

Sartoflow® SP

Enabling Single Pass (SP) Continuous Diafiltration

Product Information

Sartoflow® SP is a benchtop Tangential Flow Filtration (TFF) system which, in combination with Sartococon® SP cassette enables highly efficient diafiltration of biomolecular solutions in a continuous, single pass (SP) process. It allows complete control of flow, pressure and conductivity for feed, buffer, and retentate lines. Thus, it enables rapid process development, optimization and consistent ongoing performance of continuous diafiltration processes with the Sartococon® SP cassette. Thereby, process steps such as buffer exchange between chromatography steps can be done continuously in a single pass.

Features and Benefits

Continuous Diafiltration: An innovation

Sartococon® SP cassette to leverage conventional diafiltration performance in a single pass.

Versatile System for Process Control

Rapidly establish process-specific parameters for truly continuous diafiltration.

Intuitive Control Software

Full, simple parameter control and automation via the touch screen interface, enabling processes control by either constant TMP or constant feed flow rate.



Description

Sartoflow® SP benchtop TFF system is suitable for process development and steps involving continuous diafiltration processes for antibody, vaccine and other biomolecule solutions in the preclinical, and PD stage. The single pass process can be run with full control over flow, pressure and conductivity in the feed, buffer and retentate lines. Thus, the entire diafiltration process can be performed automatically with preset process parameters such as diafiltration-factor, concentration-factor, or transmembrane pressure (TMP).

Sartoflow® SP is designed to be used with Sartococon® SP TFF cassettes (Figure 1) and normal flow-through membrane filtration devices. Sartococon® SP cassettes feature a unique three chamber design to achieve diafiltration performance comparable to a classical TFF set-up (Figure 2A) but in a single pass mode (Figure 2B). Sartococon® SP cassette can be used for diafiltration in biopharmaceutical preclinical | clinical trials.

The unique design of the Sartoflow® SP enables an easy, and straight-forward setup and control of the diafiltration process. The system is equipped with a cleanable flow path including all necessary tubings and connectors to run the Sartococon® SP TFF cassette. The assembly features minimum total hold up volume to ensure maximum recovery.

Figure 1: Sartococon® SP Cassette *In- and Outlets*

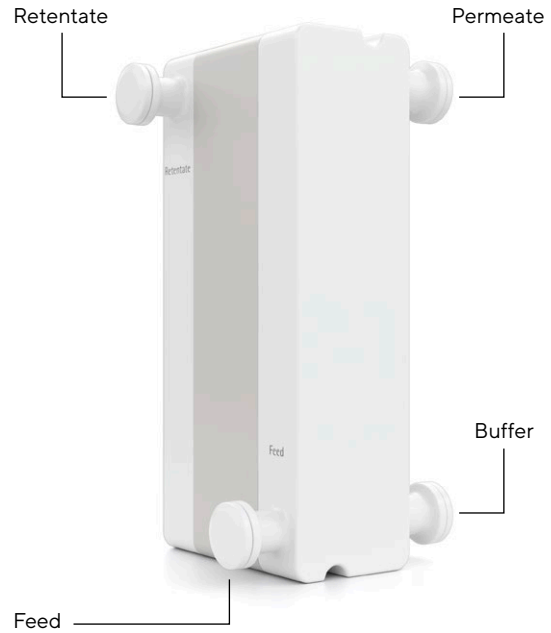
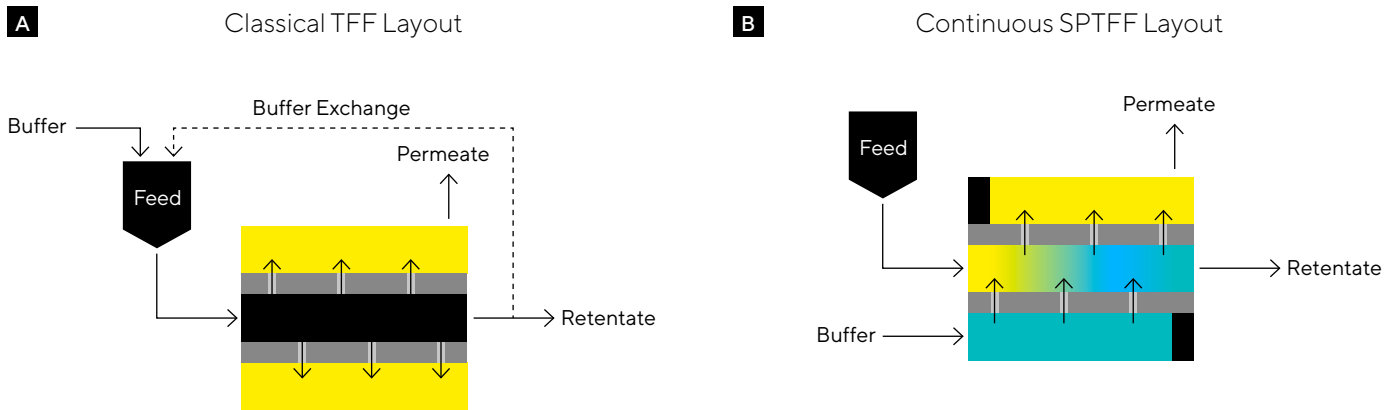


Figure 2: *Classical and Continuous Layout Comparison*



Technical Data

Specifications

Pump output	Buffer: 194 mL/min @ 2 bar (29 psi), Feed: 57 mL/min @ 2 bar (29 psi)
Filter area (Sartocon® SP)	0.2 m ²
Minimum holdup volume	< 30 mL (combined volume of feed and retentate path)
Max. inlet pressure	3 bar (43.5 psi)
Dimensions (H × L × W)	873 mm × 567 mm × 460 mm
Weight	54 kg (119 lbs.)
Electrical requirements	230 VAC 50 Hz 3 Amp; 120 VAC 60 Hz 4 Amp
IP-Standard	33
Display diameter	17 inch

Control Software

Sartoflow® SP system features a specially designed software that allows accurate and precise control of all process parameters. All set points, signal read-outs and data curves are displayed on the 17-inch touch screen. All process data, control functions and alarms are logged and can be easily viewed and analyzed in the software or exported in spreadsheet format for further analysis and backup.

Process Sequences

Sartoflow® SP software includes predefined process sequences for venting, flushing or draining the cassette or to run at constant TMP or constant flow. That will lead to a user defined recipe which can easily be transferred to process conditions.

Service

Ensure reliable and efficient performance of your equipment. We support you with installation, regular maintenance and our Service Level Agreements, to meet your individual needs for response time and cost control.



Sartocon® SP and Sartoflow® SP are sold under a sublicense from Cytiva US LLC under U.S. Patent No. 7,384,549 B2 and/or its US and foreign equivalents. The aforementioned patent rights are owned by SPF Innovations, LLC.

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Order Codes of Related Products

Sartoflow® SP TFF system	SFSP-M-SYS
Sartoflow® SP flow path	SFSP-M-TUSET
Sartocon® Slice SC hydraulic filter holder	3D540SQ01-01
Sartocon® SP (Hydrosart®, 30 kD, 0.2 m ² , AseptiQuik® S*)	3Q514459M1465902
Sartocon® SP (Hydrosart®, 30 kD, 0.2 m ² , Tri-Clamp®**)	3T514459M1465902

*AseptiQuik® is a registered trademark of the Colder Products Company.


**Tri-Clamp® is a registered trademark of the Master Flex Company.

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DIR: 2573385-000-02

Status: 09 | 2023