

# HYDROCHLOR

## Salt water pool chlorinator

- Ezy Timer
- Energy Saving Winter Mode
- Precision Chlorine Production
- Super Chlorination Function
- Self Cleaning, Electrolytic Cell
- Battery Back Up



## Pool Sanitisation

Indoor and outdoor pools are contaminated by a number of human-borne and airborne contaminants, which can come from a variety of sources. These include: sweat, bathing oils/cosmetics, bacteria and other atmospheric pollutants. For this reason, any treatment process must deal with a diverse number and kind of elements which vary over time based on the time of day and in the case of outdoor pools, the local atmospheric conditions.

Chlorine, is one of the most effective treatment to make water potable or safe to drink. Chlorine's powerful disinfectant qualities come from its ability to bond with and destroy the outer surfaces of bacteria and viruses. Chlorination is one of the most widely used methods to safeguard drinking water supplies.

*"Chlorine occurs in nature, mainly as a common salt"*

### Chlorine Production by Electrolysis

Through the process of electrolysis, a saline solution passes over an electrolytic cell, then the saline solution is separated into two components: chlorine and sodium. The chlorine is instantaneously transformed into Hypochlorous acid; this is the chlorine form that kills algae and other harmful organisms in the water. Then the chlorine and sodium re-bond and become natural salt again, the process continues as long as the electrolytic cell is functioning properly.

A chlorine generator's main function is to produce chlorine for the pool. This keeps a residual of chlorine in the pool that prevents algae from growing.



*"The concentration of salt in a human tear is about 5000 ppm"*

### Why Salt-Water?

Ocean water has a salt content of around 35,000 parts per million ("ppm"). Humans have a salt taste threshold of around 3,500 ppm. The Hydrochlor requires a salt content of 4000 - 6000 ppm in the pool.

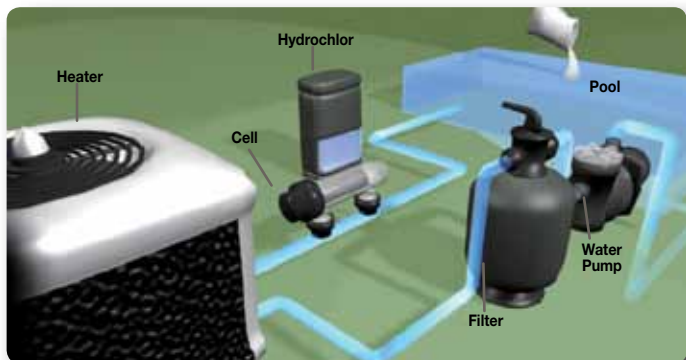
Swimming in a mild saline solution is much like taking a shower in soft water. In a salt-water pool (one with Hydrochlor) the water feels smooth, your skin feels smooth and many people feel more refreshed.

## Hydrochlor Salt Water Chlorinator

The Hydrochlor will automatically maintain the chlorine level of your pool and eliminate problems associated with periods of very high or low chlorine levels. Fewer fluctuations in chlorine levels mean fewer fluctuations in pH levels. This adds up to more stable, balanced water.

Consistently maintained sanitizer levels in the pool water will prevent the growth of all common algae. A salt-water chlorinated pool requires much less attention than a chlorine pool. A salt water pool provides a more comfortable swimming environment. Salt water feels better and is less irritating to the body than standard chlorinated water.

The Hydrochlor is plumbed directly in-line with the pool equipment, typically after the heater.



Hydrochlor consists of a power pack (to supply power to the cell) and a Salt Cell (where chlorine is produced)

## Hydrochlor Power Pack

The Power Pack monitors and controls chlorine production by regulating the amount of electrical energy supplied to the salt cell.



1. Large aluminium heat sink for heat dissipation.
2. Space saving vertical design.
3. UV and weather proof housing.
4. Chlorinator Override switch.
5. Ezy timer.
6. Chlorine production can be adjusted to reflect different seasonal requirements.
7. Chlorine production indicator LEDs.
8. No Flow LED.

## Ezy Timer

Just press "HOUR" or "MIN" keys to change the current time.

Changing the default programming for one that suit your lifestyle, just press "TIMER" to toggle between the START and FINISH of the running sequences to set your desire programme.

## Energy Saving

During the winter months the chlorine demand decreases. By selecting the Winter mode, the operation hours of Hydrochlor is halved to save energy during winter months.

## Pump Protection

If no water flow is detected in the salt cell, Hydrochlor automatically switches off the pump to prevent any damage to the pump and pool equipment. The NO WATER FLOW LED Indicator will start blinking on the panel to alert the pool owner until the fault is rectified.

## Salt Cell

The Hydrochlor's salt cell consists of a series of titanium electrodes with opposite charges. Hydrochlor's clear salt cell housing allows visual inspection of the salt cell plates and enables monitoring of chlorine production.

The cell housing is constructed using clear U.V. stabilized acrylic. Both anode and cathode of the self-clean chlorinator are made from uniquely coated titanium plates for extra durability.



1. Brass pin quick connectors
2. Large lock ring for easy access.
3. Hydraulic efficient design.
4. Unobtrusive cradle design to minimise calcium build up.
5. Titanium Electrolytic Cell – the cell's large surface area, improves chlorine production and extends its cell life.
6. Durable UV stabilised engineering plastic cell housing with a maximum working pressure of 4 bars.
7. 50mm connections for quick connection to pipe work.

## Low Maintenance - Self Clean

Hydrochlor Self Clean Salt Cell has the added ability to reverse the polarity of the voltage to clean calcium build-up off its electrodes.



Brass pin connections – utilising quick connectors for quick simple removal of the cell

## Two Years Warranty

Hydrochlor Chlorinator	1 year full + 1 year pro rata*
Titanium cell	1 year full + 1 year pro rata
Power pack	2 years
Commercial Installations	1 year

\*Please refer to Waterco's Warranty terms and conditions.

## Salts Level - Operation

Once a Hydrochlor is installed and the desirable salt level is achieved (see table), salt needs only to be added occasionally to replace any water loss e.g. splash out, evaporation, backwashing.

Salt Levels (ppm)		
Minimum = 4000	Optimum=5500	Maximum=6000

Note: Low salt level will lead to low chlorine production.

## Battery Back Up

A Battery backup is incorporated to save your settings in the event of electrical power disruptions.



## FREQUENTLY ASKED QUESTIONS

*Is there a difference between 'salt chlorinator' chlorine and 'normal' chlorine?*

A salt chlorinator makes chlorine the same way a chlorine factory does. The difference is that it is manufactured in your pool. Liquid chlorine is approximately 12.5% pure, whereas Hydrochlor's chlorine is 100% pure.

*Will I ever need to add standard pool chlorine again?*

From time to time it may become necessary to add some chlorine to the pool. This may be due to heavy rain or if the chlorine level needs to be shocked back up.

*Does the salt damage pool equipment?*

No. Low levels of salt have relatively insignificant corrosive effects on pool fittings and equipment.

*How do I get started?*

It's easy! After installing your salt chlorinator, you simply add the recommended amount of salt to your pool and choose your desired chlorine level.

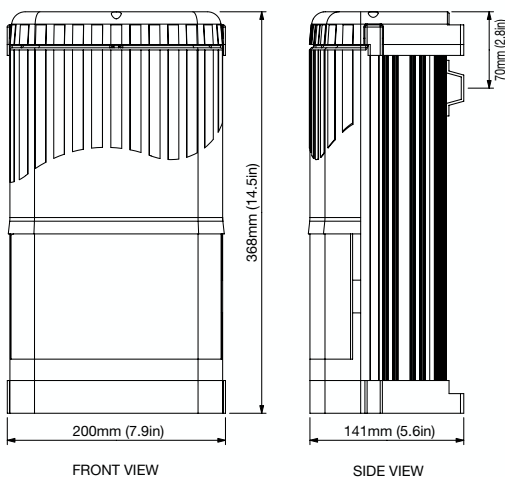
*How much salt will I need?*

1 kg of salt in 1,000 litres of water raises the salt level by 1000ppm. Therefore, 420 kg of salt will raise a 70,000 litres pool from 0 ppm to 6,000 ppm.

*What type of salt should I use?*

High purity salt, it is important that the salt does not contain additives. Any common salt (like table salt) usually has an additive that may have staining properties.

### Hydrochlor Power Pack Dimensions

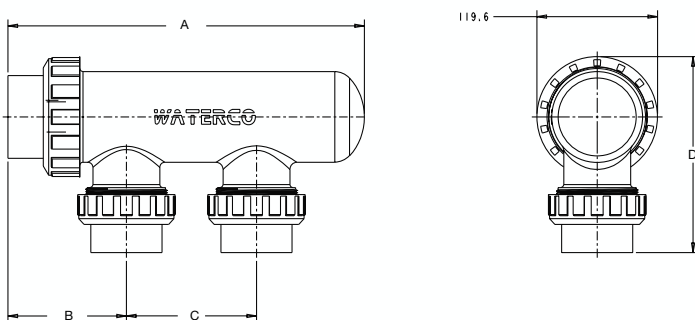


### Hydrochlor Technical Specifications

Model	Input Watt (W) max	Output current DC (A) max	Chlorine Production (g/hr)	Max Pool Capacity (L) Climate	
				Temperate	Tropical
Hydrochlor 20A	290	20	20	80,000	48,000
Hydrochlor 25A	330	25	25	100,000	60,000
Hydrochlor 30A	380	30	30	120,000	72,000

	20A	25A	30A
Primary Input (Volts) / Frequency (Hz)	220-240 / 50-60	220-240 / 50-60	220-240 / 50-60
Input Power (W)	290	330	380
Maximum Total Current (A)	10	10	10
Pump Outlet Maximum (A)	8	8	8
Cell Voltage (V)	6 - 8	6 - 8	6 - 8
Degree of Protection	IP23	IP23	IP23

### Hydrochlor Self Clean Cell Dimensions



Model	A (mm)	B (mm)	C (mm)	D (mm)
20SC / 25SC / 30SC	423.5	136.5	180	188.8

These chlorinators are approved and conformed to AS3136 Swimming Pool Equipment, as a prescribed article under Australian Registration. These Chlorinators conform to the Australian Electromagnetic Compatibility Standard marked by the C-tick.



Established since 1981, Waterco is an Australian public listed company involved in the manufacture and distribution of:

- Swimming pool/spa equipment and chemicals
- Domestic water filters, softeners and purifiers
- Commercial and Industrial water treatment equipment.

Waterco's research & development team has created an innovative range of award winning products.

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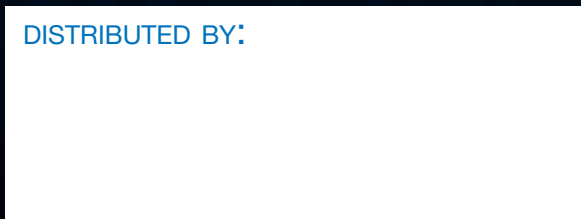
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