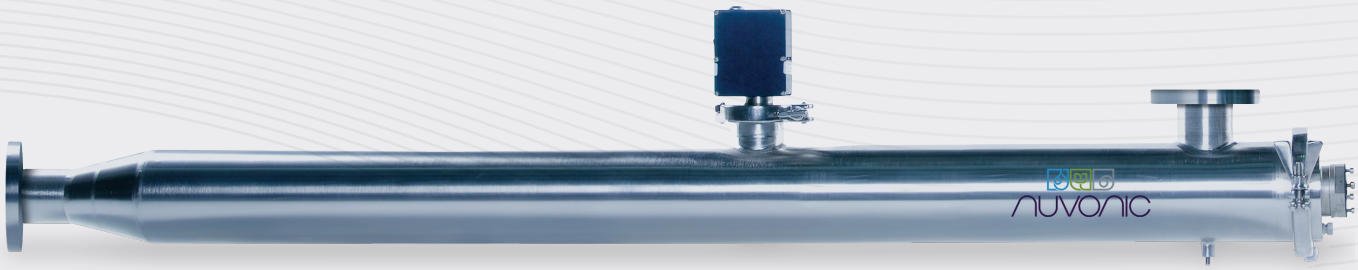
formerly Aquionics, Berson, Hanovia and Orca GmbH



PureLine D AF

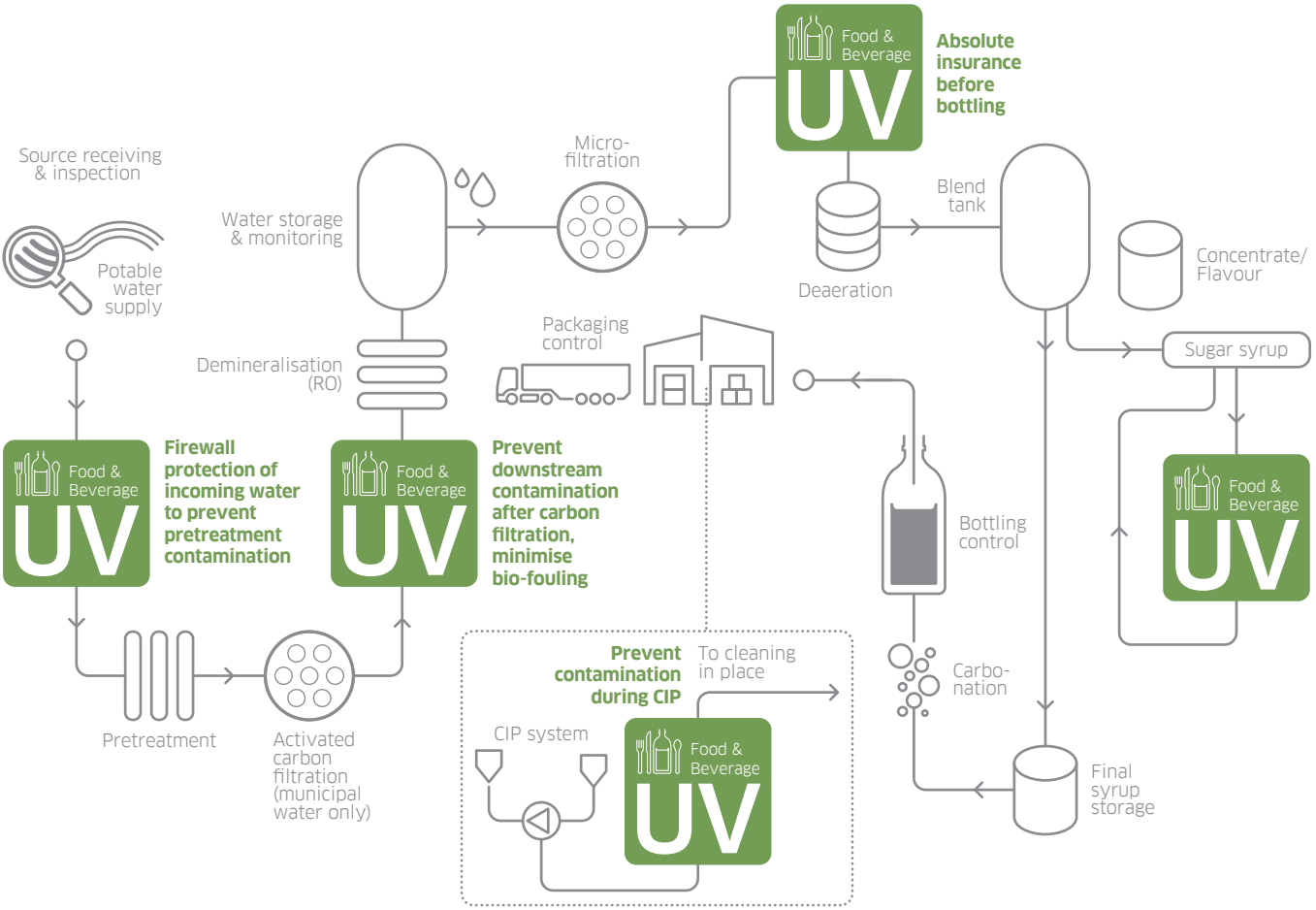
UV TREATMENT FOR FOOD AND BEVERAGE

Our **PureLine D AF** systems are aimed specifically at providing UV treatment for product and process waters used in the food and beverage industry.

By using a UV system you will deactivate harmful micro-organisms, reduce microbial load, and support bio-fouling control within water systems. Each system comes with a UV monitor to measure the active output of the UV system and make it easy to monitor and log performance.

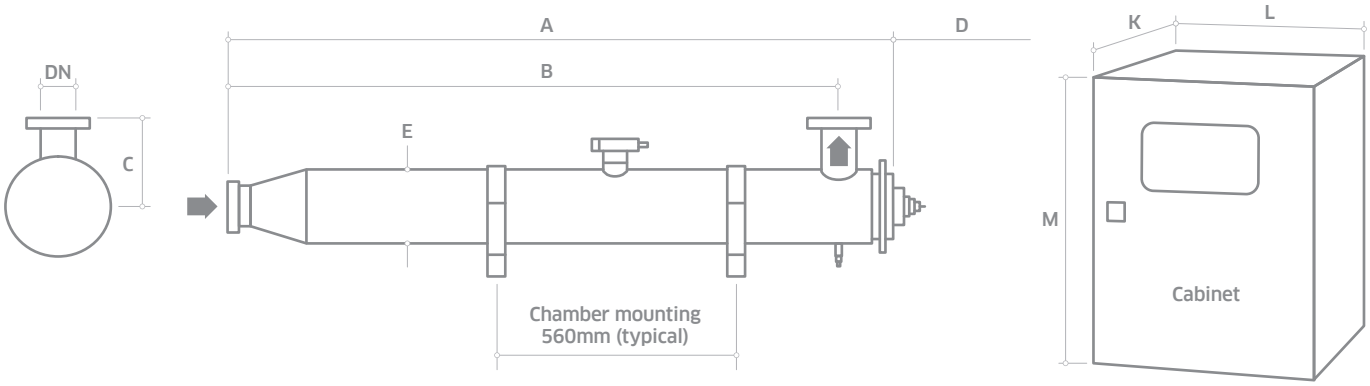
Application Optimised UV for Food & Beverage

POTENTIAL LOCATIONS OF THE PURELINE D AF™



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring active wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
OPTIMISATION		
UV water treatment	Protect your process waters from microbiological contamination such as Cryptosporidium and Giardia	Does not affect taste and colour of final product
		No chemicals used
Designed for the food and beverage industry	FDA-approved materials used for all wetted parts	Industry compliant materials
	*Chamber with tri-clamp connections and < 0.38 µm internal finish	Sanitary design
	*Automatic wiper (quartz cleaning)	Self cleaning
INTEGRATION		
Compact design	Can be fitted to skids	Easy integration
	Can be retrofitted to existing process	

*Option



MODEL NUMBER	MAX POWER (W)	MIN T_{10}(%)	DIMENSIONS (mm)												APPROX WEIGHT (kg)		
									Unwiped			Wiped					
			A	B	C	D	E	DN	K*	L	M**	K*	L	M**	Chamber (Empty)	Control Cabinet	Control Cabinet (wiped)
PureLine D AF 0003	115	60	920	840	100	800	64	25	170	300	490	225	400	690	5	11	20
PureLine D AF 0005	115	60	1388	1273	150	1300	102	40	170	300	490	225	400	690	9	11	20
PureLine D AF 0008	165	60	1388	1273	150	1300	102	50	170	300	490	225	400	690	9	11	20
PureLine D AF 0016	345	60	1388	1273	150	1300	102	50	170	300	490	225	400	690	9	11	20
PureLine D AF 0030	345	60	1437	1300	200	1300	168	80	170	300	490	225	400	690	24	11	20
PureLine D AF 0090	600	60	1980	1825	250	1900	206	150	225	400	690	225	400	690	46	22	22

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.
* 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).

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:	Tri-clamp to ISO 2852
End plate:	Removable tri-clamp except D 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 (F200)
Number of arc tubes (lamps):	1
Expected lamp life:	12000 hours
Temperature sensor:	Snap stat on D AF 0090 only
UV monitorr:	Wet UV monitor (if above minimum T_{10})
Working fluid temperature:	5°C to 40°C
Maximum CIP temperature:	130°C (D AF 0003 – D AF 0016) 95°C (D AF 0030 – D AF 0090) with cabinet electrically isolated
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
Chamber mounting:	Horizontal or vertical except D AF 0090 which is 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
Welder Document Pack for chamber construction

OPTIONS (CONTINUED)

Wiper: Automatic (pneumatically driven) except D AF 0003
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish
Flange options: ANSI 150, JIS, Table 'E' and tri-clamp
Chamber internal finish: Tri-clamp chamber only <0.38 µm, welds left as laid, electropolished and passivated
Maximum CIP temperature: 130°C (D AF 0030 – D AF 0090, panel switched off)
Skid mounting (not shipboard or earthquake zone)

CABINET (CONTROLLER ELECTRON)

Material:	Polyester coated carbon steel
Degree of protection:	IP66 / NEMA 4 except D AF 0090 which is IP54 NEMA 12
Supply voltages:	230 V (+/- 10%) 50/60 Hz
Operating temperature range:	5°C to 40°C
Relative humidity:	<95% non-condensing, expect D AF 0090 which is 85%
Cooling fans:	D AF 0090 only
Interconnecting cable lengths:	5 m

CUSTOMER OUTPUTS

4-20 mA passive outputs:	UV intensity %
VFC outputs:	Lamp ON and Low UV warning

CUSTOMER INPUTS

VFC inputs:	Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT

None

APPROVALS

CE marked

PureLine D

Also available in our Food & Beverage product range...

PURELINE DC+DCD

Dechlorination and Chlorine Dioxide removal

PURELINE DO

Ozone removal and treatment

PURELINE PQ

3rd party bioassayed systems for critical treatment

PURELINE S

Sugar syrup treatment

Canada
+1 980 256 5700
americas@nuvonic.com

China
+86 21 6167 9599
apac@nuvonic.cn

Germany
+44 2268 90 8300
emea@nuvonic.com

Mexico
+1 980 256 5700
americas@nuvonic.com

United Kingdom
+44 175 351 5300
emea@nuvonic.com

USA
+1 980 256 5700
americas@nuvonic.com

NUVONIC

A Halma company

formerly Aquionics, Berson, Hanovia and Orca GmbH

©2023 Nuvonic 910433-0000-02-EN

nuvonic.com

FM 29365