



# Sartoclear® Depth Filter Cassettes

Cell Clarification and Contaminant Removal Technologies

## Product Information

Sartoclear® filters are cellulose-based depth filters developed for demanding clarification applications in the biotechnological and pharmaceutical industries. Various device formats are available to serve you from the first steps, throughout clinical phases and up to large scale manufacturing while always keeping the same filter material.



### Cassettes

Sartoclear® Depth Filter Cassettes are single-use filtration devices especially designed for biopharmaceutical clarification applications. The modular devices provide linear scalability from small to large scale processes. Three different sizes allow for a seamless adaptation to different process fluid volumes.

### Applications

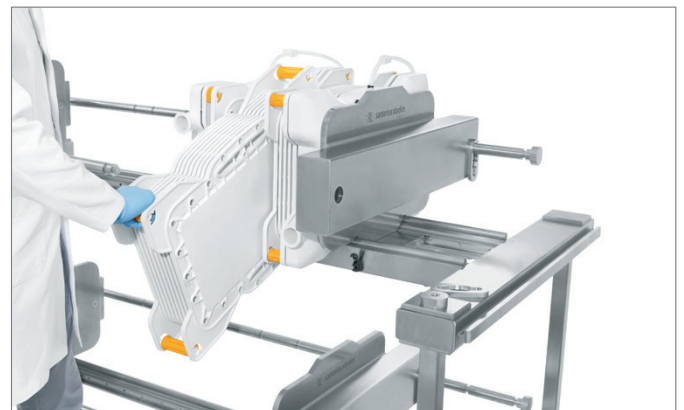
- Mammalian cell culture harvests
- Microbial lysates
- Removal of precipitates from sera and plasma
- Particle and colloid removal from process intermediates
- Media Filtration

### DL-Series

Sartoclear® DL-Series are high capacity depth filters made of two distinct filtration layers. The primary coarser layer is followed by a second finer layer which enables the removal of a broader spectrum of particles in a single step. The Sartoclear® DL-Series are pre-selected and optimized to serve the most common biopharmaceutical applications. See below for detailed application guidance per DL-grade.

### S-Series

Sartoclear® S-Series are single layer depth filter media grades for more specific applications such as vaccines, process process intermediates with a lower or homogeneous particle load.

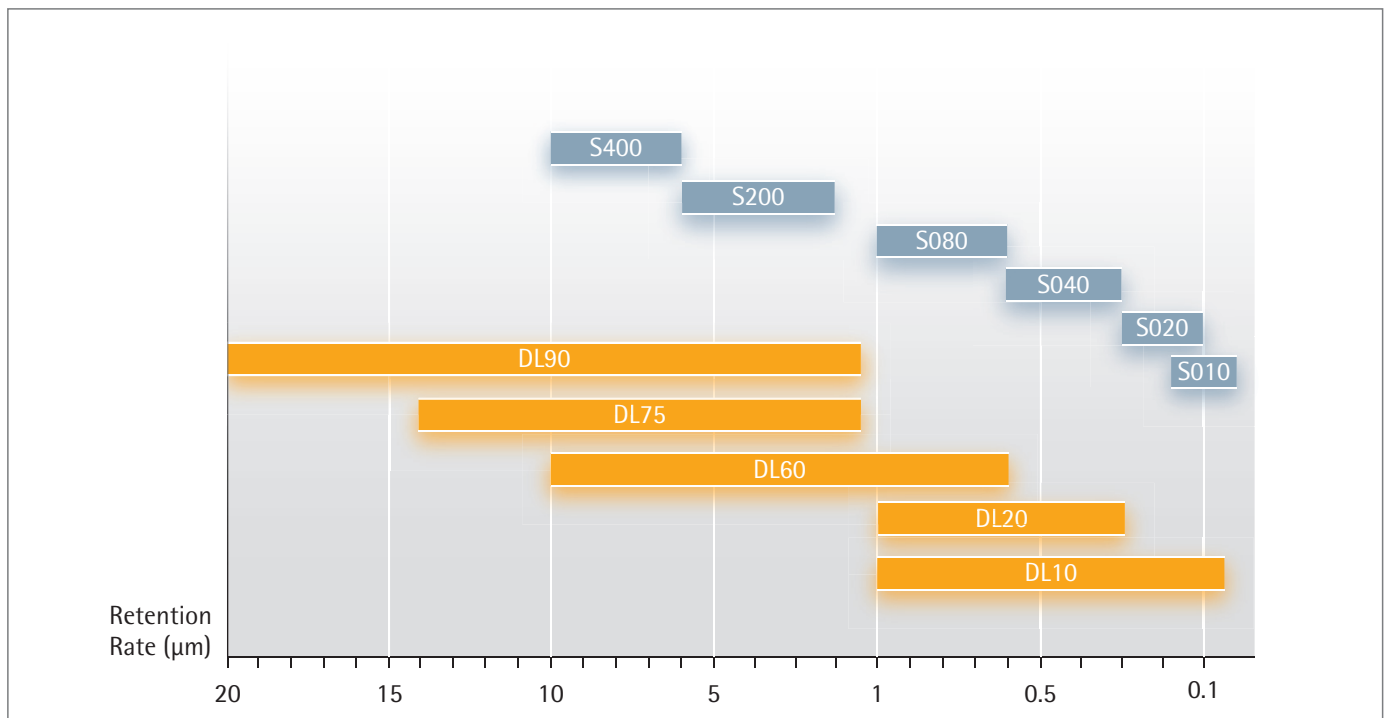


Grade	Description	Application examples <sup>1</sup>
DL90	Very coarse primary grade on top of a coarse secondary filter for filtrations with high solid concentrations <sup>2</sup>	Primary clarification of mammalian cell cultures <sup>2</sup> , insect cell cultures <sup>2</sup> , microbial fermentations, vaccines
DL75	Pure cellulose pre-filter combined with a coarse secondary filter	Primary clarification of mammalian cell cultures <sup>2</sup> , insect cell cultures <sup>2</sup> , microbial fermentations, vaccines
DL60	Coarse primary grade with a secondary fine filtration grade for lower to moderate solid concentrations	Post-perfusion bioreactors, vaccines
DL20	Fine filtration grade combined with a standard bioburden reduction grade for the removal of particles	Post centrifuge mammalian cell cultures, post primary depth filtration, process precipitates
DL10	Fine filtration grade followed by an very tight secondary filter for the removal of high concentrations of small particles	Post centrifuge microbial (e.g. E. coli) lysates, post primary depth filtration step, process precipitates

<sup>1</sup> The listed examples are indicative and need to be confirmed by small scale tests

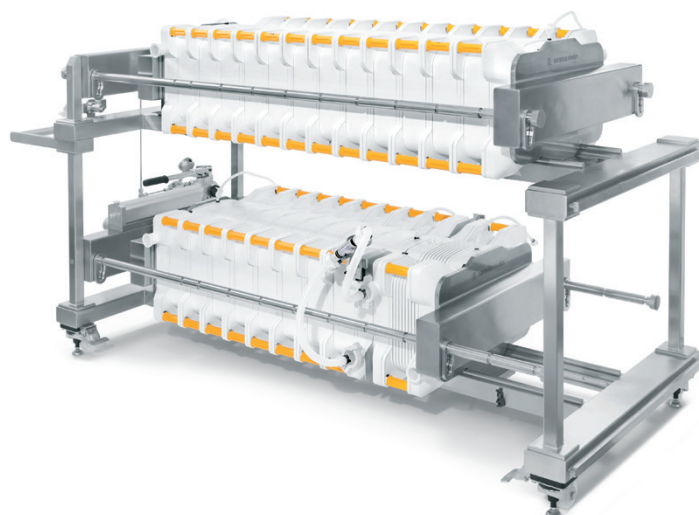
<sup>2</sup> Sartorius recommends Sartoclear® Dynamics for cell cultures above 5 % WCW

## Technical Data



Grade	Thickness mm	Ash content %	Water flow L/m <sup>2</sup> /min
S010	3.9	58	30
S020	3.9	50	46
S040	3.9	49	61
S080	3.9	50	175
S200	3.9	50	330
S400	4.1	48	2381

	Sartoclear® Depth filter	Sartoclear® Manifold Set
<b>Dimensions</b> H×W×D (mm)	387×634×36 (Filtration area: 0.2 m <sup>2</sup> ) 387×634×59 (Filtration area: 0.4 m <sup>2</sup> ) 387×634×104 (Filtration area: 0.8 m <sup>2</sup> ) 387×634×104 (Filtration area: 1.0 m <sup>2</sup> )	387×634×58
<b>Connections</b>		
Drain and vent		4" hose barb with pre-installed 4" × a" silicone tubing incl. PinchClamp and MPC quick connector (1/4" female coupling + sealing plug)
In and outlet		1½" Tri Clamp
<b>Materials of construction</b>		
Housing	ABS   Glass Fiber Reinforced	ABS   Glass Fiber Reinforced
Filter	Cellulosic fibers with inorganic filter aids and wet strength agents	
Drains and vents		ABS + silicon tubing
Gaskets	Silicone	Silicone
<b>Operating Conditions</b>		
Temperature range	4°C – 40 °C	4°C – 40 °C
Maximum operation pressure	Liquid: 1.7 bar   21.8 PSI Gaseous: 0.5 bar   7.2 PSI	Liquid: 1.7 bar   21.8 PSI Gaseous: 0.5 bar   7.2 PSI
Maximum allowed back pressure	0.7 bar   10.2 PSI	0.7 bar   10.2 PSI
<b>Safety</b> (for all materials with direct fluid contact)		
Endotoxins	< 0.25 EU/mL	< 0.25 EU/mL
Biosafety	Passing of USP Plastic Class VI tests in accordance with the USP <88> for all component materials	Passing of USP Plastic Class VI tests in accordance with the USP <88> for all component materials
TSE/BSE	Complying with the EMA/410/01	Complying with the EMA/410/01
CE Pressure equipment directive	Designed according the requirements of the Pressure Equipment Directive 97/23/EC.	Designed according the requirements of the Pressure Equipment Directive 97/23/EC.



## Ordering Information

### Sartoclear® Depth Filter Cassettes

#### DL-Series

Order No.	Filtration area	Grade
29XDL10-FCA	0.2 m <sup>2</sup>	DL10
29XDL20-FCA	0.2 m <sup>2</sup>	DL20
29XDL60-FCA	0.2 m <sup>2</sup>	DL60
29XDL75-FCA	0.2 m <sup>2</sup>	DL75
29XDL90-FCA	0.2 m <sup>2</sup>	DL90
29XDL10-FCB	0.4 m <sup>2</sup>	DL10
29XDL20-FCB	0.4 m <sup>2</sup>	DL20
29XDL60-FCB	0.4 m <sup>2</sup>	DL60
29XDL75-FCB	0.4 m <sup>2</sup>	DL75
29XDL90-FCB	0.4 m <sup>2</sup>	DL90
29XDL10-FCC	0.8 m <sup>2</sup>	DL10
29XDL20-FCC	0.8 m <sup>2</sup>	DL20
29XDL60-FCC	0.8 m <sup>2</sup>	DL60
29XDL75-FCC	0.8 m <sup>2</sup>	DL75
29XDL90-FCC	0.8 m <sup>2</sup>	DL90

#### S-Series

Order No.	Filtration area	Grade
29XS010-FCA	0.2 m <sup>2</sup>	S010
29XS020-FCA	0.2 m <sup>2</sup>	S020
29XS040-FCA	0.2 m <sup>2</sup>	S040
29XS080-FCA	0.2 m <sup>2</sup>	S080
29XS200-FCA	0.2 m <sup>2</sup>	S200
29XS400-FCA	0.2 m <sup>2</sup>	S400
29XS010-FCB	0.4 m <sup>2</sup>	S010
29XS020-FCB	0.4 m <sup>2</sup>	S020
29XS040-FCB	0.4 m <sup>2</sup>	S040
29XS080-FCB	0.4 m <sup>2</sup>	S080
29XS200-FCB	0.4 m <sup>2</sup>	S200
29XS400-FCB	0.4 m <sup>2</sup>	S400
29XS010-FCC	1.0 m <sup>2</sup>	S010
29XS020-FCC	1.0 m <sup>2</sup>	S020
29XS040-FCC	1.0 m <sup>2</sup>	S040
29XS080-FCC	1.0 m <sup>2</sup>	S080
29XS200-FCC	1.0 m <sup>2</sup>	S200
29XS400-FCC	1.0 m <sup>2</sup>	S400

### Sartoclear® Manifold Set

Order No.	Description	Qty.
29Z-S00001	Inlet and outlet plate with pre-installed silicone tubing incl. pinch clamp and MPC quick connectors on the ventilation and drain ports.	1

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Copyright Sartorius Stedim Biotech GmbH. Printed  
in the EU on paper bleached without chlorine.  
Publication No.: SPK2152-e161002  
Order No.: 85037-554-28  
Ver. 10 | 2016