

HYDRO-CLEER

Culligan®

D.E. Filters for  
swimming pool water



CULLIGAN: WORLD LEADER IN THE WATER TREATMENT

[www.culliganpiscine.com](http://www.culliganpiscine.com)



# D.E. Filters for swimming pool water

The water used in swimming pools needs to be crystal clear and without trace of turbidity. Culligan **Hydro-Cleer** Filters clarify the swimming pool water through a very sophisticated and economical system: diatomaceous earth (D.E.) filtration.

The system is based on the microporosity of a very fine white powder produced from the silica-based shells of a particular type of microalgae: the diatoms allow a purity filtration of about 1 micron.

The most noteworthy feature of Culligan Hydro-Cleer Filters is their exclusive, patented **self-cleaning elements** which support the D.E. layer.

Water from the pool is pumped through the layer of D.E. powder, evenly distributed over the surface of the filtering elements. Turbidity is trapped while clarified water is returned to the pool.

The self-cleaning elements, stainless steel springs are covered with a polypropylene sock.

The elements are gradually compacted as the headloss caused by the turbidity slowly clogs the D.E. layer.

When the pump stops, the headloss drops to zero, and the elements spring back to their normal length, displacing the dirty layer which drops down to the bottom of the filter housing ready for removal.

Self-cleaning elements of Diatomaceous Earth filtration system.

## Investment and sizing

The filtering capacity of the self-cleaning elements is extremely high and can cater for **large flow rates**, whilst remaining compact in size. The results are a considerable **saving of energy and D.E. consumption**. The volume of waste water used for flushing is also negligible; normally the dirty D.E. cake can be removed by draining water off from the filter.



## Protection against corrosion

Culligan **Hydro-Cleer** filters (models **HCF 20** to **HCF 180**) are manufactured in stainless steel. They are protected against corrosion internally by plastic coating and painted externally with polyurethane paint. This protection makes the Hydro-Cleer filters also suitable for the treatment of sea and thermal water. **HCF 10** filter is completely manufactured in stainless steel.





# HYDRO-CLEER Filter

The electric pump and pre-filter used in association with any Hydro-Cleer filters must be selected on an individual basis.

Models of pumps available:

- self-priming electric pump with pre-filter in thermo-plastic material (Models 10, 20, 30, 50 and 90);
- electric pump in cast Iron or cast bronze or AISI 316 stainless steel and pre-filter in cast Iron or stainless steel (Models 30, 50, 90, 120 and 180).



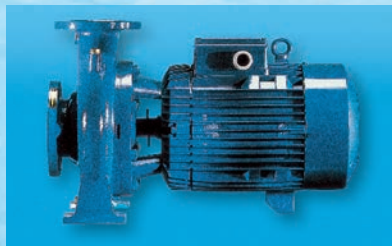
Self-priming electric pump with prefilter



Filter HCF 30



Model HCF 180



Cast Iron or bronze or AISI 316 stainless steel electric pump

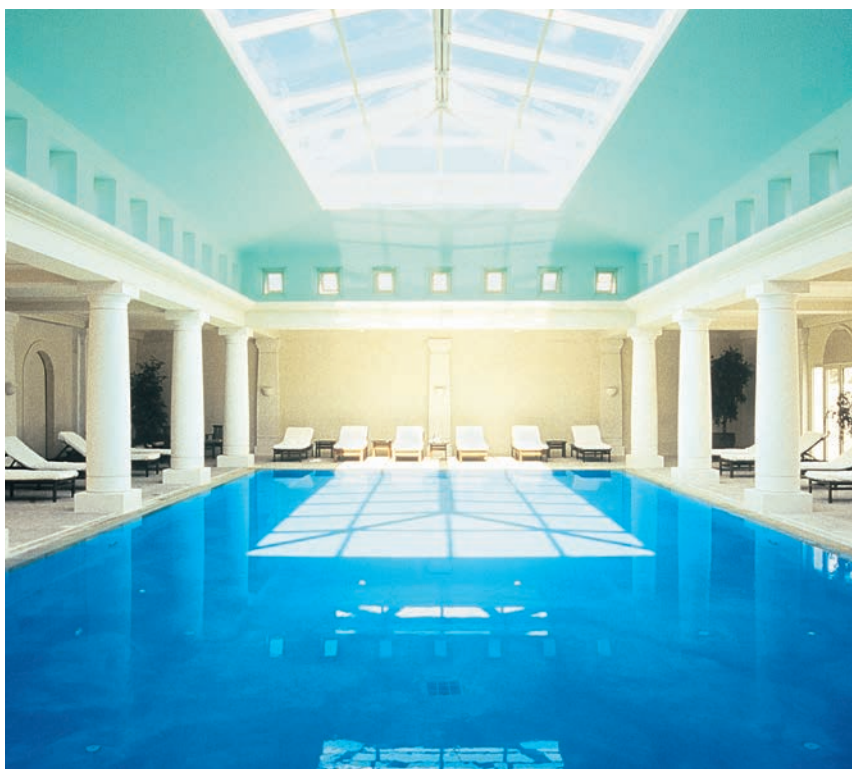
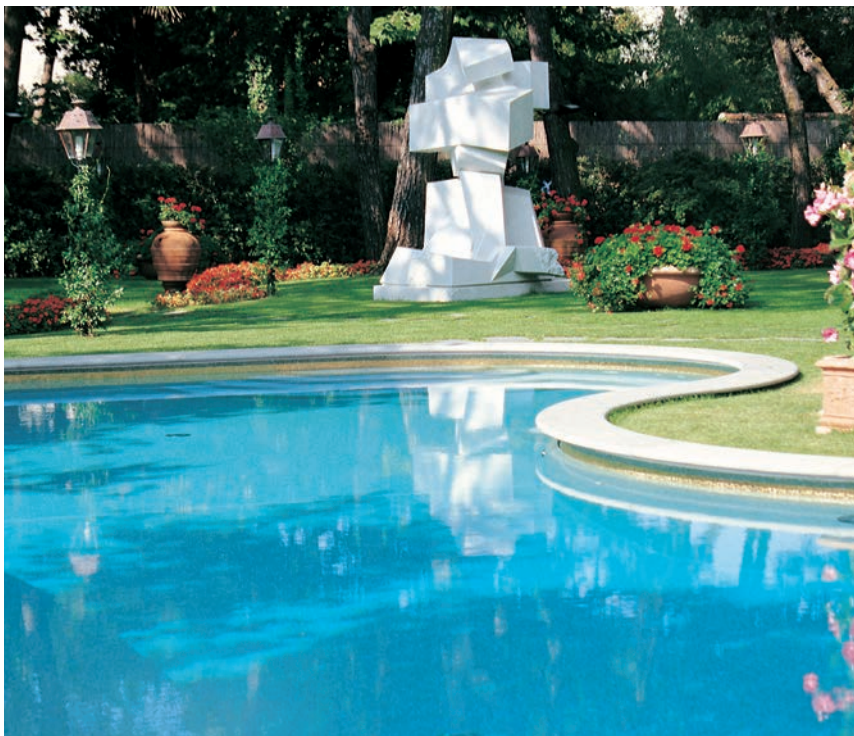


Stainless steel prefilter

Model	Flow rate max m <sup>3</sup> /h	Fittings Ø ins			Overall dimensions width x depth x height mm	Shipping weight kg
		inlet	outlet	drain		
HCF 10	10	2	2	1	340 x 340 x 1030	21
HCF 20	20	2½	2½	2	622 x 636 x 1280	105
HCF 30	30	2½	2½	2	622 x 636 x 1520	135
HCF 50	50	3	3	2	722 x 747 x 1575	160

Model	Flow rate max m <sup>3</sup> /h	Fittings Ø			Overall dimensions width x depth x height mm	Shipping weight kg
		inlet	outlet	drain		
HCF 90	90	DN 100	DN 100	3"	1130 x 1003 x 1910	310
HCF 120	120	DN 100	DN 100	3"	1130 x 1053 x 1910	330
HCF 180	180	DN 150	DN 150	3"	1375 x 1310 x 2025	480





**CE** *Equipment according to CE Directives in force*

The following optional items are available for separate purchase

- electric control panel complete with timer;
- disinfection system and pH control for swimming pool water;
- hydro-massage system;
- counter-current swimming system;
- water fun;
- multi-colour LED underwater lights;
- accessories for distribution and recirculation of water, including cleaning and lighting and any items to make any swimming pool attractive as well as functional.

**QUALITY SYSTEM CERTIFIED ACCORDING TO UNI EN ISO 9001:2008 NORM**

Culligan reserves the right to change any technical or design specifications for the models shown in this brochure.

Culligan Guarantee – Any manufacturing defects and corrosion are covered by the Culligan guarantee's norms.

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