BIO PROCESSING CATALOG

The GVS Group

In over 45 years of history, GVS has evolved from a supplier of components for the healthcare sector to a global group that produces highly technological diversified filtration solutions.

Wide range of products and custom design expertise

GVS produces a wide range of filter materials, filters and off-the-shelf components in all its divisions, enabling its customers to reduce the design time for new product launches. All the GVS divisions work in highly regulated environments and the Group therefore operates with extremely high-quality standards. Thanks to its research and development centres located all over the world, GVS is also able to offer an extremely efficient and personalized service to meet its customers'needs: from product conception and design to testing and mass production.

Dynamic and flexible structure

GVS has developed a streamlined, dynamic and technologically advanced structure that has made it possible to achieve constant and balanced growth. The Group currently employs a total of 4869 people who work in automated assembly departments, in lines for the production and processing of filter membranes and in class 10,000 and 100,000 cleanrooms.

Global growth

The GVS Group has always paid great attention to research, development and innovation of its products and processes and has shown a strong trend towards development in global markets since its foundation.
In addition to the corporate headquarters in Bologna, GVS currently has 19 plants in Italy, United Kingdom, Brazil, United States, China, Mexico, Romania e Puerto Rico, and 29 commercial offices located all over the world. GVS has always adopted a "glocal" approach: it operates locally in contact with its customers, but relies on the strength of a global network.

For more information, visit www.gvs.com

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PES membrane

CFP series PES membrane

Eco Grade PES Pleated Filter Cartridges

CFP series - PES Eco Grade Pleated Filter Cartridges use the hydrophilic polyethersulfone (PES) membrane, which is with extreme low extractables and non-fiber releasing.
The CFP series - PES Eco Grade Pleated Pleated Filter Cartridges have a broad chemical compatibility and better stability. This series is suitable for the filtration of bioburden reduction

Features

- High flow rate
- High-durability PES membrane and other PP assemblies
- Broad chemical compactivity (pH 1-14)
- Special hydrophilic materials

Applications

- large volume parenterals (LVP)
- Biological reagent filtration
- Ophthalmics filtration
- Aseptic filtration for detergent and disinfectant

Guarantees

- All filter cartridges are manufactured in 10,000-degree clean room
- Manufactured according to ISO9001:2015 certified quality management system
- Gross integrity

Dimension

OD	69 mm (2.72")
Length	5", 10", 20", 30", 40"

Material of Constructions

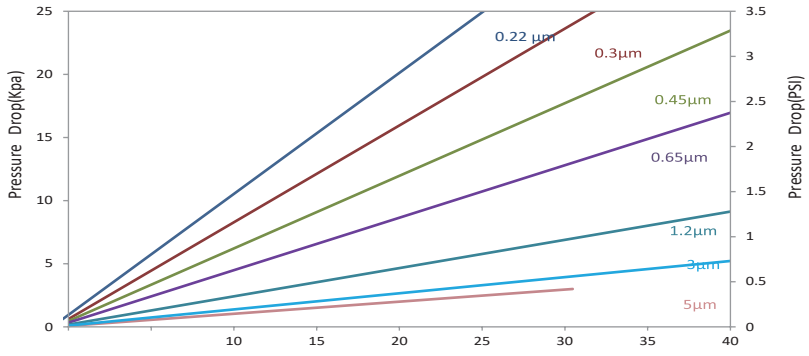
Media	Polyethersulfone (PES)
Support/Diversion	Polypropylene
Core/Cage/End Cap	Polypropylene

Performance

Max Operating Temperature	80 °C
Max. Operating DP	4.0 bar @20 °C
	2.4 bar @80 °C (Forward)
SIP	25 °C / 30 min

Flow Rate size 10"

Liquid Flow Rate (GPM) Water at 20 °C



Liquid Flow Rate (LPM) Water at 20 °C

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Calss VI-121C for plastics.
- Filter cartridgespassed European Commission Directives (EU10/2011)
- Halal Certified

Eg.=> CFPPS0022Z050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PS = PES	0022 = 0.22µm	Z = Eco Gr	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0045 = 0.45µm		10 = 10"		E2 = 213/Flat	S = SS Steel	E = EPDM		
		0065 = 0.65µm		20 = 20"		H1 = 222/Fin		V = Viton	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0120 = 1.2µm		30 = 30"		H2 = 222/Flat		F = E-FKM		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin				
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PES membrane

High Asymmetric PES Pleated Filter Cartridges

CFP series High Asymmetric Polyethersulfone (PES) pleated filter cartridges are made of hydrophilic high asymmetric polyethersulfone membrane, can provide exceptionally high flow rate and long service life for processing large fluid volumes. It has excellent retention of microorganisms for superior protection of final filters. This characteristic especially suits for Food and Beverage filtration.

Features

- Broad pH compatibility allows the use of filters in a wide range of fluids
- Bioburden reduction efficiency for process with variable bioburden applications with high flow requirements.
- 100% integrity tested during manufacture.
- Low extractables.

Integrity Test		
Micron	Bubble Point≥ (Water)	Diffusion Flow≤ (10"Ø69mm)
0.22 µm	3.2 bar	35ml / min @ 2.76 bar
0.45 µm	2.1 bar	35ml / min @ 1.70 bar
0.65 µm	1.32 bar	24ml / min @1.1 bar

Applications

- Food and beverage filtration
- Reduce biological load
- High flow process requirements
- Protection final filters or downstream equipment and systems such as tangential chromatographic

Dimension

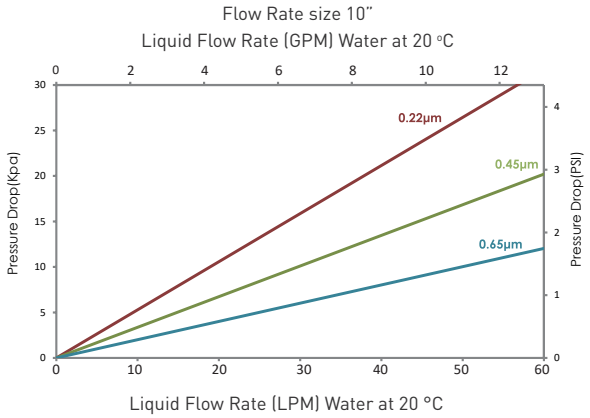
Diameter	69 mm
Length	5", 10", 20", 30", 40"

Quality

- Validated with B. diminuta (ATCC 191463) at 107/CM2 (0.22 µm).
- Each membrane filter element has been individually tested for integrity.
- Individual element is tracked by serial number.
- Manufactured according to ISO 9001:2015 certified quality management system.
- Meets USP Biological Reactivity Test requirements of the current USP <88> for plastic class VI-121 °C.

Effluent quality

- Non-fiber releasing
- Meets TOC and water conductivity per USP Purified Water, pH per USP Sterile Purified Water.



Material of Constructions

Media	PES
Support	PP
Cage/Core/End	PP
Connection Adaptor	
SS Insert, PSU Insert	
O-Ring Silicone, EPDM , Viton®	

Performance

Operating Conditions

Max Operating Temperature	80 °C
Max. Operating DP	4 bar @ 21°C, 2.4 bar @ 80 °C

Sterilization

Autoclave Sterilization	121 °C, 60 Min

Filtration Area

Ø 69mm 0.65 m² / 10" Filter cartridges

Extractables

10" Filter Cartridges	< 20mg

Eg.=> CFPPS0010S050AD0PSS0

ORDERING INFORMATION

Product Type	Membrane Type	Membrane pore size	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFP = Pleated Cartridge Filter	PS = PES	0010 = 0.1µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypropylene	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	S = SS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement	
		0065 = 0.65µm		30 = 30"		H2 = 222/Flat		V = Viton	(Endcap D0, E2, K1, K2, excluded)	
				40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
						K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PES membrane

Asymmetric PES Pleated Filter Cartridges

The CFP series Asymmetric Polyethersulfone (PES) Pleated Pleated Filter Cartridges are designed to provide greater bacteria and particle removal at high flow rates and low pressure drops in a wide range of biological fluids. It offers the greatest assurance of filtration performance, stability, and service life. All components of the filter cartridge comply with FDA regulations for food contact use.

Features

- Durable PES and PP components
- Highly porous asymmetric membrane
- Excellent chemical compatibility
- Low extractables
- 100% integrity tested during manufacture

Applications

- Large infusion (LVP), small injection (SVP), eye drops sterilization filtration
- Sterilization filtration of biological product
- Sterilization filtration of antibiotic aqueous solution
- Cleaning fluid and disinfectant sterilizing filtration

Dimension

Diameter	69 mm
Length	5", 10", 20", 30", 40"

Material of Constructions

Media	PES
Support	PP
Cage/Core/End	PP
Connection Adaptor	SS Insert, PSU Insert
O-Ring	Silicone, EPDM , Viton®

Quality

- Validated with B. diminuta (ATCC 191463) at 10^7/CM2 (0.22 µm).
- Each membrane filter element has been individually tested for integrity.
- Individual element is tracked by serial number.
- Manufactured according to ISO 9001:2015 certified quality management system.
- Meets USP Biological Reactivity Test requirements of the current USP <88> for plastic class VI-121°C.

Performance

Operating Conditions

Max Operating Temperature	80 °C
Max. Operating DP	4 bar @ 21 °C , 2.4 bar @ 80 °C

Sterilization

Autoclave Sterilization	121°C , 60 Min
SIP	135°C , 30 Min , 20 cycles

Filtration Area

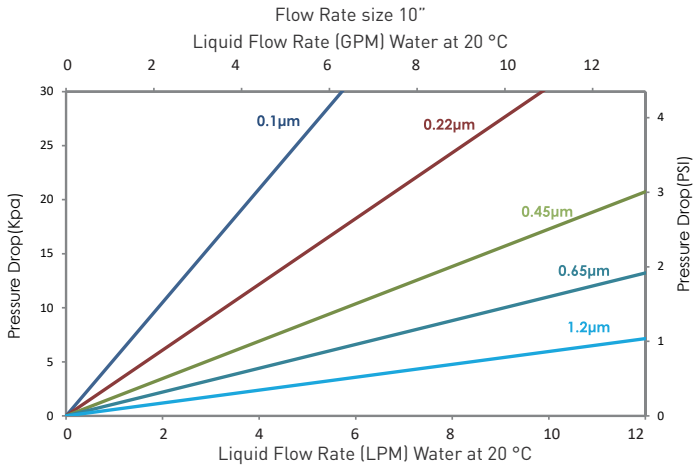
Ø 69mm	0.65 m² / 10" Filter cartridges

Extractables

10" Filter Cartridges	< 20 mg

Effluent quality

- Non-fiber releasing
- Non-pyrogenic per USP Bacterial Endotoxins (<0.25 EU/mL)
- Meets TOC and water conductivity per USP Purified Water, pH per USP Sterile Purified Water.



Integrity Test		
Micron	Bubble Point ≥ (Water)	Diffusion Flow ≤ (10"Ø69 mm)
0.1 µm	4.8 bar	25 ml / min @ 4.475 bar
0.22 µm	3.2 bar	25 ml / min @ 2.76 bar
0.45 µm	2.1 bar	25 ml / min @ 1.70 bar
0.65 µm	1.32 bar	12 ml / min @ 1.1 bar

Eg.=> CFPPS0010S050AD0PSS0

ORDERING INFORMATION										
Product Type	Membrane Type	Membrane pore size	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFP = Pleated Cartridge Filter	PS = PES	0010 = 0.1µm	S = Ster Grade	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypropylene	S = Silicone	S= Standard	0 = Rev.0
		0004=0.04µm		10 = 10"		E2 = 213/Flat	S = SS Steel	E = EPDM		
		0022 = 0.22µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0045 = 0.45µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0065 = 0.65µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0120 = 1.2µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PES membrane

Double Layer Asymmetric PES Pleated Filter Cartridges

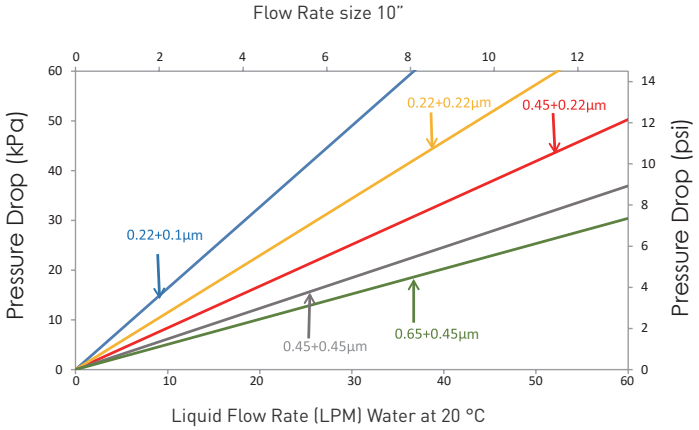
CFP series Double Layer Asymmetric PES Pleated Filter Cartridges is constructed of highly asymmetric polyethersulfone membrane from Germany and imported support layer. Unique double layer hydrophilic polyethersul-fone makes it have excellent filtration performance and reliable bacteriaintercepting ability. It is especially used in pharmaceutical industry with stringent requirement. All components of filter cartridge comply with FDA regulations. This filter can withstand repeated steam sterilization.

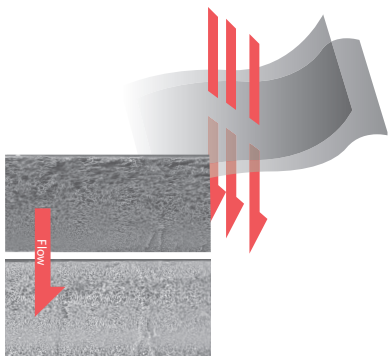
Features

- Unique double layer hydrophilic polyethersulfone with double security makes it have reliable bacteria-intercepting ability,increasing filtration safety factor by more than 10 times.
- Large effective filtration area makes the filter longer service life and lower cost.
- Broad chemical compatibility (PH1-14) ,it is suitable for various pharmaceutical filtration.
- Structure Stabilization,it can withstand sterilization cycle with 50 times
- 100% integrity test ensures absolute sterilization
- Low protein adsorption
- ISO9001:2015 certified Quality Management System

Quality

- Validated with B. diminuta (ATCC 191463) at 107/CM2 (0.22 μm).
- Each membrane filter element has been individually tested for integrity.
- Individual element is tracked by serial number.
- Manufactured according to ISO 9001:2015 certified quality management system.
- Meets USP Biological Reactivity Test requirements of the current USP <88> for plastic class VI-121 °C





Applications

Pharma - Particles filtration, becterium filtration, API (Active Pharmaceutical Ingredient) filtration, Food and Beverage - Water filtration, Wine and Sparkling Wine filtration, Spirits filtration.

Material of Constructions

Media	PES
Support	PP
Cage/core/end cap	PP
Sealing	Silicone, EPDM,NBR, Viton,Teflon,E-FKM

Dimension

Outer Diameter	69 mm
Length	5", 10", 20", 30", 40"

Performance

Operating Conditions

Max Operating Temperature	80 °C
Max. Operating DP	4.0 bar @ 20 °C 2.4 bar @ 80 °C

Sterilization

Autoclave Sterilization	121 °C , 60 min
SIP	125 °C , 30 min

Filtration Area

Ø 69mm	0.65 m² / 10"

Extractables

10" Filter Cartridges	< 20 mg

Effluent quality

- Non-fiber releasing
- Non-pyrogenic per USP Bacterial Endotoxins (<0.25EV/mL)
- Meets TOC and water conductivity per USP Purified Water, pH per USP Sterile Purified Water.

Integrity Test		
Membrane por size	**Bubble Point ≥ (Water)**	**Diffusion Flow ≤ (10"Ø69mm)**
2201 =0.22/0.1µm	4.8 bar	25ml/min @ 4.475 bar
2222 = 0.22/0.22µm	3.2 bar	20ml/min @ 2.76 bar
0422 = 0.45/0.22µm	3.2 bar	25ml/min @ 2.76 bar
0404 = 0.45/0.45µm	2.1 bar	20ml/min @ 1.70 bar
0604 =0.65/0.45µm	2.1 bar	25ml/min @ 1.70 bar

Eg.=> CFPPS2201P050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge Filter	PS = PES	2201 =.22/0.1µm	P = Premier	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypropylene	S = Silicone	S= Standard	0 = Rev.0
		2222 = .22/.22µm		10 = 10"		E2 = 213/Flat	S = SS Steel	E = EPDM		
		0422 = .45/.22µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0404 = 45/.45µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0604 = .65/.45µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
						K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PSU membrane

CFP series PSU membrane

General Applications PSU Pleated Filter Cartridges

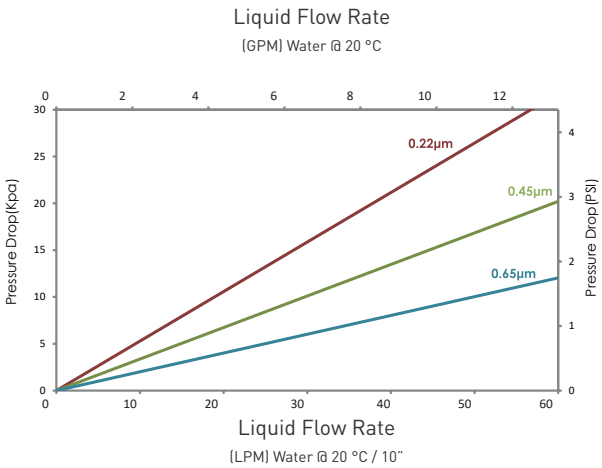
CFP series General Applications Pleated PSU Filter Cartridges is constructed of highly asymmetric hydrophilic polysulfone membrane and polypropylene components. The unique PSU membrane delivers a high flow rate, long life time, and excellent particle removal efficiency. All the cartridges are made in a controlled clean room environment. The cartridges are ideally suitable for filtration of water-based fluids.

Features

- Highly asymmetric polysulfone membrane provides excellent dirt holding capacity and flow characteristics
- Hydrophilic polysulfone membrane eliminates the need for prewetting and flushing
- Asymmetric membrane structure provides high flow rates with lower differential pressure and a longer life time
- Widely compatible with cleaning applications in many processes such as developing, etching, and stripping
- Manufactured in controlled clean room environment

Applications

- General-Use water Filtration
- Deionized water systems
- Liquid clarification
- Chemical filtration
- Ulta-Pure water systems



Dimension

Diameter	69 mm
Length	5", 10", 20", 30", 40"

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Calss VI-121C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Material of Constructions

- Media — Highly Asymmetric Hydrophilic PSU Membrane
- Support — Polypropylene (PP)
- Cage/Core/End — Polypropylene (PP)
- Sealing — EPDM, Viton®, E-FKM

Performance

Operating Conditions

Max. Operating Temperature	80 °C
Max. Operating DP	4 bar @ 21 °C, 2.4 bar @ 80 °C

Quality

- Filter Cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System
- 100% integrity test

Eg.=> CFPSU0003G050ADOPSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge Filter	SU = Polysulfone	0003 = 0.03µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0005 = 0.05µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0010 = 0.1µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0020 = 0.20µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0045 = 0.45µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0120 = 1.2µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series
PP media

CFP series PP media

General Applications PP Pleated Filter Cartridge

CFP series General Aplications PP Pleated Filter Cartridge are all-polypropylene filter cartridges in economically efficient design, suitable for a wide range of process applications. The pleated polypropylene filter material provides a large filtration surface area which allows for maximized flow rate in the system. PP Pleated Filter Cartridges are available in nominal retention ratings from 0.1 to 50 micron.

Features

- Nominal rated structure, particle removal rating from 0.1 to 50 Micron
- 100% polypropylene components provide broad chemical compatibility, suitable for use in a variety of fluids
- Various end cap configurations to fit into the most standaed housings
- Meets FDA requirements for food contact and passes European Commission Directives (EU10/2011)

Applications

- Food & Beverage
- Plating Chemicals
- RO Pre-Filtration
- Fine Chemicals
- Process Water
- Waste water

Dimension

Diameter	69 mm
Length	5", 10", 20", 30", 40"

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Calss VI-121 °C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Material of Constructions

- Media:PP
- Support: PP
- Cage / Core / End cap: PP
- Sealing: Silicone, EPDM, NBR, Viton®, Teflon®, E-FKM

Operating Conditions

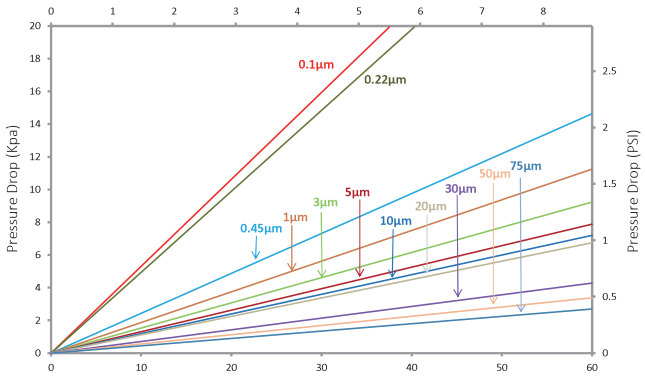
Max. Operating Temperature	80 °C
Max. Operating DP	4 bar @ 21°C , 2.4 bar @ 80 °C

Quality

- Filter Cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System

Particle Removal Efficiency (µm)		
Membrane pore size identification	85% efficiency	95% efficiency
0010	0.1	----
0022	0.22	----
0045	0.45	----
0065	0.65	----
0100	1	----
0300	3	----
0500	5	----
1000	10	----
2000	20	----
5000	50	----

Flow Rate size 10"
Liquid Flow Rate (GPM) Water at 25 °C



Liquid Flow Rate (LPM) Water at 25 °C

Eg.=> CFPPP0010G050AD0PSS0

ORDERING INFORMATION										
Product Type	Membrane Type	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFP = Pleated Cartridge	PP = Polypro	0010 = 0.1µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0100 = 1µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
		1000 = 10µm				K2 = 222 Ext/Flat				
		2000 = 20µm				G1 = 226/Fin				
		5000 = 50µm				G2 = 226/Flat				
		7500 = 75µm				G5 = 226/Spear Fin				

CFP series PP media

Nominal Rated PP Pleated Filter Cartridges

CFP series Nominal Rated PP Pleated Filter Cartridges are all-polypropylene filter cartridges made with sub-micron fine fiber filter media which provide smaller pores. It is fabricated without using any binders, adhesives, plasticizers, and surfactants. These filter cartiges can be repeatedly hot water sanitized. The filter media and its support structure are thermally welded to the end caps, making integral filter cartridges of minimum extractables in a wide range of fluids and applications. All the filter cartridges are manufactured in a clean room environment.

Features

- Nominal rated structure, particle removal rating from 0.1 to 50 Micron
- Non filber shedding
- 100% polypropylene components provide broad chemical compatibility, suitable for use in a variety of fluids
- Various end cap configurations to fit into the most standard housings
- Meet FDA requirements for food contact and passes European Commission Directives (EU10/2011)

Applications

- Pharmaceutical Water
- RO Pre-Filtration
- Fine Chemicals
- Process Water

Filtration Area

Ø 69mm: 0.6 m² / 10" Filter Cartridges

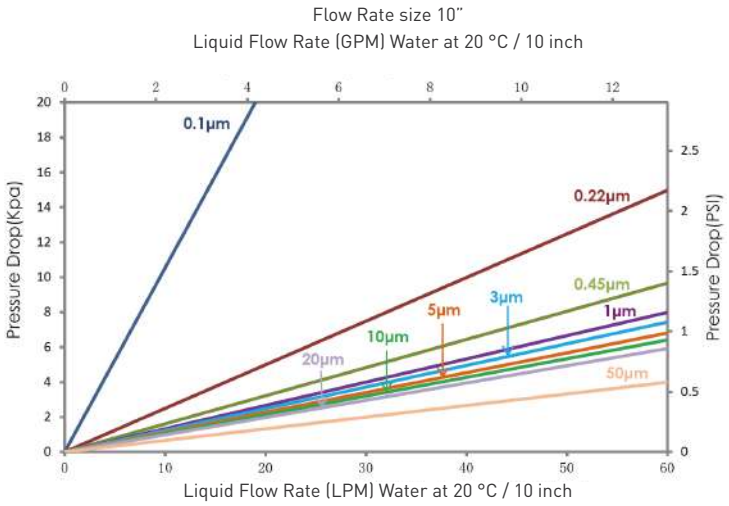
Material of Constructions

- Media: PP
- Support: PP
- Cage/Core/Endcap: PP
- Connection: PP
- Sealing: Silicone EPDM, NBR, Viton ®

Performance

Max.Operating temperature: 80 °C

Max.Operating DP: 4 bar @ 21 °C , 2.4 bar @ 80 °C



Particle Removal Ratings (µm)		
Membrane pore size identification	90% efficiency	95% efficiency
0010	0.1 µm	----
0022	0.22 µm	----
0045	0.45 µm	----
0065	0.65 µm	----
0100	1 µm	----
0300	3 µm	5 µm
0500	5 µm	10 µm
1000	10 µm	15 µm

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

Food Contact Compliance

- Materialsof construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR.
- Materials used to produce filter media and hardware meet the specificationsfor biologicalsafety per USP Calss VI-121˚C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Eg.=> CFPPP0010C050AD0PSS0

ORDERING INFORMATION										
Product Type	Membrane Type	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFP = Pleated Cartridge	PP = Polypro	0010 = 0.1µm	C = Chem	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0100 = 1µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
		1000 = 10µm				K2 = 222 Ext/Flat				
		2000 = 20µm				G1 = 226/Fin				
		5000 = 50µm				G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PP media

High Rated PP Pleated Filter Cartridges

These CFP series filter cartridges are high rated pleated depth-type filters constructed of 100% polypropylene material. These filters are available in absolute particle retention ratings from 0.1 to 50 micron and various end cap configurations to fit into the most standard housings. All components of the series filter cartridges are FDA approved. The filter media and its support structure are thermally welded to the end caps, making integral filter cartridges of minimum extractables in a wide range of fluids and applications. All the filter cartridges are manufactured in a clean room environment.

Features

- Absolute rated structure, particle removal rating from 0.1 to 50 Micron
- 100% polypropylene components provide broad chemical compatibility, suitable for use in a variety of fluids
- Consistent particle removal, no migration of filter media and non fiber shedding
- Meets FDA requirements for food contact and passes European Commission Directives (EU10/2011)

Applications

- Food & Beverage
- Plating Chemicals
- RO Pre-Filtration
- Fine Chemicals
- Process Water

Dimension

OD: 69mm
Length: 5" , 10" , 20" , 30" , 40"

Material of Constructions

- Media: PP
- Support: PP
- Hardware : PP, SS core & adapter insert available
- Sealing: Silicone, EPDM, NBR Viton®, Teflon®, E-FKM

Performance

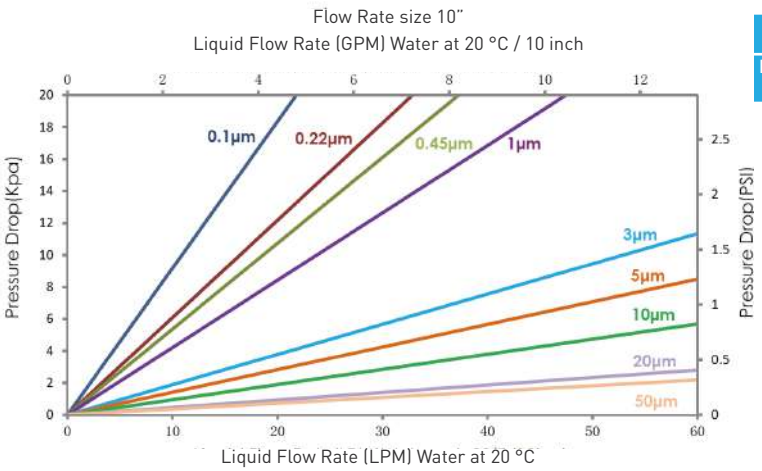
Max.Operating temperature:	80 °C
Max.Operating DP:	4 bar @ 21°C,
	2.4 bar @ 80 °C

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according t o ISO9001:2015 certified Quality Management System

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Calss VI-121˚C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified



Particle Removal Efficiency (µm)		
Membrane pore size identification	95% efficiency	99% efficiency
0010	0.1 µm	----
0022	0.22 µm	----
0045	0.45 µm	----
0065	0.65 µm	----
0100	----	1 µm
0300	----	3 µm
0500	----	5 µm
1000	----	10 µm

Eg.=> CFPPP001P050AD0PSS0

ORDERING INFORMATION										
Product Type	Remouval Rating	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFP = Pleated Cartridge	PP = Polypro	0010 = 0.1µm	P = Premier	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0100 = 1µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
		1000 = 10µm				K2 = 222 Ext/Flat				
		2000 = 20µm				G1 = 226/Fin				
		5000 = 50µm				G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series PP media

Multi-Layers PP Pleated Filter Cartridges

CFP series Multi-Layers PP Pleated filter cartridges are comprised of multi-layers media.
The unique construction results in a highly porous, continuous-ly graded pore structure with a tighter inner layer and several outer prefilter layers to substantially increase the dirt holding capacity. This filter structure provides excellent flow rates at low pressure drops and high throughputs while achieving submicron retentions, high efficiencies, and extraordinary dirt holding capacities. The filter media and its support structure are thermally welded to the end caps, making integral filter cartridges of minimum extractables in a wide range of fluids and applications. All the filter cartridges are manufactured in a clean room environment.

Features

- Gradient pore size structure
- 100% polypropylene components provide broad chemical compatibility, suitable for use in a variety of fluids
- Fixed filter matrix with no adhesives and surfactants providing consistent filtrate quality
- Meet FDA requirements for food contact and passes European Commission Directives (EU10/2011)

Applications

- Food & Beverage
- Plating Chemicals
- RO Pre-Filtration
- Fine Chemicals
- Process Water
- Colloid material filtration
- High viscosity liquids
- Fermentation liquids

Dimension

OD: 69 mm
Length: 5", 10", 20", 30", 40"

Material of Constructions

- Media: PP
- Support: PP
- Cage/ Core/ Endcap: PP
- Sealing: EPDM, Viton®, E-FKM

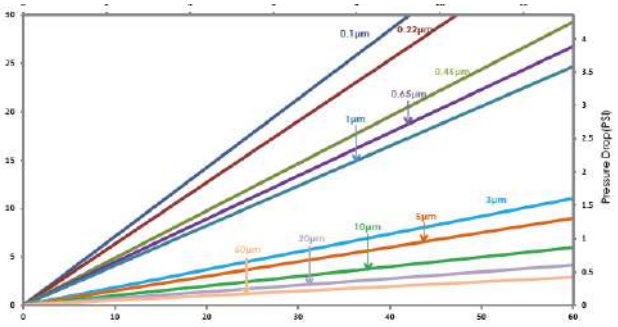
Performance

Max. Operating temperature:	80 °C
Max. Operating DP:	4 bar @ 21 °C, 2.4 bar @ 80 °C

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

Flow Rate size 10"
Liquid Flow Rate (GPM) Water at 20 °C / 10 inch



Liquid Flow Rate (LPM) Water at 20 °C

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meet the specificationsfor biologicalsafety per USP Calss VI-121˚C for plastics.
- Filter cartridgespassed European Commission Directives (EU10/2011)
- Halal Certified

Eg.=> CFPPP001P050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Removal Rating**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PP = Polypro	0010 = 0.1µm	M = M.layer Fil	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0100 = 1µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
		1000 = 10µm				K2 = 222 Ext/Flat				
		2000 = 20µm				G1 = 226/Fin				
		4000 = 40µm				G2 = 226/Flat				
		5000 = 50µm				G5 = 226/Spear Fin				

CFP series Hydrophobic PTFE membrane

CFP series Hydrophobic PTFE membrane

General Applications Hydrophobic PTFE Pleated Filter Cartridges

CFP series General Applications Hydrophobic PTFE Pleated Filter Cartridges are made of polytetrafluoroethylene, and thus have excellent resistance to organic and inorganic chemical corrosive substances and have natural hydrophobicity of filtering materials. They are widely used in sterile filtration of strong solvents, strong corrosive liquids and strong oxidative liquids.

Features

- Inherently hydrophobic PTFE membranes
- All PP components and low extractables
- High-flow and low pressure drop
- Enhanced resistance to in-line and autoclave steam sterilization
- 100% Integrity Test

Applications

- Strong oxidative liquids filtration
- Prefiltration and terminal filtration of corrosive liquids
- Solvent materials filtration

Dimension

Out Diameter	69 mm (2.72")
Length	5", 10", 20", 30", 40"

Material of Constructions

- Media: Hydrophobic PTFE
- Support: PP
- Cage/ Cage/ Endcap: PP
- Seal Material: Please refer to ordering information

Performance

- Max Operating Temperature — 80 °C
- Max Operating DP — 4.5 bar @ 20 °C
  2.4 bar @ 80 °C

Quality

- Filter Cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified
- Quality Management System
- Materials of construction comply with FDA requlations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR 100% Integrity Tested
- Each individual element is tracked by serial number

Eg.=> CFPPT0010G050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PT = PTFE phobic	0010 = 0.1µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0022 = 0.22µm		10 = 10"		E2 = 213/Flat	U = SUS Steel	E = EPDM		
		0045 = 0.45µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, K1, K2, excluded)	
		0100 = 1µm		30 = 30"		H2 = 222/Flat		V = Viton		
		0300 = 3µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		0500 = 5µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
		1000 = 10µm				K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP series Hydrophobic PTFE membrane

Sterilizing grade Hydrophobic PTFE Pleated Filter Cartridges

CFP series Sterilizing grade Hydrophobic PTFE Pleated Filter Cartridges are made of hydrophobic PTFE membrane and inherently hydrophobic PTFE membrane ensuring the sterilizing performance in different humidity environments. The PP components offer superior oxidation resistance. The reinforced core makes the filter cartridges have higher pressure resistance to withstand, The in-line steam sterilization and autoclave, it is suitable for fermentation, pharmaceutical, and other biotechnology applications.

Features

- Inherently hydrophobic PTFE membranes
- Oxidation resistant hardware
- High-flow and low pressure drop
- Enhanced steaming resistance
- 100% Integrity tested

Applications

- Corrosive gas sterile filtration
- Compressed air and nitrogen gas solution
- Aseptic packaging
- Fermenter inlet air and exhaust venting, sterile process air and sterile venting of tanks

Dimension

Length	5" (125 mm) / 10" (254 mm) / 20" (500 mm) 30" (750 mm) / 40" (1000 mm)
Out Diameter	69 mm (2.72")
EFA	0.8 m² / 10"

Integrity Test Parameters

• Bubble Point (BP)	⩾ 1.1 bar @ IPA : Water 60 : 40
• Diffusion Flow (DF)	CFPPT0020Y ⩽ 16 ml / min @ 1035 mbar CFPPT0020S ⩽ 24 ml / min @ 1035 mbar
• Water Instrusion (WIT)	CFPPT0020Y ⩽ 0.38 ml / min @ 2500 mbar CFPPT0020S ⩽ 0.75 ml / min @ 2500 mbar

Material of Constructions

- Membranes: Inherently hydrophobic PTFE
- Support/Drainage: Oxidation resistant PP
- Cage/ Core/ Endcap: Oxidation resistant PP
- O-ring: Please refer to ordering information

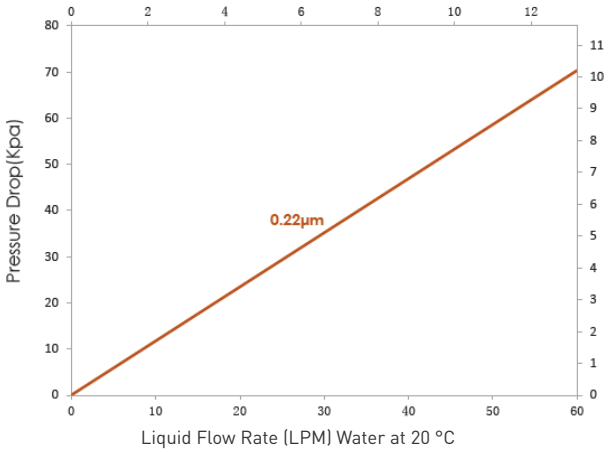
Performance

Maximum operating temperature	80 °C
Maximum differential pressure	2.4 bar @ 80 °C
	5.2 bar @ 20 °C

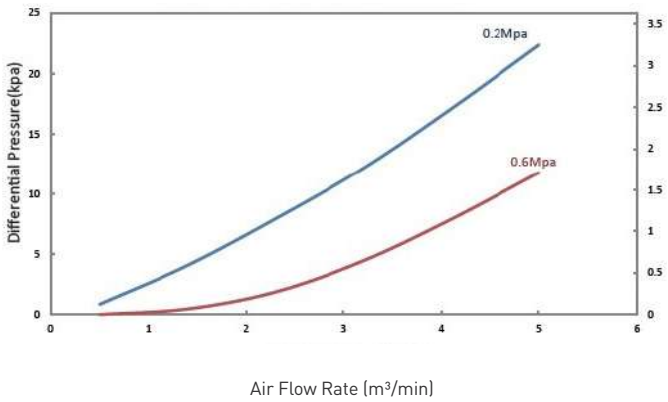
Sterilization

- Inline Steam Sterilization: 135 °C / 30 min, 150 cycles
- Maximum Forward Steam Sterilization: 1 bar @ 125 °C
  0.3 bar @ 142 °C
- Maximum Reverse Steam Sterilization: 0.5 bar @ 125 °C
  0.2 bar @ 142 °C

Flow Rate CFPPT0020S10 (ster grade / size 10")
Liquid Flow Rate (GPM) Water at 20 °C
wetted membrane IPA 60/40



Gas flow vs Pressure Drop
per 10" cartridge length. With air at 20°C



Quality

- Filter cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System
- Material of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR
- 100% integrity tested
- Each individual element is tracked by serial number

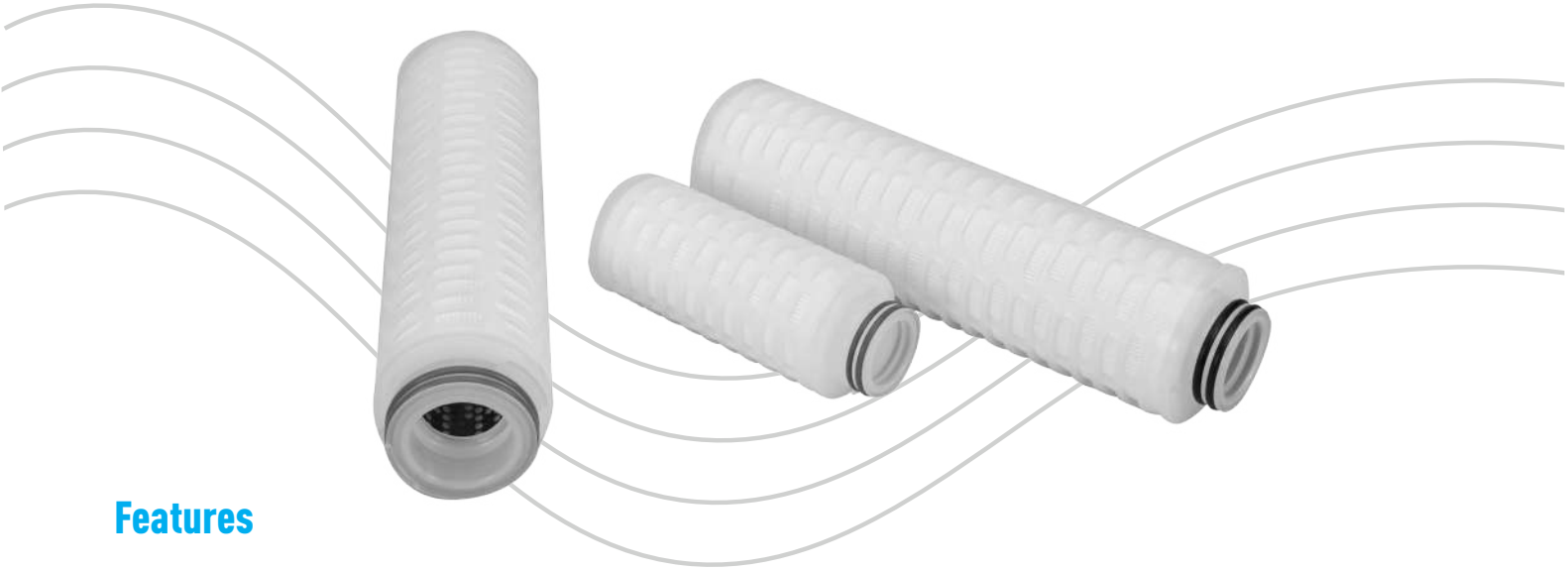
Eg.=>CFPPT0020S050AH1PSY0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PT = PTFE phobic	0020 = 0.2μm	S = Ster Grade Y = P Ster Gr	05 = 5" 10 = 10" 20 = 20" 30 = 30" 40 = 40"	0A = OD:69 mm	H1 = 222/Fin H2 = 222/Flat G1 = 226/Fin G2 = 226/Flat	P = Polypro U = SUS Steel	S = Silicone E = EPDM V = Viton	Y = SS reinforced P = PSU reinforced (Endcap: G1,G2, only)	0 = Rev.0

CFP series Hydrophobic PTFE membrane

High-Temperature Sterilizing grade Hydrophobic PTFE Pleated Filter Cartridges

CFP series Hydrophobic PTFE membrane High-Temperature Sterilizing grade Pleated Filter Cartridges can ensure the sterilizing performance in different humidity environment. The oxidation resistant PP components offer superior oxidation and high temperature resistance, reinforced core makes the filter cartridge higher pressure resistance, withstand in-line steam sterilization and autoclave, it is suitable for fermentation, pharmaceutical and other biotechnology applications.



Features

- Inherently hydrophobic PTFE membranes
- High temperature resistance
- Oxidation resistant hardware
- High-flow and low pressure drop
- Enhanced steaming resistance
- 100% Integrity tested

Applications

- Process venting
- Compressed air
- Gas purification
- Fermentation feed air

Dimension

Out Diameter	2.72" (69mm)
Length	5" (125mm) / 10" (254mm) 20" (500mm) 30" (750mm) 40" (1000mm)

Integrity Test Parameters

• Diffusion Flow (DF)	⩽ 20 ml/min @ 1035 mbar (60/40 IPA/Water)
• Water Instrusion (WIT)	CFPPT0022U ⩽ 0.38 ml/min @ 2500 mbar CFPPT0022T ⩽ 0.75ml/min @ 2500 mbar

Material of Constructions

• Media	PTFE
• Support	PP/PET
• Cage/End Cap	High temperature resistance PP
• Core	High temperature resistance PP/SS
• Adapter	PP with insert

Pore Size

Gas	0.01 µm
Liquid	0.2 µm

Performance

• Max Operating Temperature	100 °C
• Max Operating DP	5.2 bar @ 20 °C
	2.4 bar @ 80 °C

Sterilization

• Inline Steam Sterilization	135 °C / 30 min, 150 cycles
• Maximum Forward Steam Sterilization	1 bar @ 135 °C
	0.3 bar @ 142 °C
• Maxinum Reverse Steam Sterilization	0.5 bar @ 125 °C
	0.2 bar @ 142 °C

Quality

- Filter cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System
- Materials of construction comply with FDA requlations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR
- 100% Integrity Tested
- Each individual element is tracked by serial number

Eg.=> CFPPT0022T050AH1PSY0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PT = PTFE phobic	0022 = 0.22µm	T = HT Ster Gr U = HT P Ste Gr	05 = 5" 10 = 10" 20 = 20" 30 = 30" 40 = 40"	0A = OD:69 mm	H1 = 222/Fin H2 = 222/Flat G1 = 226/Fin G2 = 226/Flat	P = Polypro U = SUS Steel	S = Silicone E = EPDM V = Viton	Y = SS reinforced P = PSU reinforced (Endcap: G1,G2, only)	0 = Rev.0

CFP series Hydrophobic PTFE membrane

Absolute Rated Hydrophobic PTFE

All Fluoropolymer Pleated Filter Cartridges

CFP series Absolute Rated Hydrophobic PTFE membrane, All Fluoropolymer Pleated Filter Cartridges are constructed PTFE support netting, and ultra-pure PFA hardware. This presents a filter cartridge with excellent chemical compatibility corrosion resistance, and low extractions to ensure high efficiency filtration and long service life with chemicals.

Features

- Excellent chemical compatibility
- High flow rate, low pressure loss, long service life
- 100% integrity tested

Applications

- Pharmaceutical products
- Fine chemicals
- Microelectronics fluids

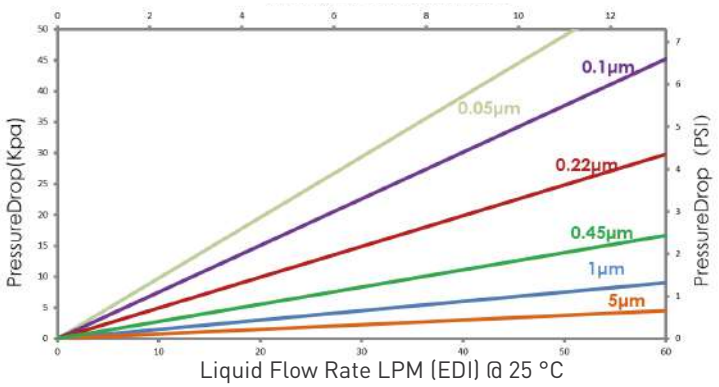
Dimension

- Outer Diameter — 2.72" (69 mm)
  3.3" (83 mm) Only 10 inch is available
- Length — 10"/20"/30"/40"
- Filtration Area:
  H100A = H / 10" / OD:69mm = 0.9 m^2 — H100H = H / 10" / OD:83mm = 1.51 m^2
- Premier Filtration Area
  K100A = K / 10" / OD:69mm = 1.12 m^2 — K100H = K / 10" / OD:83mm = 1.63 m^2

Material of Constructions

- Media — Hydrophobic PTFE membrane
- Support Netting — PFA/PTFE
- Cage/Core/End Cap — PFA
- Seal Material — E-FKM

Flow Rate size 10"
Liquid Flow Rate GPM (EDI) @ 25 °C

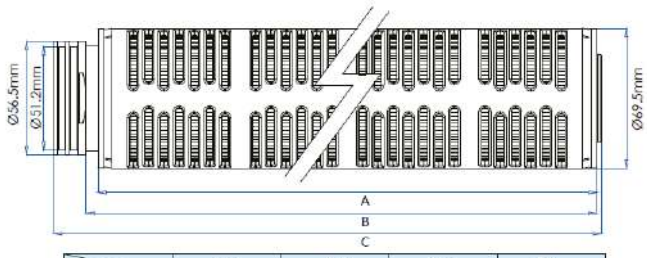


Performance

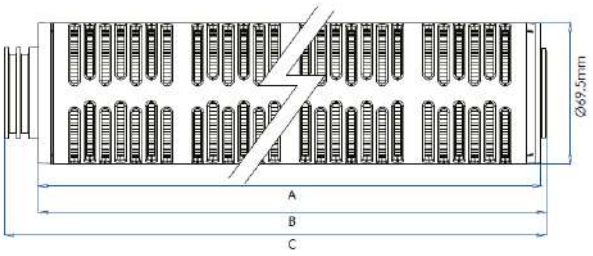
- Max Operating Temperature 160 °C
- Max Operating DP 5.0 bar @ 20 °C
  2.0 bar @ 120 °C
- SIP 135 °C / 30 min

Quality

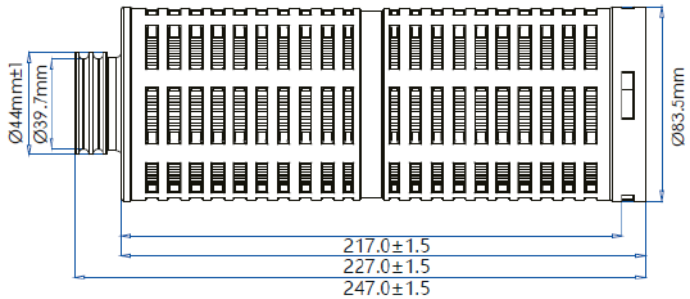
- Filter cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified
- Quality Management System



	10"	20"	30"	40"
A	246.0±1	496.0±2	746.0±2	996.0±2
B	260.0±1	510.0±2	760.0±2	1010.0±2
C	279.5±1	529.5±2	779.5±2	1029.5±2



	10"	20"	30"	40"
A	246.0±1		746.0±2	996.0±2
B	260.0±1	510.0±2	760.0±2	1010.0±2
C	279.5±1	529.5±2	779.5±2	1029.5±2



Eg.=> CFPPT0005H100AH2FFS2

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	PT = PTFE phobic	0003=0.03µm	H = High Chem	10 = 10"	0A = OD:69 mm	H2 = 222/Flat	F = PFA	F = E-FKM	S= Standard	2 = Prewet
		0005 = 0.05µm	K = P High Chem	20 = 20"	0H = OD:83mm (Size: 10, only)	G2 = 226/Flat				3 = No-Prewet
		0010 = 0.1µm		30 = 30"						5 = H.CL Prew
		0020 = 0.20µm		40 = 40"						6 = H.CL No-Prew
		0045 = 0.45µm								
		0100 = 1µm								
		0500 = 5µm								

CFP series Nylon membrane

CFP series Nylon membrane

General Applications NY Pleated Filter Cartridges

CFP series Nylon membrane General Applications Pleated Filter Cartridges are naturally hydrophillic due to polyamides filter media. This filter media has a high porosity and uniform pore size distribution, giving to series products high flow rate, high retention ability and long service life.

Features

- Naturally hydrophilic, no need for pre-wetting
- High flow rate, low DP and long service life
- Excellent integrity provides good particle removal and sterilization efficiency
- Non-contact welding adopted, no adhesives, low extractables
- Excellent chemical compactivity
- Tolerance for in-line steam sterilization
- Gross integrity

Applications

- Large volume parenterals (LVP) injections and antibiotic filtration
- Physiological saline solution and other solvents filtration of microorganism removal
- Pure Water and water-based filtration of microorganism removal

Dimension

Out Diameter	2,72" (69 mm)
Length	5" (125 mm)
	10" (254 mm)
	20" (500 mm)
	30" (750 mm)
	40" (1000 mm)

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Calss VI-121C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Material of Constructions

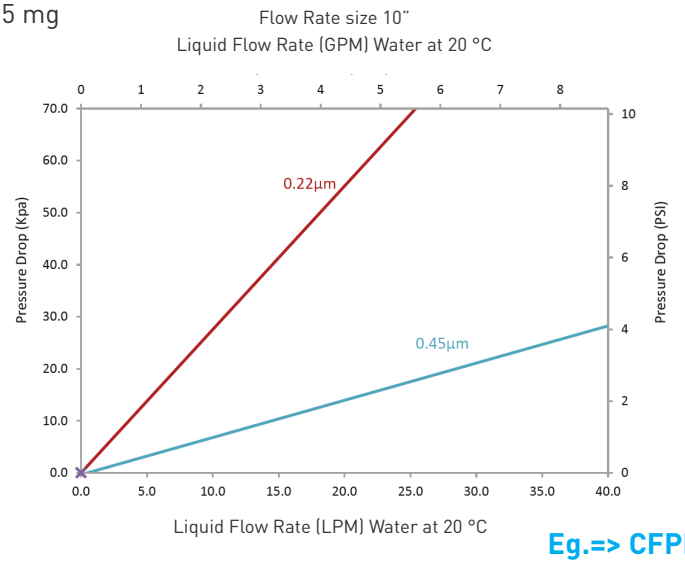
Filter medium	Nylon N66
Support/Drainage	PET
Cage/Core	Polypropylene
Endcap	Polypropylene and Insert

Performance

- Max Operating Temperature — 80 °C
- Max Operating DP — Forward 4.0 bar @ 25 °C; Forward 2.4 bar @ 80 °C
- SIP — 125 °C , 30min

Guarantees

- Manufactured in 100,000-class clean room environment
- Manufactured according to ISO9001:2015 certified quality management system
- Meets USP Biological Reactivity Test Requirements of the current USP <88> for plastic class VI
- Extractables per 10 inch < 25 mg



Eg.=> CFPNY0010G050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	NY = Nylon	0010 = 0.1µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard (Endcap: D0, only)	0 = Rev.0
		0022 = 0.22µm		10 = 10"		H1 = 222/Fin	S = SS Steel	E = EPDM	Y = SS reinforced (Endcap: D0, excluded)	
		0045 = 0.45µm		20 = 20"		H2 = 222/Flat		B = NBR	P = PSU reinforced (Endcap: G1, G2, only)	
		0120 = 1.2µm		30 = 30"		G1 = 226/Fin		V = Viton		
				40 = 40"		G2 = 226/Flat		K = FKM		
								F = E-FKM		

CFP Series
Glass Fiber media

CFP Series - Glass Fiber Media

General Applications Glass Fiber Pleated Filter Cartridges

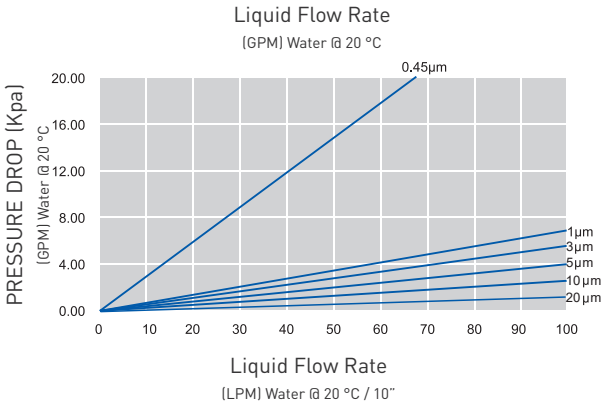
The CFP series General Applications Glass Fiber (GF) Pleated Filter cartridges are highly efficient, good for the pre-filtration of gas and vent, and can be effectively used in a variety of industrial applications. The cartridge offers a large surface area for high flow rates and high dirt holding capacity, also reduces labor costs with less changing of the filters.

Features

- Low pressure drops and high flow rates
- High filtration efficiency, up to 96%
- Excellent chemical compatibility
- High dirt holding capacity and long service life

Applications

- Food & Beverage
- Chemicals & Oil
- Pharmaceutical
- Process Water Treatment
- Pre-filtration of vent & gas



Dimension

Diameter	69 mm
Length	5", 10", 20", 30", 40"

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Class VI-121 °C for plastics
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Material of Constructions

- Media — GF
- Support — PP
- Core/Cage/End Cap — PP
- Seal Material — Silicone, EPDM, NBR, FKM, E-FKM

Performance

Operating Conditions

Max. Operating Temperature	80 °C
Max. Operating DP	4.0 Bar @ 20 °C
	2.4 Bar @ 80 °C

Quality

- Filter Cartridges are manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

Eg.=> CFPGF0045G050AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge Filter	GF = Glass Fiber	0045 = 0.45µm	G = Gen Purpose	05 = 5"	0A = OD:69 mm	D0 = DOE	P = Polypro	S = Silicone	S= Standard	0 = Rev.0
		0100 = 1µm		10 = 10"		E2 = 213/Flat	S = SS Steel	E = EPDM		
		0300 = 3µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, H1, H2, excluded)	
		0500 = 5µm		30 = 30"		H2 = 222/Flat		V = Viton		
		1000 = 10µm		40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
		2000 = 20µm				K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G5 = 226/Spear Fin				

CFP Series - Glass Fiber media

High Performance Glass Fiber Pleated Filter Cartridges

The CFP series High Performance Glass Fiber (GF) Pleated Filter cartridges are made of ultra-fine glass fiber. It has a high retention efficiency up to 96% which can effectively protect and prolong service life of terminal sterilization filters. It is widely used in the pre-filtration of gases etc.

Features

- No fiber releasing, very low leachables
- High flow rates and low pressure drops
- Excellent adsorption performance and high filtration efficiency
- All components comply with FDA regulations
- 100% integrity tested

Applications

- Remove particles in compressed gas, oil etc.
- Pre-filtration of gases in fermentation

Dimension

Diameter	69 mm
Length	5", 10", 20", 30", 40"

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Class VI-121 °C for plastics
- Filter cartridges passed European Commission Directives (EU10/2011)
- Halal Certified

Material of Constructions

- Media GF
- Support PP
- Cage/Core/End PP
- O-Ring Silicone, EPDM, NBR, FKM, E-FKM

Quality

- Filter Cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System
- 100% integrity test

Performance

Operating Conditions

Max Operating Temperature	80 °C
Max. Operating DP	4.0 bar @ 20 °C
	2.4 bar @ 80 °C

Sterilization

Autoclave Sterilization	121 °C , 60 min

Filtration Area

Ø 69mm	0.45 m²/10" Filter cartridges

Extractables

10" Filter Cartridges	< 20 mg

Eg.=> CFPGF0010P50AD0PSS0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Removal Rating**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFP = Pleated Cartridge	GF = Glass Fiber	0010=0.1µm	P = Premier	5 = 5"	0A = OD:69 mm	D0 = DOE	P = PP Core	S = Silicone	S= Standard	0 = Rev.0
		0030=0.3µm		10 = 10"		E2 = 213/Flat	S = SS Core	E = EPDM		
		0050=0.5µm		20 = 20"		H1 = 222/Fin		B = NBR	Y = SS reinforcement (Endcap D0, E2, H1, H2, excluded)	
				30 = 30"		H2 = 222/Flat		V = FKM		
				40 = 40"		H5 = 222/Spear Fin		F = E-FKM		
						K1 = 222 Ext/Fin			P = PSU reinforcement (Endcap G1, G2, only)	
						K2 = 222 Ext/Flat				
						G1 = 226/Fin				
						G2 = 226/Flat				
						G2 = 226/Flat				

CFW series
Glass Fibe
String Wound

CFW series Glass Fiber String Wound

High Dirt Filter Cartridges

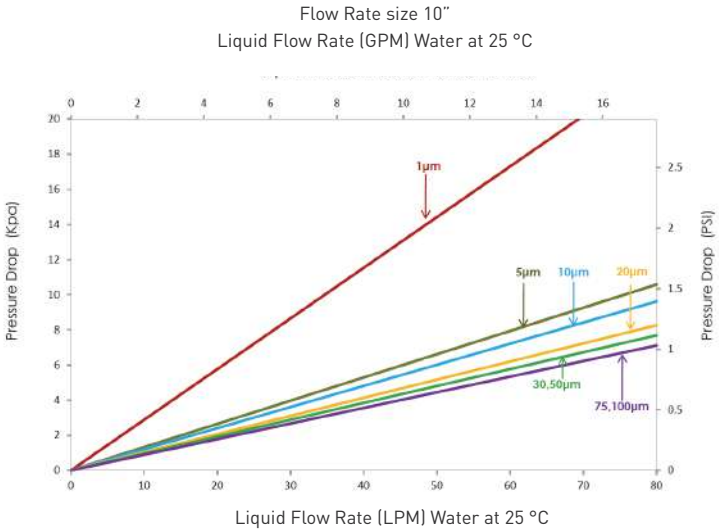
CFW Series String Wound Filter Cartridges are manufactured of structured loose outer layers and tight inner layers to offer true depth filtration for high dirt holding capacity and extremely low media migration. The main advantage of the string wound filter cartridge is its exceptionally high structural strength. Therefore, they can withstand higher PSID and severe operating conditi The economical design makes the cartridges of greater superiority in cost-saving.

Features

- Broad chemical compatibility
- Many different combinations of filter materials and pore sizes
- String Wound depth filter cartridge
- High dirt holding capacity
- Economical design

Applications

- Consumer Products
- Food and Beverage
- Drinking Water
- Pharmaceutical
- Edible Oil
- Inks & Paints
- Photographic
- Plating Solutions
- Petrochemicals
- Waste Water
- Chemicals
- Oil



Dimension

Out Diameter	63 mm (2.5") , 115 mm (4.5")
Inner Diameter	28 mm
Length	9.87", 10", 20", 30", 40"

Particle Removal Efficiency		
Membrane pore size identification	85% efficiency	95% efficiency
CFW 0100	1	----
CFW 0500	5	----
CFW 1000	10	----
CFW 2000	----	20
CFW 3000	----	30
CFW 5000	----	50
CFW 7500	----	75
CFW 10000	----	100

Material of Constructions

- Media — PP, Bleached Cotton, Glass Fiber
- Inner Core — PP, SS

Performance

- Max. operating temperature — PP: 80 °C; Cotton: 120 °C; Glass Fiber: 200 °C
- Max. pressure drop — 2.0 bar @ 25 °C

Eg.=> CFWCW0100D98MD0POS0

ORDERING INFORMATION										
Product Type	Membrane Type	Membrane pore size	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CFW = String Wound Cartridge	CW = Cotton S.W.	0100=1µm	D = High Dirt	98 =9.87"	0M = OD:63 mm	F = DOE	P = Polypro	O = No seal Mat	S= Standard	0 = Rev.0
	PW = Polypro S.W.	0500=5µm		10 = 10"	0L = OD:115 mm	M = 222 / Flat	S = SS Steel	S = Silicone		
	GW = Glass Fiber S.W.	1000=10µm		20 = 20"		T = 226 / Flat		E = EPDM		
		2000=20µm		30 = 30"		P = 222 / Fin		B = NBR		
		3000=30µm		40 = 40"		Q = 226 / Fin		V = Viton		
		5000=50µm				H = 213 / Flat				
		7500=75µm				E = 222 Extended / Fin				
		X100=100µm				N =222 Extended / Flat				
						W= 222 Spear Fin				

CFM series PP Melt Blown

CFM series PP Melt Blown PP

Melt Blown Standard Filter Cartridges

CFM series PP Melt Blown Standard Filter Cartridges are fused and intertwined with polypropylene resin without any chemical glues. The cartridge is glued at random to form 3D micro porea which will make the cartridge's 3 layers with fibers on the surface and inside. With the fiber, density from high filtration rating, strong pollutants hold capacity, low pressure drop, gradual changing structure loose outside and close inside, it can remove contaminant effectively,-such as suspended substance, particulate and rust, providing efficient filtration and long service life.

Applications

- R.O. Pre-filtration
- Food and Beverage
- Industry Water, Plating Solution
- Chemical, Organic Solvent Filtration
- Microelectronics
- Pharmaceutics

Particle Removal Efficiency		
Membrane pore size identification	85% efficiency	90% efficiency
1	1	----
3	3	----
5	5	----
10	----	10
25	----	25
50	----	50
75	----	75
100	----	100

Material of Constructions

• Media	PP
• End Cap	PP
• Sealing	Silicone, EPDM, NBR, Viton®
• Core	PP

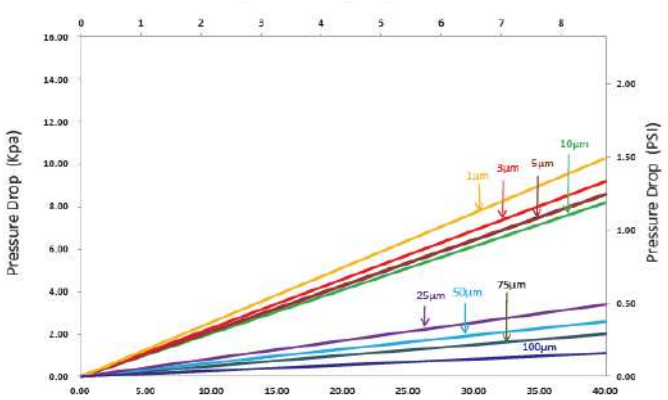
Dimension

Out Diameter	63 mm (2.5") , 115 mm (4.5")
Inner Diameter	28 mm
Length	9,87", 10", 20", 30", 40"

Performance

• Max Operating Temperature	65 °C
• Max Operating DP	2.0 bar @ 21 °C

Flow Rate size 10"
Liquid Flow Rate (GPM) Water at 20 °C



NSF COMPONENT

Tested and certified by NSF international to NSF/ANSI 42 for material requirement only.

Eg.=> CFMPP0100G97ZBD4X7X0

ORDERING INFORMATION										
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Size**	**Diameter**	**Endcap**	**Inner Core**	**Sealing Material**	**Connection Support**	**Revision**
CFM = Meltblown Cartridge	PP = Polypro,	0100 = 1µm	G =Gen Purpose	97 = 9.75"	ZB = 28/63mm	D4 = DOE no Endcap	X = No core	O = No seal mat	X= No supp	0 = Rev.0
		0300 = 3µm		98 = 9.87"	ZD = 28/115mm	D5 = DOE PE gasket	P = Polypro	B = NBR		
		0500 = 5µm		10 = 10"		H1 = 222/Fin		E = EPDM		
		1000 = 10µm		20 = 20"		H2 = 222/Flat		V = Viton		
		2500 = 25µm		30 = 30"		G1 = 226/Fin				
		5000 = 50µm		40 = 40"		G2 = 226/Flat				
		7500 = 75µm								
		X100 = 100µm								

CJD series Junior Pleated Cartridge

CJD series Junior Pleated Cartridge

GVS's range of 56mm OD CJD filter elements 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


4H


8H


SY


LY

Material of Constructions

- Media PP, PES, PTFE
- Support PP
- Cage/Core/End PP
- Sealing Silicone, EPDM, FKM

Performance

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

PP Junior Cartridge

ORDERING INFORMATION										
Product Type	Membrane Type	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CJD=Junior Pleated Cartridge	PP = Polypro	0100 = 1µm	P =Premier	H3=32mm H8=82mm X5=105mm For 4H	OF =OD:56mm	4H=AS118 15.3mm	P=PP	E=EPDM	S=Standard	0 = Rev.0
		0022=0.22µm		X7=107mm For 8H		8H=AS123 10.5mm		S=Silicone		
		0045=0.45µm		S7=70mm Y9=129mm For SY		SY=AS116 5mm		K=FKM		
		0100=1.0µm		L7=77mm Z6=136mm For LY		LY=AS116 12mm				
		0300 = 3µm								
		0500 = 5µm								
		1000 = 10µm								
		2000 = 20µm								
		5000 = 50µm								

PES Junior Cartridge

ORDERING INFORMATION										
Product Type	Membrane Type	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CJD=Junior Pleated Cartridge	PS= PES	0004 = 0.04µm	S =Ster Grade	H3=32mm H8=82mm X5=105mm For 4H	OF =OD:56mm	4H=AS118 15.3mm	P=PP	E=EPDM	S=Standard	0 = Rev.0
		0010=0.1µm		X7=107mm For 8H		8H=AS123 10.5mm		S=Silicone		
		0022=0.22µm		S7=70mm Y9=129mm For SY		SY=AS116 5mm		K=FKM		
		0045=0.45µm		L7=77mm Z6=136mm For LY		LY=AS116 12mm				
		0065 = 0.65µm								
		0120 = 1.2µm								

PTFE Junior Cartridge

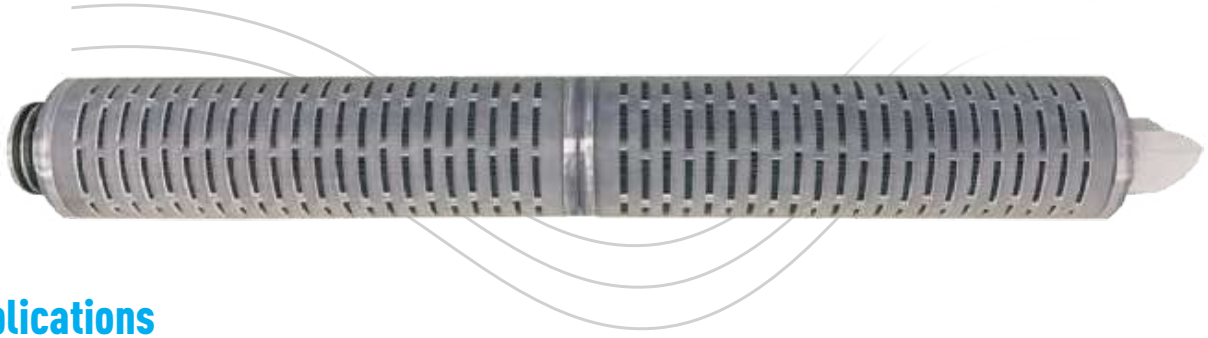
ORDERING INFORMATION										
Product Type	Membrane Type	Removal Rating	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CJD=Junior Pleated CartrCar-tridge	PT= PTFE	Application G	G =Gen Purpose	H3=32mm H8=82mm X5=105mm For 4H	OF =OD:56mm	4H=AS118 15.3mm	P=PP	E=EPDM	S=Standard	0 = Rev.0
		0010=0.1µm	S =Ster Grade	X7=107mm For 8H		8H=AS123 10.5mm		S=Silicone		
		0022=0.22µm		S7=70mm Y9=129mm For SY		SY=AS116 5mm		K=FKM		
		0045=0.45µm		L7=77mm Z6=136mm For LY		LY=AS116 12mm				
		0100= 1.0µm								
		0300 = 3.0µm								
		0500=5.00µm								
		1000=10.00µm								
		Application S								
		0010=0.1µm								
		0022=0.22µm								
		0045=0.45µm								
		0100=1.0µm								

CCD Series
Carbon Cellulose
Pleated Filter Cartridges

CCD Series

Carbon Cellulose Pleated Filter Cartridges

CCD Carbon Cellulose Pleated Filter Cartridges are made of high performance carbon impregnated cellulose media as well as FDA corresponding PP hardware and seal material. The media has features of narrow pore size distribution, big surface area, fast adsorption and desorption speed, good formability and other advantages. The main application of this filter cartridge is decolorizing filtration for pharmaceutical liquids and fine chemical products.



Applications

- Decolorizing filtration of organic solvent
- Decolorizing filtration of antibiotic, antivirus, hormone drugs
- Decolorizing filtration of Vitamins, amino acids, sugar, starch
- Decolorizing filtration of pesticide, fine chemical products

Dimension

Outer Diameter: 69 mm

Length: 5", 10", 20", 30", 40"

Material of Constructions

Media: carbon impregnated

Support: cellulose media PP

Cage/Core/End cap: PP

Sealing: Silicon, EPDM, FKM

Performance

Micro rating: 5 µm

PH: 1-13

Max Operating Temperature: ⩽ 50°C

Max Operating Pressure: 65°C, 1.0 bar / 80°C

Max. Operating DP: 4 bar @ 20°C, 1 bar @ 65°C

Eg.=> CCDCI0500L100AG1PSY0

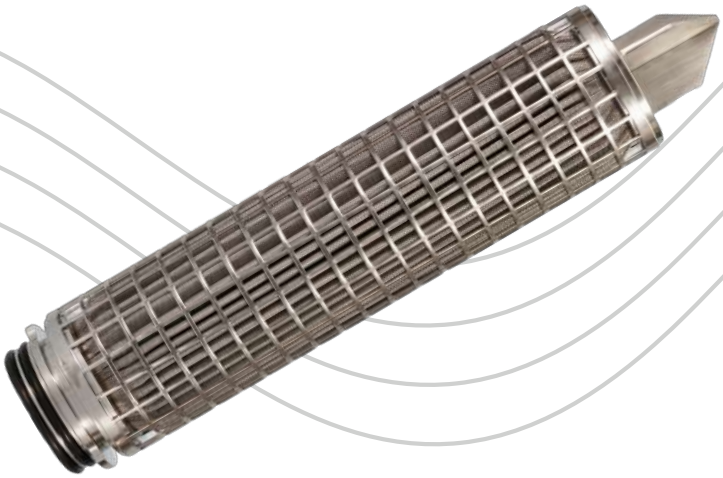
Product Type	Membrane Type	Membrane Pore Size	Application	Size	Diameter	Endcap	Inner Core	Seal Material	Connection Support	Revision
CCD = Carbon Cellulose Pleated Filter Cartridges	CI = Carbon impregnated Cellulose	0500 = 5µm	L = Decolorizing	05 = 5"	0A = OD: 69 mm	H2 = 222/Flat	P = Polypro	S = Silicone	Y = SS reinforcement	0 = Rev.0
				10 = 10"		H1 = 222/Fin		E = EPDM		
				20 = 20"		G1 = 226/Fin		K = FKM		
				30 = 30"		G2 = 226/Flat				
				40 = 40"						

SPK Series
Stainless Steel

Stainless Steel filter

Stainless Steel Pleated Filter Cartridge

The GVS Stainless Steel pleated filter Cartridge are composed of pleated woven stainless steel meshes.
The pleating process makes the filter media have a large effective filtration area,high dirt holding capacity and high flow rates. Sealing undergoes argon arc welding process, providing no leakage and excellent performance in high temperature and high pressure filtration environment. The filter cartridge can be cleaned repeatedly.



Features

- Homogeneous pore sizes, good Permeability
- Metal media possess high mechanical strength and no releasing media
- Strong corrosive resistance, does not
- Washable with long lifetime

Application

- Steam Filtration
- Oxidizing Liquid filtration
- Filtration of high viscosity liquids
- Liquid Decarburization filtration

Dimension

Outer Diameter: 60mm, 65mm, 68mm
Length: 5", 10", 20", 30", 40"

Material of Constructions

- Media 304/316L
- Core/Cage/Endcap 304/316L
- Seal Material Silicone, EPDM, NBR, E-FKM

Performance

- Maximum operating temperature 300˚C
- Maximum working differential pressure: 5.0 bar

Quality

Manufactured according to ISO9001:
2015 certified Quality Management System

ORDERING INFORMATION										
Product Type	Membrane Type	Membrane Pore Size	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
SPK=S-Steel Pleated Cartridge	SS=S304	0100 = 1µm	G=Gen Purpose	05=5"	0G=OD:60mm	D0=D0E	S=Standard	S=Silicone	S=Standard	0 = Rev.0
	SL=S316L	0300=3µm		10=10"	0E=OD:65mm	H2=222/Flat		E=EPDM		
		0500=5µm		20=20"	0B=OD:68mm	G2=226/Flat		B=NBR		
		1000=10µm		30=30"		S1=Screw		V=Viton		
		2000 = 20µm		40=40"				F=E-FKM		

Stainless Steel filter

Stainless Steel Sintered filter cartridge

GVS Metal Sintered filter cartridge is a microporous filter media formed by high purity stainless steel powder or titanium poweder as raw material by high temperature and high vacuum sintering process.
The filter media has high porosity, good mechanical properties, excellent chemical compatibility, no shedding, extremely low dissolution. Filter can be repeatedly cleaned and reused with low operating cost.

Features

- Tubular porous structure
- Metal material has high mechanical strength and no media falling off
- Good temperature resistance
- Washable and long-lasting

Application

- Steam Filtration
- Filtration of corrosive reagents
- High temperature fluid filtration
- Liquid Decarburization filtration

Dimension

Outer Diameter: 60mm, 65mm, 68mm
Length: 5", 10", 20", 30", 40"

Material of Constructions

- Media SS304/SS316L/Titanium
- Core/Cage/Endcap 304/316L
- Seal Silicone, EPDM, NBR, E-FKM

Performance

- Maximum operating temperature 280˚C
- Maximum Operating DP: 3.0 bar

Quality

Manufactured according to ISO9001:
2015 certified Quality Management System

ORDERING INFORMATION										
Product Type	Membrane Type	Membrane Pore Size	Application	Size	Diameter	Endcap	Inner Core	Sealing Material	Connection Support	Revision
CTK = Titanium Powder Cartridge	SS=S304	0100 = 1µm	G=Gen Purpose	05=5"	0G=OD:60mm	D0=D0E	S=Standard	S=Silicone	S=Standard	0 = Rev.0
CPK = S-Steel Powder Cartridge	SL=S316L	0300=3µm		10=10"	0E=OD:65mm	H2=222/Flat		E=EPDM		
	TI=Titanium	0500=5µm		20=20"	0B=OD:68mm	G2=226/Flat		B=NBR		
		1000=10µm				S1=Screw		V=Viton		
								F=E-FKM		

Bio Depth Capsule Filter

Description and use

The Bio Depth Capsule Filter are designed for Bio-products industry which mainly used in cell harvest clarification and downstream liquid filtration. The MSBDID is for lab scale filtration, MSBDED is for pilot testing research and lab scale protein production. The MSBDRD 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 Bio Depth 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.

Application

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

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

Bio-Safety

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

Construction of Materials

MediaCellulose	filter-aids and resins
Core/Cage/End Cap	PP/PC
Seal Material Option	Silicone

MSBDD-L

Filtration Area: 4000cm²

Filter Holders

Performance

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

MSBDID

Filtration Area: 34cm²

MSBDED-S

Filtration Area: 1600cm²

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		
Product Type	**Core**	**Removal Rating**
MSBDID	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

ORDERING INFORMATION			
Product Type	**Core**	**Removal Rating**	**Length**
MSBDID	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	S = Short L = Long

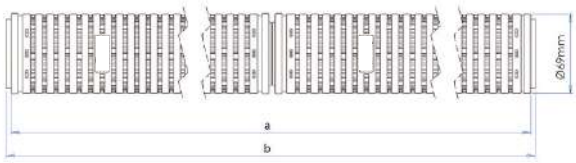
ORDERING INFORMATION							
Product Type	**Membrane**	**Removal Rating**	**Filter Cell**	**Layer**		**Seal Material**	**Separator**
MSBDID	C = PC	C0102 = 0.1~0.4μm C0105 = 0.1~0.8μm C0140 = 0.1~9μm C0240 = 0.2~9μm C0290 = 0.2~20μm C0690 = 0.6~20μm C0890 = 0.8~20μm	S= Single-Cell Capsule L = Multi-Cell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

APPENDIX

CARTFLOW DIMENSIONS
Pleated cartridge membrane: PES, PSU, PTFE, Nylon

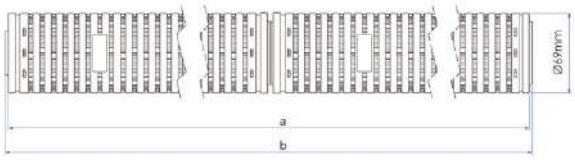
Endcap — Connection support

DOE — Standard



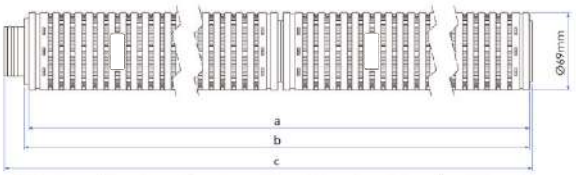
	5"	10"	20"	30"	40"
a	117.0±1	246.0±1	492.0±2	742.0±2	992.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2

213/ Flat — Standard



	5"	10"	20"	30"	40"
a	115.0±1	245.0±1	495.0±2	745.0±2	995.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2

222/ Flat — Standard

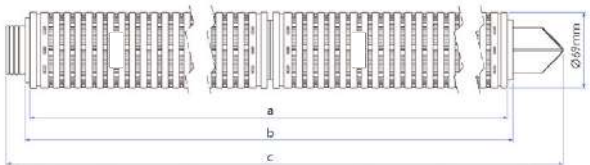


	5"	10"	20"	30"	40"
a	116.0±1	246.0±1	496.0±2	746.0±2	996.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.0±1	270.0±1	520.0±2	770.0±2	1020.0±2

222/ Fin — Standard

	5"	10"	20"	30"	40"
a	118.0±1	247.0±1	493.0±2	743.0±2	993.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	177.5±1	316.5±1	562.5±2	812.5±2	1062.5±2

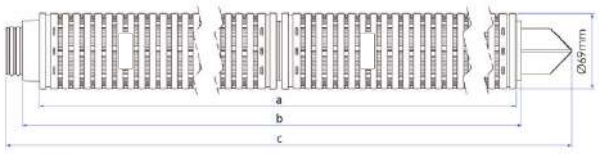
222/ Spear Fin — Standard



	5"	10"	20"	30"	40"
a	116.0±1	245.0±1	491.0±2	741.0±2	991.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	188.5±1	317.5±1	563.5±2	813.5±2	1063.5±2

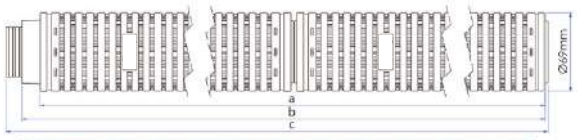
Endcap — Connection support

222/ Spear Fin — SS Reinforced



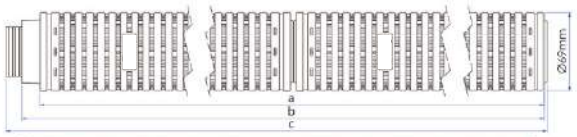
	5"	10"	20"	30"	40"
a	114.0±1	243.0±1	489.0±2	739.0±2	989.0±2
b	135.0±1	264.0±1	510.0±2	760.0±2	1010.0±2
c	196.0±1	325.0±1	571.0±2	821.0±2	1071.0±2

222 Extended/ Flat — Standard



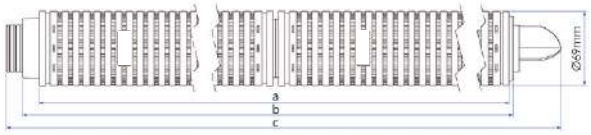
	5"	10"	20"	30"	40"
a	114.0±1	244.0±1	494.0±2	744.0±2	994.0±2
b	130.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	146.5±1	276.5±1	526.5±2	776.5±2	1026.5±2

222 Extended/ Flat — SS Reinforced



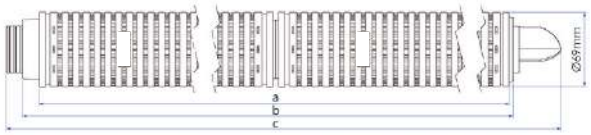
	5"	10"	20"	30"	40"
a	114.0±1	244.0±1	494.0±2	744.0±2	994.0±2
b	130.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	146.5±1	276.5±1	526.5±2	776.5±2	1026.5±2

222 Extended/ Fin — Standard



	5"	10"	20"	30"	40"
a	116.0±1	245.0±1	491.0±2	741.0±2	991.0±2
b	135.0±1	264.0±1	510.0±2	760.0±2	1010.0±2
c	194.5±1	323.5±1	569.5±2	819.5±2	1069.5±2

222 Extended/ Fin — SS Reinforced

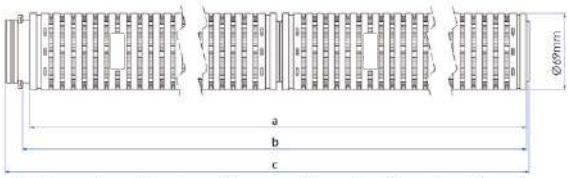


	5"	10"	20"	30"	40"
a	116.0±1	245.0±1	491.0±2	741.0±2	991.0±2
b	135.0±1	264.0±1	510.0±2	760.0±2	1010.0±2
c	194.5±1	323.5±1	569.5±2	819.5±2	1069.5±2

CARTFLOW DIMENSIONS

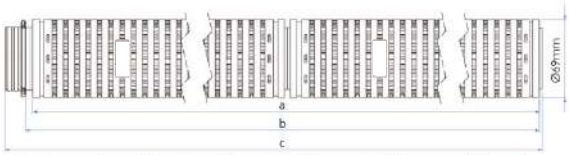
Endcap — Connection support

226/ Flat — Standard



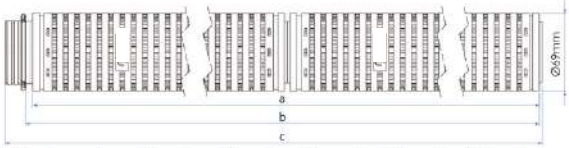
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	139.5±1	269.5±1	519.5±2	769.5±2	1019.5±2

226/ Flat — SS Reinforced



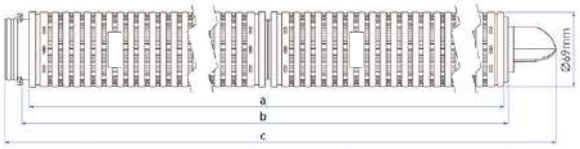
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.5±1	270.5±1	520.5±2	770.5±2	1020.5±2

226/ Flat — PSU Reinforced



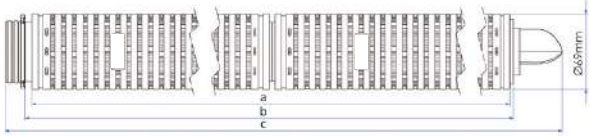
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.5±1	270.5±1	520.5±2	770.5±2	1020.5±2

226/ Fin — Standard



	5°	10°	20°	30°	40°
a	115.0±1	244.0±1	490.0±2	740.0±2	990.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2
c	186.5±1	315.5±1	561.5±2	811.5±2	1061.5±2

226/ Fin — SS Reinforced



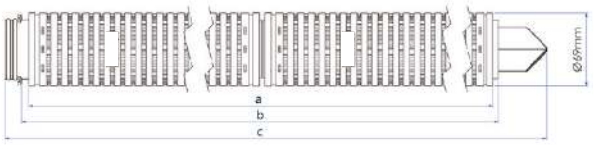
	5°	10°	20°	30°	40°
a	115.0±1	244.0±1	490.0±2	740.0±2	990.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2
c	188.0±1	317.0±1	563.0±2	813.0±2	1063.0±2

Endcap — Connection support

226/ Fin — PSU Reinforced

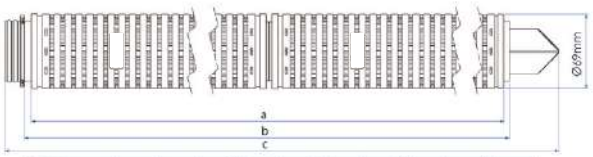
	5°	10°	20°	30°	40°
a	115.0±1	244.0±1	490.0±2	740.0±2	990.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2
c	188.0±1	317.0±1	563.0±2	813.0±2	1063.0±2

226/ Spear Fin — Standard



	5°	10°	20°	30°	40°
a	113.0±1	242.0±1	488.0±2	738.0±2	988.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2
c	182.0±1	316.0±1	562.0±2	812.0±2	1062.0±2

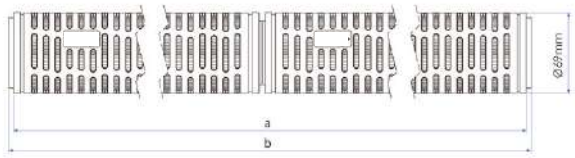
226/ Spear Fin — SS Reinforced



	5°	10°	20°	30°	40°
a	113.0±1	242.0±1	488.0±2	738.0±2	988.0±2
b	125.0±1	254.0±1	500.0±2	750.0±2	1000.0±2
c	190.5±1	319.5±1	565.5±2	815.5±2	1065.5±2

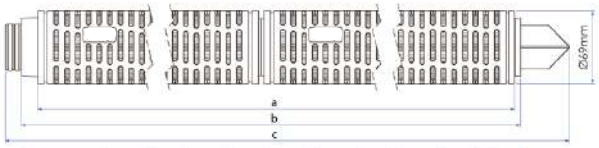
CARTFLOW DIMENSIONS
Pleated cartridge media: PP

DOE / Standard



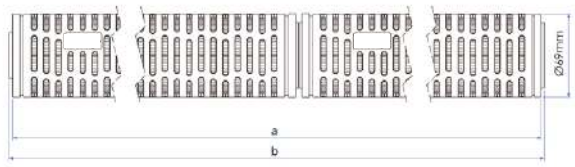
	5"	10"	20"	30"	40"
a	117.0±1	242.0±1	492.0±2	742.0±2	992.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2

222/Spear Fin / SS Reinforced



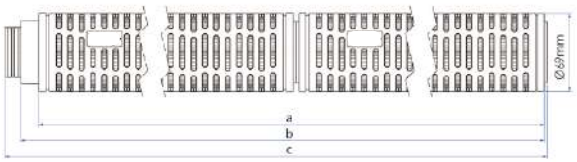
	5"	10"	20"	30"	40"
a	114.0±1	239.0±1	489.0±2	739.0±2	989.0±2
b	135.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	196.0±1	321.0±1	571.0±2	821.0±2	1071.0±2

213/ Flat / Standard



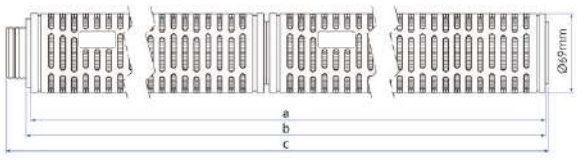
	5"	10"	20"	30"	40"
a	115.0±1	245.0±1	495.0±2	745.0±2	995.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2

222 Extended/ Flat / Standard



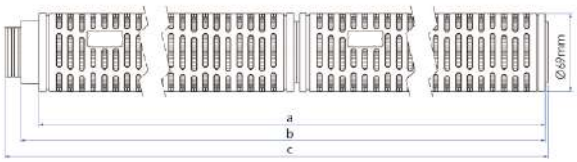
	5"	10"	20"	30"	40"
a	114.0±1	244.0±1	494.0±2	744.0±2	994.0±2
b	130.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	146.5±1	276.5±1	526.5±2	776.5±2	1026.5±2

222/ Flat / Standard



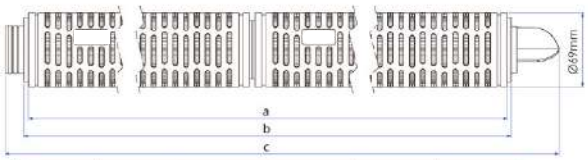
	5"	10"	20"	30"	40"
a	116.0±1	246.0±1	496.0±2	746.0±2	996.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	110.0±1	270.0±1	520.0±2	770.0±2	1020.0±2

222 Extended/ Flat / SS Reinforced



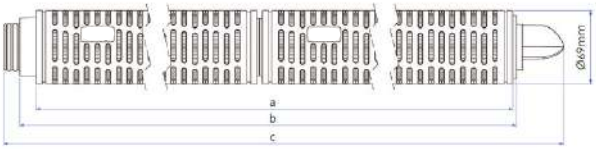
	5"	10"	20"	30"	40"
a	114.0±1	244.0±1	494.0±2	744.0±2	994.0±2
b	130.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	146.5±1	276.5±1	526.5±2	776.5±2	1026.5±2

222/ Fin / Standard



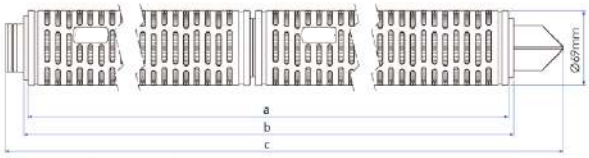
	5"	10"	20"	30"	40"
a	118.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	187.5±1	312.5±1	562.5±2	812.5±2	1062.5±2

222 Extended/ Fin / Standard



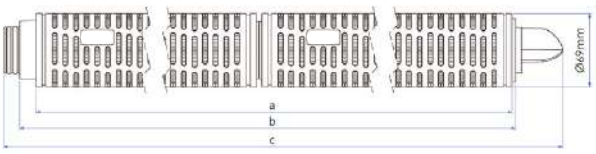
	5"	10"	20"	30"	40"
a	117.0±1	242.0±1	492.0±2	742.0±2	992.0±2
b	135.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	194.5±1	319.5±1	569.5±2	819.5±2	1069.5±2

222/ Spear Fin / Standard



	5"	10"	20"	30"	40"
a	116.0±1	241.0±1	491.0±2	741.0±2	991.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	188.5±1	313.5±1	563.5±2	813.5±2	1063.5±2

222 Extended/ Fin / SS Reinforced

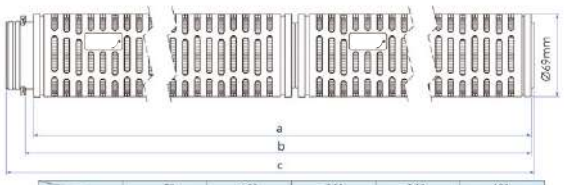


	5"	10"	20"	30"	40"
a	117.0±1	242.0±1	492.0±2	742.0±2	992.0±2
b	135.0±1	260.0±1	510.0±2	760.0±2	1010.0±2
c	194.5±1	319.5±1	569.5±2	819.5±2	1069.5±2

CARTFLOW DIMENSIONS

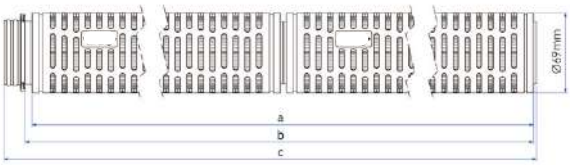
Endcap — Connection support

226/ Flat — Standard



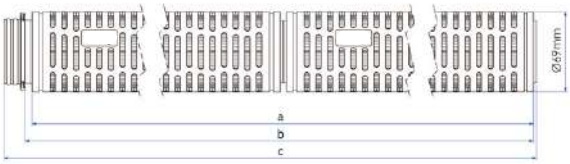
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	138.5±1	268.5±1	518.5±2	768.5±2	1018.5±2

226/ Flat — SS Reinforced



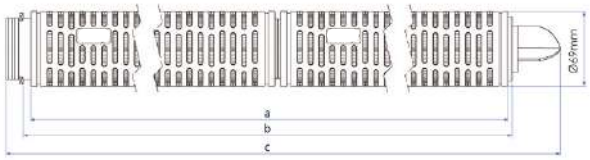
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.5±1	270.5±1	520.5±2	770.5±2	1020.5±2

226/ Flat — PSU Reinforced



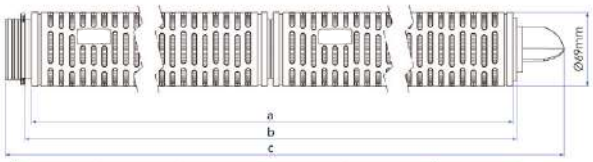
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.5±1	270.5±1	520.5±2	770.5±2	1020.5±2

226/ Fin — Standard



	5°	10°	20°	30°	40°
a	115.0±1	240.0±1	490.0±2	740.0±2	990.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	185.5±1	310.5±1	560.5±2	810.5±2	1060.5±2

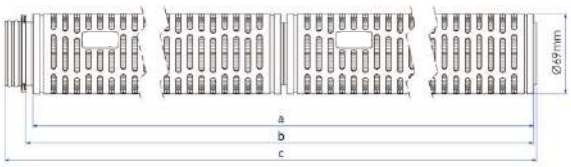
226/ Fin — SS Reinforced



	5°	10°	20°	30°	40°
a	115.0±1	240.0±1	490.0±2	740.0±2	990.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	188.0±1	313.0±1	563.0±2	813.0±2	1063.0±2

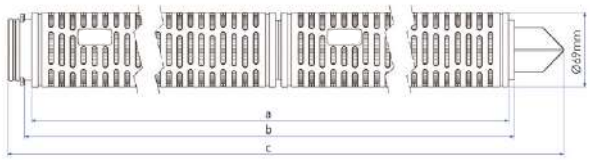
Endcap — Connection support

226/ Fin — PSU Reinforced



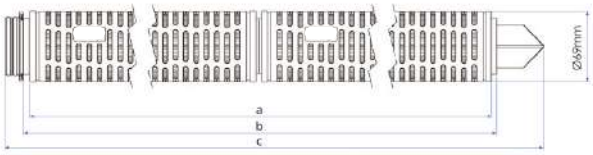
	5°	10°	20°	30°	40°
a	113.0±1	243.0±1	493.0±2	743.0±2	993.0±2
b	120.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	140.5±1	270.5±1	520.5±2	770.5±2	1020.5±2

226/ Spear Fin — Standard



	5°	10°	20°	30°	40°
a	113.0±1	238.0±1	488.0±2	738.0±2	988.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	187.0±1	312.0±1	562.0±2	812.0±2	1062.0±2

226/ Spear Fin — SS Reinforced



	5°	10°	20°	30°	40°
a	113.0±1	238.0±1	488.0±2	738.0±2	988.0±2
b	125.0±1	250.0±1	500.0±2	750.0±2	1000.0±2
c	189.0±1	318.0±1	564.0±2	814.0±2	1064.0±2

HOUSFLOW

CHDA Series - Sanitary Single-Round Liquid Filter Housings

Sanitary Single-Round Liquid Filter Housings are designed to meet requirements for sanitary construction with smooth crevice-free welding and TC-type sanitary connections. Easy to clean and disassemble. Suitable for low flow rate applications with low-to-medium pressure conditions. This design is widely used in pharmaceutical, bio-technology, and food/beverage industries.

Features

- Ultra-high degree of polishing: Internal: Ra≤0.3μm; External: Ra≤ 0.4μm
- Meets GMP standards with smooth crevice-free welding and sanitary design. Excellent cleanability & liquid drainage.
- Vent/Drain Port: The threaded sleeve is separated from stepped hose barb, so the connection tube will not rotate when venting or draining.
- A strengthened closure clamp allows a maximum operating pressure of 1.0MPa.
- With a small footprint and ease of disassembly, this series is ideally suited for use in the manufacture of pharmaceutical and food/beverage product.
- The heavy-duty housing legs have strengthened threads for stability and ruggedness. Adjustable nuts on the legs allow height adjustment for installation convenience.
- Suitable for Suitable for Clean-in-Place and Steam-in Place processes.
- Compatible with cartridge connection for 222 and 226.
- Optional N6 drain port (sampling port).

Surface Finish

Finish Processing Options:	Electropolished
	Mech. Polished
Polish Quality:	Internal: Ra ≤ 0.3μm
	External: Ra ≤ 0.4μm

Materials

Shell Options:	304 or 316L Stainless Steel
Drain/Vent Port:	304, 316L
Tri-Clamp:	304
Stabilizer Blade:	304
Seal Materials:	Silicone, FKM, EPDM

Operating Conditions

Max. Operating Pressure:	1.0MPa (150psi)
Max.Operating Temperature:	140°C(284°F)

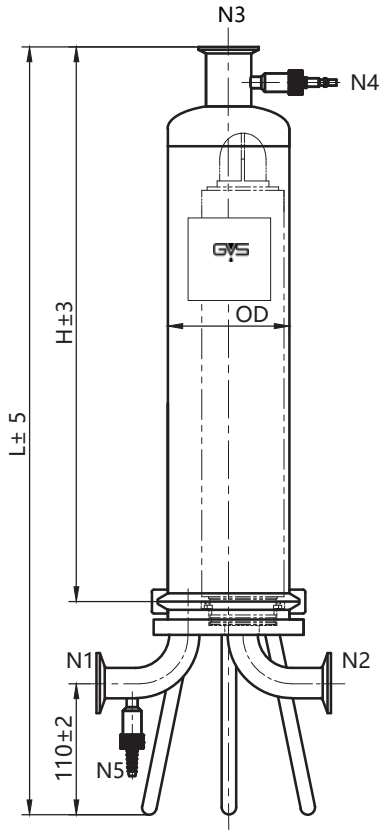
Connection

Shell Connection:	Tri-clamp
Inlet & Outlet (N1, N2):	1" Tri-clamp(T25)
Vent Port(N4):	Sanitary hose barb valve fit with integrity test interface
Drain Port (N5, N6):	Sanitary hose barb valve for 8mm i.D. tubing
Pressure Gauge Port(N3):	1.5" Tri-clamp

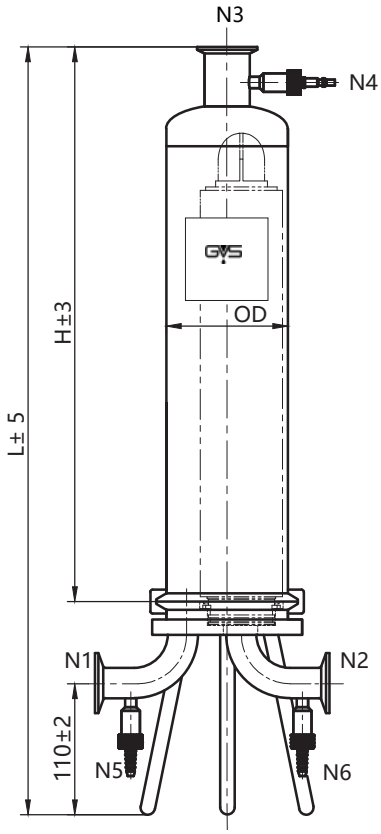
Applications

- Pharmaceuticals: filtration of injectables, LVPs, water for injection, antibiotics, and other biological products
- Food and beverage: filtration of beer, wine, distilled spirits, juices, syrups, and drinking water
- Petrochemical industry: filtration of oilfield water, organic solvents, acids, and alkaline fluids
- Microelectronics: pre-filtration of high-purity water

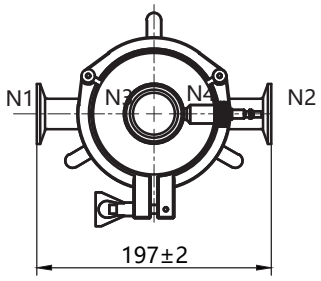
Dimensions (mm)



Type A (N6-free)



Type B



Housing / Cartridge length / height(mm)	H	L
5''	240	420
10''	370	550
20''	620	800
30''	870	1,050
40''	1,120	1,300

Eg.=>CHDAAQJ0105T25SEEY

ORDERING INFORMATION

Series	Connection	Shell Material	Qty.	Length	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDAA=CHDA Series Filter Housigs(N6-free)	Q = 226 / Fin	J=304	01=1	05 = 5"	T25=TCDN25	S=Silicone	E=Electropolished	E=Electropolished	Y=1.0Mpa
	P = 222 / Fin	K=316L		10 = 10"	B25=ASME-BPE	E=EPDM	M=Mech. Polished	M=Mech. Polished	
CHDAB=CHDA Series Filter Housings	T = 226 / Flat			20 = 20"	DN25	V=FKM			
	M = 222 / Flat			30 = 30"	F25=Flange DN25				
				40 = 40"					

CHDB Series - Sanitary Multi-Round Liquid Filter Housings

Sanitary Multi-Round Liquid Filter Housings are designed to meet requirements for sanitary construction with smooth crevice-free welding and TC-type sanitary connections. Easy to clean and disassemble. Suitable for higher flow rate applications with low-to-medium pressure conditions. This design is widely used in pharmaceutical, bio-technology, and food/beverage industries. The internal surface can be finely polished down to Ra≤0.3μm.

Features

- Ultra-high degree of polishing: Internal: Ra≤0.3μm; External: Ra≤0.4μm
- Meets GMP standards with smooth crevice-free welding and sanitary design. Excellent cleanability & liquid drainage.
- Vent port feature: Tri-clamp connection for convenience.
- A strengthened closure clamp allows a maximum operating pressure of 1.0MPa.
- The faceplate can be made detachable for full-surface cleaning.
- Suitable for CIP and SIP processes.
- Compatible with cartridge connection for 222 and 226.
- Optional N6 drain port (sampling port).

Surface Finish

Finish Processing Options:	Electropolished Mech. Polished
Polish Quality:	Internal: Ra ⩽ 0.3μm External: Ra ⩽ 0.4μm

Operating Conditions

Max. Operating Pressure:	1.0MPa (150psi)
Max.Operating Temperature:	140˚C(284°F)

Materials

Shell Options:	304 or 316L Stainless Steel
Drain/Vent Port:	304 or 316L
Tri-Clamp:	304
Stabilizer Blade:	304
Seal Materials:	Silicone, FKM, EPDM

Connection

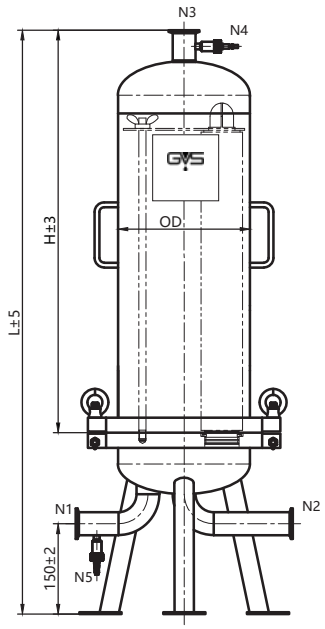
Shell Connection:	Flange eyebolt
Inlet & Outlet (N1, N2):	1.5'', 2'', 2.5'' Tri-clamp
Vent Port(N4):	Sanitary hose barb valve fit with integrity test interface
Drain Port (N5, N6):	Sanitary hose barb valve for 8mm i.D. tubing
Pressure Gauge Port(N3):	1.5" Tri-clamp

Applications

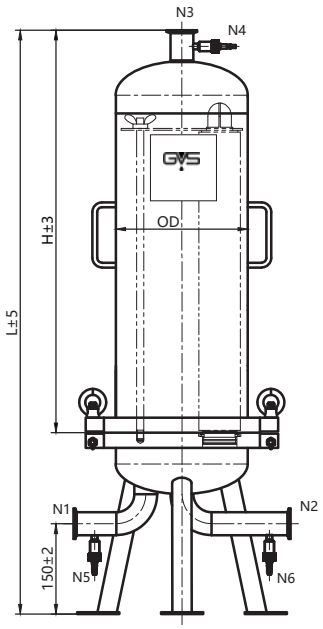
- Pharmaceuticals: filtration of injectables, LVPs, water for injection, antibiotics, and other biological products.
- Food and beverage: filtration of beer, wine, distilled spirits, juices, syrups, and drinking water.
- Petrochemical industry: filtration of oilfield water, organic solvents, acids, and alkaline fluids.
- Microelectronics: pre-filtration of high-purity water

Dimensions (mm)

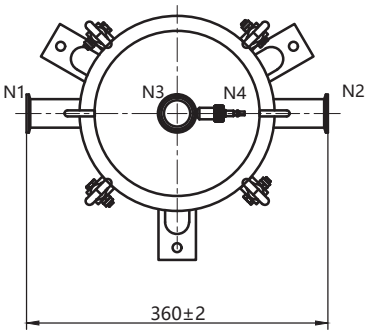
3-Round



Type A (N6-free)

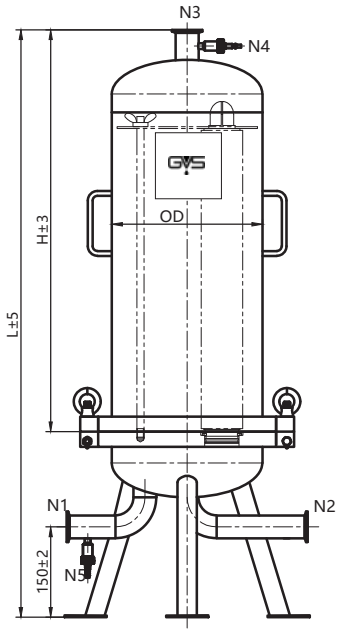


Type B

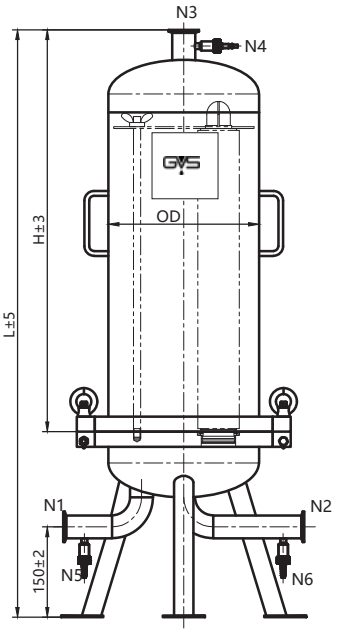


Housing / Cartridge length	height(mm) H	L
10''	418	720
20''	668	970
30''	918	1,220
40''	1,168	1,470

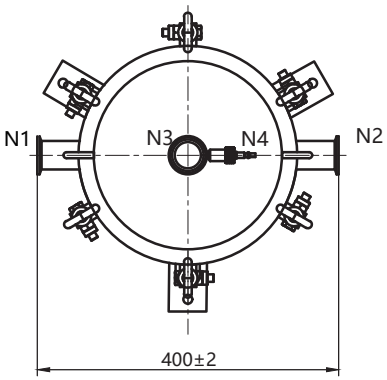
5-Round



Type A (N6-free)

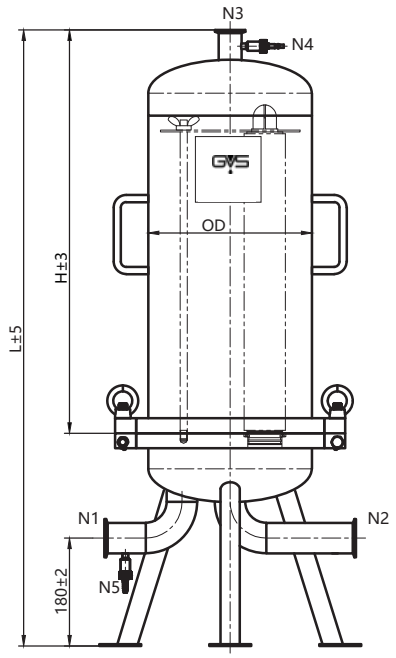


Type B

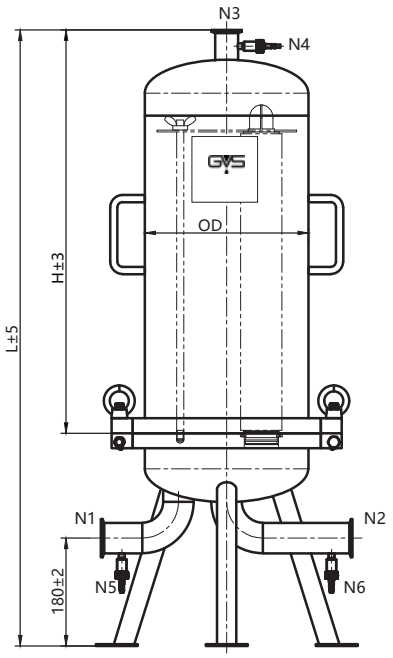


Housing / Cartridge length	height(mm) H	L
10''	417	725
20''	667	975
30''	917	1,225
40''	1,167	1,475

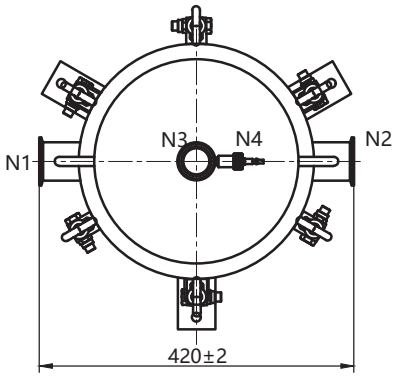
7-Round



Type A (N6-free)

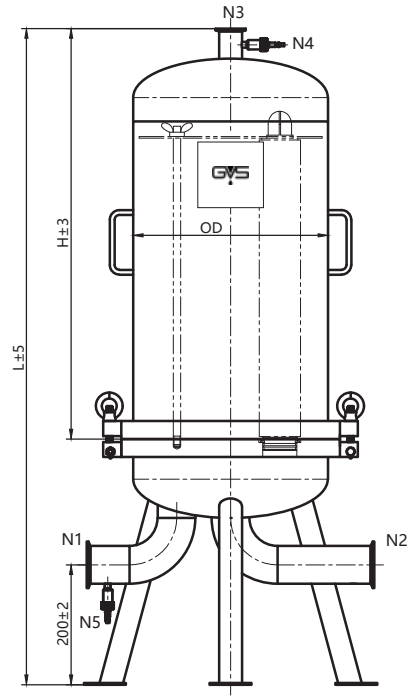


Type B

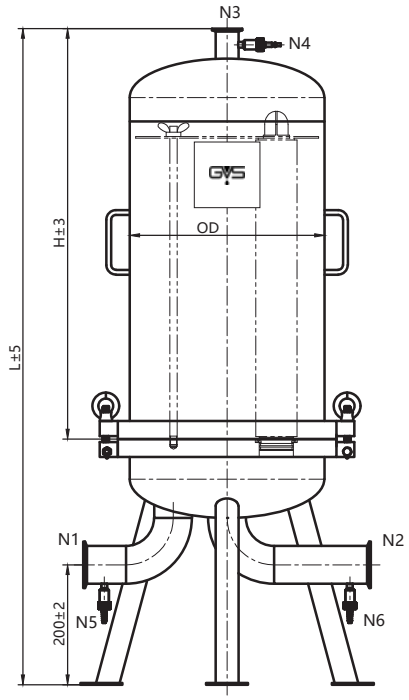


Housing / Cartridge length	Housing height(mm) H	L
10''	423	778
20''	673	1,028
30''	923	1,278
40''	1,173	1,528

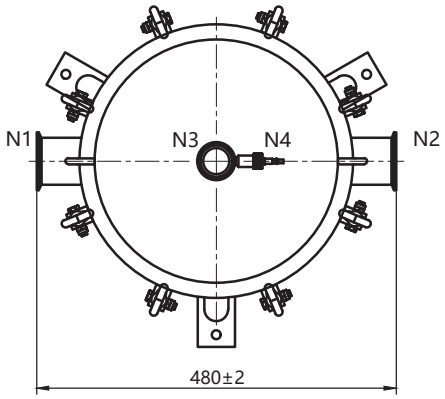
9-Round



Type A (N6-free)

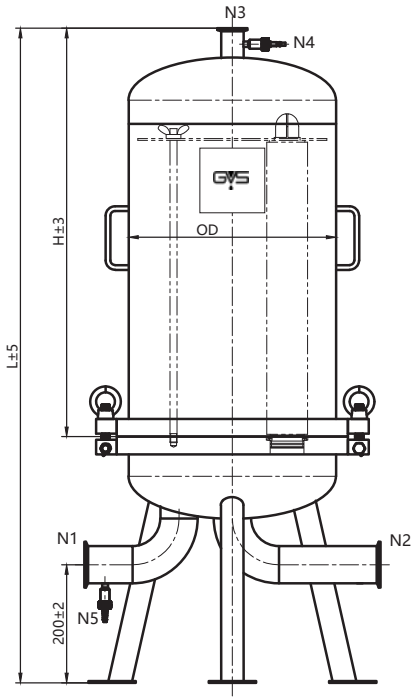


Type B

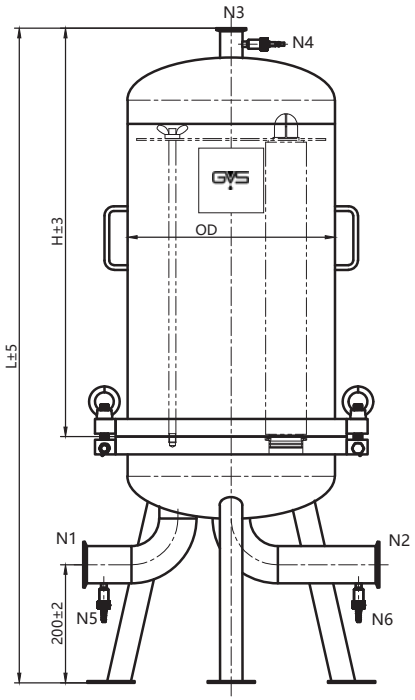


Housing / Cartridge length	Housing height(mm) H	L
10''	436	846
20''	686	1,096
30''	936	1,346
40''	1,186	1,596

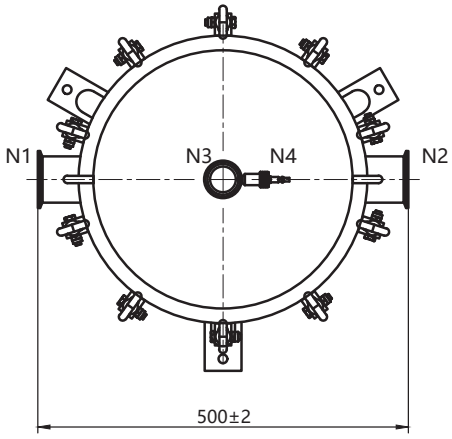
12-Round



Type A (N6-free)



Type B



Housing / Cartridge length	height(mm) H	L
10"	442	858
20"	692	1,108
30"	942	1,358
40"	1,192	1,608

Eg.=>CHDBAQJ0310T38SEEY

ORDERING INFORMATION									
Series	Connection	Shell Material	Qty.	Length	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDBA=B Series Filter Housings(N6-free) CHDBB=B Series Filter Housings	Q = 226 / Fin P = 222 / Fin T = 226 / Flat M = 222 / Flat	J=304 K=316L	03 = 3 05= 5 07 = 7 09 = 9 12 = 12	10 = 10" 20 = 20" 30 = 30" 40 = 40"	T38=TC 1.5"(Only for 3 cartridges) T50=TC 2" (for 5, 7 cartridges) T63=TC 2.5"(for 9, 12 cartridges)	S=Silicone E=EPDM V=FKM	E=Electropolished M=Mech. Polished	E=Electropolished M=Mech. Polished	Y=1.0Mpa

CHDC Series - Sanitary In-Line Filter Housings

Sanitary In-Line Filter Housings are the ideal choice when the application calls for a compact and cost-effective design. Suitable for filtration of liquids and gases. Uses a convenient clamp body closure and drain/vent ports.

Features

- Ultra-high degree of polishing: Internal: Ra ⩽ 0.3μm; External: Ra ⩽ 0.4μm
- Meets GMP standards with smooth crevice-free welding and sanitary design.
- Excellent cleanability & liquid drainage.
- Vent/Drain Valve: the threaded sleeve is separated from stepped hose barb, so the connection tube will not rotate when venting or draining.
- A strengthened closure clamp allows a maximum operating pressure of 1.0MPa.
- Compatible with cartridge connection for 222 and 226.

Surface Finish

Finish Processing Options:	Electropolished
	Mech. Polished
Polish Quality:	Internal: Ra ⩽ 0.3μm
	External: Ra ⩽ 0.4μm

Operating Conditions

Max. Operating Pressure:	1.0MPa (150psi)
Max.Operating Temperature:	140℃(284°F)

Materials

Shell Options:	304, 316L Stainless Steel
Drain/Vent Port:	304, 316L
Tri-Clamp:	304
Seal Materials:	Silicone, FKM, EPDM

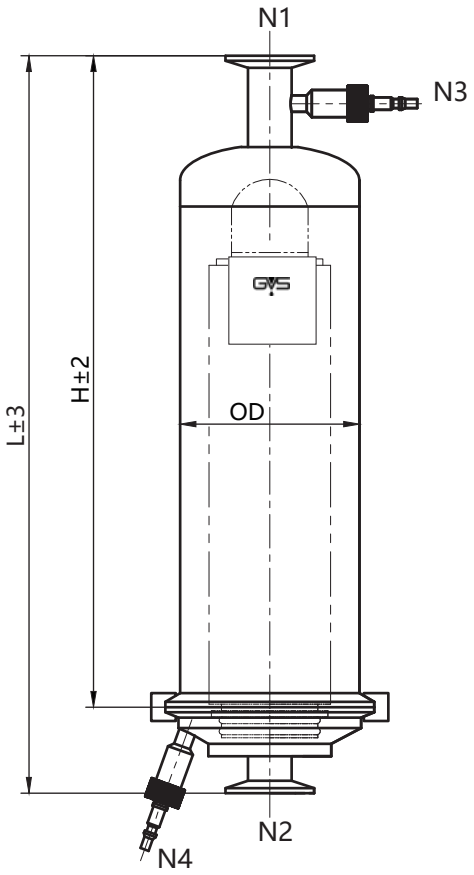
Connection

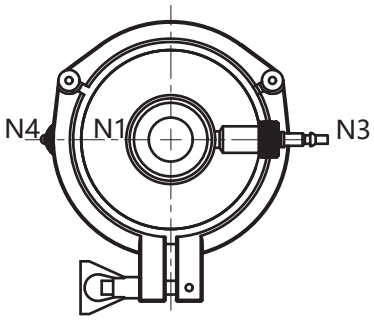
Shell Connection:	Tri-clamp
Inlet & Outlet (N1, N2):	1''Tri-clamp (T25)
Vent Port(N3):	Sanitary hose barb valve fit with integrity test interface
Drain Port (N4):	Sanitary hose barb valve for 8mm i.D. tubing

Applications

- Particle filtration of pipeline liquids.
- In-line gas filtration or as a respirator.
- Filtration of beverages, edible oils, etc.

Dimensions (mm)





Housing height(mm) / Cartridge length	H	L
5''	238	288
10''	368	418
20''	618	668
30''	868	918
40''	1,118	1,168

Eg.=>CHDCQJ0105T25SEEY

ORDERING INFORMATION									
Series	**Connection**	**Shell Material**	**Qty.**	**Length**	**Inlet&Outlet**	**Seal Material**	**Surface Finish (internal)**	**Surface Finish (external)**	**Design Pressure**
CHDC=Sanitary In-Line Filter Housing	Q = 226 / Fin P = 222 / Fin T = 226 / Flat M = 222 / Flat	J=304 K=316L	01=1	05 = 5" 10 = 10" 20 = 20" 30 = 30" 40 = 40"	T25=TCDN25 B25=ASME-BPE DN25F25=Flange DN25	S=Silicone E=EPDM V=FKM	E=Electropolished M=Mech. Polished	E=Electropolished M=Mech. Polished	Y=1.0Mpa

CHDD Series - Sanitary Gas Filter Housings

Sanitary Gas Filter Housings are suitable for removal of particulate from gas streams. When used with appropriate sterilizing-grade filter cartridges, the combination can be used in high-purity sterile gas filtration.

Features

- Ultra-fine polishing: Internal: Ra≤0.3μm; External: Ra≤ 0.4μm
- Accepts 226-style cartridges with locking tabs to assure safe and secure sealing performance.
- The Tri-Clamp body connection allows easy servicing and cartridge change-out.
- Compatible with cartridge connection for 222 and 226, the housing is applied in high-purity, high-temperature, aseptic, fermentation, etc.

Surface Finish

Finish Processing Options:	Electropolished
	Mech. Polished
Polish Quality:	Internal: Ra ≤ 0.3μm
	External: Ra ≤ 0.4μm

Operating Conditions

Max. Operating Pressure:	0.6MPa (90psi, Tri-clamp)
Max.Operating Temperature:	1.0MPa (150psi, Flange)
	140˚C (284°F)

Materials

Shell Options:	304 or 316L Stainless Steel
Drain Port:	304 or 316L
Tri-clamp:	304
Stabilizer Blade:	304
Seal Materials:	Silicone, FKM, EPDM

Connection

Shell Connection:	Tri-clamp or Flange
Inlet & Outlet (N1, N2):	1'', 1.5''Tri-clamp or DN25/ DN50 Flange(PL-RF, HG/ T20592-2009 PN16)
Pressure Gauge Port(N3):	M14*1.5Thread FNP-
Drain Port(N4):	T1/4"Thread

Applications

- Pharmaceuticals: gas sterilization and air/gas filtration in the production of biological products
- Food and beverage: gas sterilization and air/gas filtration in the production of food, beverages, and fermented products
- Chemical industry: filtration of industrial gases such as coal gas, hydrogen, nitrogen, and natural gas, among others
- Laboratory: environmental air filtration

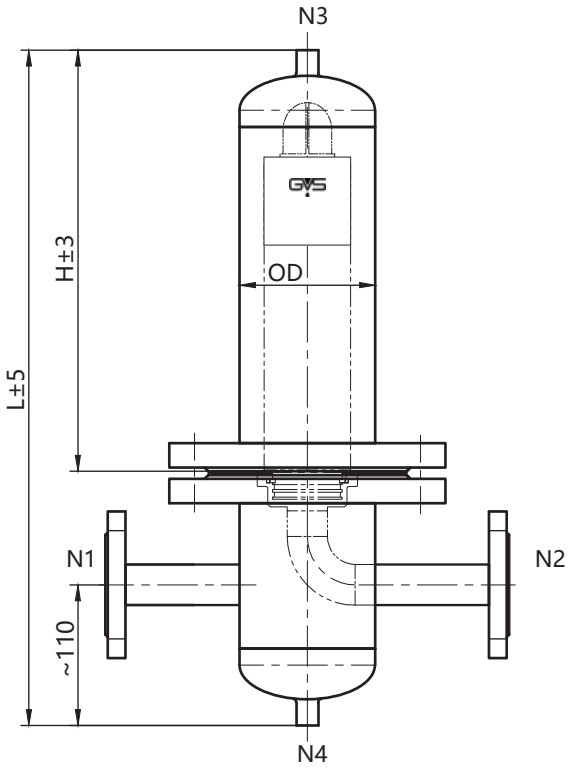
Eg.=>CHDDQJ0110T25SEEY

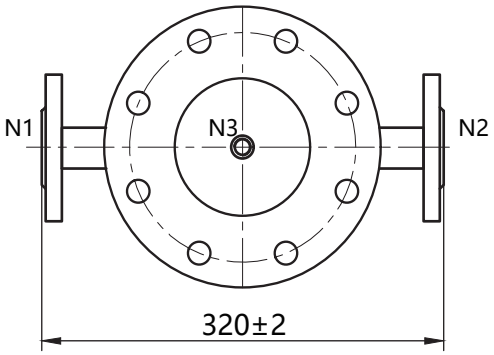
ORDERING INFORMATION

Series	Connection	Shell Material	Qty.	Length	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDD=Sanitary Gas Filter Housing	Q = 226 / Fin P = 222 / Fin T = 226 / Flat M = 222 / Flat	J=304 K=316L	01=1	05= 5" 10 = 10" 20 = 20" 30 = 30" 40 = 40"	T25=TC 1" T38=TC1.5" F25=Flange DN25 F50=Flange DN50	S=Silicone E=EPDM V=FKM	E=Electropolished M=Mech. Polished	E=Electropolished M=Mech. Polished	Y=1.0Mpa

Dimensions (mm)

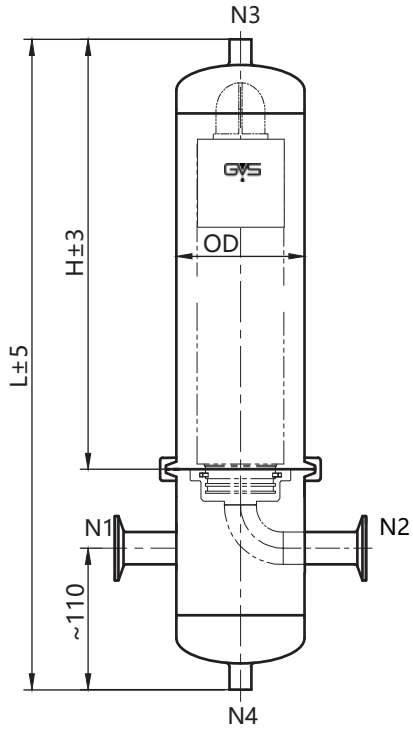
Flange Type

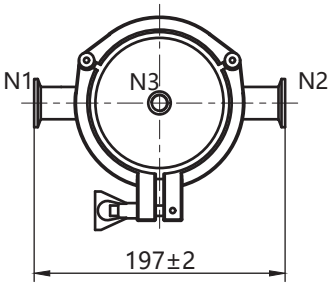




Housing / Cartridge length	Housing height(mm) H	L
5''	210	410
10''	340	540
20''	590	790
30''	840	1,040
40''	1,090	1,290

Tri-clamp Type





Housing / Cartridge length	Housing height(mm) H	L
5''	208	380
10''	338	510
20''	588	760
30''	838	1,010
40''	1,088	1,260

CHDE Series - Sanitary Vent Filter Housings

Sanitary Vent Filter Housings are comply with sanitary vessel design requirements. Suitable for gas sterilization filtration in the pharmaceutical and food industries. The top elbow is intended to prevent large particles and debris from entering the housing.

Features

- Ultra-fine polishing: Internal: Ra≤0.3μm, External: Ra≤0.4μm
- Complies with GMP standards.
- Excellent cleanability.
- Design prevents accumulation of liquid.
- Top elbow prevents external particles and debris from entering the housing
- The vent filter housings are available in single-opening A and top elbow B model, compatible with cartridge connec-tion for 222 and 226.

Surface Finish

Finish Processing Options:	Electropolished
	Mech. Polished
Polish Quality:	Internal: Ra ≤ 0.3μm
	External: Ra ≤ 0.4μm

Operating Conditions

Max. Operating Pressure:	1.0MPa(10bar/150psi)
Max.Operating Temperature:	140°C(284°F)

Materials

Shell Options:	304 or 316L Stainless Steel
Clamp:	304 Stainless Steel
Seal Materials:	Silicone, FKM, EPDM

Connection

Shell Connection:	Clamp
Outlet&Inlet (N1, N2):	Tri-clamp 1''(T25)

Applications

- Allows sterile filtration of vented gas flow in the production and storage of:
  -Pharmaceutical and bio-technology products
  -Fermentation process products
  -Food, beverages, potable water

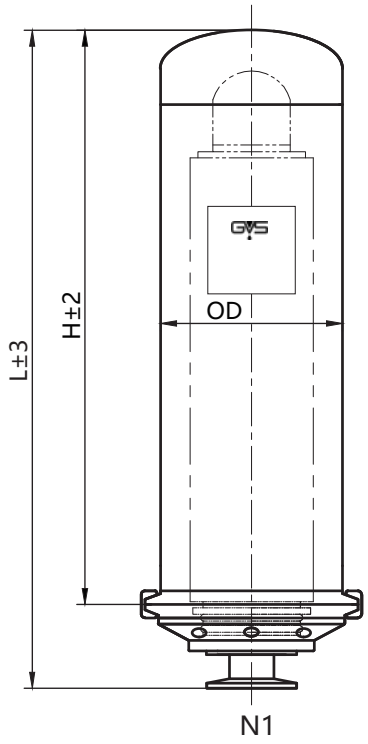
Eg.=>CHDEAQJ0110T25SEEY

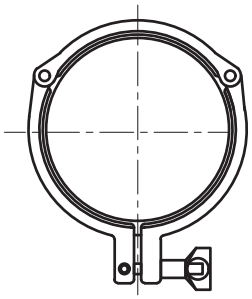
ORDERING INFORMATION

Series	Connection	Shell Material	Qty.	Length	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDEA = Vent Filter Housing Type A	Q = 226 / Fin	J=304	01=1	05 = 5"	T25=TCDN25	S=Silicone	E=Electropolished	E=Electropolished	Y=1.0Mpa
CHDEB = Vent Filter Housing Type B	P = 222 / Fin	K=316L		10 = 10"	B25=ASME-BPEDN25	E=EPDM	M=Mech. Polished	M=Mech. Polished	
	T = 226 / Flat			20 = 20"	F25=Flange DN25	V=FKM			
	M = 222 / Flat			30 = 30"					
				40 = 40"					

Dimensions (mm)

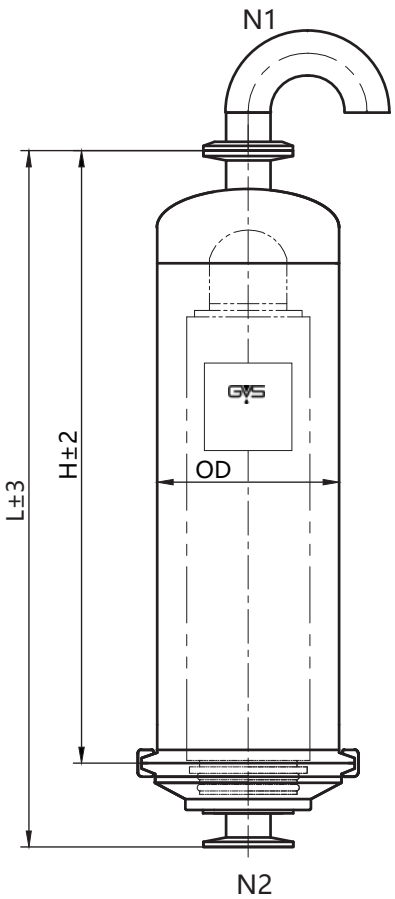
Type A

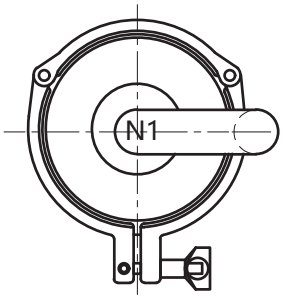




Housing / Cartridge length	height(mm) H	L
5''	210	260
10''	340	390
20''	590	640
30''	840	890
40''	1,090	1,140

Type B





Housing / Cartridge length	height(mm) H	L
5''	188	238
10''	318	368
20''	568	618
30''	818	868
40''	1,1068	1,118

CHDH Series - Sanitary Depth-Stack Filter Housings

Sanitary Depth-Stack Filter Housings are a new type of depth-stack filter housing. Designed to meet requirements for sanitary construction with smooth crevice-free welding and TC-type sanitary connections. Easy to clean and disassemble. The co-linear inlet and outlet flow paths beneath the vessel shell serve to minimize liquid turbulence. Available for 8", 12" and 16" diameter cartridges up to four high modules to meet high flow rates requirements.

Features

- Ultra-high degree of polishing: Internal: Ra≤0.3μm; External: Ra≤0.4μm
- Liquid turbulence is minimized with co-linear inlet-outlet porting beneath the housing shell.
- Specially designed drain valves can optionally be installed on the inlet and outlet ports for easy liquid drainage.
- Allows vertical stacking of up to four depth-stack cartridges and provides high flow rates at high retention efficiency.
- Segmented cartridge design makes it more convenient to replace depth stack cartridges and helps to reduce liquid loss.
- The housing is fitted with DOE and stack with support plates part or handle, 3 modules for 8'' and 4 modules for 12'' and 16''.
- Optional N6 drain port (Sampling port).

Surface Finish

Finish Processing Options:	Electropolished
	Mech. Polished
Polish Quality:	Internal: Ra ⩽ 0.3μm
	External: Ra ⩽ 0.4μm

Operating Conditions

Max. Operating Pressure:	1.0MPa (10bar150psi)
Max.Operating Temperature:	80˚C(176°F)

Materials

Shell Options:	304 or 316L Stainless Steel
Vent Port:	304 or 316L
Eyebolts:	304
Legs:	304
Seal Materials:	Silicone, FKM, EPDM

Connection

Shell Connection: Inlet &	Eyebolt
Outlet (N1,N2):	Tri-clamp
Vent Port(N4):	Sanitary hose barb valve fit with integrity test interface
Drain Port (N5, N6):	Sanitary hose barb valve for 8mm i.D. tubing
Pressure Gauge (N3):	1.5" TC

Applications

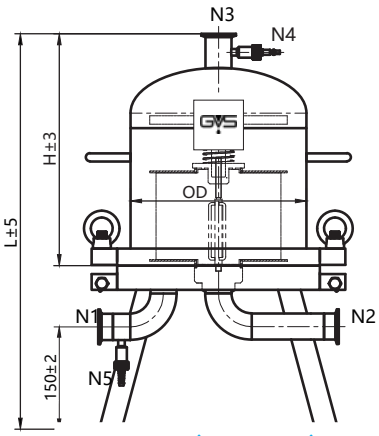
- Pharmaceuticals: filtration of injectables, LVPs, water for injection, and other biological products
- Food and beverage: filtration of beer, wine, and distilled spirits, juices, syrups, and edible oils
- Chemical industry: filtration of grease and dirt, sludge, and gelatinous materials

Cartridge Sealing System

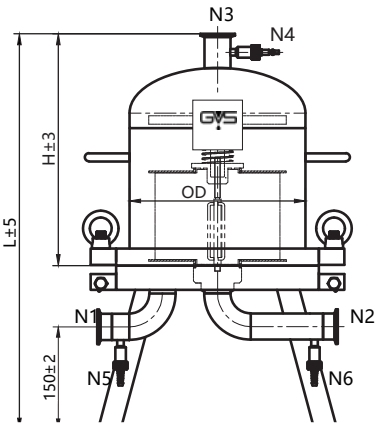
A spring-loaded sealing system provides optimal sealing compression to help prevent filter bypass even under the most arduous process conditions.

Dimensions (mm)

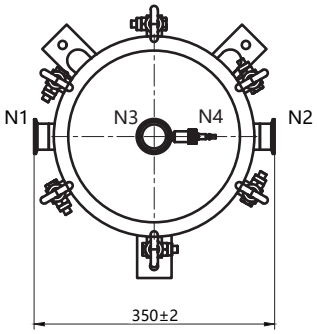
8"



Type A (N6-free)

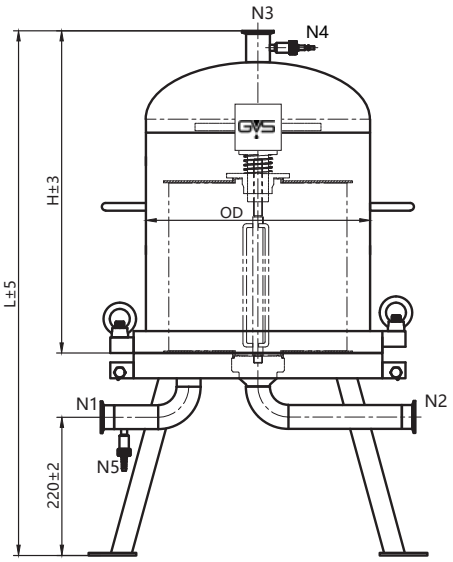


Type B

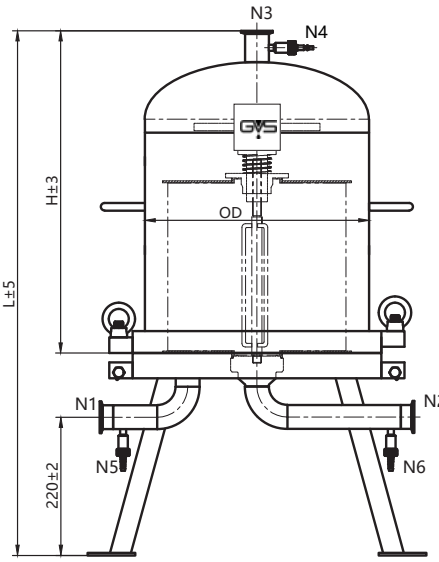


Housing / Cartridge height(mm) / length	H	L
8	337	572
16	477	712
24	617	852

12"



Type A (N6-free)



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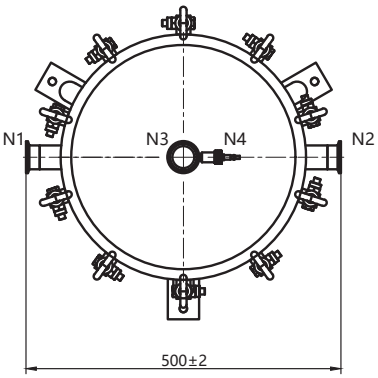
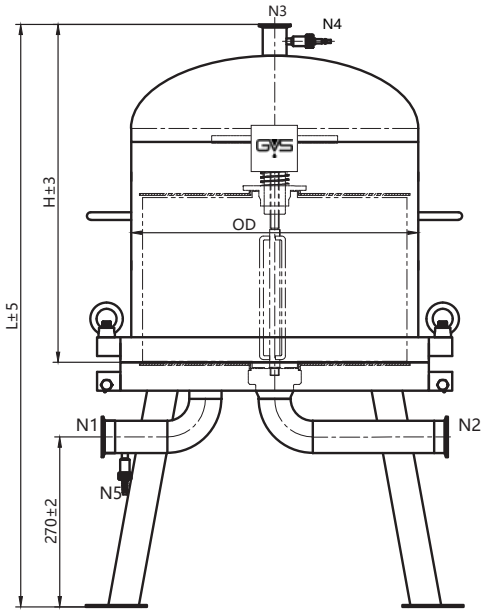
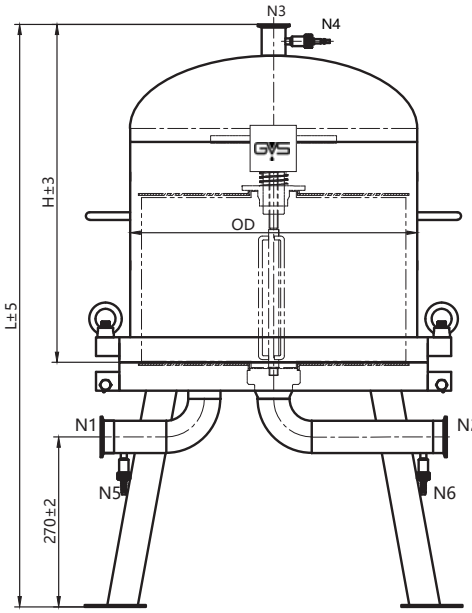


Housing / Cartridge length	Housing height(mm) H	L
16	512	825
32	792	1,105
48	1.072	1,385
64	1,352	1,665

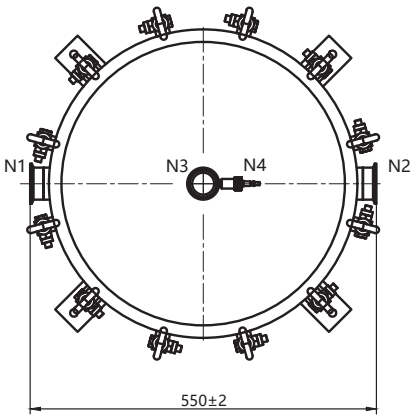
16"



Type A (N6-free)



Type B



Housing / Cartridge length	Housing height(mm) H	L
16	537	915
32	817	1,195
48	1.097	1,475
64	1,377	1,755

Eg.=>CHDHAFJ0801T38SEEY

ORDERING INFORMATION								
Series	**Connection**	**OD**	**Cells**	**Inlet&Outlet**	**Seal Material**	**Surface Finish (internal)**	**Surface Finish (external)**	**Design Pressure**
CHDHAF= H Series Filter Housings(N6-free)	J=304	08= 8"	01= 8(8")	T38=TC1.5"/ for 8",12"	S=Silicone	E=Electropolished	E=Electropolished	Y=1.0Mpa
CHDHBF= H Series Filter Housings	K=316L	12 = 12"	05= 16	T50=TC2"/ for 16"	E=EPDM	M=Mech. Polished	M=Mech. Polished	
		16 = 16"	07 = 24(8")		V=FKM			
			10 = 32(12",16")					
			13 = 48(12",16")					
			15 = 64(12",16")					

CHDM Series - High Flow Filter Housings

CHDM Series - High Flow vertical Filter Housings are designed to accommodate HF series High Flow filter cartridges intended for use primarily for higher fluid flow applications, especially in water treatment. Housings are available in a range of sizes accommodating from 1 to 5 cartridges in lengths of 40" . Constructed of high quality 304 or 316L stainless steel suitable for use in high temperatures, with tolerance to acids, alkalis, and organic chemicals. The vertical option minimizes the system's footprint. Customized configurations are available to suit customers' specific needs.

Features

- Using quality stainless steel components to build allhousings, ensures consistent quality and performance.
- Large cartridge size with expansive filtration area provides for high-volume liquid filtration at high retention efficiency with a low initial investment.
- Housings are manufactured with crevice-free internals, fine polishing inside to ensure surface smoothness. Preferable for potable water and food/beverage production

Surface Finish

Finish Processing Options: Internal: Mech Polished / Passivated
Exernal: Mech Polished /Passivated / Abrasive Blasted

Materials

Shell Options:	304 or 316L
Vent Port:	304 or 316L
Eyebolts:	304
Legs	304
Seal Materials:	Silicone, FKM, EPDM

Operating Conditions

Max. Operating Pressure:	1.0MPa (150psi)
Max.Operating Temperature:	80°C(176°F)

Connection

Num	Name	Specification	Connection	Note
N1	Inlet	pl-rf	Flange	HG/T20592-2009 PN16
N2	Outlet	pl-rf	Flange	HG/T20592-2009 PN16
N3	Vent	FNPT1/4"	Thread	-
N4	Pressure Gauge Conection	M14*1.5	Thread	-
N5	Outlet	FNPT1/4"	Thread	-

Applications

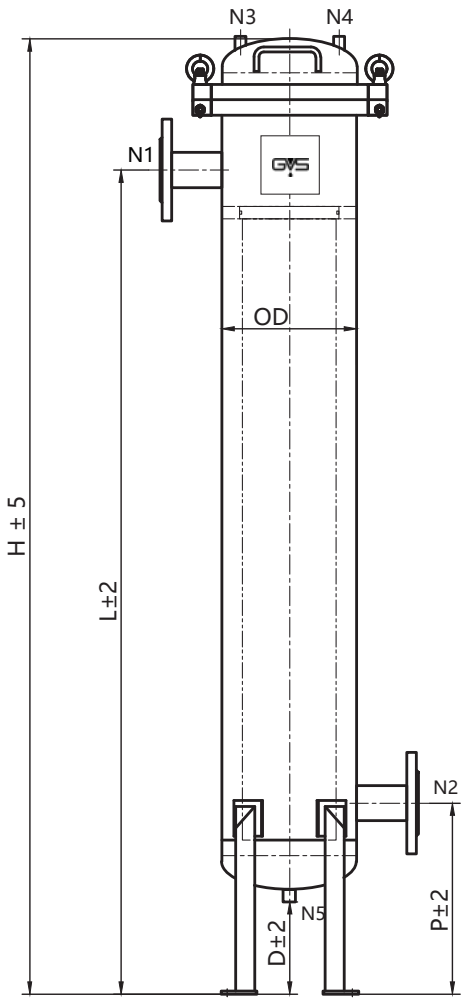
- Pre-filtration of RO systems; Bottled water production
- Filtration of process water, condensate water, cooling water, waste water
- Chemical industry filtration of acids, alkaline liquids, organic solvents
- Energy industry condensate & cooling waters
- Food and beverage: filtration of drinks, beverages and drinking water

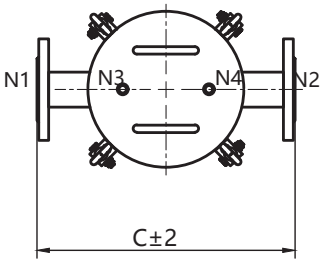
Eg.=>CHDMHJ0140F50SEEY

ORDERING INFORMATION

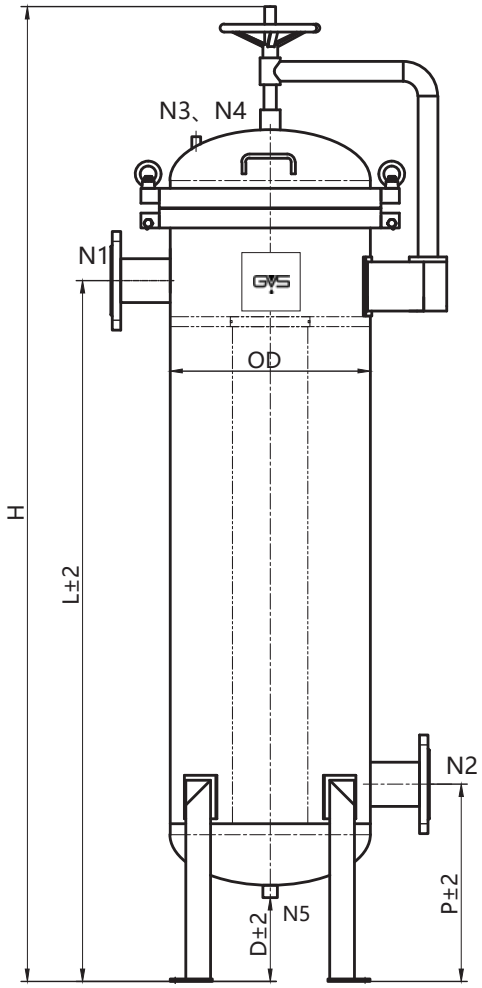
Series	Connection	Shell Material	Number Round	Length	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDM=High Flow Filter Housings	HF=HF Series Cartridges	J=304 K=316L	01 = 1 02= 2 03 = 3 04 = 4 05 = 5	20 = 20" 40 = 40" 60 = 60"	F50=DN50/(for Single-round) F80=DN80/(for 2-round) F100=DN100/(for 3-round) F125=DN125/(for 4/5-round)	S=Silicone E=EPDM V=FKM	M=Mech. Polished P=Passivated	M=Mech. Polished P=Passivated S=Abrasive Blasted	Y=1.0Mpa

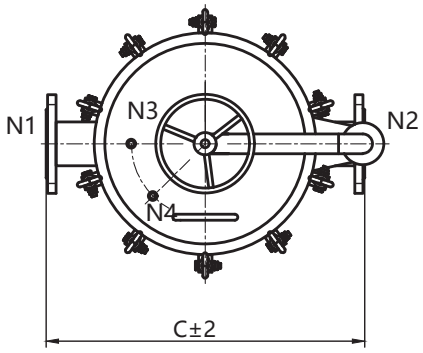
Single-round 40''





Multi-round 40''





(mm) Cartridges	H	L	P	N	C	D	OD
1	1550	1340	310	DN50	420	150	ø219
2	1980	1420	400	DN80	645	170	ø406
3	2030	1440	420	DN100	695	170	ø456
4	2090	1470	450	DN125	750	170	ø508
5	2120	1480	460	DN125	800	170	ø558

CHDN Series - Bag Filter Housings

CHDN Series - Bag Filter Housings from Filtration are offered in a range of sizes and port options to meet your needs for liquid filtration. The housings are fabricated using best-practice, industry leading production methods to deliver high quality and best value. These are an excellent choice for liquid filtration covering a wide range of applications: food and beverage, fine chemicals, process fluids. The single-bag and multi-bag housings can be customized depending on the user's specific needs.

Features

- Using quality stainless steel components to build all housings, ensures consistent quality and performance.
- The three-point clamping closure ensures excellent sealing performance.
- The swingbolt closure with eyebolts allows for easy handling and servicing.
- Strengthened filter baskets provide more robust construction and longer service life.
- Housings are manufactured with crevice-free internals, fine polishing inside to ensure surface smoothness.
- Preferable for potable water and food/beverage production.
- Compatible with 1# bag and 2# bag.

Surface Finish

Finish Processing Options:	Internal: Mech Polished / Passivated Exernal: Mech Polished /Passivated / Abrasive Blasted

Operating Conditions

Max. Operating Pressure:	1.0MPa (150psi)
Max.Operating Temperature:	80˚C(176°F)

Materials

Shell Options:	304 or 316L
Eyebolts:	304
Legs	304
Seal Materials:	FKM, EPDM

Connection

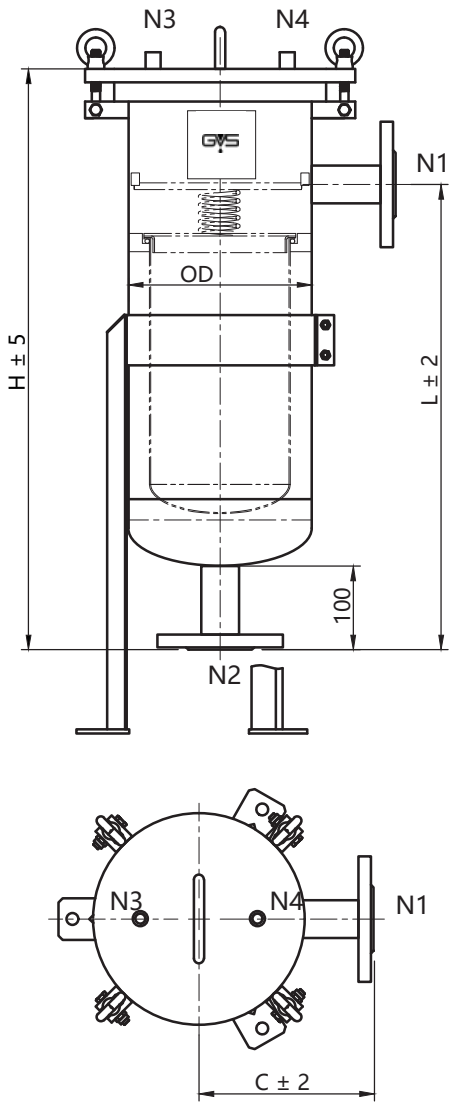
Num	Name	Connection	Note
N1	Inlet	FlangePL-RF/tc	HG/T20592-2009 PN16
N2	Outlet	FlangePL-RF/tc	HG/T20592-2009 PN16
N3	Vent	FNPT1/4"Thread	-
N4	Pressure Gauge Conection	M14*1.5 Thread	-

Applications

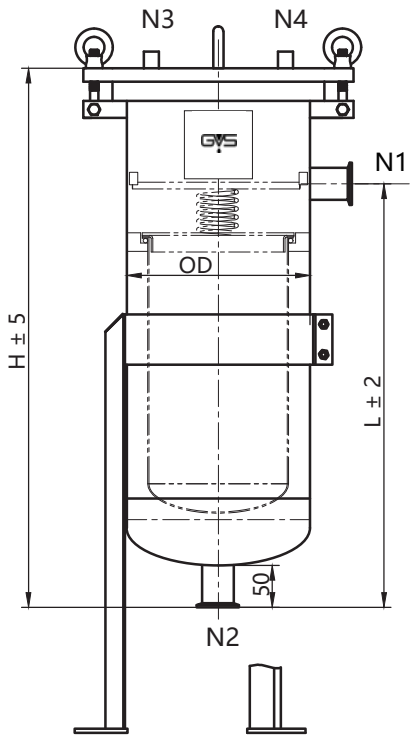
- Pre-filtration of RO systems, Bottled water production
- Filtration of process water, condensate water, cooling water, & waste water
- Chemical industry filtration of acids, alkaline liquids, & organic solvents
- Energy industry condensate & cooling waters

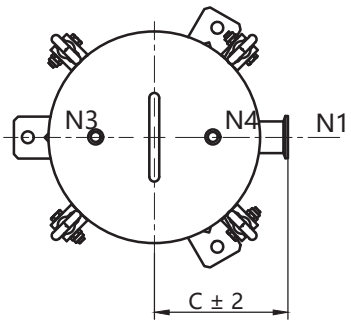
Dimensions (mm)

Single-bag 1#Flange



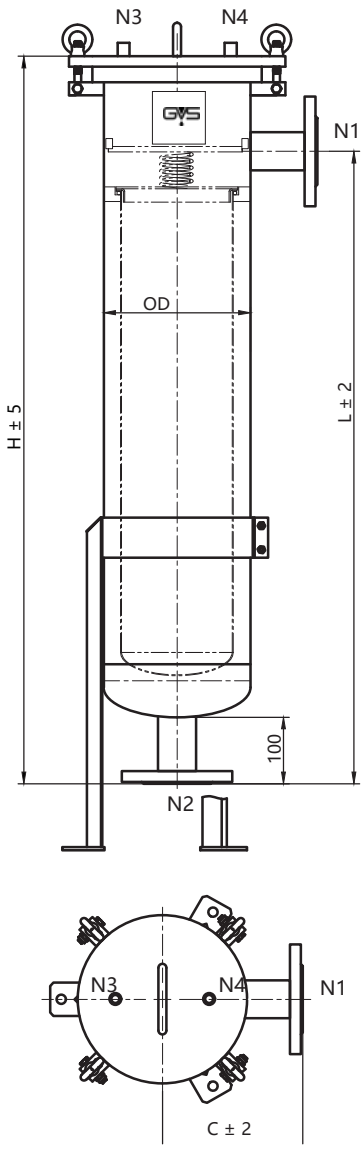
Single-bag 1#TC



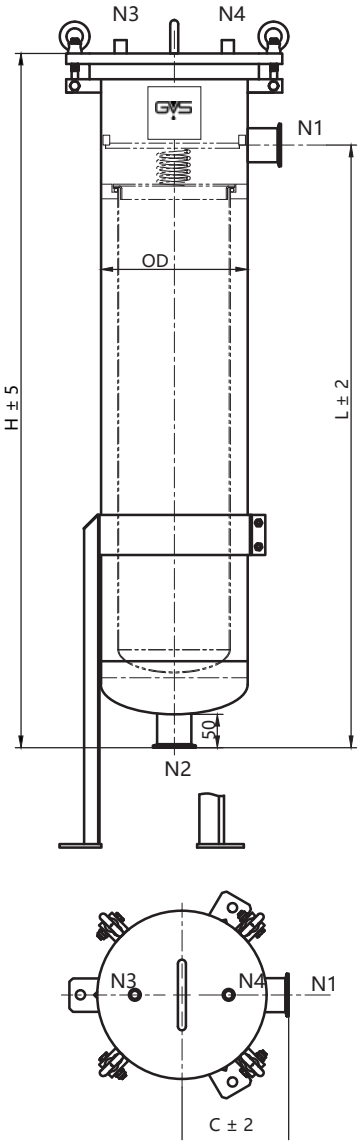


Mode \ (mm)	H	L	P	N	C	OD
1# Single-bag TC	645	505	-	1.5''	150	ø219
1# Single-bag Flange	695	555	-	DN40	210	ø219
2# Single-bag TC	1045	905	-	2''	150	ø219
2# Single-bag Flange	1095	950	-	DN50	210	ø219
2#2 bags Flange	1680	1120	400	DN80	645	ø406
2#3 bags Flange	1730	1140	420	DN100	695	ø456
2#4 bags Flange	1790	1170	450	DN125	750	ø508
2#5 bags Flange	1820	1180	460	DN125	800	ø558

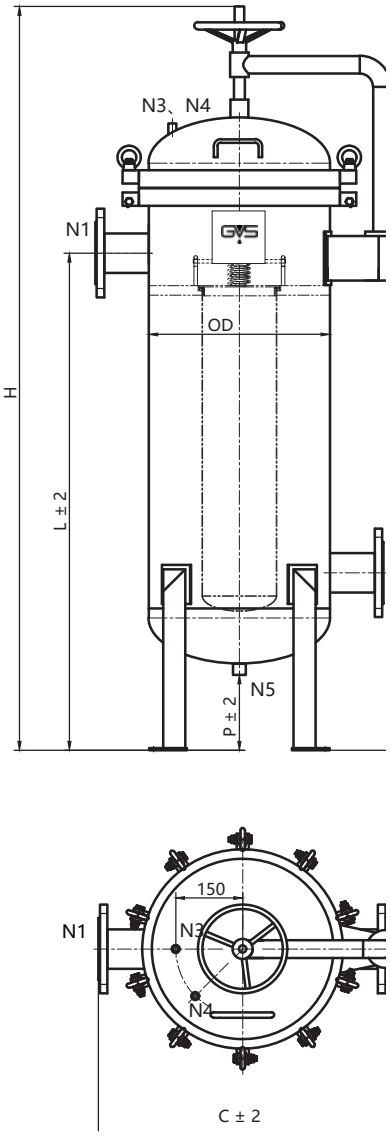
Single-bag 2#Flange



Single-bag 2#TC



Multi-bag 2#Flange



Eg.=>CHDNJ0101T38SMMY

ORDERING INFORMATION								
Series	Shell Material	Number Round	FilterBag	Inlet&Outlet	Seal Material	Surface Finish (internal)	Surface Finish (external)	Design Pressure
CHDN=Bag Filter	J=304	01=1	01=1#	T38=TC 1.5''/(for Single-bag 1#)	S=Silicone	M=Mech. Polished	M=Mech. Polished	Y=1.0Mpa
	K=316L	02=2	02=2#	T50=TC 2''/(forSingle-bag2#)	E=EPDM	P=Passivated	P=Passivated	
		03=3		F40=Flange DN40/(for Single-bag 1#)	V=FKM		S=Abrasive Blasted	
		04=4		F50=Flange DN50/(for Single-bag 2#)				
		05=5		F80=Flange DN80/(for 2 bags 2#)				
		06=6		F100=Flange DN100/(for 3 bags 2#)				
		07=7		F125=Flange DN125/(for 4/5 bags 2#)				
		08=8						

CHDSBC Series - Multi-Cartridge Liquid Filter Housings

w/ Swing Bolt Closure

Manufactured of AISI304 or AISI316L stainless steel for high-purity industrial filtration requirements. The flexible design accommodates DOE, 222/FIN, and 222/FLAT style cartridges. They accept standard 2.5" to 2.85"OD filter cartridges in configurations of up to 50-around and up to 40" cartridge length.

This housing series offers a great many options for cartridge quantity, flow rate capacity, and porting. They're the standard choice to support higher flow rate applications with abundant options for cartridge media types and retention ratings.

Features

- Rugged swing-bolt closure allows easy access for cartridge changes.
- Strengthened, welded legs provide a stable and durable installation.
- 150 psi (10 bar) operating pressure rating.
- Davit arm hand wheel features improved ease of operation (12 around and up).
- Can provide flow rates to 1,200 GPM and beyond.

Applications

- Suitable for the broadest range of industrial applications from process fluid streams for water, aqueous solutions, oils, and fine chemicals
- Used in food and beverage production: filtration of juices, syrups, food ingredients, and bottled water

Product Quality

- Manufactured within an ISO 9001:2015 certified quality management system.
- Certification of Quality document can be provided upon request.

Materials of Construction

Shell Components	AISI304 or AISI316L Stainless Steel
Seal Options	EPDM (standard), SILICONE, NBR, FKM

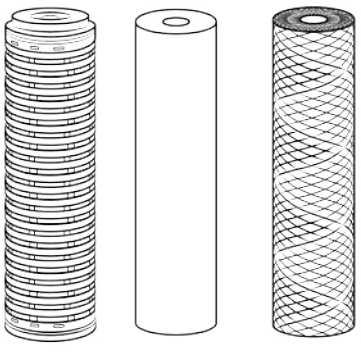
Surface Finish

Surface Quality	Glass beaded finish is standard Industrial electropolish option

Operating Conditions

Operating Temperature	121°C (250°F) max.
Design Pressure	10 bar (150 psi)

Cartridge Type



Pleated | Melt Blown | String Wound

DOE

222/Fin

End Cap

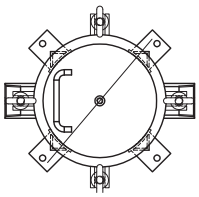
CHDSBC Series - Multi-Cartridge Liquid Filter Housings

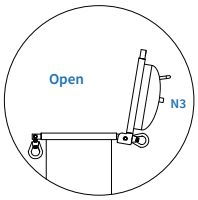
Dimensions (mm)

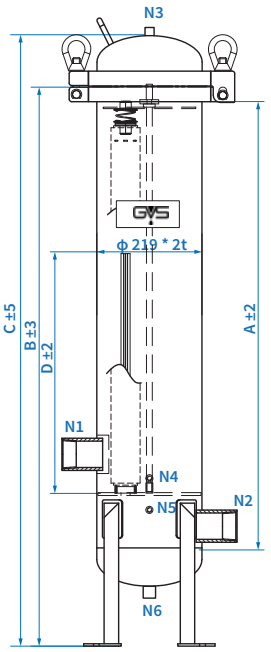
Industrial Cartridge Housing - 5X

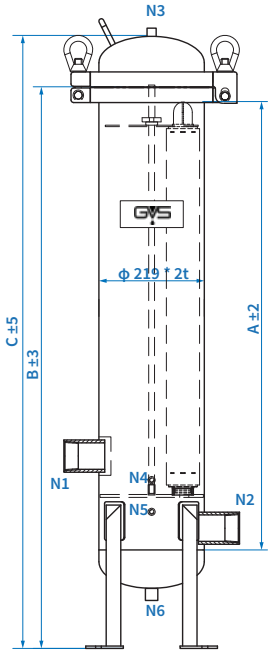
Num	Name	Specification	Connection mode
N1	Inlet	FNPT 2''	Thread
N2	Outlet	FNPT 2''	
N3	Vent	FNPT 1/4''	
N4	Gauge	FNPT 1/4''	
N5	Gauge	FNPT 1/4''	
N6	Drain	FNPT 1/2''	

Size	A	B	C	D
10''	430	665	770	120
20''	680	915	1020	247
30''	930	1165	1270	498
40''	1180	1415	1520	746





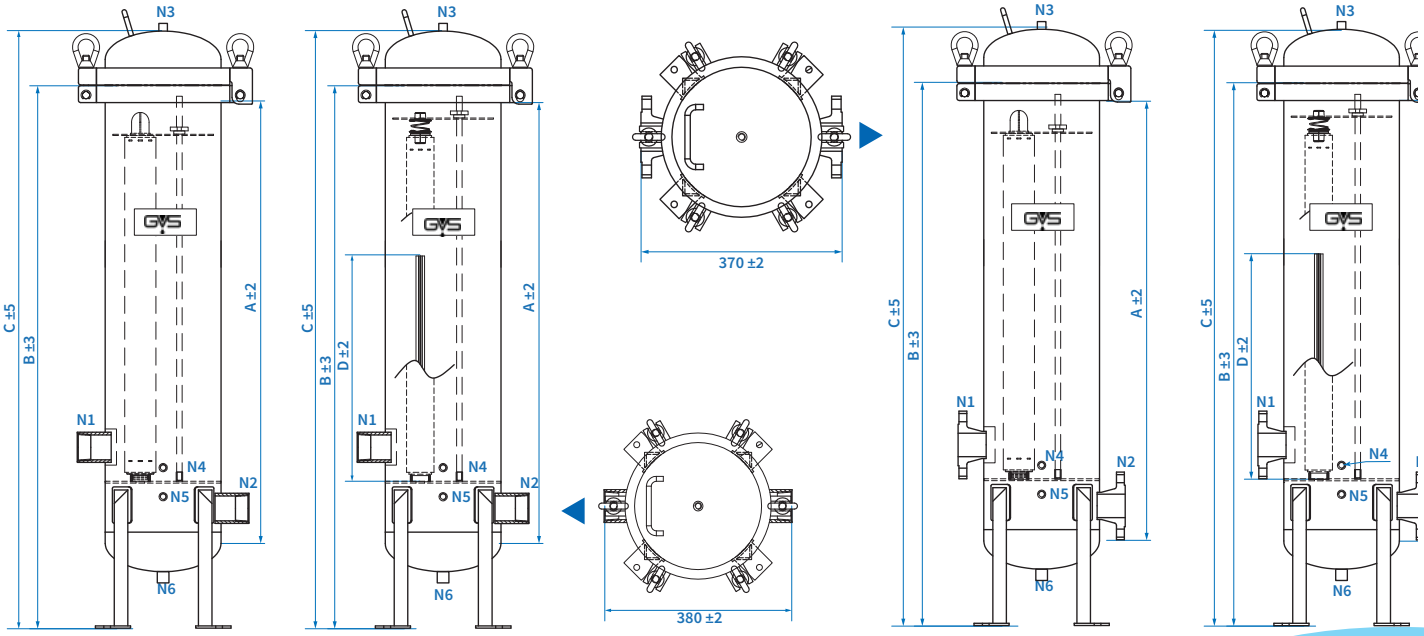




Industrial Cartridge Housing - 7X

Size	A	B	C	D
10''	450	700	820	120
20''	700	950	1070	247
30''	950	1200	1320	498
40''	1200	1450	1570	746

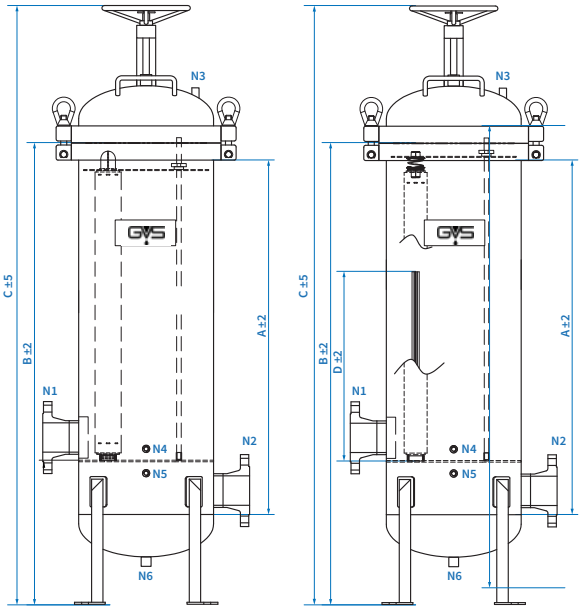
Num	Material	Name	Specification	Connection mode
N1	304	Inlet	FNPT 2''	Thread
	316L	Outlet	WN50-150RF	Flange
N2	304	Inlet	FNPT 2''	Thread
	316L	Outlet	WN50-150RF	Flange
N3	304/316L	Vent	FNPT 1/4''	Thread
N4		Gauge	FNPT 1/4''	
N5		Gauge	FNPT 1/4''	
N6		Drain	FNPT 1/2''	



Dimensions (mm)

Industrial Cartridge Housing - 12X

Num	Name	Specification	Connection mode
N1	Inlet	FNPT 2''	Thread
N2	Outlet	FNPT 2''	
N3	Vent	FNPT 1/4''	
N4	Gauge	FNPT 1/4''	
N5	Gauge	FNPT 1/4''	
N6	Drain	FNPT 1/2''	



Industrial Cartridge Housing - 7X

Size	A	B	C	D
10"	430	665	770	120
20"	680	915	1020	247
30"	930	1165	1270	498
40"	1180	1415	1520	746

Eg.=>CHDSBC4120N304SEP

ORDERING INFORMATION

Series	Ctg Qty	Cartridge Length	Main Ports	Material	Seals	Option, Standard
CHDSBC	4 — 4 Cartridges 5 — 5 Cartridges 7 — 7 Cartridges 12 — 12 Cartridges 21 — 21 Cartridges 36 — 36 Cartridges 51 — 51 Cartridges	1 — 10'' 2 — 20'' 3 — 30'' 4 — 40''	20N — 2''FNPT 30N — 3''FNPT 20F — 2''RF FLANGE 30F — 3''RF FLANGE 40F — 4''RF FLANGE 60F — 6''RF FLANGE	304 — AISI304 316L — AISI316L	E — EPDM B — NBR S — Silicone V — FKM	EP — Electropolished

Integrated Gas Filter Cartridges

Integrated Gas Filter Cartridges

GVS integrated gas filter cartridges, whose shell is made of electronic grade stainless steel 316L, the internal filter cartridge is made of PFA, and the membrane is PTFE/316L, can effectively remove particles in the gas. Corro-sion-resistant and high-pressure resistant materials are suitable for the filtration process of various special gases, with compact structures and easy replacement.

Features

- **High flux and low pressure loss**

  The natural hydrophobicity of PTFE membrane enables it to filter gas with very huge filtration flux and very low initial DP. PTFE membrane has excellent particle trapping capacity, providing particle retention efficiency up to 99.99%. Removal rating up to 0.003μm to achieve fine filtration of pipeline gas.

- **Semiconductor Grade Housing Treatment**

  The inner surface of the housing is electrolytically polished with Ra less than 0.1μm. The inner surface is corro-sion-resis-tant and mirror-clean.

- **Excellent chemical compatibility**

  PTFE is used as media and high purity SUS316L as the housing material. Both of them have excellent corrosion resistance and can be used for active gas filtration. At the same time, ensure the stable filtration of gas under high temperature and high pressure.

Material of Constructions

- Media PTFE
- Cage PFA/SUS316

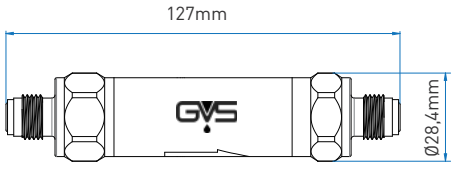
Performance

- Max Operating Temperature 80 °C
- Max Allowable DP 6bar @ 20 °C
- Max. Operating Pressure 5.2Mpa @ 80 °C

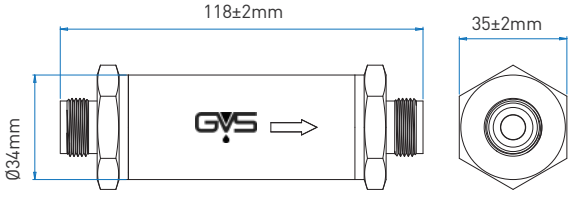
Dimension

OD	28.4mm
Length	127mm

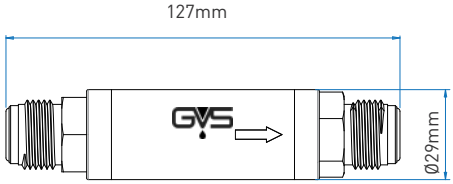
Dimensional Drawings



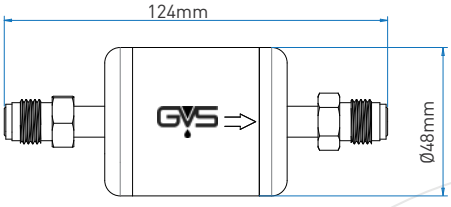
CXDCFB



CXDDEB

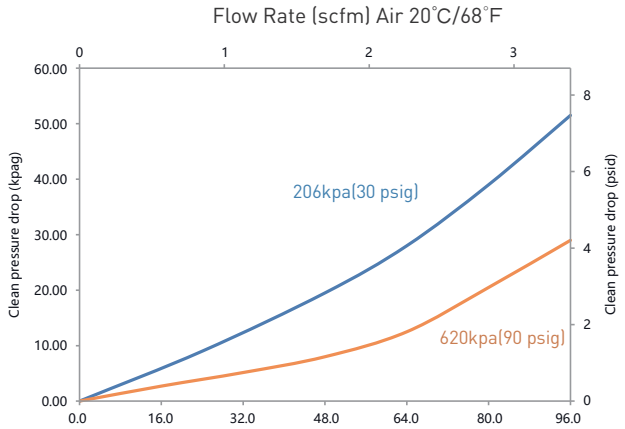


CXDCEB

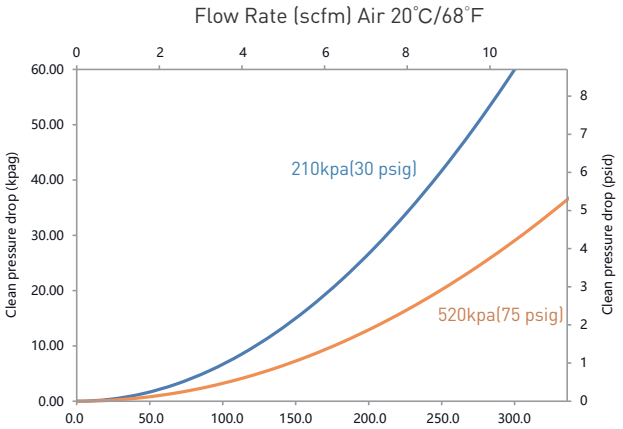


CXDEIB

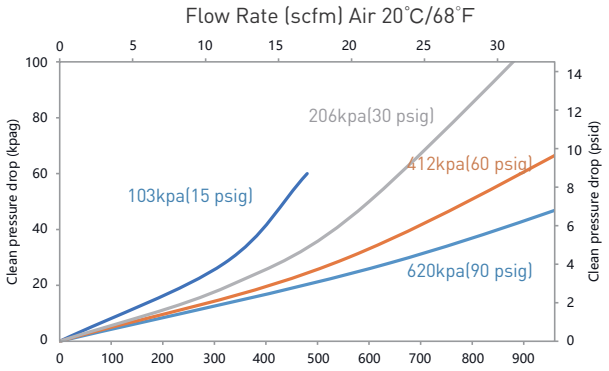
CXDCFB Pressure Drop vs. Gas Flow rate



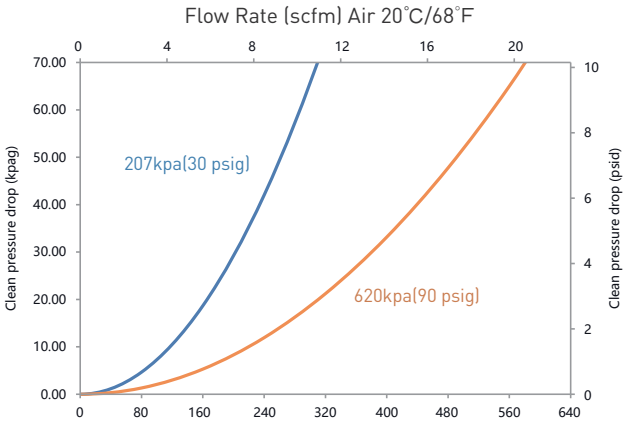
CXDCEB Pressure Drop vs. Gas Flow rate



CXDDEB Pressure Drop vs. Gas Flow rate



CXDEIB Pressure Drop vs. Gas Flow rate



Eg.=>CXDCFBF0003MM18V

Model	Cage Material	Removal Rating	Interface Type
CXDCF=BCFB	F = PFA / SUS316L	0003 = 0.003μm	MM18V = 1/8''VCR (Male/Male)
CXDDEB=DEB		001 = 0.01μm	MM14V = 1/4''VCR (Male/Male)
CXDCEB=CEB			MM38V = 3/8''VCR (Male/Male)
CXDEIB=EIB			MM12V = 1/2''VCR (Male/Male)
			MM34V = 3/4''VCR (Male/Male)
			MM1V = 1''VCR (Male/Male)
			MM14S = 1/4''Swagelok (Male/Male)
			MM516S = 5/16''Swagelok (Male/Male)
			MM38S = 3/8''Swagelok (Male/Male)
			MM12S = 1/2''Swagelok (Male/Male)
			MM58S = 5/8''Swagelok (Male/Male)
			MM34S = 3/4''Swagelok (Male/Male)
			MM78S = 7/8''Swagelok (Male/Male)

CAPSFLOW

CSK series
Capsule Filters

CSK series - Asymmetrical PES membrane Capsule Filters

Description and use

- The PES membrane capsule utilizes single layer hydrophilic polyethersulfone membrane. lt offers broad chemical compatibility, high flow rate and low extractable.
- Polyethersulfone is particularly suited for the filtration of products that contain substances that adsorb to the media. The lower binding characteristics of polyethersulfone make it a good choice for filtration of valuable protein solutions such as vaccines and biologicals.

Typical Applications

- Cell Culture Media
- Large Volume Parenterals (LVP's)
- Pharmaceutical Bulk Chemical Solutions
- Diagnostics
- Blood and Serum Fractions
- Purified Water
- Beer, Wine and Spirits
- Juice & Soft Drinks
- Bottled Water

Fitting Option

- NPT-Male
- NPT-F
- Swagelok
- CPCPLC-Male
- CPCPLC-Female
- Hose Barb
- Stepped Hose Barb
- Triclover

Maximum Operating Conditions

- Maximum operating pressure:
  Liquid: 5 bar (80psi) at 77°F/25°C
  Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

Toxicity

All materials meet the specifications far biological safety per USP Class VI -121C° far plastics.

Filter Area

- 500 cm^2
- 1000 cm^2
- 1500 cm^2
- 2100 cm^2

Construction of Materials

- Filter Media: Polyethersulfone
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Food Safety Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and
- hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011

Capsule Integrity Test Specifications

Gen Purpose

Pore size	Min.Bubble point
0.04 µm	2.3 barg@22°C/IPA
0.1 µm	4.8 barg@22°C
0.2 µm	3.1 barg@22°C
0.45 µm	1.7 barg@22°C
0.65 µm	1.3 barg@22°C
0 .8 µm	1.2 barg@22°C
1.2 µm	0.8 barg@22°C

Low Bio

Pore size	Min.Bubble point
0.2 µm	3.5 barg@22°C
0.45 µm	2.3 barg@22°C
0.65 µm	1.5 barg@22°C

Ster Grade

0.2/0.04µm	2.3 Barg@22°C (IPA)
0.45/0.04µm	2.3 Barg@22°C (IPA)
0.45/0.2um	3.5 barg@22°C
0.65/0.2µm	3.5 barg@22°C
0.65/0.45µm	2.3 Barg@22°C
0.8/0.45um	2.3 Barg@22°C
0.2/0.1um	1.7 Barg@22°C (IPA)
0.45/0.1um	1.7 Barg@22°C (IPA)

ORDERING INFORMATION

Product ype	Membrane Type	Membrane pore size	Application	Sterilization	Size	Fittings in / out	Vent/ Drain	Revision
CSK = Capsule Filter	PS = PES	**Application G**	G = Gen Purpose	N = Not Sterile	05= 500 cm^2	4NM=1/4"NPT-M	NN = None	0 = Bag label
		0010 = 0.1µm	B = Low Bio		10 = 1000cm^2	8NM = 3/8" NPT-M		1 = Housing Label
		0020 = 0.2µm	S = Ster Grade		15 = 1500cm^2	2NM = 1/2" NPT-M		
		0045 = 0.45µm			21 = 2100cm^2	8NF = 3/8" NPT-F		
		0065 = 0.65µm				4SL = 1/4" Swagelok		
		0080 = 0.8µm				5SL = 5/16" Swagelok		
		0100 = 1.2µm				8SL = 3/8" Swagelok		
		Application B				4CM = 1/4" CPC-PLC-M		
		0020 = 0.2µm				4HB = 3/4" HB		
		0045 = 0.45µm				8HB = 3/8" HB		
		0065 = 0.65µm				48B = 1/4"-3/8" HB		
		Application S				1TC = 1" TC		
		02X4 = 0.2/0.04µm						
		04X4 = 0.45/0.04µm						
		0402 = 0.45/0.2µm						
		0602 = 0.65/0.2µm						
		0604 = 0.65/0.45µm						
		0804 = 0.8/0.45µm						
		0201 = 0.2/0.1µm						
		0401 = 0.45/0.1µm						

CSK series - Hydrophobic ePTFE membrane Capsule Filters

Description and use

Capsflow CSK series PTFE membrane capsule utilizes single layer hydrophobic PTFE membrane. lt offers broad chemical compatibility, high flow rate and low extractables.

Benefits

- 100% integrity tested
- FDA food contact compliant
- Thermal bonding
- Non-fiber releasing

Typical Application

- Sterile air feed
- Chemicals
- Pharmaceuticals
- Solvent

Fitting Option

- NPT-Male
- NPT-F
- Swagelok
- CPCPLC-Male
- CPCPLC-Female
- Hose Barb
- Stepped Hose Barb
- Triclover

Toxicity

All components meet the specifications for biological safety per USP Class VI -121 °C for plastics.

Cartridge Integrity Test Specifications

Low Bio

Pore size	0.2 mm
Subbie Point	≥1. 4 barg (IPA/ Water)
Water intrusion	≤0.17 ml/min@2500 mbar/2100cm2, 2°C22°C

Gen Purpose

Pore size	Bubble Point / IPA
0010 = 0.1μm	1.7 barg
0020 = 0.2μm	1.1 barg
0045 = 0.45μm	0.6 barg
0065 = 0.65μm	0.5 barg
0100 = 1.0μm	0.4 barg
0300 = 3.0μm	0.1 barg
0500 = 5.0μm	0.07 barg

Capsule Integrity

- Minimum burst pressure: 123.5 psi (8.5 barg)

Construction Materials

- Filter Membrane: ePTFE
- Membrane Media Support: Polypropylene
- Capsule: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable

Filter Area

- 500 cm^2
- 1000 cm^2
- 1500 cm^2
- 2100 cm^2

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21 CFR. Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011.

Maximum Operating Conditions

- Maximum operating pressure
  -Liquid: 5 bar (80psi) at 77°F/25°C
  -Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings in / out**	**Vent/Drain**	**Revision**
CSK = Capsule Filter	PT = PTFE phobic	**Application G**	G = Gen Purpose	N = Not Sterile	05= 500 cm^2	4NM=1/4"NPT-M	NN = None	0 = Bag label
		0010 = 0.1µm	B = Low Bio		10 = 1000cm^2	8NM = 3/8" NPT-M		1 = Housing Label
		0020 = 0.2µm			15 = 1500cm^2	2NM = 1/2" NPT-M		
		0045 = 0.45µm			21 = 2100cm^2	8NF = 3/8" NPT-F		
		0065 = 0.65µm				4SL = 1/4" Swagelok		
		0100 = 1.0µm				5SL = 5/16" Swagelok		
		0300 = 3.0µm				8SL = 3/8" Swagelok		
		0500 = 5.0µm				4CM = 1/4" CPC-PLC-M		
		Application B				4HB = 3/4" HB		
		0020 = 0.2µm				8HB = 3/8" HB		
						48B = 1/4"-3/8" HB		
						1TC = 1" TC		

CSK series - Polypropylene membrane Capsule Filters

Description and use

CSKPP Capsule Filters with depth structure of polypropylene media. lt offers broad chemical compatibility, higher dirt holding capacity with high flow rates at low pressure drop, and low extractables. They are available in nominal and absolute rating.

Benefits

- Wide chemical compatibility
- High dirt hold capacity
- High retention
- Thermal bonding
- Non-fiber releasing

Typical Application

- Process Water
- Vinegar
- Aqueous solutions
- Beer, Wine and Spirits
- Juice, Soft Drinks, Edible Oils
- Bulk Chemicals
- Pharmaceutical intermediates

Construction Materials

- Filter Media: Polypropylene
- Media Support: Polypropylene
- End Caps: Polypropylene
- lnner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable
- Hot water

Toxicity

All components meet the specifications for biological safety per USP Class VI -121 °C for plastics.

Capsule Integrity

- Minimum burst pressure: 123.5 psi (8.5 barg)

Filter Area

- 500 cm^2
- 1000 cm^2
- 1500 cm^2
- 2100 cm^2

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR.

Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011.

Maximum Operating Conditions

- Maximum operating pressure
  -Liquid: 5 bar (80psi) at 77°F/25°C
  -Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings in / out**	**Vent/Drain**	**Revision**
CSK = Capsule Filter	PP = Polypropylene	**Application G**	G = Gen Purpose	N = Not Sterile	05= 500 cm^2	4NM=1/4"NPT-M	NN = None	0 = Bag label
		0030 = 0.3µm	P= Premier		10 = 1000cm^2	8NM = 3/8" NPT-M		1 = Housing Label
		0060 = 0.6µm			15 = 1500cm^2	2NM = 1/2" NPT-M		
		0100 = 1.0µm			21 = 2100cm^2	8NF = 3/8" NPT-F		
		0300 = 3.0µm				4SL = 1/4" Swagelok		
		0500 = 5.0µm				5SL = 5/16" Swagelok		
		0700 = 7.0µm				8SL = 3/8" Swagelok		
		1000 = 10.0µm				4CM = 1/4" CPC-PLC-M		
		2000 = 20.0µm				4HB = 3/4" HB		
		3000 = 30.0µm				8HB = 3/8" HB		
		5000 = 50.0µm				48B = 1/4"-3/8" HB		
		Application P				1TC = 1" TC		
		0100 = 1.0µm						
		0300 = 3.0µm						
		0500 = 5.0µm						
		0700 = 7.0µm						
		1000 = 10.0µm						
		2000 = 20.0µm						
		3000 = 30.0µm						
		5000 = 50.0µm						

CIK series

In Line Integrity Test Capsule Filter

CIK series - Asymmetrical PES membrane Bio-burden Reduction Capsule Filters

Capsflow CIK series is family of full size capsule filters with Staubli connection at the vent, which enables in-line integrity test.

The PES membrane capsule utilizes single layer hydrophilic polyethersulfone membrane. lt offers broad chemica compatibility, high flow rate and low extractable.

Polyethersulfone is particularly suited for the filtration of products that contain substances that adsorb to the media. The lower binding characteristics of polyethersulfone make it a good choice for filtration of valuable protein solutions such as vaccines and biologicals.

Typical Applications

- Cell Culture Media
- Large Volume Parenterals (LVP's)
- Pharmaceutical Bulk Chemical Solutions
- Diagnostics
- Blood and Serum Fractions
- Purified Water
- Beer, Wine and Spirits
- Juice & Soft Drinks
- Bottled Water

Vent/Drain Option

Staubli

Stepped hose barb

Fitting Option

- 1.5"TC
- 1/2" Hose Barb
- 3/4" Hose Barb

Maximum Operating Conditions

- Maximum opereting pressure
  -Liquid: 5 bar (80psi) at 77°F/25°C
  -Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

Toxicity

All materials meet the specifications

far biologica! safety per USP Class

VI -121"C far plastics

Filter Area

Size	Filtration Area
2.5''	= 1400 cm^2
5''	= 2500 cm^2
10''	= 6000 cm^2
20''	= 12000 cm^2
30''	= 18000 cm^2
40''	= 24000 cm^2

Construction of Materials

- Filter Media: Polyethersulfone
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011.

Cartridge Integrity Test Specifications

Water wetted membrane

Pore size	Min.Bubble point	Diffusive Flow/10"
0.04 µm	2.3 barg@22°C/IPA	⩽ 25 ml/ 1.7 barg
0.1 µm	1.7 barg@22°C/IPA	⩽ 25 ml/ 1.3 barg
0.2 µm	3.5 barg@22°C	⩽ 25 ml/ 2.8 barg
0.45 µm	2.3 barg@22°C	⩽ 25 ml/ 1.7 barg
0.65 µm	1.6 barg@22°C	⩽ 25 ml/ 1.0 barg
0 .8 µm	1.3 barg@22°C	⩽ 25 ml / 0.8 barg
1.2 µm	0.9 barg@22°C	⩽ 25 ml/ 0.6 barg

ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings In/Out**	**Vent/Drain**	**Revision**
CIK = Capsule InT Filter	PS = PES	0010 = 0.1 µm	B =Low Bio	N = Not Sterile	SS = 2.5"	5TC = 1.5" TC	SS = St/St	0 = Bag label
		0020 = 0.2 µm			LL = 5"	2HB = 1/2" HB	HH = HB/HB	1 = Housing label
		0045 = 0.45 µm			TE = 10"	4HB = 3/4" HB	SH = St/HB	
		0065 = 0.65 µm			TW = 20"	T2B = 1.5" TC/ 1/2" HB	HS = HB/St	
		0080 = 0.80 µm			TH = 30"	T4B = 1.5" TC/ 3/4" HB		
		0120 = 1.2 µm			FO = 40"	2BT = 1/2"HB/ 1.5 TC		
						2B4 = 1/2"HB/ 3/4"HB		
						4BT = 3/4"HB/ 1.5"TC		
						4B2 = 3/4"HB/ 1/2"HB		

CIK series - Hydrophobic ePTFE membrane Bio-burden Reduction Capsule Filters

Capsflow CIK series is family of full size capsule filters with Staubli connection at the vent, which enables in-line integrity test.

The PTFE membrane Bio-burden reduction capsule utilizes single layer hydrophobic PTFE membrane. It offers broad chemical compatibility, high flow rate and low extractables.

Benefits

- 100% integrity tested
- FDA food contact compliant
- Thermal bonding
- Non-fiber releasing

Typical Application

- Sterile air feed
- Chemicals
- Pharmaceuticals
- Solvent

Capsule Integrity

- Minimum burst pressure: 123.5 psi (8.5 barg)

Construction Materials

- Filter Membrane: ePTFE
- Membrane Media Support: Polypropylene
- Capsule: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable

Cartridge Integrity Test Specifications

Pore size	0.2 mm
Subbie Point	≥1. 2 barg (IPA/ Water)
Water intrusion	≤0.37 ml/min @ 2500 mbar/10", 22°C
Diffusive Flow	10 ml/min @ 800 mbar/ 10", 22°C

Filter Area

Size Filtration Area

- 2.5'' = 1500 cm^2
- 5'' = 2700 cm^2
- 10'' = 6300 cm^2
- 20'' = 12600 cm^2
- 30'' = 18900 cm^2
- 40'' = 25200 cm^2

Fitting Option

- 1.5" TC
- 1" Hose Barb
- 3/4" Hose Barb

Vent/Drain Option

- Staubli
- Stepped hose barb

Toxicity

- All components meet the specifications
- for biological safety per USP Class VI -121 °C for plastics

Food Safety Compliance

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21 CFR.
- Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011.

Maximum Operating Conditions

- Maximum operating pressure
  -Liquid: 5 bar (80psi) at 77°F/25°C
  -Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings In/Out**	**Vent/Drain**	**Revision**
CIK = Capsule InT Filter	PT = PTFE phobic	0020 = 0.2 µm	B = Low Bio	N = Not Sterile	SS = 2.5" LL = 5" TE = 10" TW = 20" FO = 40"	5TC = 1.5" TC 2HB = 1/2" HB 4HB = 3/4" HB T2B = 1.5" TC/ 1/2" HB T4B = 1.5" TC/ 3/4" HB 2BT = 1/2"HB/ 1.5TC 2B4 = 1/2"HB/ 3/4"HB 4BT = 3/4"HB/ 1.5"TC 4B2 = 3/4"HB/ 1/2"HB	SS = St/St HH = HB/HB SH = St/HB HS = HB/St	0 = Bag label 1 = Housing label

CIK series - Polypropylene media
General Application Capsule Filters

CIKPP Capsule Filters with depth structure of polypropylene media. lt offers broad chemical compatibility, higher dirt holding capacity with high flow rates at low pressure drop, and low extractables. They are available in nominal and absolute rating.

Benefits

- Wide chemical compatibility
- High dirt hold capacity
- High retention
- Thermal bonding
- Non-fiber releasing

Typical Applications

- Process Water
- Vinegar
- Aqueous solutions
- Beer, Wine and Spirits
- Juice, Soft Drinks, Edible Oils
- Bulk Chemicals
- Pharmaceutical intermediates

Construction Materials

- Filter Media: Polypropylene
- Media Support: Polypropylene
- End Caps: Polypropylene
- lnner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable
- Hot water

Toxicity

- All plastic parts meet the specifications for biological safety per USP Class VI -121°C for plastics.

Filter Area

Size Filtration Area

- 2.5'' =1480 cm^2
- 5'' =2650 cm^2
- 10'' =5500 cm^2
- 20'' =11000 cm^2
- 30'' =16500 cm^2
- 40'' =22000 cm^2

Capsule Integrity

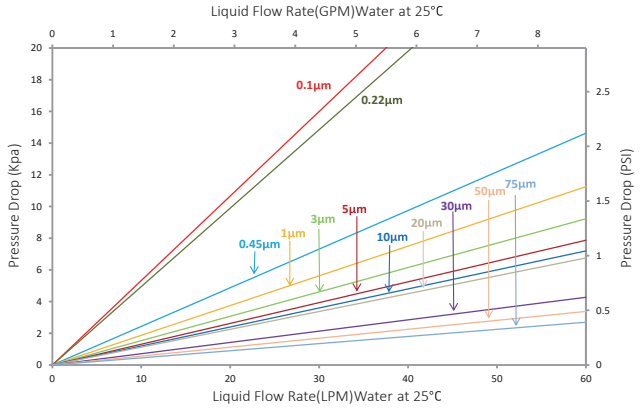
Minimum burst pressure: 123.5psi (8.5 barg)Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR.

Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011

Maximum Operating ConditionS

- Maximum opereting pressure
  -Liquid: 5 bar (80psi) at 77°F/25°C
  -Gas: 3.5 bar (60psi) at 77°F/25°C
- Maximum Operating Temperature: 80 °C
- Autoclave at 125 °C, 30 minutes and 25 cycles
- Autoclave at 135 °C, 30 minutes and 15 cycles

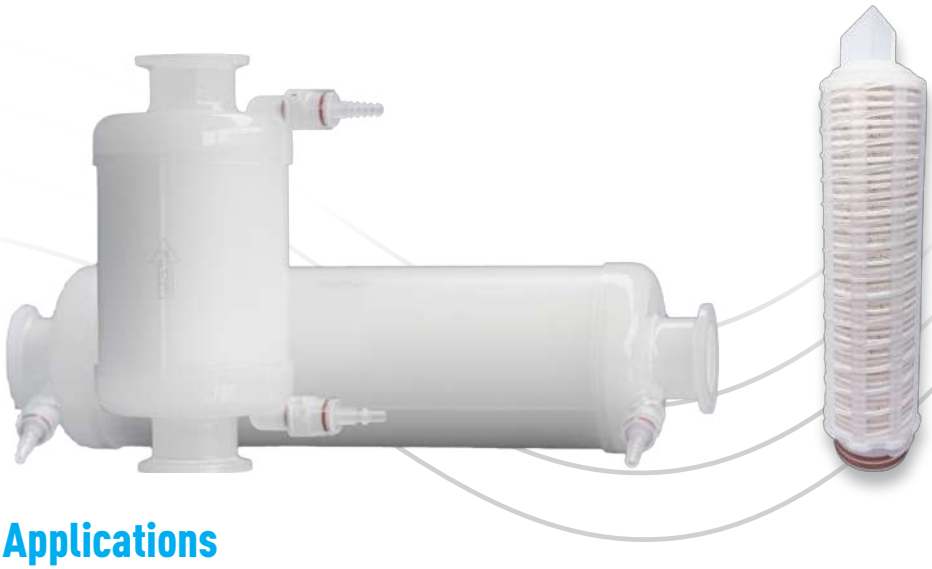


ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings**	**Vent/Drain**	**Revision**
CIK = Capsule InT Filter	PP = Polypropylene	**Application G**	G = Gen Purpose	N = Not Sterile	SS = 2.5"	5TC = 1.5" TC	SS = St/St	0 = Bag label
		0060 = 0.6 µm	P= Premier		LL = 5"	2HB = 1/2" HB	HH = HB/ HB	1 = Housing label
		Application P			TE = 10"	4HB = 3/4" HB	SH = St/HB	
		0100 = 1.0 µm			TW = 20"	T2B = 1.5" TC/ 1/2" HB	HS = HB/St	
		0300 = 3.0 µm			TH = 30"	T4B = 1.5" TC/ 3/4" HB		
		0500 = 5.0 µm			FO = 40"	2BT = 1/2"HB/ 1.5TC		
		0700 = 7.0 µm				2B4 = 1/2"HB/ 3/4"HB		
		1000 = 10.0 µm				4BT = 3/4"HB/ 1.5"TC		
		2000 = 20.0 µm				4B2 = 3/4"HB/ 1/2"HB		
		3000 = 30.0 µm						
		5000 = 50.0 µm						

KP cellulosic depth media capsule filter

KP cellulosic depth media capsule filter have been designed for simple, quick, and efficient filtration of fluids used in laboratories, pilot, and small scale applications. The family of products is particularly suitable for high loading liquid applications. The compact design of the filters with respect to the filtration area, reduces hold-up volume and optimizes performance. Multiple pore size options is assembled in all polypropylene construction for excellent chemical compatibility.

The cellulosic depth media is structured in a stacked disk format to provide optimal flow. No adhesives, binders, surfactants are used in the process of manufacture.



Typical Applications

- Prefiltration
- Secondary clarification
- Cell culture harvest
- Cell culture clarification Protein aggregate removal

Filtration Area

- Single layer:1300cm^2/10''
- Double layer:650cm^2/10"

Material construction

- Filter Media:
  -Cleaned and bleached cellulose
  -Natural filter aid (kieselguhr, perlite)
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene

Fitting Option

- 1.5"TC
- 1/2" Hose Barb
- 3/4" Hose Barb
- 314"TC

Vent/Drain Option

- Staubli
- Stepped hose barb

Toxicity

All materials meet the specifications for biological safety per USP Class Vl-121'C for plastics

Capsule Integrity

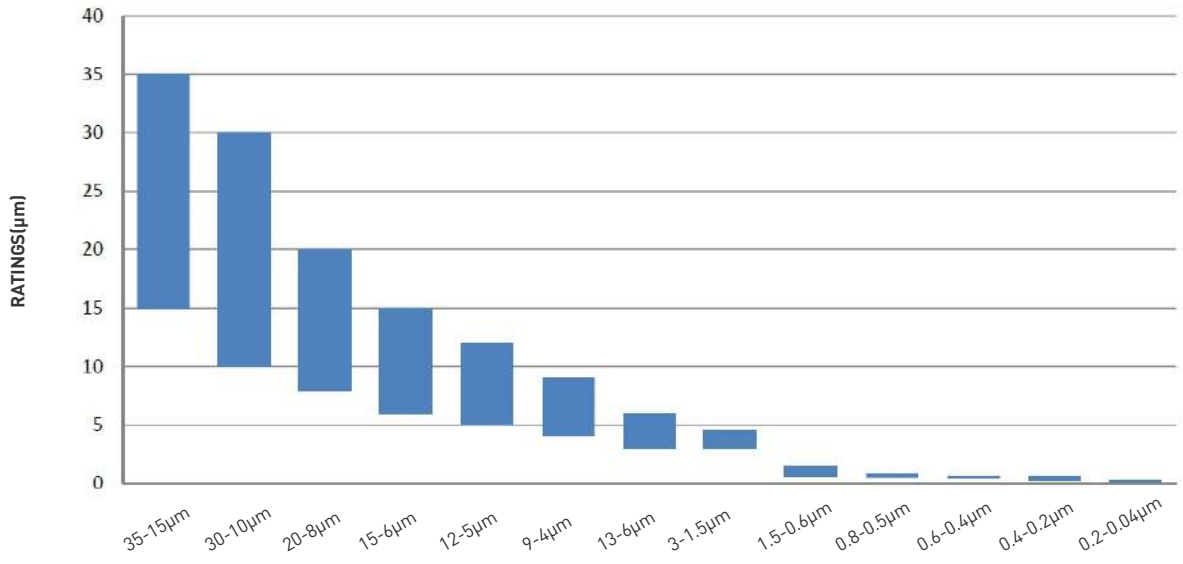
Minimum burst pressure:123.5psi(8.5barg)

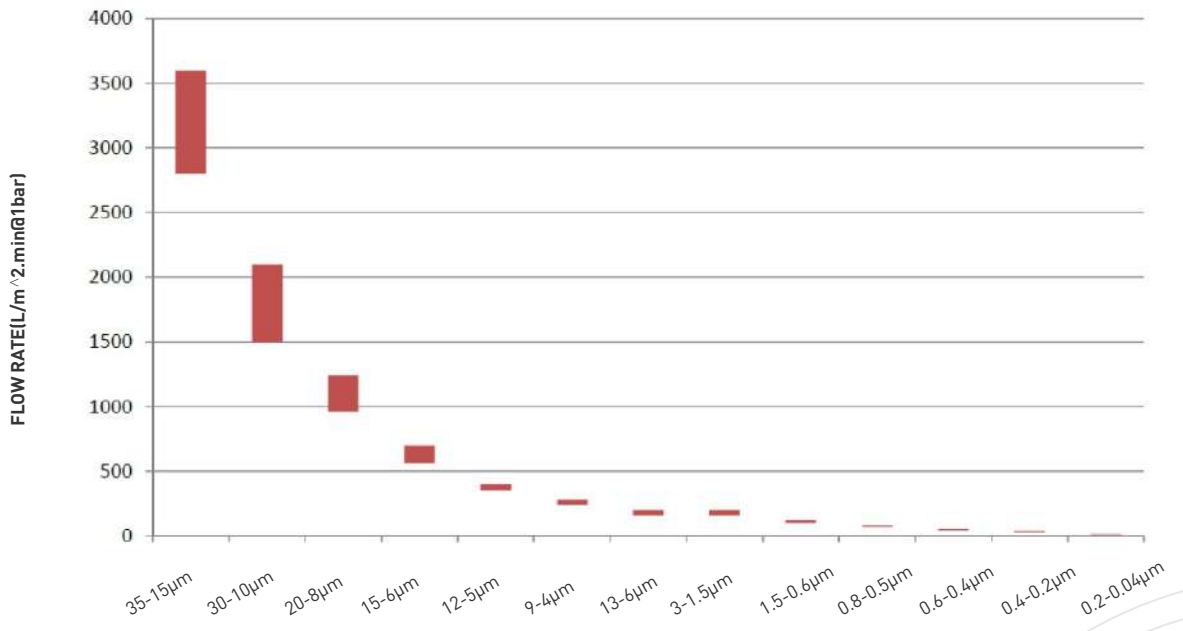
Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code ofFederalRegulations, 21CFRMaterials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011

Media Grade/Rating

	Retention Rating/μm
Coarse filtration	35-15
Coarse filtration	30-10
Coarse filtration	20-8
Clear filtration	15-6
Clear filtration	12-5
Clear filtration	9-4
Clear filtration	6-13
Fine filtration	3-1.5
Germ Reduction filtration	1.5-0.6
Sterile Filtration	0.8-0.5(Serratia marcescens, LRV>5)
Sterile Filtration	0.6-0.4(Serratia marcescens, LRV>7)
Sterile Filtration	0.4-0.2(Serratia marcescens, LRV>8)
Sterile Filtration	0.2-0.04(Serratia marcescens, LRV>8)





ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings in / out**	**Vent/Drain**	**Revision**
CKC = Capsule InT Depth Filter	CC = Cellulose	Z2Y4 = 0.2-0.04µm	G = Gen Purpose	N = Not Sterile	SS = 2.5"	5TC = 1.5" TC	SS = St/St	0 = Bag label
CCT = Capsule T-Line Depth Filter		Z4Z2=0.4-0.2µm			LL = 5"	2HB = 1/2" HB	HH = HB/HB	1 = Housing label
CCT is only available in 1.5"TC connection		Z6Z4 = 0.6-0.4µm			TE = 10"	4HB = 3/4" HB	SH = St/HB	
		Z8Z5=0.8-0.5µm			TW = 20"	T25 = 3/4" TC	HS = HB/St	
		15Z6=1.5-0.6µm			TH = 30"			
		3X15=3-1.5µm						
		9XX4=9-4µm						
		12X5=12-5µm						
		13X6=13-6µm						
		15X6=15-6µm						
		20X8=20-8µm						
		3010=30-10µm						
		33515=35-15µm						

CXK series

Steaming in Place

Capsule Filter

CXK series
Steaming in Place Capsule Filters

Description and use

The GVS CXK Capsflow Steaming in Place Capsule filters have a standard filter sealed in a robust plastic housing, which remains high-strength and integral at a harsh applications.

Typically Steaming in Place (SIP) sterilization. Capsflow filters are manufactured under criteria of certified Quality management system ISO 9001. All filters are integrity tested during manufacture to meet the set requirements. Materials of construction comply with FDA regulations for food and beverage contact use.

Benefits

- Purpose-designed for SIP
- Cost-saving
- Easy connection with sanitary flange
- On-line connection to automatic integrity tester Available in multiple choice of media and ratings

Typical Application

- Sterile filtration of air and liquid in pharmaceutical and biological products
- Sterile air feed

Construction Materials

- Hydrophobic Filter membrane: PTFE,
- Hydrophilic Filter membrane: PES, NYLON
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Filter sealing without glue in housing

Traceability

Each capsule is marked with a unique part number, batch number and serial number to enable full traceability

Size

- 2.5" (84 mm)
- 5" (159 mm)

Toxicity

All components meet the specifications for biological safety per USP class VI 121°C for plastic

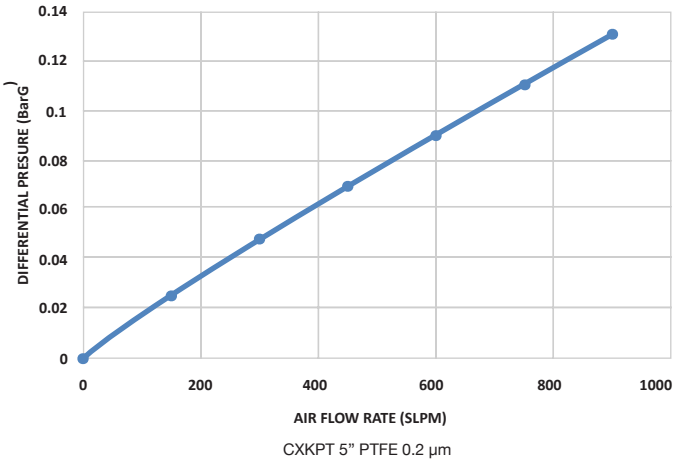
Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21 CFR. Materials used to produce filter media
and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011. Rohs 2011/65/EU compliance.

Maximum Operating Conditions

- CXKPT (PTFE) 0.2 µm:
- Maximum Pressure: 5.8 barg @ 40°C
- Maximum Differential Pressure: 5barg @ 40°C

Typical Air Flow Rate



CXKPT 5" PTFE 0.2 µm

Filtration Area

CXKPT (PTFE), CXKPS (PES)

- 2.5" : 600 cm^2

CXKNY (NYLON)

- 2.5" : 700 cm^2
- 5" : 2100 cm^2
- 5" : 1700 cm^2

Performance data

	CXKPT			CXKPS				CXKNY		
Filter membrane	**PTFE (Hydrophobic)**			**PES (Hydrophilic)**				**NYLON (Hydrophilic)**		
Membrane pore size	0.05 µm	0.1 µm	0.2 µm	0.45 µm	0.1 µm	0.21 µm	0.45 µm	0.1 µm	0.21 µm	0.45 µm
Flow rate 2,5" Liquid 1 cP *		2lpm@6psid	3.1lpm@6psid	5.9lpm@6psid	7.5lpm@5psid	5lpm@5psid	5lpm@2.6psid	4lpm@8.5psid	5lpm@5.5psid	5lpm@3.5psid
Flow rate 5" Liquid 1 cP *		5lpm@6.5psid	5lpm@4psid	5lpm@1.9psid	5lpm@4psid	5lpm@2.2psid	5lpm@1.3psid	5lpm@4.6psid	5lpm@3.4psid	5lpm@2.8psid
Maximum Operating Parameter Pressures Forward/Reverse (bar)	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5	6.5/3.5
Integrity Test specification Bubble point (bar)	2.7 (IPA)	1.6 (IPA)	1.6 (IPA)	0.5 (IPA)	1.8 (IPA)	3.6 (WATER)	2.6 (WATER)	4.5 (WATER)	3.3 (WATER)	1.9 (WATER)
N. SiP sterilization cycles	100 cycles @126 °C			50 cycles @126 °C				50 cycles @126 °C		

* CXKPT (PTFE - Hydrophobic) IPA Wetted membrane

ORDERING INFORMATION								
Product Type	**Membrane Type**	**Membrane pore size**	**Application**	**Sterilization**	**Size**	**Fittings in / out**	**Vent/Drain**	**Revision**
CXK = Capsule SIP Filter	PT = PTFE phobic	0005 = 0.05 µm (PT only)	X = Steaming in place	N = Not Sterile	SS = 2.5"	5TC = 1.5" TC	SS = St/St	0 = Bag label
	PT = PES	0010 = 0.1 µm			LL = 5"		HH = HB/HB	
	NY = NYLON	0020 = 0.2 µm					SH = St/HB	
							HS = HB/St	

CIL series

TIn-line filter PES membrane

Capsule Filter

TIn line filter PES membrane
Capsule Filters bio-burden reduction

Description and use

The TIn-line capsule filters is family of full size capsule filters available in multiple option of length. The PES membrane capsule utilizes single layer hydrophilic polyethersulfone membrane. It offers broad chemical compatibility, high flow rate and low extractables.

Polyethersulfone is particularly suited for the filtration of products that contain substances that adsorb to the media. The lower binding characteristics of polyethersulfone make it a good choice for filtration of valuable protein solutions such as vaccines and biologicals.

Typical Applications

- Cell Culture Media
- Large Volume Parenterals (LVP's)
- Pharmaceutical Bulk Chemical Solutions
- Diagnostics
- Blood and Serum Fractions
- Purified Water
- Beer, Wine and Spirits
- Juice & Soft Drinks
- Bottled Water

Toxicity

- All materials meet the specifications
- far biological safety per USP Class
- VI -121C° far plastics.

Filter Area

- 0. 6 cm^2/10"c

Fitting Option

- 1.5" TC

Vent/Drain Option

- Stepped hose barb

Capsule Integrity

- Minimum burst pressure: 123.5psi (8.5barg)

Construction Materials

- Filter Media: Polyethersulfone
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding
- Filter sealing without glue in housing

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011.

Capsule Integrity Test Specifications

Pore size	Min.Bubble point	Diffusive Flow
0.2 µm	3.5 barg@22°C	≤28ml/2.8 barg
0.45 µm	2.3 barg@22°C	≤25ml/1.7 barg
0.65 µm	1.6 barg@22°C	≤25ml/1.0 barg

ORDERING INFORMATION								
Product Type	Membrane Type	Membrane pore size	Application	Sterilization	Size	Fittings In/Out	Vent/Drain	Revision
CIL= TIn-Line Capsule Filter	PS = PES	0020 = 0.2 µm	B =Low Bio	N = Not Sterile	SS = 2.5"	5TC = 1.5" TC	HH = HB/HB	0 = Bag label
		0045 = 0.45 µm			LL = 5"			1 = Housing label
		0065 = 0.65 µm			TE = 10"			
					TW = 20"			
					TH = 30"			
					FO = 40"			

CIL series

Hydrophobic PTFE membrane Capsule Filter

TIn line filter Hydrophobic PTFE membrane Capsule Filters bio-burden reduction

Description and use

The TIn-line capsule filters is family of full size capsule filters available in multiple option of length. The PTFE membrane bio-burden reduction capsule utilizes single layer hydrophobic PTFE membrane. It offers broad chemical compatibility, high flow rate and low extractables.

Benefits

- 100% integrity tested
- FDA food contact compliant
- Thermal bonding
- Non-fiber releasing

Typical Applications

- Sterile air feed
- Chemicals
- Pharmaceuticals
- Solvent

Toxicity

- All materials meet the specifications
- far biological safety per USP Class
- VI -121C° far plastics.

Filter Area

- 10": 64000cm^2

Fitting Option

- 1.5" TC

Vent/Drain Option

- Hose barb

Capsule Integrity

- Minimum burst pressure: 123.5psi (8.5barg)

Construction Materials

- Filter Media: ePTFE membrane
- Media Support: Polypropylene
- Capsule: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization /Sterilizaion

Autoclavable

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are safe for use in contact with foodstuffs in accordance with EU Directives 10/2011

Capsule Integrity Test Specifications

Pore size	Bubble point	Water Intrusion	Diffusive Flow
0.2 µm	≥ 1.2 barg(IPA/Water)	≤ 0.37ml/min @2500mbar/10",22°C	≤10ml/min @800mbar/10",22°C

ORDERING INFORMATION								
Product Type	Membrane Type	Membrane pore size	Application	Sterilization	Size	Fittings In/Out	Vent/Drain	Revision
CIL= TIn-Line Capsule Filter	PT = PTFE phobic	0020 = 0.2 µm	B =Low Bio	N = Not Sterile	SS = 2.5" LL = 5" TE = 10" TW = 20" TH = 30" FO = 40"	5TC = 1.5" TC	HH = HB/HB	0 = Bag label 1 = Housing label

Filter Bags

FBDG Series - Filter Bags

Filter bags are one of the most cost-effective choices for a wide range of filtrations, ranging from food and beverage to industrial chemical filtration. The micron ratings range from 0.5 micron to 100 micron and coupled with our wide of filter bag material choices. It applies to the removal of particles of various sizes. PP, PET needle felt bags are suitable for nominal precision filtration, while nylon mesh bags are suitable for filtration at lower ratings. Light weight and low-cost filtering material offer high chemical and corrosion resistance. It follows international standards and is compatible with bag filter housings of current mainstream brands.

Features

- Various media types and sizes available
- Broad chemical compatibility
- Sewn or fully welded construction
- High flow rate / low pressure drop
- High dirt holding capacity
- Low cost

Applications

- Chemicals
- Paints & Coatings
- Food and Beverage
- Machinery
- Water Treatment

Material of Constructions

- Media PP, PET, Nylon
- Seal Ring SS, PP

Dimensions

Size 1	Ø180mm x L420mm
Size 2	Ø180mm x L810mm
Size 3	Ø105mm x L230mm
Size 4	Ø102mm x L380mm
Size 5	Ø150mm x L520mm

Performance

Max. Operating Temperature	PP:80°C(176°F) PET: 120°C(248°F) Nylon: 160°C(320°F)
Max. Operating DP	PP: 2 bar(29psi)@20°C(68°F), 1 bar(15psi)@80°C(176°F); PET: 2 bar(29psi)@20°C(68°F), 1 bar(15psi)@120°C(248°F); Nylon: 2 bar(29psi)@20°C(68°F), 1 bar(15psi)@80°C(176°F)

Eg.=>Eg.=>FBDG1ARG0050A

ORDERING INFORMATION						
Series	**Size**	**Material**	**Body Construction**	**Removal Rating**		
FBDG	1 = Size 1: Ø180mm x L420mm 2 = Size 2: Ø180mm x L810mm 3 = Size 3: Ø105mm x L230mm 4 = Size 4: Ø102mm x L380mm 5 = Size 5: Ø150mm x L520mm	A = PP Media and PP Collar B = PP Media and SS Seal Ring C = PET Media and SS Seal Ring D = Nylon Media and SS Seal Ring	R = Welded F = Sewn(ss seal ring)	G = PP G0050 = 0.5µm G0100 = 1µm G0300 = 3µm G0500 = 5µm G1000 = 10µm G2000 = 20µm G5000 = 50µm G7500 = 75µm G9900 = 100µm	Z = PET Z0050 = 0.5µm Z0100 = 1µm Z0300 = 3µm Z0500 = 5µm Z1000 = 10µm Z2000 = 20µm Z5000 = 50µm Z7500 = 75µm Z9900 = 100µm	B = Nylon B5000 = 50µm B7500 = 75µm B9900 = 100µm	A

Sterilizing Filter

50 mm Sterilizing Filter

Description and use

Positive pressure sterilizing filters are widely applicable to sterilizing filtration of aqueous solutions in biological laboratories, adapt for the peristaltic pump, syringe or other positive pressure device.

GVS 50 mm sterilizing filter is suitable for removing microor-ganisms, particles, precipitates, and undissolved pow-ders larger than 0.22 μm from aqueous solutions. It has the stepped hose barb design that ensures stable con-nection between the filter and the hose.The membrane material is 0.22 μm hydrophilic polyethersulfone (PES) , can filter samples up to 8 L in volume.

- Membrane diameter: 50 mm
- Membrane pore size: 0.22 μm
- Pattern: Two stepped barbs, filling bell
- Materials:
  -Filter housing: Methyl methacrylate-butadiene-styrene (MBS)
  -Filter Membrane: Hydrophilic polyether sulfone (PES)
  -Filling Bell: Polycarbonate (PC)
  -Filling Bell Cap: Low-density polyethylene (LDPE) Conforming to USP Class VI standards

Features

- The filter membrane is made of 0.22 μm hydrophilic polyether- sulfone for high throughput and excellent filtration performance
- The products have an effective filtration area of up to 19.9 cm^2, and can filter samples up to 3.8-8 L in volume
- Maximum operating temperature: 45°C
- Maximum inlet pressure: 3.3 bars (50 psi) at 25°C
- Typical water flow rate: 390 mL/min at 25°C under 15 psi
- It is designed with a filling bell avoiding liquid splashing and pollution
- Stepped hose barb design that ensures stable connection between the filter and the hose
- Filter surface with coding marks, clearly distinguish inlet and outlet
- Sterilized by irradiation, SAL 10-6, DNase/RNase-free, Non-pyrogenic, Non-cytotoxic

Special Tips:

The test results show that the 50 mm sterilizing filters are suitable for most aqueous solutions, such as acetic acid (5%), aqueous buffer, cell media, bleaching agent (5% solution), sodium hydroxide (10%), sulfuric acid (20%). The unlisted reagents should be tested for applicability before use.

Ordering information								
Product Code	Description	Adaptive Tube Diameter	Membrane Pore Size (μm)	Membrane Diameter (mm)	Outer Diameter (mm)	Sterile	Qty. Per Bag	Qty. Per Case
PLAJSF0505SA	PES membrane, two stepped barbs, filling bell	1/2 " -1/4 "ID	0.22	50	62	Y	1	10
PLAJSF1505SA	PES membrane, two stepped barbs, without filling bell	1/2 " -1/4 "ID	0.22	50	62	Y	1	10

Disc Capsule Filter

Description and use

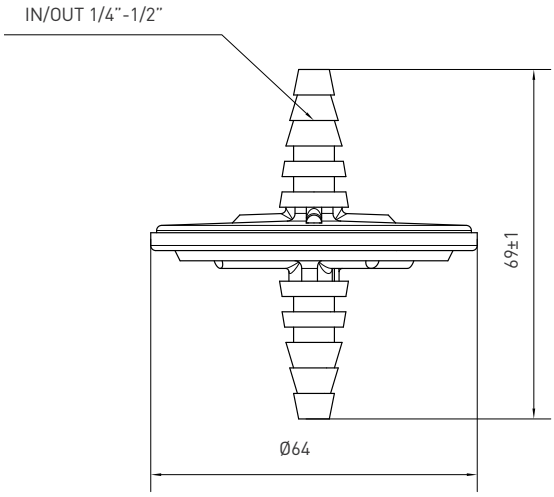
Disc capsule filters are made of polytetrafluoroethylene which have excellent resistance to organic and inorganic chemical corrosion properties along with natural hydrophobici-ty. It can be widely used in sterile ventilation processes such as biotechnology, pharmaceuticals, laboratories etc. It's easy to use and operate, the lightweight design (only 20g) makes the structure very stable and reliable and will not appear hose bending to adversely affect ventilation.

Typical Applications

- Sterile ventilation of culture containers and CO^2 incubators
- Sterile ventilation of fermenters and storage tanks
- Autoclave steam sterilization air exchange
- Removal of gas particles

Typical Applications

OD	64mm
Length	69mm
Inlet/Outlet	1/4"-1/2"HB



Features

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

Construction of Materials

Housing	PP
Media	Hydrophobic PTFE

Performance

Max. Operating Pressure	3 Bar@20°C
Autoclaving	125°C-30min-60cycles
Filtration Area	20cm²

Ordering information			
Product Code	**Pore size**	**Package**	**Sterilization**
VF50ASPPT002AX01	0.22μm	10/pk	YES
VF50ASPPT004AX01	0.45μm	10/pk	YES
VF50ANPPT002AC01	0.22μm	100/pk	NO
VF50ANPPT004AC01	0.45μm	100/pk	NO

Filter Integrity Tester

Filter Integrity Tester

GVS filter integrity tester is a new-generation device signed according to the latest GAMP guidelines. It combines intelligent technology with high-sensitivity performance and features large-capacity accurate data recording, exporting, and printing functions. The tester's system is designed for greater stability, making it suitable for most cleanroom environments. The device is lightweight, compact, and ergonomic. Its 10-inch high-definition truecolor touch screen enhances usability and simplifies operation.

Additionally, the equipment complies with GMP guidelines and meets FDA 21 CFR Part 11 requirements for electronic records, and 21 CFR 820.72 for calibration.

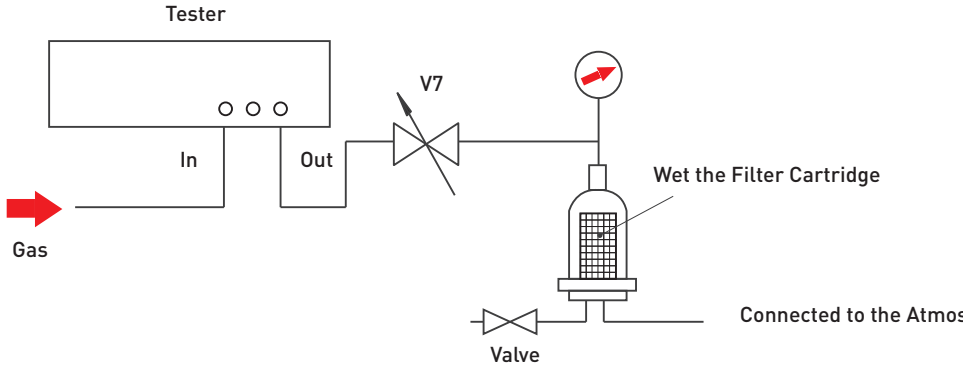


Diagram of Connection Between Tester and Filter

Product Code	ITMDG020

Features

◊ Innovation of Hardware Configuration

- The new high-performance industrial-grade dual-core design CPU significantly improves the data processing speed and capability to ensure the safety, reliability, and efficiency of the instrument during operation.
- The structure is optimized to achieve front IP65 level dust and splash protection, with superior internal sealing for reliable operation in wet environments, enhancing durability.
- The device features a 10-inch true-color touch screen design and a user-friendly interface, allowing for simple, quick, and reliable operation.
- The built-in thermal printer avoids the risk of particle and ink contamination, hardly produces any particles during the printing process, meets the FDA requirements for data recording, can maintain legible writing under the appropriate conditions for more than 10 years, and the printing paper outlet design is ergonomic.
- The instrument supports various industrial buses and analog control ports, tailored to customer needs. It features a rich data interface, including standard digital and analog interfaces (RS232/USB), and offers a USB disk data export function. This function exports not only the original test data but also source data and configuration data, enhancing flexibility.
- The equipment adopts compact and lightweight design, small size, light weight, less energy consumption, easy to carry.

◊ Flexible and Steady Operating System Design

- Optimize the Linux system, enhance the autonomy of the instrument, its stability has been fully verified, optimize test operation, and reduce the test time.
- With a perfect boot-up automatic self-check function and comprehensive diagnostic capabilities, the instrument ensures accurate operation.
- The scientific electronic signature system and user hierarchy management mechanism enhance responsibility division, reduce misoperations, and increase standardization and security in laboratory management.
- High-precision sensors and optimized algorithms can extend the gas path to 100m, make the upstream volume test more accurate, and the instrument can better meet the conditions of field use without affecting the test results.
- The operation interface displays the test data and process curve in real time, and monitors the test process throughout the process to ensure the accuracy and controllability of the test.
- Audit trail records can be exportable and be quickly queried record storage 5 years.
- Support database encryption export, which perfectly reflects the data integrity requirements of the instrument.
- Implemented an efficient calibration process to ensure accurate pressure and flow measurements within instrument test thresholds.

◊ Comprehensive Testing and Data Processing Capabilities

- Comprehensive and powerful, it covers all existing test methods for filter integrity, including the integrity testing of ultrafiltration systems.
- Advanced digital sensor technology is utilized to significantly enhance the accuracy and consistency of test results, ensuring precise evaluation of the performance indicators of the tested filter.
- Conduct both offline (with battery) and online testing using pressure sensors that provide higher accuracy and lower deviation.
- The tester provides detailed and comprehensive test data, along with complete test curves that accurately reflect various performance indicators of the filter being tested, delivering precise analytical information to users.
- Up to 12 20-inch filters can be tested, which greatly improves the user's work efficiency.

◊ Secure and Reliable Data Storage Capability

- Historical records can store up to 300,000 test results, support quick query and generate PDF test reports.
- "Reservation Solution (programs) " design simplifies operation, can establish 1000 sets of pre-stored programs, and fully meets multiple filter types and different test conditions in the field, which is more intelligent, simpler, and accurate.
- User-level management allows for the creation of up to 1,000 user accounts, which can be easily queried.
- The information base can store 5000 fault information and prompt information, and can be quickly queried.

Parameters

Dimension

- Weight: 8.2kg
- Depth x Width x Height:
  350mm x 352mm x 178mm
  (13.78in. x 13.86in. x 7.01in.)

Filter Test Methods

- Bubble point Test
- Extensive Bubble Point Test
- Pressure Holding Test
- Diffusion FLow Test
- Water Intrusion Test
- Ultrafitration Membrane Test

Function Test Methods

- Self-check
- Flow Check Test
- Printer Test
- Network Test

Other Functions

- Anti-backflow device (optional)
- Cleaning function
- Test program transfer functionality
- Set the transfer function
- Rights management transfer function
- Test result output function
- Backup function

Pressure Options

- mbar
- kPa
- psi
- kgf/cm^2

Communication Ports

- USB
- RS232C
- Ethernet
- Wireless Ethernet Network (optional)

Test Accuracy

- Upstream Volume Test: ±4%
- Bubble Point Test; ±50mbar
- Diffusion Flow Test: ±4%
- Water Intrusion Test: ±0.01ml

Test Range

- Bubble Point; 100-8000mbar
- Diffusion Flow: 1-1000ml/min
- Water Intrusion: 0.01-100ml/min

Electrical Supply

- Voltage: Automatically adjusted between 100-240V AC , external power supply (including EU, UK, US, AU adaptors)
- Input Frequency: 50/60HZ
- Charging Power: 120W
- Spare Battery (optional)

Operation Conditions

- Operating Pressure: 100-10000 mbar (150psi)
- Dust and Splash Level: IP54, Front is IP65
- Operating Temperature: +5°C to +40°C
- Storage Temperature: -20°C to +70°CRelative Humidity: 10-80%
- Applicable Environment: Above D level
- Usage: Online/Offline (with battery)

Display Screen

- Size: 10.1 inch
- Resolution: 1024x768 pixels
- Features: High definition, color, bright background, touch screen

Information Records

- Reservation Solution(programs): 1000 sets
- History Record Function: No limit on the number of records stored
- Result Backup: Support U disk export data (including test curve)

Audit Trial

- Audit trail records can exportable and irreversible
- Record storage 5 years

Printer

- Audit trail records can exportable and irreversible
- Record storage 5 years

User Management

- Authority Management: Login level 4 permission in full compliance with FDA 21CFR PART 11
- Number of Accounts : 1000

Operating System

- Linux System (more stable than Windows)

Applied Scope

- Symmetric and asymmetric membrane test, needle filters, capsule filters, flat filters, cartridge filters, ultrafiltration membrane packages, ultrafiltration columns, various irregular filters

Calibration Item

- Calibration limits for pressure sensors and flow measurements

Signal Output

- (4-20)mA, RS485, 12V alarm output

FibraFlow Tangential Flow

GVS provides comprehensive solutions on tangential flow filtration

TFFSPS010003010 80N

1 2 3 4 5 6

1 Material of hollow fiber membrane

PS	PES(Modified polyethersulfone)

2 MWCO

010M	0.1μm
020M	0.2μm
045M	0.45μm

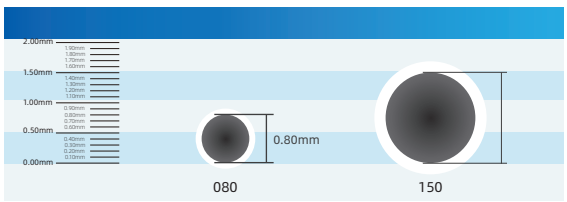
3 Passageway length

03	30cm
06	60cm
11	110cm

4 Housing Specifications

Code	Scale	Inner diameter(mm)	Membrane area(m^2)	Passageway length(cm^2)	Housing length	Interface specifications Inlet/Return Port through Port
01	small scale	3	0.00067	27	32.2	4mm males luer female luer head 4mm males luer female luer head
			0.0014	56	62.2	
02		9	0.017	27	31.8	TC25(1/2'') TC25(1/2'')
			0.035	56	61.8	
03	middle scale	19	0.10	27	33.3	TC25(1/2'') TC25(1/2'')
			0.20	56	63.3	
04		32	0.24	27	31.2	TC50(1-1/2'') TC25(1/2'')
			0.50	56	61.2	
05		51	0.53	27	35.5	TC50(1-1/2'') TC25(1/2'')
			1.1	56	65.5	
06	production	76	2.7	53	67.9	TC64(2'') TC50(1-1/2'')
			5.1	101	117.9	
07		108	5.0	50	70.9	TC64(2'') TC50(1-1/2'')
			10	101	121.9	

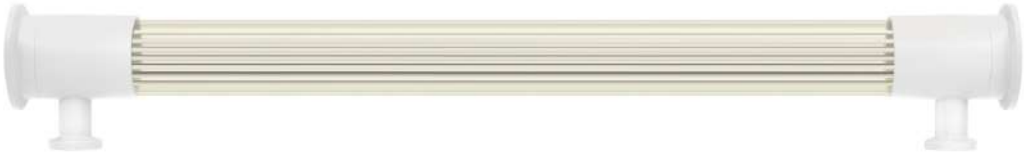
5 Member diameter



6 Specification

N	common filter
A	autoclavable filter
SU	single-use, irradiated

Hollow Fiber Filter



Applications:

- Lysate clarification
- Upstream cell perfusion culture
- Inclusion body clarification and renaturation
- Nanoparticle Diafiltration and Separation
- Liposome concentration and diafiltration
- Cell concentration, clarification, diafiltration
- Purification, concentration, diafiltration of
- proteins and nucleic acids
- Virus purification, concentration, diafiltration

The production raw materials of this product meet the requirements of EMEA/410/01.

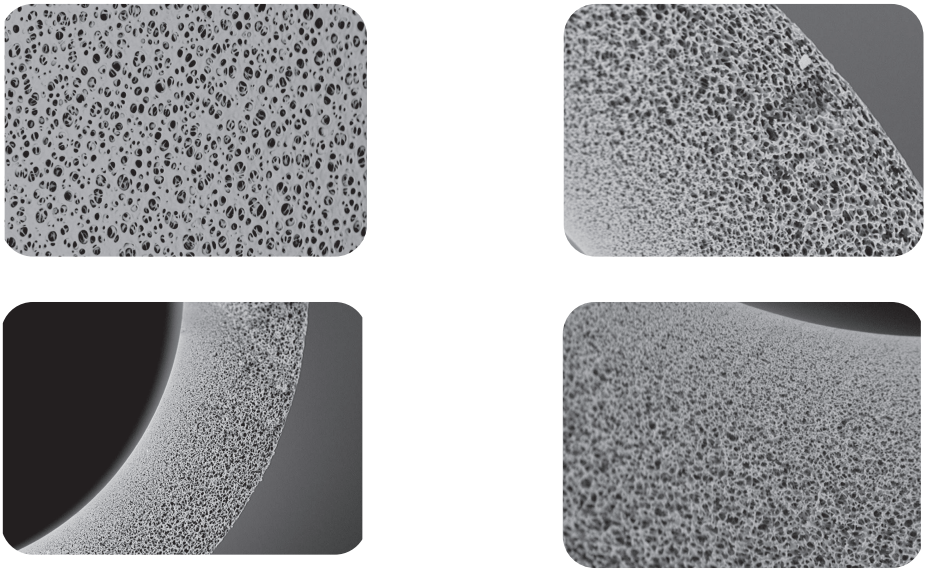
The technical parameters of this product meet the following regulatory requirements:

- Biological Reactivity Test, In Vivo per USP<88>Class VI
- 21CFR177 Indirect Food Additives
- L929 MEM Elution test - ISO 10993-5(Cytotoxicity)
- Hemolysis - Rabbit Blood (direct contact) - ISO 10993-4

The production of this product meets the requirements of 15013485:2016 quality management system.

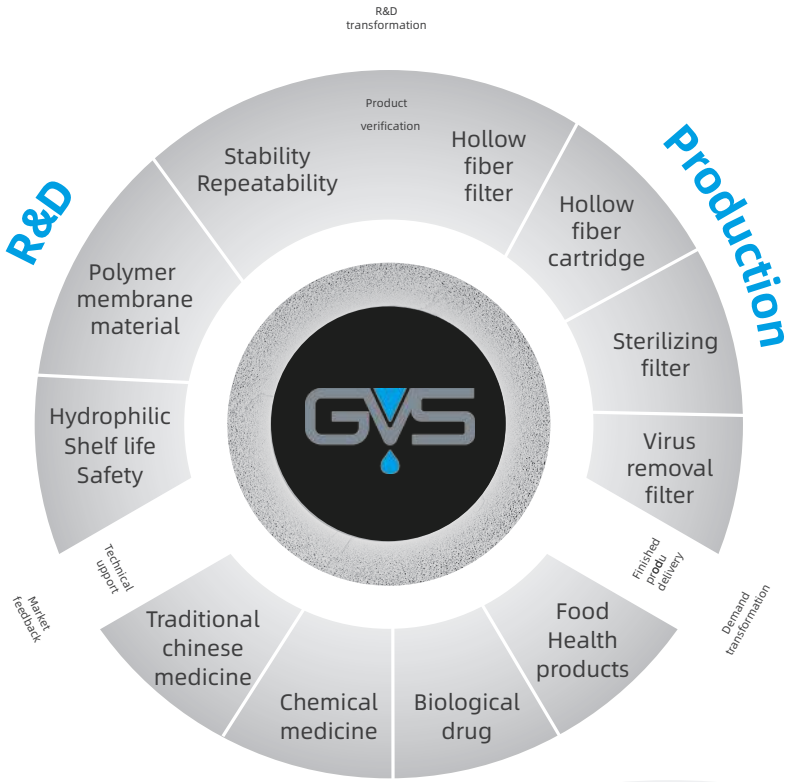
Hollow Fiber Membrane

GVS hollow fiber filter is made of modified polyethylene inkstone (mPES), which is suitable for filtration of various processes in the pharmaceutical industry (such as biopharmaceuticals, chemical drugs etc.) and the food industry. It can provide stable and reliable filtration performance.



GVS hollow fiber membrane made of modified polyphenol is an asymmetric structure, the membrane layer is dense, and the outer layer is relatively open. Its unique structural design can result in lower bioburden, lower non-specific adsorption, faster filtration rate, higher throughput, and shorter filtration time, so it is very suitable for the pharma-ceuti-cal and food industries.

GVS takes advantage of its professional production process in "membrane" to speed up the development of the biomedical industry



Chemical Compatibility Table

Code indication: R=recommended; L=limited exposure; NR=not recommended; U=unknown

Material / Solvent	Regenerated cellulose (RC)	Polysulfone(PS) polyethersulfone (PES)	Modified polyethersulfone (mPES)	Polypropylene (PP)	Polyvinylidene fluoride (PVDF)	Nylon (N)	Stainless steel (SS)	Polyester (P)	Fluorocarbons (F)
Ammonia (diluted)	R	R	R	R	R	R	R	U	R
Ammonia (diluted)(10%)	L	R	R	R	R	R	R	U	R
aniline	R	NR	NR	R	R	R	R	U	R
benzaldehyde	R	NR	NR	R	L	U	L	NR	R
phenol (0.5%)	R	R	R	R	R	NR	L	L	R
phenol (10%)	R	L	L	R	R	NR	L	NR	R
propanol	R	R	R	R	R	NR	R	R	R
acetone	R	NR	NR	R	L	R	R	R	R
acetic acid (5%)	R	R	R	R	R	NR	L	L	R
acetic acid (25%)	R	L	L	R	R	NR	L	NR	R
sodium hypochlorite	R	R	L	L	R	NR	NR	U	R
butanol	R	R	R	R	R	L	R	R	U
xylene	R	NR	NR	R	R	R	L	NR	R
dichloromethane	R	L	L	R	R	L	L	NR	R
dimethylformamide	L	NR	NR	R	NR	R	R	NR	U
dimethyl sulfoxide (50%)	U	L	L	U	U	U	U	U	U
glycerin	R	R	R	R	R	R	R	R	R
peracetic acid (0.1N)	U	R	R	U	U	U	U	U	U
perchloric acid(25%)	L	NR	NR	NR	R	NR	L	U	R
toluene	R	NR	NR	R	R	R	R	U	R
cresol	R	NR	NR	R	NR	NR	R	U	R
methanol	R	L	L	R	R	L	R	U	R
formaldehyde (2%)	R	R	R	R	R	R	R	R	R
formaldehyde (30%)	R	R	R	R	R	R	R	R	R
formic acid (25%)	R	R	R	R	R	NR	L	NR	R
formic acid (50%)	R	R	R	R	R	NR	L	NR	R
phosphoric acid (25%)	L	L	L	R	R	L	NR	U	R
sulfuric acid(5%)	R	R	R	R	R	L	NR	NR	R
sulfuric acid(25%)	L	R	R	R	R	NR	NR	NR	R
citric acid(2%)	U	R	R	U	U	U	U	U	U
urea	R	R	R	R	R	R	L	R	R
urea (6N)	R	NR	R	R	R	R	L	R	R
boric acid	R	R	R	R	R	L	L	R	R
hydrofluoric acid (25%)	L	L	L	NR	R	L	NR	NR	R
potassium hydroxide (1N)	R	R	R	R	R	L	L	R	R
potassium hydroxid (25%)	R	R	R	R	R	L	L	R	R
sodium hydroxide (0.1N)	R	R	R	R	R	R	L	R	R
sodium hydroxide (5%)	L	R	R	R	R	R	L	L	R
sodium hydroxide (25%)	L	R	R	R	R	R	L	NR	R
trichloroacetic acid (25%)	NR	R	R	R	R	L	NR	NR	R
trichloromethane (chloroform)	R	NR	NR	R	R	R	R	R	R
triethylamine	R	NR	NR	L	R	R	R	U	R
carbon tetrachloride	R	NR	NR	R	R	NR	L	R	U
tetrahydrofuran	R	NR	NR	R	R	R	R	R	R
diacetone alcohol	R	NR	NR	R	R	R	L	U	R
hydrogen peroxide(30%)	R	L	L	R	R	NR	L	R	R

Material / Solvent	Regenerated cellulose (RC)	Polysulfone(PS) polyethersulfone (PES)	Modified polyethersulfone (mPES)	Polypropylene (PP)	Polyvinylidene fluoride (PVDF)	Nylon (N)	Stainless steel (SS)	Polyester (P)	Fluorocarbons (F)
petroleum ether	R	R	R	R	R	U	U	R	U
nitric acid(5%)	R	R	R	R	NR	NR	R	R	R
nitric acid (25%)	NR	R	R	R	NR	NR	R	L	R
nitric acid (6N)	NR	L	L	L	R	NR	R	R	R
acetonitrile	R	NR	NR	R	L	U	U	U	U
ether	R	NR	NR	L	L	R	R	NR	R
ethyl acetate	R	NR	NR	R	R	R	L	U	R
amyl acetate (banana oil)	R	NR	NR	R	R	L	R	L	R
ethanol	R	R	R	R	R	R	R	R	R
ethanol(15%)	R	R	R	R	R	R	R	R	R
ethanol(95%)	R	L	L	R	R	R	R	R	R
ethylene glycol	R	R	R	R	R	R	L	R	R
hydrochloric acid (5%)	R	R	R	R	R	L	NR	R	R
hydrochloric acid (25%)	NR	R	R	R	R	NR	NR	R	R
hydrochloric acid(37%)	NR	R	R	L	R	NR	NR	R	R
Isopropyl alcohol	R	R	R	R	R	NR	L	R	R
n-hexane	R	R	R	R	R	L	R	R	R

This table is for informational purposes only and is not a guarantee of chemical compatibility. Variations in temperature, concentration, exposure time and other factors may affect the performance of the product and it is recommended to test under your own conditions.

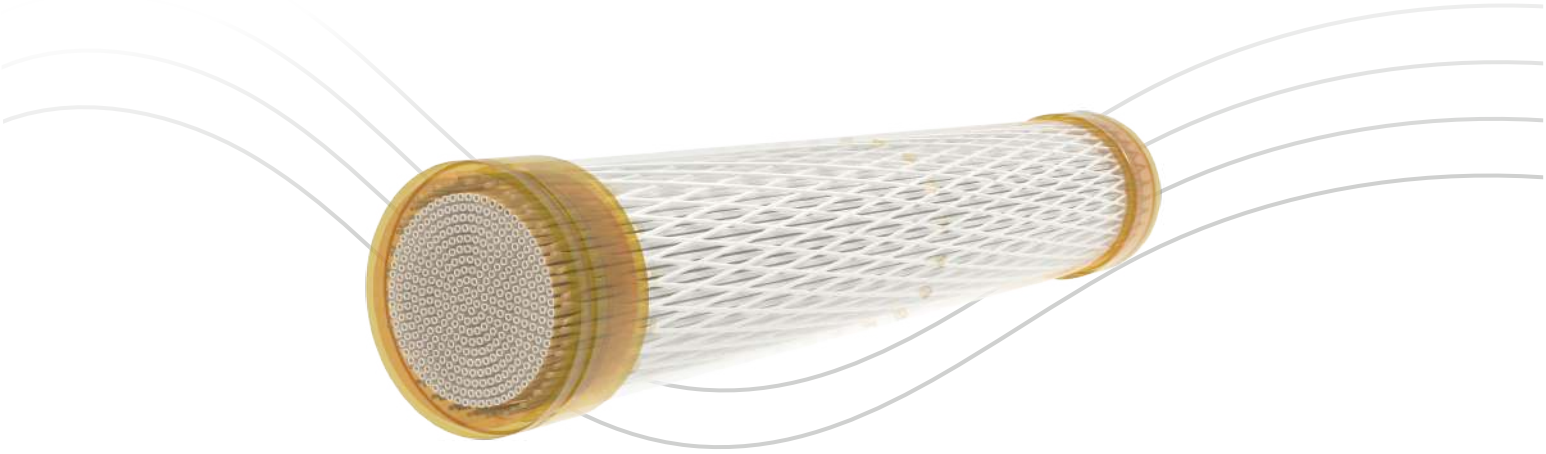
Quality compliance

GVS hollow fiber filter is designed, developed and produced under the ISO13485 quality management system certified by the authoritative organization.After the production be completed in an ISO CLASS 7 clean room, a quality certificate is issued after the products passing the inspection. Products with good quality specifications can meet the regulatory needs of biopharmaceutical customers.

- USP <88> Class VI Testing: All flow path materials have been tested confirmed to the USP <88> Class VI biocompatibility standards
- Bioburden: Bioburden of a single hollow fiber column < 1000 Colony Forming Units (CFU)
- Pyrogen: Hollow fiber filter production and assembly are carried out under strictly monitored conditions to ensure minimal endotoxin levels, but the product line cannot be guaranteed to be completely pyrogen-free
- Free of Animal Origin: Synthetic and processed materials used in fiber synthesis that do not contain any animal or derived substances
- Shipping and Packaging Verification: GVS has verified product shipping/packaging configurations to ISTA 3A (2008) requirements to ensure that sterile products are adequately protected from damage during shipping
- Product Validity: Non-sterile filters are valid for 5 years from the date of manufacture

Hollow Fiber Filter

GVS hollow fiber filters are designed for online steam sterilization processes The mPES hollow fiber membrane has characteristics of high temperature resistance, tolerance to steam circulation operations and recycle.



Applications:

- Filtration of proteins
- Nucleic acids
- Polysaccharides
- Viruses, etc.

Features

- Higher membrane strength
- Design for steam-in-place
- Reusable
- Stable performance, long-term work

Material of Constructions

- Membrane Material: mPES
- Housing: PSU
- Mesh Material: PP
- Shim: PE

Operating Parameters

- Max. operating pressure: 2bar
- Operating temperature: ≤80°C
- Operating PH range: 2~14
- Storage: 0.1 N NaOH
- Cleaning metnods: 0.5N NaOH, citric acid, and sodium hypochlorite solutions.etc

TFFS PS 020M 06CC 080 S

① ② ③ ④ ⑤

Material ①	Pore size ②	Housing specifications ③	Fiber ID ④	Sterilization method ⑤
PS=mPES	020M=0.2μm 045M=0.45μm	06CC	080=0.8μm 100=1.00μm	s=Steam-in-place

Reciprocating Tangential Flow Filter

Perfusion system, compared with the classical fed-batch system, could competent higher cell density culture and dramatically improve yield productions. A small-scale bioreactor with a perfusion system can yield equal or even more products than a large-scale bioreactor, achieving more flexibility and lower cost. It has been deeply applied to drive higher yield biopharmaceutical products, including antibodies, recombinant proteins, viral vaccines, VLPs, viral vectors, and bioprocesses of N-1 perfusion system and expansion of stem cells, or CAR-T cells.

GVS have developed hollow fiber filters to resolve the requirements of sterility and long-term work used in the perfusion system. The hollow fiber silk is made of hydrophilic polyether sulfone (mPES) with 0.2 μm pore size.

It has many good characteristics, such as very low protein adsorption, high resistance to contamination, tolerance to humid heat sterilization and steam in place, and standard connection type, making it a great potential alternative consumable for various perfusion systems.

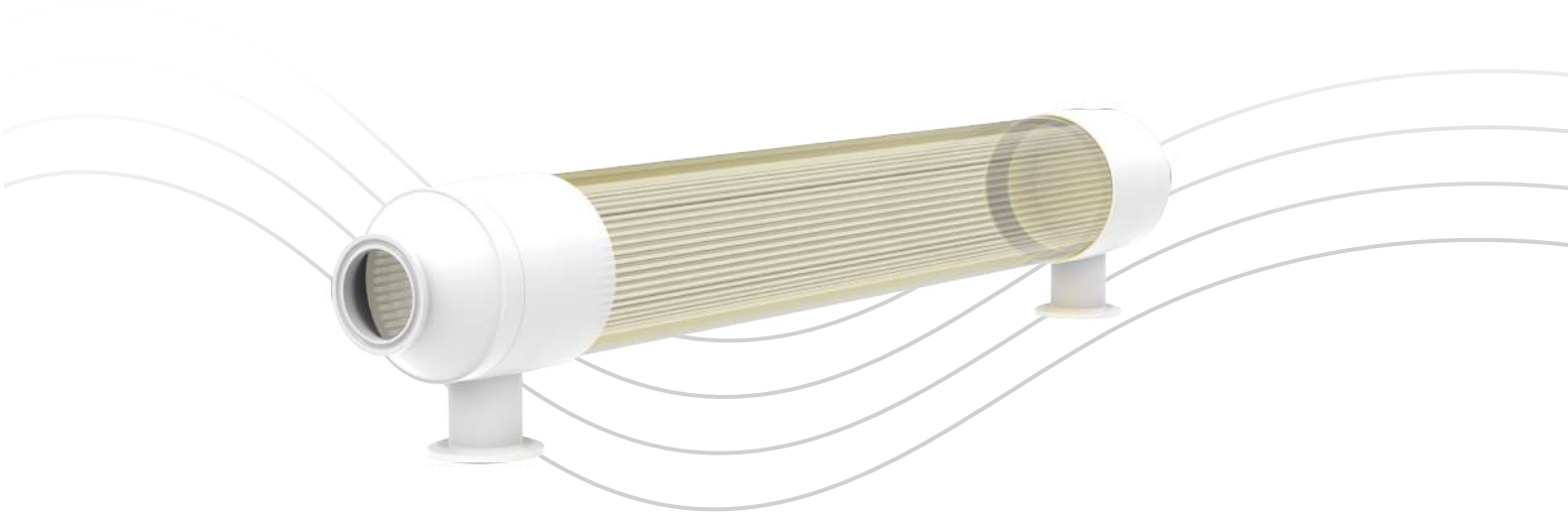
Features

- Asymmetric membrane structure, better resistance
- mPES, better hydrophilia
- Normalized pore size, more stable
- Open flow path, lower shear force
- Reusable

TFFS R 020M CRT 030 04 A

1 2 3 4 5 6

Filter series brand ①	Rating ②	Filter style ③	Flowpath length ④	Housing specification (Length*Diameter) ⑤	Type ⑥
R	020M=0.2μm	X=CRT	030=30cm 060=60cm	04=362mm*58mm 06=637mm*75.2mm 10=515mm*175.5mm	A=Autoclavable



Features

- Asymmetric membrane structure, better resistance
- mPES, better hydrophilia
- Normalized pore size, more stable
- Open flow path, lower shear force
- Single-use

TFFS R 020M FLT 030 02 SU
① ② ③ ④ ⑤ ⑥

Filter series brand ①	Rating ②	Filter style ③	Flowpath length ④	Housing specification (Length*Diameter) ⑤	Type ⑥
R	020M=0.2μm	FLT=Filter	030=30cm 060=60cm 110=110cm	02=633mm*23mm 04=362mm*58mm 06=637mm*75.2mm 10=515mm*175.5mm	A=Autoclavable SU=Single-use, irradiated

Ultra H2O Terminal Ultrafilter

GVS Terminal Ultrafilter

The GVS terminal ultrafiltration filter can effectively remove bacteria endotoxins, nucleases, proteases and bacteria from water, making it suitable for areas requiring very high water quality such as ultrapure substance analysis, cell culture, trace detection, and gene sequencing.

Features

- Removal of bacterial endotoxins: Bacterial endotoxins, which are components of the cell walls of Gram-negative bacteria, primarily consist of lipopolysaccharides. These endotoxins can interact with other molecules or aggregate to form microstructures, causing interference in various analytical and separation methods like cell differentiation, resin purification, electrophoretic analysis, and plasmid extraction.
- Removal of nucleases: Under appropriate water conditions, the GVS terminal ultrafiltration filter can produce nuclease-free water. This process is convenient and safe, and it avoids the CO2 and alcohol contamination that often results from frequent DEPC treatment.
- Removal of bacteria: It has been verified that the GVS terminal ultrafiltration filter can effectively remove bacteria, allowing for the production of sterile water when used normally in a clean environment.

Material

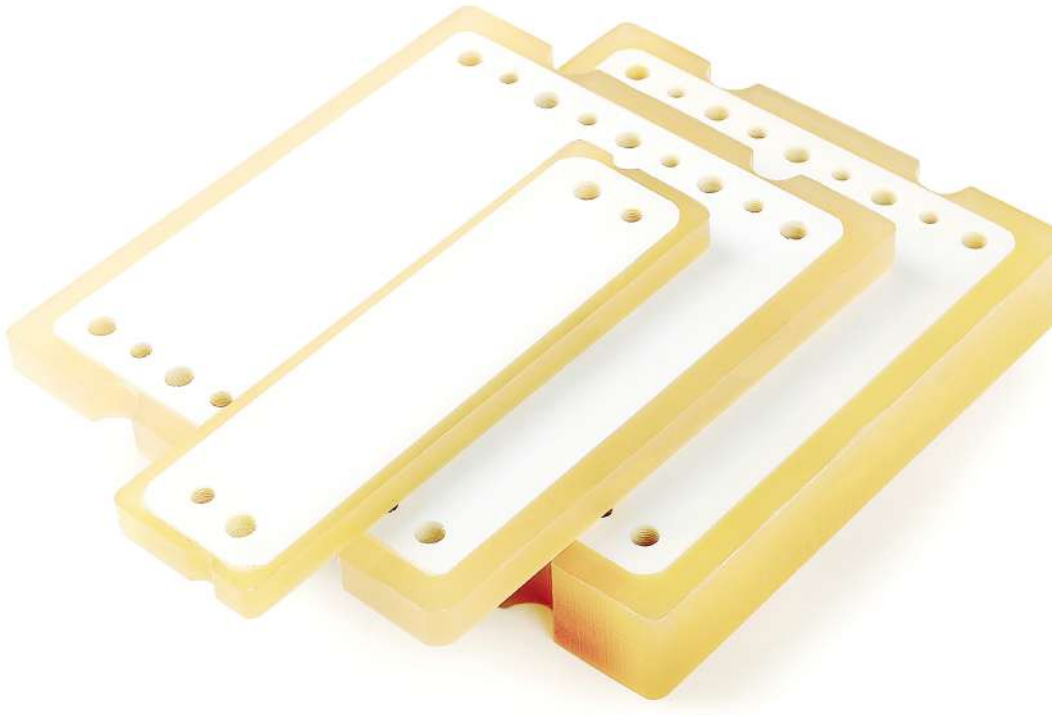
Membrane:	Modified polyether sulfone
Housing:	ABS
End base:	ABS
Sealing ring:	Silicone
Sealing material:	Polyurethane

Parameters

Membrane area:	0.43m²
Maximum inlet water temperature:	60°C
Interception molecular:	>15000Da
Bacterial:	<1 cuf/100ml
Bacterial endotoxin:	<0.001EU/ml
RNase:	<1pg/ml
DNase:	<5pg/ml
Replacement cycle:	90 days
Flow rate:	less than 2.5L/min
Inlet size:	1/4" plug in

Product Code	UFSGPES15KD4302S

CassetteFlow Microfiltration Ultrafiltration



PESU Ultrafiltration Cassettes

GVS microfiltration & ultrafiltration cassettes have the characteristics of quick and easy installation, thorough and convenient cleaning, low working volume, high efficiency retention and large flux. Linear scale-up of process can be achieved from small to large size cassettes.

Material

Membrane:	PESU/RC
Support:	Polyester/Polyolefin
Screen mesh:	PP
Sealing gasket:	Medical silica
Material characteristics:	Low adsorption of non-specific protein, high product recovery, high flux, good chemical compatibility

Parameters

Membrane pore size	ultrafiltration(kd)	microfiltration(μm)
	1/3/5/8/10/30/50/100/300/500/750/1000	0.1/0.22/0.45
Max pressure	≤3bar	
TMP	≤3bar @ 4-45˚C	
Working temperature range	4-45˚C	
pH	1-14	
Flux test	100% tested before delivery	
Integrity test	100% tested before delivery	

Cassettes size and the selection

Type	Membrane area	Application	Processing capacity	Remark
SM	0.11m²	R&D	200mL-2L	Adapt to stainless steel holder (0.1m²)
LM	0.5m²	pilot scale test	500mL-10L	Adapt to stainless steel holder (0.5-2.5m²)
	1.3m²	Pilot scale test, production	1000mL-50L	
	2.5m²	Pilot scale test, production	50L more than 50L	

Ordering information

	Pore size	0.11m² filter area	0.5m² filter area	1.3m² filter area	2.5 m² filter area
Microfiltration cassettes	0.1μm	CSTPSUGG010M0011	CSTPSUGG010M0050	CSTPSUGG010M0130	CSTPSUGG010M0250
	0.22μm	CSTPSUGG022M0011	CSTPSUGG022M0050	CSTPSUGG022M0130	CSTPSUGG022M0250
	0.45μm	CSTPSUGG045M0011	CSTPSUGG045M0050	CSTPSUGG045M0130	CSTPSUGG045M0250
Ultrafiltration cassettes	**Cut off**	**0.11m² filter area**	**0.5m² filter area**	**1.3m² filter area**	**2.5 m² filter area**
	1kd	CSTPSUGG00010011	CSTPSUGG00010050	CSTPSUGG00010130	CSTPSUGG00010250
	3kd	CSTPSUGG00030011	CSTPSUGG00030050	CSTPSUGG00030130	CSTPSUGG00030250
	5kd	CSTPSUGG00050011	CSTPSUGG00050050	CSTPSUGG00050130	CSTPSUGG00050250
	8kd	CSTPSUGG00080011	CSTPSUGG00080050	CSTPSUGG00080130	CSTPSUGG00080250
	10kd	CSTPSUGG00100011	CSTPSUGG00100050	CSTPSUGG00100130	CSTPSUGG00100250
	30kd	CSTPSUGG00300011	CSTPSUGG00300050	CSTPSUGG00300130	CSTPSUGG00300250
	50kd	CSTPSUGG00500011	CSTPSUGG00500050	CSTPSUGG00500130	CSTPSUGG00500250
	100kd	CSTPSUGG01000011	CSTPSUGG01000050	CSTPSUGG01000130	CSTPSUGG01000250
	300kd	CSTPSUGG03000011	CSTPSUGG03000050	CSTPSUGG03000130	CSTPSUGG03000250
	500kd	CSTPSUGG05000011	CSTPSUGG05000050	CSTPSUGG05000130	CSTPSUGG05000250
	750kd	CSTPSUGG07500011	CSTPSUGG07500050	CSTPSUGG07500130	CSTPSUGG07500250
	1000kd	CSTPSUGG10000011	CSTPSUGG10000050	CSTPSUGG10000130	CSTPSUGG10000250

Sterilo Microbial Test Units

Sterility Test Canister

Gamma sterilization

Features

- Assembled clamps for pipelines are more convenient to use
- Double-layer aseptic packaging facilitates the transfer in the clean room and reduces the pollution during the transfer process
- Gamma ray sterilization, no residue, safe and reliable, avoiding the appearance of false negative results
- SAL≤10^{-6}
- Ultrasonic welding process ensures tightness and pressure resistance
- 100% passed the airtight performance test
- Microbial retention, microbial growth (sensitivity) and sterility testing ensure that the results of sterility testing are authentic and reliable
- Filter membrane: bubble point method, bacterial retention rate test
- Sterility test 14 day

Schematic diagram	Product code	Inspection style	Bottle/Packaging size
	MTWGNCGN220G MTWGNCGN330G	MCE membrane for Glass bottle large volume injection	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNYGA220G MTWGNYGA330G	Nylon membrane for Glass bottle large capacity antibiotic injection	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNCAN220G MTWGNCAN330G	MCE membrane for Ampoule injection	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNYAA220G MTWGNYAA330G	Nylon membrane for Ampoule antibiotic injection	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNCVN220G MTWGNCVN330G	MCE membrane for vial bottle soluble powder	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNYVA220G MTWGNYVA330G	Nylon membrane for vial bottle solution antibiotic powder	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNCSN220G MTWGNCSN330G	MCE membrane for soft bag large volume injection	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGPPIN220G MTWGPPIN330G	PP membrane for insoluble liquid, oily, high viscus products	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton
	MTWGNYPN220G MTWGNYPN330G	Nylon membrane for powder that need to be dissolved and diluted	18 sets/box,72 sets/carton 12 sets/box,48 sets/carton

*Available in EO sterilization and the PN ends with "E" instead of "G"

Sterility Test Canister

EO sterilization

Features

- Adopt composite film packaging technology, good air permeability and bacteria resistance
- Ultrasonic welding process is adopted to ensure tightness and pressure resistance
- The pipe is equipped with a stop clip, which is convenient for customers to operate and improve efficiency
- The pump tube is made of composite materials imported from Germany, with higtihc iteyl aasnd tension Durable, wear and pressure resistant, can ensure the maximum amount of filtr a on successfully completed accomplished
- Filter membrane: bubble point method, bacterial retention rate test
- 100% passed the sealing performance test
- Using advanced gamma ray sterilization, no residue, safe and reliable, avoiding the occurrence of false negative results; SAL ≤10*
- Aseptic independent packaging, and double-layer packaging mode, so that through the buffer zone into the aseptic room, to achieve rapid detection
- Through microbial retention, microbial growth promotion (sensitivity) and sterility test, to ensure that the sterility test results are authentic and reliable
- Sterility test: 14-day culture cycle, consistent with pharmacopoeia requirements

The advantages of gamma ray sterilization compared with other main sterilization methods

Sterilization method	Requirements for packaging	Chemical residue	Temperature increase	Sterilization effect (Whether sterilization can be achieved, That is SAL ≤ 106)	Post-steriliza on treatment me
Gamma rays	No	No	No	Yes	can be used immediately after irradiation
Ethylene oxide	Must use Special packaging material	Yes	Yes	Yes	must be left for at least 48 hours after sterilization. Volatilization reduces residual chemical solvents in the product
High temperature steam	Must use Special packaging material	No	Yes	No	"After sterilization requires a certain amount of time to cool

Technical parameters

Cups count	2pcs / 3pcs	Cup material	AS
Cup Withstand pressure	0.4MPA	Bottom material	ABS
Cup volume	100ml	Filter/needle holder material	ABS
Filter membrane material	MCE/Nylon/PP 0.45μm	Clips/needle cover/caps material	PP
Filter material	PTFE diameter 25mm, 0.45μm	Caps materials	Silicone

Sterility Test Pump

Features

- Straight-line installation of pump tube and pump head automatic opening and closing function
- The pump head opening and closing and the runner running indication function keep the instrument working state at any time
- With stepless speed regulation, speed memory function
- Misoperation of interlock design and alarm prompt function to avoid accidents
- Stainless steel mirror body, small size and beautiful appearance
- Color LCD display, friendly man-machine interface, simple and intuitive, easy to operate
- Rotary coding switch for operation and parameter setting
- Adopting brushless motor, high reliability, long life, no electrical contact spark, good safety and explosion-proof performance
- Forced air cooling to ensure safe use of the product
- The panel type MTWGCP08A/MTWGCP08B is suitable for sterility inspection isolation system installation

Technical Parameter

Working power:	AC220V /50Hz
Power:	240W
Peristaltic pump speed:	15~240rpm
Runner quantity:	3pc
Height (including bottle rack):	39cm
Dimensions:	36*36*20cm
Weight:	20kg

Product Code	MTWGCP08

Sterility Test Pump

Features

- Polishing processing stainless steel case, easy to clean and disinfect
- Large touch LCD screen display, opening and closing of the pump head, running status indication function in time clock function, master the instrument working status at any time
- Toughened glass panel, touch button control, smooth surface, not easy to scratch, easy to clean
- With stepless speed regulation, four - speed direct speed regulation, speed memory function
- Straight type pump pipe installation, the pump head with automatic opening and closing function
- Pump head anti-pinch pipe design
- Misoperation of interlock design and alarm function to avoid accidents
- Adopts brushless dc motor, high reliability, long service life, no electrical contact spark, security, explosion-proof
- Forced air cooling heat dissipation, to ensure the safe use of products

Technical Parameter

Working power:	AC220V /50Hz
Power:	240W
Peristaltic pump speed:	20~300rpm
Runner quantity:	3pc
Height (including bottle rack):	39cm
Dimensions:	36*28*18.1cm
Weight:	16kg

Product Code MTWGCP06

Sterility Test Pump

Features

- Mini-size design reduces occupying space of super-clean control console and airBow interference
- Waterproof design of equipment body is used to avoid liquid entering into interior of apparatus
- Super-huge LCD can observe running status and clock function
- Direct speed adjustment in 4 levels has memory function for rotating speed
- Adopting brushless motor, high reliability, long life, no electrical contact spark, good safety and explosion-proof performance
- Mirror-polished treatment on stainless steel equipment box is easy to clean and disinfect

Technical Parameter

Working power:	AC220V /50Hz
Power:	200W
Peristaltic pump speed:	15~240rpm
Runner quantity:	3pc
Height (including bottle rack):	39cm
Dimensions:	32*22*12cm
Weight:	12kg

Product Code MTWGCP03

Sterility Test Pump

Features

- Mini-size design reduces occupying space of super-clean control console and airf lowinterference
- Waterproof design of equipment body is used to avoid liquid entering into interior of apparatus
- Concise & modern interface is easy to clean
- Knob with unlimited speed adjustment has memory function of rotating speed
- Mirror-polished treatment on stainless steel equipment box is easy to clean and
- Panel type MTWGCP01A/MTWGCP01B for sterility inspection isolation system installation

Technical Parameter

Working power:	AC220V /50Hz
Power:	150W
Peristaltic pump speed:	15~240rpm
Runner quantity:	3pc
Height (including bottle rack):	39cm
Dimensions:	32*22*13cm
Weight:	12kg

Product Code	MTWGCP01

Nova Bio Bag
Single-Use Solution

BIOBGWB Single-Use Cell Culture Bag

Single-use processes are widely used in the biopharmaceutical field. These processes are being accepted and used by more and more biopharmaceutical companies due to their advantages of small fixed investment, reduced production time, low contamination risk, and flexible operation. GVS Single-Use Cell Culture Bag is specially designed for common cell culture applications in biopharmaceutical development.

Applications

Suitable for various cell culture conditions, including scientific research, research and development, in-process seed culture, and new therapies, such as cell therapy. Works with the rocking cell culture systems of GVS or other major suppliers in the market.

Features:

- Easy use: This product is sterile for single use, providing a safe and suitable environment for cell growth, with the features of easy installation and operation
- Good stability: The bags are composed of co-extruded multi-layer films with excellent flexibility and low gas penetration rate, and are suitable for long-term cell culture
- High cell density: The perfusion function enables the high-density cell culture in a faster manner
- Good biosafety: The material liquid contact layer is composed of EVA copolymers, which are biologically inert and can guarantee process safety
- Flexible application conditions: The bags can be used at 10–50 ° C and under operating pressures up to 0.1 bar; the bags are available in various sizes to support culture volumes from 300 mL to 25 L
- Wide selection of bag type: GVS provides cell bags for standard operation, cell therapy, and complex use; optional selections include the basic configuration, for pH & DO, perfusion, and pH & DO & perfusion
- Flexible customization of tubings, connectors, and other units to meet the needs of customers
- Complete validation documents:
- Sterility test
- Bacterial endotoxin test
- Integrity test
- Extractable test
- Chemical compatibility test
- The biocompatibility of gamma-irradiated bags meets the following specifications:
  1) ISO 10993-4: In vivo hemolysis test (extraction method)
  2) USP87: Cytotoxicity test (extraction method)
  3) USP <88> Class VI intramusclar implantation test
  4) USP88: Acute intracutaneous test
  5) USP88: Acute systemic toxicity test

Technical Parameters :

FL140C multilayer co-extruded film, EVA liquid contact layer

	Item	Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	89%	ASTM D1003
	Transmittance	31%	ASTM D1003
	Transmissivity	88%	ASTM D882
	Minimum tolerable temperature	Below -40 ℃	ASTM D1790
	Density	0.96 g/cm^3	ASTM D792
Mechanical properties	Tensile strength	17 MPa	ASTM D882
	Elongation at break	800%	ASTM D882
	Elastic modulus	94MPa	ASTM D882
	Puncture resistance	42N	ASTM F1306-21
	Right-angled tearing strength	21N	ASTM D1004-21
	Rubbing resistance (23±2° C, 49% RH, rubbed 270 times)	0 hole	ASTM F392/F392M-2011
	Oxygen permeation after 270 rubs (23±2° C, 0% RH, rubbed 270 times)	3.24 cm^3/(m^2 · day ·1bar)	GB/T1038-2000
Barrier properties	Water vapor transmission rate 1.58g	1.58g/（m^2·day） （23 ℃ ,100%RH)	ASTM F1249
	Oxygen permeability	3.40 cm^3/(m^2·day·0.1MPa)	ASTM D3985
	Carbon dioxide permeability	8.25 cm^3/(m^2·day·0.1MPa)	ASTM F2476
Pass USP<661> plastic packaging system test			
Comply with USP <788> "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume （≥ 100ml) intravenous injection.			
Comply with USP <85> "Test for Bacterial Endotoxin" , and the result is ≤ 0.25 EU/ml， meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

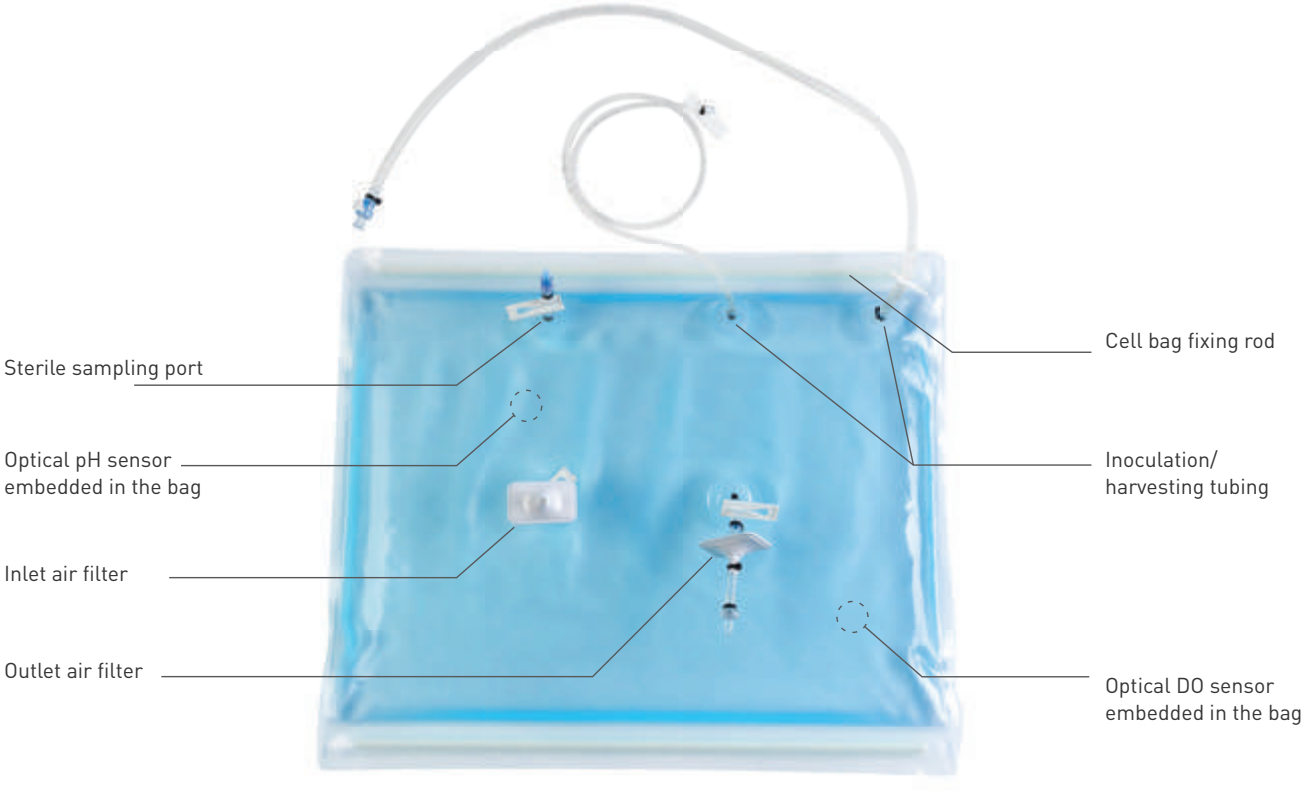
FLCB33 multilayer co-extruded film, LLDPE liquid contact layer

Item		Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	14.6%	ASTM D1003-21
	Transmittance	91.1%	ASTM D1003-21
	Brittleness temperature by impact	-70 ℃ / No. of destruction：0	ASTM D1790-21
	Density	0.928 g/cm^3	ASTM D792-20
Mechanical properties	Tensile strength	Horizontal：23.8 MPa Vertical：25.8 MPa	ASTM D882-18
	Elongation at break	Horizontal：760% Vertical：770%	ASTM D882-18
	Tensile Modulus	Horizontal：319 MPa Vertical：295 MPa	ASTM D882-18
	Puncture resistance	64N	ASTM F1306-21
	Right-angled tearing strength	36N	ASTM D1004-21
Barrier properties	Water vapor transmission rate (23±0.5℃，100%RH)	0.442 g/(m^2·day)	ASTM F1249-20
	Oxygen permeability (23℃，50±5%RH)	1.57 cm^3/(m^2·day·bar)	ASTM D1434-82(2015)$^{\varepsilon 1}$
	Carbon dioxide permeability (23℃，50±5%RH)	1.70 cm^3/(m^2·day·bar)	ASTM D1434-82(2015)$^{\varepsilon 1}$
Pass USP<661> plastic packaging system test			
Comply with USP <788> "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume (≥ 100ml) intravenous injection.			
Comply with USP <85>"Test for Bacterial Endotoxin" , and the result is ≤ 25 EU/ml, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

FL9101 multilayer co-extruded film, ULDPE liquid contact layer

	Item	Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	7%	ASTM D-1003
	Transmittance	97%	ASTM D-1003
	Transmissivity	93%	ASTM D-1003
	Minimum tolerable temperature	-40 ℃	ISO 8570
	Density	0.9 g/cm^3	ASTM D-792
Mechanical properties	Tensile strength	13 Mpa	ASTM D-882
	Elongation at break	300%	ASTM D-882
	Elastic modulus	350 Mpa	ASTM D-882
	Right-angled tearing strength	29N	ASTM D1004-21
Barrier properties	Water vapor transmission rate	0.32 g (m^2·day)	ASTM F1249
	Oxygen permeability	< 0.05 cm^3/(m^2·day·bar)	ASTM D3985
	Carbon dioxide permeability	< 0.2 cm^3/(m^2·day·bar)	ASTM F2476
Pass USP <661> plastic packaing system test			
Comply with USP <788> "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume (≥ 100ml) intravenous injection.			
Comply with USP <85> "Test for Bacterial Endotoxin" , and the result is ≤ 25 EU/ml, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

A standard BIOBGWB Cell Culture Bag consists of the following units:



Schematic diagram of standard cell bag

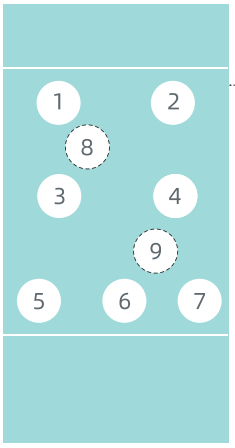
- Sterile sampling port: for easy and fast sterile connection to downstream operations;
- Inlet and outlet air filter: allows gases to go in and out of the cell bag;
- pH & DO sensor: pH & DO sensor controlled with PID automation can better maintain a suitable cell growth environment;
- Cell bag fixing rod: secures the cell bag to the tray of the rocking bioreactor;
- Inoculation/harvesting tubing: allows medium and cells to go in and out of the cell bag.

Bag volume	Min. to max. culture volume	Compatible system	Corresponding tray
2 L	300 ml–1 L	WB 50	Tray 10/20
10 L	500 ml–5 L		Tray 10/20
20 L	1 L–10 L		Tray 20
22 L	1 L–10 L		Tray 50
50 L	5 L–25 L		Tray 50
100 L	10 L-50 L		Tray 100/200
200 L	20 L-100 L		Tray 200

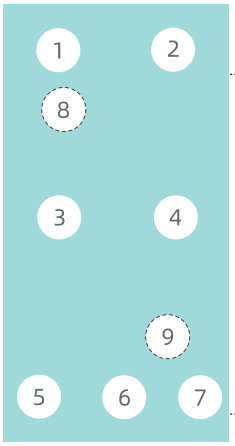
Ordering information

For antibodies and proteins

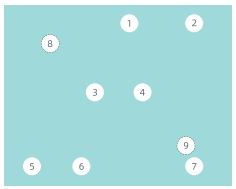
FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

Volume	Version	Product code	Configuration	
2 L 	Basic cell bag	BIOBGWBAP 002LC101	1.2 NA 3.4 Air filter 5. C-Flex 1/8 id *1/4 od*100 cm, female Luer 6. NA	7. Silicone 3/16 id*3/8od*5 cm, needleless sampling 8.9 NA
	pH & DO cell bag	BIOBGWBAP 002LC201	1. C-Flex 1/4 id *7/16 od*100 cm, plug 2. NA 3.4 Air filter 5. Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id *3/8 od*5 cm, needleless sampling 7. C-Flex 1/8 id*1/4 od*100 cm, female Luer C-Flex 1/8 id*1/4 od*100 cm, female Luer 8.9 pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 002LC304	1. Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8.9 NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 002LC404	1. Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8.9 pH, DO sensor

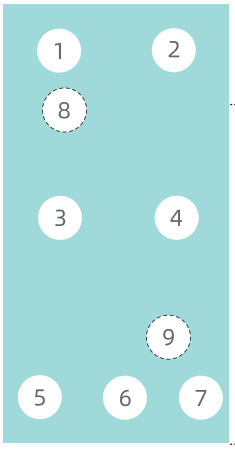
* All connected by non-adjustable straight connectors
* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 mL

Volume	Version	Product code	Configuration			
10 L 	Basic cell bag	BIOBGWBAP 010LC101	1.2	NA	7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter		
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC	8.9	NA
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer		
	pH & DO cell bag	BIOBGWBAP 010LC201	1.	NA	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling
			2.	C-Flex 1/4 id *7/16 od*100 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer
			5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 010LC304	1.	Y-connector (attached to perfu-sion filter)	5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 1/4 id*7/16 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer NA
			3.4	Air filter	8.9	NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 010LC404	1.	Y-connector (attached to perfu-sion filter)	5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 1/4 id*7/16 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.4	Air filter	8.9	pH, DO sensor

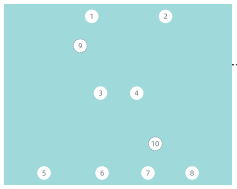
* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
20 L 	Basic cell bag	BIOBGWBAP 020LC101	1.2	NA	7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer		
	pH & DO cell bag	BIOBGWBAP 020LC201	1.	NA	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling
			2.	C-Flex 3/8 id *5/8 od*100 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 020LC304	1.	Y-connector (attached to perfusion filter)	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.4	Air filter	8.9	NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 020LC404	1.	Y-connector (attached to perfusion filter)	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.4	Air filter	8.9	pH, DO sensor

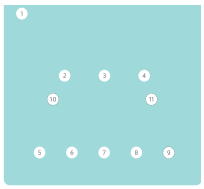
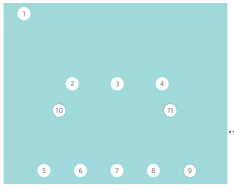
* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
22 L 	Basic cell bag	BIOBGWBAP 022LC101	1.2	NA	7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer		
	pH & DO cell bag	BIOBGWBAP 022LC201	1.	C-Flex 3/8 id *5/8 od*100 cm, plug	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling
			2.	NA	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 022LC303	1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer NA
			3.4	Air filter	8.9	
	pH & DO & Perfusion cell bag	BIOBGWBAP 022LC404	1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer pH, DO sensor
			3.4	Air filter	8.9	

* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration	
50 L 	Basic cell bag	BIOBGWBAP 050LC101 BIOBGWBAP 050LS101	1.2 NA 3.4 Air filter 5. C-Flex 1/8 id *1/4 od*100 cm, female MPC 6. C-Flex 1/4 id *7/16 od*100 cm, female Luer	7. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 8. NA 9.10 NA
	pH & DO cell bag	BIOBGWBAP 050LC201 BIOBGWBAP 050LS201	1.8 C-Flex 3/8 id *5/8 od*100 cm, plug 2. NA 3.4 Air filter 5. Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id *3/8 od*5 cm, needleless sampling	7. C-Flex 1/8 id*1/4 od*100 cm, female Luer C-Flex 1/8 id*1/4 od*100 cm, female Luer 9.10 pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 050LC304 BIOBGWBAP 050LS304	1. Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 2. C-Flex 3/8 id*5/8 od*100 cm, plug 3.4 Air filter 5. Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer 9.10 NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 050LC404 BIOBGWBAP 050LS404	1. Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 2. C-Flex 3/8 id*5/8 od*100 cm, plug 3.4 Air filter 5. Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer 9.10 NA

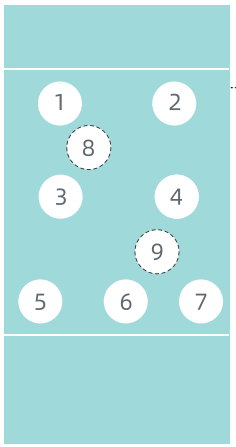
* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration	
100 L 	Basic cell bag	BIOBGWBAP 100LC101	1. Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 c plug 9. Silicone 1/8 id* 1/4 od* 150 &C-Flex *50 cm, plug 10.11 NA
	pH & DO cell bag	BIOBGWBAP 100LC201	1. Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 c plug 9. Silicone 1/8 id* 1/4 od* 150 &C-Flex *50 cm, plug 10.11 pH,DO sensor
200 L 	Basic cell bag	BIOBGWBAP 200LC101	1. Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 c plug 9. Silicone 1/8 id* 1/4 od* 150 &C-Flex *50 cm, plug 10.11 NA
	pH & DO cell bag	BIOBGWBAP 200LC201	1. Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 c plug 9. Silicone 1/8 id* 1/4 od* 150 &C-Flex *50 cm, plug 10.11 pH,DO sensor

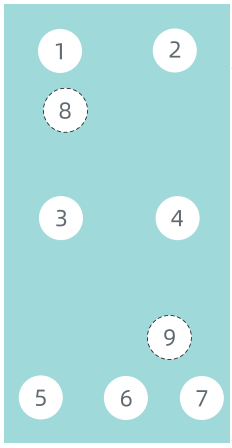
Ordering information

For antibodies and proteins

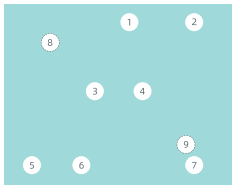
FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

Volume	Version	Product code	Configuration	
2 L 	Basic cell bag	BIOBGWBAP 002LC102	1.2 NA 3.4 Air filter 5. C-Flex 1/8 id *1/4 od*100 cm, female Luer and plug 6. NA	7. Silicone 3/16 id *3/8od *5 cm, needless sampling 8.9 NA
	pH & DO cell bag	BIOBGWBAP 002LC202	1. C-Flex 1/4 id *7/16 od*100 cm, plug 2. NA 3.4 Air filter 5. Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id *3/8 od*5 cm, needleless sampling 7. C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug 8.9 pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 002LC305	1. Y -connector（attached to perfusion filter） C-Flex 1/8 id*1/4 od*6 cm, needless sampling Silicone 1/8 id*1/4 od*100 cm &C-Flex *60cm, plug 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8.9 NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 002LC405	1. Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 7. NA 8.9 pH, DO sensor

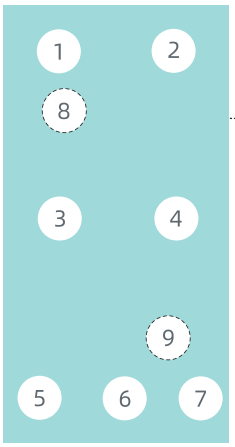
* All connected by non-adjustable straight connectors
* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 mL

Volume	Version	Product code	Configuration			
10 L 	Basic cell bag	BIOBGWBAP 010LC102	1.2	NA	7.	Silicone 3/16 id *3/8od *5cm needless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug		
	pH & DO cell bag	BIOBGWBAP 010LC202	1.	NA	6.	Silicone 3/16 id *3/8 od*5 c needleless sampling
			2.	C-Flex 1/4 id *7/16 od*100 cm plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO senso
	Perfusion cell bag	BIOBGWBAP 010LC305	1.	Y -connector（attached to perfusion filter）	5.	Silicone 1/4 id*7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needless sampling	6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
				Silicone 1/8 id*1/4 od*100 cm &C-Flex *60cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
			2.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter	8.9	NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 010LC405	1.	Y-connector (attached to perfusion filter)	5.	Silicone 1/4 id*7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
			2.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug	8.9	pH, DO senso
			3.4	Air filter		

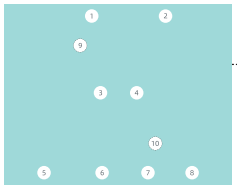
* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
20 L 	Basic cell bag	BIOBGWBAP 020LC102	1.2	NA	7.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug		
	pH & DO cell bag	BIOBGWBAP 020LC202	1.	NA	6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling
			2.	C-Flex 3/8 id *5/8 od*100 cm plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO senso
	Perfusion cell bag	BIOBGWBAP 020LC305	1.	Y-connector (attached to perfusion filter)	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
			2.	C-Flex 3/8 id*5/8 od*100 cm plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter	8.9	NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 020LC405	1.	Y-connector (attached to perfusion filter)	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air fil	8.9	pH, DO senso

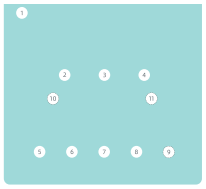
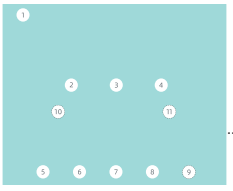
* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
22 L 	Basic cell bag	BIOBGWBAP 022LC102	1.2	NA	7.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug		
	pH & DO cell bag	BIOBGWBAP 022LC202	1.	C-Flex 1/4 id *7/16 od*100 cm plug	6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling
			2.	NA	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			5.	Silicone 1/4 id *7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO senso
	Perfusion cell bag	BIOBGWBAP 022LC302	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			2.	C-Flex 3/8 id*5/8 od*100 cm plug		
			3.4	Air filter	8.9	NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 022LC402	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			2.	C-Flex 3/8 id*5/8 od*100 cm plug		
			3.4	Air filter	8.9	pH, DO senso

* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration		
50 L 	Basic cell bag	BIOBGWBAP 050LC102	1.2	NA	
			3.4	Air filter	
			5.	C-Flex 1/8 id *1/4 od*100 cm female MPC and plug	
		BIOBGWBAP 050LS102	6.	C-Flex 1/4 id *7/16 od*100 cm female Luer and plug	
					7. Silicone 3/16 id*3/8 od*5 cm needleless sampling
					8. NA
					9.10 NA
	pH & DO cell bag	BIOBGWBAP 050LC202	1.8	C-Flex 3/8 id *5/8 od*100 cm plug	
			2.	NA	
			3.4	Air filter	
			5.	Silicone 3/8 id *5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	
		BIOBGWBAP 050LS202	6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling	
					7. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
					C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
					9.10 pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 050LC305	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	
			2.	C-Flex 3/8 id*5/8 od*100 cm plug	
		BIOBGWBAP 050LS305	3.4	Air filter	
			5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	
					6. Silicone 3/16 id*3/8 od*5 cm needleless sampling
					7. NA
					8. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
					Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
					9.10 NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 050LC405	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	
			2.	C-Flex 3/8 id*5/8 od*100 cm plug	
		BIOBGWBAP 050LS405	3.4	Air filter	
			5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	
					6. Silicone 3/16 id*3/8 od*5 cm needleless sampling
					7. NA
					8. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
					Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
					9.10 NA

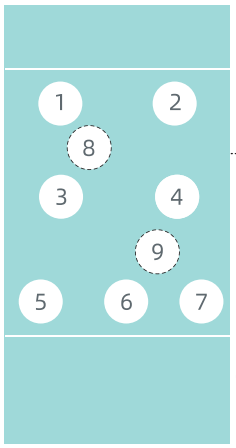
* All connected by non-reducing straight connectors

Volume	Version	Product code	Configuration
100 L 	Basic cell bag	BIOBGWBAP 100LC102	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug 7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm plug 9. Silicone 1/8 id* 1/4 od* 150cm &C-Flex *50 cm, plug 10.11 NA
	pH & DO cell bag	BIOBGWBAP 100LC202	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug 7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm plug 9. Silicone 1/8 id* 1/4 od* 150 &C-Flex *50 cm, plug 10.11 pH,DO sensor
200 L 	Basic cell bag	BIOBGWBAP 200LC102	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug 7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm plug 9. Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug 10.11 NA
	pH & DO cell bag	BIOBWBAP 200LC202	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug 7. Silicone 1/4 id* 7/16 od* 5 cm needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm plug 9. Silicone 1/8 id* 1/4 od* 150cm &C-Flex *50 cm, plug 10.11 pH,DO sensor

Ordering information

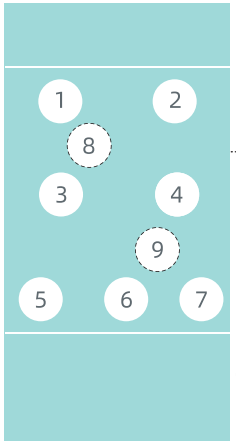
For novel therapies

FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

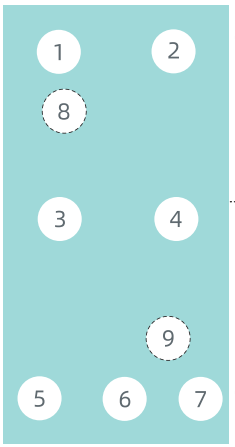
Volume	Version	Product code	Configuration		
2 L 	Basic cell therapy bag	BIOBGWBCT 002LC101	1.2 NA 3.4 Air filter 5. Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug	6. NA 7. Silicone 3/16 id*3/8 od*5 cm needleless sampling 8.9 NA	
	pH & DO cell therapy bag	BIOBGWBCT 002LC201	1. NA 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug **3.4** Air filter 5. Silicone 1/4 id *7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id *3/8 od*5 cm needleless sampling 7. NA 8.9 pH, DO senso	
	Perfusion cell therapy bag	BIOBGWBCT 002LC303	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & PVC*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm needleless sampling 7. NA 8.9 NA	
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 002LC403	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm needleless sampling 7. NA 8.9 pH, DO senso	

* All connected by non-adjustable straight connectors

* The minimum cultu e volume for 2 L pH & DO & perfusion cell bag is 400 ml

Volume	Version	Product code	Configuration			
5 L 	Basic cell therapy bag	BIOBGWBCT 005LC101	1.2 3.4 5.	NA Air filter Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug	6. 7. 8.9	NA Silicone 3/16 id*3/8 od*5 cm needleless sampling NA
	pH & DO cell therapy bag	BIOBGWBCT 005LC201	1. 2. **3.4** 5.	NA VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug Air filter Silicone 1/4 id *7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag	6. 7. 8.9	Silicone 3/16 id *3/8 od*5 cm needleless sampling NA pH, DO senso
	Perfusion cell therapy bag	BIOBGWBCT 005LC303	1. 2. 3.4	Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug Air filter	5. 6. 7. 8.9	Silicone 1/4 id*7/16 od*100 cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm needleless sampling NA NA
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 005LC403	1. 2. 3.4	Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug Air filter	5. 6. 7. 8.9	Silicone 1/4 id*7/16 od*100 cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm needleless sampling NA pH, DO senso

* All connected by non-reducing straight connectors

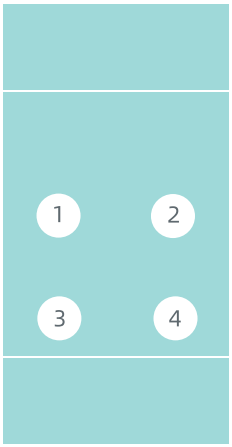
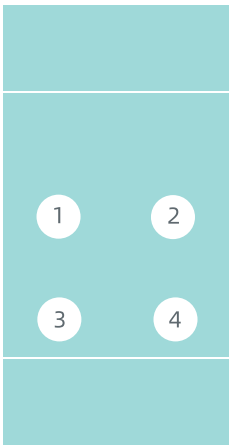
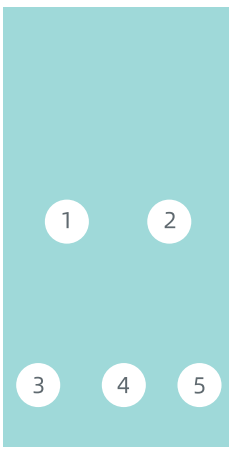
Volume	Version	Product code	Configuration	
10 L 	Basic cell therapy bag	BIOBGWBCT010LC101	1.2 NA 3.4 Air filter 5. Silicone 1/4 id *7/16 od*70 cm & PVC*50 cm, female Luer and plug	6. Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug 7. Silicone 3/16 id*3/8 od*5 cm needleless sampling 8.9 NA
	pH & DO cell therapy bag	BIOBGWBCT010LC201	1. NA 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug **3.4** Air filter 5. Silicone 1/4 id *7/16 od*100 & PVC*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id *3/8 od*5 cm needleless sampling 7. NA 8.9 pH, DO senso
	Perfusion cell therapy bag	BIOBGWBCT010LC303	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/4 id*7/16 od*100 cm, plug **3.4** Air filter	5. Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm, needleless sampling 6. PVC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 8.9 NA
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT010LC403	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/4 id*7/16 od*100 cm, plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm, needleless sampling 6. PVC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 8.9 pH, DO senso

* All connected by non-adjustable straight connectors

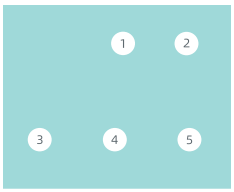
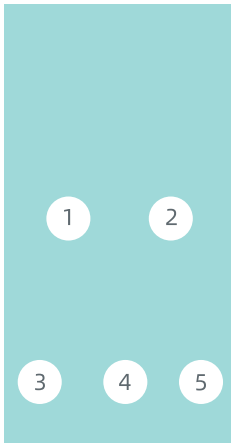
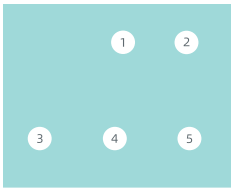
Ordering information

Mixing function

FL9101 multilayer co-extruded film, ULDPE liquid contact layer, heat resistance up to 65˚C

Volume	Version	Product code	Configuration
1 L 	Mixing bag	BIOBGWBMR 001LC101	1. C-Flex 1/4 id*7/16 od*100 cm, female MPC 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
2 L 	Mixing bag	BIOBGWBMR 002LC101	1. C-Flex 1/4 id*7/16 od*100 cm, female MPC 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
10 L 	Mixing bag	BIOBGWBMR 010LC101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling

* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration
20 L 	Mixing bag	BIOBGWBMR 020LC101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
22 L 	Mixing bag	BIOBGWBMR 022LC101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. C-Flex 1/4 id*7/16 od*100 cm, male MPC
50 L 	Mixing bag	BIOBGWBMR 050LC101 BIOBGWBMR 050LS101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling

* All connected by non-adjustable straight connectors

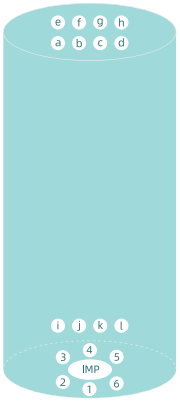
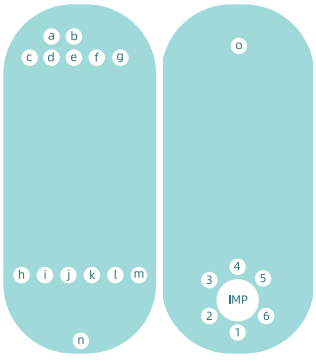
Features of BIOBGBRCF Single-Use Bottom-Driven Mixing Bioreactor Bags

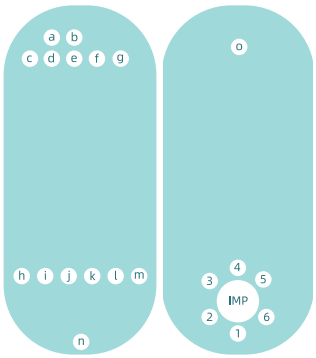
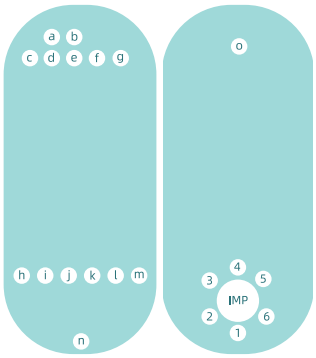
BIOBGBRCF Single-Use Bottom-Driven Mixing Bioreactor Bags are designed to match single-use bioreactors used in biopharmaceuticals. The product can be used for scientific research, process development and commercial production of CHO, Vero, and MDCK cells.

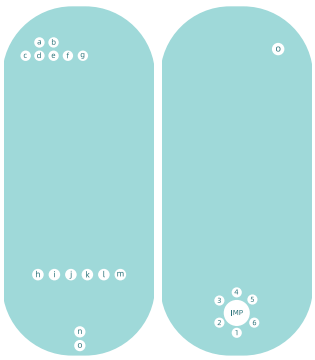
- With RENOLIT 9101 multi-layer co-extrusion films, the fluid contact layer is ultra-low density polyethylene (ULDPE), which has good biocompatibility and chemical compatibility and contributes to a low level of ex-tractable
- The ventilation tray contains 6 ventilation dial components, and the ventilation aperture is available in 35 μm, 300 μm, and 1 mm, with good aperture uniformity. Free combinations of micro, medium, and macro sparges are supported to meet dif-ferent process requirements
- The impeller of 2000 L bioreactor bags are made of engineering-grade plastic Peek for high hardness. The N40E design has a lower shear force and a shorter mixing time
- Standard imported filters to ensure the integrity of bags
- Customized tubings
- Comprehensive validations with completed validation reports

BIOBGBR Single-Use Bioreactor (2000 L) and Controller

Standard Configuration of BIOBGBRCF Single-Use Bottom-Driven Mixing Bioreac-tor Bags

Volume	Version	Product code	Configuration
50 L 	Medium + Macro sparge	BIOBGBRCF0050P101	• Min. working volume: 15 L • Max. working volume: 50 L • Impeller: M40e, 3-blade, diameter: 216 mm, angle: 40° , bottom-driven centric mixing
	Micro + Macro sparge	BIOBGBRCF0050P201 BIOBGBRCF0050P203	• e, c (inlet): 205 cm 3/8" × 5/8" C-Flex ™ 374, plug • a, g (inlet): 60 cm 3/8" × 5/8" C-Flex ™ 374, plug • h, d (small feed port): 205 cm 1/8" × 1/4" C-Flex ™ 374, plug • f (vent filter): CS2VTV0.2-002 (Meissner), T-connector tube 1: 60 cm 1/2" × 3/4" C-Flex ™ 374, plug; tube 2: 28 cm 1/2" × 3/4" C-Flex ™ 374
	Macro sparge	BIOBGBRCF0050P301 BIOBGBRCF0050P303	• b (headspace gas): pressure sensor, CS2VTV0.2-002 (Meissner), 45 cm 1/2" × 3/4" C-Flex ™ 374 + 16 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing • i (sampling port): 50 cm 1/8" × 1/4" C-Flex ™ 374 (× 2), needleless sampling (× 2)
	Medium sparge	BIOBGBRCF0050P401	• j, k (sensor): female Kleenpak ™ connector, 1/2" HB • l (sensor): thermowell, ID 3.5 mm • 1, 3, 5 (harvest tubing): 128 cm 3/8" × 5/8" C-Flex ™ 374, hose plug, OD 1/8"–1" pinch valve • 2, 4, 6 (bottom gas): CS2VTV0.2-002 (Meissner), 153 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing (only 1 filter is available for macro sparge and medium sparge)
200 L 	Medium + Macro sparge	BIOBGBRCF0200P101	• Min. working volume: 40 L • Max. working volume: 200 L • Impeller: M40e, 3-blade, diameter 216 mm, angle 40° , bottom-driven eccentric mixing
	Micro + Macro sparge	BIOBGBRCF0200P201 BIOBGBRCF0200P203	• a, b (small feed port): 305 cm 1/8" × 1/4" C-Flex ™ 374, plug • c, g (inlet): 305 cm 3/8" × 5/8" C-Flex ™ 374, plug • d, f (inlet): 60 cm 3/8" × 5/8" C-Flex ™ 374, plug • e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 75 cm 1/2" × 3/4" C-Flex ™ 374 + 16 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing
	Macro sparge	BIOBGBRCF0200P301 BIOBGBRCF0200P303	• o (vent filter): CL2VTV0.2-002 (Meissner), T-connector tube 1: 25 cm 3/4" × 1" C-Flex ™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex ™ 374 • h (sampling port): 50 cm 1/8" × 1/4" C-Flex ™ 374 (× 2), needleless sampling (× 2)
	Medium sparge	BIOBGBRCF0200P401	• i, j, k, l (sensor): female Kleenpak ™ connector, 1/2" HB • m (sensor): thermowell, ID 3.5 mm • n (harvest tubing): 90 cm 1/2" × 3/4" C-Flex ™ 374, plug, OD 1/8"–1" pinch valve • 1, 2, 3, 4, 5, 6 (bottom gas): CF2VTV0.2-33B1 (Meissner), 233 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug or gas tubing

Volume	Version	Product code	Configuration
500 L 	Medium + Macro sparge	BIOBGBRCF0500P101	• Min. working volume: 100 L • Max. working volume: 500 L • Impeller: M40e, 3-blade, diameter 266 mm, angle 40° , bottom-driven eccentric mixing • a, b (small feed port): 320 cm 1/8" × 1/4" C-Flex ™ 374, plug • c, g (inlet): 320 cm 3/8" × 5/8" C-Flex ™ 374, plug • d, f (inlet): 60 cm 3/8" × 5/8" C-Flex ™ 374, plug • e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 85 cm 1/2" × 3/4" C-Flex ™ 374 + 16 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing • o (vent filter): CL2VTV0.2-002 (Meissner), T-connector tube 1: 30 cm 3/4" × 1" C-Flex ™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex ™ 374 • h (sampling port): 50 cm 1/8" × 1/4" C-Flex ™ 374 (× 2), needleless sampling (× 2) • i, j, k, l (sensor): female Kleenpak ™ connector, 1/2" HB • m (sensor): thermowell, ID 3.5 mm • n (harvest tubing): 90 cm 1/2" × 3/4" C-Flex ™ 374, plug, OD 1/8"–1" pinch valve • 1, 2, 3, 4, 5, 6 (bottom gas): CF2VTV0.2-33B1 (Meissner), 263 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug or gas tubing
	Micro + macro sparge	BIOBGBRCF0500P201 BIOBGBRCF0500P203	
	Macro sparge	BIOBGBRCF0500P301 BIOBGBRCF0500P303	
	Medium sparge	BIOBGBRCF0500P401	
1000 L 	Medium + Macro sparge	BIOBGBRCF1000P101	• Min. working volume: 200 L • Max. working volume: 1000 L • Impeller: M40e, 3-blade, diameter 317 mm, angle 40° , bottom-driven eccentric mixing • a, b (small feed port): 340 cm 1/8" × 1/4" C-Flex ™ 374, plug • c, d, f, g (inlet): 340 cm 1/2" × 3/4" C-Flex ™ 374, plug • e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 75 cm 1/2" × 3/4" C-Flex ™ 374 + 16 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing • o (vent filter): CU2VTV0.2-1N002 (Meissner), T-connector, tube 1: 30 cm 3/4" × 1" C-Flex ™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex ™ 374 • h (sampling port): 50 cm 1/8" × 1/4" C-Flex ™ 374 (× 2), needleless sampling (× 2) • i, j, k, l (sensor): female Kleenpak ™ connector, 1/2" HB • m (sensor): thermowell, ID 3.5 mm • n (harvest tubing): 90 cm 1" × 1-3/8" C-Flex ™ 374, plug, PureFit TCL stop clamp, OD 1-3/8", WALL3/16" • 1, 2, 3, 4, 5, 6 (bottom gas): CS2VTV0.2-002 (Meissner), 288 cm 1/4" × 7/16" C-Flex ™ 374, tc 25 + 6# quick plug or gas tubing
	Micro + Macro sparge	BIOBGBRCF1000P201 BIOBGBRCF1000P203	
	Macro sparge	BIOBGBRCF1000P301 BIOBGBRCF1000P303	
	Medium sparge	BIOBGBRCF1000P401	

Volume	Version	Product code	Configuration
2000 L 	Medium + Macro sparge	BIOBGBRCF2000P101	• Min. working volume: 400 L • Max. working volume: 2000 L • Impeller: M40e, 4-blade, diameter 419 mm, angle 40° , bottom-driven eccentric mixing • a, b (small feed port): 380 cm 1/8" × 1/4" C-Flex ™ 374, plug • c, d, f, g (inlet): 380 cm 1/2" × 3/4" C-Flex ™ 374, plug • e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 150 cm 1/2" x 3/4" C-Flex ™ 374 + 20 cm 1/4" x 7/16" C-Flex ™ 374, tc 25 + 6# quick plug for gas tubing • o (vent filter): CU2VTV0.2-1N002 (Meissner), Y-connector, tube 1: 35 cm 3/4" × 1" C-Flex ™ 374, plug; tube 2: 60 cm 3/4" × 1" C-Flex ™ 374 • h (sampling port): 50 cm 1/8" × 1/4" C-Flex ™ 374 (× 2), needleless sampling (× 2) • i, j, k, l (sensor): female Kleenpak ™ connector, 1/2" HB • m (sensor): thermowell, ID 3.5 mm • n (harvest tubing): 90 cm 1" × 1-3/8" C-Flex ™ 374, plug, PureFit TCL stop clamp, OD 1-3/8", WALL3/16" • 1, 2, 3, 4, 5, 6 (bottom gas): CS2VTV0.2-002 (Meissner), 318 cm 1/2" × 3/4" C-Flex ™ 374, tc 25 + 6# quick plug or gas tubing
	Micro + Macro sparge	BIOBGBRCF2000P201 BIOBGBRCF2000P203	
	Macro sparge	BIOBGBRCF2000P301 BIOBGBRCF2000P303	
	Medium sparge	BIOBGBRCF2000P401	

Single-Use Top-Driven Bioreactor Bag

The core of the BIOBGBRCF 50L microbial fermentation system is the single-use microbial bioreactor bag designed to meet the stringent requirements of microbial fermentation. It is used for cultivating various organisms, including E-coli, pseudomonas, and yeast. The single-use microbial reactor bag is based on the proven design and materials of the BIOBGBRCF single-use bioreactor bags for mammalian cell culture.

- RENOLIT 9101 multilayer co-extruded film, ULDPE liquid contact layer, offering excellent biocompatibility and chemical compatibility while ensuring low levels of extractable content
- The dual impeller design enables vigorous mixing of the culture, and the bottom magnetic coupling eliminates external shafts, minimizing the risk of leakage
- All single-use microbial bioreactor bags are equipped with pressure sensors to maintain bag integrity during demanding fermentation processes
- The vent filter is equipped with a condensation bag at the front end to integrate

Standard Configuration of BIOBGBRCF Single-Use Bottom-Driven Microbial Bioreactor Bag

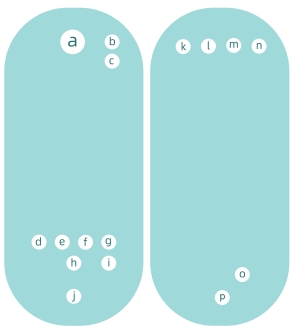
Volume	Version	Product code	Configuration
50 L 	Medium sparge	BIOBGBRCF 0050P404	• Min. working volume: 15 L • Max. working volume: 50 L • Impeller: double-layer, 6 Rushton blades, pitch blade at the top, axial flow impeller,diameter: 195 mm, bottom-driven centric mixing • a，b，e (feeding port): 05 cm 1/8" x 1/4" C-Flex, hose plug • c (pressure monitoring): pressure sensor, 45 cm 1/2" x 3/4" C-Flex, hose plug • d (vent filter + condensation bag):: 37 cm 1" x 1-3/8" C-Flex， condensation bag，20 cm 1" x 1-3/8"C-Flex，L10SSAPBBG1P，35 cm 1" x 1-3/8" C-Flex，L05SSAPBBG1P • f (feeding port): 205 cm 1/8" x 1/4" C-Flex（×2），hose plug（×2） • g (spare vent filter inlet）：30 cm 1" x 1-3/8" C-Flex , AseptiQuik® L sterile connector； • h (intlet): 205 cm 3/8" x 5/8" C-Flex, hose plug • i (sampling port): 50 cm 1/8" x 1/4" C-Flex(× 2), sterile sampling valve（× 2） • j，k (sensor): Kleenpak ™ sterile connector female adapter • l (sensor): thermowell, ID3.5 mm • 1，3，5 (harvest tubing): 128 cm 3/8" x 5/8" C-Flex, hose plug, OD1/8"-OD1" pinch valve • 2，4，6 (bottom gas): CL2VTV0.2-002 (Meissner), 168 cm 1/4" x 7/16"C-Flex， TC 25 + 6 # quick plug for gas tubing（Only one filter for pure medium sparge and pure macro sparge）
	Macro sparge	BIOBGBRCF 0050P304	
	Medium + Macro sparge	BIOBGBRCF 0050P104	

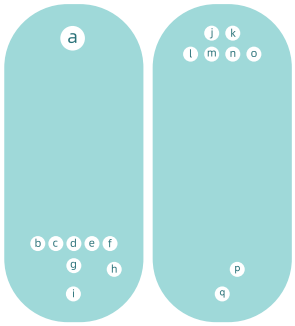
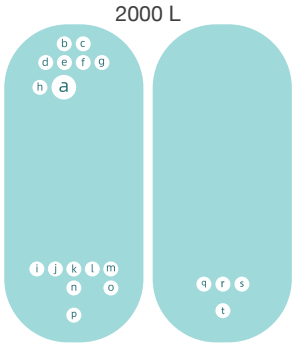
Features of BIOBGBRTF Single-Use Top-Driven Bioreactor Bag

BIOBGBRTF Single-Use Top-Driven Bioreactor Bag is designed to match single-use top mechanical coupling bioreactors used in biopharmaceuticals. The product can be used for scientific research, process development and commercial production of CHO, Vero, and MDCK cells, etc.

- RENOLIT 9101 multilayer co-extruded film, ULDPE fluid contact layer, offering excellent biocompatibility and chemical compatibility while ensuring low levels of extractable content
- The porous-frit microsparge column is designed from ultra-high molecular weight polyethylene (UHMW-PE), with pore sizes ranging from 20-40 μm. The generated bubbles possess a high surface area ratio and enhanced oxygen transfer. UHMW-PE exhibits outstanding impact resistance, wear resistance, chemical corrosion resistance, physiological inertness, adaptability, and hydrophobicity
- The macro-perforated microporous membrane is a dispersed aeration disc based on film. Laser-drilled to maintain uniform pore size, various specifications such as 0.178mm, 0.233mm, 0.368mm, 0.445mm, 0.582mm are available, tailored with specific apertures and quantities for each bag specification
- Equipped with imported filters to ensure bag integrity
- All pipelines can be flexibly customized
- Fully validated, complete validation reports can be provided

Standard Configuration of BIOBGBRTF Single-Use Bottom-Driven Bioreactor Bag

Volume	Version	Product code	Configuration
50 L 	Micro + Macro sparge 5:1	BIOBGBRTF 0050C201	• a(top-driven mixing parts): 3-blade impeller, diameter: 111.1 mm, angle: 45° • b (headspace gas) : pressure sensor, CF2VTV0.2-33B1 (Meissner), 20 cm1/2" x 3/4" C-Flex + 16 cm 1/4" x 7/16"C-Flex,6 # quick plug for gas tubing • c (intlet / feeding port) : 150 cm 1/4" x 7/16" C-Flex, 30 cm 1/8" x 1/4" C-Flex plug • k (intlet / feeding port) : 150 cm 3/8" x 5/8" C-Flex, Y connector, tubing 1: 40 cm 3/8" x 5/8" C-Flex, plug; tubing 2: 10 cm 3/8" x 5/8" C-Flex, 30 cm 1/4" x 7/16" C-Flex, plug • l (intlet) : 180 cm 3/8" x 5/8" C-Flex, plug • n (feeding port): 15 cm 1/4" x 7/16" C-Flex, 150 cm 1/8" x 1/4" C-Flex, plug • m (vent filter) : CS2VTV0.2-002 (Meissner), Y connector, tubing 1: 25 cm 1/2" x 3/4" C-Flex; tubing 2: 15 cm 1/2" x 3/4" C-Flex, AseptiQuik® G sterile connector, 1/2"HB • d,e,f,g(sensor): AseptiQuik® G sterile connector, 1/2"HB • h (sampling port) : 30 cm 1/8" x 1/4" C-Flex, needless sampling 50 cm 1/8" x 1/4" C-Flex, plug • i (sensor) : thermowell, ID3.5 mm • j (harvest port) : 100 cm 1/2" x 3/4" C-Flex, 30 cm 3/8" x 5/8" C-Flex, plug • o,p(bottom gas): CF2VTV0.2-33B1 (Meissner), 15 cm 1/4" x 7/16"C-Flex, one-way valve, 150 cm 1/4" x 7/16" C-Flex, 6 # quick plug for tubing
	Micro + Marco sparge 2:1	BIOBGBRTF 0050C202	

Volume	Version	Product code	Configuration
1000 L 	Micro + Macro sparge 5:1	BIOBGBRTF 1000C201	• a (top-driven mixing parts）：3-blade impeller，diameter：321 mm，angle :45° • k（headspace gas）：pressure sensor , CS2VTV0.2-002 (Meissner), 50 cm1/2" x 3/4" C-Flex + 20 cm 1/4" x 7/16"C-Flex，6# quick plug for gas tubing • l（feeding port）：15 cm 1/4" x 7/16" C-Flex，250 cm 1/8" x 1/4" C-Flex，plug • m (intlet / feeding port）：250 cm 1/4" x 7/16" C-Flex，30 cm 1/8" x 1/4" C-Flex，plug • n,o (intlet / feeding port）：250 cm 3/8" x 5/8" C-Flex，connector，tubing 1：30 cm 3/8" x 5/8" C-Flex，plug；tubing 2：20 cm 3/8" x 5/8" C-Flex，35 cm 1/8" x 1/4" C-Flex，plug • j（vent filter）：CUVTV0.2-1N002 (Meissner)×2, connector，tubing 1：25 cm 3/4" x 1" C-Flex；tubing 2：25 cm 3/4" x 1" C-Flex • b,c,d,e,f（sensor）：AseptiQuik® G sterile connector，1/2"HB • g（sampling port）：30 cm 1/8" x 1/4" C-Flex，needless sampling；80 cm 1/8" x 1/4" C-Flex，plug • h（sensor）：thermowell，ID3.5 mm • i（harvest port）：160 cm 1/2" x 3/4" C-Flex，30 cm 3/8" x 5/8" C-Flex，connector tubing 1：30 cm 3/8" x 5/8" C-Flex，plug；tubing 2：20 cm 3/8" x 5/8" C-Flex，35 cm 1/8" x 1/4" C-Flex，plug • p，q（bottom gas）：CS2VTV0.2-002 (Meissner)，16 cm 1/4" x 7/16"C-Flex，one-way valve，185 cm 1/4" x 7/16" C-Flex，6# quick plug for gas tubing
2000 L 	Micro + Macro sparge 5:1	BIOBGBRTF 2000C201	• a（top-driven mixing parts）：3-blade impeller，diameter：397 mm，angle: 45° • c (headspace gas)：pressure sensor , CS2VTV0.2-002 (Meissner), 50 cm 1/2" x 3/4" C-Flex + 30 cm 1/4" x 7/16"C-Flex，6# quick plug for gas tubing • d,g (ifeeding port)：50 cm 1/4" x 7/16" C-Flex,220 cm 1/8" x 1/4" C-Flex，plug • e (intlet / feeding port)：220 cm 1/2" x 3/4" C-Flex,50 cm 3/8" x 5/8" C-Flex，plug • f (intlet / feeding port)：220 cm 1/4" x 7/16" C-Flex,50 cm 1/8" x 1/4" C-Flex，plug • h (intlet)：15 cm 1" x 1 - 3/8" C-Flex, connector (internal extended tube), tubing 1：15 cm 3/4" x 1" C-Flex，250 cm 1/2" x 3/4" C-Flex，plug；tubing 2：15 cm 3/4" x 1" C-Flex，250 cm 1/2" x 3/4" C-Flex，plug • b (vent filter)：CUVTV0.2-1N002 (Meissner)×2, Y connector，tubing 1：30 cm 3/4" x 1" C-Flex；tubing 2：30 cm 3/4" x 1" C-Flex • i,j,k,l,m (sensor)：AseptiQuik® G sterile connector，1/2"HB • n (sampling port)：30 cm 1/8" x 1/4" C-Flex，needless sampling；80 cm 1/8" x 1/4" C-Flex，plug • o（sensor）：thermowell，ID3.5 mm • p（harvest port）：200 cm 3/4" x 1" C-Flex，TC 50 • q，r，s，t（bottom gas）：CS2VTV0.2-002 (Meissner)，8 cm 1/4" x7/16" C-Flex，one-way valve，200 cm 1/4" x 7/16" C-Flex，6# quick plug for gas tubing

BIOBGMB Single-Use Mixing Bags are made of multi-layer co-extrusion films. The sterile storage bags are guaranteed very low gas permeability, excellent chemical compatibility and biocompatibility, and good physical strength. This ensures their safety in the preparation and storage of feed liquids in various biopharmaceutical processes. The impellers are designed with high-strength magnet and secondary coating, and complete tightness is guaranteed due to the whole coating of the magnet. The combination of the bags with different impellers contributes to efficient mixing. The flexibly designed mixing bags can be integrated with various types of sensors for online monitoring of pH, conductivity, and temperature. Also, it can be flexibly equipped with 2", 3", 4", 6", and 8" feeding ports to meet solid feeding needs.

Ordering information

Single-use cubic mixing bag

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMBSC0050S003	Cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0050S004	Cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0050S005	Cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0050S006	Cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0100S003	Cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0100S004	Cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0100S005	Cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0100S006	Cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0200S003	Cubic stainless steel mixing system 200 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0200S004	Cubic stainless steel mixing system 200 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0200S005	Cubic stainless steel mixing system 200 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0200S006	Cubic stainless steel mixing system 200 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0400S003	Cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0400S004	Cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0400S005	Cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0400S006	Cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMBSC0500S003	Cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0500S004	Cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0500S005	Cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0500S006	Cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0650S003	Cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0650S004	Cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0650S005	Cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0650S006	Cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC1000S003	Cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC1000S005	Cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC1500S003	Cubic stainless steel mixing system 1500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC1500S005	Cubic stainless steel mixing system 1500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC2000S003	Cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC2000S005	Cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC2500S003	Cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC2500S005	Cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC3000S003	Cubic stainless steel mixing system 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC3000S005	Cubic stainless steel mixing system 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic

Mixing bags of other models

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMCSC0050S003	C series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0050S007	C series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0050S005	C series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0050S008	C series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0100S003	C series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0100S007	C series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0100S005	C series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0100S008	C series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0200S003	C series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0200S007	C series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0200S005	C series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0200S008	C series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0500S003	C series cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0500S007	C series cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC0500S005	C series cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC0500S008	C series cubic stainless steel mixing system 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC1000S003	C series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC1000S005	C series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMCSC2500S003	C series cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMCSC2500S005	C series cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMPSC0050S003	P series circular plastic mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0050S008	P series circular plastic mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0050S005	P series circular plastic mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0050S009	P series circular plastic mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0200S003	P series circular plastic mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0200S008	P series circular plastic mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0200S005	P series circular plastic mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0200S009	P series circular plastic mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0400S003	P series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0400S008	P series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0400S005	P series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0400S009	P series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0650S003	P series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0650S008	P series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC0650S005	P series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC0650S009	P series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC1000S003	P series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC1000S005	P series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMPSC2000S003	P series cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMPSC2000S005	P series cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMSSC0050S003	S series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0050S007	S series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0050S005	S series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0050S008	S series cubic stainless steel mixing system 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0100S003	S series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0100S007	S series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0100S005	S series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0100S008	S series cubic stainless steel mixing system 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0200S003	S series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0200S007	S series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0200S005	S series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0200S008	S series cubic stainless steel mixing system 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0400S003	S series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0400S007	S series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0400S005	S series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSS0400-S008	S series cubic stainless steel mixing system 400 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0650S003	S series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0650S007	S series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC0650S005	S series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC0650S008	S series cubic stainless steel mixing system 650 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMSSC1000S003	S series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC1000S005	S series cubic stainless steel mixing system 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC1500S003	S series cubic stainless steel mixing system 1500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC1500S005	S series cubic stainless steel mixing system 1500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC2000S003	S series cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC2000S005	S series cubic stainless steel mixing system 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC2500S003	S series cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC2500S005	S series cubic stainless steel mixing system 2500 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMSSC3000S003	S series cubic stainless steel mixing system 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMSSC3000S005	S series cubic stainless steel mixing system 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0010S003	M series circular mixing system-Generation I 10 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0010S007	M series circular mixing system-Generation I 10 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0010S005	M series circular mixing system-Generation I 10 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0010S008	M series circular mixing system-Generation I 10 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0050S003	M series circular mixing system-Generation I 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0050S007	M series circular mixing system-Generation I 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0050S005	M series circular mixing system-Generation I 50 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0050S008	M series circular mixing system-Generation I 50 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0100S003	M series circular mixing system-Generation I 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0100S007	M series circular mixing system-Generation I 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0100S005	M series circular mixing system-Generation I 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0100S008	M series circular mixing system-Generation I 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMM1R0200S003	M series circular mixing system-Generation I 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0200S007	M series circular mixing system-Generation I 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0200S005	M series circular mixing system-Generation I 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0200S008	M series circular mixing system-Generation I 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0500S003	M series circular mixing system-Generation I 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0500S007	M series circular mixing system-Generation I 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R0500S005	M series circular mixing system-Generation I 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R0500S008	M series circular mixing system-Generation I 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM1R1000S003	M series circular mixing system-Generation I 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM1R1000S005	M series circular mixing system-Generation I 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0100S003	M series circular mixing system-Generation II 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0100S007	M series circular mixing system-Generation II 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0100S005	M series circular mixing system-Generation II 100 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0100S008	M series circular mixing system-Generation II 100 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0200S003	M series circular mixing system-Generation II 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0200S007	M series circular mixing system-Generation II 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0200S005	M series circular mixing system-Generation II 200 L	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0200S008	M series circular mixing system-Generation II 200 L	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	150 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0500S003	M series circular mixing system-Generation II 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0500S007	M series circular mixing system-Generation II 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R0500S005	M series circular mixing system-Generation II 500 L	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R0500S008	M series circular mixing system-Generation II 500 L	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	150 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMM2R1000S003	M series circular mixing system-Generation II 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R1000S007	M series circular mixing system-Generation II 1000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R1000S005	M series circular mixing system-Generation II 1000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R1000S008	M series circular mixing system-Generation II 1000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R2000S003	M series circular mixing system-Generation II 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R2000S007	M series circular mixing system-Generation II 2000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R2000S005	M series circular mixing system-Generation II 2000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R2000S008	M series circular mixing system-Generation II 2000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R3000S003	M series circular mixing system-Generation II 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R3000S007	M series circular mixing system-Generation II 3000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R3000S005	M series circular mixing system-Generation II 3000 L	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	150 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R3000S008	M series circular mixing system-Generation II 3000 L	150 cm ID13/4"*OD1" thermoplastic tubing + plug	150 cm ID13/4"*OD1" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

Electrode Sleeve

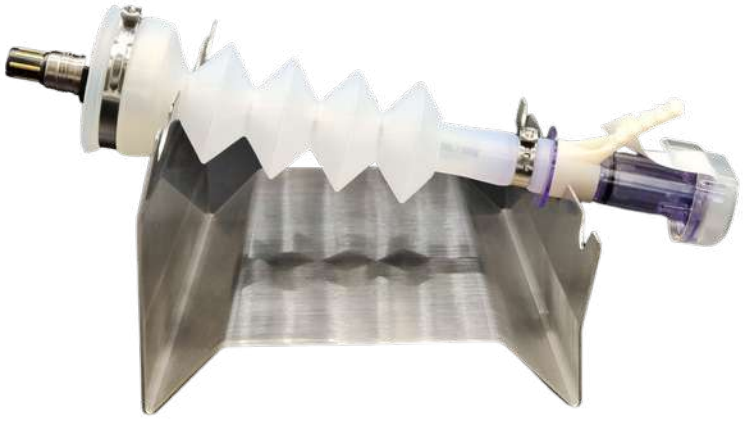
As one of the critical steps in different biopharmaceutical fields for antibody drugs, vaccines, and drugs for cell therapy and gene therapy, cell culture has direct effects on the yield and quality of drugs. The monitoring of pH and dissolved oxygen is very important during the cell culture process to ensure performance indicators, including viable cell density, cell viability, and cell unit yield. GVS Electrode Sleeve are specially designed for sterile monitoring of pH and dissolved oxygen.

Applications

Sterile connection of pH/DO electrode probe with the single-use bioreactor bag during the cell culture process.

Features

- Threaded fittings adapted to pH/DO electrodes to ensure air tightness
- The telescopic tubes of different specifications are suitable for electrodes and sterile connectors based on their lengths
- Electrode mounting clips and sterile brackets are also available
- Resistant to humid heat sterilization: temperature ⩽ 135 ° C, 30 min
- Sufficient inventory of raw materials and relevant components to support the supply chain stably
- Fully compliant with biosafety requirements



KPC Electrode Sleeve with electrode bracket

Technical Parameters

Component name	Main material
KPC/AQG connector	-
Unit Polycarbonate	Polycarbonate
Telescopic tubing Silicone	Silicone
Threaded fitting PSU	PSU

Ordering information

Product	Product name	Description
BIOBGBRCF000LP001	Electrode sleeve × 4	KPC series + telescopic tubing + threaded fitting + nylon snap ring, 4 pcs per group
BIOBGBRCF000LP002	Electrode sleeve × 2	KPC series + telescopic tubing + threaded fitting + nylon snap ring, 2 pcs per group
BIOBGBRCF000LC001	Electrode sleeve × 4	AQG series + telescopic tubing + threaded fitting + nylon snap ring, 4 pcs per group
BIOBGCBR0001L361	Electrode mounting clip	Auxiliary fixed electrode clamp × 1
BIOBGCBR0001L360	Electrode bracket	Sterile electrode bracket × 1

KPC Electrode Sleeve

AQG Electrode Sleeve

Single-Use Open Bags

Single-Use Open Bags are made of multi-layer co-extrusion films (PP infusion film and FL194A). The sterile storage bags are guaranteed very low gas permeability, excellent chemical compatibility and biocompatibility. This ensures their safety in the preparation and storage of feed liquids in various biopharmaceutical processes.

Features

- The open design facilitates the rapid feeding of a large volume of materials
- Flexible choice of film options and higher cost performance
- Flexibly customizable sizes, tubing, and connector
- Complete validation documents

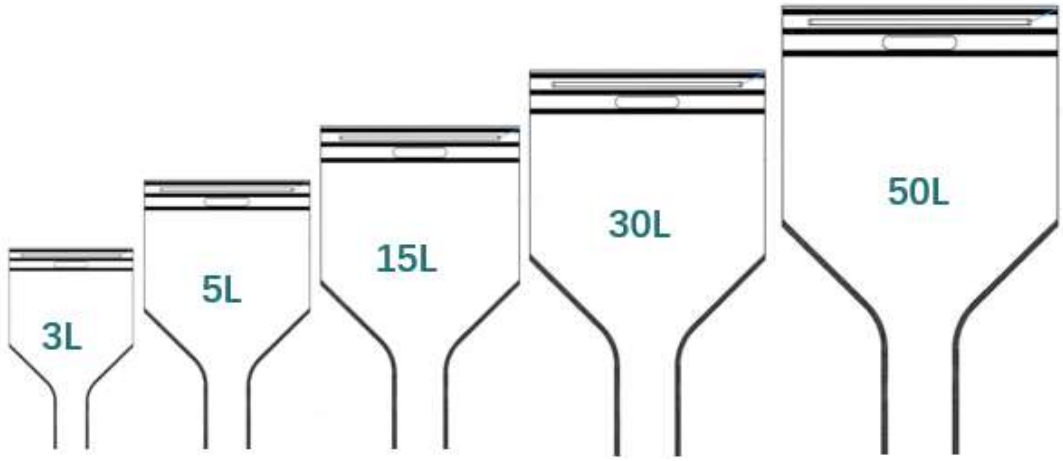
Ordering information

Product code	Matching type	Line 1	Film
BIOBGBBLR0050S005	plastic bin 50 L	No outlet tubing	PP infusion film
BIOBGBBLR0050S003		No outlet tubing	FL194A
BIOBGBBLR0050S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBBLR0100S005	plastic bin 100 L	No outlet tubing	PP infusion film
BIOBGBBLR0100S003		No outlet tubing	FL194A
BIOBGBBLR0100S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBBLR0200S005	plastic bin 200 L	No outlet tubing	PP infusion film
BIOBGBBLR0200S003		No outlet tubing	FL194A
BIOBGBBLR0200S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBBLR0300S005	plastic bin 300 L	No outlet tubing	PP infusion film
BIOBGBBLR0300S003		No outlet tubing	FL194A
BIOBGBBLR0300S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOBGBBLR0500S005	plastic bin 500 L	No outlet tubing	PP infusion film
BIOBGBBLR0500S003		No outlet tubing	FL194A
BIOBGBBLR0500S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A

Product code	Matching type	Line 1	Film
BIOBGBTLR0019S005	N series circular bin 19 L	No outlet tubing	PP infusion film
BIOBGBTLR0019S003		No outlet tubing	FL194A
BIOBGBTLR0019S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0028S005	N series circular bin 28 L	No outlet tubing	PP infusion film
BIOBGBTLR0028S003		No outlet tubing	FL194A
BIOBGBTLR0028S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0038S005	N series circular bin 38 L	No outlet tubing	PP infusion film
BIOBGBTLR0038S003		No outlet tubing	FL194A
BIOBGBTLR0038S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0057S005	N series circular bin 57 L	No outlet tubing	PP infusion film
BIOBGBTLR0057S003		No outlet tubing	FL194A
BIOBGBTLR0057S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0113S005	N series circular bin 113 L	No outlet tubing	PP infusion film
BIOBGBTLR0113S003		No outlet tubing	FL194A
BIOBGBTLR0113S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0208S005	N series circular bin 208 L	No outlet tubing	PP infusion film
BIOBGBTLR0208S003		No outlet tubing	FL194A
BIOBGBTLR0208S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0303S005	N series circular bin 303 L	No outlet tubing	PP infusion film
BIOBGBTLR0303S003		No outlet tubing	FL194A
BIOBGBTLR0303S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOBGBTLR0378S005	N series circular bin 378 L	No outlet tubing	PP infusion film
BIOBGBTLR0378S003		No outlet tubing	FL194A
BIOBGBTLR0378S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOBGBTLR0568S005	N series circular bin 568 L	No outlet tubing	PP infusion film
BIOBGBTLR0568S003		No outlet tubing	FL194A
BIOBGBTLR0568S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOBGBTLR0050S005	T series circular bin 50 L	No outlet tubing	PP infusion film
BIOBGBTLR0050S003		No outlet tubing	FL194A
BIOBGBTLR0050S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0100S005	T series circular bin 100 L	No outlet tubing	PP infusion film
BIOBGBTLR0100S003		No outlet tubing	FL194A
BIOBGBTLR0100S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOBGBTLR0200S005	T series circular bin 200 L	No outlet tubing	PP infusion film
BIOBGBTLR0200S003		No outlet tubing	FL194A
BIOBGBTLR0200S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A

Single-Use Powder-Feeding Bag

GVS Single-Use Powder Feeding Bags are easy to use with high recovery and do not require cleaning or sterilization. The bags are made of anti-static films; the feeding port and the bag are closely fit, effectively avoiding residues.



Powder-feeding bag

Features

- Volume range: 3 L, 5 L, 15 L, 30 L, 50 L
- Feeding port sizes: 2", 3", 4", 6", 8"
- Optional washing function: maximize the recovery of residual powder
- Soft bag body and ergonomic rods for easy operation

Ordering information

Product code	Matching type	Feeding port	Film
BIOBGBP0003S001	3 L	3" Feeding port	Anti-static film
BIOBGBP0003S002	3 L	4" Feeding port	Anti-static film
BIOBGBP0003S003	3 L	2" Feeding port	Anti-static film
BIOBGBP0005S001	5 L	3" Feeding port	Anti-static film
BIOBGBP0005S002	5 L	4" Feeding port	Anti-static film
BIOBGBP0005S003	5 L	2" Feeding port	Anti-static film
BIOBGBP0015S001	15 L	3" Feeding port	Anti-static film
BIOBGBP0015S002	15 L	4" Feeding port	Anti-static film
BIOBGBP0015S003	15 L	2" Feeding port	Anti-static film
BIOBGBP0030S001	30 L	3" Feeding port	Anti-static film
BIOBGBP0030S002	30 L	4" Feeding port	Anti-static film
BIOBGBP0030S004	30 L	6" Feeding port	Anti-static film
BIOBGBP0050S001	50 L	3" Feeding port	Anti-static film
BIOBGBP-0050-S002	50 L	4" Feeding port	Anti-static film
BIOBGBP-0050-S004	50 L	6" Feeding port	Anti-static film
BIOBGBP-0050-S005	50 L	8" Feeding port	Anti-static film

Single-Use Weighing Bag

GVS weighing bags are made of PE films and the 3D design contributes to convenient weighing.

Features

- Volume range: 1 L, 5 L, 10 L, 50 L
- Seal transfer can be achieved with a heat sealer, seling clip, or cable tie
- The 3D design facilitates weighing

Ordering information

Product code	Volume	Film
BIOBGBW0001S002	1 L	PE film
BIOBGBW0005S002	5 L	PE film
BIOBGBW0010S002	10 L	PE film
BIOBGBW0050S002	50 L	PE film
BIOBGBWX200S003	200 ml	PE films for pharmaceutical packaging
BIOBGBW0003S003	3 L	PE films for pharmaceutical packaging
BIOBGBW0005S003	5 L	PE films for pharmaceutical packaging
BIOBGBW0006S003	6 L	PE films for pharmaceutical packaging

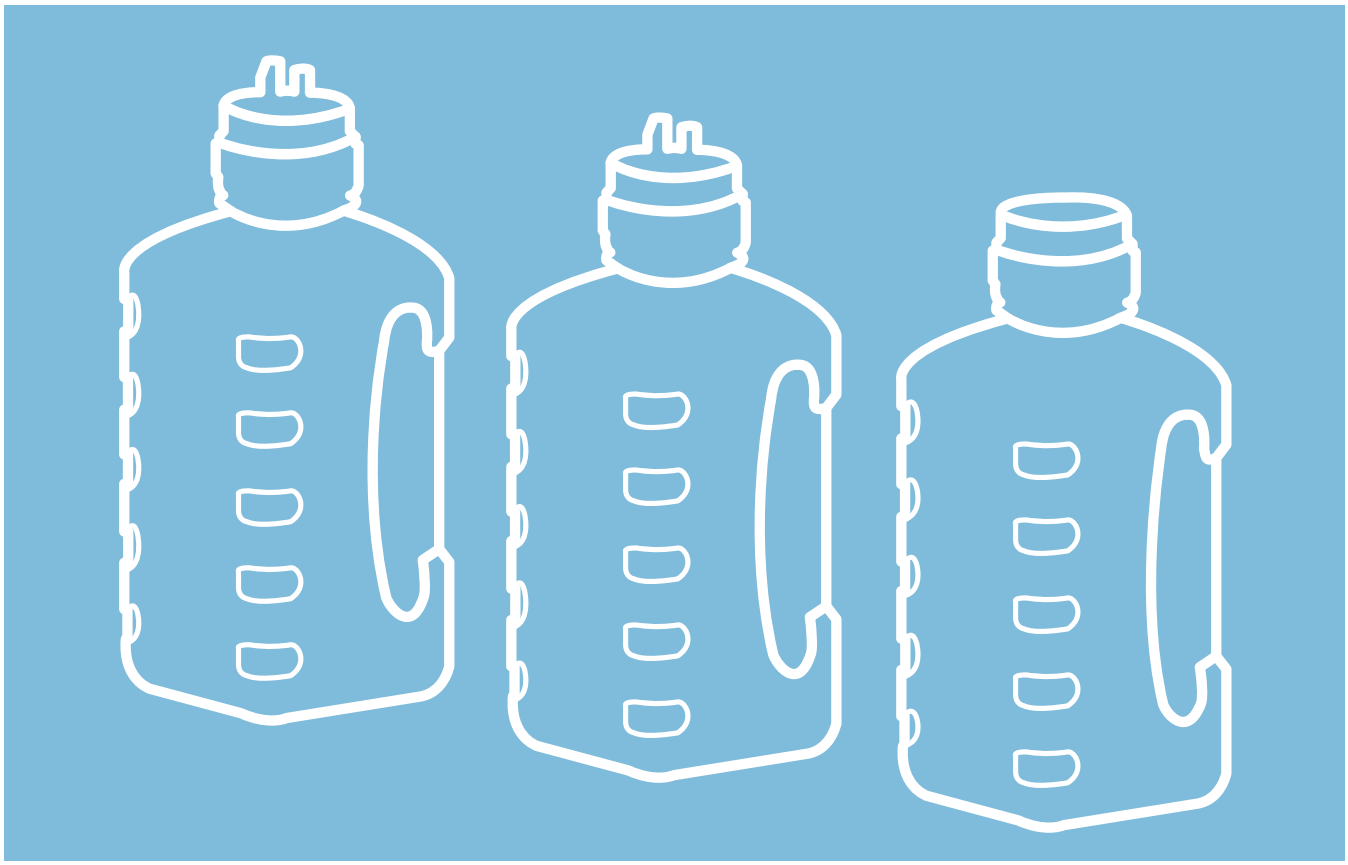
Liquid Storage Solution

The storage and transport of process fluids are critical in biopharmaceutical processes. GVS Single-Use Storage Systems are specially designed for medium storage and transfer, cell fluid clarification and collection, interim storage of filtered buffers, intermediate product storage, bulk solution storage and cryopreservation, interim storage of semi-finished products, etc. Flexible transfer can be achieved with GVS 2D Storage Bags, 3D Storage Bags, and Storage Bottles, together with different storage and transfer tools. These systems include cubic collapsible plastic boxes, circular plastic bins, 2D plastic trays, stainless steel tanks, and carts.

Storage Bottle

Single-Use Storage Bottles are designed for the storage, transport, and cryopreservation of liquids used in biopharmaceutical processes. It can be used for sensitive liquids, buffers, culture media, etc. Autoclave and gamma irradiation versions with different caps are available. There is no risk of batch-to-batch or product-to-product cross-contamination. In addition, the bottle is equipped with multiple designs of caps and can be flexibly selected by customers according to their different requirements for liquid transfer.

The caps of Single-Use Storage Bottles are available in 20 mm, 38 mm, 48 mm, and 80 mm, and are suitable for various steps of biotechnology and pharmaceutical liquid transport. The caps can be adapted to GVS liquid storage bottles as well as some foreign brand liquid storage bottles.



Features

- The bottle is made of PC material for its durability and transparency
- The cap is equipped with a silicone gasket to prevent leakage
- Volume range: 5 mL–10 L
- No additives, irradiated natural discoloration
- Fully validated to ensure safety
- Can be stored at – 80 ° C
- Resistant to moist heat sterilization at 121 ° C for 30 min for 3 times
- Customization available

Validation Documents

- USP <661>
- ISO10993-4 Hemolysis
- USP<88>Class VI
- USP<87> No cytotoxicity
- USP<85> No pyrogen
- USP <788> Particulate Matter in Injections
- FDA 21 CFR 177.1580
- FDA 21 CFR 177.1520

Ordering information

Bottle with regular cap

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOBGBTA5ML001	BIOBGBTB5ML001	5 mL	36*36*60	200	20 mm regular cap
BIOBGBTA20ML001	BIOBGBTB20ML001	20 mL	36*36*80	200	
BIOBGBTA50ML001	BIOBGBTB50ML001	50 mL	45*45*85	120	
BIOBGBTA125ML001	BIOBGBTB125ML001	125 mL	54*54*120	60	38 mm regular cap
BIOBGBTA250ML001	BIOBGBTB250ML001	250 mL	68*68*140	40	
BIOBGBTA500ML001	BIOBGBTB500ML001	500 mL	74*74*190	20	
BIOBGBTA1L001	BIOBGBTB1L001	1 L	98*98*220	25	48 mm regular cap
BIOBGBTA2L001	BIOBGBTB2L001	2 L	114*114*286	16	
BIOBGBTA5L001	BIOBGBTB5L001	5 L	180*180*332	6	80 mm regular cap
BIOBGBTA10L001	BIOBGBTB10L001	10 L	240*240*361	4	

Storage bottle with 2-port cap (no tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOBGBTA5ML002	BIOBGBTB5ML002	5 mL	36*36*60	200	20 mm 2-port cap, no tubing
BIOBGBTA20ML002	BIOBGBTB20ML002	20 mL	36*36*80	200	
BIOBGBTA50ML002	BIOBGBTB50ML002	50 mL	45*45*85	120	
BIOBGBTA125ML002	BIOBGBTB125ML002	125 mL	54*54*120	60	38 mm 2-port cap, no tubing
BIOBGBTA250ML002	BIOBGBTB250ML002	250 mL	68*68*140	40	
BIOBGBTA500ML002	BIOBGBTB500ML002	500 mL	74*74*190	20	
BIOBGBTA1L002	BIOBGBTB1L002	1 L	98*98*220	25	48 mm 2-port cap, no tubing
BIOBGBTA2L002	BIOBGBTB2L002	2 L	114*114*286	16	
BIOBGBTA5L002	BIOBGBTB5L002	5 L	180*180*332	6	80 mm 2-port cap, no tubing
BIOBGBTA10L002	BIOBGBTB10L002	10 L	240*240*361	4	

Storage bottle with 3-port cap (no tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOBGBTA5ML003	BIOBGBTB5ML003	5 mL	36*36*60	200	20 mm 3-port cap, no tubing
BIOBGBTA20ML003	BIOBGBTB20ML003	20 mL	36*36*80	200	
BIOBGBTA50ML003	BIOBGBTB50ML003	50 mL	45*45*85	120	
BIOBGBTA125ML003	BIOBGBTB125ML003	125 mL	54*54*120	60	38 mm 3-port cap, no tubing
BIOBGBTA250ML003	BIOBGBTB250ML003	250 mL	68*68*140	40	
BIOBGBTA500ML003	BIOBGBTB500ML003	500 mL	74*74*190	20	
BIOBGBTA1L003	BIOBGBTB1L003	1 L	98*98*220	25	48 mm 3-port cap, no tubing
BIOBGBTA2L003	BIOBGBTB2L003	2 L	114*114*286	16	
BIOBGBTA5L003	BIOBGBTB5L003	5 L	180*180*332	6	80 mm 3-port cap, no tubing
BIOBGBTA10L003	BIOBGBTB10L003	10 L	240*240*361	4	

Storage bottle with 2-port cap (with welded tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOBGBTA5ML008	BIOBGBTB5ML008	5 ml	36*36*60	20 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/8"*1/4", 30 cm, plug Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA20ML008	BIOBGBTB20ML008	20 ml	36*36*80		
BIOBGBTA50ML008	BIOBGBTB50ML008	50 ml	45*45*85		
BIOBGBTA125ML008	BIOBGBTB125ML008	125 ml	54*54*120	38 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA250ML008	BIOBGBTB250ML008	250 ml	68*68*140		
BIOBGBTA500ML008	BIOBGBTB500ML008	500 ml	74*74*190		
BIOBGBTA1L008	BIOBGBTB1L008	1 L	98*98*220	48 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGBTA2L008	BIOBGBTB2L008	2 L	114*114*286		
BIOBGBTA5L008	BIOBGBTB5L008	5 L	180*180*332	80 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 3/8*5/8", 30 cm, plug Outer tubing 2: silicone tubing, 3/8*5/8", 15 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming

Storage bottle with 2-port cap (with silicone tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOBGBTA5ML009	BIOBGBTB5ML009	5 ml	36*36*60	20 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA20ML009	BIOBGBTB20ML009	20 ml	36*36*80		
BIOBGBTA50ML009	BIOBGBTB50ML009	50 ml	45*45*85		
BIOBGBTA125ML009	BIOBGBTB125ML009	125 ml	54*54*120	38 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA250ML009	BIOBGBTB250ML009	250 ml	68*68*140		
BIOBGBTA500ML009	BIOBGBTB500ML009	500 ml	74*74*190		
BIOBGBTA1L009	BIOBGBTB1L009	1 L	98*98*220	48 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGBTA2L009	BIOBGBTB2L009	2 L	114*114*286		
BIOBGBTA5L009	BIOBGBTB5L009	5 L	180*180*332	80 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 3/8*5/8", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 3/8*5/8", 15 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming

Storage bottle with 3-port cap (with welded tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOBGBTA5ML010	BIOBGBTB5ML010	5 ml	36*36*60	20 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/8"*1/4", 30 cm, plug Outer tubing 3: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8*1/4, bottoming
BIOBGBTA20ML010	BIOBGBTB20ML010	20 ml	36*36*80		
BIOBGBTA50ML010	BIOBGBTB50ML010	50 ml	45*45*85		
BIOBGBTA125ML010	BIOBGBTB125ML010	125 ml	54*54*120	38 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 3: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8*1/4, bottoming
BIOBGBTA250ML010	BIOBGBTB250ML010	250 ml	68*68*140		
BIOBGBTA500ML010	BIOBGBTB500ML010	500 ml	74*74*190		
BIOBGBTA1L010	BIOBGBTB1L010	1 L	98*98*220	48 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 3: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGBTA2L010	BIOBGBTB2L010	2 L	114*114*286		
BIOBGBTA5L010	BIOBGBTB5L010	5 L	180*180*332	80 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 3/8*5/8", 30 cm, plug Outer tubing 3: silicone tubing, 3/8*5/8", 15 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming

Storage bottle with 3-port cap (with silicone tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOBGBTA5ML011	BIOBGBTB5ML011	5 ml	36*36*60	20 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA20ML011	BIOBGBTB20ML011	20 ml	36*36*80		
BIOBGBTA50ML011	BIOBGBTB50ML011	50 ml	45*45*85		
BIOBGBTA125ML011	BIOBGBTB125ML011	125 ml	54*54*120	38 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGBTA250ML011	BIOBGBTB250ML011	250 ml	68*68*140		
BIOBGBTA500ML011	BIOBGBTB500ML011	500 ml	74*74*190		
BIOBGBTA1L011	BIOBGBTB1L011	1 L	98*98*220	48 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGBTA2L011	BIOBGBTB2L011	2 L	114*114*286		
BIOBGBTA5L011	BIOBGBTB5L011	5 L	180*180*332	80 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 3/8*5/8", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 3/8*5/8", 15 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 3/8*5/8", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming

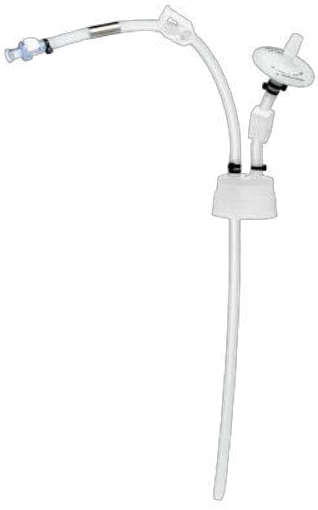
Cap - no tubing

Product code - sterile	Product description	Line
BIOBGCAP200001	20 mm, regular	No port, no tubing
BIOBGCAP380001	38 mm, regular	
BIOBGCAP480001	48 mm, regular	
BIOBGCAP800001	80 mm, regular	
BIOBGCAP202001	20 mm, 2-port	2 ports, no tubing; 1/8'' * 2, inner 1/8'' * 2
BIOBGCAP382001	38 mm, 2-port	2 ports, no tubing; 1/4'' × 2, inner 1/8'' × 2
BIOBGCAP482001	48 mm, 2-port	2 ports, no tubing; 1/4''*2, inner 1/4''*2
BIOBGCAP802001	80 mm, 2-port	2 ports, no tubing; 1/4'' * 2, inner 1/4'' * 2
BIOBGCAP203001	20 mm, 3-port	3 ports, no tubing; 1/8"*3, inner 1/8"*2
BIOBGCAP383001	38 mm, 3-port	3 ports, no tubing; 1/4"*3, inner 1/8"*2
BIOBGCAP483001	48 mm, 3-port	3 ports, no tubing; 1/4"*3, inner 1/4"*2
BIOBGCAP803001	80 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2

Product code - non-sterile	Product Description	Line
BIOBGCBP200001	20 mm, regular	No port, no tubing
BIOBGCBP380001	38 mm, regular	
BIOBGCBP480001	48 mm, regular	
BIOBGCBP800001	80 mm, regular	
BIOBGCBP202001	20 mm, 2-port	2 ports, no tubing; 1/8'' * 2, inner 1/8'' * 2
BIOBGCBP382001	38 mm, 2-port	2 ports, no tubing; 1/4'' × 2, inner 1/8'' × 2
BIOBGCBP482001	48 mm, 2-port	2 ports, no tubing; 1/4''*2, inner 1/4''*2
BIOBGCBP802001	80 mm, 2-port	2 ports, no tubing; 1/4'' * 2, inner 1/4'' * 2
BIOBGCBP203001	20 mm, 3-port	3 ports, no tubing; 1/8"*3, inner 1/8"*2
BIOBGCBP383001	38 mm, 3-port	3 ports, no tubing; 1/4"*3, inner 1/8"*2
BIOBGCBP483001	48 mm, 3-port	3 ports, no tubing; 1/4"*3, inner 1/4"*2
BIOBGCBP803001	80 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2

Cap - with silicone tubing

Product code - sterile	Product code - non-sterile	Product Description	Line
BIOBGCAP202002	BIOBGCBP202002	20 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP382002	BIOBGCBP382002	38 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP482002	BIOBGCBP482002	48 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP802002	BIOBGCBP802002	80 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP203002	BIOBGCBP203002	20 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP383002	BIOBGCBP383002	38 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP483002	BIOBGCBP483002	48 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP803002	BIOBGCBP803002	80 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming



Cap - with welder tubing

Product code - sterile	Product code - non-sterile	Product Description	Line
BIOBGCAP202003	BIOBGCBP202003	20 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP382003	BIOBGCBP382003	38 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP482003	BIOBGCBP482003	48 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP802003	BIOBGCBP802003	80 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP203003	BIOBGCBP20-3-003	20 mm, 3-port	Outer tubings 1 & 2: C-Flex tubing, 1/8"*1/4", 30 cm, plug Outer tubing 3: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8*1/4, bottoming
BIOBGCAP383003	BIOBGCBP383003	38 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP483003	BIOBGCBP483003	48 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP803003	BIOBGCBP803003	80 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming

2D Storage Solution

2D Storage Bag

2D Storage bags are made of multi-layer co-extrusion films. The ship-typed integrated welded outlet helps to minimize residual liquid. The outlet is available in 1/8", 1/4" and 3/8" and can be connected to silicone and thermoplastic tubing. The combination of GVS 2D storage bags with single-use tubings can meet the requirements of different processes and liquids.

Features

- Volume range: 5 mL–50 L
- Wide applications: for collection of purified components, bulk solution storage, intermediate product storage, medium storage, etc.
- Highly customizable, and configurable with a variety of connectors, hoses, and functional units

2D Storage bags

Ordering information

Product code	Volume	Line 1	Line 2	Line 3(sampling)	Film
BIOBGBCX005S007	5 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	-	-	Imported
BIOBGBCX005S015	5 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	-	-	Imported
BIOBGBCX010S007	10 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX010S015	10 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBCX020S007	20 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX020S015	20 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBCX050S007	50 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX050S015	50 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBCX100S007	100 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX100S015	100 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBCX250S007	250 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX250S015	250 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBCX500S007	500 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCX500S015	500 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0001S007	1 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0001S015	1 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0002S007	2 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0002S015	2 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0005S007	5 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0005S015	5 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0010S007	10 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0010S015	10 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0020S007	20 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0020S015	20 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBC0050S007	50 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBC0050S015	50 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported

Product code	Volume	Line 1	Line 2	Line 3(sampling)	Film
BIOBGBCX005S009	5 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	-	-	Domestic
BIOBGBCX005S014	5 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	-	-	Domestic
BIOBGBCX010S009	10 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX010S014	10 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCX020S009	20 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX020S014	20 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCX050S009	50 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX050S014	50 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCX100S009	100 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX100S014	100 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCX250S009	250 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX250S014	250 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCX500S009	500 ml	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + male Luer	10 cm ID1/8"*OD1/4" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCX500S014	500 ml	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	30 cm ID1/8"*OD1/4" thermoplastic tubing + plug	10 cm ID1/8"*OD1/4" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC0001S009	1 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0001S014	1 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC0002S009	2 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0002S014	2 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC0005S009	5 L	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + female MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0005S014	5 L	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC0010S009	10 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0010S014	10 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC-0020S009	20 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0020S014	20 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBC0050S009	50 L	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	30 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	20 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBC0050S014	50 L	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID3/8"*OD5/8" thermoplastic tubing + plug	20 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic

3D Storage Solution

Circular Storage Bag

Made of multi-layer co-extrusion films, the sterile circular storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard circular storage bags are available in various types and specifications (50–500 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBBPR0050S003	Circular plastic bin 50L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBPR0050S004	Circular plastic bin 50L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8""*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPR0050S005	Circular plastic bin 50L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBPR0050S006	Circular plastic bin 50L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8""*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPR0100S003	Circular plastic bin 100L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBPR0100S004	Circular plastic bin 100L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPR0100S005	Circular plastic bin 100L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBPR0100S006	Circular plastic bin 100L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPR0200S003	Circular plastic bin 200L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBPR0200S004	Circular plastic bin 200L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPR0200S005	Circular plastic bin 200L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBPR0200S006	Circular plastic bin 200L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPR0300S003	Circular plastic bin 300L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPR0300S004	Circular plastic bin 300L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBPR0300S005	Circular plastic bin 300L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPR0300S006	Circular plastic bin 300L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBPR0500S003	Circular plastic bin 500L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPR0500S004	Circular plastic bin 500L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBPR0500S005	Circular plastic bin 500L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPR0500S006	Circular plastic bin 500L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic

Cubic Storage Bag: Matching Cubic Plastic Bin

Made of multi-layer co-extrusion films, the sterile cubic storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard cubic storage bags are available in various types and specifications (50–1000 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Ordering information

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBBPC0100S003	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPC0100S004	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBBPC0100S005	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPC0100S006	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBBPC0250S003	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPC0250S004	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBBPC0250S005	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBPC0250S006	cubic collapsible plastic bin 250 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBBPC1000S003	cubic collapsible plastic bin 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBPC1000S005	cubic collapsible plastic bin 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCPC0050S003	C series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCPC0050S007	C series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBCPC0050S005	C series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCPC0050S008	C series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBCPC0100S003	C series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCPC0100S007	C series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBCPC-0100-S005	C series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCPC0100S008	C series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBCPC0200S003	C series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCPC0200S007	C series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBCPC0200S005	C series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCPC0200S008	C series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBCPC0500S003	C series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCPC0500S007	C series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBCPC0500S005	C series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBCPC0500S008	C series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBCPC1000S003	C series cubic plastic tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBCPC1000S005	C series cubic plastic tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPPC0050S003	P series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPPC0050S007	P series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPPC0050S005	P series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPPC0050S008	P series cubic plastic tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPPC0100S003	P series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPPC0100S007	P series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPPC0100S005	P series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPPC0100S008	P series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPPC0200S003	P series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPPC0200S007	P series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPPC0200S005	P series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPPC0200S008	P series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPPC0500S003	P series cubic plastic tank 500 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPPC0500S007	P series cubic plastic tank 500 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPPC0500S005	P series cubic plastic tank 500 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPPC0500S008	P series cubic plastic tank 500 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPPC1000S003	P series cubic plastic tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPPC1000S005	P series cubic plastic tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBSPC0100S003	S series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSPC0100S007	S series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBSPC0100S005	S series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSPC0100S008	S series cubic plastic tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBSPC0200S003	S series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSPC0200S007	S series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBSPC0200S005	S series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSPC0200-008	S series cubic plastic tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic
BIOBGBSPC0500S003	S series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSPC0500S007	S series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Imported
BIOBGBSPC0500S005	S series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSPC0500S008	S series cubic plastic tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needle-less sampling	Domestic

Cubic Storage Bag: Matching Cubic Stainless Steel Tank

Made of multi-layer co-extrusion films, the sterile cubic storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard cubic storage bags are available in various types and specifications (50–1000 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Ordering information

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBBSC0100S003	cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC0100S004	cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBSC0100S005	cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBSC0100S006	cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBSC0200S003	cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC0200S004	cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBSC0200S005	cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBSC0200S006	cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBSC0500S003	cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC0500S004	cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBBSC0500S005	cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBSC0500S006	cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBBSC1000S003	cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC1000S005	cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBSC2000S003	cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC2000S005	cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBBSC3000S003	cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBBSC3000S005	cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBMSC0200S003	M series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBMSC0200S007	M series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBMSC0200S005	M series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBMSC0200S008	M series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBMSC0500S003	M series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBMSC0500S007	M series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBMSC0500S005	M series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBMSC0500S008	M series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBMSC1000S003	M series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBMSC1000S005	M series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBMSC1500S003	M series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBMSC1500S005	M series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBMSC2000S003	M series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBMSC2000S005	M series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC0050S003	P series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC0050S007	P series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPSC0050S005	P series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC0050S008	P series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPSC0100S003	P series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC0100S007	P series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPSC0100S005	P series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC0100S008	P series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBPSC0200S003	P series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC0200S007	P series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPSC0200S005	P series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC0200S008	P series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPSC0500S003	P series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC0500S007	P series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBPSC0500S005	P series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC0500S008	P series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBPSC1000S003	P series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC1000S005	P series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC1500S003	P series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC1500S005	P series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC2000S003	P series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC2000S005	P series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBPSC3000S003	P series cubic stainless steel tank 3000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBPSC3000S005	P series cubic stainless steel tank 3000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC0050S003	S series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC0050S007	S series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBSSC0050S005	S series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC0050S008	S series cubic stainless steel tank 50 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic

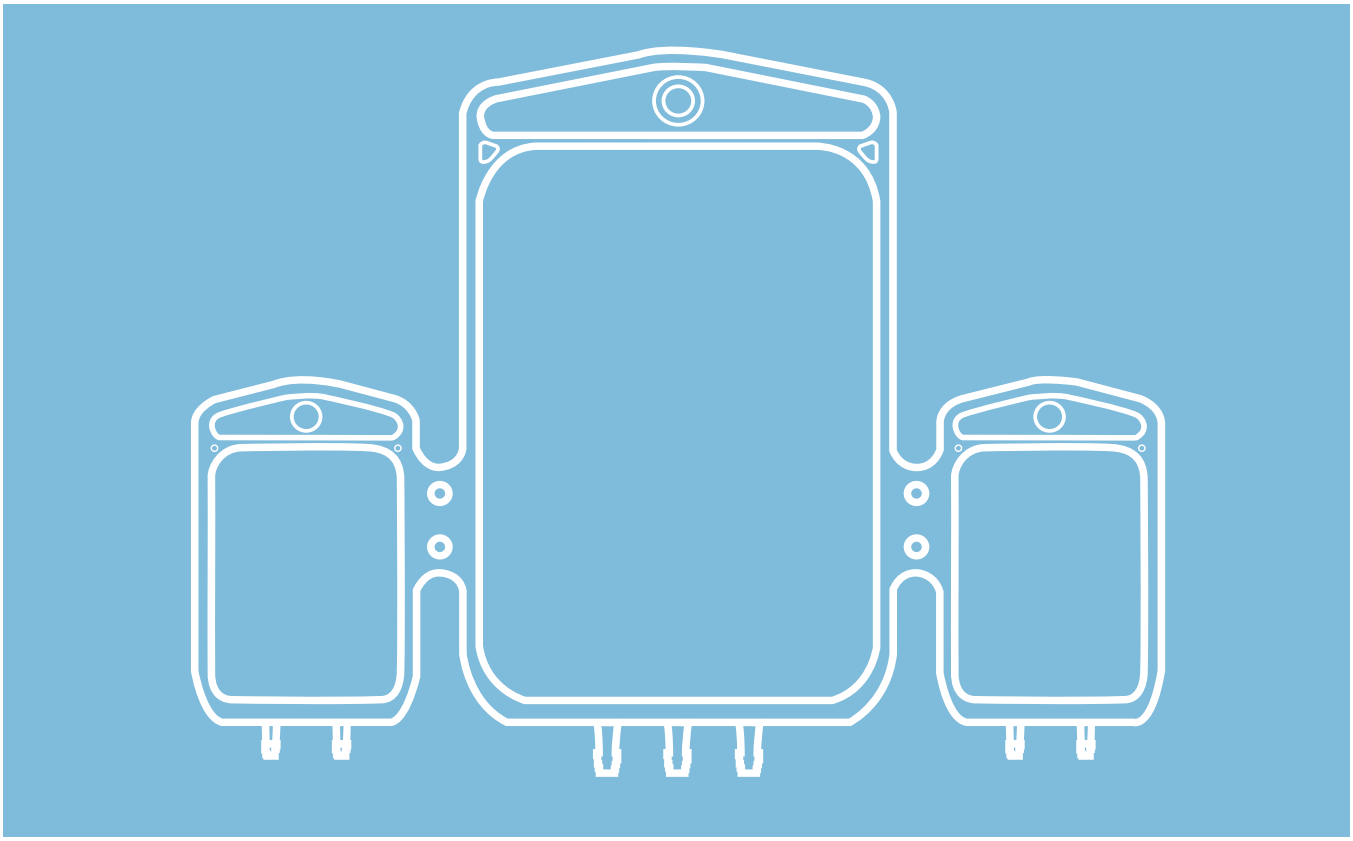
Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOBGBSSC0100S003	S series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC0100S007	S series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBSSC0100S005	S series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC0100S008	S series cubic stainless steel tank 100 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBSSC0200S003	S series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC0200S007	S series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBSSC0200S005	S series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC0200S008	S series cubic stainless steel tank 200 L	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	100 cm ID3/8"*OD5/8" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBSSC0500S003	S series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC0500S007	S series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOBGBSSC0500S005	S series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC0500S008	S series cubic stainless steel tank 500 L	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	100 cm ID1/2"*OD3/4" thermoplastic tubing + plug	30 cm ID1/4"*OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOBGBSSC1000S003	S series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC1000S005	S series cubic stainless steel tank 1000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC1500S003	S series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC1500S005	S series cubic stainless steel tank 1500 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC2000S003	S series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC2000S005	S series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC2500S003	S series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC2500S005	S series cubic stainless steel tank 2000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOBGBSSC3000S003	S series cubic stainless steel tank 3000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOBGBSSC3000S005	S series cubic stainless steel tank 3000 L	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"*OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"*OD7/16" platinum cured silicone tubing + needleless sampling	Domestic

RNase-free Disposable Consumables

mRNA is a new-generation technology platform that is expected to change traditional ways of vaccines and monoclonal anti-body development and manufacturing. Due to its short R&D cycle, simple production process, strong immunogenicity, and high safety, mRNA has the potential to be widely applied in various fields such as vaccines for infectious diseases, tumor immunology, and recombinant protein. Even though mRNA vaccines are booming, the mRNA drugs are in low profile. To date, there is no particularly welcomed mRNA drug, mainly due to the difficulty of mRNA drug development - the higher the purity, the stronger the druggability.

However, due to ubiquitous RNase in the environment, mRNA is easily contaminated, which is why Moderna has invested heavily in building a nuclease-free laboratory (RNase-free Lab). The construction costs are as high as tens of millions of dollars; and with subsequent operations and maintenance, the cost requires an investment of hundreds of millions of dollars. This is possibly why the development of many mRNA drugs is stalled.

Ribonuclease (RNase) is a class of nucleic acid hydrolases that are widely found in animals and plants. Due to its "ubiquitous" nature, it is necessary to take multiple and complex clean-ups to eliminate the effects of RNase in the mRNA production process, which greatly reduces production efficiency. Meanwhile, the process validation and verification of RNase removal are also time-consuming and labor-intensive. Therefore, RNase-free disposable consumables are highly welcomed by mRNA manufacturers using single-use bioprocess technology for production. In addition, the RNase level within those consumables shall be inspected before release and can be verified post-use without damage.



As a supplier of bioprocess disposable equipment and consumables for bioprocessing, GVS has launched an innovative design and comprehensive solution of master bag + double satellite bags for the first time with 100% RNase/DNase inspection and release of products as well as customer verification.

Features

- Innovative design of master bag + double satellite bags (enabling 100% individual inspection of RNase-/DNase-free bags)
- Identical material/production environment of the master bag and satellite bag
- Satellite bag-1 (QC release): for RNase inspection prior to product release
- Satellite bag-2 (customer verification): for customer verification test before/after use
- Different sizes/models of bioprocess disposable products (Storage bags + Bioreactor bags + Cell bags, etc.)
- High-standard production environment control and monthly RNase monitoring

Nuclease-free Single-Use Consumables		
Single-use storage bottle	Batch inspection	DNase-free/ RNase-free/ Nuclease-free (DNase-free & RNase-free)
Single-use 2D storage bag	Individual/hybrid/batch inspection	
Single-use 3D storage bag	Individual/hybrid/batch inspection	
Single-use mixing bag	Individual/hybrid/batch inspection	
Single-use cell bag/mixing bag	Individual/hybrid/batch inspection	
Single-use bioreactor bag	Individual/hybrid/batch inspection	

Ordering information

DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Product name	Matching type	Package
BIOBGBTA5ML001D	BIOBGBTA5ML001R	BIOBGBTA5ML001N	5 ml	5 ml single-use storage bottle	Regular cap	200
BIOBGBTA20ML001D	BIOBGBTA20ML001R	BIOBGBTA20ML001N	20 ml	20 ml single-use storage bottle		200
BIOBGBTA50ML001D	BTA50ML001R	BIOBGBTA50ML001N	50 ml	50 ml single-use storage bottle		120
BIOBGBTA125ML001D	BTA125ML001R	BIOBGBTA125ML001N	125 ml	125 ml single-use storage bottle		60
BIOBGBTA250ML001D	BTA250ML001R	BIOBGBTA250ML001N	250 ml	250 ml single-use storage bottle		40
BIOBGBTA500ML001D	BTA500ML001R	BIOBGBTA500ML001N	500 ml	500 ml single-use storage bottle		20
BIOBGBTA1L001D	BIOBGBTA1L001R	BIOBGBTA1L001N	1L	1 L single-use storage bottle		25
BIOBGBTA2L001D	BIOBGBTA2L001R	BIOBGBTA2L001N	2L	2 L single-use storage bottle		16
BIOBGBTA5ML002D	BIOBGBTA5ML002R	BIOBGBTA5ML002N	5 ml	5 ml single-use storage bottle	2-port cap	200
BIOBGBTA20ML002D	BIOBGBTA20ML002R	BIOBGBTA20ML002N	20 ml	20 ml single-use storage bottle		200
BIOBGBTA50ML002D	BIOBGBTA50ML002R	BIOBGBTA50ML002N	50 ml	50 ml single-use storage bottle		120
BIOBGBTA125ML002D	BIOBGBTA125ML002R	BIOBGBTA125ML002N	125 ml	125 ml single-use storage bottle		60
BIOBGBTA250ML002D	BIOBGBTA250ML002R	BIOBGBTA250ML002N	250 ml	250 ml single-use storage bottle		40
BIOBGBTA500ML002D	BIOBGBTA500ML002R	BIOBGBTA500ML002N	500 ml	500 ml single-use storage bottle		20
BIOBGBTA1L002D	BIOBGBTA1L002R	BIOBGBTA1L002N	1 L	1 L single-use storage bottle		25
BIOBGBTA2L002D	BIOBGBTA2L002R	BIOBGBTA2L002N	2 L	2 L single-use storage bottle		16
BIOBGBTA5ML003D	BIOBGBTA5ML003R	BIOBGBTA5ML003N	5 ml	5 ml single-use storage bottle	3-port cap	200
BIOBGBTA20ML003D	BIOBGBTA20ML003R	BIOBGBTA20ML003N	20 ml	20 ml single-use storage bottle		200
BIOBGBTA50ML003D	BIOBGBTA50ML003R	BIOBGBTA50ML003N	50 ml	50 ml single-use storage bottle		120
BIOBGBTA125ML003D	BIOBGBTA125ML003R	BIOBGBTA125ML003N	125 ml	125 ml single-use storage bottle		60
BIOBGBTA250ML003D	BIOBGBTA250ML003R	BIOBGBTA250ML003N	250 ml	250 ml single-use storage bottle		40
BIOBGBTA500ML003D	BIOBGBTA500ML003R	BIOBGBTA500ML003N	500 ml	500 ml single-use storage bottle		20
BIOBGBTA1L003D	BIOBGBTA1L003R	BIOBGBTA1L003N	1 L	1 L single-use storage bottle		25
BIOBGBTA2L003D	BIOBGBTA2L003R	BIOBGBTA2L003N	2 L	2 L single-use storage bottle		16

DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Line
BIOBGBD0001S003	BIOBGBR0001S003	BIOBGBN0001S003	1 L	50 ml satellite bag 20 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer 30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector
BIOBGBD0002S003	BIOBGBR0002S003	BIOBGBN0002S003	2 L	30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOBGBD0005S003	BIOBGBR0005S003	BIOBGBN0005S003	5 L	
BIOBGBD0010S003	BIOBGBR0010S003	BIOBGBN0010S003	10 L	50 ml satellite bag 20 cm ID1/8"*OD1/4" platinum cured silicone tubing + female Luer 30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector
BIOBGBD0020S003	BIOBGBR0020S003	BIOBGBN0020S003	20 L	30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOBGBD0050S003	BIOBGBR0050S003	BIOBGBN0050S003	50 L	
BIOBGBD0001S004	BIOBGBR0001S004	BIOBGBN0001S004	1 L	50 ml satellite bag 10 cm ID1/8"*OD1/4" platinum cured silicone tubing+ 10 cm ID1/8"*OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + female MPC
BIOBGBD0002S004	BIOBGBR0002S004	BIOBGBN0002S004	2 L	30 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + male MPC 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + plug
BIOBGBD0005S004	BIOBGBR0005S004	BIOBGBN0005S004	5 L	
BIOBGBD0010S004	BIOBGBR0010S004	BIOBGBN0010S004	10 L	50 ml satellite bag 10 cm ID1/8"*OD1/4" platinum cured silicone tubing + 10 cm ID1/8"*OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + female MPC
BIOBGBD0020S004	BIOBGBR0020S004	BIOBGBN0020S004	20 L	30 cm ID3/8" * OD5/8" C-Flex thermoplastic tubing + female MPC 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + plug
BIOBGBD0050S004	BIOBGBR0050S004	BIOBGBN0050S004	50 L	

DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Line
BIOBGBD0001S005	BIOBGBR0001S005	BIOBGBN0001S005	1 L	50 ml satellite bag 10 cm ID1/8"*OD1/4" platinum cured silicone tubing + 10 cm ID1/8"*OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + TC25 quick connector 30 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + TC25 quick connector 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOBGBD0002S005	BIOBGBR0002S005	BIOBGBN0002S005	2 L	
BIOBGBD0005S005	BIOBGBR0005S005	BIOBGBN0005S005	5 L	
BIOBGBD0010S005	BIOBGBR0010S005	BIOBGBN0010S005	10 L	50 ml satellite bag 10 cm ID1/8"*OD1/4" platinum cured silicone tubing + 10 cm ID1/8"*OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + TC25 quick connector 30 cm ID3/8" * OD5/8" C-Flex thermoplastic tubing + TC25 quick connector 20 cm ID1/4"*OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOBGBD0020S005	BIOBGBR0020S005	BIOBGBN0020S005	20 L	
BIOBGBD0050S005	BIOBGBR0050S005	BIOBGBN0050S005	50 L	

Sterile Sampling System

Product sampling is necessary and critical for cell culture and other operations in biopharmaceutical processes. Samples collected through Sampling Bags can be used to determine critical purity attributes, such as sterility, endotoxin levels, bioburden, and important cell culture parameters including metabolites, nutrient levels, pH, and osmolarity.

Sterile Sampling Systems provides a pre-assembled sampling solution. It is specially designed for sampling operations at various stages of biopharmaceutical processes such as in-process monitoring of buffer storage, medium preparation, product collection and analysis. To mitigate the risk of residual contamination and ensure the safety of bio-process, the product is sterilized by irradiation prior to delivery.

Features

- Types of sampling container: bags and bottles
- Volume range: sampling bag 50 mL to 1 L, sampling bottle 20 mL to 250 mL
- 2 mm needle, covers a variety of liquid sampling needs in the entire bio-process
- The material of the liquid contact layer of both the sampling bags (ULDPE) and sampling bottles (PC) complies with bio-pharmaceutical requirements
- High transparency and excellent compatibility
- Overmolded needles and tubings for assurance of airtightness and sterility
- Adequate validation documents to ensure safety in use
- Operating temperature range: sampling bag – 80 ° C to 60 ° C, sampling bottle – 80 ° C to 121 ° C
- Maximum operating pressure: single-needle, single-bag products: 0.5 bar; single-needle, 5-bag products: 0.3 bar
- Customization available

Validation Documents

- 100% integrity testing
- USP<665>, Extractable testing
- USP <88> , Class VI plastics
- USP <87>, Cytotoxicity
- USP <788>, Particulate Matter in Injections
- USP<85>, Bacterial Endotoxins
- ISO 11137, Sterility testing
- ISO 10993-4, Hemolysis testing

Ordering information

Sampling bag

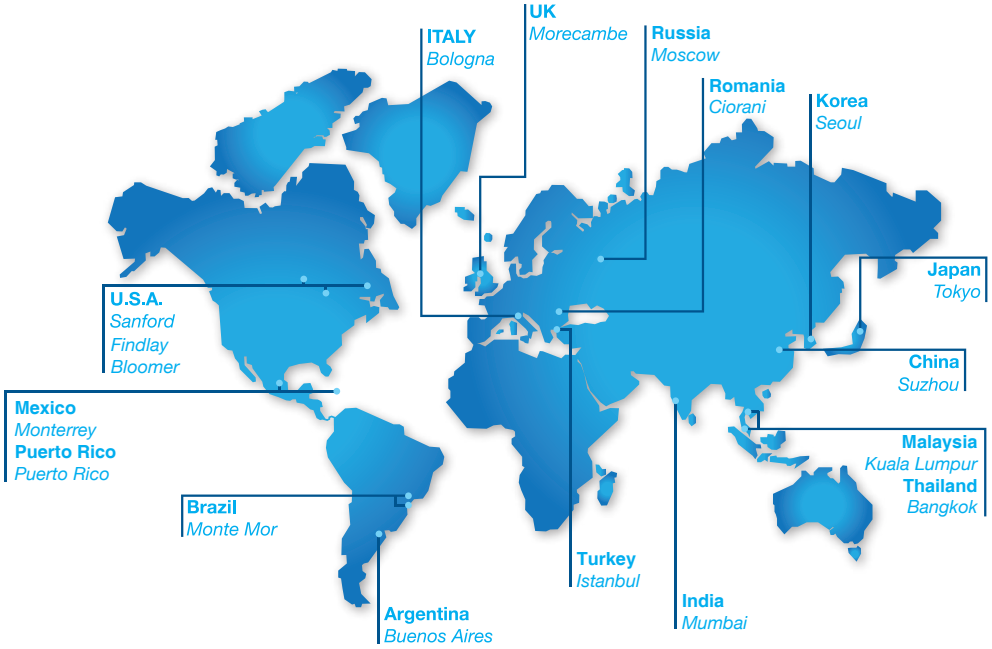
Product code	Volume	Inlet tubing	Outlet tubing
BIOBGBSX050S005	50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOBGBSX100S005	100 mL		
BIOBGBSX250S005	250 mL		
BIOBGBSX500S005	500 mL		
BIOBGBS0001S005	1000 mL		
BIOBGBSX050S006	2 × 50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOBGBSX100S006	2 × 100 mL		
BIOBGBSX250S006	2 × 250 mL		
BIOBGBSX050S007	3 × 50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOBGBSX100S007	3 × 100 mL		
BIOBGBSX250S007	3 × 250 mL		
BIOBGBSX050S008	5 × 50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOBGBSX100S008	5 × 100 mL		
BIOBGBSX250S008	5 × 250 mL		

Sampling bottle

Product code	Volume	Inlet tubing	Outlet tubing
BIOBGTSTGST037	20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOBGTSTGST038	50 mL		
BIOBGTSTGST039	125 mL		
BIOBGTSTGST040	250 mL		
BIOBGTSTGST041	2 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOBGTSTGST042	2 × 50 mL		
BIOBGTSTGST043	2 × 125 mL		
BIOBGTSTGST044	2 × 250 mL		
BIOBGTSTGST045	3 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOBGTSTGST046	3 × 50 mL		
BIOBGTSTGST047	3 × 125 mL		
BIOBGTSTGST048	3 × 250 mL		
BIOBGTSTGST049	5 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOBGTSTGST050	5 × 50 mL		
BIOBGTSTGST051	5 × 125 mL		
BIOBGTSTGST052	5 × 250 mL		

Sampling unit

Product code	Volume	Inlet tubing	Outlet tubing
BIOBGTSTGST053	-	2 mm needle, silicone tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a metal ring for sterile disconnection and a male Luer and cap at the end	
BIOBGTSTGST054	-	2 mm needle, C-Flex tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a male Luer and cap at the end	
BIOBGTSTGST055	-	2 mm needle, PVC tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a male Luer and cap at the end	



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