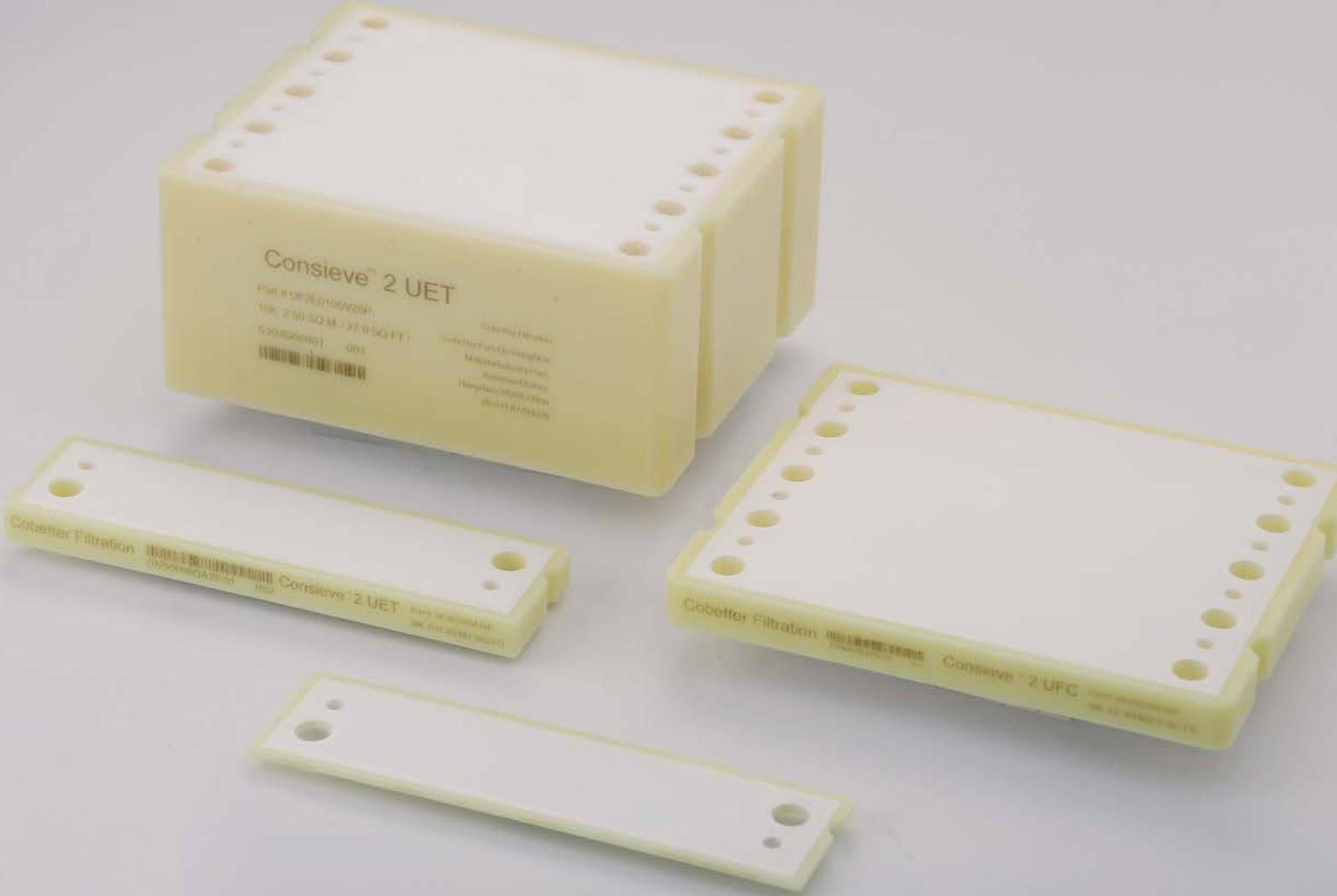


Consieve 2 TFF Cassettes and Systems



Tangential Flow Filtration Technology

Tangential flow filtration is a membrane technology used for concentration, dialysis, separation by tangential flow, usually retaining the molecular weight of the Range: 1-1000KD.

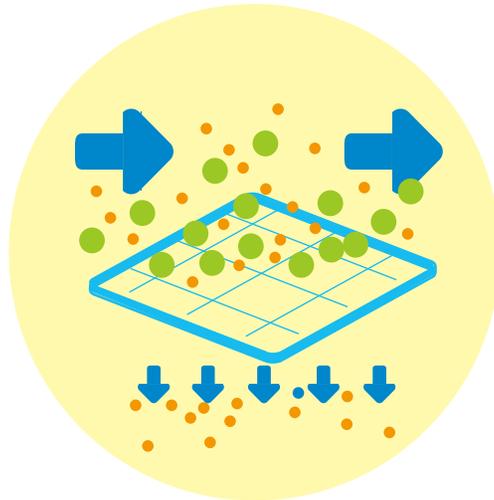
Unlike conventional vertical filtration, in tangential flow filtration, the fluid flows tangentially across the membrane surface and the transmembrane pressure difference created by the fluid presses a portion of the solution against the filter membrane, while the retained portion circulates back through the

system. During the whole process, the liquid flows continuously through the membrane surface at a certain speed, while ultrafiltration also flushes the membrane surface, so that the membrane surface is not easy to form a gel layer, so that the particles in the liquid will not quickly block the membrane, maintaining a stable filtration speed.

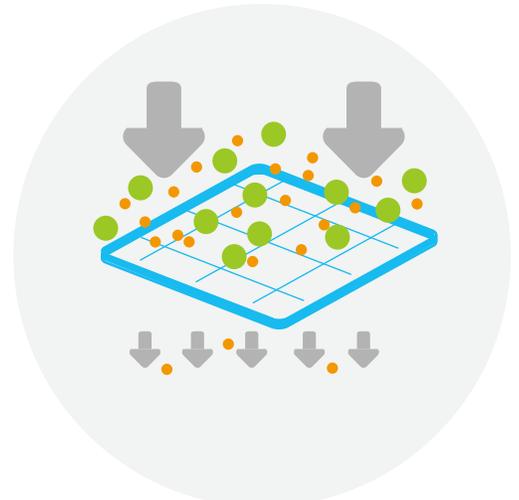
Applications

- Blood products
- Vaccines
- Recombinant protein
- Monoclonal
- Plasmids
- Chemical
- Traditional Chinese medicine injection

Tangential flow filtration

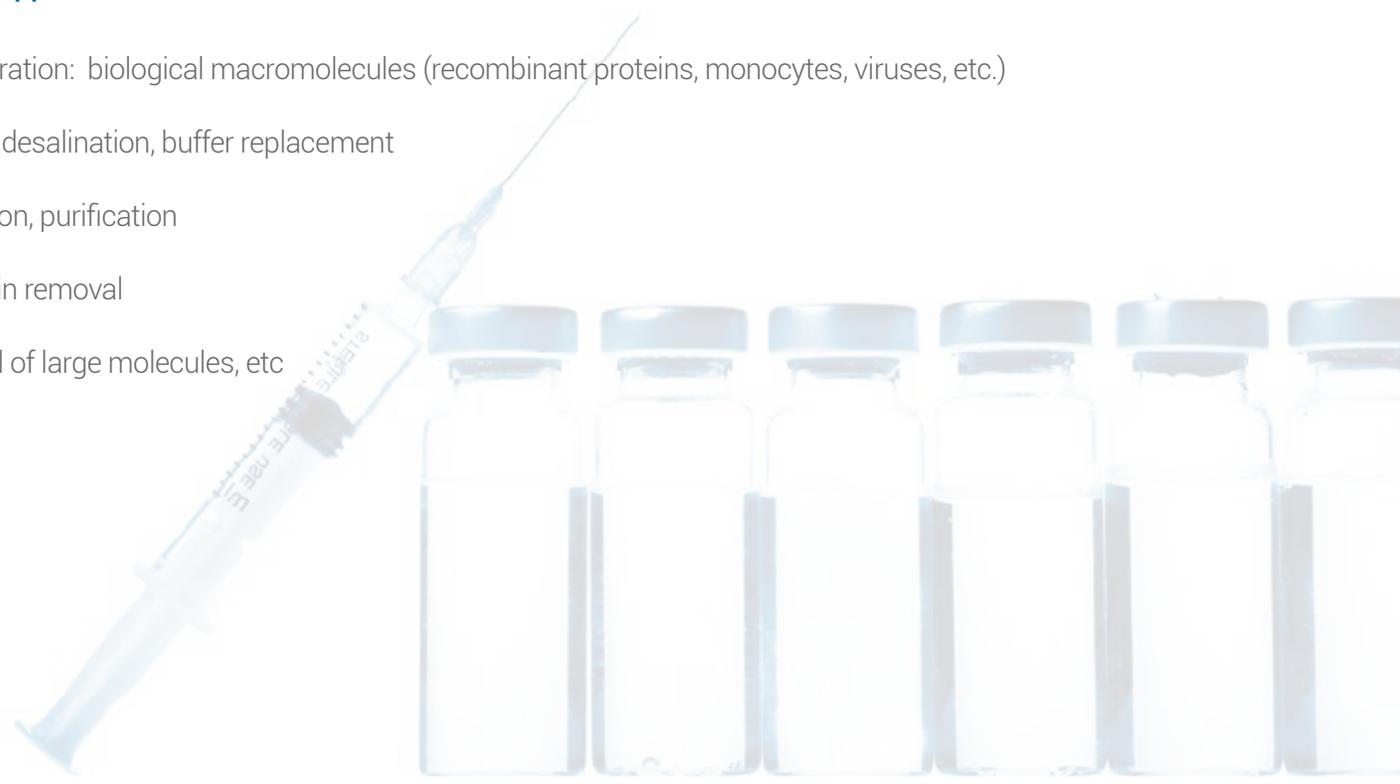


Dead-End Filtration



Typical Applications

- Concentration: biological macromolecules (recombinant proteins, monocytes, viruses, etc.)
- Dialysis, desalination, buffer replacement
- Separation, purification
- Endotoxin removal
- Removal of large molecules, etc

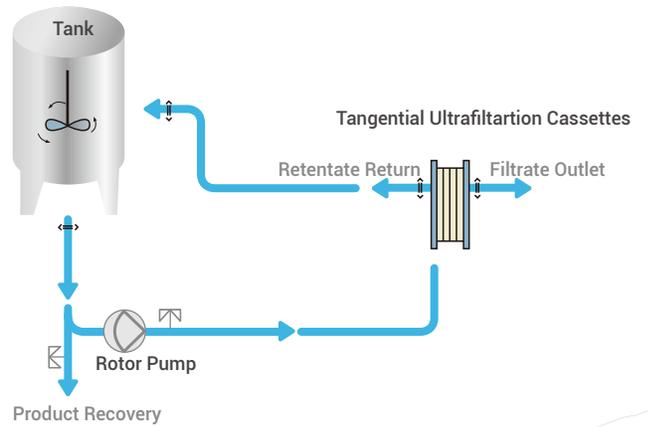


Tangential Flow Simple Device

The tangential flow simple device is easy to operate, flexible configuration, small footprint, sanitary design.

Can be used for small trial, pilot, small scale production, fully linear scaling.

Pump	Peristaltic Pump			
Holder	Sanitary Cassette Holder			
Membrane	Lab	100cm ²	200cm ²	0.11m ²
	Flow	0.46m ²	0.5m ²	2.33m ² 2.5m ²
Pipe	Hygienic silicone tubes, autoclavable			
Pressure Gauge	Sanitary diaphragm pressure gauge			
Connections	Sanitary clamp connection			



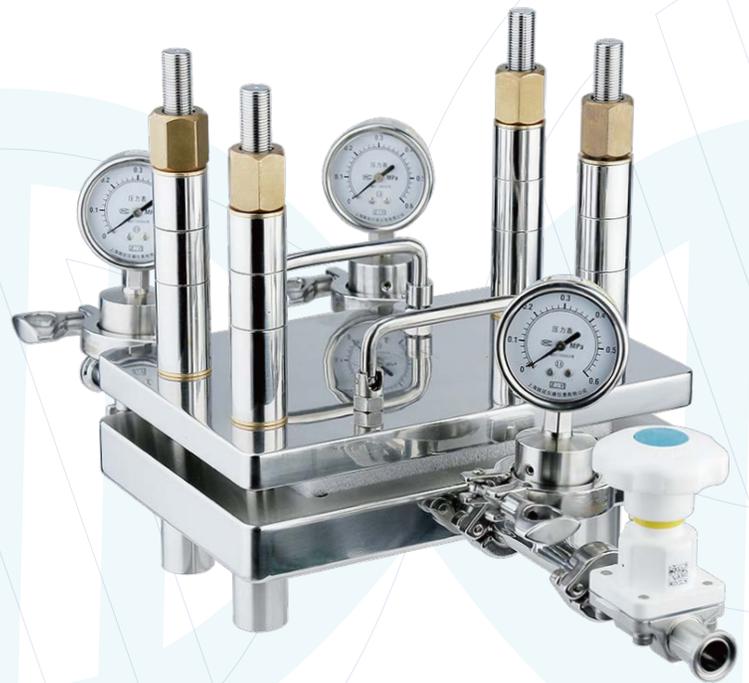
A Stainless Steel Holder

Process development and small-volume manufacturing with an EFA of 100cm²/200cm²/0.11m²



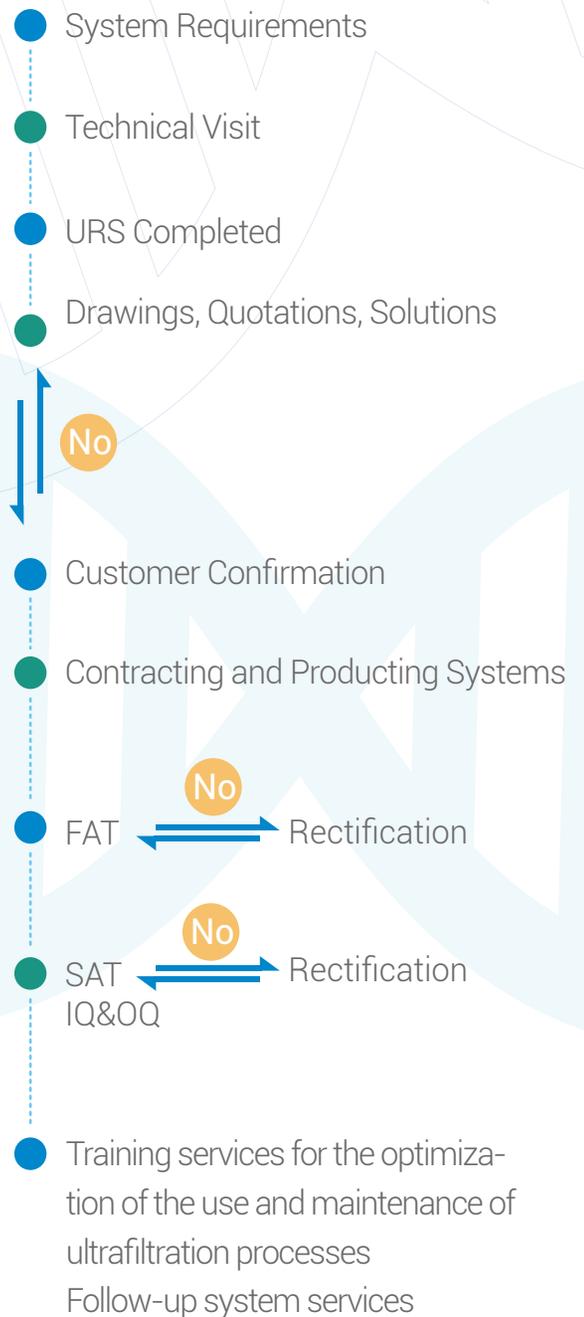
B Stainless Steel Holder

Accomodate an EFA of 0.46 - 2.5 m² up to 5 m² (Need to replace longer fixing screw)



Customized Ultrafiltration System for Lab Pilot & Process Scale Application

- Mass flowmeter, electromagnetic flowmeter, pH meter, conductivity meter and other testing equipment can be selected according to needs
- Automatic CIP/SIP, automatic detection of water flux, automatic concentration, constant-volume dialysis, automatic recycling, etc. can be achieved by editing methods
- Automatic adjustment/control of inlet or circulating flow rate and recording of flow rate change curve.
- Automatically monitor the inlet, retentate, and permeate pressure, calculate TMP automatically, realize TMP control, and record TMP curve.
- The retentate can be equipped with a precision TMP control valve for automatic and precise TMP control.
Multi-level permission management with audit trail.



Consieve 2 UET

TFF Cassette with PES Membrane

Consieve 2 series ultrafiltration cassettes represent an enhanced iteration of Cobetter Consieve line, incorporating field-proven design optimizations in membrane structure and material selection. **Consieve 2 UET** cassettes employ polyurethane resin encapsulation, significantly increases structural rigidity and compression resistance, ensuring dimensional stability of flow channels.

The cassettes demonstrate excellent linear scalability from lab-scale development to production-scale manufacturing. With optimized flow path configurations and multiple channel options, users can select the most suitable flow structure based on application requirements to improve process economics.



Material

Membrane	PES
Screen	PP
Gasket	Silicone
Adhesive	Polyurethane
Material Features	Low protein binding and high product yield High flux Broad chemical compatibility

Information

pH Range	1-14
NMWL	1/3/5/8/10/30/50/100/300/500/1000KD
Max. Operating Temperature	50°C
Max. Operating Pressure	4bar
Integrity	100% Integrity testing
Tangential Flow Rate	100% Tangential flow rate testing
Biocompatibility	Component materials meet the requirements of the current USP<88> for plastic class VI.

Consieve 2 UFC

TFF Cassette with RC Membrane



Consieve 2 UFC RC membrane cassettes employ polyurethane resin encapsulation, significantly increases structural rigidity and compression resistance, ensuring dimensional stability of flow channels. The cassettes demonstrate excellent linear scalability from lab-scale development to production-scale manufacturing. With optimized flow path configurations and multiple channel options, users can select the most suitable flow structure based on application requirements to improve process economics.

The regenerated cellulose (RC) ultrafiltration membrane demonstrates strong hydrophilicity, low absorption, low extractables, and excellent organic solvent resistance, offering advantages such as high flux, strong antifouling capability, and ease of cleaning/regeneration.

Material

Membrane	Regenerated Cellulose(RC)
Screen	PP
Gasket	Silicone
Adhesive	Polyurethane
Material Features	Low protein binding and high product yield High flux Special solvent resistance

Information

pH Range	2-13
NMWL	1/2/3/5/8/10/30/100/300 KD, 1KH/3KH/3KL/30KH/100KH
Max. Operating Temperature	50°C
Max. Operating Pressure	4bar
Integrity	100% Integrity testing
Tangential Flow Rate	100% Tangential flow rate testing
Biocompatibility	Component materials meet the requirements of the current USP<88> for plastic class VI.

Consieve 2 MET

Microfiltration TFF Cassette

Consieve MET microfiltration TFF cassettes are often used in the clarification process of the supernatant after centrifugation of fermentation broth or lysate. It has the characteristics of high process throughput, large filtration loading capacity, good clarification effect, and easy cleaning. The relatively open suspended flow channel is compatible with filter fluids with a certain solid content and higher viscosity.

Material

Membrane	Polyethersulfone (PES)
Screen	Polypropylene (PP)Silicone
Gasket	Silicone
Adhesive	Polyurethane
Material Features	High throughput, high load capacity, acid and alkali resistant

Information

pH Range	1-14
Pore Size	0.1/0.2/0.45/0.65µm
Max. Operating Temperature	50°C
Max. Operating Pressure	4bar
Integrity	100% Integrity testing
Tangential Flow Rate	100% Tangential flow rate testing
Biocompatibility	Component materials meet the requirements of the current USP<88> for plastic class VI.

Ordering Information

Cobetter Consieve™ 2 UETA Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2ME	001S	A	01	P
UF2ME Cobetter Consieve™ 2 UETA	001S 1 KD 003S 3 KD 005S 5 KD 008S 8 KD 010S 10 KD 030S 30 KD 050S 50 KD 100S 100 KD 300S 300 KD 500S 500 KD 01KS 1000 KD	A Tight Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UETC Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2ME	001S	C	01	P
UF2ME Cobetter Consieve™ 2 UETC	001S 1 KD 003S 3 KD 005S 5 KD 008S 8 KD 010S 10 KD 030S 30 KD 050S 50 KD 100S 100 KD 300S 300 KD 500S 500 KD 01KS 1000 KD	C Standard Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UETD Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2ME	001S	D	01	P
UF2ME Cobetter Consieve™ 2 UETD	001S 1 KD 003S 3 KD 005S 5 KD 008S 8 KD 010S 10 KD 030S 30 KD 050S 50 KD 100S 100 KD 300S 300 KD 500S 500 KD 01KS 1000 KD	D Coarse Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UETV Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2ME	001S	V	01	P
UF2ME Cobetter Consieve™ 2 UETV	001S 1 KD 003S 3 KD 005S 5 KD 008S 8 KD 010S 10 KD 030S 30 KD 050S 50 KD 100S 100 KD 300S 300 KD 500S 500 KD 01KS 1000 KD	V Suspended Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Ordering Information

Cobetter Consieve™ 2 UFCA Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2MC	030S	A	01	P
UF2MC Cobetter Consieve™ 2 UFCA	030S 30KD 030H 30KDH	A Tight Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UFCC Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2MC	001S	C	01	P
UF2MC Cobetter Consieve™ 2 UFCC	001S 1KD 001H 1KDH 002S 2KD 003S 3KD 003H 3KDH 003L 3KDL 005S 5KD 008S 8KD 010S 10KD 030S 30KD 030H 30KDH 050S 50KD 100S 100KD 100H 100KDH 300S 300KD	C Standard Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UFCD Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2MC	001S	D	01	P
UF2MC Cobetter Consieve™ 2 UFCD	001S 1KD 001H 1KDH 002S 2KD 003S 3KD 003H 3KDH 003L 3KDL 005S 5KD 008S 8KD 010S 10KD 030S 30KD 030H 30KDH 050S 50KD 100S 100KD 100H 100KDH 300S 300KD	D Coarse Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Cobetter Consieve™ 2 UFCV Ultrafiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Industry
UF2MC	001S	V	01	P
UF2MC Cobetter Consieve™ 2 UFCV	001S 1KD 001H 1KDH 002S 2KD 003S 3KD 003H 3KDH 003L 3KDL 005S 5KD 008S 8KD 010S 10KD 030S 30KD 030H 30KDH 050S 50KD 100S 100KD 100H 100KDH 300S 300KD	V Suspended Screen	01 0.01 m ² 02 0.02 m ² 10 0.11 m ² 50 0.5 m ² 25 2.5 m ²	P Pharmaceutical

Ordering Information

Cobetter Consieve™ 2 METV Microfiltration Cassettes

Application	MWCO	Screen Type	Effective Filtration Area	Filter Type	Industry
MF2ME	M10	V	02	N	P
Cobetter Consieve™ 2 METV	M10 0.1µm M20 0.2µm M45 0.45µm M65 0.65µm	V Suspended Screen	02 0.02 m ² 10 0.1 m ² 50 0.5 m ² 25 2.5 m ²	N Non-sterile	P Pharmaceutical



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