

Membrano EC

for best water!

Photo: © M.Malpricht



Membrane cell electrolyzers produce a fresh, highly active disinfection solution from salt, water and electricity for direct use on site. The compact Membrano EC systems are highly efficient and suitable for any application! Can be used in both indoor or outdoor pools. Plastic, liner, tiled or stainless steel pools.

Universal range of application

Efficient

Ecological

Compact

Membrano EC

*Available in different performance classes and as two models:
Membrano EC "tank" and Membrano EC "direct".*

Membrano EC tank

An economical solution

Large graphic display with clear text display

Integrated water softening via reverse osmosis with activated carbon filter

Remote monitoring via dinoAccess app

Simple and inexpensive installation

Simple, compact system design

Robust membrane cell for a production output of 16 or 26 g/Cl₂/h

Product storage tank to cover peak-demand periods

Dosing via external dosing pump



▶ The Membrano EC can also handle high water inlet temperatures (up to 27°C).

With the Membrano EC the choice is yours. The less expensive Membrano EC "tank" systems produce fresh sodium hypochlorite solution directly into the storage tank integrated on the system. Peaks in demand are easily balanced with the help of the "tank". Your dosing system takes the quantity required for water treatment from the tank and adds it as needed via the measuring and control equipment on the customer side.

Optionally, you can also connect a larger external storage tank to the Membrano EC, e.g. to use the Membrano EC to supply two pool systems.

The compact system technology, the extensive pre-piping and electrical wiring of the Membrano EC tank ensure that the system can be installed and commissioned in a very short time.

Technical features

	EC 16 tank	EC 26 tank	EC 40 tank	EC 80 tank
Power consumption approx. (W)	100	150	180	330
Production output approx. (g Cl ₂ /h)	16	26	38	76
Product concentration (g Cl ₂ /h), depending on flow rate	6.5	10	9	9
System output	100% (constantly)		50 - 100% (controlled)	
Max. daily output [g/d]	384	624	912	1824
Salt consumption approx. ([g/NaCl/h)	37	60	88	177
Salt is carried over into product	minor			
Operation of 2 pools	Yes			
Supply voltage (V/Hz)	230/50			
Transport weight (kg), approx.	45		47	
Space required for wall mounting plate (mm) (h x w x d), approx.	1030 x 900 x 250			
Space required for installation (mm)	500 x 1300			
Product reserve (l)	1 l (optionally extendable)		40 l	
Softening plant	Reverse osmosis (integrated on mounting plate)			
Power module	integrated on mounting plate			

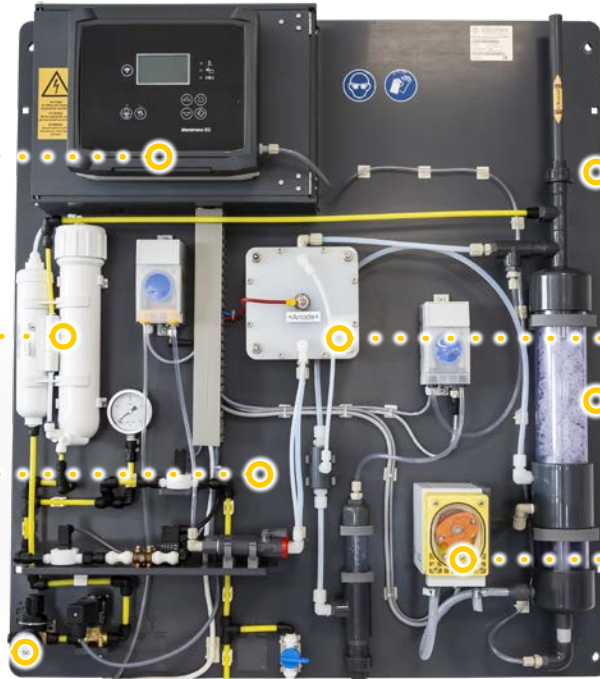
Leading edge technology

Large graphic display with clear text display

Integrated water softening via reverse osmosis with activated carbon filter

Remote monitoring via dinoAccess app

Suitable for all pool systems



Simple and inexpensive installation. No motive water circuit necessary!

Demand-based production of disinfectant solution

Highly active product. pH neutral - maintains acid capacity!

Integrated chlorine dosing pump. No addition of gas!

► The disinfectant solution produced by the "direct" model is pH neutral. Your advantage: You save on pH reducers!

The Membrano EC "direct" does not require a storage tank. The disinfectant solution produced is added directly into the pool water line in this case.

The concentration of the product in the disinfection solution of the "direct" system is adjusted via the innovative dinotec Marathon technology according to the defaults set in the customer's control and measuring equipment. The integrated peristaltic pump then automatically doses the solution into the pool circuit. The process technology for the regulation of the product concentration allows to optimize the production while ensuring an addition of disinfection solution as required. This "convenience operation" also offers the advantage of considerably optimizing the service life of the cell.

The process technology used in the Membrano EC "direct" ensures that there is no salt carried over into the disinfection solution! This means a use in stainless steel pools is possible without any problems even under high loads.

Given a level of pH 7, the produced disinfectant solution is neutral and maintains the acid capacity of the water. In practice, this means savings on pH reducers.

The lye produced in the Membrano EC can also be used to correct the pH value. As with the disinfectant solution, this is controlled by the on-site measuring and control technology. An additional lye pump is not required.

The compact system technology, the extensive pre-piping and electrical wiring of the Membrano EC direct ensure that the system can be installed and commissioned in a very short time.

A motive water circuit is not required.

Technical features

	EC 16 direct	EC 26 direct	EC 40 direct	EC 80 direct
Power consumption approx. (W)	100	150	180	330
Production output approx. (g Cl ₂ /h)	16	26	38	76
Product pH level approx. (pH)	7 - 7.5			
System output	20 - 100% (controlled)			
Max. daily output [g/d]	384	624	912	1824
Max. salt consumption approx. (g/NaCl/h), at 100% system output	59	96	140	280
Carry-over of salt into the product.	None			
Operation of 2 pools	No		Yes (extension set)	
Supply voltage (V/Hz)	230/50			
Transport weight (kg), approx.	55		52 (plus pumps)	
Space required for wall mounting plate (mm) (hxwx), approx.	1030 x 900 x 250			
Space required for installation (mm)	500 x 1300			
Product reserve (l)	Production in line with demand			
Softening plant	Reverse osmosis (integrated on mounting plate)			
Power module	integrated on mounting plate			

Comparison of systems

The compact design of both systems makes them very attractive. Both Membrano EC systems are easy to connect, commission and maintain. Your trained specialist swimming pool dealer will complete this in a short time.

Characteristics:

	Membrano EC tank	Membrano EC direct
System layout	simple	more complex
Salt consumption approx.	2.3 kg salt / kg Cl ₂	3.6 kg Salz / kg Cl ₂
Salt is carried over into product	minor	No carry-over of salt
	Use with stainless steel pools is possible to a limited extent.	Safe for use in stainless steel pools.
Acid capacity	Acid capacity decreases due to the required addition of pH-Minus	pH neutral product - acid capacity is preserved
Product concentration	approx. 6.5 or 10.5 g/Cl ₂ /l	Control of concentration via chlorine control variable Changes in water pressure and temperature are not critical
Chlorine dosing	separate	integrated
Lye dosing for pH raise	separate	integrated
Maintenance requirements	low	average
Investment costs	lower	higher
Warranty*	3 years	3 years

*According to dinotec warranty terms



- It is mandatory to use salt to DIN EN 16370 (quality 1) to operate the Membrano EC. We recommend the use of dinosolit tablet salt, which has been approved according to the EU Biocidal Product Regulation.

dinotec GmbH has been a leading supplier of electrolysis systems for decades and offers a wide range of products and services. The systems are used worldwide in private swimming pools, hotels and municipal pools, and also for the disinfection of drinking water.



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