MEMBRANE DISC FILTERS

HIGH PURITY DISC FILTERS IN NINE MEMBRANE OPTIONS TO MATCH A WIDE-RANGE OF FILTRATION APPLICATIONS

Cobetter membrane disc filters are available in a wide range of membrane media options and retention ratings to match the exacting needs of particluate removal, clarification, sample preparation, cell harvesting, sterile filtration, microbiological testing, and related analytical and research applications.

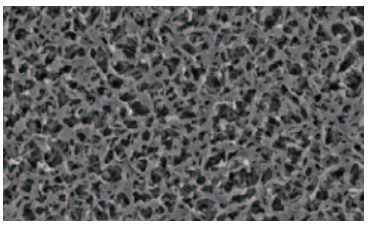
MEMBRANE OPTIONS

Nylon	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.
Hydrophobic PTFE	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.
Hydrophilic PTFE	Cobetter hydrophilic PTFE (polytetrafluorethylene) membrane filters have a durable wide operating temperature range and resistance to the destructive effects of many chemicals. They can be used to filter aqueous fluids without prior wetting.
Hydrophilic PVDF	Cobetter modified hydrophilic PVDF (Polyvinylidene fluoride) 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.
Cellulose Acetate (CA)	Cobetter Cellulose Acetate membrane filters combine high flow rates with very low adsorption characteristics. Ideal for sterile filtration of culture media, microbe retetive, particle-removal filtration of nutrient media, and cell harvesting.
Polyethersulphone (PES)	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
Mixed Cellulose Ester (MCE)	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. It can withstand autoclaving temperatures up to 130°C without adversely affecting bubble point, flow rate or microbiological recovery.
Polypropylene (PP)	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, aqueous and organic solvent filtration, depth filtration, sterile gases (traps aqueous aerosols), as well as air and gas venting.
Glass Fiber (GF)	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. Used in biochemical applications, liquid clarification, quantification of solids in suspensions of fine particles, and filtering extremely fine precipitates such as protein, nucleic acids, or serum precipitates.

NYLON FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Nylon	White	Hydrophilic	0.1 µm	≥ 4.8	100 +15	4.0	135°C
			0.22 µm	≥ 3.4	100 +15	9.9	
			0.45 µm	≥ 2.6	100 +15	26.9	
			0.8 µm	≥ 1.0	100 +15	80.5	
			1.2 µm	≥ 0.82	100 +15	130.5	
			5.0 µm	≥ 0.41	100 +15	331	



ORDERING INFORMATION

EXAMPLE: **MF25NY0045** = nylon filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF ☐ **NY** ☐

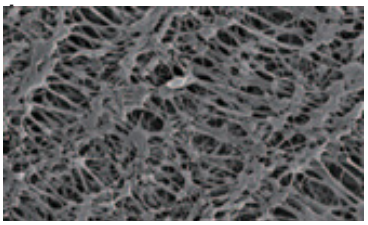
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)
- 142 = 142 mm, (25)
- 293 = 293 mm, (25)

Pore Size
- 0010 = 0.1 µm
- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0080 = 0.8 µm
- 0120 = 1.2 µm
- 0500 = 5.0 µm

HYDROPHOBIC PTFE FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Hydrophobic PTFE with PP support	White	Hydrophobic	0.1 µm	≥ 0.16	200 +30	-	130°C
			0.22 µm	≥ 0.12	200 +30	-	
			0.45 µm	≥ 0.09	200 +30	-	
			1.2 µm	≥ 0.06	200 +30	-	
			3.0 µm	≥ 0.03	200 +30	-	



ORDERING INFORMATION

EXAMPLE: **MF25PT0045** = hydrophobic PTFE filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF ☐ **PT** ☐

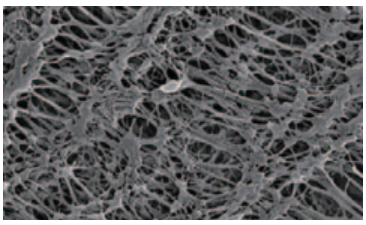
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)
- 142 = 142 mm, (25)
- 293 = 293 mm, (25)

Pore Size
- 0010 = 0.1 µm
- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0120 = 1.2 µm
- 0300 = 3.0 µm

HYDROPHILIC PTFE FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Hydrophilic PTFE	White	Hydrophilic	0.1 µm	≥ 3.8	35		
			0.22 µm	≥ 2.4	35		100°C
			0.45 µm	≥ 1.4	35		



ORDERING INFORMATION

EXAMPLE: **MF25PTF0045** = hydrophilic PTFE filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF [ ] **PTH** [ ]

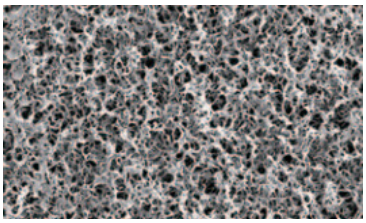
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)

Pore Size
- 0010 =0.1 µm
- 0022 =0.22 µm
- 0045 =0.45 µm

HYDROPHILIC PVDF FILTER

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.	Protein Binding (µg/cm²)
Hydrophilic PVDF	White	Hydrophilic	0.22 µm	≥ 3.4		> 12		4
			0.45 µm	≥ 1.5		> 34		4



ORDERING INFORMATION

EXAMPLE: **MF25PVH0045** = hydrophilic PVDF filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF [ ] **PVH** [ ]

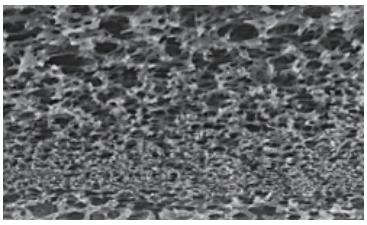
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)

Pore Size
- 0022 =0.22 µm
- 0045 =0.45 µm

CELLULOSE ACETATE (CA) FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Cellulose Acetate (CA)	White		0.22 µm	3.62	130 ±10	19	75°C
			0.45 µm	2.23	130 ±10	60	
			0.65 µm	1.18	130 ±10	135	
			0.8 µm	0.95	130 ±10	180	
			1.2 µm	0.77	130 ±10	270	



ORDERING INFORMATION

EXAMPLE: **MF25CA0045** = cellulose acetate (CA) filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF ☐ **CA** ☐

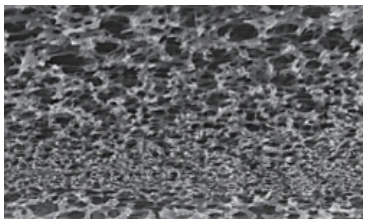
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, 25

Pore Size
- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0065 = 0.65 µm
- 0080 = 0.80 µm
- 0120 = 1.2 µm

POLYETHERSULPHONE (PE) FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Polyethersulphone (PES)			0.22 µm	3.4	110 ±10		30°C
			0.45 µm	2.7	130 ±10		40°C



ORDERING INFORMATION

EXAMPLE: **MF25CA0045** = polyehtersulphone (PE) filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

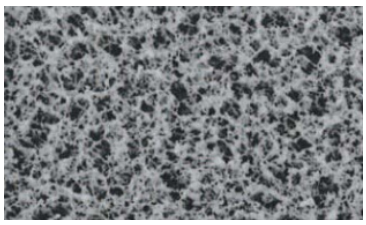
MF ☐ **PE** ☐

Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, 25

Pore Size
- 0022 = 0.22 µm
- 0045 = 0.45 µm

MIXED CELLULOSE ESTER (MCE) FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Mixed Cellulose Ester (MCE) 	White	Hydrophilic	0.22 µm	≥ 3.62	130 ±10	19	75°C
			0.45 µm	≥ 2.23	130 ±10	60	
			0.65 µm	≥ 1.18	130 ±10	135	
			0.8 µm	≥ 0.95	130 ±10	180	
			1.2 µm	≥ 0.77	130 ±10	270	

ORDERING INFORMATION

EXAMPLE: **MF25PTF0045** = mixed cellulose ester (MCE) filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

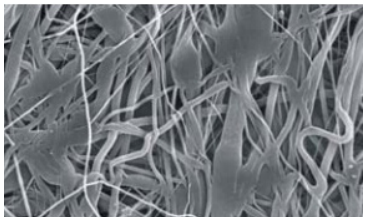
MF ☐ **MC** ☐

Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)

Pore Size
- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0065 = 0.65 µm
- 0080 = 0.80 µm
- 0120 = 1.2 µm

POLYPROPYLENE (PP) FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Polypropylene (PP) 	White	Hydrophobic	0.22 µm		140	-	90°C
			0.45 µm		140	-	
			1.2 µm		140	-	
			2.5 µm		140	-	

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EXAMPLE: **MF25PTF0045** = polypropylene (PP) filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF ☐ **PP** ☐

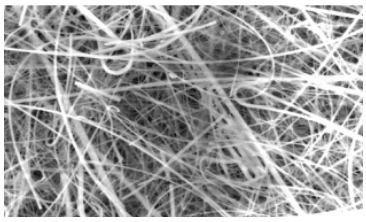
Diameter, Qty/pk (total pcs)
- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)

Pore Size
- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0120 = 1.2 µm
- 0250 = 2.5 µm

GLASS FIBER FILTERS

SPECIFICATIONS

Media	Color	Reaction to Water	Pore Size	Bubble Point (bar @ 25°C)	Thickness (µm)	Water Flow Rate (mL/min/cm²)	Max. Operating Temp.
Glass Fiber 9	White	Hydrophilic	0.22 µm		120 + 20		90°C
			0.45 µm		120 + 20		
			0.7 µm		120 + 20		
			1.2 µm		120 + 20		



ORDERING INFORMATION

EXAMPLE: **MF25PTF0045** = mixed cellulose ester (MCE) filter, 25 mm, 50 pks of 10 for total of 500 pieces, 0.45 µm

MF ☐ **GF** ☐

Diameter, Qty/pk (total pcs)

- 13 =13 mm, 100 (600)
- 25 = 25 mm, 50 (500)
- 47 = 47 mm, 50 (300)
- 90 = 90 mm, (25)

Pore Size

- 0022 = 0.22 µm
- 0045 = 0.45 µm
- 0070 = 0.7 µm
- 0120 = 1.2 µm

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