



## Sartoclear® P Single Layer Depth Filter Modules

Cell Clarification and Contaminant Removal Technologies



- Large scale applications
- Secure and Economical processing

Sartoclear® P depth filter products are cellulose based depth filters, especially developed for use in the Biopharmaceutical industry. They combine high dirt holding capacities with electro kinetic adsorption in a single closed filtration unit.

### Applications

The specific characteristics of Sartoclear® P depth filters have proven to be valuable in a variety of clarification applications like:

- Cell harvest & Cell debris clarification
- Lysates from bacteria and yeasts
- Removal of precipitates from sera and plasma
- Particle and colloid removal

### Sartoclear® P Depth Filter Media

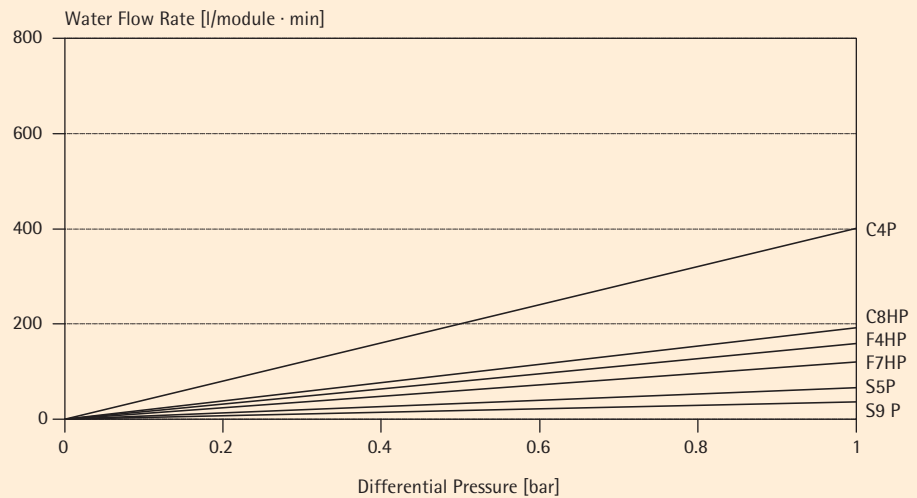
Offering a maximal performance for every application, Sartoclear® P filter media are available in 6 different grades. The different variations of special selected cellulose fibres and diatomaceous earth provide a range

of filters, each having its own dirt holding and contaminant adsorption characteristics. Small scale, 25 cm<sup>2</sup>, Sartoclear® P Caps are available to screen for the most optimal filter grade per application.

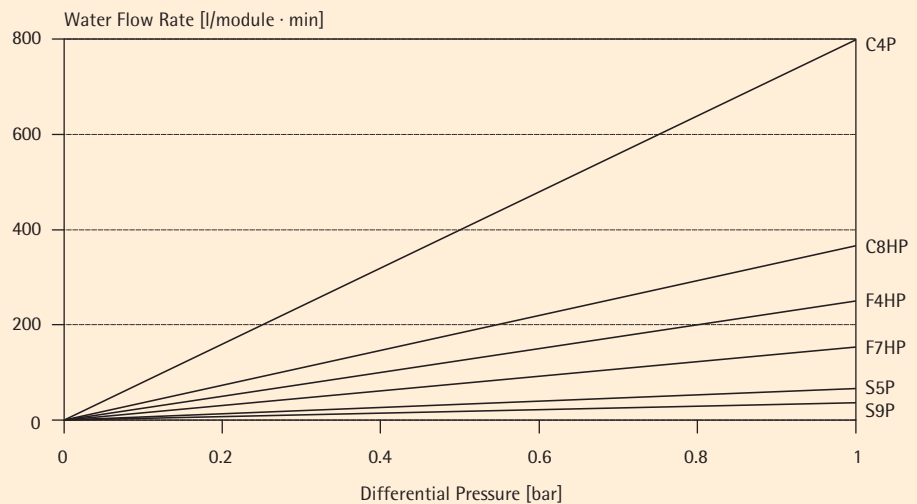
### Specifications

Grade	Nominal retention µm	Thickness mm	Weight kg/m <sup>2</sup>	Ash content %	Water flow L/m <sup>2</sup> /min
C4-P	8	4.1	0.93	20	1,250
C8HP	4	4.1	1.08	35	700
F4HP	1.5	4.1	1.26	45	205
F7HP	1.0	4.0	1.42	50	100
S5-P	0.3	4.0	1.55	50	70
S9-P	0.1	4.0	1.64	48	42

**Water Flow Rate**  
12" module, 16 cells



**Water Flow Rate**  
16" module, 16 cells



## Housings

Sartoclear® P filter housings are optimized for Sartoclear® P lenticular modules in pharmaceutical applications. The 12" and 16" diameter housings come with a self draining baseplate design and a replaceable adapter for the use of O-ring and flat gasket adapters. A detailed datasheet for Sartoclear® P filter housings is available.



## Validation

All Sartoclear® P products are validated according to the quality standards for WFI, set by the current USP. Detailed information on the methods and the validation data can be found in the Validation Guide for Sartoclear® P Sheets and Modules.

## Materials

Depth Filter media	Cellulosic depth filter media with inorganic filter aids
O-Rings	EPDM
Core	Polypropylene
End caps	Polypropylene

## Operating parameters

Max. allowable differential pressure	2.0 bar   36 psi
Max. allowable back pressure	0.03 bar   0.4 psi

## Sanitization

Steam sterilization	121°C at 1 bar for 60 min.
Hot water flush	80°C at 1 bar for 30 min.

## Biosafety

All materials of this filter element meet the requirements of the current USP <88> Class VI test for plastics.

LAL level	< 0.25 EU/ml
Metal extractables	see corresponding validation guide.

## Dimensions and connections

### 12" Filter Modules

Filtration area	1.8 m <sup>2</sup>
Diameter	286 mm
Height DO-Adapter	330 mm
Height FA-Adapter	272 mm

### 16" Filter Modules

Filtration area	3.6 m <sup>2</sup>
Diameter	402 mm
Height DO-Adapter	330 mm
Height FA-Adapter	272 mm

## Ordering information

Adapter Media Grade	12" Lenticular Module 1.8 m <sup>2</sup>		16" Lenticular Module 3.6 m <sup>2</sup>	
	Flat Gasket	Double O-ring	Flat Gasket	Double O-ring
C4-P	293C4-P12-1FA--V	293C4-P12-1DO--V	293C4-P16-1FA	293C4-P16-1DO
C8HP	293C8HP12-1FA--V	293C8HP12-1DO--V	293C8HP16-1FA	293C8HP16-1DO
F4HP	293F4HP12-1FA--V	293F4HP12-1DO--V	293F4HP16-1FA	293F4HP16-1DO
F7HP	293F7HP12-1FA--V	293F7HP12-1DO--V	293F7HP16-1FA	293F7HP16-1DO
S5-P	293S5-P12-1FA--V	293S5-P12-1DO--V	293S5-p16-1FA	293S5-p16-1DO
S9-P	293S9-P12-1FA--V	293S9-P12-1DO--V	293S9-P16-1FA	293S9-P16-1DO

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