

Laboratory Filtration



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For General Filtration Application

Cosmo[®] Syringe Filters

Applications

- General laboratory
- Pharmaceutical
- Food and beverage
- Environmental Sampling

Filter type available

- Hydrophilic PVDF - Aqueous and mild organic solutions; ultra-low protein binding
- PES - High asymmetric PES membrane, high flow rate, low extractable
- Nylon - Filtration of aqueous biological solutions, alcoholic solutions and non-aqueous HPLC/GC solvents
- Glass Fiber - Prefiltration
- Polypropylene - Prefiltration



Specifications

Housing Material	PP
Diameter	13 / 25 mm
Pore size	0.22 / 0.45 μ m (0.1 / 0.8 / 1.2 / 3.0 / 5.0 μ m are available)
Max. Operating Temp.	45C°
Connection	Connection: Female Luer-Lok inlet / Male Luer slip outlet

Ordering Information

Cat. No.	Material	Pore Size (μ m)	Diameter (mm)	Hold-up Volume (μ L)	Qty/pk (pcs)
SFU13PVH0022 SFU13PVH0045	Hydrophilic PVDF	0.22 0.45	13	< 25	100
SFU13PE0022 SFU13PE0045	PES	0.22 0.45			
SFU13NY0022 SFU13NY0045	Nylon	0.22 0.45			
SFU13GF0022 SFU13GF0045	Glass Fiber	0.22 0.45			
SFU13PP0022 SFU13PP0045	Polypropylene	0.22 0.45			
SFU25PVH0022 SFU25PVH0045	Hydrophilic PVDF	0.22 0.45	25	< 100	
SFU25PE0022 SFU25PE0045	PES	0.22 0.45			
SFU25NY0022 SFU25NY0045	Nylon	0.22 0.45			
SFU25GF0022 SFU25GF0045	Glass Fiber	0.22 0.45			
SFU25PP0022 SFU25PP0045	Polypropylene	0.22 0.45			

For High Particulate Filtration

HP Syringe Filters

Application

HP syringe filters are ideal for heavily particulate-laden samples found in:

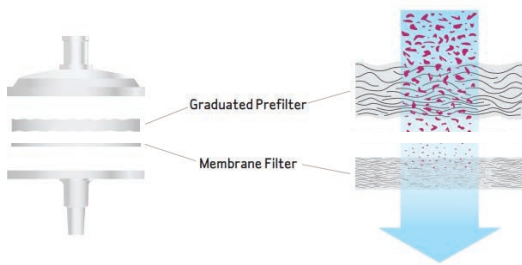
- Dissolution testing
- Concentration analysis
- Routine sample preparation
- Food analysis
- Environmental sampling



Features

- Graduated glass fiber prefilter, 0.7µm to 10µm
- Eliminates sample contamination
- Requires less hand pressure, even with the most difficult samples
- Process three to seven times more sample volume

Configuration



Ordering Information

Cat. No.	Material	Pore Size (µm)	Diameter (mm)	Hold-up Volume (µL)	Qty/pk (pcs)
SFU13NY0022HP SFU13NY0045HP	GF prefilter, nylon	0.22 0.45	13	< 25	100
SFU13PE0022HP SFU13PE0045HP	GF prefilter, PES	0.22 0.45			
SFU13PVH0022HP SFU13PVH0045HP	GF prefilter, Hydrophilic PVDF	0.22 0.45			
SFU13PTH0022HP SFU13PTH0045HP	GF prefilter, Hydrophilic PTFE	0.22 0.45			
SFU25NY0022HP SFU25NY0045HP	GF prefilter, nylon	0.22 0.45	25	< 100	
SFU25PE0022HP SFU25PE0045HP	GF prefilter, PES	0.22 0.45			
SFU25PVH0022HP SFU25PVH0045HP	GF prefilter, Hydrophilic PVDF	0.22 0.45			
SFU25PTH0022HP SFU25PTH0045HP	GF prefilter, Hydrophilic PTFE	0.22 0.45			

For Sample Preparation

Unichro® Syringe Filters

Cobetterlab Unichro® syringe filters are ideal for preparing 1-100mL samples prior to chromatography or other instrumental analyses. The Overmolded Design for higher operating pressures and faster filtration.

Filter Type Available

- Nylon - Aqueous and organic solutions
- RC - Fast flow and low protein binding
- Hydrophilic PTFE - Aqueous and mild organic solutions
- Hydrophobic PTFE - Organic solvents
- PES - High flow rate, low extractable
- MCE - Biologically inert, widely used membranes in analytical and research applications

Features

- HPLC Certified for Low Extractables
- IC Certified for Low Levels of Inorganic Extractables
- Color-coding for Easy Identification

Specifications

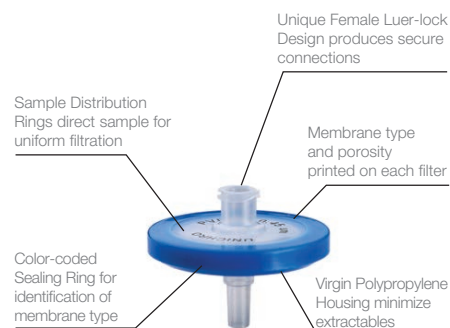
Housing Material	PP
Diameter	13 / 25 / 33 mm
Max. Operating Temp	45°C
Connection	Female Luer-Lock inlet Male Luer slip outlet

Ordering Information

Cat. No.	Material	Pore Size (µm)	Diameter (mm)	Hold-up Volume (µL)	Qty/pk (pcs)
SFM13NY0022	Nylon	0.22	13	<25	100
SFM13NY0045		0.45			
SFM13PVH0022	Hydrophilic PVDF	0.22			
SFM13PVH0045		0.45			
SFM13RC0022	RC	0.22			
SFM13RC0045		0.45			
SFM13PTH0022	Hydrophilic PTFE	0.22			
SFM13PTH0045		0.45			
SFM13PT0022	Hydrophobic PTFE	0.22			
SFM13PT0045		0.45			
SFM13PE0022	PES	0.22			
SFM13PE0045		0.45			
SFM13CA0022	CA	0.22			
SFM13CA0045		0.45			
SFM25NY0022	Nylon	0.22	25	<100	100
SFM25NY0045		0.45			
SFM25PVH0022	Hydrophilic PVDF	0.22			
SFM25PVH0045		0.45			
SFM25RC0022	RC	0.22			
SFM25RC0045		0.45			
SFM25PTH0022	Hydrophilic PTFE	0.22			
SFM25PTH0045		0.45			
SFM25PT0022	Hydrophobic PTFE	0.22			
SFM25PT0045		0.45			
SFM25PE0022	PES	0.22			
SFM25PE0045		0.45			
SFM25CA0022	CA	0.22			
SFM25CA0045		0.45			
SFM33NY0022	Nylon	0.22	33	<125	100
SFM33NY0045		0.45			
SFM33PVH0022	Hydrophilic PVDF	0.22			
SFM33PVH0045		0.45			
SFM33RC0022	RC	0.22			
SFM33RC0045		0.45			
SFM33PTH0022	Hydrophilic PTFE	0.22			
SFM33PTH0045		0.45			
SFM33PT0022	Hydrophobic PTFE	0.22			
SFM33PT0045		0.45			
SFM33PE0022	PES	0.22			
SFM33PE0045		0.45			
SFM33CA0022	CA	0.22			
SFM33CA0045		0.45			



Configuration



* Mark: RC filters will be coming soon.

For Ion Chromatography

IC Syringe Filters

Cobetterlab IC syringe filters are specially designed for the preparation of samples for subsequent ion chromatography and HPLC analysis. These filters conform to quality release criteria for ion chromatography extractables.



Features

- Low binding membrane
- Low IC extractables
- Clarifies both aqueous and mild organic solutions
- Individually packaged to minimize the risk of ionic contamination

Specifications

Housing	HDPE
Material	Hydrophilic PTFE membrane / PES
Diameter	13 mm, 25 mm
Pore size	0.22 µm, 0.45 µm
Filtration area	13 mm, 0.65 cm ² / 25 mm, 3.9 cm ²
Sterilization	Non-sterile
Connection	Female Luer-Lok inlet / Male Luer slip outlet

Ordering Information

Cat. No.	Material	Pore Size (µm)	Diameter (mm)	Hold-up Volume (µL)	Housing	Qty/pk(pcs)
SFM13PTH0022IC	IC-Hydrophilic PTFE	0.22	13	< 25	HDPE	100
SFM13PTH0045IC		0.45	25	< 100		
SFM25PTH0022IC	IC-PES	0.22	25	< 25		
SFM25PTH0045IC		0.45	25	< 100		
SFM13PE0022IC	IC-PES	0.22	13	< 25		
SFM13PE0045IC		0.45	25	< 100		
SFM25PE0022IC	IC-PES	0.22	25	< 25		
SFM25PE0045IC		0.45	25	< 100		

Disposable Vent Filter

Features and Benefits

- Exceptionally high flow rate with low pressure drop
- 100% integrity tested to provide a high level of confidence
- Can be sterilized by gamma irradiation or autoclaving

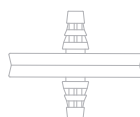
Applications

- Venting bioreactors
- Fermentation tanks
- Culture vessels
- Carboys
- Filling machines
- Autoclaves
- Transfer vessels

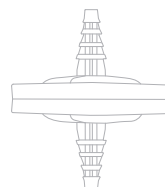
SFU-GM



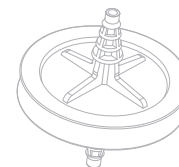
Bricap™ 42 (SS47DISC-GM)



Bricap™ V5D (64DISC-GM)



Bricap™ V5A (AV50-GM)



Filter Media	Hydrophobic PTFE on a PET support	Hydrophobic PTFE on a PET support	Hydrophobic PTFE on a PET support	Hydrophobic PTFE on a PET support
Pore Size	0.2µm	0.2µm	0.2µm	0.2µm
Housing	Gamma stable PP	Gamma stable PP	Gamma stable PP	Gamma stable PP
Effective Filtration Area	0.72cm ² 3.4cm ² 4.5cm ²	13.8cm ²	20.0cm ²	20.0cm ²
Overall Length	19.0mm 22.5mm 26.1mm	47.0mm	69.5mm	83.5mm
Diameter	18.0mm 30.0mm 35.0mm	56.0mm	64.0mm	73.0mm
Inlet/Outlet Connections	Inlet: Female luer-lok Outlet: Male luer slip	1/4"-3/8" Hose barb	1/4"-1/2" Hose barb	1/4"-1/2" Hose barb
Max. Operation Pressure	6.0bar(87psi)@20°C	2.4bar(35psi)@20°C	4.2bar(61psi)@20°C	2.4bar(35psi)@20°C
Typical Air Flow Rate (20°C)	13mm:0.5L/min@0.2bar(3psi) 25mm:2.1L/min@0.2bar(3psi) 33mm:2.9L/min@0.2bar(3psi)	6.3L/min@0.2bar(3psi)	9.6L/min@0.2bar(3psi)	9.0L/min@0.2bar(3psi)
Bubble Point	≥1.1bar(60%IPA)	≥1.1bar(60%IPA)	≥1.1bar(60%IPA)	≥1.1bar(60%IPA)
Sterilization	Gamma irradiation 25kGy recommended	- Gamma irradiation 25kGy recommended 50kGy maximum - Gamma irradiation	- Gamma irradiation 25kGy recommended 50kGy maximum - Gamma irradiation	- Gamma irradiation 25kGy recommended 50kGy maximum - Gamma irradiation
Biological Safety	Meets USP Biological Reactivity Test, in vivo, for Class VI-121°C Plastics.			

Ordering Information

Cat. No.	Material	Pore Size (µm)	Sterility
SFM13PT0022-GM	PTFE	0.2	Gamma-irradiated
SFM25PT0022-GM			Gamma-irradiated
SFM33PT0022-GM			Gamma-irradiated
SS47DISC-GM-PTFE0020L			Gamma-irradiated
SS47DISC-PTFE0020L			Autoclavable
64DISC-GM-PTFE0020L			Gamma-irradiated
64DISC-PTFE0020L			Autoclavable
AV50-GM-PTFE0020L			Gamma-irradiated
AV50-PTFE0020L			Autoclavable

Membrane Filters

Nylon Membrane

Cobetter Nylon membrane filters are recommended for particle removing filtration for water, aqueous solutions and solvents for analytical determinations such as HPLC, as well as for the filtration of these liquids.

Typical Applications

- HPLC sample preparations
- Sterile filtration of aqueous and solvent solutions
- Clarification and particle removal

Specifications

Color	White
Material	Nylon
Reaction to water	Hydrophilic
Pore size	0.1µm-5µm
Diameter	13/ 25/ 47/ 90/ 142/ 250/ 293mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13NY0010	13	100/600	Nylon	0.1
MF25NY0010	25	50/500		
MF47NY0010	47	50/300		
MF90NY0010	90	25		
MF142NY0010	142	25		
MF293NY0010	293	25	Nylon	0.22
MF13NY0022	13	100/600		
MF25NY0022	25	50/500		
MF47NY0022	47	50/300		
MF90NY0022	90	25		
MF142NY0022	142	25		
MF293NY0022	293	25	Nylon	0.45
MF13NY0045	13	100/600		
MF25NY0045	25	50/500		
MF47NY0045	47	50/300		
MF90NY0045	90	25		
MF142NY0045	142	25		
MF293NY0045	293	25	Nylon	0.8
MF13NY0045	13	100/600		
MF25NY0045	25	50/500		
MF47NY0045	47	50/300		
MF90NY0045	90	25		
MF142NY0045	142	25		
MF293NY0045	293	25	Nylon	1.2
MF13NY0120	13	100/600		
MF25NY0120	25	50/500		
MF47NY0120	47	50/300		
MF90NY0120	90	25		
MF142NY0120	142	25		
MF293NY0120	293	25	Nylon	5.0
MF13NY0500	13	100/600		
MF25NY0500	25	50/500		
MF47NY0500	47	50/300		
MF90NY0500	90	25		
MF142NY0500	142	25		
MF293NY0500	293	25		



Membrane Filters

Hydrophobic PTFE Membrane

Cobetter Hydrophobic PTFE membrane is made from pure PTFE membrane bonded to a polypropylene support. The extreme chemical compatibility (pH 1-14) makes them very useful for the filtration of solvents and acids or other aggressive chemicals, for which other membrane filter types are unsuitable. Due to their hydrophobic characteristics, they must be pre-wet with a solvent such as ethanol or methanol before the filtration of aqueous solutions.



Typical Applications

- Ideal for HPLC and organic solvents
- Air and gas filtration
- Aerosol sampling

Specifications

Color	White
Material	PTFE
Reaction to water	Hydrophobic
Pore size	0.1µm-5µm
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13PT0010	13	100/600	Hydrophobic PTFE, PP supported	0.1
MF25PT0010	25	50/500		
MF47PT0010	47	50/300		
MF90PT0010	90	25		
MF142PT0010	142	25		
MF13PT0022	13	100/600	Hydrophobic PTFE, PP supported	0.22
MF25PT0022	25	50/500		
MF47PT0022	47	50/300		
MF90PT0022	90	25		
MF142PT0022	142	25		
MF13PT0045	13	100/600	Hydrophobic PTFE, PP supported	0.45
MF25PT0045	25	50/500		
MF47PT0045	47	50/300		
MF90PT0045	90	25		
MF142PT0045	142	25		
MF13PT0120	13	100/600	Hydrophobic PTFE, PP supported	1.2
MF25PT0120	25	50/500		
MF47PT0120	47	50/300		
MF90PT0120	90	25		
MF142PT0120	142	25		
MF13PT0300	13	100/600	Hydrophobic PTFE, PP supported	3.0
MF25PT0300	25	50/500		
MF47PT0300	47	50/300		
MF90PT0300	90	25		
MF142PT0300	142	25		

Sterile Syringe Filters

Filter type available

- Hydrophilic PVDF - Ultra-low protein binding
- PES - High flow rate, low protein binding
- CA - Low protein binding and extractables

Ordering Information

Cat. No.	Material	Pore Size (µm)	Diameter (mm)	Hold-up Volume (µL)	Qty/pk(pcs)
SFM13PE0022S	PES	0.22	13	< 25	100
SFM13PE0045S		0.45			
SFM25PE0022S		0.22	25	< 100	
SFM25PE0045S		0.45			
SFM33PE0022S		0.22	33	< 125	
SFM33PE0045S		0.45			
SFM13CA0022S	CA	0.22	13	< 25	
SFM13CA0045S		0.45			
SFM25CA0022S		0.22	25	< 100	
SFM25CA0045S		0.45			
SFM33CA0022S		0.22	33	< 125	
SFM33CA0045S		0.45			
SFM13PVH0022S	Hydrophilic PVDF	0.22	13	< 25	
SFM13PVH0045S		0.45			
SFM25PVH0022S		0.22	25	< 100	
SFM25PVH0045S		0.45			
SFM33PVH0022S		0.22	33	< 125	
SFM33PVH0045S		0.45			
SFM25PT0010S	Hydrophobic PTFE	0.1	25	< 100	
SFM25PT0022S		0.22			
SFM25PT0045S		0.45			
SFM33PT0010S		0.1	33	< 125	
SFM33PT0022S		0.22			
SFM33PT0045S		0.45			



Features

- Provide the fastest flow rates, low protein binding and low extractables
- Manufactured in accordance with ISO 9001 standards

Filter Type Available

- Filtration of tissue culture media/buffers
- Biological sample preparation

Disposable Vacuum Filters

Coming Soon

Features

- Ideally suited for sterile filtration of a variety of complex cell culture medias, buffers and reagents
- High capacity of liquid
- Suitable for both open and close fluid system
- Designed for extremely low protein binding

Filter type available

- PES membrane--high flux
- Hydrophilic PVDF--low protein binding and good chemical compatibility
- Surfactant-Free Cellulose Acetate (SFCA)--ultra low protein binding
- Nylon membrane--general filtration

Pore size

0.1µm、0.22µm、0.45µm

Dimension

150ml、250ml、500ml、1000ml



Membrane Filters

Hydrophilic PTFE Membrane

Cobetter hydrophilic PTFE (polytetrafluorethylene) membrane filter has a durable wide operating temperature range and resistance to the destructive effects of many chemicals. It can be used to filter aqueous fluids without prior wetting.

Specifications

Color	White
Material	PTFE
Reaction to water	Hydrophilic
Pore size	0.22 μ m-0.45 μ m
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (μ m)
MF13PTH0010	13	100/600	Hydrophilic PTFE, unsupported	0.1
MF25PTH0010	25	50/500		
MF47PTH0010	47	50/300		
MF13PTH0022	13	100/600	Hydrophilic PTFE, unsupported	0.22
MF25PTH0022	25	50/500		
MF47PTH0022	47	50/300		
MF13PTH0045	13	100/600	Hydrophilic PTFE, unsupported	0.45
MF25PTH0045	25	50/500		
MF47PTH0045	47	50/300		

Membrane Filters

Hydrophilic PVDF Membrane

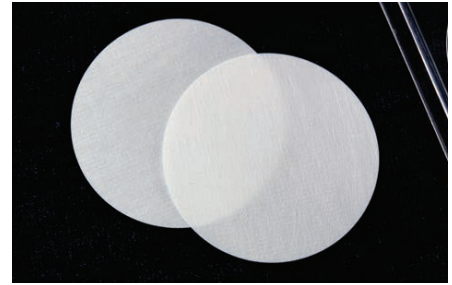
Cobetter modified hydrophilic PVDF (Polyvinylidene Difluoride) membrane filter has excellent water wettability, providing high flow rate. PVDF membranes are naturally hydrophobic but are modified to a hydrophilic nature. Useful for a wide range of applications, both aqueous and non-aggressive solvent-based. These membranes are typically low protein binding and are frequently used for sterilizing filtration.

Specifications

Color	White
Material	PVDF
Reaction to water	Hydrophilic
Pore size	0.22 μ m-0.45 μ m
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (μ m)
MF13PVH0022	13	100/600	Hydrophilic PVDF	0.22
MF25PVH0022	25	50/500		
MF47PVH0022	47	50/300		
MF90PVH0022	90	25	Hydrophilic PVDF	0.45
MF13PVH0045	13	100/600		
MF25PVH0045	25	50/500		
MF47PVH0045	47	50/300	Hydrophilic PVDF	0.45
MF90PVH0045	90	25		



Typical Applications

- Ideal for filtration of aqueous and organic solvents
- Analytical Sample Prep, HPLC
- Chromatography



Typical Applications

- Particulate removal
- Clarifying filtration of biological solutions
- General filtration
- Sample preparation

Membrane Filters

CA Membrane

Cobetter Cellulose Acetate membrane filter combines high flow rates with very low adsorption characteristics.

Typical Applications

- Sterile filtration of culture media
- Microbe-retentive, particle-removing filtration of nutrient media, water and solutions
- Cell harvesting

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13CA0022	13	100/600	Cellulose Acetate, White, Plain	0.22
MF25CA0022	25	50/500		
MF47CA0022	47	50/300		
MF90CA0022	90	25		
MF13CA0045	13	100/600	Cellulose Acetate, White, Plain	0.45
MF25CA0045	25	50/500		
MF47CA0045	47	50/300		
MF90CA0045	90	25		
MF13CA0065	13	100/600	Cellulose Acetate, White, Plain	0.65
MF25CA0065	25	50/500		
MF47CA0065	47	50/300		
MF90CA0065	90	25		
MF13CA0080	13	100/600	Cellulose Acetate, White, Plain	0.8
MF25CA0080	25	50/500		
MF47CA0080	47	50/300		
MF90CA0080	90	25		
MF13CA0120	13	100/600	Cellulose Acetate, White, Plain	1.2
MF25CA0120	25	50/500		
MF47CA0120	47	50/300		
MF90CA0120	90	25		



Specifications

Color	White
Material	Cellulose Acetate
Reaction to water	Hydrophilic
Pore size	0.22µm-5.0µm
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Membrane Filters

PES Membrane

Cobetter PES membrane filter has very low protein binding characteristics, high liquid flow rates and throughput (long life), and low extractable. PES' s hydrophilic characteristics allow it to be used with both liquids and dry gases, making it suitable for a variety of environments.

Typical Applications

- HPLC sample preparations, Sterilizing filtration
- Sterile filtration
- Clarification and particle removal

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13PE0022	13mm	100/600	PES	0.22
MF25PE0022	25mm	50/500		
MF47PE0022	47mm	50/300		
MF90PE0022	90mm	25		
MF13PE0045	13mm	100/600	PES	0.45
MF25PE0045	25mm	50/500		
MF47PE0045	47mm	50/300		
MF90PE0045	90mm	25		



Specifications

Color	White
Material	PES
Reaction to water	Hydrophilic
Pore size	0.22µm-0.45µm
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Membrane Filters

MCE Membrane

Cobetter MCE (Mixed cellulose ester) membrane is biologically inert, it's one of the most widely used membranes in research applications. MCE membrane filter is characterized by a smoother and more uniform surface than pure nitrocellulose filter, providing superior flow rates. Withstand autoclaving temperatures up to 130 C without adversely affecting bubble point, flow rate or microbiological recovery.



Typical Applications

- Widely used membranes in analytical and research applications
- Sterilizing biological fluids
- Microbiology testing

Specifications

Color	White
Material	Mixed Cellulose Acetate
Reaction to water	Hydrophilic
Pore size	0.22µm-1.2µm
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13MC0022	13	100/600	Mixed Cellulose Ester	0.22
MF25MC0022	25	50/500		
MF47MC0022	47	50/300		
MF90MC0022	90	25		
MF13MC0045	13	100/600	Mixed Cellulose Ester	0.45
MF25MC0045	25	50/500		
MF47MC0045	47	50/300		
MF90MC0045	90	25		
MF13MC0065	13	100/600	Mixed Cellulose Ester	0.65
MF25MC0065	25	50/500		
MF47MC0065	47	50/300		
MF90MC0065	90	25		
MF13MC0080	13	100/600	Mixed Cellulose Ester	0.8
MF25MC0080	25	50/500		
MF47MC0080	47	50/300		
MF90MC0080	90	25		
MF13MC0120	13	100/600	Mixed Cellulose Ester	1.2
MF25MC0120	25	50/500		
MF47MC0120	47	50/300		
MF90MC0120	90	25		

Membrane Filters

PP Filter

Cobetter PP (polypropylene) membrane filter is a preferred choice for HPLC applications. This plastic polymer has very good resistance to a broad range of chemicals even at high temperature. Adaptable material for applications ranging from air filtration.

Typical Applications

- Aqueous and organic solvent filtration
- Depth filtration
- Sterilize gases: traps aqueous aerosols
- Air and gas venting

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13PP0022	13	100/600	PP	0.22
MF25PP0022	25	50/500		
MF47PP0022	47	50/300		
MF90PP0022	90	25		
MF13PP0045	13	100/600	PP	0.45
MF25PP0045	25	50/500		
MF47PP0045	47	50/300		
MF90PP0045	90	25		
MF13PP0120	13	100/600	PP	1.2
MF25PP0120	25	50/500		
MF47PP0120	47	50/300		
MF90PP0120	90	25		
MF13PP0250	13	100/600	PP	2.5
MF25PP0250	25	50/500		
MF47PP0250	47	50/300		
MF90PP0250	90	25		



Specifications

Color	White
Material	Polypropylene
Reaction to water	Hydrophobic
Pore size	0.22µm-3.0µm
Diameter	13/ 25/ 47/ 90/ 142mm
Package	13mm, 100pcs per pk, 6pks in a box 25mm, 50pcs per pk, 10pks in a box 47mm, 50pcs per pk, 6pks in a box

Membrane Filters

Glass Fiber Filter

Cobetter Glass fiber filters without binder resin retain their structural integrity without weight loss when heated up to 500 °C and can therefore be used in gravimetric analysis as well as for the filtration of hot gases.

Typical Applications

- Use in biochemical applications
- Liquid clarification, quantification of solids in suspensions of fine particles
- Filtering extremely fine precipitates such as protein, nucleic acids, or serum precipitates

Ordering Information

Cat. No.	Diameter (mm)	Qty/pk (pcs)	Material	Pore Size (µm)
MF13GF0022	13	30/180	Glass Fiber	0.22
MF25GF0022	25	15/150		
MF47GF0022	47	15/90		
MF90GF0022	90	10		
MF13GF0045	13	30/180	Glass Fiber	0.45
MF25GF0045	25	15/150		
MF47GF0045	47	15/90		
MF90GF0045	90	10		
MF13GF0070	13	30/180	Glass Fiber	0.7
MF25GF0070	25	15/150		
MF47GF0070	47	15/90		
MF90GF0070	90	10		
MF13GF0120	13	30/180	Glass Fiber	1.2
MF25GF0120	25	15/150		
MF47GF0120	47	15/90		
MF90GF0120	90	10		



Specifications

Filter	Retention Rate	Binder	Weight (g/m ²)	Max. Operation Temp. (°C)
Glass fiber	0.22	Binder free	120+20	500
Glass fiber	0.45			
Glass fiber	0.7			
Glass fiber	1.2			

Package: 13mm, 30pcs per pk, 6pks in a box;
25mm, 15pcs per pk, 10pks in a box;
47mm, 15pcs per pk, 6pks in a box;

PP & SS Filter Holders

47mm PP Filter Holders

Cobetterlab plastic membrane filter holders are designed for microfiltration and ultra cleaning of small volumes of liquids using positive pressure. The female luer slip-fit cap with a male 1/4inch NPT and 1/4inch tubing(multipurpose) base. Cobetterlab 47mm filter holders are reusable and accept 47 and 50mm diameter membrane.



Features

- Polypropylene housing, silicone o-ring
- Size: 60mm OD x 52mm H
- Accept 47mm and 50mm membranes
- Connections: Female luer slip-fit cap with a male 1/4inch NPT and 1/4inch tubing
- Syringe compatible

Ordering Information

Cat. No.	Material	Inlet/Outlet	Qty/pk (pcs)
RSF47	Reusable filter holder, accept 47mm and 50mm membranes	1/4inch MNPT	50

Vacuum Manifold

Features

- Each vacuum filtration station have an individual control valve
- Stainless steel manifold construction (SS 316L)
- 1, 3, or 6 unit configuration
- Glass funnel available

Application

- Biochemical-pharmaceutical sanitation test
- Water quality analysis
- Food & beverage and science research

Ordering Information

Cat.No.	Description	Packaging
SSM003	1) Stainless Steel Manifold	1set
SSM006	2) Six Stainless Steel Filtration Units	



Stainless Steel Filter

H-DMF Membrane Filter

H-DMF membrane filter is produced according to sanitary standard, the whole design structure is removable, easily to clean. The maximum grade of lining polishing reaches 0.3µm, which is in full compliance with sanitary standard and GMP requirements.

H-DMF can be placed for single or two layers of membrane, with good sealing structure, easy for operation. It is used for benchmark test for laboratory analysis, as well as used in small flow rate applications.

Features

- Ultra high polishing level;
- All removable structure, easily for cleaning;
- Single or two layers membrane both available;

Surface Finish

Polishing Type: Mechanical Polished, Electro-Polished
 Surface Option: Internal Ra 0.3µm, External Ra 0.4µm

Operating Conditions

Max. Differential Pressure 0.6Mpa(6bar)
 Max. Temperature 150°C(300°F)
 Steam Sterilization: In site/Autoclaved at 121°C/30minutes

Material of Construction

Shell of filter: 304, 316L
 Vent/Drain: 304/316L
 Clamp: 304
 Leg: 304
 O-rings/Gasket: Silicone, Viton, EPDM, PTFE

Connection

Body Connection: Sanitary Tri-clamp
 Inlet/Outlet: Tri-clamp
 Drain: I.D: 4mm, for 8mm tube



Ordering Information

Cat.No.	Membrane layer	Diameter	Material	Inlet/Outlet	Inlet/Outlet
H-DMF	1= single layer 2= double layers	47=47mm	A=304 B=316L	T=Tri-clamp	S=Silicone V=Viton F=PTFE E=EPDM
		60=60mm			
		90=90mm			
		142=142mm			
		293=293mm			

Laboratory Testing Filter

H-TMF Membrane Testing Filter

H-TMF membrane filter is produced according to sanitary standard, the whole design structure is removable, easily to clean. The maximum grade of lining polishing reaches 0.3µm, which is in full compliance with sanitary standard and GMP requirements.

H-TMF uses whole stainless steel, including the shell and internal support filter plate. And the whole filter is natural mechanical sealing, without any other sealing material. Compatible with wide range of applications, can be used in majority liquid analysis.

H-TMF works together with vacuum bottle, can be used in negative pressure filtration.

H-TMF has simple structure and easy for operation, are widely used in different liquid analysis.

Surface Finish

Polishing Type

Mechanical Polished, Electro-Polished

Surface Option

Internal Ra 0.3µm, External Ra 0.4µm

Material of Construction

Shell of filter: 304, 316L



Ordering Information

Cat.No.	Membrane layer	Diameter	Material
H-TMF	1=one layer	47=47mm	A=304 B=316L



Capsule Filters

Cobetter capsule filters are available in different sizes with effective filtration surface areas ranging from 150 to 1500 cm². Capsules are available with membranes such as PES, nylon, PTFE, PVDF and non-woven polypropylene and glass fiber depth medias. The capsules are available with a variety of end fittings such as stepped hose barbs, tri-clamp(sanitary) and NPT connections. Sterile and non-sterile options are also available.

Features

- 100% integrity-tested during manufacturing;
- Nylon membrane capsule filter is recommended for filtering aqueous solutions;
- Dual layer PES membrane capsules filters provide efficient filtration for critical aqueous solutions;
- Hydrophobic PTFE membrane capsule filters are designed for use with organic solvents and chemically aggressive solutions;
- Polypropylene and Glass Fiber filter capsule filters are usually used as prefilters;
- Manufactured in clean room facilities under ISO Quality Systems;

For Lab Water Purification

Point-of-use Capsule Filter

Cobetter Point-of-use capsule filter is specially used for the ultrapure laboratory water. These capsule filters are available with PES membrane and positively charged Nylon66.

Features

Low hold-up volumes and extractables

Materials are in compliance with FDA

Manufactured in class 10,000 clean room which is ISO certified



Specification

Filter Media Available

PES / Nylon66

Housing, Core and Support Material

Polypropylene

Sealing Technology

Thermal bonding

Filling Bell

Polycarbonate

Pore Size Available

0.1/0.2 μ m

Norminal Dimensions

Housing Length(without filling bell): 93mm/122mm

Housing Diameter(without vent): 45mm

Inlet

1/4" NPT

Outlet

1/4 to 3/8" Stepped Hose Barb with filling bell

Max. Operating Temp.

60°C@ 2.1bar

Max. Operating Pressure

4.1bar@ambient temp.

Endotoxin Level

< 0.25 EU/mL using Limulus

Amoebocyte Lysate (LAL) test

Biological Safety

Materials pass USP Class VI

Sterilization

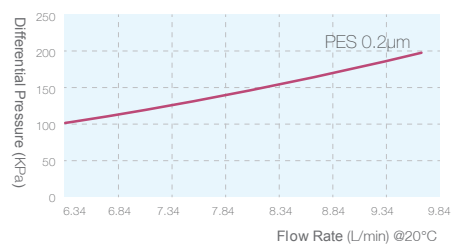
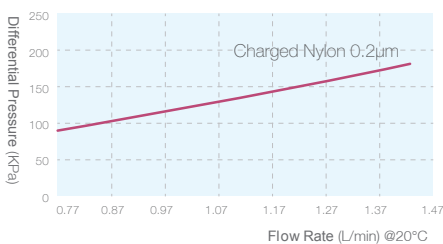
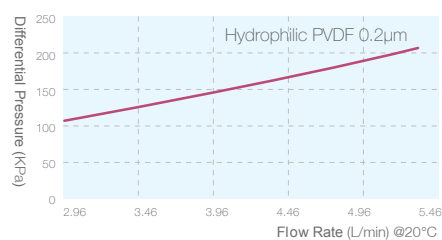
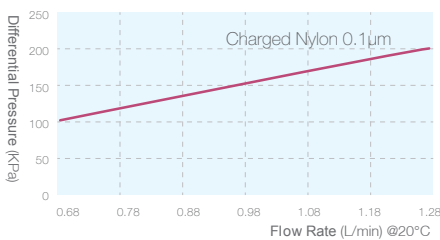
Pre-sterilized available;

Non-sterile, can be Autoclave at 121°C for 30 minutes

Package

Individually poly-bag wrapped, 1 pc per pack.

Water Flow Rate VS Differential Pressure (Tested with LUPWII capsule filter)



Pls contact your sales engineer for filter selection.

Small-to-medium Size Capsule Filter

For aqueous and solvent solutions

Specification

Filter Media Available

PP / PTFE / PES / Nylon66 / GF

Housing, Core and Support Material

Polypropylene

Sealing Technology

Thermal bonding

Pore Size Available

0.1 / 0.2 / 0.45 / 1 / 5 / 10µm

Effective Filtration Area

0.04 m² / 0.43sqft;

0.08 m² / 0.86sqft;

0.16 m² / 1.7sqft;

Normal Dimensions

Housing Length: 92mm, Diameter:70mm

138mm, Diameter:65mm

Inlet/Outlet

1/4-3/8" Stepped Hose Barb

Vent

1/8NPT

Max. Operating Temp.

71°C@ 2.4bar

Maximum Operating Pressure

4.1bar

Biological Safety

Materials pass USP Class VI

Sterilization

Non-sterile, can be Autoclave

at 121°C for 30 minutes



Pls contact your sales engineer for filter selection.

GWQ Capsule Filter

For filtration of ground water samples

Specification

Filter Media Available

PES

Housing, Core and Support Material

Polypropylene

Sealing Technology

Thermal bonding

Effective Filtration Area

<600cm²

Normal Dimensions

Housing Length: 125.5mm

Housing diameter: 73mm

Inlet/Outlet Connections

Inlet: 1/8" NPT + 1/2" Stepped Hose Barb

Outlet: 1/8" NPT

Sterilization

Non-sterile

Package

Individually poly-bag wrapped, 1 pc per pack.



Ordering Information

Cat. No.	Material	Pore Size (µm)	Sterility	Package(pk)
GWQSPSSM0045L	PES	0.45	Non sterile	1 pc
GWQAPSHA0100L		1.0		

Laboratory Filtration

Microbiology

Protein sample preparation

Environmental Monitoring Membrane

Instruments

Small-to-medium Size Capsule Filter

Filters for R&D labs

Specification

Filter Media Available

PES/Nylon66/PTFE/GF/PP

Housing, Core and Support Material

Polypropylene

Sealing Technology

Thermal bonding

Pore Size Available

0.1/ 0.2 / 0.5/1/3/5/10/20 μ m

Effective Filtration Area

0.15m²/1.6 sqft;

Normal Dimensions

Housing Length: 145/163/187mm

Housing diameter: 74mm

Inlet/Outlet Connections:

1/2" Stepped Hose Barb

1" Sanitary Flange

Max. Operating Temp.

71C°@ 2.4bar

Max. Operating Pressure

5.2bar@38C° (Liquid service)

3.4bar@38C° (Gas service)

Endotoxin Level

< 0.25 EU/mL using Limulus Amoebocyte

Lysate (LAL) test

Biological Safety

Materials pass USP Class VI

Sterilization

Non-sterile, can be autoclave at 121C°

for 30 minutes



STBT1

STKZ

STBT2

Pls contact your sales engineer for filter selection.

Gamma irradiatable

For small to medium scale filtration in biopharm

Cobetter GM series capsule filters perfectly combine disposable technology and membrane together, features safety and convenience. Filtration area ranges from 200cm² to 800cm², which are especially designed for small to medium scale filtration.

Applications

- Cell culture media
- Buffers
- Protein solutions
- Serum
- Other biopharmaceutical solutions

Quality and Biological Safety

- 100% integrity tested
- Manufactured under a quality management system certified to Iso9001:2008
- Meets USP Biological reactivity test, in vivo, for class VI-121°C plastics
- Meets the criteria for a "non-fiber releasing" filter as defined in 21CFR 210.3 (b) (6).



Specifications

GM200 --GM800 capsule filters

Spec / Cat. No.	GM200	GM400	GM800
Max. Length with different connections	-94mm(3.7in.)	-131mm(5.2in.)	-179mm(7.0in.)
-3/4" sanitary flange inlet and outlet	-111mm(4.3in.)		
-1/4"-1/2" hose barb inlet and outlet	-102.5mm(4.1in.)	-122.0mm(4.8in.)	-170.0mm(6.7in.)
-3/4" sanitary flange inlet and 1/4-1/2" hose barb	-102.0mm(4.0in.)	-126.5mm(5.0in.)	-174.5mm(6.9in.)
-1.5" sanitary flange inlet and outlet	-106.5mm(4.2in.)		
-1.5" sanitary flange inlet and 1/4-1/2 hose barb			
Diameter	63.6mm(2.5in.)		
Filtration Area	0.02m ²	0.04m ²	0.08m ²
Materials of Construction	PES/Hydrophilic PVDF/Hydrophobic PVDF		
-Filter Media	Polypropylene		
-Film Edge	Polypropylene		
-Supports	Polypropylene		
-Core/Cage/End Caps/Housing	Polypropylene		
-Vent O-rings	Silicone		
Vent/Drain	1/4" hose barb with double O-ring seal		
Operation Conditions	Forward: 5.5bar(80psi)at 25°C, 1.0bar(15psi) at 80°C		
Max. Differential Pressure			
Extractables	Meets or exceeds the Quality standards set for "Sterile Water for Injection" by the current USP.		
Bacterial Retention	Quantitative retention of 10 ⁷ CFU/cm ² Brevundimonas diminuta ATCC®19146 per ASTM methodology		
Bacterial Endotoxins	Aqueous extraction contains <0.25 EU/mL as determined by the Limulus Amebocyte Lysate (LAL) Test.		
Sterilization	Can be sterilized by Gamma Irradiation at 25-45 kGy, or Can be autoclaved for 3 cycles of 60 min at 126 °C. (Cannot be steam sterilized in-line) Sterile capsules :Gamma irradiated at 25-45 kGy in sterile package and can not be re-sterilized.		

High Flow Teflogas Vent Autoclave Filter Cartridges

Hydrophobic PTFE Membrane · Sterilizing Grade

Cobetter High Flow Teflogas Vent Autoclave Filter Cartridges designed for critical applications where sterile air is required to break the vacuum formed by steam condensation inside the autoclave chamber. The filter cartridge consists of an inherently hydrophobic PTFE membrane and removing all particles down to 0.01 micron ensuring the removal of microorganisms including bacteria and viruses.

Cobetter High Flow Teflogas Vent Autoclave Filter Cartridges have been completely validated using the Bacterial Challenge Test and Aerosol Challenge Test respectively. Using *Pseudomonas diminuta*, in the Bacterial Challenge Test, results in total bacterial retention. Using T1 bacteriophage (0.05 micron x 0.1 micron), in the Aerosol Challenge Test, allows removal to a gas micron rating of 0.01 micron. This ensures bacteria and bacteriophage removal especially during the vacuum-break period.

Features and Benefits

- High Flow Rates
- Inherently Hydrophobic
- Exceptional Mechanical Strength
- Steam Sterilized Repeatedly at 140°C in an Autoclave
- 100% Integrity Tested
- Manufactured under a Quality Management System Certified to ISO9001:2000

Specification

Filter Medium

Hydrophobic PTFE

Cage/Core

Polypropylene

Gasket

EPDM/Silicone/Viton

End Caps

1/2" BSPP, Male Thread

Effective Filtration Area

90DHV-GPFL 0.01 1216 cm²

DHV-GPFL 0.01 2831 cm²

Max. Temperature

70°C

Max. Differential Pressure

4.5 bar/ 80°C

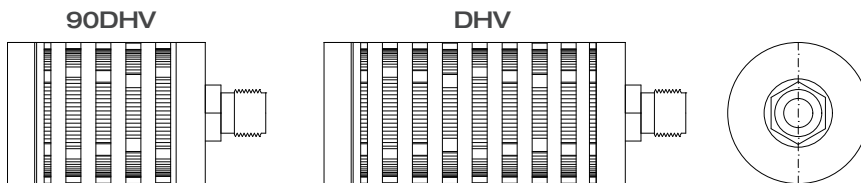
Material Safety

Meet the requirements for food contact in European Regulation (EC) Number 1935/2004

Meet UPS <88> for Class VI-121°C Plastics

Dimensions

Available in 2 sizes to meet different requirements depending on the type of vacuum, autoclave size, maximum vacuum-break time required, or additional restrictions.



90DHV-GPFL-0020-E-P

DHV-GPFL-0020-E-P

	90DHV-GPFL-0020-E-P	DHV-GPFL-0020-E-P
Length	90±1 mm	163±1 mm
Diameter	63±0.5 mm	63±0.5 mm
Surface Area	1216 cm ²	2831 cm ²

Ordering Information

Cat. No.	Filter Medium	Removal Ratings	Seal Material
90DHV	PTFE	0.01	Silicone
DHV	Glass microfiber	0.2	EPDM Viton

126 Series Mini Filter Cartridge

Cobetter 126 Series Mini Filter Cartridges are specially designed for small volum air and liquid filtration, especially suitable for small flow rate situations. They have compact structures, which avoid residual loss to greatest level, easy for operation and cleaning. Double o-ring ensure strict sealing to effectively prevent bacteria and particles penetration.



Materials of Constructure

Filter Media	PP/GF/PTFE/PES/PVDF/N66
Core/Cage/End Cap	PP
End Cap	126

Ordering Information

Cat. No.	Membrane	Removal Ratings	End Cap	Nominal Length	Seal Material
126	PP	0001 = 0.01µm	126	141mm(126)	S = Silicone
126-70	GF	0010 = 0.1µm		70mm(126-70)	E = EPDM
	PTFE	0020 = 0.2µm			V = Viton
	PES	0045 = 0.45µm			
	PVDF				
	N66				

Mini Filter Housing

126 Series Mini Filter Housings are used together with 126 series mini filter cartridges, which meet the high standard filtration requirements of pharmaceutical industry customers. 316L stainless steel housing ensures reliable using performance and perfect corrosion resistance effect. Concise design of appearance, compact structure and easy operation & cleaning avoid residual loss to greatest level.



Materials of Constructure

Filter Media	316L/304
Polishing	Internal Ra 0.3µm, External Ra 0.4µm
Connectors	Tri-clamp
Max. Differential Pressure	0.6Mpa (6bar)

Ordering Information

Cat. No.	Number of Cartridge	Cartridge Length	Material	End Cap	Cylinder Connectors	Inlet/Outlet	O-ring
H-SPF II	1	02 = 70mm 05 = 141mm	A = 304 B = 316L	W = 126 O-ring P = 116 O-ring	T = Tri-clamp	T25 = DN25 Tri-clamp	S = Silicone E = EPDM V = Viton

Microbiology

The background of the page features abstract, flowing, wavy lines in shades of blue and pink, creating a modern and dynamic aesthetic. The lines are layered and semi-transparent, giving a sense of depth and movement.



MicroDisc® membrane filters, sterile.....	29
UniFit® membrane filters, sterile	29
UniFit® dispenser	30
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MicroDisc® Membrane Filter

MicroDisc® Sterile, Individually packed, gridded membrane filters are widely used in the food, beverage, pharmaceutical industries for microbiology analysis of water and other liquids.

Features

- Sterile, individually packed
- A range of membrane pore sizes are available to meet wide variety of applications
- Consistent performance
- Lot traceability

Specifications

Membrane Material	Mixed Cellulose Ester or Cellulose Nitrate
Filter Diameter	47mm
Filter Surface	Gridded / Plain
Filter Color	White / Black
Sterility	Sterile
Pore Size	0.22/ 0.45/ 0.8µm



Ordering Information

Cat. No.	Color	Pore Size	Diameter	Grid/Plain	Membrane	Packing
SMFWGMC470022 SMFWGMC470045 SMFWGMC470080	White	0.22µm 0.45µm 0.8µm	47mm	Gridded	MCE MCE MCE	100pcs
SMFLGMC470022 SMFLGMC470045	Black	0.22µm 0.45µm			MCE MCE	
SMFWGCN470022 SMFWGCN470045 SMFWGCN470080	White	0.22µm 0.45µm 0.8µm			Cellulose Nitrate Cellulose Nitrate Cellulose Nitrate	

UniFit® Membrane Filter

UniFit® membranes are sterile-sealed, without protective paper on top of each filter, and in a individual package on a band. The special pleating of the band units ensures that they are perfectly flat when dispensed. To facilitate traceability, the membrane catalogue number, lot number, pore size and sequential number (from 1 to 150) are printed on the back of every membrane cell.

Benefits

- Outstanding recovery rates for microorganisms
- 0.2, 0.45µm pore size are available
- Multi-fit: Fits into various dispensers
- Product data are printed on each membrane

Ordering Information

Cat. No.	Grid/Plain	Pore Size	Diameter	Grid/Plain	Membrane	Sterilization	Packing
SMFWGCA470022C SMFWGCA470045C		0.22µm 0.45µm	47mm	White Gridded	Cellulose Acetate	Gamma Irradiation	150pcs
SMFWGMC470022C SMFWGMC470045C		0.22µm 0.45µm			Mixed Cellulose Ester		
SMFWGPVH470045C		0.45µm			Hydrophilic PVDF		

Mark:

Cellulose Acetate and Mixed Cellulose Ester membrane in continuous package are still under development, pls contact your sales representative to check availability.



UniFit® Dispenser

Dispense sterile membranes with contamination-free and hands-free convenience.

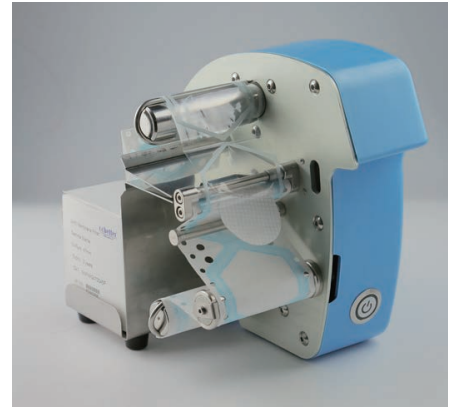
Features

- Save time
- Compact design and lightweight
- Reduces the risk of accidental contamination

Ordering Information

UniFit® Membrane Dispenser

Cat. No.	Packing
MD01AU	1 each



S58 Filtration Unit

- All-in-one system, funnel&filter&petri dish
- Available in 100ml
- Reduce contamination and labor work
- Ready to use, pre-sterilized
- Filter Diameter: 58mm

Ordering Information

Cat. No.	Color	Pore Size	Grid/Plain	Volume	Packing
S58-PVDF0022M	White	0.22µm	Giddd	100mL	1pc/pk
S58-PVDF0045M		0.45µm			



Ascle® U Filtration Funnel

The Ascle® U consist of single use sterile 250 mL or 100 mL plastic funnels and sterile packed filtration membranes. Membrane are available in single pouch (MicroDisc®) or in rolls of 150 units (UniFit®).

Ordering Information

	Cat. No.	Volume	Packing
Ascle® U funnel	A47U-100	100mL	10pcs
	A47U-250	250mL	10pcs



Ascle® V Filtration Funnel

- All-in-one system, funnel & filter, 0.45µm 47mm white gridded
- Available in 100mL, 250mL,
- Reduced contamination
- Ready to use, pre-sterilized

Ordering Information

Cat. No.	Color	Pore Size	Grid/Plain	Volume	Packing
A47V-GMC0022100 A47V-GMC0045100	White	0.22µm 0.45µm	Gridded	100mL	10pcs/pk
A47V-LGMC0022100 A47V-LGMC0045100	Black	0.22µm 0.45µm			
A47V-GMC0022250 A47V-GMC0045250	White	0.22µm 0.45µm		250mL	
A47V-LGMC0022250 A47V-LGMC0045250	Black	0.22µm 0.45µm			



UniFit® Manifold

UniFit® manifold works with optimal hardware and consumables, especially suit for Ascle® U filtration funnel and Ascle® V filtration unit.

It has the same features with traditional manifold besides it is more flexible and has light structure.

Features

Whole equipment body is designed with stainless steel, surface is mirror finished and is easy to clean and sterilize;
 Triplet filtering head design can be simultaneously suction filtration to improve work efficiency;
 Filtering head can quickly sterilize via flame for continuous lab operation;
 Filtering head can be easily dismounting and mounting and individually do moist heat sterilization;
 Multiple filtering heads are available for two kinds of membrane specification at 47mm and 50mm.

Sterilization

By autoclaving(max.134°C)
 By dry heat sterilization(max.180°C)
 By flaming

Ordering Information

	Cat. No.	Applicable membrane diameter	Dimension	Weight
UniFit® SS Manifold, 3-place	M301SS	47mm/ 50mm	43.5×10.3×12cm	1.5kg



Sterility Testing Devices

Sterility testing is one of the most crucial steps in pharmaceutical product release.

Cobetter sterility test device is a completely closed system for the sterility testing of pharma and biopharma products. It is based on the membrane filter method, however it eliminates the procedure of manipulating the filters. By this means the main risk of a secondary contamination and false positive results is eliminated. A peristaltic pump transfers the sample into the filtration units which are filled with media and used for incubation of the filter without any contact to the environment.

Versatile PVDF filter membrane

Cobetter sterility testing devices take advantage of PVDF membrane, features good chemical compatibility, high mechanical strength and ultra-low binding capacity. So they can be used in both regular pharmaceutical drugs and drugs containing inhibitory properties and some difficult to filter drugs.

Consistent Performance

- Pre-installed colourful clamps for easier identification and handling;
- Gamma sterilized devices meet $SAL \leq 10^8$, optimized design, specific membrane, unique sealing and all closed operating system minimize the false positives and false negatives.
- Validation guide is available.

Ordering Information

Sterility testing device

	Cat. No.	Type of Sample	Membrane	Packing
	STMD02-PVDFNDS0045M	Liquids in glass bottles and vials		
	STMDT2-PVDFNDS0045M	Soluble powders in vials		
	STMDH2-PVDFNDS0045M	Antibiotic diluted powders in vials	Hydrophilic PVDF 0.45µm	1pc/pk
	STMSL2-PVDFNDS0045M	Liquids in ampoules		
	STMSS2-PVDFNDS0045M	Liquids in collapsible bags		

More choices will be coming soon!



Laboratory Filtration

Microbiology

Protein sample preparation

Environmental Monitoring Membrane

Instruments

Protein Sample Preparation

Ultrafiltration centrifugal filters	35
Ultrafiltration membrane(PES)	35
Blotting membrane.....	36
PVDF blotting membrane	36



COMING SOON

Ultrafiltration Centrifugal Filters

Applications

- Desalting, buffer exchange and concentration of Macromolecules
- Protein concentration of Urine
- Removal of primer, linker and molecular labels from reaction mix
- Fast removal of antibody
- Purification of macromolecular components found in tissue culture extracts and cell lysates
- Size exclusion and protein fractionation

Ordering Information

Initial Volume	Final concentrate volume	Qty/pk	3k	10k	30k	50k	100k
0.5ml	15-20µl	24	UCF005003	UCF005010	UCF005030	UCF005050	UCF005100
2ml	15-70µl	24	UCF020003	UCF020010	UCF020030	UCF020050	UCF020100
4ml	50-100µl	24	UCF040003	UCF040010	UCF040030	UCF040050	UCF040100
15ml	150-300µl	24	UCF150003	UCF150010	UCF150030	UCF150050	UCF150100



Ultrafiltration Membrane(PES)

- Low non-specific protein binding, high product yield
- High flux
- Broad chemical compatibility

Ordering Information

Cat.No	Diameter(mm)	Description	Packaging
UF25PE005	25	ultrafiltration PES membrane, 5kDa	10
UF47PE005	47		
UF76PE005	76		
UF25PE010	25	ultrafiltration PES membrane, 10kDa	
UF47PE010	47		
UF76PE010	76		
UF25PE030	25	ultrafiltration PES membrane, 30kDa	
UF47PE030	47		
UF76PE030	76		
UF25PE050	25	ultrafiltration PES membrane, 50kDa	
UF47PE050	47		
UF76PE050	76		
UF25PE100	25	ultrafiltration PES membrane, 100kDa	
UF47PE100	47		
UF76PE100	76		
UF25PE300	25	ultrafiltration PES membrane, 300kDa	
UF47PE300	47		
UF76PE300	76		

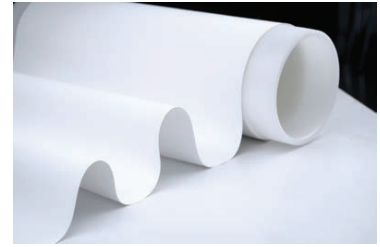


PVDF Western Blotting Membrane

Western blotting is widely used in analysis in molecular biology and immunology to detect certain proteins.

PVDF membrane is ideal for western blotting application. Cobetter provides high binding capacity Hydrophobic PVDF membrane with the pore size of 0.2µm for western blots, dot blots, protein sequencing, and amino acid analysis.

Strong protein adsorption capacity and signal low background make hydrophobic PVDF membrane perform better than other materials. Especially under rigorous conditions, such as when organic, acid and alkali solvent occurs. PVDF has better sensitivity and less brittle than nitrocellulose as well. In addition, PVDF membrane is reusable without a loss of sensitivity or increased background. Comparison of performance between Cobetter membrane and other brands.



Description

Cobetter PVDF blotting membrane is ideal for western blotting, protein sequencing and protein binding assays.

Features

- High mechanical strength, hard to be broken and be curly, good heat resistant and reusable
- High protein binding ability, high sensitivity, low background
- Broad chemistry compatibility

Ordering Information

Cat.No	Size	Pore Size (µm)	Packaging
TMPV00221	7 x 8.4cm sheet	0.2	PVDF
TMPV00222	15 x15cm sheet		
TMPV00223	20 x 20cm sheet		
TMPV00224	26cm x 3.3m roll		
TMPV00225	30cm x 3m roll		
TMPV00451	7 x 8.4cm sheet	0.45	
TMPV00452	15 x15cm sheet		
TMPV00453	20 x 20cm sheet		
TMPV00454	26cm x 3.3m roll		
TMPV00455	30cm x 3m roll		

Laboratory Filtration

Microbiology

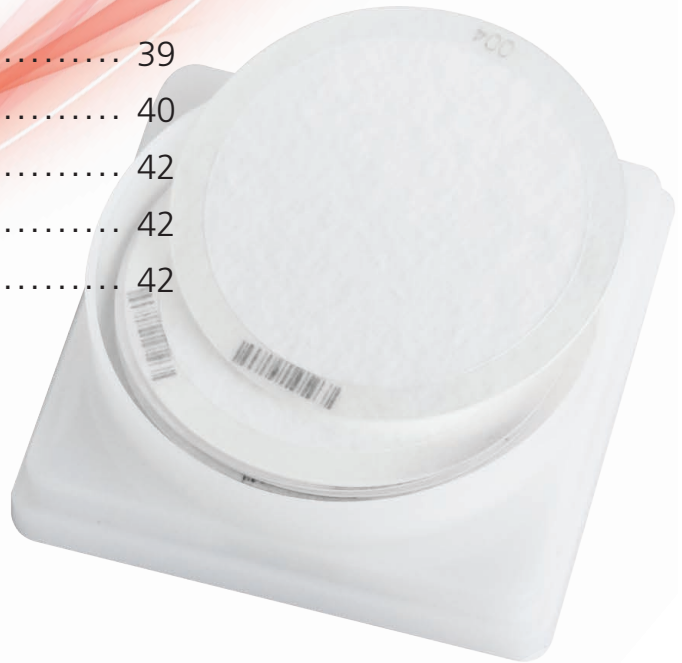
Protein sample preparation

Environmental Monitoring Membrane

Instruments

Environmental Monitoring Membrane

DOP test	39
PTFE membranes	40
Glass fiber membranes	42
MCE membranes	42
Protective filters	42

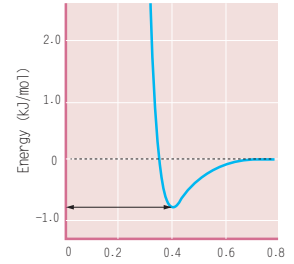




Why

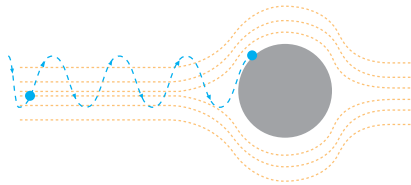
big pore size membrane (such as 2 μm) can intercept particles which is much smaller than its pore size (such as 0.3 μm) ?

Dust particles in ambient air are doing motion in the field of electrostatic force, moving because of inertia of airflow or doing Brownian Motion all the time. Vanderwaals Force between filter media and particles make them stay together when they meet.

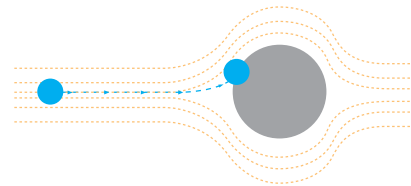


Why use retention rate of 0.3 μm particles as the test standard?

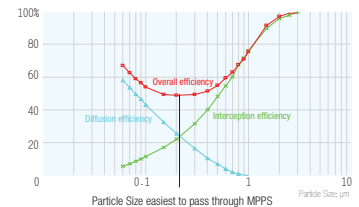
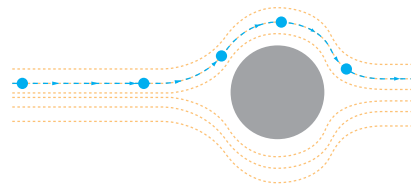
Particles smaller than 0.1 μm are not moving with airflow, but doing "Brownian Diffusion Motion", particles will be captured when encounter the filter media. The smaller the particle is, the more active brownian diffusion is, so the better filtration efficiency is.



Particles bigger than 0.5 μm are doing inertia motion in the airflow, they will hit on the filter media directly because of the inertia effect when airflow pass through the edge of the filter media.



As research proved, particles of 0.3 μm has the weakest inertia effect and Brownian Motion, so it's hardest to be captured. That's why we use retention rate of 0.3 μm particles as the standard.



What is DOP Test?

DOP(Dioctyl-phthalate), di-2-ethylhexyl sebacate in chemical, a normal plasticizer. Liquid DOP is made to be spray by heating or compressed air, than we choose 0.3 μm as the dust source to do the efficiency test. This is called DOP Test.

This method has a 40-year history, nowadays people think it's unhealthy to human, so most of this test is substituted by DOS, PAO,ect. But this method is still called "DOP Test".



High-Purity PTFE membrane with PP ring

For PM2.5 Air Monitoring

Features

- Conforms to EPA PM 2.5 reference method under the requirements for 40 CFR part 50 Appendix L
- Manufactured under clean room
- No glues or adhesives
- Used for PM 2.5 ambient air monitoring
- Sequentially numbered for easy traceability

Ordering Information

Part Number	Diameter	Specification	Working volume(ml)	Package
PM2.5PF-46.2	46.2mm	Filter Material	Teflon	50 pcs/pk
		Thickness	40±10µm	
		Weight	165.37±0.01mg	
		Pore Size	2µm	
		Support Ring Media	PP	
		Support Ring Thickness	0.38±0.04mm	
		Retention Rate	>99.995%	
		Pressure Drop(0.3µm)@16.67l/min	<30mmH2O	
		Alkaline	<25µeq/g	
		Temperature until weight stable	<20µg	
		Weight dropped to stability	<20µg	
		Max. Hygroscopic	<10µg	



Unsupported PTFE membrane

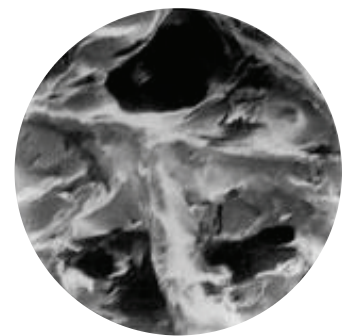
Low chemical background for highly sensitive determinations

Specifications

Property	Value
Filter Media	Unsupported PTFE
Filter Thickness	130-170µm
Filter Pore Size	5µm
Typical Air Flow Rate (Gurley 100mL 1 inch ²)	≤3S

Ordering Information

Part Number	Diameter	Package
PF-5SD-37	37mm, 5µm	50pcs/pk
PF-5SD-47	47mm, 5µm	50pcs/pk



Laboratory Filtration

Microbiology

Protein sample preparation

Environmental Monitoring Membrane

Instruments

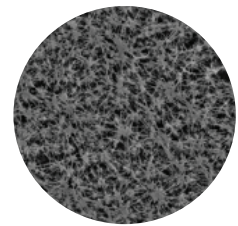
PTFE membrane laminated onto a PET support

Cobetter ePTFE protective membrane is suitable for automatic monitoring device for CO, SO₂, NO₂, NO_x, O₃, ect. It can detect liquid or spray water, big particles and dust of ambient air, in the meantime, it won't adsorb detected gas so that can protect equipment, reduce maintain cost and assure the accuracy of result.

- High particle loading, good dust filtration ability
- Hydrophobic membrane, stop liquid and spray water
- Low chemical background
- No adsorption of detected gas
- Easy to use, 180 C thermostability

Applications

- For air monitoring and sampling in aggressive environments
- SO₂, CO, NO₂, NO_x, O₃ Protective Membrane for Online Gas Detection Equipment



Specifications

Property	Value
Filter Media	PTFE
Support layer	PET
Filter Thickness	150 ± 50µm
Filter Pore Size	5µm
Typical Air Flow Rate (Gurley 100mL 1 inch ²)	≤2S
Particle retention	Not applicable
Available size	Discs & Sheets

Ordering Information (Roll sizes)

Part Number	Diameter/Pore size	Package
PF-TB5W-37	37mm, 5µm	50 pcs/pk
PF-TB5W-47	47mm, 5µm	50 pcs/pk

PTFE membrane laminated onto a PTFE support

Suited for monitoring acid rain, poly-nuclea aromatic hydrocarbons

Specifications

Property	Value
Filter Media	PTFE
Support layer	PTFE
Filter Thickness	85 ± 30µm
Filter Pore Size	2µm
Typical Air Flow Rate (Gurley 100mL 1 inch ²)	≤10S
Particle retention	99.998%
Available size	Discs

Ordering Information (Roll sizes)

Part Number	Diameter/Pore size	Package
PF-2F-37	37mm, 2µm	50 pcs/pk
PF-2F-47	47mm, 2µm	50 pcs/pk

High Throughput Glass Fiber Membrane

Cobetter Glass Fiber membrane is made of hydrophobic glass fiber, it has good adsorption of particles in ambient air. The retention efficiency of 0.3 μ m standard particles can reach 99.99%. It also has good Aerodynamic flow rate and high particle loading.

- High flow rate and high particle loading, suitable for any strict environment
- Special designed support ring which strengthen the Tensile strength
- Retention efficiency of 0.3 μ m standard particles reach 99.99%
- Customized for different size of membrane, including rectangle, roll

Applications

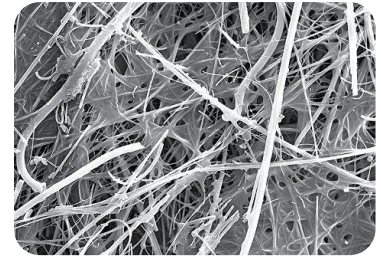
- Air pollution control (with chemical analysis)
- Measurement of smoke spot number
- Exhaust emission test

Specifications

Property	Value
Basic weight	75g/m ²
Retention efficiency	99.99%
Pressure drop	35 mbar

Ordering Information

Part Number	Size	Inner diameter	Package
GF-43-37	37mm	/	15pcs/pk
GF-43-47	47mm	/	15pcs/pk
GF-43-4030	40mm x 30m	28mm	1roll/pk
GF-43-3020	30mm x 20m	40mm	1roll/pk



MCE Membrane Filters

Specifications

Property	Value
Filter Media	Hydrophilic mixed cellulose esters
Filter Thickness	160 \pm 10 μ m
Filter Pore Size	0.8 μ m
Typical Air Flow Rate	55(0.8 μ m)
L/ min/ 3.7cm ² at 0.9 bar (90 kPa, 13.5 psi)	

Protective Filter

Cobetter protective filter can protect your sensor from liquid, prolong lifetime.

- Hydrophobic ePTFE membrane
- High flow rate
- Manufactured in 2300m² class clean room

Inlet/Outlet

47Disc	Inlet: 1/8 NPT Outlet: 1/4-3/8in(6-9mm) Stepped hose barb
SS47D	Inlet/Outlet: 1/4-3/8in(6-9mm) Stepped hose barb

Ordering Information

Part Number	Material	Pore Size	Diameter
47Disc	PTFE	0.01/0.22/0.45/1.0/3.0 μ m	47mm
SS47Disc	PTFE	0.01/0.2/0.45/1.0/3.0 μ m	47mm



Process Filtration Products

Typical Cartridge Filters	44
Filter Housing	45

Typical Cartridge Filters



LHPV series



DPS series



LHPF series

	Sterilizing-grade Single-Layer Symmetric PES Validation guide pharmaceutical		Sterilizing-grade Double-layer: Asymmetric PES + Symmetric PES Validation guide pharmaceutical		Sterilizing-grade Single-Layer PES Integrity tested by water		
Electron Microscope							
Micron Ratings	Code 0010 = 0.1 μm 0020 = 0.2 μm 0045 = 0.45 μm 0065 = 0.65 μm 0080 = 0.8 μm 0120 = 1.2 μm	Filter area (m ² /10") 0.58	Code 2210 = 0.22+0.1 μm 2222 = 0.22+0.22 μm 4522 = 0.45+0.22 μm 4545 = 0.45+0.45 μm 6545 = 0.65+0.45 μm	Filter area (m ² /10") 0.6 x 2	Code 0010 = 0.1 μm 0020 = 0.2 μm 0045 = 0.45 μm 0065 = 0.65 μm 0080 = 0.8 μm 0120 = 1.2 μm	Filter area (m ² /10") 0.66	
Dimensions	Filter O.D. Filter Length	Φ 69 mm: 10"/20"/30"/40"		Φ 69 mm: 5"/10"/20"/30"/40"		Φ 69 mm: 10"/20"/30"/40"	
Materials	Filter media Support Core/Cage/Endcap	Polyethersulfone Membrane Polypropylene Polypropylene		Double-layered PES Membrane Polypropylene Polypropylene		Asymmetric PES Membrane Polypropylene Polypropylene	
Max. Working Temperature	90°C (1 week)		90°C (1 week)		90°C (1 week)		
Max. Working Pressure	0.4 Mpa		0.4 Mpa		0.4 Mpa		
Application	<ul style="list-style-type: none"> Antibiotics LVP & SVP Large batch solutions Cleaning & disinfecting liquids 		<ul style="list-style-type: none"> Biologic vaccines Blood products LVP and SVP Lyophilization freeze-dried powder Ophthalmic solution Sterile API 		<ul style="list-style-type: none"> Buffer and culture solutions Plasma, serums and vaccines LVP Ophthalmic solutions Water-soluble antibiotics 		

Filter Housing

Sanitary Series, Liquid



H-SCF Series , T-style
Single-Round



H-SPF Series, Inline
Single-Round



H-SCF Series
Multi-Round

Mult-Round Industrial Series, Liquid



H-ICF Series



H-SICF Series



H-TCF Series

Bag Filter Housing Series



H-TBF Top Inlet Series



H-SBF Side Inlet Series



H-MBF Multi Bag Series

High Flow Filter Housing Series



H-HF150 Series
Vertical / Horizontal



HflowFRP Housing



H-CSD Series
Lenticular Filter