



Sartoclear® P MaxiCaps®

Cell Clarification and contaminant Removal



- Fast & easy scale up from the lab to process scale
- Fully disposable fluid pathway
- Maximal flexibility

Sartoclear® P MaxiCaps® are medium scale depth filter capsules for scale up studies and small scale production processes in the Biopharmaceutical industry. The cellulose based depth filters combine high dirt holding capacities with electro kinetic adsorption in a single closed filtration system.

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 cm², 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 ²	Ash content %	Water flow L/m ² /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

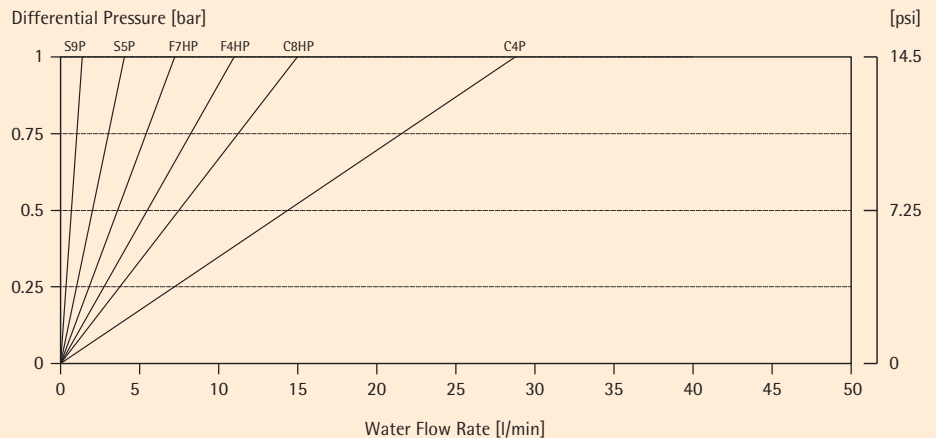
Sartoclear® P Multilayer combinations

Typical applications often require two or more filter media grades. The 4 most common media combinations have been selected and put together in one capsule.

Multilayer filters combine two process steps in one, which results in faster processing, reduced buffer costs and reduced footprint.

Media Grades	Application	Media combination
PB1	Post Bioreactor fluids with high cell densities and low viabilities	C3 + C8H
PB2	Post Bioreactor fluids with common cell densities and viabilities	C4 + F7H
PC1	Post Centrifuge applications (100–150 FNU)	F7H + S5
PC2	Post Centrifuge applications (<100 FNU)	S5 + S5

Water Flow Rates for Sartoclear® P 5" MaxiCaps®



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.

Biosafety

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

LAL content < 0.25 EU/ml

Metal extractables see corresponding Validation guide.

Materials

Depth Filter media	Cellulosic depth filter media with inorganic filter aids
Sealing media	Silicone
Core	Polypropylene
End caps	Polypropylene
Capsule Housing	Polypropylene

Operating parameters

Max. operating pressure	2.5 bar 36 psi
Max. allowable differential pressure	2.0 bar 29 psi
Max. allowable back pressure	2.0 bar 29 psi

Sterilization

1 cycle of wet autoclaving 121°C at 1 bar for 30 min. Sartoclear® MaxiCaps® may not be in line steam sterilized!

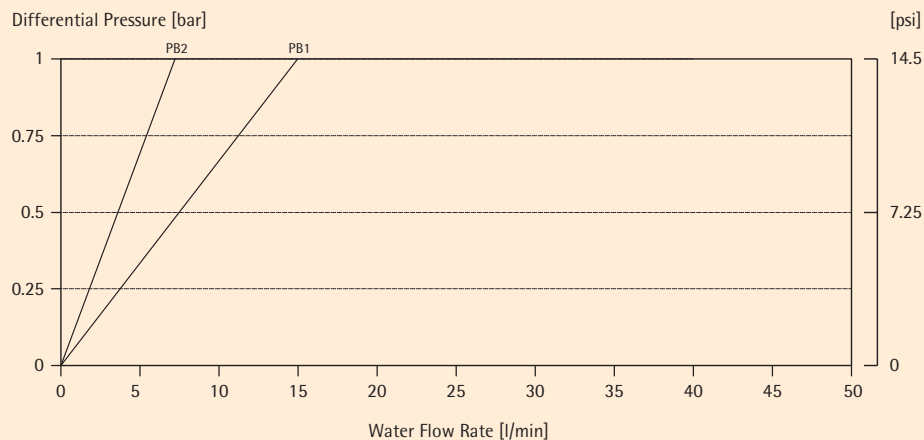
Filtration area MaxiCaps®

	Single Layer	Multi Layer
5"	600 cm ²	400 cm ²
10"	1,100 cm ²	–
20"	2,200 cm ²	1,500 cm ²

Dimensions and connections

Capsule type	Single Layer 5"	Single Layer 10"	Single Layer 20"	Multi Layer 5"	Multi Layer 20"
Connector	¾" Sanitary Flange	1½" Sanitary Flange	1½" Sanitary Flange	¾" Sanitary Flange	¾" Sanitary Flange
Capsule (height × diameter)	250 × 100 mm	365 × 100 mm	620 × 100 mm	250 × 100 mm	620 × 100 mm
Inlet and outlet connector	25 mm outer Ø 14 mm inner Ø	50.5 mm outer Ø 36 mm inner Ø	50.5 mm outer Ø 36 mm inner Ø	25 mm outer Ø 14 mm inner Ø	25 mm outer Ø 14 mm inner Ø

Water Flow Rates for Sartoclear® P 5" MaxiCaps®



Ordering Information

Order no.	Grade	Nominal Pore Size	Quantity	Adapter inlet and outlet	Filtration area
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Single Layer Products

Sartoclear® P 5" MaxiCaps®

293C4-P13AFFF--V	C4-P	8 µm	2	¾" Sanitary Flange	600 cm ²
293C8HP13AFFF--V	C8HP	4 µm	2	¾" Sanitary Flange	600 cm ²
293F4HP13AFFF--V	F4HP	1.5 µm	2	¾" Sanitary Flange	600 cm ²
293F7HP13AFFF--V	F7HP	1.0 µm	2	¾" Sanitary Flange	600 cm ²
293S5-P13AFFF--V	S5-P	0.3 µm	2	¾" Sanitary Flange	600 cm ²
293S9-P13AFFF--V	S9-P	0.1 µm	2	¾" Sanitary Flange	600 cm ²

Sartoclear® P 10" MaxiCaps®

293C4-P13A1SS	C4-P	8 µm	1	1½" Sanitary Flange	1,100 cm ²
293C8HP13A1SS	C8HP	4 µm	1	1½" Sanitary Flange	1,100 cm ²
293F4HP13A1SS	F4HP	1.5 µm	1	1½" Sanitary Flange	1,100 cm ²
293F7HP13A1SS	F7HP	1.0 µm	1	1½" Sanitary Flange	1,100 cm ²
293S5-P13A1SS	S5-P	0.3 µm	1	1½" Sanitary Flange	1,100 cm ²
293S9-P13A1SS	S9-P	0.1 µm	1	1½" Sanitary Flange	1,100 cm ²

Sartoclear® P 20" MaxiCaps®

293C4-P13A2SS	C4-P	8 µm	1	1½" Sanitary Flange	2,200 cm ²
293C8HP13A2SS	C8HP	4 µm	1	1½" Sanitary Flange	2,200 cm ²
293F4HP13A2SS	F4HP	1.5 µm	1	1½" Sanitary Flange	2,200 cm ²
293F7HP13A2SS	F7HP	1.0 µm	1	1½" Sanitary Flange	2,200 cm ²
293S5-P13A2SS	S5-P	0.3 µm	1	1½" Sanitary Flange	2,200 cm ²
293S9-P13A2SS	S9-P	0.1 µm	1	1½" Sanitary Flange	2,200 cm ²

Multi Layer Products

Sartoclear® P 5" MaxiCaps®

295PB1P13AFFF--V	PB1	11 µm 4 µm	2	¾" Sanitary Flange	400 cm ²
295PB2P13AFFF--V	PB2	8 µm 1 µm	2	¾" Sanitary Flange	400 cm ²
295PC1P13AFFF--V	PC1	1 µm 0.3 µm	2	¾" Sanitary Flange	400 cm ²
295PC2P13ACFF--V	PC2	0.3 µm 0.3 µm	2	¾" Sanitary Flange	400 cm ²

Sartoclear® P 20" MaxiCaps®

295PB1P13A2FF	PB1	11 µm 4 µm	1	¾" Sanitary Flange	1,500 cm ²
295PB2P13A2FF	PB2	8 µm 1 µm	1	¾" Sanitary Flange	1,500 cm ²
295PC1P13A2FF	PC1	1 µm 0.3 µm	1	¾" Sanitary Flange	1,500 cm ²
295PC2P13A2FF	PC2	0.3 µm 0.3 µm	1	¾" Sanitary Flange	1,500 cm ²

Accessories

Order no.	Description
5ZGI-0001	Stainless steel holder for one 5", 10" or 20" MaxiCap®, 3 legs
5ZGLG-0004	Stainless steel holder for one 5", 10" or 20" MaxiCap®, 3 legs

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