



Certified
series



When you use water for drinking or in critical (production) processes, in terms of clean and safe water, only 100% certainty counts. To make this possible, we developed the Certified Series (C series) UV systems. These internationally certified systems are guaranteed to purify your water according to the desired quality standards. The C-series is a valued system thanks to the reliability in, for example, the maritime sector and the pharmaceutical and food industry. Industries in which production security and product safety are of vital importance.

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Reference case



Fort Island Pampus receives a unique sustainable 'watermaker'

Fort Island Pampus, a UNESCO World Heritage Site in the Netherlands, has joined forces with Van Remmen UV Technology, Jotem Water Solutions, and NX Filtration to achieve self-sufficiency in water. Faced with historical challenges in water supply, they developed a local 'watermaker' system that converts water from the IJmeer into high-quality drinking water. The off-grid system, based on sand filtration, nanofiltration membranes, and UV disinfection, requires minimal maintenance and is powered by solar panels. This sustainability project aims for complete self-sufficiency by 2024, eliminating the need to transport drinking water to Pampus by boat. Visitors will enjoy locally produced 'Pampuswater,' meeting stringent standards and offering the highest quality. Pampus aims to set a global example, emphasizing that innovative, sustainable solutions like this are crucial in a world grappling with resource shortages, water scarcity, and ecological issues. Pampus director Tom van Nouhuys envisions the self-sufficient island as a sustainability model deserving global emulation.



Benefits



Meets the strictest certifications

The C series is certified according to CEN EN 14897:2006. This CEN protocol is based on the ÖNORM M 5873-1 and comparable to the US-EPA 2003 and the DVGW. An ÖNORM UV sensor is placed as standard in the base of a Certified unit. This series is also certified by the Norwegian Institution of Public Health (NIPH).



Real Time monitoring

By monitoring the flow and UV intensity in the C-series, you determine exactly the right UV dose for your water. This optimises energy consumption and guarantees safety. If the system deviates from the norm, the system will malfunction and the water flow will be shut off. Therefore, not a single drop of water passes through the system without the required UV dose.



Lowest Total Cost of Ownership

Our C-series systems are made of high-quality materials with a long lifespan, require minimal maintenance and work with energy-efficient low-pressure lamps. As a result, our systems have the lowest Total Cost of Ownership (TCO) in the market. In most instances, the payback period for our C-series is only a few years.

Specifications



Type	C340	C360	C370	C380	C390
UV Chamber					
Material	316L / 14404 Stainless steel				
In-/Outlet Connections (BSP-T)	1.5"	2"	2"	2.5"	3"
Pressure drop	< 0.1 bar				
Max. Pressure	10 bar at 25°C				
Mounting Orientation	Horizontal/ Vertical	Horizontal/ Vertical	Horizontal	Horizontal	Horizontal
Diameter - A (mm)	129	129	89	129	129
Height - B (mm)	103	103	82	110	120
Installation dimension - C (mm)	547	1041	1340	1336	1604
Length - D (mm)	708	1207	1499	1512	1790
Required working space - E (mm)	1275	2270	2855	2880	3440
Weight (kg)	6.8	10.8	9.7	13.2	15.7

UV Lamp(s)

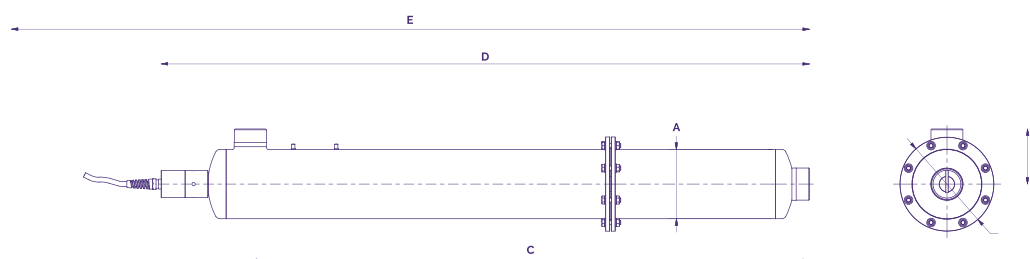
Lamp type	60 W Regular	120 W Long Life	205 W Long Life	205 W Long Life	325 W Long Life
Preferred water temp. (°C)	5°C - 30°C				
Total UV-C output (Watt)	19	38	58	58	116
Lamp lifespan (hours)	16000				
Number of lamps	1	1	1	1	1

Control Unit

Material	Aluminium and recycled ABS				
Dimensions (lxbxh)	280x150x90 mm				
Control features	UV intensity (absolute Value in W/m²), lamp status, lamp hour counter, system running time, volt free alarm contacts, 4/20mA output, Remote start/stop				
Options	1" UV sensor conform ÖNORM, Modbus RTU, Remote monitoring				
Operating Voltage	230 VAC, 50/60 Hz				
Electrical connection	6A C-char./4A D-char.				
Protection rating	IP55				
Preferred ambient temp. (°C)	5°C - 35°C				
Total Power Consumption (W)	70	140	230	230	365
Length lamp cable	1 meter (3 or 6 optional)				

Approvals

Complies with	Low Voltage Directive (LVD) 2014/35/EU, Electromagnetic Compatibility Directive (EMC) 2014/30/EU, Machinery Directive 2014/42/EC
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Specifications



Type	C400	C420	C450	C490
UV Chamber				
Material	316L / 1.4404 RVS			
In-/Outlet Connections (BSP-T)	DN100 PN16	DN150 PN16	DN250 PN16	DN300 PN16
Pressure drop	<0.2 bar		<0.1 bar	
Max. Pressure	10 bar bij 25°C		16 bar bij 25°C	
Mounting Orientation	Horizontal	Horizontal	Horizontal	Horizontal
Diameter - A (mm)	204	204	254	304
Height - B (mm)	159	159	262	255
Installation dimension - C (mm)	1131	1431	143	1442
Length - D (mm)	1321	1621	1710	1710
Required working space - E (mm)	2640	3100	3360	3360
Weight (kg)	37	41.2	73	89

UV Lamp(s)

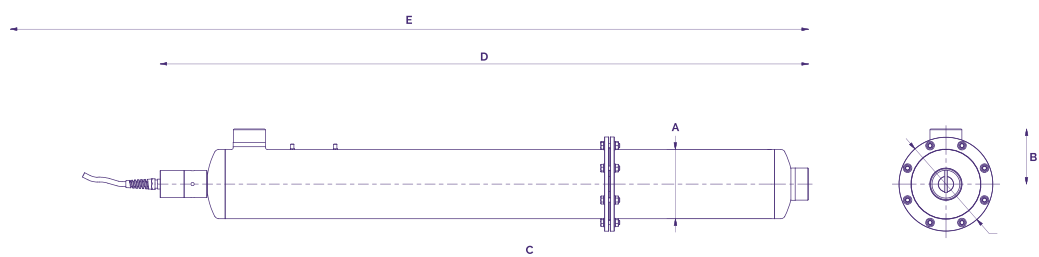
Lamp type	120 W Long Life	205W Long Life	325W Long Life	325W Long Life
Preferred water temp. (°C)	5 °C - 30°C			
Total UV-C output (Watt)	114	174	348	580
Lamp lifespan (hours)	16000			
Number of lamps	3	3	3	5

Control Unit

Material	Coated steel			
Dimensions (lxbxh)	600x600x210 mm			
Control features	Lamp status, lamp hours, system running time, volt free alarm contacts, 4/20mA output, Remote start/stop			
Options	1" UV sensor conform ÖNORM, Modbus RTU, Remote monitoring			
Operating Voltage	230 VAC, 50/60 Hz			
Electrical connection	16A C-char./10A D-char.			
Protection rating	IP54			
Preferred ambient temp. (°C)	5°C - 35°C			
Total Power Consumption (W)	435	690	1085	1810
Length lamp cable	3 meter (6 optional)			

Approvals

Complies with	Low Voltage Directive (LVD) 2014/35/EU, Electromagnetic Compatibility Directive (EMC) 2014/30/EU, Machinery Directive 2014/42/EC
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Capacities in m³/h at a dose of 400 J/m²

Unit	T10 80%	T10 85%	T10 90%	T10 95%	T10 99%
C340	3,7	4,6	5,7	7,3	8,8
C360	7,8	10,1	13	16,5	19,8
C370	12,5	15	18,4	22,5	26,4
C380	13	17,6	25,1	35,8	47,6
C390	27,3	35,8	46,3	59,9	72,8
C400	30,5	38	50,7	71,5	97
C420	48	63	83	109	135
C450	79	114	163	233	310
C490	149	186	233	291	349

Capacities - Transmittance diagram

