



Features

- Various sizes and pore sizes
- Sterile packed or non-sterile packed both available
- Consistent performance

Specifications

Membrane Material	MCE (Mixed Cellulose Ester), N66, PES
Filter Diameter	47mm, 50mm, 60mm
Surface	Gridded 3mm/6mm (MCE), Plain
Pore Size	0.22µm, 0.45µm

Membrane Stack Disc Filters are applications in a variety of sizes and are used for a wide variety of application including clarification and prefiltration, sterile filtration including clarification, prefiltration and sterile filtration. We offer sterile and non-sterile membranes, sterile single packed membrane filters, and continuous packed membrane filters to meet your different needs.

Ordering Information

Series	Material	Pore Size	Features	Surface	Diameter(mm)	Packing
MSD	M = MCE	0045 = 0.45µm	SS = Single Sterile packed	N1 = Gridded (3mm)	A = 47	200pcs
				N2 = Gridded (6mm)	B = 50	
				B = Plain	C = 60 (Except N2)	
			NS = Non-sterile packed	N1 = Gridded (3mm)	A = 47	100pcs
				B = Plain	B = 50 C = 60	
			CS = Continuous Sterile packed	N1 = Gridded (3mm)	A = 47	150pcs
				B = Plain	A = 47 B = 50	
	C = N66	0022 = 0.22µm	SS = Single Sterile packed	B = Plain	A = 47 B = 50 C = 60	200pcs
					A = 47 B = 50	
		0045 = 0.45µm	NS = Non-sterile packed	B = Plain	A = 47 B = 50	100pcs
					A = 47 B = 50 C = 60	
	A = PES	0022 = 0.22µm	SS = Single Sterile packed	B = Plain	A = 47 B = 50 C = 60	200pcs
					A = 47 B = 50 C = 60	
			NS = Non-sterile packed	B = Plain	A = 47 B = 50 C = 60	100pcs
					A = 47 B = 50 C = 60	
		0045 = 0.45µm	SS = Single Sterile packed	B = Plain	A = 47 B = 50 C = 60	200pcs
					A = 47 B = 50	
			NS = Non-sterile packed	B = Plain	A = 47 B = 50	100pcs

MSDM0045CSN1A



Darilly's range of 56mm OD MiniFil-Junior™ filter cartridges are offered in multiple grades of PES and PTFE membrane as well as absolute-rated pleated polypropylene depth media. Designed to easily retrofit Pall® Junior, Millipore Optiseal®, and compatible housings.

Features

- Polypropylene depth media option offers ratings from 0.2um to 70um with high capacity and low pressure drop
- Hydrophilic PES and hydrophobic PTFE membranes available in ratings from 0.03 to 1 micron. Integrity testing assures consistent, highly retentive performance. High tolerance to repeated cleaning and steaming cycles
- Products are manufactured in a controlled environment under a quality management system certified to ISO9001:2015

Applications

- Small-Batch Pharmaceutical, Bio-Technology, and Ophthalmic Products
 - ❖ Bio-reduction and clarification of ingredients and final products
- Semiconductor and Micro-Electronic fluids, fine chemicals
 - ❖ Cleaners, solvents, photoresist & developer solutions, & process chemicals
- Pilot-Scale Investigations and R&D process development
 - ❖ Facilitates optimizations and scale-up

Material of Constructions

Filter Media	PP, PES, PTFE
Support Layer	PP
Cage/Core/Adapter	PP
Seal Material Options	Silicone, EPDM, FKM

Performance

Max. Temperature	80°C (176°F)
Max. dP (forward)	5 bar(73 psi) @ 50°C (122°F) 3 bar(44 psi) @ 90°C (194°F)
Pressure	0.3 bar(4 psi) @ 90°C(194°F) reverse



Ordering Information

MFJ	H4	P	107	K0010			S
Type	Cage/Core /Adapter	Length (mm)	Media & Removal Rating				Seal Material
			K = FGF	P = PAA	G = BTG	E = PTB	
H4 (4 Tab)	P = PP	32, 82, 105	K0010=FGF0.1µm	P0004=PAA0.04µm	G0010=BTG0.1µm	E0010=PTB0.1µm	S = Silicone
H8 (8 Tab)	P = PP	107	K0022=FGF0.22µm	P0010=PAA0.1µm	G0022=BTG0.22µm	E0022=PTB0.22µm	E = EPDM
YS (Short adapter)		70, 129	K0045=FGF0.45µm	P0022=PAA0.22µm	G0045=BTG0.45µm	E0045=PTB0.45µm	V = FKM
YL (Long adapter)		77,136	K0100=FGF1µm	P0045=PAA0.45µm	G0100=BTG1µm	E0100=PTB1µm	
		K0300=FGF3µm	P0065=PAA0.65µm	G0300=BTG3µm			
		K0500=FGF5µm	P0120=PAA1.2µm	G0500=BTG5µm			
		K01000=FGF10µm		G1000=BTG10µm			
		K02000=FGF20µm					
	K05000=FGF50µm						



Surpraline Series disc filters are made of polytetrafluoroethylene which have excellent resistance to organic and inorganic chemical corrosion properties along with natural hydrophobicity. It can be widely used in sterile ventilation processes such as biotechnology, pharmaceuticals, laboratories etc. It's easy to use and operate, the lightweight design makes the structure very stable and reliable and will not appear hose bending to adversely affect ventilation.

Features

- PTFE components provide broad chemical compatibility
- Natural hydrophobicity, strong resistance property to chemical corrossions
- High flow rate and low extractables
- Lightweight structure, easy to install and dismantle
- 100% Integrity Test

Applications

- Sterile ventilation of culture containers and CO₂ incubators
- Sterile ventilation of fermenters and storage tanks
- Autoclave steam sterilization air exchange
- Removal of gas particles

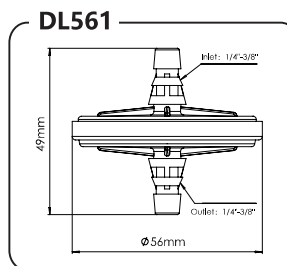
Material of Constructions

Housing	PP
Media	Hydrophobic PTFE

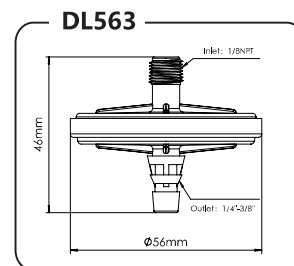
Performance

Max. Operating Pressure	3 Bar(44psi)@20°C (68°F)
Autoclaving	125°C , 30min, 60cycles

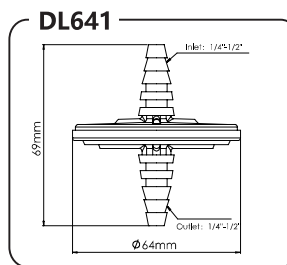
Drawings



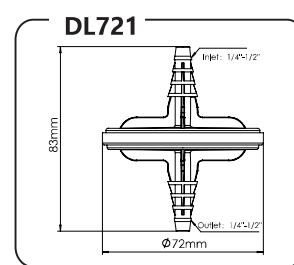
Filtration Area: 14.4cm²



Filtration Area: 14.4cm²



Filtration Area: 20cm²



Filtration Area: 27cm²

Ordering Information

641	P	TF0022
Code	Cage Material	Media
561 = DL561	P = PP	TF = hydrophobic PTFE
563 = DL563		TF0022 = 0.22µm
641 = DL641		TF0045 = 0.45µm
721 = DL721		



DL707 capsule filters adopt trapezoidal inlet and outlet hose barb and equip with exhaust and liquid port in the structure. Its inner filter membranes can be different according to specific biological filtration process, PTFE, PES, PVDF, PP and other materials are all available. The product shows high filtration efficiency when using, easy to install and convenient to operate. It can be widely used in biological pharmaceutical such as culture medium, buffers, organic solvents, other liquid filtration etc.

Features

- Broad chemical compatibility
- Hot-melt welding technology help to improve pressure resistance
- High flow rate and low extractables
- Easy to install and dismantle
- Multiple filter membranes are on available
- 100% Integrity Test

Applications

- Culture medium sterile filtration
- Buffer filtration
- Virus suspension filtration
- Filtration of aqueous or saline solutions etc.

Material of Constructions

Housing	PP
Media	PP, PTFE, PES, PVDF

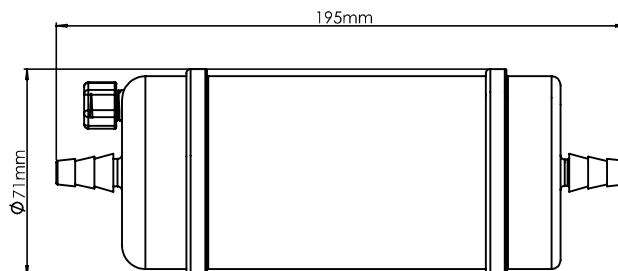
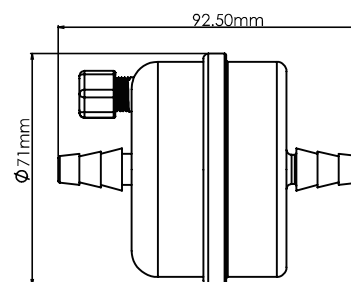
Dimension

Outer Diameter	71mm
Length	92.5mm, 195mm
Inlet/Outlet	1/4"-3/8"HB

Performance

Max. Operating Temperature	80°C (176° F)
Max. Operating Pressure	6 Bar(87psi) @ 20°C (68° F)
Filtration Area	570cm ² , 2950cm ²

Drawing



Ordering Information

707	P	S0022	S				
Code	Cage Material	Media					Length
707 = DL707	P = PP	K=FGF	P=PAA	F = PAD	D = BDG	Y = PVA	S = Short(92.5mm)
		K0010 = FGF0.1	P0010 = PAA0.1	F2210 = PAD0.22+0.1	D0010 = BDG0.1	Y0010 = PVA0.1	L = Long(195mm)
		K0022 = FGF0.22	P0022 = PAA0.22	F2222 = PAD0.22+0.22	D0022 = BDG0.22	Y0022 = PVA0.22	
		K0045 = FGF0.45	P0045 = PAA0.45	F4522 = PAD0.45+0.22	D0045 = BDG0.45	Y0045 = PVA0.45	
		K0100 = FGF1	P0065 = PAA0.65	F4545 = PAD0.45+0.45	D0100 = BDG1	Y0065 = PVA0.65	
		K0300 = FGF3	P0120 = PAA1.2	F6545 = PAD0.65+0.45	D0300 = BDG3		
		K0500 = FGF5			D0500 = BDG5		
		K1000 = FGF10					
		K2000 = FGF20					
K5000 = FGF50							



Darilly Capsule Filters are ready-to-use units for critical applications and low flows of gas, air and liquids. All filter units consist of a durable polypropylene housing and various filter media. The housing units are thermal welded and all capsule filters have many connection options. They are manufactured in a cleanroom environment and wrapped in double sealed packaging to avoid any possible contamination.

Features

- Multi connections
- Encapsulated Filter
- Robust design and construction
- Choice of filter media options

Material of Constructions

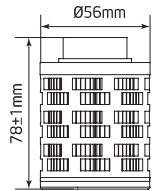
Media	PP, PES, Hydrophilic PTFE, Hydrophobic PTFE, Nylon 66, GF
Support	PP
Housing	PP
Seal Material Options	Thermal welding
	See Below Ordering Information

Applications

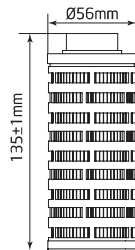
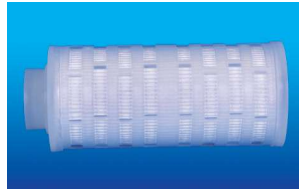
- Pharmaceutical
- Lab use
- Biopharma
- Underground water analysis
- Microelectronics
- Chemical
- Ink-jet
- DNA/RNA extractions

Ordering Information

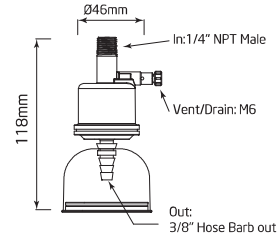
Code		Media	Removal Rating			
			PP	PES	Hydrophilic PTFE	Hydrophobic PTFE
116-2.5	666	G = PP	0010 = 0.1µm	0010 = 0.1µm	0010 = 0.1µm	0001 = 0.01µm
116-5	709	A = PES	0022 = 0.22µm	0022 = 0.22µm	0022 = 0.22µm	0002 = 0.02µm
418	726	D = Hydrophilic PTFE	0045 = 0.45µm	0045 = 0.45µm	0045 = 0.45µm	
517	761	T = Hydrophobic PTFE	0100 = 1µm	0065 = 0.65µm		
		C = Nylon 66	0300 = 3µm	0800 = 0.8µm		
		S = GF	0500 = 5µm	1200 = 1.2µm		
			1000 = 10µm		Nylon66	Glass Fiber
			2000 = 20µm		0010 = 0.1µm	0045 = 0.45µm
			3000 = 30µm		0022 = 0.22µm	0100 = 1µm
			5000 = 50µm		0045 = 0.45µm	0300 = 3µm
					0065 = 0.65µm	0500 = 5µm
						1000 = 10µm
						2000 = 20µm



Code:116-2.5

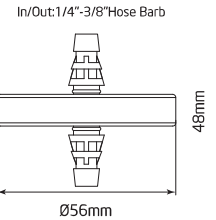


Code:116-5



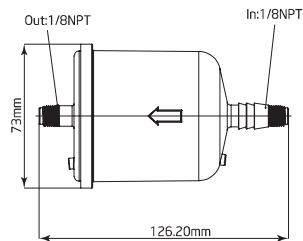
Filtration Area: 161.7cm²

Code:418



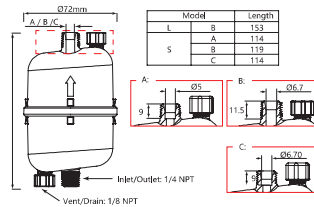
Filtration Area: 13.8cm²

Code:517



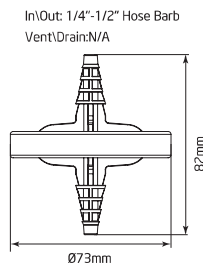
Filtration Area: 1299.5 cm²

Code:666



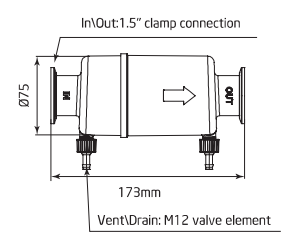
Filtration Area: 1058 cm²

Code:709



Filtration Area: 26.4cm²

Code:726



Filtration Area: 1559 cm²

Code:761



The Bioaxenic[®]-A Capsule Filters are researched and developed for sterile filtration process with reliable and stable sterilization performance. It's designed with external vent valve structure that can remove Gas-liquid quickly and efficiently. Its built-in sterile grade hydrophilic polyethersulfone (PES) membrane has the characteristics of high flow rate, high contaminant holding capacity and excellent chemical compatibility, ensuring its wide range of applications such as bioburden and bacteria removal in the culture medium, intermediate solution, buffers and other upstream and downstream processes. The Bioaxenic[®]-A Capsule Filters can help shorten process time, reduce production costs and improve economic benefits.

Features

- Reliable bacteria retention abilities
- High flow rate and large filtration area
- Excellent chemical compatibility
- Excellent ability to deal with plugging liquid
- 100% Integrity Test

Applications

- Culture medium sterile filtration
- Buffer filtration
- Intermediate products filtration
- Pre-ultrafiltration filtration
- Terminal products sterile filtration

Material of Constructions

Media	PES
Support	PP
Core/Cage/End cap	PP
Seal Material Option	Silicone

Bio-safety

Endotoxin	Comply with USP<85>, endotoxin content <0.25EU/ mL
Biocompatibility	Comply with USP<87>USP<88>

Performance

Max. Operating Temperature	50 °C (122°F)
Max. Operating DP	5 Bar(73psi)@20°C (68°F) 3 Bar(44psi)@50°C (122°F)

Quality

Fiber release	Comply with 21CFR210.3(b)(6) on "Non fiber" release regulations
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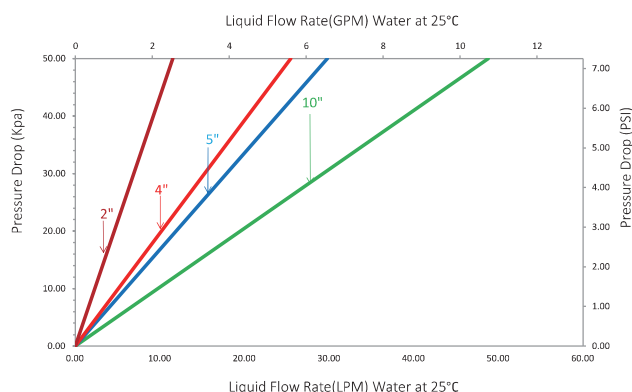
Bacteria Retention

Validated with *Brevundimonas diminuta* (ATCC 19146) at 10⁷/cm² (0.22µm)

Autoclaving	121°C, 30min, 3 Cycles
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Gamma irradiation	35 kGy
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Bioaxenic[®] (PAA 0.22µm) Flow Rate



Integrity Test

PAA

Removal rating	Bubble point $\geq$ (Water)	Diffusion flow $\leq$ (10"Ø69mm)
0.22 μ m	3200mbar	25ml/min@2760mbar



1/2"-5/8" Hose Barb



3/4"Tri-Clamp



1.5"Tri-Clamp

PAD

Removal rating	Bubble point $\geq$ (Water)	Diffusion flow $\leq$ (10"Ø69mm)
0.22+0.22 μ m	3200mbar	20ml/min@2760mbar
0.45+0.22 μ m	3200mbar	25ml/min@2760mbar
0.65+0.22 μ m	3200mbar	25ml/min@1700mbar
0.65+0.45 μ m	2100mbar	25ml/min@1700mbar

Ordering Information

BA	P	F2222	AC	5	S	
Code	Core	Media		Connector	Length	Seal Material
BA=Bioaxenic	P = PP	P = PAA	F = PAD	AB = 1/2"-5/8" Hose Barb	2 = 2"	S = Silicone
		P0022 = PAA0.22µm	F2222 = PAD0.22+0.22	AC = 1.5"Tri-Clamp	4 = 4"	
			F2245 = PAD0.45+0.22	AD = 3/4"Tri-Clamp	5 = 5"	
			F2265 = PAD0.65+0.22		10 = 10"	
			F4565 = PAD0.65+0.45			



Bioaxenic®-G series capsule filters are composed of polypropylene membrane. The product shows excellent chemical compatibility, high throughput, low pressure drop characteristics, which have a wide range of applications such as pre-filtration of vaccine production and pharmaceutical water, blood and plasma component separation etc.

Features

- High efficiency, and high throughput
- Excellent chemical compatibility

Applications

- Vaccine pre-filtration
- Pharmaceutical water pre-filtration
- Blood and plasma component separation

Dimensions

Length / Filtration area	2"(65mm) / 0.08m ²
	4"(103mm) / 0.14m ²
	5"(118mm) / 0.17m ²
	10"(266mm) / 0.44m ²
OD	87mm

Material of Constructions

Media	PP
Support	PP
Core/Cage/End cap	PP
Seal Material Option	Silicone

Use Condition

Max. Operating DP	5Bar(73psi) @ 20°C (68°F)
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Quality

- Comply with 21CFR210.3(b)(6) on "Non fiber" release regulations
- Biocompatibility: Comply with USP<88>
- Material of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR
- Manufactured in a clean room environment



1/2"-5/8" Hose Barb



3/4"Tri-Clamp



1.5"Tri-Clamp

Ordering Information

BA P L0010 AC 5 S						
Code	Core	Media		Connector	Length	Seal Material
BA=Bioaxenic	P = PP	L = PGA(PP)	K = FGF(PP)	AB = 1/2"-5/8" Hose Barb	2 = 2"	S = Silicone
		L0010=PGA0.1μm	K0010=0.1μm	AC = 1.5"Tri-Clamp	4 = 4"	
		L0022=PGA0.22μm	K0022=0.22μm	AD = 3/4"Tri-Clamp	5 = 5"	
		L0045=PGA0.45μm	K0045=0.45μm		10 = 10"	
		L0100=PGA1μm	K0100=1μm			
		L0300=PGA3μm	K0300=3μm			
		L0500=PGA5μm	K0500=5μm			
		L1000=PGA10μm	K1000=10μm			
		L2000=PGA20μm	K2000=20μm			
		L5000=PGA50μm	K5000=50μm			



Bioaxenic®-T series capsule filters are designed for sterile filtration processes and have reliable and stable sterilization performance, which is very suitable for small batch validation and laboratory critical validation.

Bioaxenic®-T is composed of hydrophobic polytetrafluoroethylene (PTFE) membrane. The product shows excellent resistance to organic, inorganic chemical corrosion and natural hydrophobic characteristics, which have a wide range of applications such as: sterile filtration of compressed gas, vent air, strong corrosive and oxidizing liquids, organic solvents etc.

Features

- Validated and reliable bacteria retention capability
- High flow rate and low extractables
- Available in various connector types
- Excellent chemical compatibility
- Resistance to corrosion, oxidation, organic solvents

Applications

- Compressed gas or vent air sterilization filtration
- Solvent and disinfectant filtration
- Strong corrosive and oxidizing liquid sterilization filtration
- Inlet and outlet filtration of single-use bioreactor
- Inlet and outlet filtration of single-use mixing and storage bag

Ordering Information

BA		P		Z2222		AC		5		S			
Code		Core		Media		Connector		Length		Seal Material			
BA=Bioaxenic		P = PP		Z=PTD(PTFE)		E = PTB(PTFE)		AB = 1/2"-5/8" Hose Barb		2 = 2"		S = Silicone	
				Z2222=PTB0.22+0.22		E0010 = PTB0.1µm		AC = 1.5"Tri-Clamp		4 = 4"			
						E0022 = PTB0.22µm		AD = 3/4"Tri-Clamp		5 = 5"			
						E0045 = PTB0.45µm				10 = 10"			
						E0100 = PTB1µm							

Dimensions

Length / Filtration area	2"(65mm) / 0.12m ²
	4"(103mm) / 0.21m ²
	5"(118mm) / 0.26m ²
	10"(266mm) / 0.65m ²
OD	87mm

Material of Constructions

Media	Hydrophobic PTFE
Support	PP
Core/Cage/End cap	PP
Seal Material Option	Silicone

Use Condition

Max. Operating DP	2.5Bar(36psi) @ 20°C (68°F)
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Quality

- Comply with 21CFR210.3(b)(6) on "Non fiber" release regulations
- 100% integrity tested
- Validated with *Brevundimonas diminuta* (ATCC 19146) at 107/cm² (0.22µm)
- Endotoxin: Comply with USP<85>, endotoxin content <0.25EU/ mL
- Biocompatibility: Comply with USP<87>USP<88>
- Autoclaving: 121°C -30min-5 Cycles

Integrity Test Parameters(with PTB)

Bubble Point (BP)	≥1100mbar@IPA: Water 60:40
Water Intrusion (WIT)	≤1 ml / min@2760mbar





The Depth Plus® Capsule Filters are designed for Bio-products industry which mainly used in cell harvest clarification and downstream liquid filtration. The Minidepth is for lab scale filtration, Puredepth is for pilot testing research and lab scale protein production. The Majordepth includes three models with different processing capabilities: small, large and integrated models. All models are comprised of a holder, a set of top and bottom separators, and a number of filter modules that can be adjusted. The Depth Plus® Capsule Filters have completely independent filter medium, its pore size of upper and lower layer is asymmetrical, this design not only helps to enhance the contaminant holding capacity but also helps to extend the service life of the filter cartridge.

Features

- Disposable design makes it easier to install and dismantle
- High contaminant holding capacity
- High filtration efficiency for impurities
- Manufactured in a clean room environment

Applications

- Culture medium filtration
- Cell lysates filtration
- Host cell protein or hybrid protein aggregates filtration
- Protect downstream process

Material of Constructions

Media	Cellulose, filter-aids and resins
Core/Cage/End Cap	PP
Seal Material Option	Silicone

Bio-safety

Endotoxin	Comply with USP<85>, endotoxin content <0.25EU/ mL
Biocompatibility	Comply with USP<87>USP<88>

Performance

Max. Operating Temperature	40 °C (104°F)
Max. Operating DP	3 bar (44 psi)
Autoclaving	125°C, 30min, 1Cycle



ID

Filtration Area: 34cm²



ED-S

Filtration Area: 1600cm²

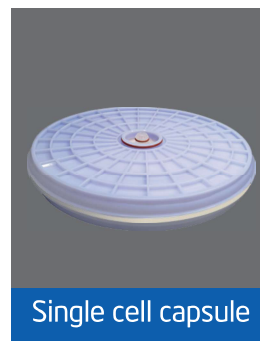


ED-L

Filtration Area: 4000cm²

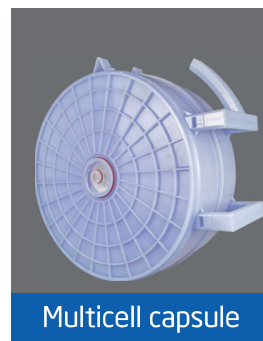


Filter Holders



Single cell capsule

Filtration Area: 0.23m²(2.4ft²)



Multicell capsule

Dual layer: 1.6m²(17.2ft²)
Single layer: 2.5m²(27.0ft²)

Ordering Information

ID	P	C0102
Code	Core	Removal Rating
ID=Minidepth	P = PP	C0102 = 0.1~0.4µm
		C0105 = 0.1~0.8µm
		C0140 = 0.1~9µm
		C0240 = 0.2~9µm
		C0290 = 0.2~20µm
		C0690 = 0.6~20µm
		C0890 = 0.8~20µm

ED	P	C0102	S
Code	Core	Removal Rating	Length
ED=Puredepth	P = PP	C0102 = 0.1~0.4µm	S = Short
		C0105 = 0.1~0.8µm	L = Long
		C0140 = 0.1~9µm	
		C0240 = 0.2~9µm	
		C0290 = 0.2~20µm	
		C0690 = 0.6~20µm	
		C0890 = 0.8~20µm	

RD	C	C0102	S	001	S	B
Code	Core	Removal Rating	Filter Cell	Layer	Seal Material	Separator
RD=Majordepth	C=PC	C0102 = 0.1~0.4µm	S = Single-Cell Capsule	001=1 002=2	S = Silicone	B=None
		C0105 = 0.1~0.8µm	L = Multi-Cell Capsule	003=3 004=4		T=Top
		C0140 = 0.1~9µm		005=5 006=6		R=Bottom
		C0240 = 0.2~9µm		007=7 008=8		TR= Top + Bottom
		C0290 = 0.2~20µm		009=9 010=10		
		C0690 = 0.6~20µm		011=11		
		C0890 = 0.8~20µm				