



PRIVATE POOLS

Concept of water treatment with or without chlorine

BIO-UV Group, the ultraviolet water treatment specialist for 20 years, developed a concept for **water treatment with or without chlorine** based on disinfection technology using type C ultraviolet light. So far, more than 20 000 private swimming pools & spas in Europe have been equipped, to the total satisfaction of their users.

Principle

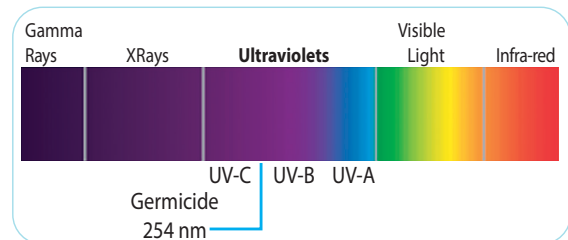
The sun emits invisible light: ultraviolet light. This natural phenomenon is reproduced inside the reactors in the **BIO-UV Group's** ranges using powerful lamps, the result of leading-edge technology, that emit UV-C rays.

Benefits

- **Water disinfected by UV-C** and **disinfecting water** thanks to the daily addition of small quantities of products that prolong the effect of the UV (chlorine, bromine, active oxygen)
- **Provides crystal clear, healthy water** that is non-irritant for the skin, hair, mucous membranes and eyes **allowing unrivalled comfort when swimming**
- **Environmentally friendly:** thanks to the use of UV-C rays that have a physical action and residual products that are chlorine-free, with residues that are not toxic for nature or humans
- No risk of allergies
- Corrosion-free, odor-free
- Compatible with all types of coatings, materials and filters
- **Automatic concept:** thanks to the dosing pump and the BIO-UV pH regulation
- Simple and quick to install
- Reliable: no electronic involved
- Reduced after-sales service: lamp changed every 13 000 hours (depending on the number of switchings on)

Action

At the wavelength 254nm, the UV-C penetrate to the DNA heart and **eradicate micro-organism** (virus, bacteria, algae, yeasts, mould, including Legionella, Cryptosporidium, Giardia and Toxoplasma that are hardly destroyed by ozone and not at all by chlorine at standard doses), destroying cell metabolism until they are completely destroyed. **Thus all germs are deactivated and cannot reproduce.**



The effective dose

The reactors of the **BIO-UV Group** ranges are dimensioned according to the pump flow rate, as it is the combination of the contact time in the reactor and the power of the lamp(s) that will ensure the necessary dose (expressed in millijoules per square centimeter or mJ/cm²) sufficient to kill **99.9% of the micro-organisms.**



UV HO N Series



UV Inox Series



UV Néo PVC Series





UV STAINLESS STEEL SERIES REACTORS (High Intensity Lamps)

Description	Max flow rate in m ³ /h	Performance in millijoules per cm ² at actual recommended flow rates*	UV Lamp : Number x Power consumption	Connection DN	Height of reactor in mm	Diameter of reactor in mm
UV 10	7	30	1 x 33 W	DN 50	424	150
UV 20	12	30	1 x 55 W	DN 50	694	150
UV 30	20	30	1 x 87 W	DN 63	940	150
UV 40	25	30	1 x 105 W	DN 75	1194	150
UV 170	17	30	2 x 55 W	DN 50	694	150
UV 250	25	30	2 x 55 W	DN 63	703	205
UV 340	34	30	2 x 87 W	DN 75	948	205

UV HO N SERIES REACTORS (High Intensity Lamps)

Description	Max flow rate in m ³ /h	Performance in millijoules per cm ² at actual recommended flow rates*	UV Lamp : Number x Power consumption	Connection	Height of reactor in mm	Diameter of reactor in mm
UV 3000 HO N	33	30	3 x 87 W	3"	1005	150
UV 3205 HO N	45	30	3 x 87 W	4"	1040	205
UV 4205 HO N	65	30	4 x 87 W	DN 125	1040	205
UV 5205 HO N	85	30	5 x 87 W	DN 125	1040	205
UV 6205 HO N	95	30	6 x 87 W	DN 150	1040	205
UV 6273 HO N	130	30	6 x 87 W	DN 150	1049	273

UV NÉO PVC SERIES REACTORS (High Intensity Lamps)

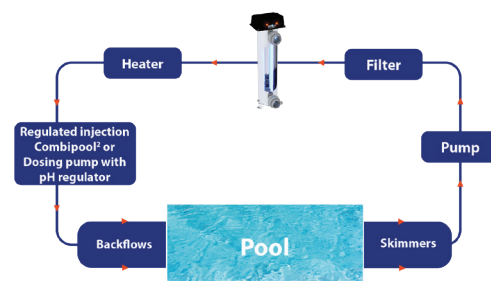
Description	Max flow rate in m ³ /h	Performance in millijoules per cm ² at actual recommended flow rates*	UV Lamp : Number x Power consumption	Connection	Height of reactor in mm	Diameter of reactor in mm
UV Néo 12	12	30	1 x 55 W	D 75	773	212
UV Néo 18	18	30	1 x 87 W	D 75	1019	212
UV Néo 25	25	30	1 x 105 W	D 75	1273	212

* The performance of these devices have been calculated at the end of the lamp life and with a transmission of 98%

Contact us for other flow rates

Advantages

- Specially adapted reactors made from mirror-polished 316L stainless steel
- Very long lamp service life (13,000 hours depending on the number of switchings on)
- Dedicated electronic ballasts guaranteeing maximum lamp UV efficiency and integrated control
- Lamp operating indicator light for each lamp
- Insignificant pressure loss
- Inlet/outlet connections using unions supplied
- Fastening lugs
- Maintenance : lamp change and cleaning of the quartz sleeve very quick and simple



During the filtration cycle, the water circulates inside the sanitiser and the bacteria, viruses and algae that pass through it are eradicated. Every day, the dosing pump injects a small quantity of remanent product in order to make the water disinfectant and prevent the appearance of algae on the sides of the pool. The automatic pH regulator enables the ideal pH comfort level to be maintained, prevents calcium deposits on the installation and optimizes the efficiency of the products.