



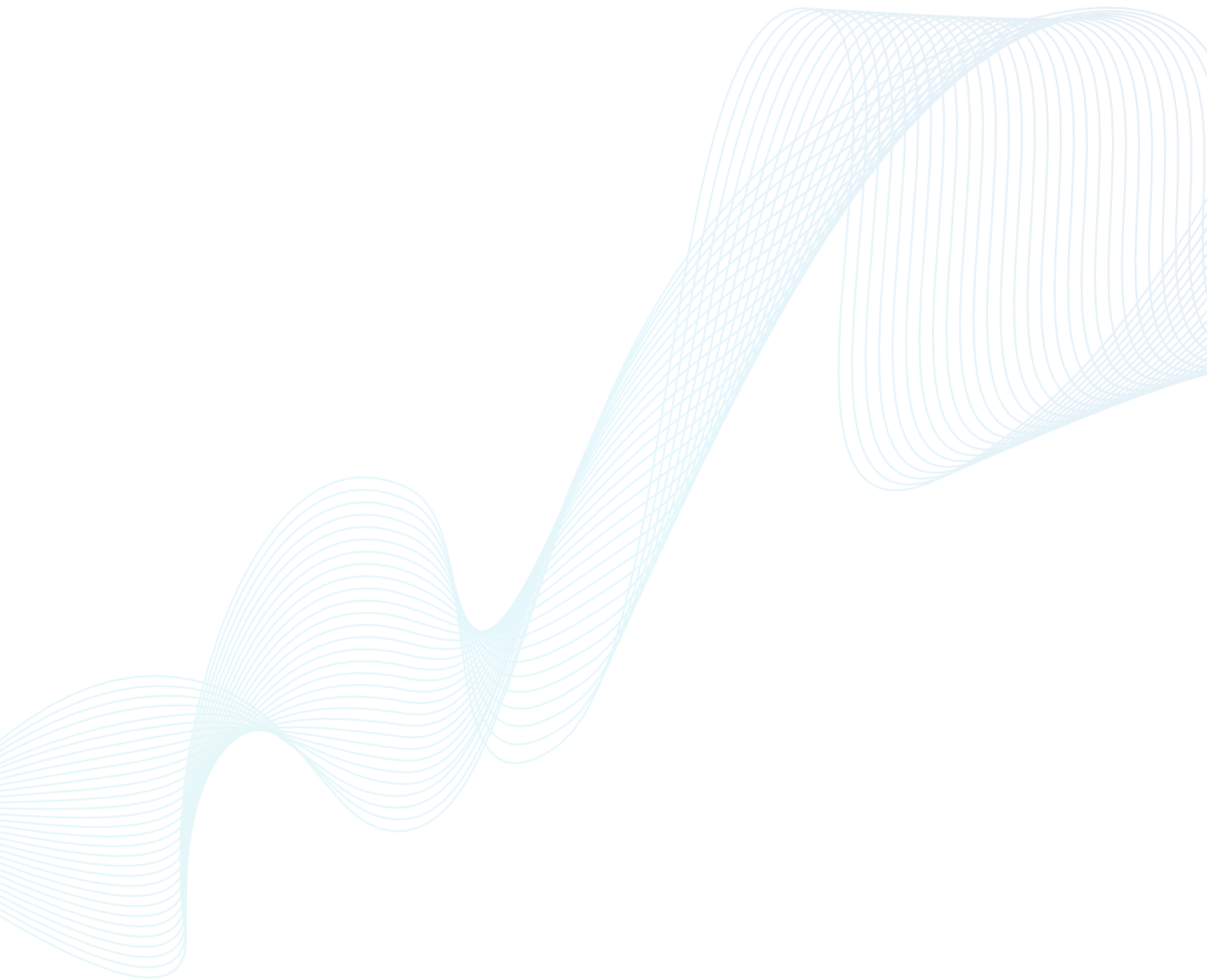
Capsule & Cartridge Filters

Table of contents

01	SCS-G series low-diffusion polyethersulfone Filters	01-05
02	E5 series high-precision polypropylene Filters	06-10
03	SCF series hydrophobic polytetrafluoroethylene (PTFE) Filters	11-15
04	Filter structure diagram	16

Product number key of low diffusion hydrophilic PES disc filter

Housing model	Membrane material	Pore size (µm)	Type	Length (inch)	Inlet/Outlet	Sterilization
DS=Disc filter	SCS=Hydrophilic PES	092=0.2	G=Low	02=2	2H=1/4"HB	G=Gamma irradiated
		094=0.45	diffusion			F=Not gamma irradiated
		096=0.65				None=Intolerance to gamma irradiation
		098=0.85				
		912=0.1+0.2				
		922=0.2+0.2				
		924=0.2+0.45				



Product number key of low diffusion hydrophilic PES CA series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet	Sealing ring material	Sterilization
CA=Diameter 110 capsule filter	SCS=Hydrophilic PES	092=0.2 094=0.45 096=0.65 098=0.85 912=0.1+0.2 922=0.2+0.2 924=0.2+0.45	G=Low diffusion	05=5 10=10 20=20 30=30	L=Up-in & down-out	H=1"-1.5" TC	H=1"-1.5" TC F=1/2" HB	S=Silicone E=EPDM V=Fluorelastomer	G=Gamma irradiated F=Not gamma irradiated None=Intolerance to gamma irradiation

Technical parameter of low diffusion hydrophilic PES CA series capsule filter

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01MPa	Diffusion flow ml/min (0.2 μm)	Bubble point MPa	Bubble point MPa
Low diffusion hydrophilic PES	CA capsule filter	G05	Single layer	0.3	≥4.5L/min	≤15@0.28MPa	≥0.34 (0.2 μm)	≥0.24 (0.45μm)
		G10	Single layer	0.6	≥9L/min	≤25@0.28MPa		
		G20	Single layer	1.2	≥18L/min	≤50@0.28MPa		
		G30	Single layer	1.8	≥27L/min	≤75@0.28MPa		
		G05	Dual layer	0.25	≥2.5L/min	≤12@0.28MPa		
		G10	Dual layer	0.5	≥5L/min	≤20@0.28MPa		
		G20	Dual layer	1	≥10L/min	≤40@0.28MPa		
		G30	Dual layer	1.5	≥15L/min	≤60@0.28MPa		

Product number key of low diffusion hydrophilic PES CB series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet	Sterilization
CB=Diameter 70 capsule filter	SCS=Hydrophilic PES	092=0.2	G=Low diffusion	01=1	L=Up-in & down-out	D=1/4" HB	D=1/4" HB	G=Gamma irradiated
		094=0.45		1H=1.5		E=3/8" HB	E=3/8" HB	F=Not gamma irradiated
		096=0.65		02=2		F=1/2" HB	F=1/2" HB	None=Not Tolerant for gamma irradiation
		098=0.85		05=5		G=1/2" TC	G=1/2" TC	
		912=0.1+0.2				H=1-1.5" TC	H=1-1.5" TC	
		922=0.2+0.2						
		924=0.2+0.45						

Technical parameter of low diffusion hydrophilic PES CB series capsule filter

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa	Diffusion flow ml/min (0.2 μm)	Bubble point MPa	Bubble point MPa
Low diffusion hydrophilic PES	CB capsule filter	GH1	Single layer	0.02	≥0.25L/min	≤2.4@0.28MPa	≥0.34 (0.2 μm)	≥0.24 (0.45μm)
		G01	Single layer	0.04	≥0.5L/min	≤4@0.28MPa		
		G1H	Single layer	0.06	≥0.9L/min	≤5.5@0.28MPa		
		G02	Single layer	0.12	≥1.8L/min	≤7@0.28MPa		
		G05	Single layer	0.2	≥3.3L/min	≤10@0.28MPa		
		GH1	Dual layer	0.015	≥0.125L/min	≤1.8@0.28MPa		
		G01	Dual layer	0.03	≥0.25L/min	≤3.0@0.28MPa		
		G1H	Dual layer	0.05	≥0.5L/min	≤4.0@0.28MPa		
		G02	Dual layer	0.10	≥1L/min	≤5.64@0.28MPa		
		G05	Dual layer	0.18	≥1.83L/min	≤8.9@0.28MPa		

Product number key of low diffusion hydrophilic PES cartridge

Membrane material	Pore size (μm)	Type	Length (inch)	Connection type	Sealing type	Sealing ring material
SCS=Hydrophilic	092=0.2	G=Low diffusion	05=5	B=226 steel liner	P=Flat cap	S=Silicone
PES	094=0.45		10=10	E=222 steel liner	R= "8" shape tail	E=EPDM
	096=0.65		20=20			
	098=0.85		30=30			
	912=0.1+0.2					
	922=0.2+0.2					
	924=0.2+0.45					

Technical parameter of low diffusion hydrophilic PES cartridge

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa	Diffusion flow ml/min (0.2 μm)	Bubble point MPa	Bubble point MPa
Hydrophilic PES	Cartridge	G05	Single layer	0.3	≥4.5L/min	≤15@0.28MPa	≥0.34 (0.2 μm)	≥0.24 (0.45μm)
		G10	Single layer	0.6	≥9L/min	≤25@0.28MPa		
		G20	Single layer	1.2	≥18L/min	≤50@0.28MPa		
		G30	Single layer	1.8	≥27L/min	≤75@0.28MPa		
		G40	Single layer	2.4	≥36L/min	≤100@0.28MPa		
		G05	Dual layer	0.25	≥2.5L/min	≤12@0.28MPa		
		G10	Dual layer	0.5	≥5L/min	≤20@0.28MPa		
		G20	Dual layer	1	≥10L/min	≤40@0.28MPa		
		G30	Dual layer	1.5	≥15L/min	≤60@0.28MPa		
		G40	Dual layer	2	≥20L/min	≤80@0.28MPa		

E5 Series High-Precision Polypropylene Filter

E5 series cartridges are composed of advanced polypropylene membrane and supporting layer, with high flux, high precision and low pressure drop, it is an economical choice for pre-filtration.

Applications

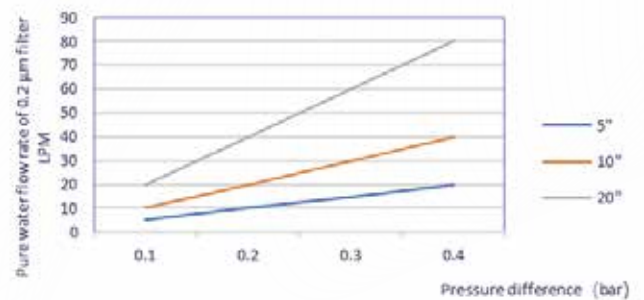
- ⦿ Buffer prefiltration
- ⦿ Pre-filtration of sterile raw materials
- ⦿ Pre-filtration of water for pharmaceutical use
- ⦿ Blood product prefiltration

Product features

- ⦿ No fiber shedding
- ⦿ Gradient pore size with extremely high dirt holding capacity
- ⦿ No foreign substances such as adhesives
- ⦿ Features broad chemical resistance



Flow curves



Material of Construction

Membrane material	Polypropylene
Center rod/housing/end cap	Polypropylene
Supporting layer	Polypropylene
Sealing ring	Refer to ordering information
Surface area	0.4 m ² /10 inch

Working condition

Max. working temperature	80°C (0.173 MPa)
Max. working pressure difference	0.50 MPa (25°C)
	0.25 MPa (80°C)
Autoclave	121°C (30 min, 5 times)

Biosafety

Endotoxin	<0.25EU/ml
Biosafety	Meets USP<87> and USP<88> biosafety requirements

Product number key of high precision polypropylene disc filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Inlet/Outlet	Sterilization
DS=Disc filter	E5=Polypropylene	091=0.1	F=Pharmaceutical	02=2	2H=1/4" HB	G=Gamma irradiated
		092=0.2	grade			F=Not gamma irradiated
		094=0.45				None=Intolerance to gamma irradiation
		096=0.65				
		098=0.85				
		001=1.0				
		003=3.0				
		005=5.0				
		010=10				
		020=20				
		030=30				

Product number key of high precision polypropylene CA series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet	Sealing ring material	Sterilization
CA=Diameter	E5=Polyp-	091=0.1	F=Pharm-	05=5	L=Up-in &	H=1"-1.5" TC	H=1"-1.5" TC	S=Silicone	G=Gamma irradiated
110 capsule	ropylene	092=0.2	aceutical	10=10	down-out		F=1/2" HB	E=EPDM	F= Not gamma irradiated
filter		094=0.45	grade	20=20				V=Fluorelastomer	None=Intolerance to
		096=0.65		30=30					gamma irradiation
		098=0.85							
		001=1.0							
		003=3.0							
		005=5.0							
		010=10							
		020=20							
		030=30							

Technical parameter of high precision polypropylene CA series capsule filter

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa
Polypropylene	CA capsule filter	F05	Single layer	0.2	≥5L/min
		F10	Single layer	0.4	≥10L/min
		F20	Single layer	0.8	≥20L/min
		F30	Single layer	1.2	≥30L/min

Product number key of high precision polypropylene CB series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet	Sterilization
CB=Diameter 70 capsule filter	E5=Polypropylene	091=0.1	F=Pharmaceutical grade	01=1	L=Up-in & down-out	D=1/4" HB	D=1/4" HB	G=Gamma irradiated
		092=0.2		1H=1.5		E=3/8" HB	E=3/8" HB	F=Not gamma irradiated
		094=0.45		02=2.5		F=1/2" HB	F=1/2" HB	None=Intolerance to gamma irradiation
		096=0.65		05=5		G=1/2" TC	G=1/2" TC	
		098=0.85				H=1-1.5" TC	H=1-1.5" TC	
		001=1.0						
		003=3.0						
		005=5.0						
		010=10						
		020=20						
030=30								

Technical parameter of high precision polypropylene CB series capsule filter

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa
Polypropylene	CB capsule filter	FH1	Single layer	0.01	≥0.25L/min
		F01	Single layer	0.02	≥0.5L/min
		F1H	Single layer	0.04	≥1L/min
		F02	Single layer	0.08	≥2L/min
		F05	Single layer	0.15	≥3.75L/min

Product number key of high precision polypropylene cartridge

Membrane material	Pore size (μm)	Type	Length (inch)	Connection type	Sealing type	Sealing ring material
E5=Polypropylene	091=0.1	F=Pharmaceutical	05=5	B=226 steel liner	P=Flat cap	S=Silicone
	092=0.2	grade	10=10	E=222 steel liner	R="8" shape tail	E=EPDM
	094=0.45		20=20	K=220		
	096=0.65		30=30			
	098=0.85					
	001=1.0					
	003=3.0					
	005=5.0					
	010=10					
	020=20					
	030=30					

Technical parameter of high precision polypropylene cartridge

Material	Series	Size code	Single/dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa
Polypropylene	Cartridge	F05	Single layer	0.2	≥5L/min
		F10	Single layer	0.4	≥10L/min
		F20	Single layer	0.8	≥20L/min
		F30	Single layer	1.2	≥30L/min
		F40	Single layer	1.6	≥40L/min

SCF Series Hydrophobic Polytetrafluoroethylene (PTFE) Filter

SCF series cartridges feature strong natural hydrophobicity, high temperature resistance and corrosion resistance, and are widely used as vent filter and for filtration of highly corrosive liquids.

Product features

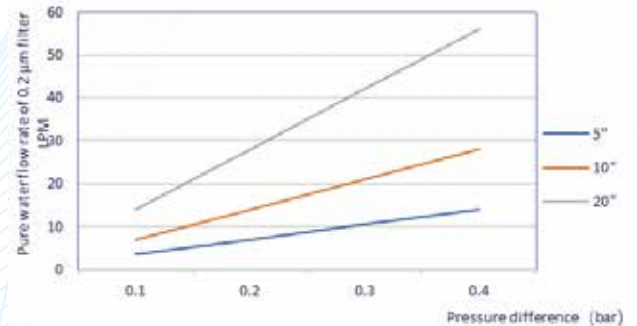
- High temperature resistance, steam resistance
- Extensive chemical compatibility, used for a variety of filtration processes in pharmaceutical manufacturing
- Naturally hydrophobic, high flux, low pressure drop
- Sterile filtration of strongly oxidizing liquids

Applications

- Vent filters for sterile packaging
- Sterile filtration of corrosive gas
- Sterile filtration of compressed air and nitrogen
- Sterile filtration of strong oxidizing liquid



Flow curves



Material of Construction

Membrane material	Hydrophobic PTFE
Center rod/housing/end cap	Polypropylene
Supporting layer	Polypropylene
Sealing ring	Refer to ordering information
Surface area	0.5 m ² /10 inch

Working condition

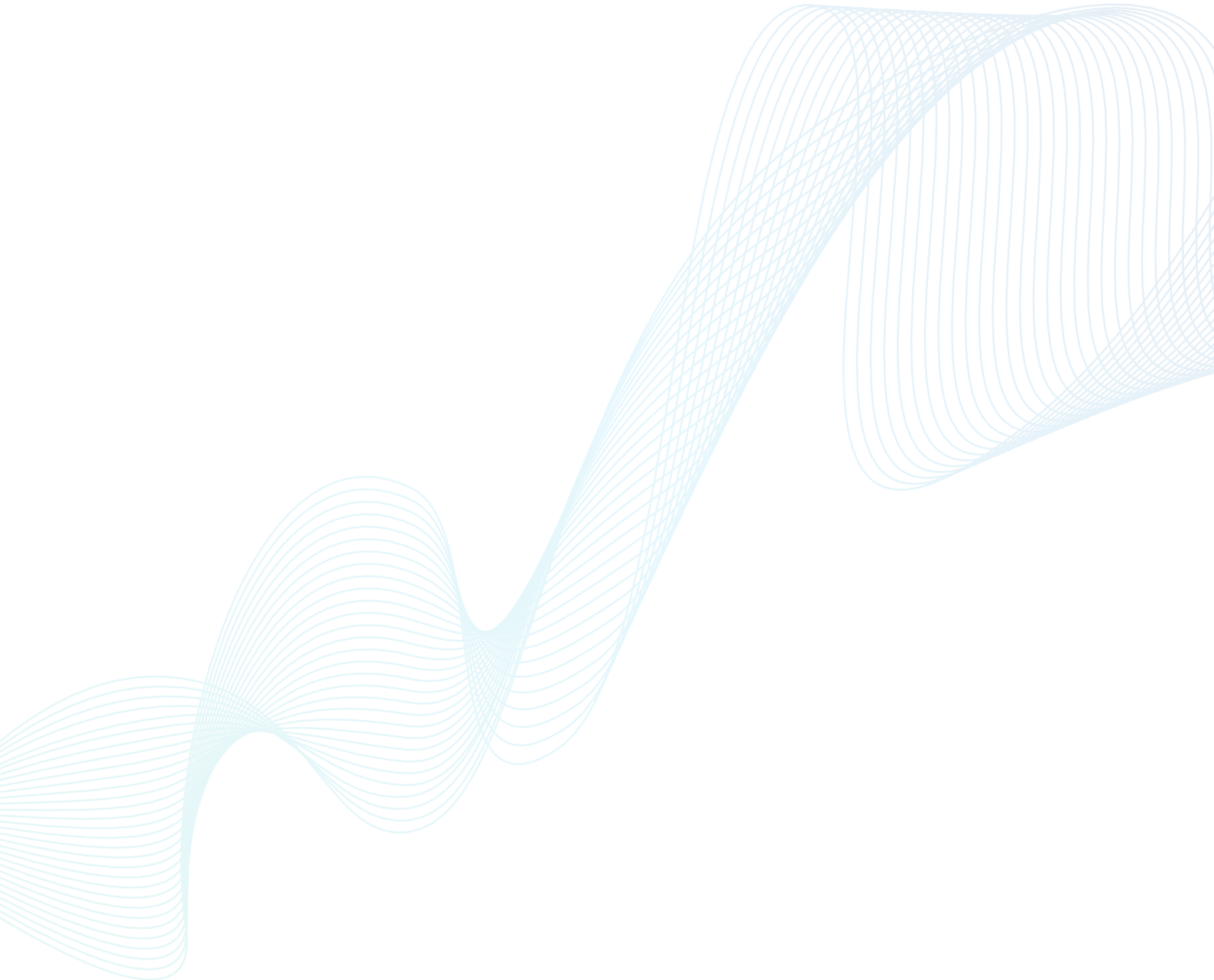
Max. working temperature	80°C (0.173 MPa)
Max. working pressure difference	0.50 MPa (25°C) 0.25 MPa (80°C)
Autoclave	121°C (30 min, 5 times)

Biosafety

Endotoxin	<0.25EU/ml
Biosafety	Meets USP<87> and USP<88> biosafety requirements

Product number key of hydrophobic PTFE disc filter

Housing model	Membrane material	Pore size (µm)	Type	Length (inch)	Inlet/Outlet
DS=Disc filter	SCF=Hydrophobic	092=0.2	P=Pharmaceutical	02=2	2H=1/4" HB
	PTFE	094=0.45 001=1	grade		



Product number key of hydrophobic PTFE CA series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet	Sealing ring material
CA=Diame- ter 110 capsule filter	SCF=Hydro- phobic PTFE	092=0.2 094=0.45 001=1	P=Pharmaceu- tical grade	05=5 10=10 20=20 30=30	L=Up-in & down-out	H=1"-1.5" TC	H=1"-1.5" TC F=1/2" HB	S=Silicone E= EPDM V=Fluorelastomer

Technical parameter of hydrophobic PTFE CA series capsule filter

Material	Series	Size code	Single/ dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa	Water intrusion ml/min (0.2 μm)	Water intrusion ml/min (0.2 μm)
Hydrophobic PTFE	CA capsule filter	P05	Single layer	0.3	≥3.5L/min	≤0.38@0.25MPa	≥0.126 MPa (Absolute ethanol)
		P10	Single layer	0.6	≥7L/min	≤0.75@0.25MPa	
		P20	Single layer	1.2	≥14L/min	≤1.50@0.25MPa	
		P30	Single layer	1.8	≥21L/min	≤2.25@0.25MPa	

Product number key of hydrophobic PTFE CB series capsule filter

Housing model	Membrane material	Pore size (μm)	Type	Length (inch)	Structure type	Inlet	Outlet
CB=Diameter	SCF=Hydro-	092=0.2	P=Pharmaceutical grade	01=1	L=Up-in &	D=1/4" HB	D=1/4" HB
70 capsule	phobic PTFE	094=0.45		1H=1.5	down-out	E=3/8" HB	E=3/8" HB
filter		001=1		02=2.5		F=1/2" HB	F=1/2" HB
				05=5		G=1/2" TC	G=1/2" TC
						H=1-1.5" TC	H=1-1.5" TC

Technical parameter of hydrophobic PTFE CB series capsule filter

Material	Series	Size code	Single/ dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa	Water intrusion ml/min (0.2 μm)	Bubble point MPa
Hydrophobic PTFE	CB capsule filter	PH1	Single layer	0.02	≥0.22L/min	/	≥0.126 MPa (Absolute ethanol)
		P01	Single layer	0.04	≥0.43L/min	/	
		P1H	Single layer	0.06	≥0.75L/min	/	
		P02	Single layer	0.12	≥1.4L/min	≤0.20@0.25MPa	
		P05	Single layer	0.2	≥2.58L/min	≤0.26@0.25MPa	


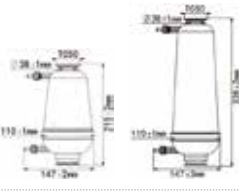



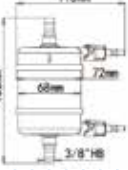

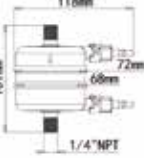

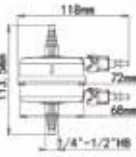




Product number key of hydrophobic PTFE cartridge

Membrane material	Pore size (μm)	Type	Length (inch)	Connection type	Sealing type	Sealing ring material
SCF=Hydrophobic	092=0.2	P=Pharmaceuti-	05=5	B=226 steel liner	P=Flat cap	S=Silicone
PTFE	094=0.45	cal grade	10=10 20=20 30=30	E=222 steel liner	R="8"shape tail	E=EPDM


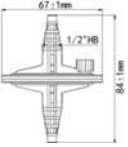
Technical parameter of hydrophobic PTFE cartridge

Material	Series	Size code	Single/ dual layer	Surface area (m ²) ≥	Pure water flow 0.2 μm ΔP=0.01 MPa	Water intrusion ml/min (0.2 μm)	Bubble point MPa
Hydrophobic PTFE	Cartridge	P05	Single layer	0.3	≥3.5L/min	≤0.38@0.25MPa	≥0.126 MPa (Absolute ethanol)
		P10	Single layer	0.6	≥7L/min	≤0.75@0.25MPa	
		P20	Single layer	1.2	≥14L/min	≤1.5@0.25MPa	
		P30	Single layer	1.8	≥21L/min	≤2.25@0.25MPa	
		P40	Single layer	2.4	≥28L/min	≤3@0.25MPa	

Capsule filter structure diagram

	<p>CA capsule filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension CA 5 inch Length: 215mm Diameter: 110mm CA 10 inch Length: 328mm Diameter: 110mm</p>	<p>Connection Inlet 1.5"TC Outlet 1.5"TC</p>	
	<p>CB capsule filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension CB 5 inch Length: 202mm Diameter: 68mm</p>	<p>Connection Inlet 1"TC Outlet 1"TC</p>	
	<p>CB capsule filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension CB 2.5 inch Length: 152mm Diameter: 68mm</p>	<p>Connection Inlet 3/8"HB Outlet 3/8"HB</p>	
	<p>CB capsule filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension CB 1.5 inch Length: 101mm Diameter: 68mm</p>	<p>Connection Inlet 1/4"NPT Outlet 1/4"NPT</p>	
	<p>CB capsule filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension CB 1 inch Length: 113.5mm Diameter: 68mm</p>	<p>Connection Inlet 1/4"-1/2"HB Outlet 1/4"-1/2"HB</p>	
	<p>Cartridge filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension Cylinder 5 inch Length: 150mm Diameter: 68mm</p>	<p>Connection 226 port, flat port</p>	
	<p>Cartridge filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension Cylinder 10 inch Length: 314mm Diameter: 68mm</p>	<p>Connection 226 port, "8" shape tail</p>	

Disc filter structure diagram

	<p>DS disc filter series</p> <p>MoC Membrane material Hydrophilic PES/Hydrophobic PTFE/PP Housing PP</p> <p>Housing dimension DS 2 inch Length: 84mm Diameter: 67mm</p>	<p>Connection Inlet 1/4"-1/2"HB Outlet 1/4"-1/2"HB</p>	
---	--	--	---



Duoning Biotechnology Group

✉ marketing@duoningbio.com

🌐 www.duoningbio.com/en

📍 6/F manulife place 348kwun tong road kl, HongKong, PRC.

