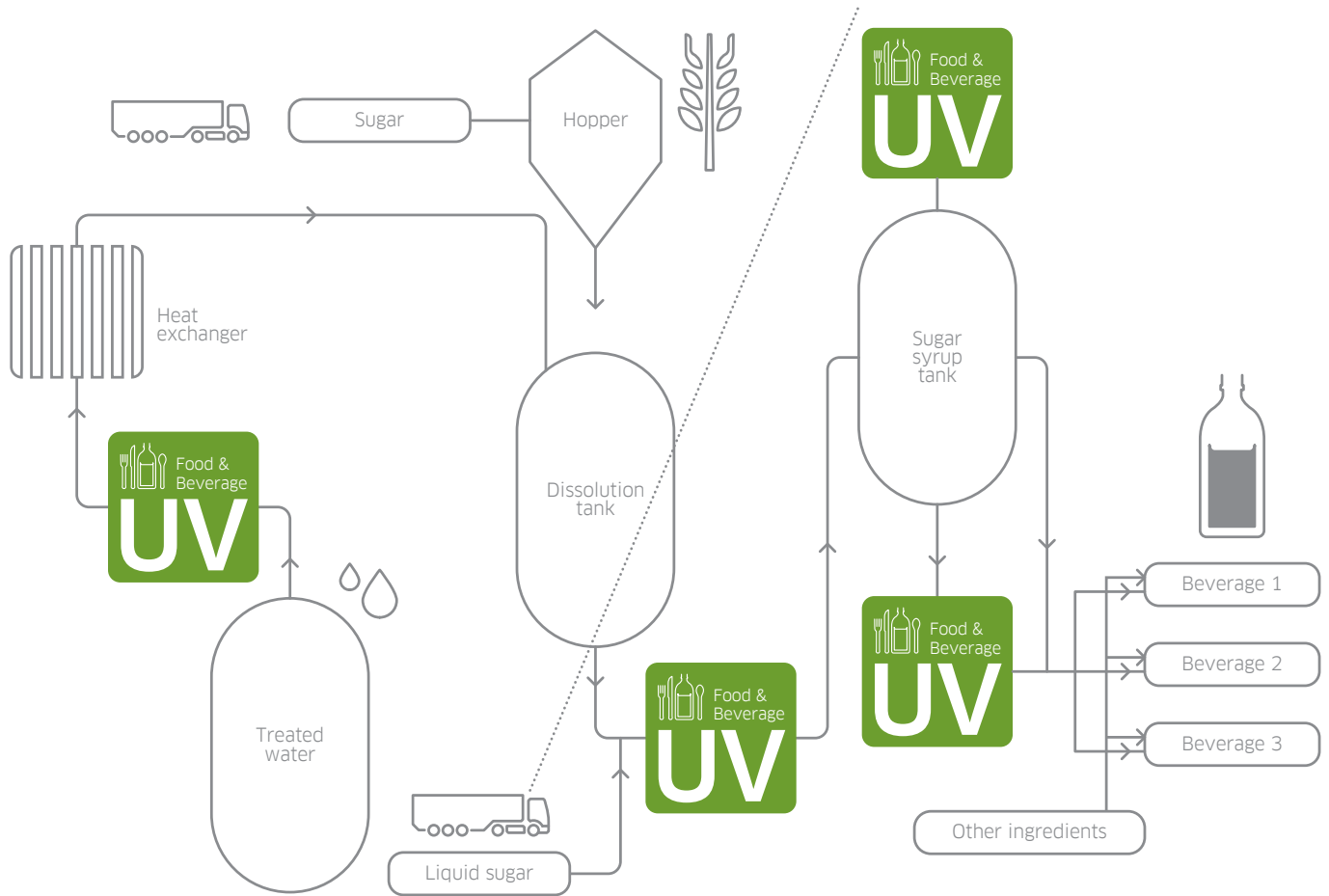# PureLine S PH 5-15

UV TREATMENT FOR SUGAR SYRUP

Our **PureLine S PH** systems are aimed specifi ally at providing UV treatment for sugar syrup used in the food and beverage industry. By using a UV system you will eliminate harmful micro-organisms, reducing the need for thermal pasteurisation with its associated energy 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.

Application Optimised UV for Food & Beverage

POTENTIAL LOCATIONS OF THE PURELINE S PH™ SUGAR SYRUP TREATMENT

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 treatment	Protect your sugar syrup from microbiological contamination including thermophilic bacteria	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
INTEGRATION		
Compact design	Can be fitted to skids	Easy integration
	Can be retrofitted to existing process	

*Option
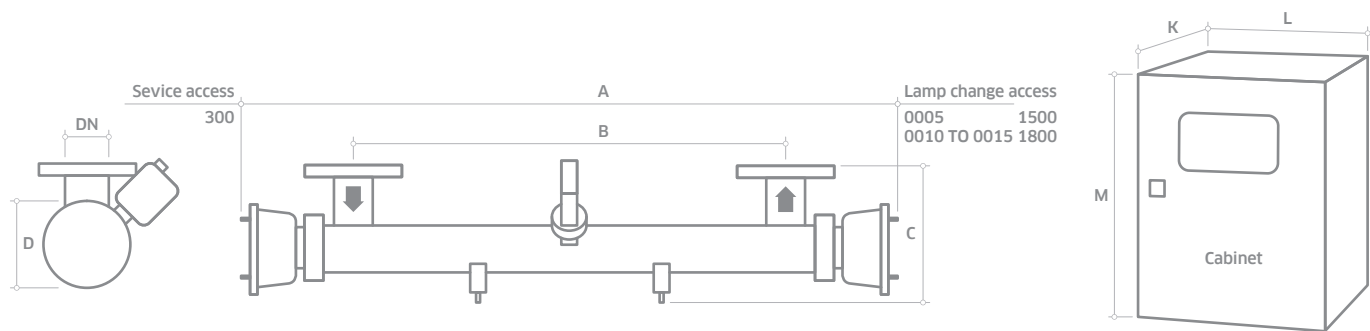
MODEL NUMBER	MAX POWER (KW)	MIN T10(%)	DIMENSIONS (MM)								APPROX WEIGHT (KG)	
			A	B	C	D	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
PureLine S PH 0005	2.7	30	955	585	184	160	40	330	750	850	20	85
PureLine S PH 0010	4.2	20	1210	825	210	160	65	330	750	850	21	85
PureLine S PH 0015	5.8	15	1465	1000	210	160	65	330	900	1100	22	165

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:	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
Expected lamp life:	8000 hours, 4000 hours S PH 0015
Temperature sensor:	Yes
UV sensor:	Wet UV monitor (if above minimum T10)
Working fluid temperature:	1℃ to 80℃
Maximum CIP temperature:	95℃ 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

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

S-shaped chamber

Maximum CIP temperature: 130℃ (panel switched off)

Welder Document Pack for chamber construction

OPTIONS (CONTINUED)

Bleed valve: Hygienic valve with tri-clamp connection

Skid mounting (not ship board or earthquake zone)

Operating pressure: 10 bar

Air vent connection: Tri-clamp blanked off

Stainless steel cabinet IP upgrade: air to air heat exchangers stainless steel IP 56, NEMA 4X, relative humidity <95% non condensing. If fitted no UL listing. See sales drawings for sizes.

CABINET (CONTROLLER PHOTON)

Material:	Polyester coated carbon steel
Degree of protection:	IP54 NEMA 12
Supply voltages (nominal):	S PH 0005 95 V to 260 V (+/-10%) S PH 0010-0015 190 V to 480 V (+/-10%) 50/60 Hz
Operating temperature range:	5℃ to 40℃
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable lengths:	10 m cabinet to chamber

CUSTOMER OUTPUTS

4-20 mA passive or active output:	UV intensity %
VFC outputs:	System warning, lamp ready, low UV intensity, common trip, remote reset, ELCB or water leak, system available, local or remote mode

CUSTOMER INPUTS

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

CUSTOMER COMMUNICATIONS PORT

None

APPROVALS

CE marked, UL listed E149108

PureLine S

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

PURELINE DC+DCD

Dechlorination and Chlorine Dioxide removal

PURELINE DO

Ozone removal and treatment

PURELINE D

Treatment as part of a multi barrier approach

PURELINE PQ

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

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