 V) 50/60 Hz
Operating temperature range:	5°C to 40°C
Relative humidity:	<95% non-condensing
Cooling fans:	No
Interconnecting cable:	10 m
Variable power:	Stepless 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 or 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 inputs
VFC inputs:	Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT	
RS 485:	Modbus

APPROVALS	
CE marked, cETLus to UL 61010-1, IEC 61010-1	

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 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
OPTIMISATION		
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
INTEGRATION		
Designed for your process water	*Skid mountable Can be retrofitted to existing process	Easy to install
	RS 485 interface	Easy integration to SCADA or plant control systems

* Option



PROLINE PQ AF

Also available in our Drinking Water product range...



PROLINE PQ EO

Energy Optimised 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

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