



description and specifications

Innovative disinfection of swimming pools without chlorine or other chemical products

Oxineo® – a private station for automated disinfection of swimming pools based on active oxygen – to ensure crystal clear and odourless water

Adamant Technologies has developed the integrated product Oxineo®, based on Adamant®-Electrodes and the DiaCell® Technology. The electrodes consist of a boron-doped diamond (BDD) coating and allow electrolytic generation of active oxygen based disinfectant (peroxodisulfate, peroxodicarbonates, hydrogen peroxide, hydroxyl radical, etc.) directly from mineral salts and water.

Adamant®-Electrodes and DiaCell®

See "DiaCell® description and specifications" sheet.

System description

The system is composed of a metallic frame on which the whole parts of the system are fixed. These parts are: 1) one or two disinfection cell(s), called DiaCell®, in which the disinfectant generation is performed; 2) all tubes and fittings for water circulation; 3) the sensors for flow, conductivity and temperature measurements; 4) parts used to connect water at the ground potential; 5) 100 µm filter; 6) the electronic unit needed to feed the cells with the adequate continuous low voltage current. Oxineo® leaves access to the user-friendly interface for controlling the unit. This interface has the shape of a porthole and allows displaying continuously the rate of operation (4 predefined settings) and the water temperature. Additionally and by simply pressing on arrow buttons, several (20) operating and autocontrol parameters are also displayed.

Specifications

A range of Oxineo® is available and the adequate configuration has to be chosen depending on swimming pool size and frequentation (normally 6 peoples per day).

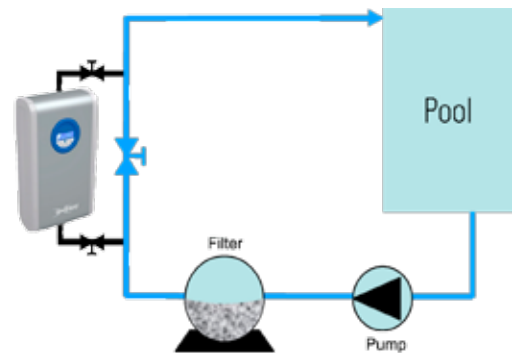
Oxineo® model	50	80	120	150	200
Dimensions & weight	86 x 48 x 31 cm / 30-45 kg				
Materials	Iron, ABS, PVC, PP				
Swimming pool volume (m³)	< 50	< 80	< 120	< 150	< 200
Pressure stability	up to 3 bar				
By-pass flow rate (m³/h)	0.3/0.6	0.4/0.9	0.6/1.2	0.9/1.8	1.2/2.4
Pressure drop at 18°C (bar)	0.2 / 0.5 bar				
Temperature range	min. 5°C / max. 45°C				
Optimal water conductivity	2.0-3.0 mS/cm (approx. 1 g/L of salt)				
Pre-filtration needed	50 µm (sand or cartridges)				

Electrical specifications

Main AC voltage	230 V ± 10%, 50 Hz or 120 V ± 10%, 60 Hz				
Energy consumption	ca. 0.05 to 0.15 kWh/m³ per day				
Max. Power (W)	750	750	750	1500	1500
Max output DC voltage	up to 48 V				
Max output DC current	15 A	15 A	15 A	30 A	30 A

Oxineo® installation

- Two DN32 PVC fittings for by-pass mounting on main circulation (if an heating system is installed, in upfront of it)
- One single electrical connection on a differential circuit breaker
- Oxineo® is fixed on vertical elements with 4 screws (diam. 8mm)
- Distance between axes of hydraulic connections : 275-285 mm
- Working together with pump operating conditions



Installation diagram of Oxineo® by-pass mounting

Oxineo® must be installed in a covered place (relative humidity < 85%, temp. 5-45°C).

Water hardness should not exceed 40°f (400 ppm CaCO₃) and should be stabilized.

To ensure Oxineo® efficiency, electrical and hydraulic connections should be done by professionals.

All Oxineo® systems are delivered ready for hydraulic and electrical connections and ready to be used.

Adamant Technologies SA preserves its right of changing some of the technical specifications of this product.