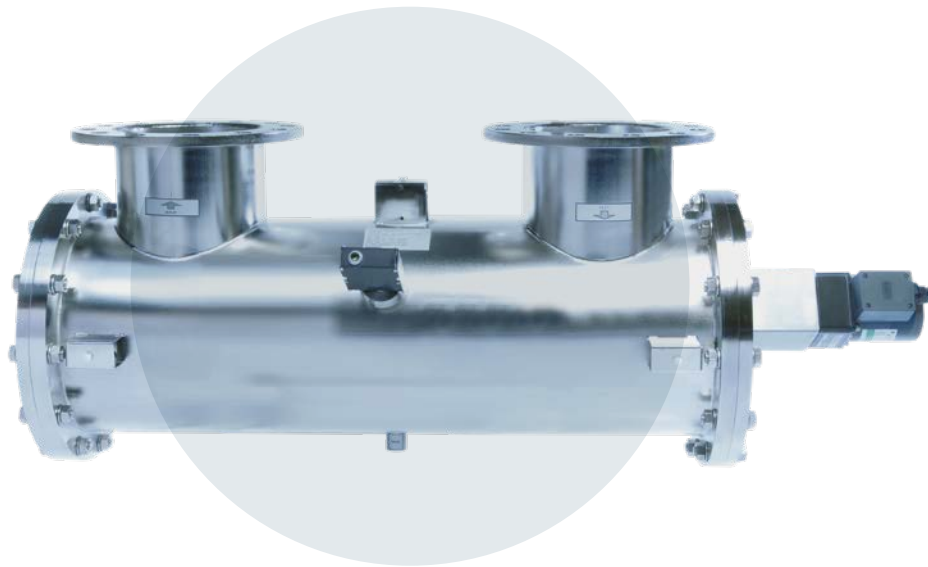


We UVCare...

# Application Optimised UV for Food & Beverage



**PURELINE D PH**



## UV treatment for food and beverage

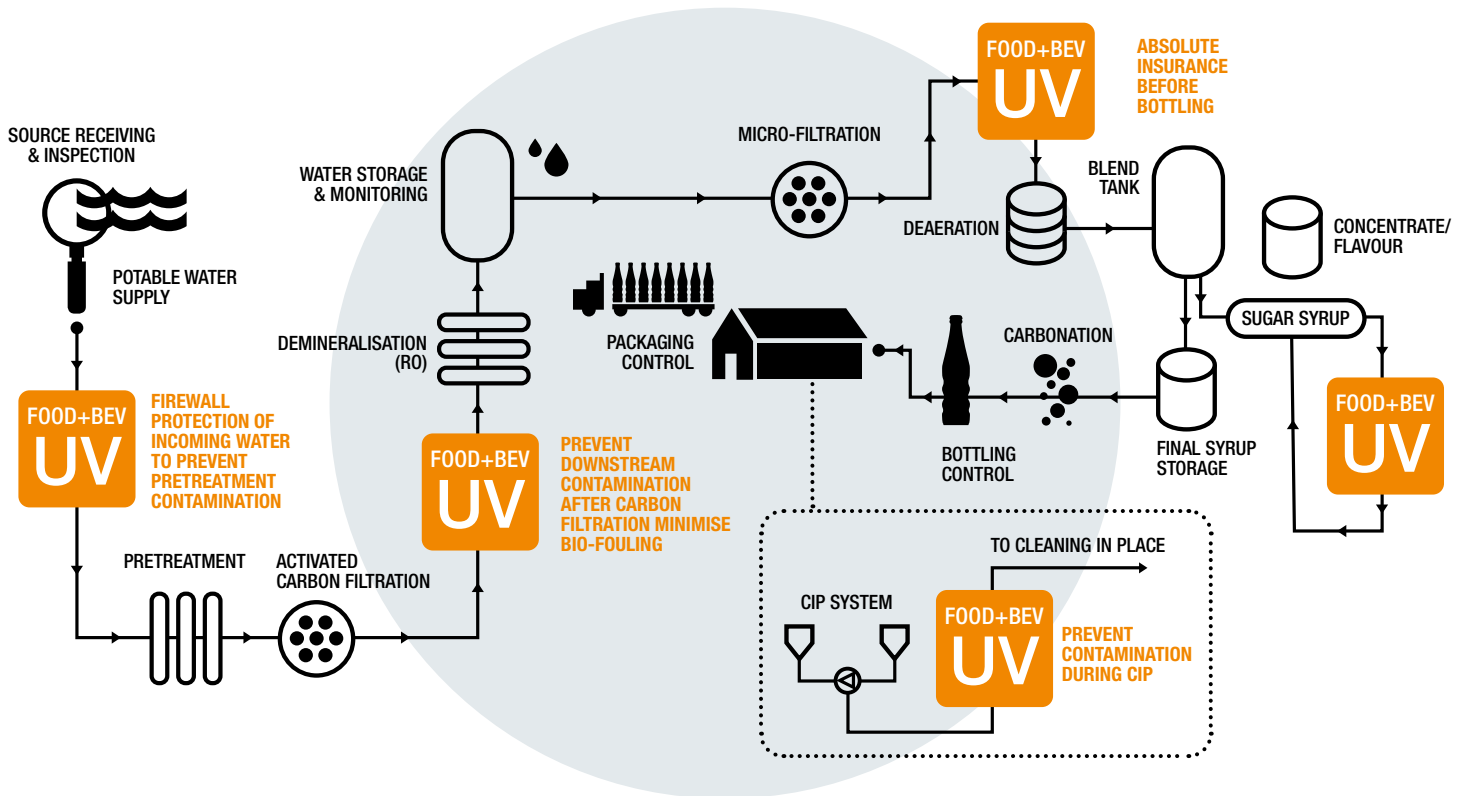
Our PureLine D PH systems are aimed specifically at providing UV disinfection for product and process waters used in the food and beverage industry. By using a UV system you will disinfect the water, eliminate harmful micro-organisms, reduce the bio-burden, protect against bio-fouling, lead to fewer CIP/SIP cycles and lower operating costs. Each system comes with a UV monitor to measure the germicidal output of the UV system and make it easy to monitor and log performance.

**berson**

**hanovia**

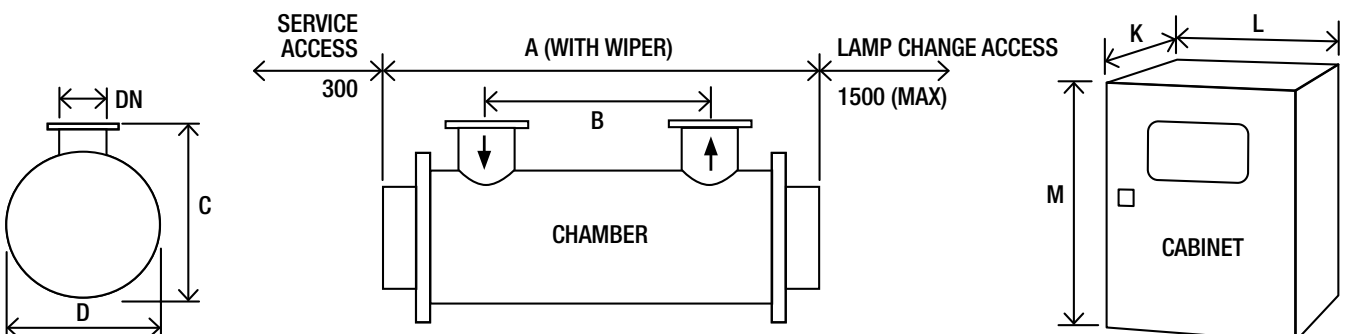
**aquionics**

# Potential locations of the PureLine D PH™



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
<b>INTELLIGENCE</b>		
UV intensity monitor measuring germicidal wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
<b>OPTIMISATION</b>		
UV water disinfection	Protect your process waters from microbiological contamination including chlorine resistant <i>Cryptosporidium</i> and <i>Giardia</i>	Does not affect taste and colour of final product No chemicals
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
<b>INTEGRATION</b>		
Compact design	Can be fitted to skids Can be retrofitted to existing process	Easy integration

\* Option



Model Number	Maximum Power (kW)	Min T <sub>10</sub> (%)	Dimensions (mm)								Approx weight (Kg)	
			A	B	C	D	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
PureLine D PH 0070	1.6	64	850	300	267	184	50	330	750	850	45	85
PureLine D PH 0080	2.7	91	1300	710	319	240	80	330	750	850	50	85
PureLine D PH 0083	2.7	91	1300	710	319	240	100	330	750	850	50	85
PureLine D PH 0100	4.4	81	1300	710	319	240	100	330	750	850	50	85
PureLine D PH 0209	4.4	90	1300	660	420	290	150	330	750	850	65	85
PureLine D PH 0240	5.8	84	1300	660	420	290	150	330	900	1100	65	85
PureLine D PH 0300	5.8	93	1300	610	505	410	200	330	900	1100	140	165
PureLine D PH 0350	10	70	1300	660	420	290	150	330	1100	1600	65	282
PureLine D PH 0400	16.5	62	1300	660	420	290	150	330	1100	1600	65	282
PureLine D PH 0550	16.5	62	1300	610	505	410	200	330	1100	1600	140	282
PureLine D PH 0900***	25.2	62	1300	550	505	410	250	330	900	1100	140	165
								330	1100	1600		
PureLine D PH 0950***	33	62	1300	610	505	410	200	330	1100	1600	140	282
								330	1100	1600		

\* 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).

\*\*\* System consists of two cabinets; separate dimensions K, L, M and weights are given for each cabinet.

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:	Stainless steel 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
End plate:	Removable end plate
Degree of protection:	IP65 equivalent to NEMA 4 but not for outside use
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Pure quartz (F200)
Number of arc tubes (lamps):	1 (D PH 0070-0300), 4 (D PH 0350-0550), 6 (D PH 0900), 8 (D PH 0950)
Expected lamp life:	8000 hrs, 4000 hrs D PH 0240 and 0300
Temperature sensor:	Yes
UV monitor:	Wet UV monitor (if above minimum T <sub>10</sub> )
Working fluid temperature:	1°C to 60°C (80°C unwiped)
Maximum CIP temperature:	95°C with cabinet electrically isolated
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
Chamber mounting:	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 material: Stainless steel 316	
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish	
Wiper: Automatic (electrically driven ) except D 0070	
Flange options: ANSI 150, JIS, Table 'E' and tri-clamp	
Chamber internal finish: <0.38 µm welds polished out, electropolished and passivated	
Lead length: 20 m, 30 m or 50 m cabinet to chamber	
Maximum CIP temperature: 130°C (panel electrically isolated)	
Welder Document Pack for chamber construction	
Bleed valve: Hygienic valve with tri-clamp connection	
S-shaped chamber	
Skid mounting (not ship board or earthquake zone)	

OPTIONS (CONTINUED)	
Operating pressure:	10 bar
Power adjustment:	4 level power switching
Air vent connection:	Tri-clamp
Stainless steel cabinet IP upgrade: air to air heat exchangers stainless steel version IP 56, NEMA 4X, relative humidity <95% non condensing. If fitted no UL listing. See sales drawings for sizes.	
Aggressive water package: For 400 ppm to 20000 ppm chloride water	
UVShield™: Power cut-out for lamp access for D PH 0070 - 0300	
Water leak detection: Detects water leaks from quartz sleeve for D PH 0070 - 0300	
Arc tube enclosure: Doped quartz F240 (reduces performance)	

CABINET (CONTROLLER PHOTON)	
Material:	Polyester coated carbon steel
Degree of protection:	IP54 NEMA 12
Supply voltages:	D PH 0070-0083 95 V to 260 V (+/- 10%) D PH 0100-0300 190 V to 480 V (+/- 10%) D PH 0350-0950 380 V to 480 V (+/- 10%) 50/60 Hz
Operating temperature range:	5°C to 40°C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	10 m cabinet to chamber

CUSTOMER OUTPUTS	
4-20 mA passive or active output:	UV intensity %, or UV dose (if power stepping option)
VFC outputs:	System warning, lamp ready, low UV, common trip, remote reset, ELCB or water leak, system available, local or remote mode

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

CUSTOMER COMMUNICATIONS PORT	
None	

APPROVALS	
CE marked, UL listed E149108	



**PURELINE D**

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



**PURELINE DC+DCD**

Dechlorination and Chlorine  
Dioxide removal



**PURELINE DO**

Ozone removal and  
disinfection



**PURELINE S**

Sugar syrup disinfection



**PURELINE PQ**

3rd party bioassayed  
systems for critical  
disinfection or as a  
pathogen barrier



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