

formerly Aquionics, Berson, Hanovia and Orca GmbH



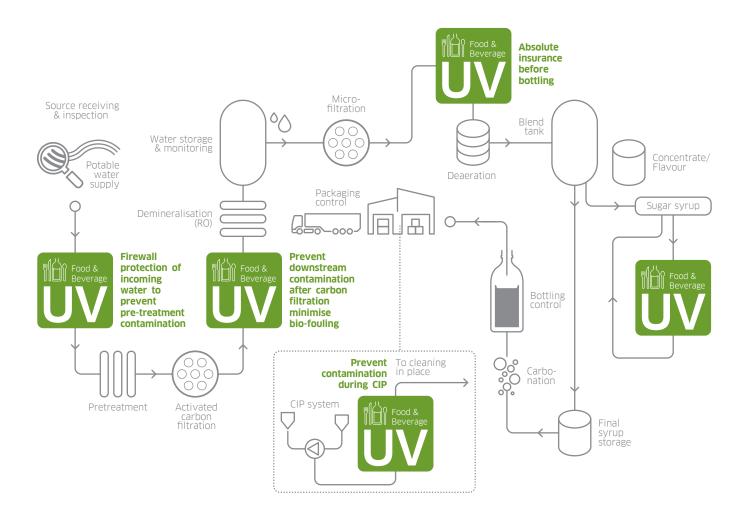
# **PureLine D PH**

# UV TREATMENT FOR FOOD AND BEVERAGE

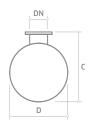
Our **PureLine D PH** systems are aimed specifically at providing UV treatment for product and process waters used in the food and beverage industry. By using a UV system you will eliminate harmful micro-organisms, reduce the bio-burden, protect against biofouling, lead to fewer CIP/SIP cycles and lower 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.

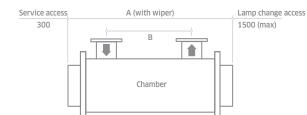


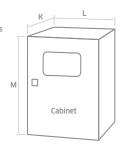
## POTENTIAL LOCATIONS OF THE PURELINE D PH™



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU		
INTELLIGENCE				
UV intensity monitor measuring germicidal 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	Does not affect taste and colour of final product		
	contamination including chlorine resistant Cryptosporidium and Giardia	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 $\mu$ m 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				







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).

MODEL NUMBER	MAX POWER (KW)	MIN T10(%)	10(%) DIMENSIONS (MM)			APPROX WEIGHT (KG)						
			А	В	С	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		282
PureLine D PH 0950***	33	62	1300	610	505	410	200	330	1100	1600	140	282
								330	1100	1600		282

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:	Remova ble 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 T10)
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

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 $\mu m$ 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

ODTIONS	(CONTINITIED)

Operating pressure: 10 bar
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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: Doned quartz E240 (reduces performance)

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 ston/start and remote reset			

#### VFC inputs: Remote stop/start and remote reset

None

CE marked, UL listed E149108

Skid mounting (not ship board or earthquake zone)

S-shaped chamber



## **PureLine D**

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

PURELINE DC+DCD

PURELINE DO PURELINE PQ PURELINE S

Dechlorination and Chlorine Dioxide removal Ozone removal and treatment

3rd party bioassayed systems for critical treatment or as a pathogen barrier Sugar syrup treatment

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