

Air Conditioning Treatment



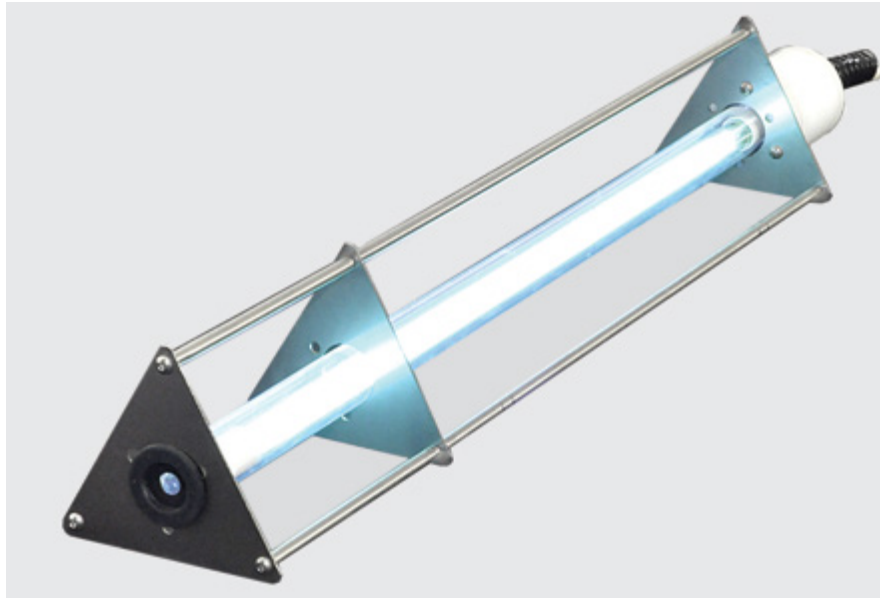
UV-STYLO-E

LIGHT PROGRESS



UV-STYLO-E

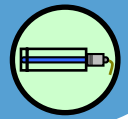
Stainless Steel UV-C germicidal Underwater device with IP 68 for disinfection of water and surfaces



UV-STYLO-E is formed by a Stainless Steel AISI 304 triangular main frame, within which an UV-C rays emitter tube is inserted.

The tube is protected by a pure quartz bulb, transparent to the rays of a wavelength of 253.7 nm (UV-C), supported by a cylinder of plastic material, which fulfils the dual function of containing the electrical connection between tube and power cable, and to support the quartz. The complete device reaches the protection class IP68 - 10m. The quartz also performs the important function of protecting the UV-C tube by low temperatures, creating a cushion of air between the tube and the outside environment, while increasing the yield of the lamp. The quartz may be protected by a thermo-retracted UVLON PIPE sheath to hold the glass fragments from possible breakage of the same. This is a special UV-C transparent and

- Selective UV-C tube (at 253.7 nm.) with high efficiency
- Triangular main frame in Stainless Steel AISI 304.
- All used materials are tested for resistance to intense UV-C rays
- Quartz to protect the UV-C tube
- Watertight and dust-tight (IP 68) (Class II).
- Powered by electronic ballasts specific for UV-C rays lamps.
- UVLON PIPE protection sheath against projections of glass fragments (optional)
- CE mark (LVD - EMC - MD - RoHS)



resistant plastic sleeve, also resistant to tearing, to wear, to any aggressive chemical and with a FDA certification for use with food.

UV-STYLO-E is available in various lengths and powers to meet the different needs of use. All models are exclusively made of materials UV-C, humidity and cold resistant. The use is allowed only in the absence people, ie in closed spaces or otherwise properly shielded



APPLICATIONS AND RESULTS

This unit multiplies the possibilities of UV-C radiation use for the disinfection of the water and makes it possible to sanitize the water directly into tanks, wells, wash systems, etc..

The exposure of the liquid to an open system such as UV-STYLO-E allows to obtain the same results of the most common steel chamber UV sterilizing devices (vessel).

Due to UV-STYLO construction materials and the degree of protection IP 68 - 10m it is possible to disinfect water and other liquids with a good UVT (UV transmittance) completely submerging the device in pools or under direct water stream. The penetration of UV-C in distilled water can reach up to 2 meters, while for clear water, but rich in dissolved salts and iron, penetration is less than (0.05 ÷ 0.25 mt.)

It's so important to know the values of UVT of a liquid (which can be measured by our technicians) or at least the values of its turbidity

and hardness in order to prepare the proper spatial distribution of the UV-STYLO modules.

In **air conditioning systems**, the 'UV-STYLO-E is directly applicable in the **tanks for collecting the water used for humidification system (cooling)**. The excess of such water, after being sprayed against the evaporative panels, percolates in tanks and, then, is recycled. The units are placed considering a UV dose of 1 watt of rated power (0.33 W UV-C) for every 1.5 dm³ water.

The effectiveness of this device is also found in the air and on surfaces for disinfection of container walls (silos, boxes, tanks, etc..) where it is necessary to sanitize "on empty", that is when the product content has been temporarily evacuated.



OPERATING

UV-STYLO-E works by direct irradiation. When it is on, a strong reduction of microbes is obtained on the irradiated surfaces. In 2 minutes of exposure, a 99% reduction of bacteria (Bacillus, Coli, Clostridium, Legionella, Vibrio, Salmonella, Pseudomonas, Staphylococcus, Streptococcus, etc.) is obtained at a distance of 1 m from the source.

The use is permitted only in the absence of personnel or in closed or adequately shielded environments.



BENEFITS AND ADVANTAGES

● PHYSICAL ACTION AND ENVIRONMENTAL PROTECTION

The treatment by UV-C rays is purely physical, and it allows to always get the same effectiveness; also, there are no problems of overdose and rooms are always safe and practicable (when devices are off). Many methods of chemical treatment involve the use of dangerous products for the environment, and difficult products to biodegrade, as well as the risk of contamination of foodstuffs. Also, the use of chemicals allows the development of resistant microbial forms with consequent danger for the human health.

● PRACTICABILITY AND SAVINGS

The treatment is immediate and ready to the use. The maintenance is minimal, with low costs both of energetic consumptions and repairs.

● IMMEDIATE EFFECT

For an effective treatment (99,9% reduction of the micro-organism) it takes a very short time.

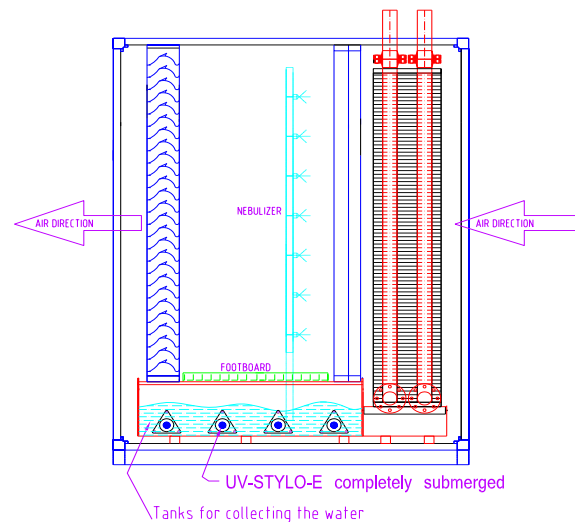
● NO DANGER OF DISPERSION OF GLASS

With the UVLON® protection special coating, there is no risk of dispersion of glass fragments resulting from any breakage of UV-C tubes.

● DEEP AND CONTINUOUS DISINFECTION OF WATER

This device can be turned on continuously (in absence of people). The disinfection of water, of equipment and of everything present in its radius of action, keeps constantly low the level of microbial load.

HUMIDIFICATION SYSTEM



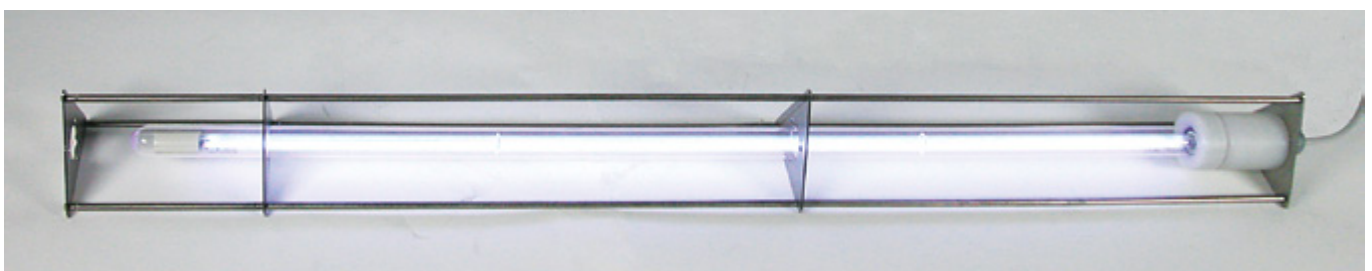
● QUALITY AND RESPECT FOR WATER

The application of the device allows not to use chemical substances and to avoid consequent alteration of chemical and organoleptic properties of water (as opposed to chlorine).

There are no dangers of overdose of UV rays on the water. On the contrary, many methods of chemical treatment involve the use of hazardous and difficult to dose substances. There will be no longer the typical problems of chlorination as the difficult biodegradability, toxicity of chlorine, the formation of any compounds of oncogenes and teratogens, in addition to the risk of accidental incorrect dosages

● TOTAL PROTECTION

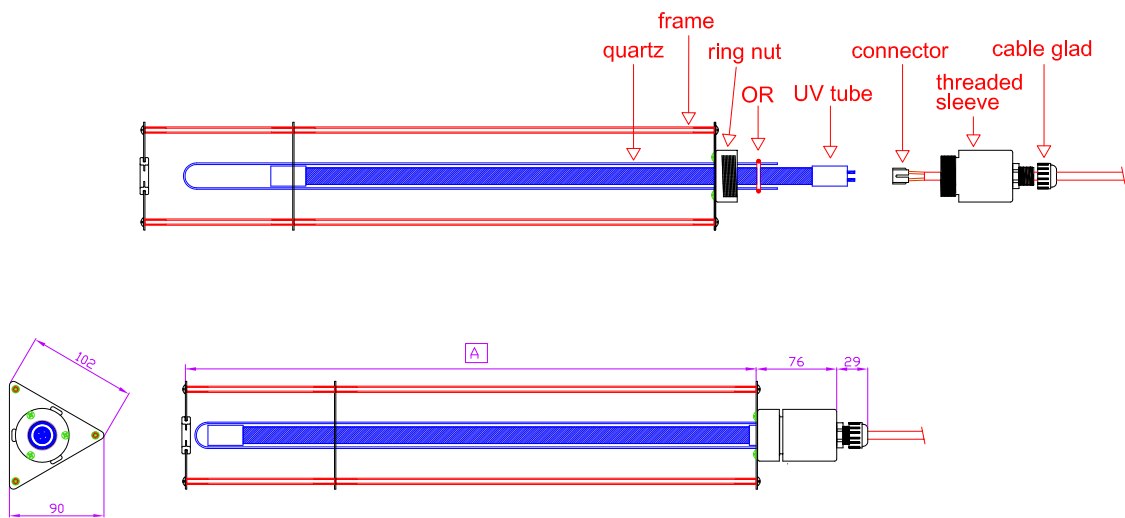
UV-STYLO can be immersed in water as it gets a degree of protection IP68-10 m. This will make it possible to treat the water, or other liquids with a high degree of transparency to UV-C radiation (UVT), by immersing one or more units.



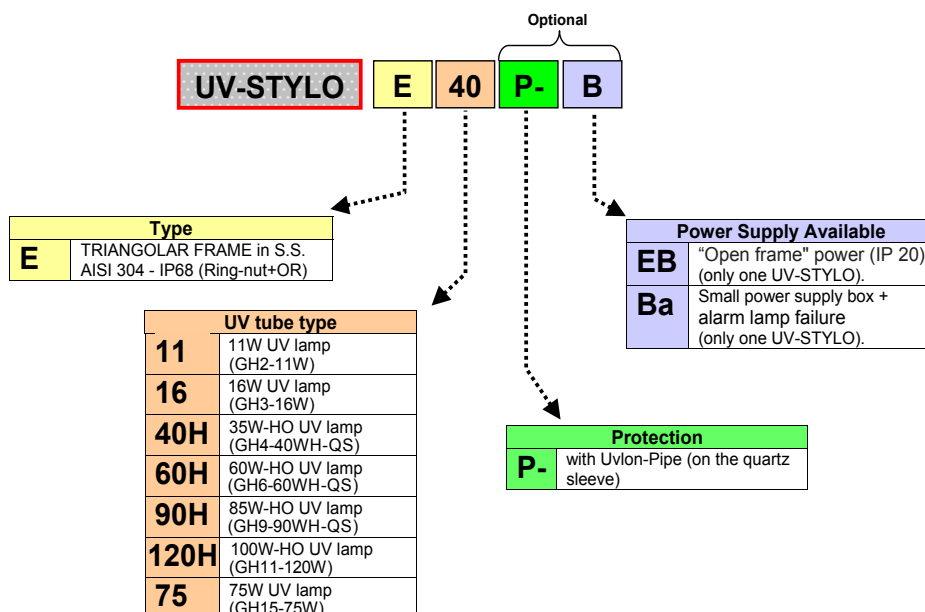


MODELS CHARACTERISTICS

UV-STYLO-E	11	16	40H	60H	90H	120H	75
AVERAGE LIFETIME TUBE (hours)	9000	9000	9000	9000	9000	9000	9000
CONSUMPTION (W)	11	16	35	60	85	100	75
"A" DIMENSIONS (mm)	234	300	442	583	900	1175	1533
WEIGHT (Kg)	0,35	0,50	0,70	0,80	1,10	1,40	1,90



MODEL CODES



POWER SUPPLY AVAILABLE

UV-STYLO series could be powered by 4 different solution:

- 1. Integrated Solution UV-STYLO-X nn-...EB :** With a "open frame" power (IP 20) small footprint. It powers only one UV-STYLO-X and is recommended when you have only a small space available and if you install single or isolated UV-STYLO-X.
- 2. Integrated Solution UV-STYLO-X nn-...B/Ba :** With a small power supply (IP 55); each box supplies a UV-STYLO-X. With -Ba solution you have also an alarm signal for lamp failure. You can install UV-STYLO-X single or isolated.
- 3. Solution with control board SINOTTICO-STY :** With this series of control board it is possible to supply more devices and check the proper functioning of every single UV-STYLO-X, directly from a synoptic board with LED. The SINOTTICO-STY also has a hour counter to check lamp life, as well as an alarm signal lamp failure. It's perfect if you install multiple UV-STYLO-X and a control check.
- 4. Solution with control board MASTER-STY :** With MASTER series you can power multiple devices at any time and control the correct operation of each UV-STYLO-X, directly from a synoptic board with LED. The control board allows to manage programs switching ON-OFF and safety checks in addition to alarms (malfunctioning of each lamp, door opening for inspection etc..) And output (light signals of lamps malfunction, end of lamps life , opening inspection doors). It suits if you install many UV-STYLO-X and you need a complete and safe control of the whole system

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