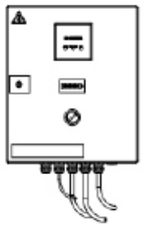
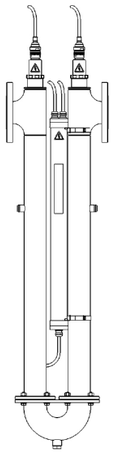
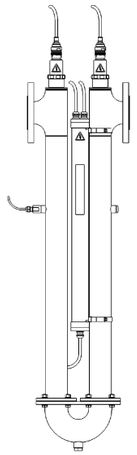
Product description - Wallenius AOT 25





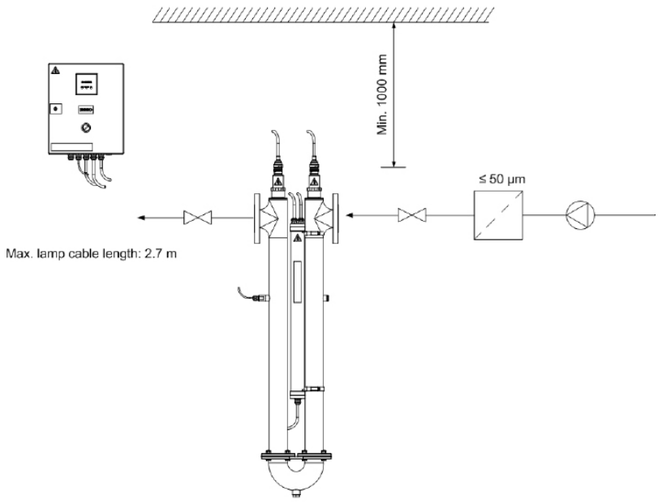
Wallenius AOT 25-02



Wallenius AOT 25-03/13

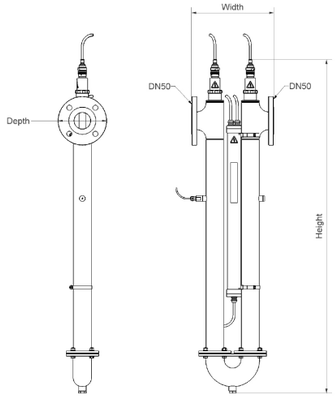
MODEL		AOT 25-02/12	AOT 25-03/13	
No. of passages		1/2[1])	2	
Total lamp power		2x80W	2x80W	
Tool free service		Yes	Yes	
Power supply indicator		Yes	Yes	
Prepared tor external alarm		Yes	Yes	
Elapsed time counter		Yes	Yes	
UV sensor with monitor		-	Yes	
Safety valves		-	Yes (optional)	

Installation example and dimensions



Dimensions

	Weight	Height	Width	Dept
AOT 25	8,6 kg	1063 mm	279 mm	167 mm
Control box		300 mm	250 mm	155 mm



For more information about Wallenius AOT products and Wallenius AOT, contact your local distributor or Wallenius Water, info@walleniuswater.com or www.walleniuswater.com/CONTACT/

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WALLENIUS WATER

Product leaflet

Wallenius AOT 25 series

- An effective microbiological barrier against Legionella

Chemical-free water treatment

• Wallenius AOT products break down harmful microorganisms and other pollutants in water

Tested and approved

• Efficient against Legionella pneumophila even inside amoebas
• Tested at Vitens laboratories in the Netherlands
• ctgb approval no. 13295N
• Meets the guidelines BRL K14010-1/01 issued by Dutch quality assurance agency KIWA
• Norovirus and polio tested

The flexibility of the Wallenius AOT 25 series

• Working temperature of water from 5 to 60°C
• Modular possibilities, single, serial or parallel
• Vertical or horizontal installation

Energy- and cost-efficient solution

• Robust design for heavy duty demands, still light weight with a small footprint
• Modularly installed in new or existing systems
• Few moving parts, long lifetime

Fuss free service and maintenance

• No tool needed for lamp replacement
• Few consumables
• Long lifetime of lamps, 9000 hours, if system in operation 24/7
• A UV sensor on reactor connected to a monitor on the front of the control cabinet, can be connected to an external alarm

Add ons

• UV sensor, prepared for connection to an external alarm function
• A safety magnetic valve, turning the waterflow off if the alarm is triggered

Approvals

• Lloyd´s Register for marine applications
• All wetted components according to BS 6920 guidelines

Wallenius AOT 25 in premium version

Features and fits

Wallenius AOT 25
The Wallenius AOT 25 has been developed specially to decrease highly evasive Legionella bacteria in water systems.

The Wallenius AOT technology has been tested at the Vitens laboratories in the Netherlands. It meets the strict new BRL K14010-1/01 guidelines issued by Dutch quality assurance agency KIWA. The Vitens laboratories' tests prove that Wallenius AOT is powerful against Legionella bacteria, even the ones living inside amoebas.

Flexible product
The Wallenius AOT 25 is a flexible product, from basic versions to be incorporated into existing systems to stand-alone versions with UV sensor, monitor and safety valve.

The product can be installed in serial or parallel configuration depending on requirements or flow rate. One control panel can handle up to two single units hence reducing the number of panels for high flow applications.

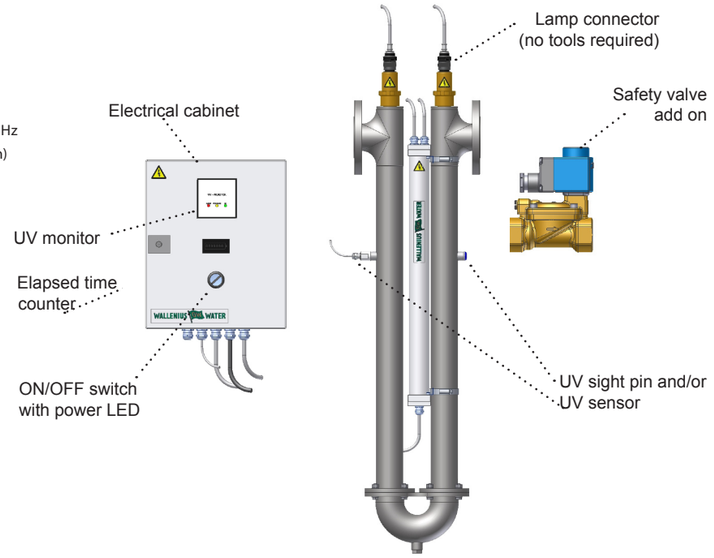
Accessories
The safety valve is an option to choose for Wallenius AOT 25 units with sensor. The safety valve is directly coupled to the UV sensor signal and automatically closes if an alarm is triggered.

Control cabinet
The control cabinets are EMC proof and have high IP classification. An elapsed time counter is placed on the front panel showing the total running hours of the unit. The ON/OFF switch lits blue when ON.

Service and maintenance
Depending on application and requirement, maintenance of the unit can differ and consists mainly of cleaning the quartz sleeve. This is easily done on the Wallenius AOT 25 in a few steps requiring no tools!

Technical specification

Max hydraulic water flow:	25 m^3/h
Lamps, effect:	160 W (2x80 W)
Power supply:	200-240 VAC, 50/60 Hz
Pressure drop:	<0,2 bar (at 25 m^3/h)
Operating pressure class:	PN10
Working temperature:	5-60°C
Ambient temperature:	5-50°C
IP class:	65
Connections:	DN50 flanges



Wallenius AOT

An advanced technology from Wallenius Water
Wallenius AOT purifies water like nature does. UV-light in combination with a photocatalytic surface create free radicals, that effectively break down harmful microorganisms and other pollutants in water.
No chemical substances are required or generated by the Wallenius AOT process.

The Wallenius AOT process occurs within a closed chamber in which radicals are generated. These radicals are highly reactive so they instantaneously break down harmful microorganisms and other pollutants. The radicals are short lived and exist for only a few milliseconds, which means they have no possibility of leaving the reaction chamber.
Related technologies to Wallenius AOT can be found in many of today´s smart products, such as the self-cleaning windows of skyscrapers and cars, which prevent the growth of organisms through an AOT reaction that occurs when sunlight strikes the titaniumdioxide.

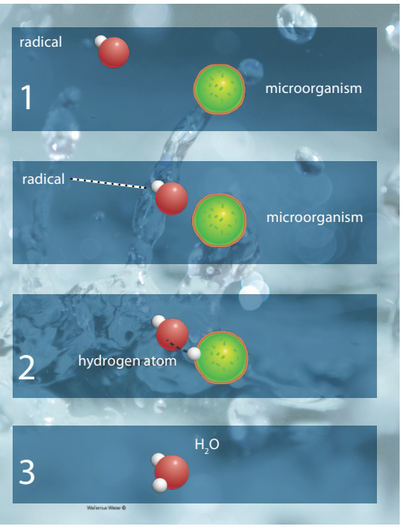
The principles of Wallenius AOT

A photocatalytic process forms hydroxyl radicals, also known as free radicals. These radicals are a highly effective and extremely fast-acting tool for breaking down microorganisms. The process is restricted to the chamber and is completely chemical-free.

1. Radicals encounter the surface of a microorganism or other contaminant.

2. The radicals steal hydrogen atoms.

3. When a structure on the surface of the microorganism or contaminant loses its hydrogen atoms, it loses its shape and breaks down. The radical is transformed into water.



Wallenius AOT makes it possible to decompose:

Bacteria e.g:
- Legionella pneumophila, even in amoebas
- E. coli
- Waste water microorganisms

Protozoa e.g:
- Cryptosporidium
- Giardia
- Amoebas
- Cordylophora caspia
- Electra crustulenta

Fungi e.g:
- Candida albicans
- Aspergillus fumigatus

Algae e.g:
- Green algae
- Chlorophyta
- Dinoflaggelates

Virus e.g:
- Tobacco mosaic virus
- Tomato bushy stunt virus
- Polio virus

Chemical compounds e.g:
- Bound chlorine
- Pharmaceutical residues
- Odor

Tested and approved technology
Wallenius AOT technology is included in all Wallenius Water´s products. Some products are focused on specific applications and have therefore been tested and approved by:
- IMO (International Maritime Organization), Det Norske Veritas (DNV) and Stockholm University
- Ctgb (Board for the authorisation of plant protection products and biocides - in the Netherlands) Authorisation no. 13295 N.

Selected products fulfill the Dutch Assessment Guideline for Legionella in tap water, BRL K14010-01/01 set by KIWA, tests performed by Vitens Laboratories in the Netherlands.

Award-winning technology
The Wallenius AOT is included as the core of PureBallast which have been awarded by WWF, Lloyds List and Sustainable Shipping. PureBallast is the first chemical-free ballast water purification system to be approved by the IMO and certified by Det Norske Veritas, DNV. PureBallast is jointly developed by Wallenius Water and Alfa Laval and is sold by Alfa Laval.