Darlly®
TOTAL FILTRATION SOLUTIONS

Pharmaceutical Filtration Solutions

www.darllyfiltration.com

About Us

Hangzhou Darlly Filtration Equipment Co.,Ltd. located in Fuyang, Hangzhou, China is a high-tech company focusing on developing, manufacturing, and marketing of the filter cartridges for over 25 years.

All the products we made are fully in accordance with international standards. The materials of cartridges used in biopharma and food market are listed in FDA file, and have passed the USP(United States Pharmacopeia) requirements for Class VI-121℃biological safety testing of plastics. Darlly strictly follows the ISO9001 quality management system, we have various analytical apparatus and equipments for quality control purpose.

Our filter cartridges are widely used in BioPharmaceuticals, Microelectronics, Food and Beverage, Power generation, Petrochemical, Metal processing, Drinking Water treatment, Swimming pool and spa water treatment, Mechanical manufacturing, Automotive, etc. markets.

Darlly filter cartridges are well accepted and appraised in the markets. We have the market share all over the world. Most of the products are sold to America, Europe, Asia Pacific, Middle East, Africa and other regions.

When our customers succeed, Darlly succeeds." Endeavored to produce good cartridges." is our continuously pursued goal. Our commitment is to continuously enhance our ability to innovate and supply more and better products to meet the diverse and demanding requirements from our customers.

ISO 9001 : 2015

Mission:

To continuously provide customers with more valuable filtration solutions

Vision:

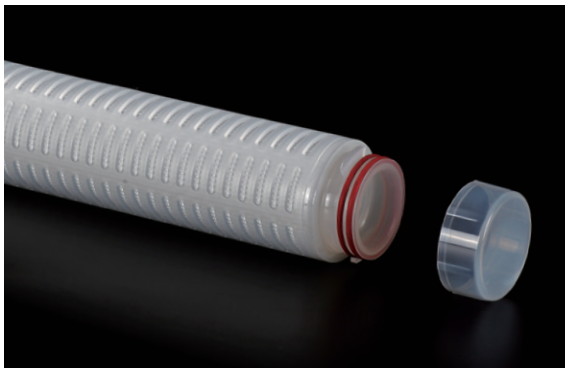
Committed to being a world-renowned provider of integrated filtration solutions

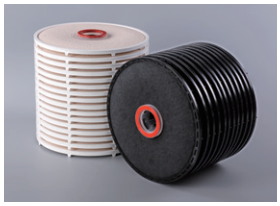
Values:

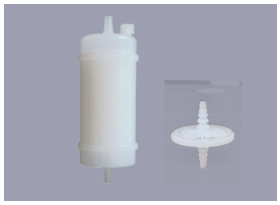
Inclusiveness, Pragmatism, Modesty, High Efficiency

Quality:

- Filter cartridges are manufactured in a clean room environment
- Manufacturered according to ISO9001 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 21CFR
- 100% integrity tested upon request
- Each individual element is tracked by serial number







Technology service center

- Extractables Lab
- Microorganism Lab
- Assay Lab
- General Lab (compatibility lab)
- Infrared/UV Lab

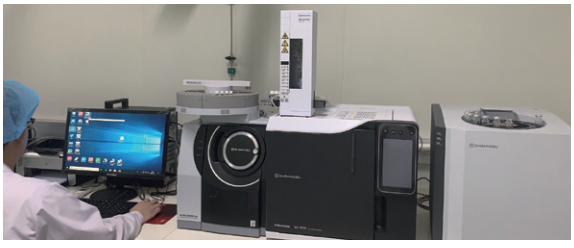
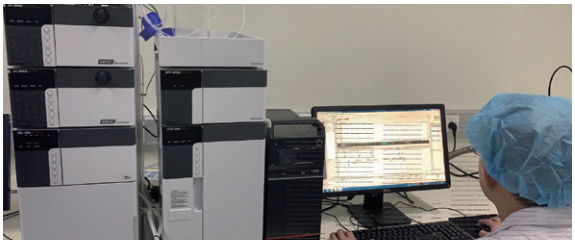
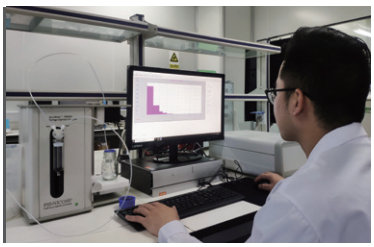
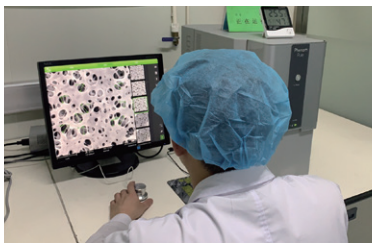
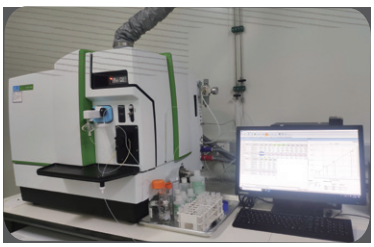
Test Equipment

- SEM
- PSS
- ICP-MS
- AAS/HPLC/FTIR

Validation Services

- Integrity Test
- Bacteria Challenge Test
- Extractables Testing
- Absorption Test
- Validation of Physical Characteristics
- Chemical Compatibility
- Biological Safety



Quality Assurance

Hangzhou Darlly has the professional technical team and perfect production quality assurance system, ensure each filter cartridge meet the technical requirement. The membrane filter cartridge passed perfect performance verification, including flow rate, pressure and temperature resistance, bacterial challenge, chemical compatibility, extractum, biosafety-fiber shedding, particle precipitation,sterilization method.Each sterilization level filter cartridge passed the integrity testing before shipment.

Bacterial Challenge

According to the standard of ASTM F838 testing method, micro pleated filter cartridge with removal rating of 0.22μm, passing the $1x10^7$ CFU/cm² reduction value of the brevundimonas diminuta (ATCC 19146) retention testing.

Bacterial Endotoxins

A cartridge aqueous extraction contains less than 0.25EU/ml.

Non-fiber Shedding

The filter product complies with the title 21 CFR, Section 210.3(b)(6).

Particles Shedding

Complies with CHP for injection water insoluble particles content testing requirements.

Sterilization Method

Online steam sterilization: 30 minutes, 10 cycles@125℃.
High pressure steam sterilization: 30 minutes, 25 cycles @121℃.

Toxicity Material

All material of this filter element meets the requirements of the current USP<88> for plastic class VI-121℃.

TOC/Conductivity

After the injection water flush and high pressure steam sterilization,the filtered liquid complies with the ChP, USP for injection water's total organic carbon content and conductivity requirements.

Testing Ability

Darlly has advanced comprehensive laboratory with various instruments and equipments for tests and validation services. Also there is a high quality technology and testing team to do the jobs. Besides the tests to materials and products of Darlly, we can also provide testing and validation services for customers. The tests we can do include:Media test and analysis, flow rate and pressure drop, filtration efficiency, dirt holding capacity, chemical compatibility, extractive, extractum, integrity, adsorbability, bacterical viability and challenge, etc.

Bacterial Visibility

Extractable Test

Bacterial Challenge Test

Compatibility Test

Adsorbability Test

PROCESS VALIDATION ITEMS

Darlly filter process validation content and items

Reference PDA Technical Report No. 26:

Criteria	Filter User	Filter Manufacturer	
	Device	Membrane Disc	Device
Bacteria retention in water or saline lactose broth (SLB) with integrity test correlation in water or solvent	-	Q、L	Q、L
Bacteria retention in product	V*	-	-
Chemical compatibility,effects on filter integrity	V	Q	Q
Extractables	V	Q	Q
Leachables	E	-	-
Sterilization method, effects on filter integrity	V	Q	Q
Integrity test (water or solvent)	V	Q、L	Q、L
Integrity test method selection (product)	V	-	-
Toxicity testing	-	Q	Q
Bacterial endotoxin	V	-	Q、L
Particulate matter	E	-	Q
Non-fiber release	E	-	Q
Total Organic Carbon (TOC) and conductivity	E	-	Q

L=Lot release criteria　　Q=Qualification　　V=Process-specific
V*=Can be performed in disc or device format　　E=Evaluate the need for testing

CONTENT

Lab Use

FGE Series - PP Pleated Filter Cartridges

FGE Series are all-polypropylene filter cartridges made of submicron fine fiber filter media which provide smaller pore size. It is fabricated without using any binders, adhesives, plasticizers, and surfactants. FGE filters can be repeatedly hot water sanitized. All the materials used for this filter meet FDA requirements for food contact and pass European Commission Directives (EU10/2011).

Features

- Nominal rated structure, particle removal rating from 0.1 to 50 micron
- Non fiber shedding
- 100% polypropylene components provide broad chemical compatibility, suitable for use in various liquid filtration
- Various end cap configurations to fit into the most standard housings

Applications

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

Dimension

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

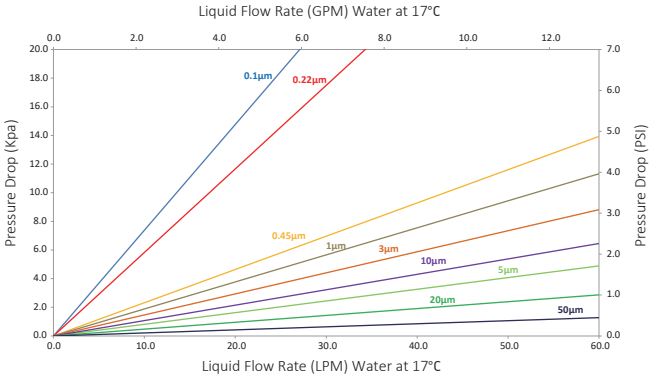
Material of Constructions

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

Performance

Max. Operating Temperature	80°C
Max. Operating DP	4bar@20°C , 2.4bar@80°C

FGE Flow Rate per 10''



Quality

- 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 21CFR
- Materials of filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics
- Passed European Commission Directives (EU10/2011)
- Halal Certified

Ordering Information

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022=0.22μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045=0.45μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0100=1μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0300=3μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
0500=5μm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
1000=10μm	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
2000=20μm	N =222 Extended / Flat	Y = 226 Spear Fin			
5000=50μm	W= 222 Spear Fin	Z = 226 (SS Insert) / Spear Fin			

FGF Series - PP Pleated Filter Cartridges

FGF Series Filter Cartridges are absolute 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 FGF 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

Applications

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

Dimension

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

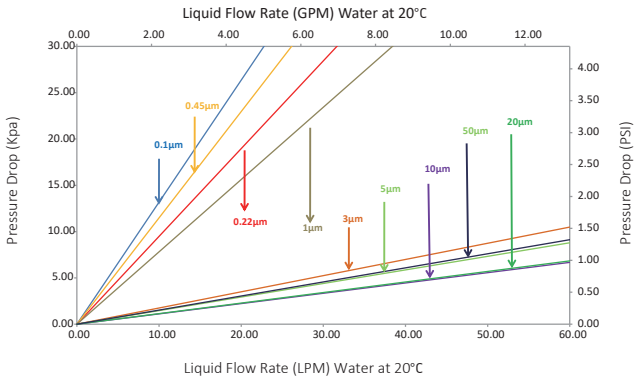
Material of Constructions

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

Performance

Max. Operating temperature	80°C
Max. Operating DP	4bar@20°C , 2.4bar@80°C

FGF Flow Rate per 10"



Quality

- 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 21CFR
- Materials of filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics
- Passed European Commission Directives (EU10/2011)
- Halal Certified

Ordering Information

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022=0.22μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045=0.45μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0100=1μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0300=3μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
0500=5μm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
1000=10μm	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
2000=20μm	N =222 Extended / Flat	Y = 226 Spear Fin			
5000=50μm	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

PGA Series - PP Pleated Filter Cartridges

PGA Series are all-polypropylene filter cartridges made with submicron fine fiber filter media which provide smaller pores. It is fabricated without using any binders, adhesives, plasticizers, and surfactants. PGA filters 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 release
- 100% polypropylene components provide broad chemical compatibility, suitable for use in a variety of fluids
- Various end cap configurations to fit into most standard housings

Applications

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

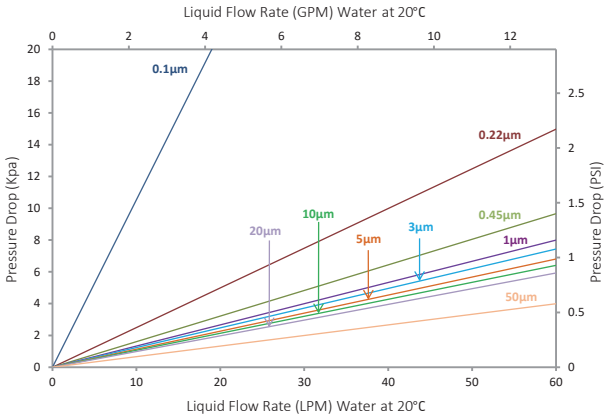
Material of Constructions

Media	PP
Support	PP
Cage/Core/End cap	PP
Sealing	Silicone, EPDM, NBR, FKM

Performance

Max. Operating temperature	80°C
Max. Operating DP	4bar@20°C ,2.4bar@80°C
Filtration Area	0.4 - 0.7m² per 10" Filter

PGA Flow Rate Per 10''



Particle Removal Efficiency		
Cartridge Designation	90% Efficiency	95% Efficiency
PGA0010	0.1μm	——
PGA0022	0.22μm	——
PGA0045	0.45μm	——
PGA0100	1μm	——
PGA0300	3μm	5μm
PGA0500	5μm	10μm
PGA1000	10μm	15μm

Quality

- 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 21CFR
- Materials of filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics
- Passed European Commission Directives (EU10/2011)
- Halal Certified

Ordering Information

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1µm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022=0.22µm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045=0.45µm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0100=1µm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0300=3µm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
050=5µm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
1000=10µm	E = 222 Extended / Fin	X = 222 (SS Insert) /Spear Fin			
2000=20µm	N =222 Extended / Flat	Y = 226 Spear Fin			
5000=50µm	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

SGH Series - PP Pleated Filter Cartridges

SGH Series filter cartridges are comprised of multi-layers media. The unique construction results in a highly porous, continuously 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 drop and high throughput while achieving submicron retentions, high efficiency, and extraordinary dirt holding capacity. 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

Applications

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

Dimension

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

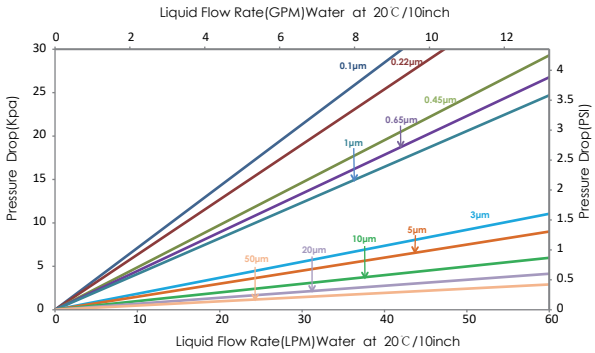
Material of Constructions

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

Performance

Max. Operating temperature	80°C
Max. Operating DP	4bar@20°C 2.4bar@80°C

SGH series Flowrate



Quality

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

Food Contact Compliance

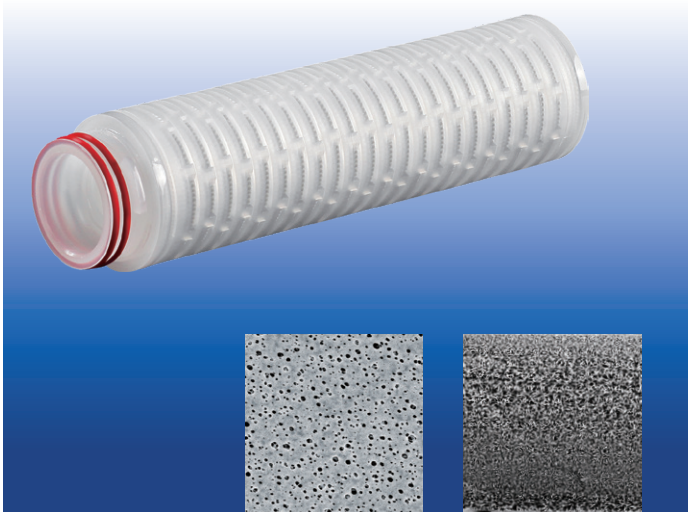
- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR
- Materials of filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics
- Passed European Commission Directives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

Ordering Information

SGH	0010	F	5	S	S

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022=0.22μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045=0.45μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0065=0.65μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0100=1μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
0300=3μm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
050=5μm	E = 222 Extended/Fin	X = 222 (SS Insert) /Spear fin			
1000=10μm	N =222 Extended/Flat	Y = 226 Spear fin			
2000=20μm	W= 222 Spear fin	Z = 226 (SS Insert) /Spear fin			
5000=50μm					

PAA Series - PES Pleated Filter Cartridges



PAA series polyethersulfone (PES) 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 PAA filter cartridges 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

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	69mm
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 , FKM

Performance

Operating Conditions

Max. Operating Temperature	80°C
Max. Operating DP	4 Bar@20°C , 2.4 Bar@80°C

Sterilization

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

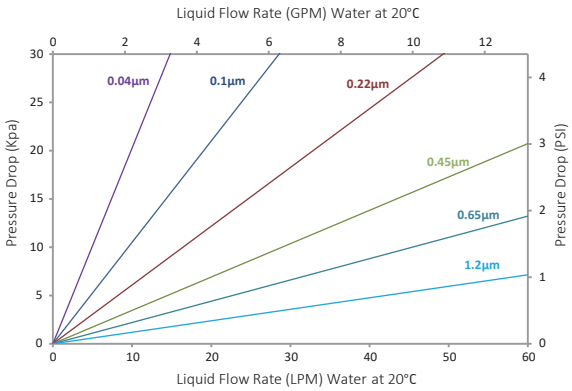
Filtration Area

0.65 m² per 10" Filter

Extractables

10" Filter Cartridges	< 20mg

PAA Flow Rate Per 10''



Quality

- Validated with B. diminuta (ATCC 191463) at 10^7CFU/cm² (0.22μm)
- 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

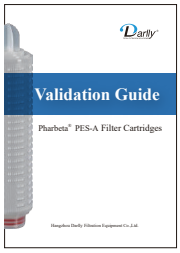
Effluent quality

- Non-fiber releasing
- Non-pyrogenic per USP Bacterial Endotoxins (<0.25EU/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"Ø69mm)
0.1μm	4.8Bar	25ml/min@4.475Bar
0.22μm	3.2Bar	25ml/min@2.76Bar
0.45μm	2.1Bar	25ml/min@1.70Bar
0.65μm	1.32Bar	12ml/min@1.1Bar

Validation Guide

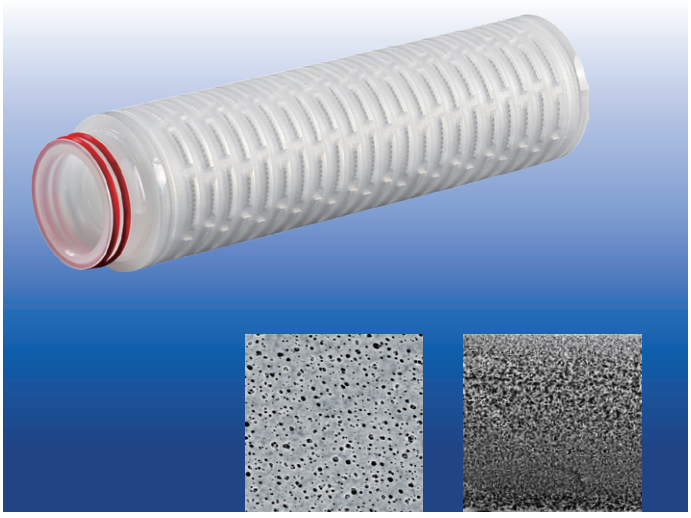


Ordering Information

PAA — 0022 — R — 10 — S — S

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
0022=0.22μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
0045=0.45μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0065=0.65μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0120=1.2μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) / Spear Fin			

PAB Series - PES Pleated Filter Cartridges



PAB series polyethersulfone (PES) pleated filter cartridges are made of hydrophilic high asymmetric polyethersulfone membrane, which 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 makes it especially suit for 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
- Low extractables

Applications

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

Dimension

Diameter	69mm
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 , FKM

Performance

Operating Conditions

Max. Operating Temperature	80°C
Max. Operating DP	4 Bar@20°C , 2.4 Bar@80°C

Sterilization

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

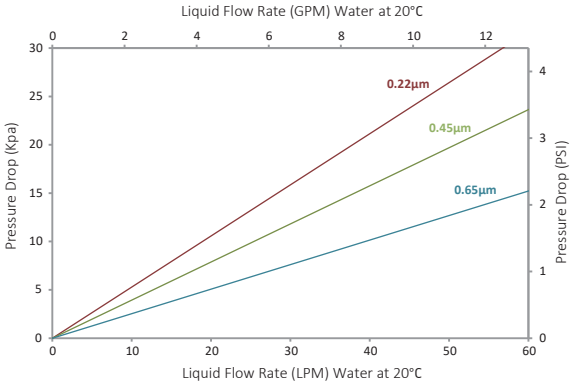
Filtration Area

0.65 m² per 10" Filter

Extractables

10" Filter Cartridges ＜ 20mg

PAB Flow Rate Per 10"



Quality

- Validated with B. diminuta (ATCC 191463) at 10^7CFU/cm² (0.22μm).
- 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 .

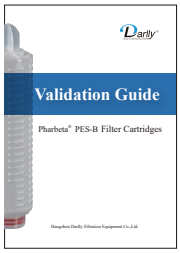
Effluent quality

- Non-fiber releasing
- Non-pyrogenic per USP Bacterial Endotoxins (＜0.25EU/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"Ø69mm)
0.22μm	3.2Bar	35ml/min@2.76Bar
0.45μm	2.1Bar	35ml/min@1.70Bar
0.65μm	1.32Bar	24ml/min@1.1Bar

Validation Guide



Ordering Information

PAB — 0022 — R — 10 — S — S

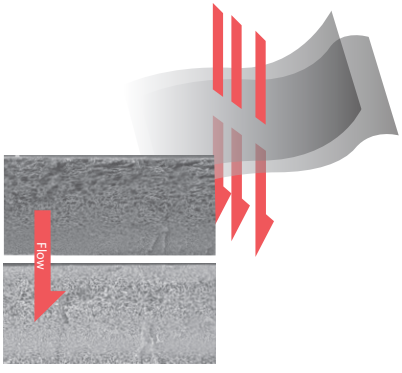
Removal Rating	End Cap Type		Length	Seal Material	Core
0022=0.22μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
0045=0.45μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
0065=0.65μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
	E = 222 Extended / Fin	X = 222 (SS Insert) /Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

PAD Series Filter Cartridges

PAD Series Filter Cartridge is constructed of highly asymmetric polyethersulfone membrane from Germany and imported support layer. Unique double layer hydrophilic polyethersulfone contributes to its excellent filtration performance and reliable bacteria-intercepting ability. It is especially used in pharmaceutical industry with stringent requirement. All components of PAD filter cartridges 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
- Full traceability to each filter with unique serial number



Material of Constructions

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

Dimension

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

Performance

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

Sterilization

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

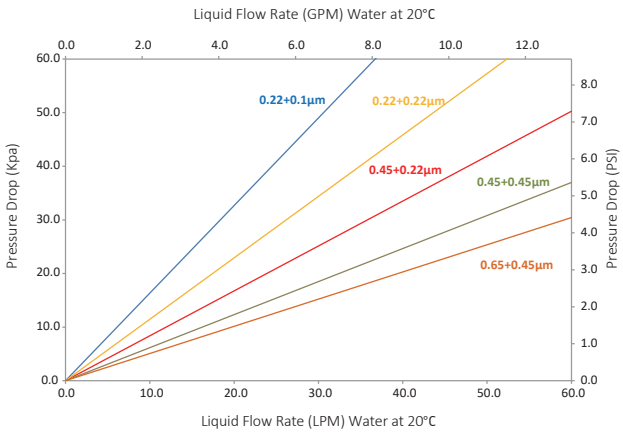
Filtration Area

0.65m² per 10" filter

Extractables

10" Filter Cartridges	< 20mg

PAD Flow Rate per 10''



Applications

- Biological vaccine/blood products sterilization filtration
- API sterilization filtration
- Large infusion (LVP), small injection (SVP) sterilization filtration
- Ophthalmic preparation sterilization filtration
- Buffers and reagents sterilization filtration

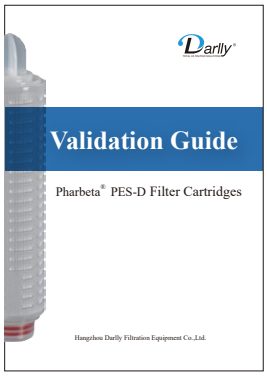
Quality

- Validated with B. diminuta (ATCC 191463) at $10^7/cm^2$ (0.22μm).
- 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
- Non-pyrogenic per USP Bacterial Endotoxins (＜0.25EV/mL)
- Meets TOC and water conductivity per USP Purified Water, pH per USP Sterile Purified Water.

Validation Guide



Integrity Test

Removal Rating	Bubble Point≥ (Water)	Diffusion Flow≤ (10" Ø69mm)
2210 = 0.22+0.1	4.8Bar	25ml/min@4.475Bar
2222 = 0.22+0.22	3.2Bar	20ml/min@2.76Bar
4522 = 0.45+ 0.22	3.2Bar	25ml/min@2.76Bar
4545 = 0.45+0.45	2.1Bar	20ml/min@1.70Bar
6545 = 0.65+0.45	2.1Bar	25ml/min@1.70Bar

Ordering Information

PAD — 2210 — R — 10 — S — S

Removal Rating	End Cap Type		Length	Seal Material	Core
2210 = 0.22+0.1	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
2222 = 0.22+0.22	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
4522 =0.45+0.22	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
4545 = 0.45+0.45	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
6545 = 0.65+0.45	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) / Spear Fin			

BTF Series All Fluoropolymer Filter Cartridges

BTF Series All Fluoropolymer Filter Cartridges are constructed of PTFE absolute-rated membrane, 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 filtration efficiency and long service life with chemicals.

Features

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

Applications

- Pharmaceuticals
- Products Fine
- Chemicals
- Microelectronics Fluids

Dimension

Outer Diameter	2.72"(69mm) 3.3"(83mm)-Only 10 inch is available
Length	10"/20"/30"/40"

Filtration Area

HP	1.12m²/69-10in	1.63m²/83-10in
EP	0.9m²/69-10in	1.51m²/83-10in

Material of Constructions

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

Quality

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

Performance

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

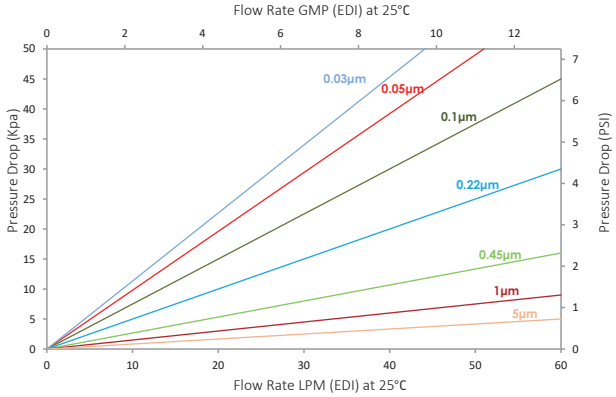
Precautions

- PTFE membrane is a natural hydrophobic media, if used for high surface tension fluid filtration, it's necessary to pre-wet the filter cartridge or directly use pre-wetting products.
- Pre-wetting products are conserved in the mix of ultrapure water and hydrogen peroxide, drain the internal liquid and rinse with 20L (every 10 inch unit) pure water before installation and use.

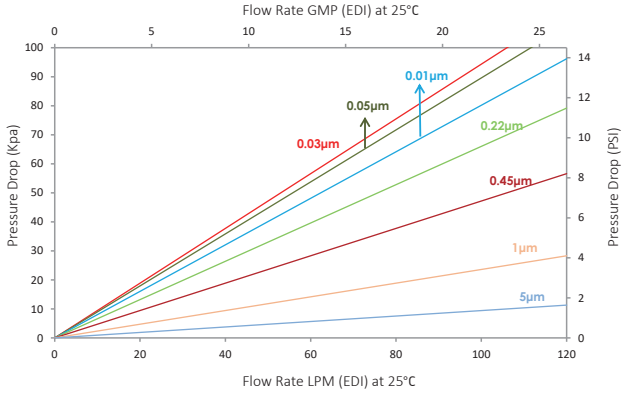
Pre-wetting Regulation

- Fully immerse cartridge into wetting liquid(IPA:Water=60:40) for 30 min
- Soak in ultra-pure water for 5 minutes
- Use ultra-pure water to rinse for 20min@7.5LPM (filter fully exhaust, cartridge is completely immersed in pure water.

BTF69 Series Flow RateVS Pressure Drop



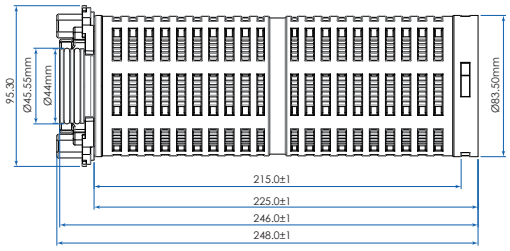
BTF83 Series Flow RateVS Pressure Drop



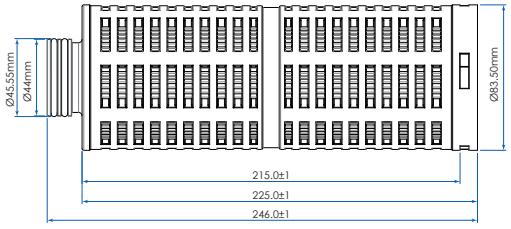
Dimensions

83 Series

222 / Flat with fastener

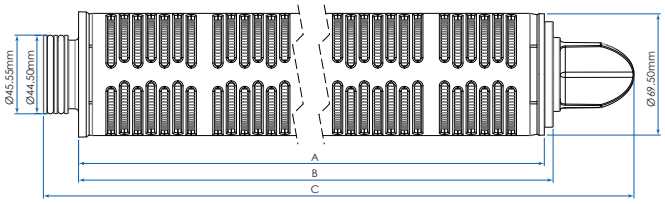


222 / Flat



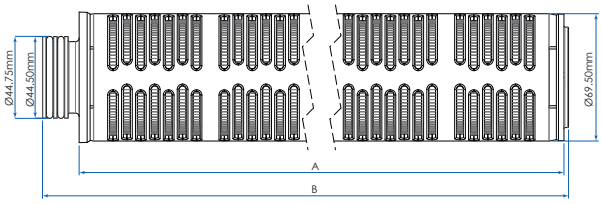
69-222 Series

222 / Fin



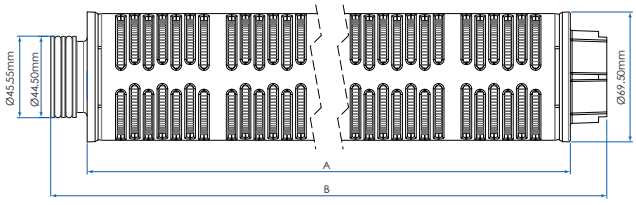
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	249.0±1	495.0±2	741.0±2	987.0±2
C	315.0±1	561.0±2	807.0±2	1053.0±2

222 / Flat



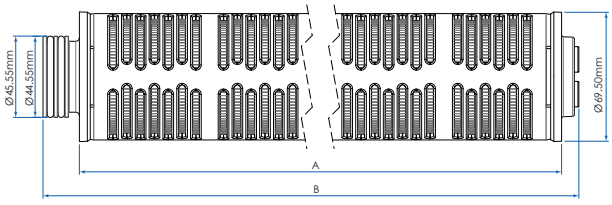
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	266.5±1	512.5±2	758.5±2	1004.5±2

222 / Flat B



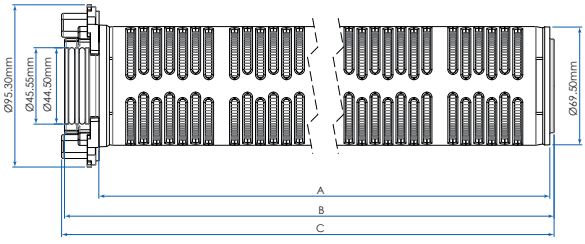
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	284.0±1	530.0±2	776.0±2	1022.0±2

222 / Flat C



	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	273.5±1	519.5±2	765.5±2	1011.5±2

222 / Flat with fastener

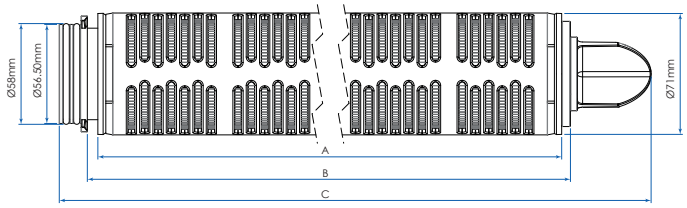


	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	266.5±1	512.5±2	758.5±2	1004.5±2
C	268.5±1	514.5±2	760.5±2	1006.5±2

Dimensions

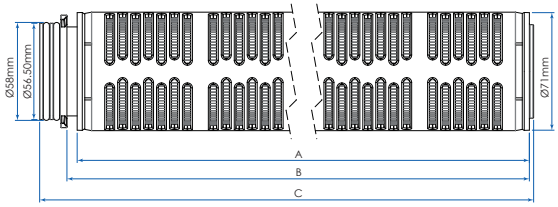
69-226 Series

226 / Fin



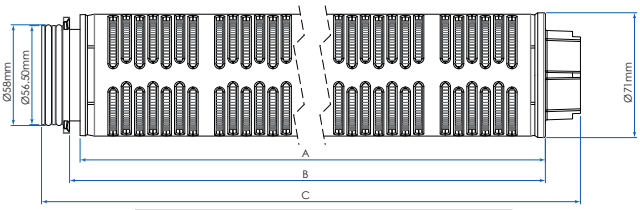
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	255.0±1	501.0±2	747.0±2	993.0±2
C	317.0±1	563.0±2	809.0±2	1055.0±2

226 / Flat



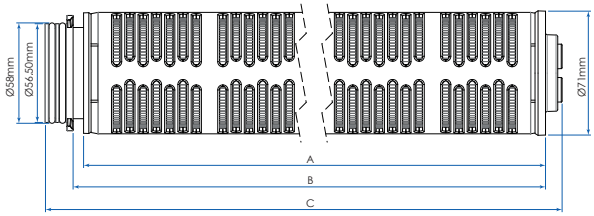
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	250.0±1	496.0±2	742.0±2	988.0±2
C	268.5±1	514.5±2	760.5±2	1006.5±2

226 / Flat B



	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	250.0±1	496.0±2	758.5±2	988.0±2
C	286.0±1	532.0±2	778.0±2	1024.0±2

226 / Flat C



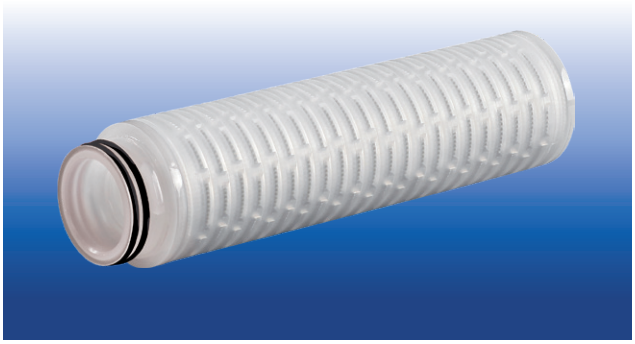
	10"	20"	30"	40"
A	244.0±1	490.0±2	736.0±2	982.0±2
B	250.0±1	496.0±2	742.0±2	988.0±2
C	275.5±1	521.5±2	767.5±2	1013.5±2

Ordering Information

69BTF — M — 0005 — HP — F — 10 — N — R0 — N

Series	End Cap Type	Revoval Rating	Filtration Area	Seal Material	Length	Wetting	Clean Class	EZlock
69BTF	M=222 / Flat	0003=30nm	HP	F = E-FKM	10 = 10"(ϕ69/83mm)	N = No Prewet	R0 = Normal	N = No
83BTF (M Interface / 10in)	B=222 / Flat B (replace P AB Type)	0005=50nm	EP		20 = 20"(ϕ69mm)	W = Prewet	R1 = High	Y = Selective Assembly (replace E chemlock)
		0010=0.1μm			30 = 30"(ϕ69mm)			
	C=222 / Flat C	0020=0.2μm						
	P=222 / Fin	0045=0.45μm						
	T=226 / Flat	0100=1μm						
	E=226 / Flat B	0500=5μm						
	G=226 / Flat C							
	Q=226 / Fin							

BTG Series Sterilizing-grade Filter Cartridges



BTG Series 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

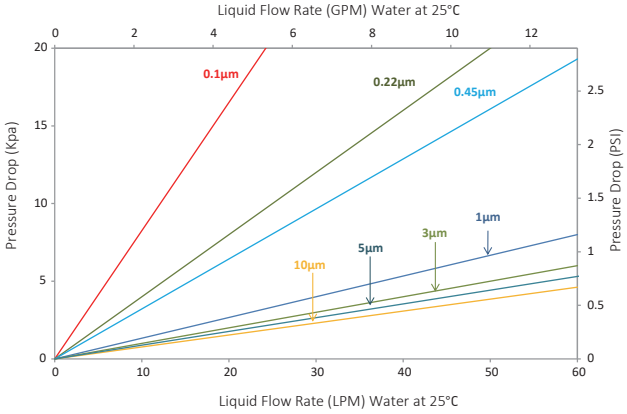
Dimension

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

Material of Constructions

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

BTG Flow Rate Per 10"



Performance

Max Operating Temperature	80°C
Max Operating DP	4.5 Bar @ 20°C
	2.4 Bar @ 80°C

Quality

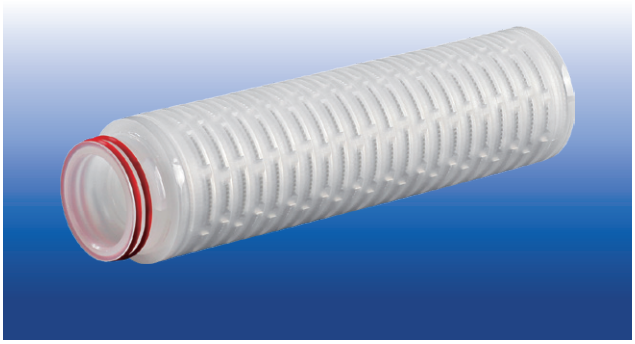
- Filter Cartridges are manufacturered in a clean room environment
- Manufacturered according to ISO9001:2015 certified Quality Management System
- Materials of construction comply with FDA requlations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR
- 100% Integrity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

Ordering Information

BTG — 0010 — F — 5 — S — P

Removal Rating	End Cap Type		Length	Seal Material	Core
0010 = 0.1μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022 = 0.22μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045 = 0.45μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0100=1μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0300=3μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
0500=5μm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
1000=10μm	E = 222 / Extended/Fin	X = 222 (SS Insert) / Spear fin			
	N =222 / Extended/Flat	Y = 226 / Spear fin			
	W= 222 / Spear fin	Z = 226 (SS Insert) / Spear fin			

BTH Series - PTFE Pleated Filter Cartridges



BTH Series filter cartridges are made of hydrophobic PTFE membrane which is excellent in chemical compatibility, heat and corrosion resistance. BTH Series filter cartridges are suitable to filter the liquids and gases with strong aggressive and oxidative,usually used for gas/vent sterile filtration.

Features

- Traceable marking
- High filtration efficiency, up to 99.99%
- Excellent chemical compatibility(pH 1-14)
- Manufactured in a clean room environment
- 100% integrity tested and flushing with 18MΩ-cm de-ionized water prior to shipment

Applications

- Solvent Filtration
- Fermentation Feed Air
- Strong Acids & Bases
- Aggressive Fluids and Gases
- Venting
- Photoresists
- Hot DI Water
- Compressed Gas

Dimension

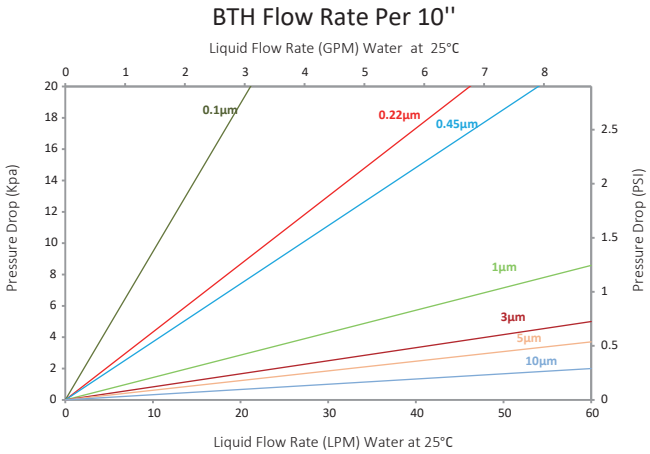
Outer Diameter	69mm
Length	5", 10", 20", 30", 40"

Material of Constructions

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

Performance

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



Quality

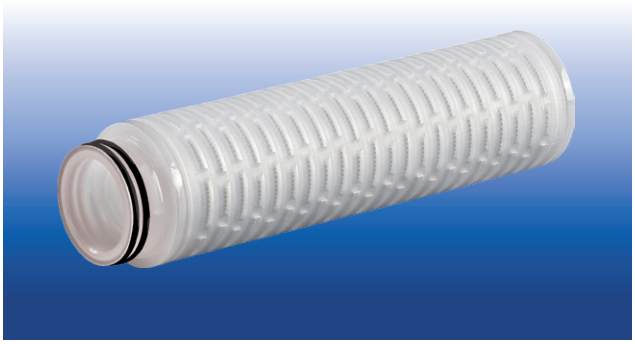
- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System
- Each membrane filter element has been individually tested for integrity
- Individual element is tracked by serial number

Ordering Information

BTH — 0010 — F — 5 — S — P

Removal Rating	End Cap Type		Length	Seal Material	Core
0010 = 0.1µm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
0022 = 0.22µm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
0045 = 0.45µm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0100 = 1µm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0300 = 3µm	Q = 226 / Fin	G = 226 (PSU Insert) / F	40 = 40"	F = E-FKM	
0500 = 5µm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
1000 = 10µm	E = 222 Extended / Fin	X = 222 (SS Insert) /Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

PTB Series Filter Cartridges



PTB series 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 solvent, strong corrosive liquid and strong oxidative liquid.

Features

- Inherently hydrophobic PTFE membranes
- Wide chemical compatibility, excellent resistance to corrosion, oxidation and organic solvents
- High-flow and low pressure drop
- Low extractables

Applications

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

Dimension

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

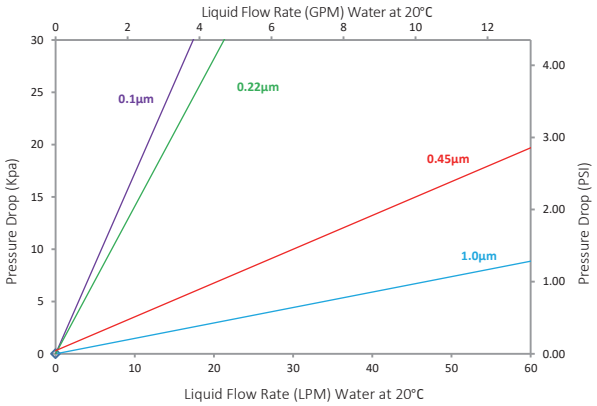
Material of Constructions

Media	Hydrophobic PTFE
Support	PP
Core/Cage/End Cap	PP
Seal Material	Silicone, EPDM, FKM

Performance

Max Operating Temperature	80°C
Max Operating DP	4.5 Bar @ 20°C
	2.4 Bar @ 80°C

PTB Flow Rate Per 10"



Quality

- Manufactured in a clean room environment
- Manufactured 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 21CFR
- 100% Integrity Tested
- Each element is tracked by serial number

Ordering Information

PTB — 0010 — F — 5 — S — P

Removal Rating	End Cap Type	Length	Seal Material	Core
0010 = 0.1μm	G = 226 (PSU Insert) / Fin	5 = 5"	S = Silicone	P = PP
0022 = 0.22μm	I = 226 (PSU Insert) / Flat	10 = 10"	E = EPDM	S = SUS
0045 = 0.45μm	J = 222 (SS Insert) / Flat	20 = 20"	V = FKM	
0100 = 1μm	K = 222 (SS Insert) / Fin	30 = 30"		
	R = 226 (SS Insert) / Fin	40 = 40"		
	V = 226 (SS Insert) / Flat			

HPTG Series Filter Cartridges

HPTG Series Filter Cartridge is made of hydrophobic PTFE membrane, inherently hydrophobic PTFE membrane 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 membrane
- 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

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

Material of Constructions

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

Pore Size

Gas	0.01μm
Liquid	0.22μm

Performance

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

Sterilization

SIP	135°C /30min, 150 cycles
Maximum Forward	1.0 Bar@135°C
Steam Sterilization	0.3 Bar@142°C
Maximum Reverse	0.5 Bar@125°C
Steam Sterilization	0.2 Bar@142°C

Quality

- Manufactured in a clean room environment
- Manufactured 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 21CFR
- 100% Integrity Tested
- Individual element is tracked by serial number

Integrity Test Parameters

Diffusion Flow（DF）	≤20ml/min@1035mbar（60/40 IPA/Water）
Water Instrusion（WIT）	HPTGP≤0.38ml/min@2500mbar HPTGW≤0.75ml/min@2500mbar

Ordering Information

HPTG — W — 0022 — J — 5 — S — P

Grade	Removal Rating	End Cap Type	Length	Seal Material	Core
W = Standard	0022 = 0.22μm	G = 226 (PSU Insert) / Fin	5 = 5"	S = Silicone	P = PP
P = High performance SCC69G(PP)		I = 226 (PSU Insert) / Flat	10 = 10"	E = EPDM	S = SUS
		J = 222 Extended (SS Insert) / Flat	20 = 20"	V = FKM	
		K = 222 Extended (SS Insert) / Fin	30 = 30"		
		R = 226 (SS Insert) / Fin	40 = 40"		
		V = 226 (SS Insert) / Flat			

PTG Series - Sterilizing Filter Cartridges

PTG series filter cartridges are made of hydrophobic PTFE membrane ensuring the sterilizing performance in different humidity environments. The PP components offer remarkable oxidation resistance. The filter cartridges reintorced core and higher pressure resistance features. The series applies to fermentation, pharmaceutical, and biotechnology.

Features

- Inherently hydrophobic PTFE membranes
- Oxidation resistant hardware
- High-flow rate 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", 10", 20", 30", 40"
Out Diameter	69mm
Filtration Area	0.8m² per 10" filter

Material of Constructions

Membranes	Inherently hydrophobic PTFE
Support/Drainage	Oxidation resistant PP
Cage/Core/Endcap	Oxidation resistant PP
O-ring	Silicone,EPDM,FKM

Removal Efficiency

0022	Gas: 0.01μm
	Liquid: 0.2μm

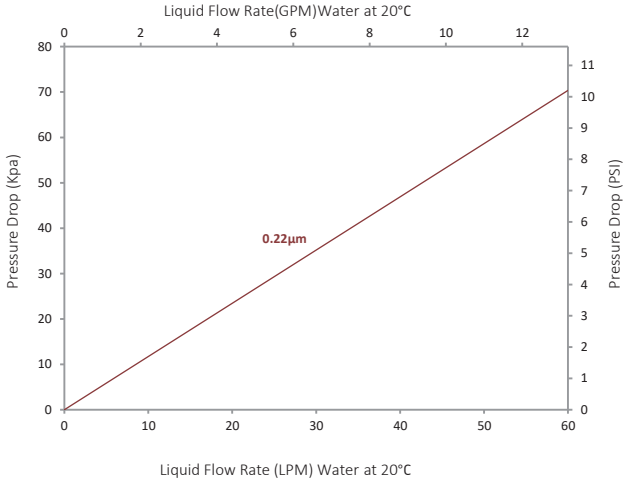
Operating Conditions

Maximum Differential Pressure	5.2Bar@20°C
Maximum Operating Temperature	2.4Bar@80°C

Sterilization

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

PTG Flow Rate Per 10"



Integrity Test Parameters

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

Quality

- 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 21CFR
- 100% integrity tested
- Each individual element is tracked by serial number

Ordering Information

PTG — W — 0020 — K — 5 — S — P

Grade	Removal Rating	End Cap Type	Length	Seal Material	Core
W = Standard	0020 = 0.2μm	I = 226 (PSU Insert) / Flat	5 = 5"	S = Silicone	P = PP
P = High Guarantee		J = 222 Extended (SS Insert) / Flat	10 = 10"	E = EPDM	S = SUS
		K = 222 Extended (SS Insert) / Fin	20 = 20"	V = FKM	
		R = 226 (SS Insert) / Fin	30 = 30"		
		V = 226 (SS Insert) / Flat	40 = 40"		
		G = 226 (PSU Insert) / Fin			

STH Series Hydrophobic PTFE Filter Cartridges

STH Series filter cartridges are constructed of hydrophobic PTFE membrane and polypropylene supports to provide the greatest assurance of filtration performance and chemical compatibility in severe process conditions. The highly porous PTFE membrane offers high flow rates and long service life.

Features

- PTFE and polypropylene components provide extremely wide chemical compatibility
- Contains no binders or adhesives for wide solvent compatibility with extremely low extractables
- Fully integrity testable for assured product integrity and effectiveness in operation
- 100% integrity testing during manufacture guarantees product reliability and consistency

Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System
- 100% Integrity Tested

Dimension

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

Material of Constructions

Media	PTFE
Support	PP
Hardware	PP
Seal Material	Silicone,EPDM,NBR, FKM,E-FKM

Performance

Max Operating Temperature	80°C
Max Operating DP	4.0 Bar @ 20°C
	2.0 Bar @ 120°C
SIP	135°C /30min

Applications

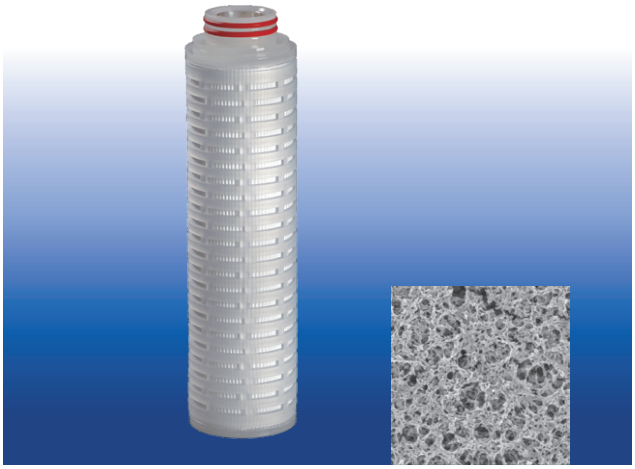
- **Pharmaceutical**
  - @Vents
  - @Filtration of Compressed Gases
  - @Filtration of Solvents
- **Food and Beverage**
  - @Sterile Venting of Holding Tanks
  - @Sterile CO_2 Filtration
  - @Microbial Control of Inlet
  - @Air for Bioprocessing of Foods
- **Process Gases**
  - @Bulk and Point-of-Use Gases
  - @Compressed Air
- **Chemicals**
  - @ Solvents
  - @Bulk Filling
  - @Acids

Ordering Information

STH — 0010 — F — 5 — S — P

Removal Rating	End Cap Type		Length	Seal Material	Core
0002 = 0.02 µm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP
0003=0.03µm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0005=0.05µm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0010=0.1µm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
0022=0.22µm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
0045=0.45µm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
0100 = 1µm	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
0500 = 5µm	N =222 Extended / Flat	Y = 226 Spear Fin			
1000 = 10µm	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

PVA Series PVDF Membrane Filter Cartridges



PVA Series filter cartridges are constructed of hydrophilic PVDF membrane and Polypropylene hardware. The single open ended configuration is designed to fit into sanitary housings to ensure effective microbial removal and assembly integrity. Due to the low absorption of the protein, it is especially suitable for the filtration of culture medium, biological agents, vaccines.

Features

- Very low protein adsorption and precipitation
- Easy to wet and integrity test
- High flow rate and longer service life
- 100% integrity tested during manufacture

Applications

- Filtration in the food and beverage industry
- Retention of particles and micro-organisms
- Protein purification
- Cell culture clarification
- Blood filtration

Quality

- Manufacturered in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics.
- 100% Integrity Tested

Dimension

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

Pore Size

0.22μm 0.45μm 0.65μm

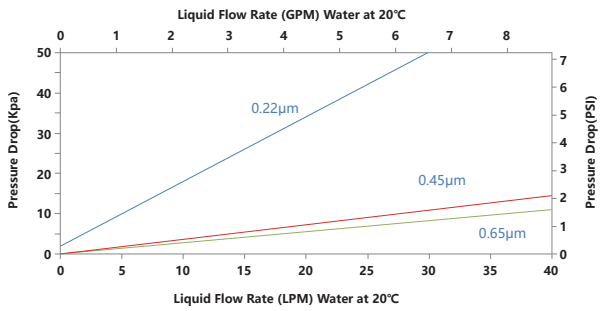
Material of Constructions

Media	PVDF
Support	PP
Core/Cage	PP
End Cap	PSU insert/SS insert
Seal Material	Silicone,EPDM,FKM

Performance

Max Operating Temperature	80°C
Max Operating DP	4.0 Bar @ 20°C
	2.4 Bar @ 80°C
Sterilization	125°C /30min, 30 cycles
Bacterial Retention	
0.22μm	LRV ≥ $7*10^7/cm^2$
	Pseudomonas diminuta
Filtration Area	
Ø 69mm	0.65m² per 10" filter
Extractables	
10"	< 20mg

PVA Flow Rate per 10"



Integrity Test Parameters

Removal Rating	Bubble Point (BP)	Diffusion Flow (DF)
0.22μm	3.45Bar	25ml/min@2.76Bar
0.45μm	2.1Bar	25ml/min@1.70Bar
0.65μm	0.97Bar	15ml/min@0.62Bar

Ordering Information

PVA — 0022 — R — 10 — S

Removal Rating	End Cap Type	Length	Seal Material
0022=0.22μm	I = 226 (PSU Insert) / Flat	5=5"	S = Silicone
0045=0.45μm	J = 222 Extended (SS Insert) / Flat	10=10"	E = EPDM
0065=0.65μm	K = 222 Extended (SS Insert) / Fin	20=20"	V = FKM
	R = 226 (SS Insert) / Fin	30=30"	
	V = 226 (SS Insert) / Flat	40=40"	

SVA series filter cartridges

SVA Series filter cartridges are made of unique hydrophilic PVDF membrane characterized by ultra-low extractables and protein binding.They are specially developed for the removal of particles and microorganisms in application where maximizing protein recovery is critical.

Features

- Ultra-low protein binding & low extractables
- Superior flow rates
- All-thermal bonded construction,no adhesives
- Broad chemical compatibility

Applications

- Biological agents
- Antibiotics
- Disinfectant, mundificant
- Culture medium
- Blood products

Dimension

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

Material of Constructions

Media	PVDF
Support	PP
Core/Cage	PP
End Cap	PP, SS with insert
Seal Material	Silicone, EPDM, NBR, FKM, E-FKM

Performance

Max Operating Temperature	80°C
Max Operating DP	4.0 Bar@25°C
	2.4 Bar@80°C
SIP	125°C /30min

Guarantee

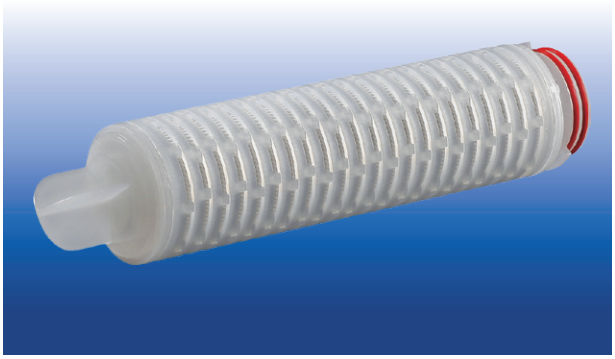
- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System
- All pp components meet the specifications for biological safety per USP Class VI-121°C for plastics
- Full traceability to each filter with unique serial number , 100% integrity tested

Ordering Information

SVA — 0010 — F — 5 — S — P

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1μm	K = 222 Extended (SS Insert) / Fin	F = DOE	5 = 5"	S = Silicone	P = PP
0022=0.22μm	R = 226 (SS Insert) / Fin	M = 222 / Flat	10 = 10"	E = EPDM	S = SUS
0045=0.45μm	V = 226 (SS Insert) / Flat	T = 226 / Flat	20 = 20"	B = NBR	
0065=0.65μm	J = 222 Extended (SS Insert) / Flat	P = 222 / Fin	30 = 30"	V = FKM	
0080=0.8μm	G = 226 (PSU Insert) / Flat	Q = 226 / Fin	40 = 40"	F = E-FKM	
0100=1μm	I = 226 (PSU Insert) / Flat				
0500=5μm					

BSG Series - GF Pleated Filter Cartridges



BSG series glass fiber (GF) pleated filter cartridges are made of ultra-fine glass fiber. They each have a high retention efficiency up to 96% which can effectively protect and prolong service life of terminal sterilization filters. They are 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

Material of Constructions

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

Dimension

Diameter	69mm
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

Filtration Area

Ø 69mm	0.45 m² per 10" Filter

Extractables

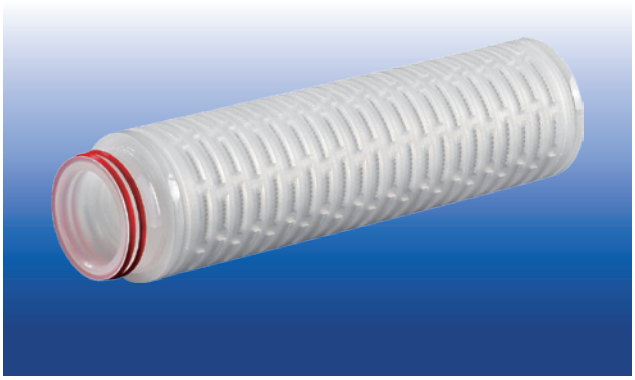
10" Filter Cartridges	<20mg

Ordering Information

BSG — 0010 — F — 5 — S — P

Removal Rating	End Cap Type		Length	Seal Material	Core
0010=0.1µm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
0030=0.3µm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
0050=0.5µm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
	E = 222 Extended / Fin	X = 222 (SS Insert) / Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) / Spear Fin			

BS Series - Glass Fiber Pleated Filter Cartridges



BS Series Filter Cartridges are made of glass fiber. The pleated glass fiber 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

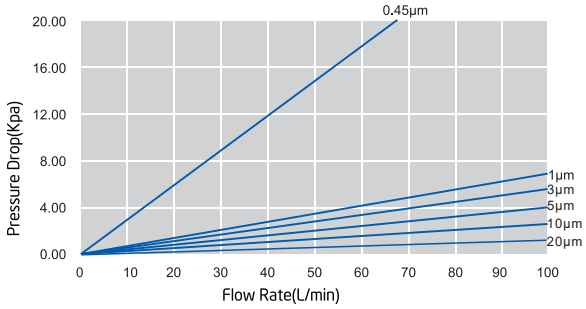
Outer Diameter	69mm
Length	5", 10", 20", 30", 40"

Material of Constructions

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

Performance

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



Quality

- 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 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

Ordering Information

Removal Rating	End Cap Type		Length	Seal Material	Core
0045 = 0.45μm	F = DOE	K = 222 Extended (SS Insert) / Fin	5 = 5"	S = Silicone	P = PP Core
0100 = 1μm	M = 222 / Flat	R = 226 (SS Insert) / Fin	10 = 10"	E = EPDM	S = SS Core
0300 = 3μm	T = 226 / Flat	V = 226 (SS Insert) / Flat	20 = 20"	B = NBR	
0500= 5μm	P = 222 / Fin	J = 222 Extended (SS Insert) / Flat	30 = 30"	V = FKM	
1000 = 10μm	Q = 226 / Fin	G = 226 (PSU Insert) / Fin	40 = 40"	F = E-FKM	
2000 = 20μm	H = 213 / Flat	I = 226 (PSU Insert) / Flat			
	E = 222 Extended / Fin	X = 222 (SS Insert) /Spear Fin			
	N =222 Extended / Flat	Y = 226 Spear Fin			
	W= 222 Spear Fin	Z = 226 (SS Insert) /Spear Fin			

SCB Series Filter Cartridges

SCB Series Filter Cartridges use absolute rated N66 membrane that is inherently hydrophilic and has excellent chemical resistance. It is manufactured without the use of glues, adhesives or wetting agents, ensuring high purity in various application.

Features

- Hydrophilic Nylon 66 membrane
- No wetting agents, High flow and long service life
- Absolute rated filtration
- All thermal boned construction,no adhesives
- Excellent chemical resistance
- 100% integrity tested

Applications

- Pharmaceutical
- Organic solvents and aqueous co-solvent systems
- High purity water filtration
- Food and Beverage

Dimension

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

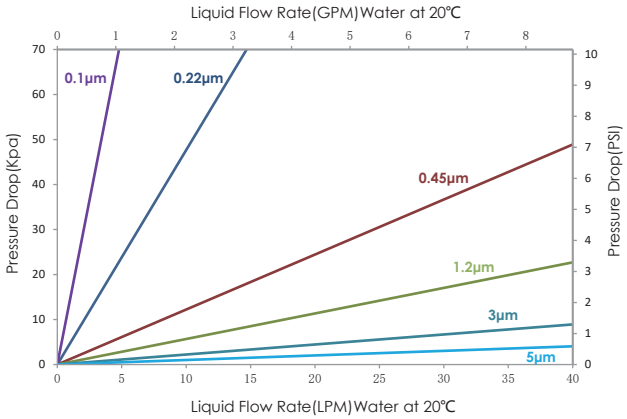
Material of Constructions

Media	N66
Support	PET
Core/Cage	PP
End Cap	PP
Seal Material	Silicone/EPDM

Performance

Max Operating Temperature	80°C
Max Operating DP	4.0 Bar @ 25°C
	2.4 Bar @ 80°C
Steam Sterilization	125°C , 30 minutes, 30 Cycles

SCB series Flowrate



Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System
- All pp components meet the specifications for biological safety per USP Class VI-121°C for plastics

Ordering Information

SCB — 0010 — F — 10 — E — P

Removal Rating	End Cap	Length	Seal Material	Core
0010=0.1μm	F = DOE	5 = 5"	S = Silicone	P = PP
0022=0.22μm	G = 226 (PSU Insert) / Fin	10 = 10"	E = EPDM	S = SUS
0045=0.45μm	I = 226 (PSU Insert) / Flat	20 = 20"	B = NBR	
0120 = 1.2μm	J = 222 (SS Insert) / Flat	30 = 30"	V = FKM	
	K = 222 (SS Insert) / Fin	40 = 40"	F = E-FKM	
	R = 226 (SS Insert) / Fin			
	V = 226 (SS Insert) / Flat			

SCD Series Filter Cartridges

SCD Series Filter Cartridges use absolute rated N66 membrane that is inherently hydrophilic and has excellent chemical resistance, it is manufactured without the use of glues, adhesives or wetting agents, ensuring high purity in various applications.

Features

- Hydrophilic Nylon 66 membrane,no wetting agents
- Double layer media,absolute rated filtration
- High flow and long service life
- Superior chemical resistance
- Enhanced resistance to in-line and autoclave steam sterilization
- 100% integrity tested

Applications

- Pharmaceutical
- Organic solvents and aqueous co-solvent systems
- High purity water filtration

Dimension

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

Material of Constructions

Media	N66
Support	PET
Core/Cage	PP
End Cap	PP
Seal Material	Silicone/EPDM

Performance

Max. Operating Temperature	80°C
Max. Operating DP	4.0 Bar @ 25°C
	2.4 Bar @ 80°C
Steam Sterilization	125°C , 30 minutes, 30 cycles

Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified quality management system
- All pp components meet the specifications for biological safety per USP Class VI-121°C for plastics
- The extractable level was not more than 25mg per 10 inch cartridge
- A cartridge aqueous extraction contains less than 0.25 EU / ml
- Full traceability to each filter with unique serial number
- 100% integrity tested

Ordering Information

SCD — 0010 — F — 10 — E — P

Removal Rating	End Cap	Length	Seal Material	Core
1010=0.1μm+0.1μm	F = DOE	5 = 5"	S = Silicone	P = PP
2222=0.22μm+0.22μm	G = 226 (PSU Insert) / Fin	10 = 10"	E = EPDM	S = SUS
4522=0.45μm+0.22μm	I = 226 (PSU Insert) / Flat	20 = 20"	B = NBR	
4545=0.45μm+0.45μm	J = 222 (SS Insert) / Flat	30 = 30"	V = FKM	
	K = 222 (SS Insert) / Fin	40 = 40"	F = E-FKM	
	R = 226 (SS Insert) / Fin			
	V = 226 (SS Insert) / Flat			

Nanofibre Pleated Filter Cartridges

Darlly Nanofibre filters contain a pleated filter media that exhibits a very high lever of positive charge. This provides a cartridge that offers both high flow and efficient removal of ultrafine contaminants. The heart of the filter is a nanoalumina and glass microfibre media that delivers > 50 millivolts Zeta potential at PH 7.2. This construction also produces a filter media with a very high internal surface area. Therefore nanofibre filters are very cost effective method or removing negatively-charged contaminants from aqueous solutions and polar solvents.

Features

- Relatively open porous structure offering high flow rates and long in process life times
- High zeta potential for effective removal of ultratine contaminants
- Enormous internal surface area providing high capacity for contaminant removal
- Media tested to ensure suitability for critical process including pharmaceutical applications and potable water

Applications

- Water Treatment
- Pharmaceutical processes
- Potable water
- Waste water treatment
- Removal of endotoxins from purified water, RO protection
- Bioburden and endotoxin reduction
- Removal of contaminants
- Removal of heavy metals, emulsions

Dimensions

Outer Diameter	69mm
Length	5", 10", 20", 30", 40"
Filtration area	0.22m² per 10" filter

Material of Constructions

Media	Borosilicate Glass Microfibre and Nanoalumina
Support	PP
End Caps	PP
Cage/Core	PP
Sealing	Silicone, EPDM, NBR, FKM, E-FKM

Performance

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

Quality

- Manufacturered in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Managemet System

Food Contact Compliance

- Materials of construction comply with FDA requirements 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 Class VI-121°C for plastics.

PACF Carbon Cellulose Pleated Filter Cartridges

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

Material of Constructions

Media	Carbon impregnated cellulose media
Support	PP
Cage/Core/End cap	PP
Sealing	Silicone, EPDM, FKM

Performance

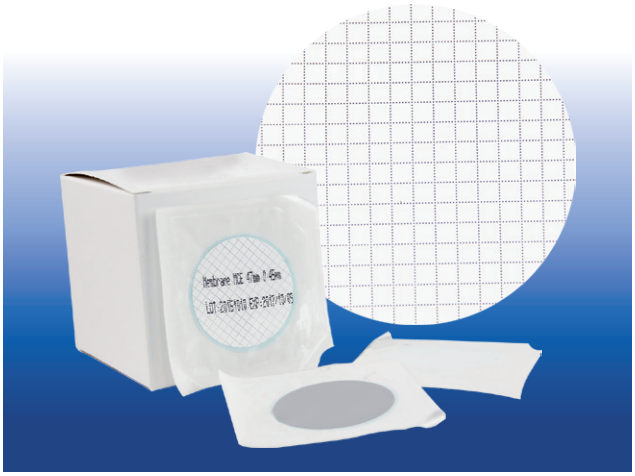
Micro rating	5μm
PH	1-13
Max. Operating Temperature	≤50 °C
Max. Operating Pressure	65 °C
Max. Operating DP	4 bar@20 °C
	1 bar@65 °C

Ordering Information

PACF — 5 — J — E

Length	End cap type	Seal Material
5 = 5"	J = 222/Flat/SS	S = Silicone
10 = 10"	K = 222/Fin/SS	E = EPDM
20 = 20"	R = 226/Fin/SS	V = FKM
30 = 30"	V = 222/Flat/SS	
40 = 40"		

MSD Series - Membrane Stack Disc Filters



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

Features

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

Specifications

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

Ordering Information

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

MSDM0045CSN1A

MiniFil-Junior™ Cartridges

Darlly's range of 56mm OD MiniFil-Junior™ 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

Material of Constructions

Filter Media	polypropylene PES PTFE
Support Layers	Polypropylene
Cage/Core/Adapters	Polypropylene
O-ring Seals	Silicone EPDM Viton® FKM

Performance

Maximum Differential Pressure	5 bar @ 50°C forward 3 bar @ 90°C forward 0.3 bar @ 90°C reverse

H4

H8

YS

YL

Ordering Information

MFJ — H4 — PP — 0.2 — 32 — S

Type	Media	Retention Rating	Length (mm)	Seal Material
H4 (4 tab)	PP= polypropylene	Speak with your	32, 82, 105	S = Silicone
H8 (8 tab)	PES = polyethersulfone	Darlly representative	107	E = EPDM
YS (short adapter)	PTFE = polytetrafluoroethylene	for all available options	70, 129	V = Viton® FKM
YL (long adapter)			77,136	

DL641 Capsule Filter

DL641 capsule filters are made of polytetrafluoroethylene which have excellent resistance to organic and inorganic chemical corrosion properties along with natural hydrophobicity. It can be widely used in sterile ventilation processes such as biotechnology, pharmaceuticals, laboratories etc. It's easy to use and operate, the lightweight design (only 20g) makes the structure very stable and reliable and will not appear hose bending to adversely affect ventilation.

Features

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

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

Material of Constructions

Housing	PP
Media	Hydrophobic PTFE

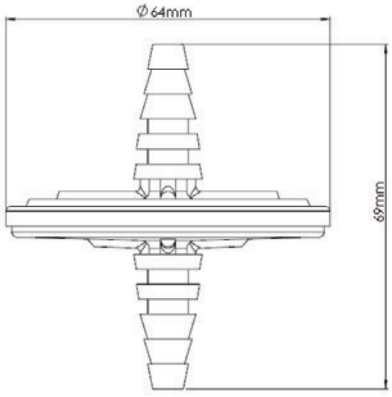
Dimension

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

Performance

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

Drawing



Ordering Information

641	P	TF0022

Code	Cage Material	Media
641 = DL641	P = PP	TF = hydrophobic PTFE
		TF0022 = 0.22μm
		TF0045 = 0.45μm

DL707 Capsule Filters

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

Features

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

Applications

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

Material of Constructions

Housing	PP
Media	PP, PTFE, PES, PVDF

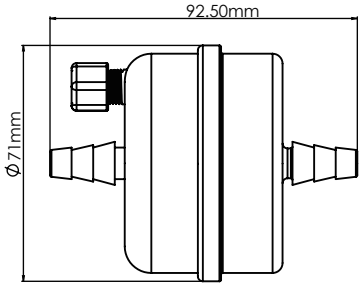
Dimension

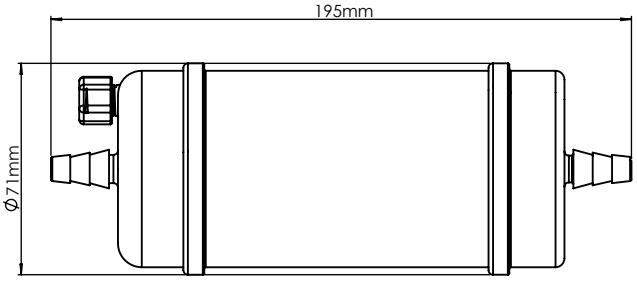
Outer Diameter	71mm
Length	92.5mm, 195mm
Inlet/Outlet	1/4"-3/8"HB

Performance

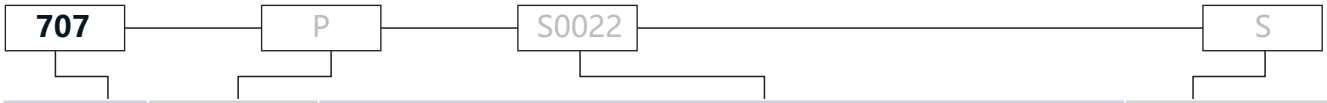
Max. Operating Temperature	80°C
Max. Operating Pressure	6.0 Bar @ 20°C
Filtration Area	570cm², 2950cm²

Drawing





Ordering Information



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

Capsule Filters

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

Features

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

Material of Constructions

Media	PP, PES, Hydrophilic PTFE, Hydrophobic PTFE, Nyon 66, GF
Support	PP
Housing	PP
Sealing	Thermal welding

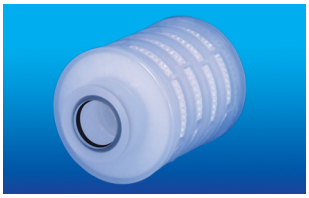
Applications

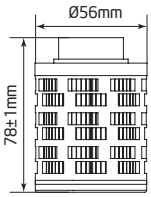
- Pharmaceutical
- Lab use
- Biopharma
- Underground water analysis
- Microelectronics
- Chemical
- Ink-jet
- DNA/RNA extractions

Ordering Information

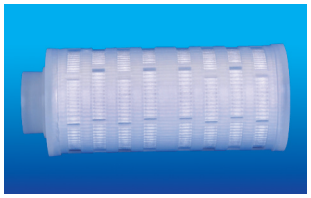
DL — 116-5 — D — 0010

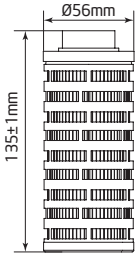
Code				Media	Removal Rating			
					PP	PES	Hydrophilic PTFE	Hydrophobic PTFE
116-2.5	523	704	741	G = PP	0010 = 0.1µm	0010 = 0.1µm	0010 = 0.1µm	0001 = 0.01µm
116-5	532	707	742	A = PES	0022 = 0.22µm	0022 = 0.22µm	0022 = 0.22µm	0002 = 0.02µm
128	553	707L	743	D = Hydrophilic PTFE	0045 = 0.45µm	0045 = 0.45µm	0045 = 0.45µm	
136	554	709	753	T = Hydrophobic PTFE	0100 = 1µm	0065 = 0.65µm		
219	555	709-c1	754	C = Nylon 66	0300= 3µm	0800 = 0.8µm		
227	558	709-c2	759	S = GF	0500 = 5µm	1200 = 1.2µm		
325	601	710	761		1000 = 10µm		**Nylon66**	**Glass Fiber**
414	620	711	831L		2000 = 20µm		0010 = 0.1µm	0045 = 0.45µm
415	621	712	831S		3000 = 30µm		0022 = 0.22µm	0100 = 1µm
416	624	722	845		5000 = 50µm		0045 = 0.45µm	0300 = 3µm
516	656	726	X44				0065 = 0.65µm	0500 = 5µm
518	657	734						1000 = 10µm
505	660	737						2000 = 20µm
517	702	738						
519	703	740						



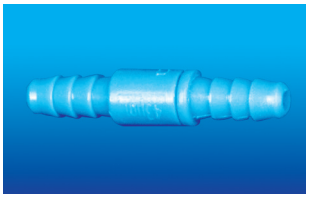


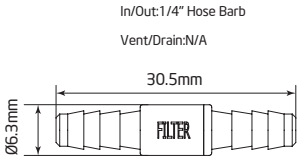
Code:116-2.5



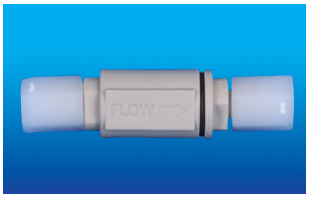


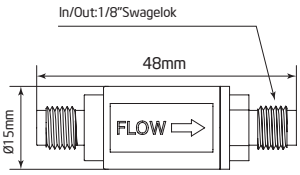
Code:116-5





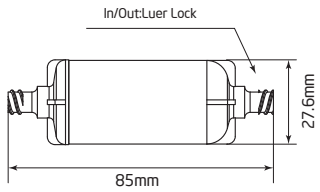
Code:128



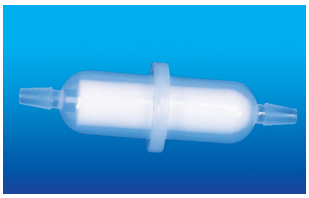


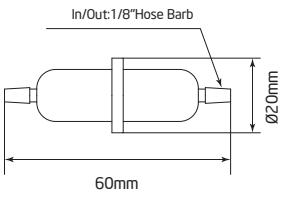
Filtration Area: 11.9cm²

Code:136



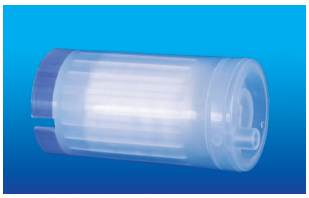
Code:219

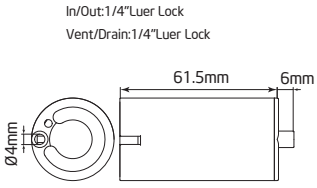




Filtration Area: 99.6cm²

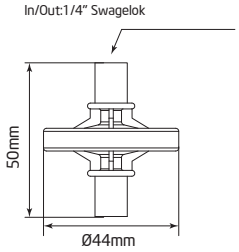
Code:227





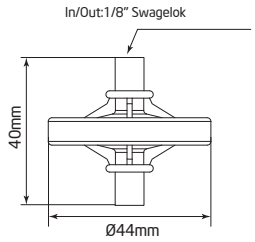
Filtration Area: 276cm²

Code:325



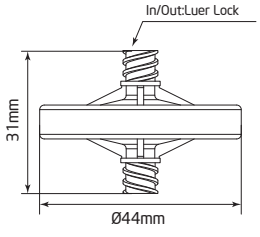
Filtration Area: 70.65cm²

Code:414



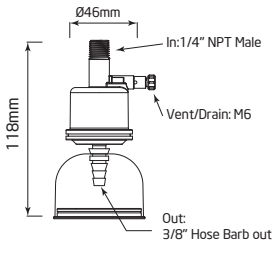
Filtration Area: 70.65cm²

Code:415



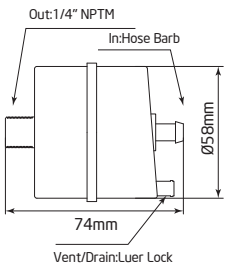
Filtration Area: 70.65cm²

Code:416



Filtration Area: 161.68cm²

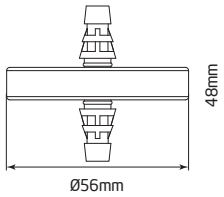
Code:418



Filtration Area: 291.6cm²

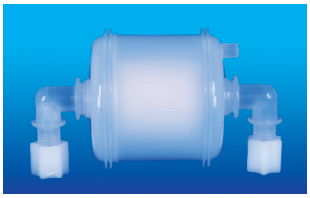
Code:505

In/Out:1/4"-3/8"Hose Barb

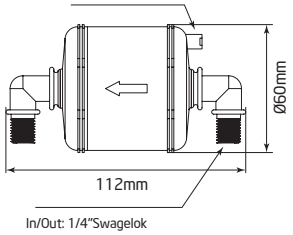


Filtration Area: 138.47cm²

Code:517

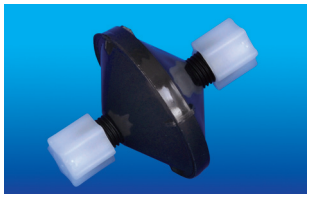


Vent/Drain: Luer Lock

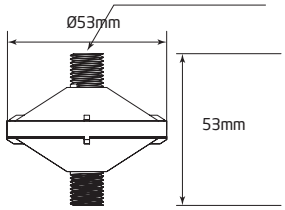


Filtration Area: 478.8cm²

Code:519



In/Out: 1/4"Swagelok

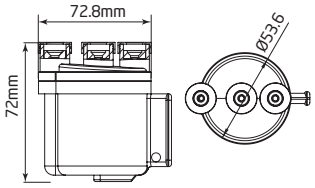


Filtration Area: 119.39cm²

Code:523

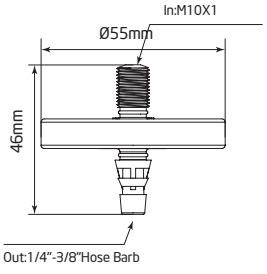
In/Out:O-rings quick connect

Vent/Drain:O-rings quick connect



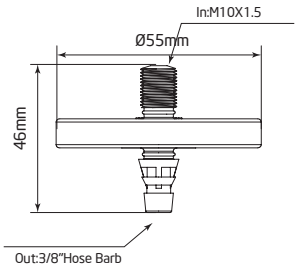
Code:532

In:M10X1



Code:553

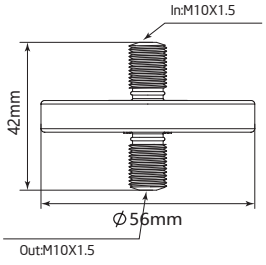
In:M10X1.5



Filtration Area: 138.47cm²

Code:554

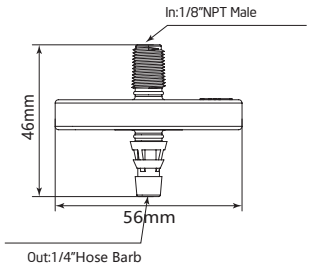
In:M10X1.5



Filtration Area: 138.47cm²

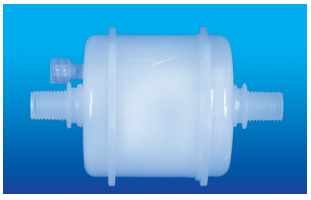
Code:555

In:1/8"NPT Male



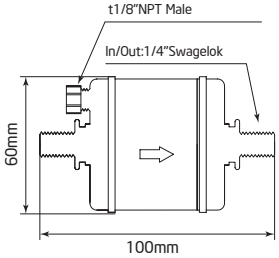
Filtration Area: 138.47cm²

Code:558



t1/8"NPT Male

In/Out:1/4"Swagelok

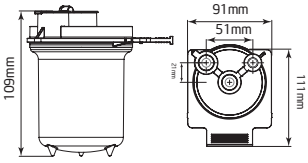


Filtration Area: 345.6cm²

Code:601

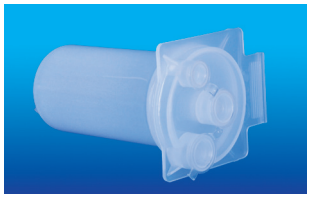
In/Out:O-rings quick connect

Vent/Drain:O-rings quick connect



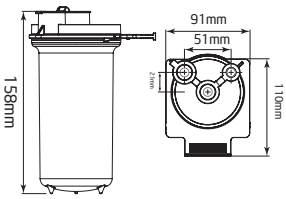
Filtration Area: 930.51cm²

Code:620



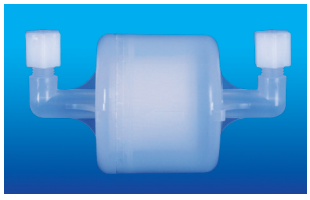
In/Out:O-rings quick connect

Vent/Drain:O-rings quick connect



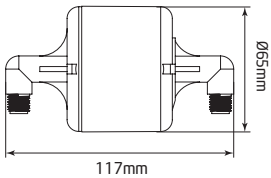
Filtration Area: 1869.12cm²

Code:621



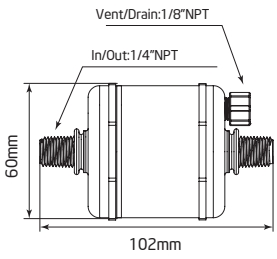
In/Out: 1/4" Swagelok

Vent/Drain:N/A



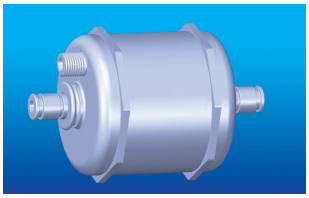
Filtration Area: 519.75cm²

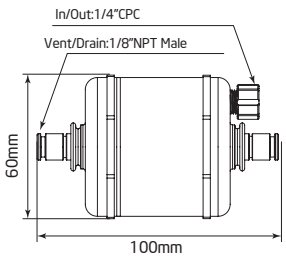
Code:624



Filtration Area: 345.6cm²

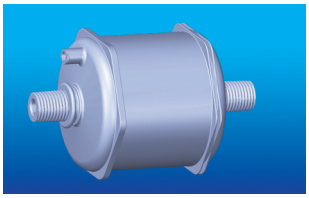
Code:656

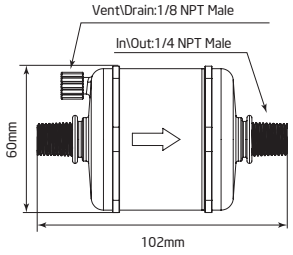




Filtration Area: 478.8 cm²

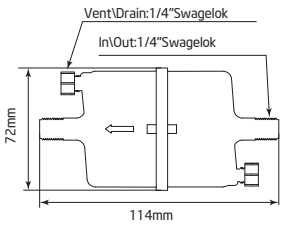
Code:657





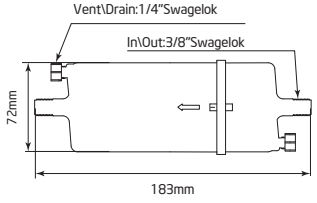
Filtration Area: 478.8 cm²

Code:662



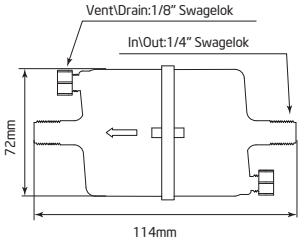
Filtration Area: 914.71 cm²

Code:702



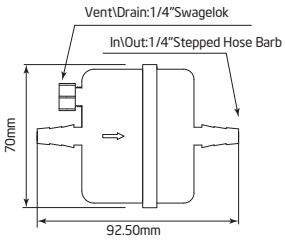
Filtration Area: 1845.32 cm²

Code:703



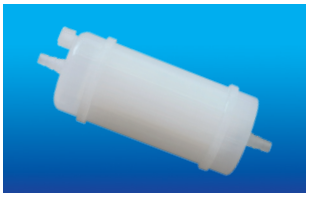
Filtration Area: 914.71 cm²

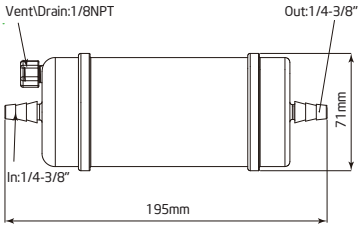
Code:704



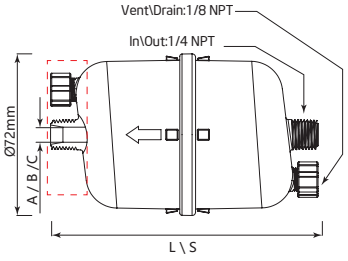
Filtration Area: 465.6 cm²

Code:707



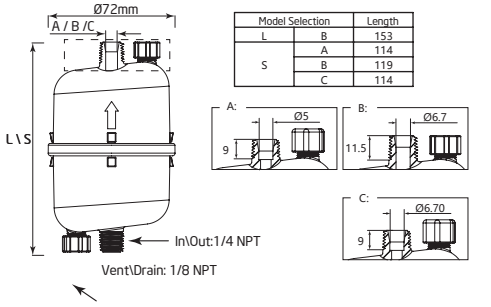


Code:707L

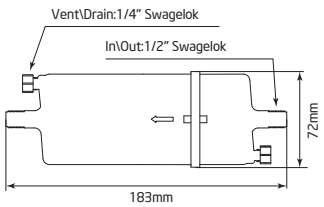


Filtration Area: 1058 cm²

Code:709

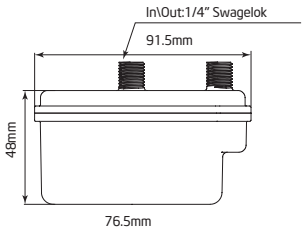


Code:709-c1/c2



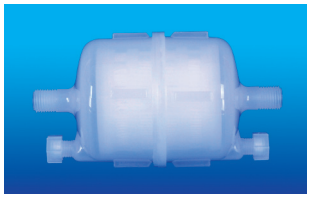
Filtration Area: 1845.32 cm²

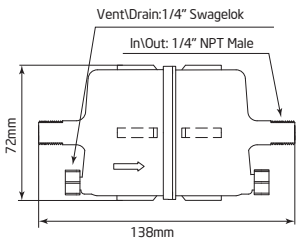
Code:710



Filtration Area: 486cm²

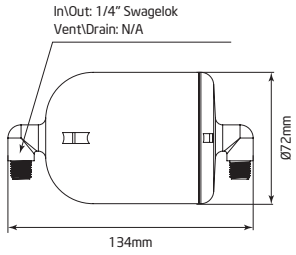
Code:711





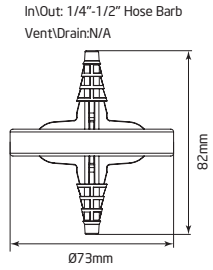
Filtration Area: 1058cm²

Code:712



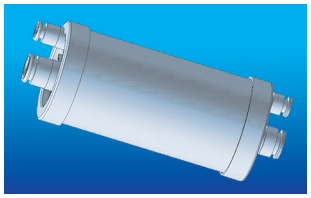
Filtration Area: 930.51cm²

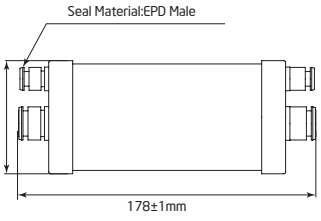
Code:722



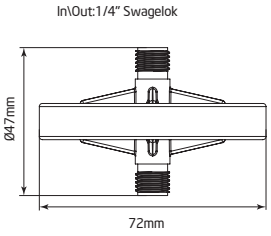
Filtration Area: 264.07cm²

Code:726



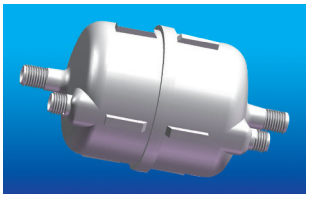


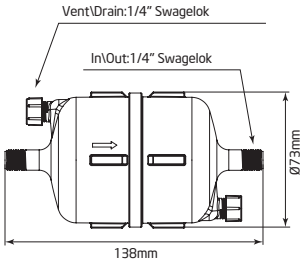
Code:734



Filtration Area: 264.07cm²

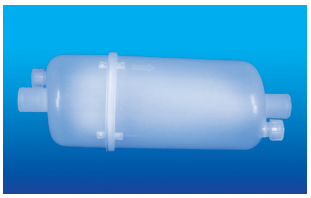
Code:737

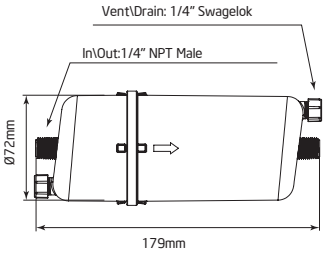




Filtration Area: 1058cm²

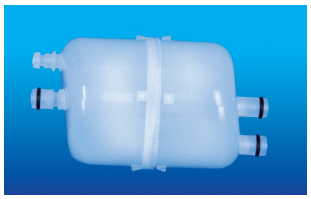
Code:738

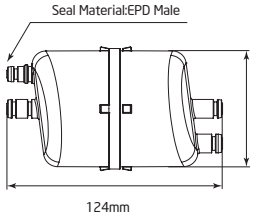




Filtration Area: 2041.6cm²

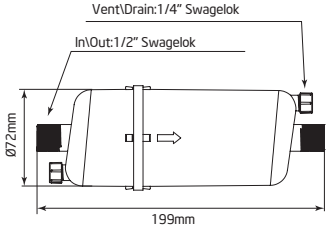
Code:740



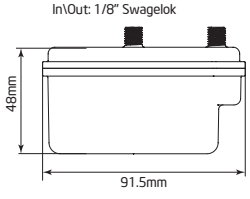


Filtration Area: 914.71 cm²

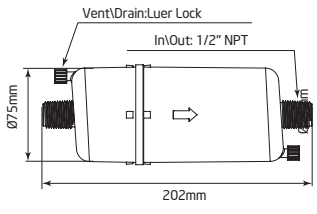
Code:741



Code:742

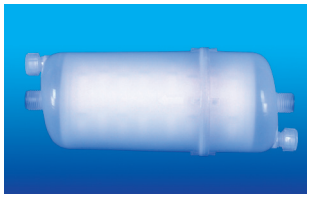


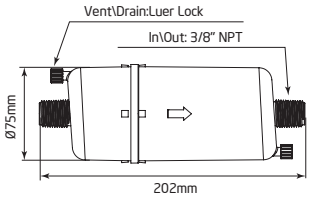
Code:743



Filtration Area: 1845.32 cm²

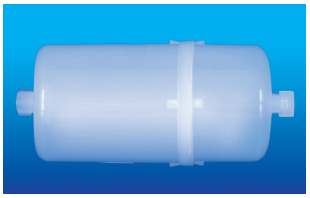
Code:753

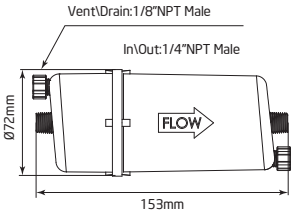




Filtration Area: 1845.32 cm²

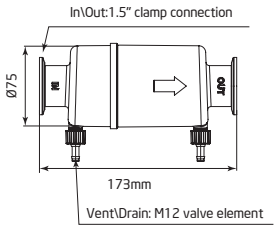
Code:754





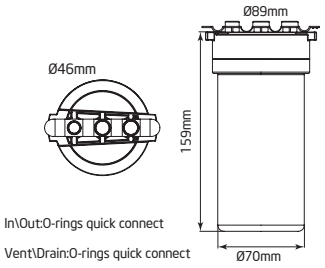
Filtration Area: 1655.98 cm²

Code:759

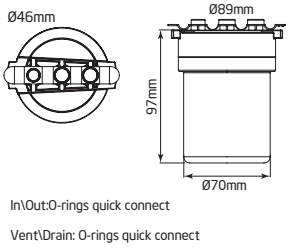


Filtration Area: 1558.98 cm²

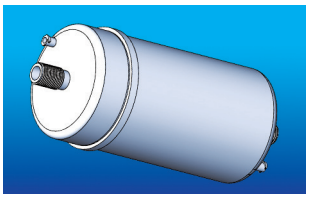
Code:761

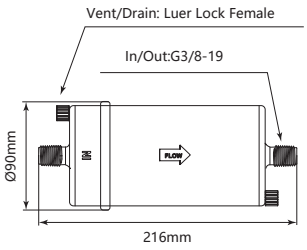


Code:831L



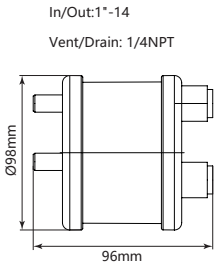
Code:831S





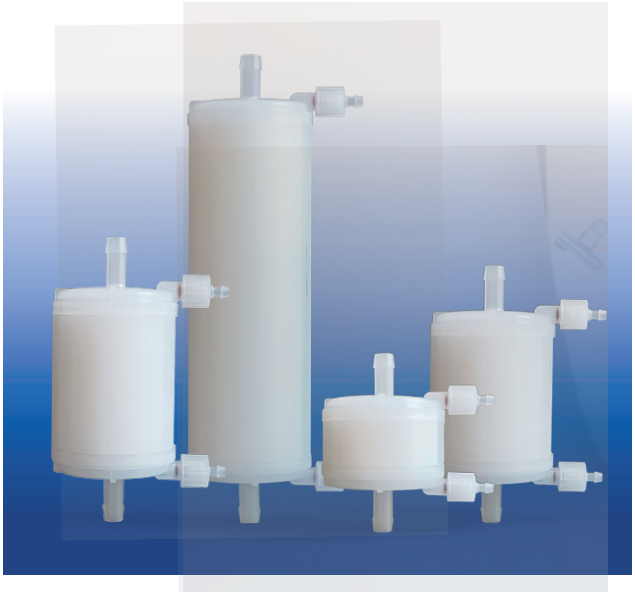
Filtration Area: 3160.51 cm²

Code:845



Code:X44

The Bioaxenic Capsule Filters



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

Features

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

Applications

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

Material of Constructions

Media	PES
Support	PP
Core/Cage/End Cap	PP
Seal Material	Silicone

Bio-safety

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

Performance

Max. Operating Temperature	80 °C
Max. Operating DP	5Bar@20°C 3Bar@50°C

Quality

Fiber release

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

Bacteria Retention

According to ASTM test method, it passed 10^7CFU/cm² Defective Pseudomonas (ATCC19146) retention test

Autoclaving 121°C -30min-3Cycles

Gamma irradiation 50 kGy


2in


4in


5in

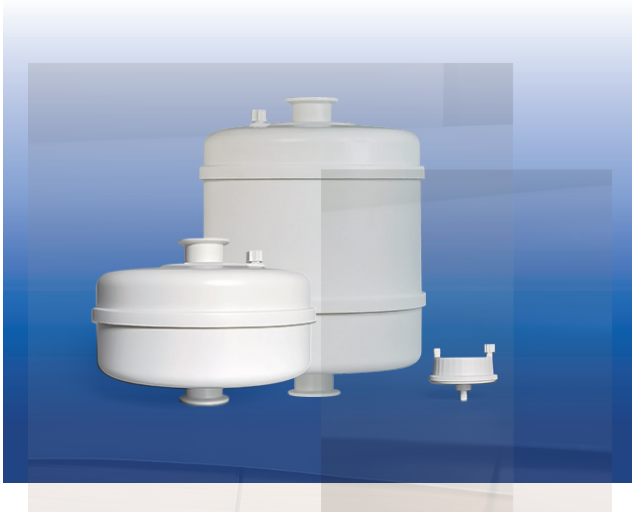

10in

Ordering Information

BA — PP — F2222 — AC — 5 — S

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

The Depth Plus Capsule Filters



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

Features

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

Applications

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

Material of Constructions

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

Bio-safety

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

Performance

Max. Operating Temperature	40 °C
Max. Operating DP	2.4 bar (35 psid)
Autoclaving	125°C -30min-1Cycle

ID

ED-S

ED-L

Ordering Information

ID — P — C0102

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

ED — P — C0102 — S

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

RD — C — C0290 — S — 001 — S — T

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

DLPP Series - Melt Blown Filter Cartridges

DLPP Series Melt Blown Cartridges are one of the standard Darlly Filter Cartridges. It is 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.

NSF COMPONENT

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

Features

Series	Feature & Benefit
H	Coarse surface · Strong mechanical performance and high pressure resistant
Blank	Smooth Surface-No Fiber Shedding, Graded Density Pore Structure
DG	Deep Groove-Bigger Filtration Area , High Flow & Dirt Holding Capacity
MG	Minigroove-Tight Fiber Construction and High Filtration Efficiency

Applications

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

Dimensions

Outer Diameter	63mm, 115mm
Inner Diameter	28mm
Length	9.75", 9.87", 10", 20", 30", 40"

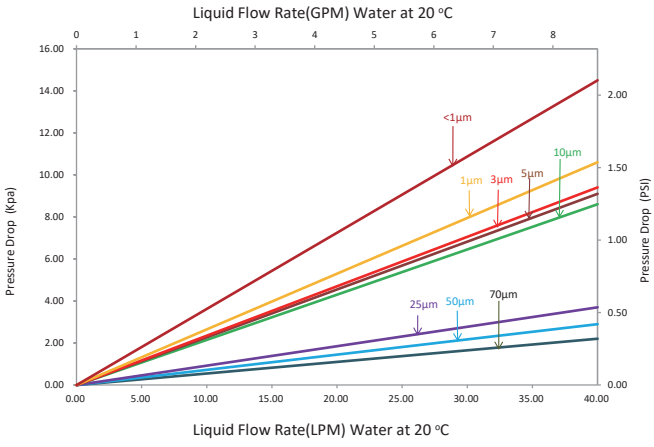
Material of Constructions

Media	PP
End Cap	PP
Sealing	Silicone, EPDM, NBR, FKM
Core	PP

Performance

Max. operating temperature	65°C
Max. operating DP	2.0Bar@20°C

DLPP Flow Rate Per 10"



Particle Removal Ratings (μm)		
Cartridge Designation	85% Efficiency	90% Efficiency
DLPP0010	1	——
DLPP0030	3	——
DLPP0050	5	——
DLPP1000	——	10
DLPP2500	——	25
DLPP5000	——	50
DLPP7500	——	75
DLPP10000	——	100

Ordering Information

DLPP — S — 0100 — M — 10 — S — P — H

Diameter	Removal Rating	End Cap Type	Length	Seal Material	Core	Surface
S = ϕ63/ϕ28	0100 = 1μm	B = DOE (No end caps)	975 = 9.75″(248mm)	N = No	N = No	Blank = Smooth
B = ϕ115/ϕ28	0300 = 3μm	G = DOE (With PE gaskets)	987 = 9.87″(250mm)	S = Silicone	P = PP Core	D = DG
	0500 = 5μm	M = 222/Flat	N10 = 10″(254mm)	E = EPDM		M = MG
	1000 = 10μm	P = 222/Fin	N20 = 20″(508mm)	B = NBR		H = H
	2500 = 25μm	Q = 226/Fin	N30 = 30″(762mm)	V = FKM		
	5000 = 50μm	T = 226/Flat	N40 = 40″(1016mm)			
	7500 = 75μm					
	9900 = 100μm					

SW Series - String Wound Filter Cartridges

SW Series String Wound Filter Cartridges are manufactured of structured loose outer layers and tight inner layers, offering 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 conditions.

Features

- Broad chemical compatibility
- Many different combinations of filter materials and pore sizes
- Graded pore structure of efficient removal of a wide range of particle sizes
- High dirt holding capacity
- Cost savings from long service life

Applications

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

Dimensions

Outer Diameter	63mm, 115mm
Inner Diameter	28mm
Length	9.87", 10", 20", 30", 40"

Material of Constructions

Media	PP, Cotton,Glass Fiber
Inner Core	PP, Stainless steel

Performance

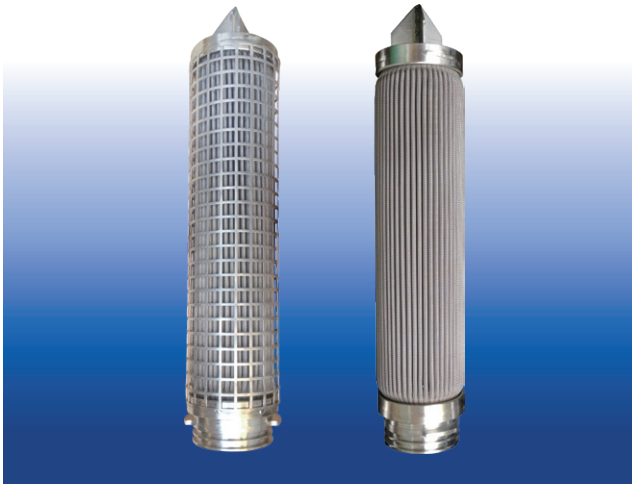
Max. Operating Temperatures	PP: 80°C
	Cotton: 120°C
	Glass Fiber: 200°C
Max. Pressure Drop	2.0 Bar@25°C

Ordering Information

SW	A	B	0100	F	N10	S	P

Diameter	Media	Removal Rating	End Cap Type	Length	Seal Material	Core
A = ϕ63/ϕ28	B = Cotton	0100=1μm	Blank = DOE (No end caps)	987 = 9.87"(250mm)	Blank = No	P = PP
B = ϕ115/ϕ28	G = PP	0500=5μm	F = DOE	N10 = 10"(254mm)	S = Silicone	S = SS
	S = Glass Fiber	1000=10μm	M = 222/Flat	N20 = 20"(508mm)	E = EPDM	
		2000=20μm	P = 222/Fin	N30 = 30"(762mm)	B = NBR	
		3000=30μm	Q = 226/Fin	N40 = 40"(1016mm)	V = FKM	
		5000=50μm	T = 226/Flat			
		7500=75μm				
		9900=100μm				

Stainless Steel Pleated Filter Cartridges



Darlly SSM Series filter cartridges are composed of pleated woven stainless steel meshes. They are characterized by large effective filtration area, high dirt holding capacity, and high flow rates. Its uniform pore size and sintered joint provide an excellent temperature and pressure resistance. The filter cartridge is washable and reusable.

Features

- All stainless steel construction
- Pleated wire cloth
- Outside protection net available
- Homogenous pore sizes
- High temperature, corrosive and oxidation resistant
- High pressure back-flushing allowed

Applications

- Steam Filtration
- Oxidizing Liquids
- Corrosive Liquids
- Liquid/gas filtration at high temperature and pressure
- Viscous Liquids
- Strong-polar Liquids
- Liquid Filtration for Decarburization

Dimensions

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

Material of Constructions

Media	304/316L
Support	304/316 L
End Caps	304/316 L
Outer Protection Net(Optional)	304/316L (Recommended when the operating pressure is up to 0.2 MPa)
Sealing	Silicone, EPDM, NBR, E-FKM

Performance

Max. Operating Temperature	300°C
Max. Operating DP	5.0bar

Quality

Manufactured according to ISO9001:2015 certified Quality Managemet System

Ordering Information

SSM — 60 — J — 0100 — 5 — M — E

Outer Diameter	Material	Removal Rating	Length	End Cap Type	Seal Material
60 = 60mm	J = S304	0100 = 1μm	5 = 5"	F = Double Open End	S = Silicone
65 = 65mm	K = S316L	0300 = 3μm	10 = 10"	M = 222 / Flat	E = EPDM
68 = 68mm		0500 = 5μm	20 = 20"	T = 226 / Flat	B = NBR
		1000 = 10μm	30 = 30"	S = Screw	T = E-FKM
		2000 = 20μm	40 = 40"		

Titanium Metal Powder Filter Cartridges

Darlly SIN Series filter cartridges are composed of high purity industrial grade titanium powder with all elements sintered at high temperatures. It features anti-chemical corrosion, oxidation and high temperature resistance, and long service life. As a low viscosity liquid cartridge, this cartridge has excellent solid-liquid separation efficiency. It is mainly used as a chemical filter to remove ozone depleting substance and for removing carbon dioxide in food, pharmaceutical, and water treatment applications.

Features

- High purity titanium construction
- High temperature corrosive and oxidation resistant
- Uniform structure with narrow pore size distribution and high filtration efficiency
- No free falling particles
- High porosity, low filtration resistance and high filtration efficiency
- Good compatibility with human tissue and blood due to its non-toxic and non-magnetic nature

Applications

- Steam Filtration
- Oxidizing Liquids
- Corrosive Liquids
- Liquid/gas filtration at high temperature and pressure
- Viscous Liquids
- Strong-polar Liquids
- Liquid Filtration for Decarburization

Dimensions

OD	60mm/65mm/68mm
Length	5", 10", 20"

Material of Constructions

Media	High-purity Titanium/304/316L
End Caps	High-purity Titanium
Screw Cap	304
Reinforcing Layers	304/316L
Sealing	Silicone, EPDM, NBR, FKM, E-FKM

Performance

Max. Operating Temperature	280°C
Max. Operating DP	3.0bar

Quality

Manufactured according to ISO9001:2015 certified Quality Managemet System

Ordering Information

SIN — 60 — L — 0100 — 5 — M — E

Outer Diameter	Material	Removal Rating	Length	End Cap Type	Seal Material
60 = 60mm	L = Titanium	0100 = 1μm	5 = 5"	M = 222/Flat	S = Silicone
65 = 65mm	J = S304	0300 = 3μm	10 = 10"	T = 226/Flat	E = EPDM
68 = 68mm	K = S316L	0500 = 5μm	20 = 20"	S = Screw	B = NBR
		1000 = 10μm			V = FKM
					F = E-FKM

BDS Series Depth-Stack Filter Cartridges

BDS Depth-Stack series is an ideal type of filter cartridge using depth filter sheets.It is designed to provide optimal clarification by using a double separator constrution. The separator design increases the total stability of the filter cartridges as the separators fully support the sheet materials. This design also prevents filter sheet deformities after heat treatments and adverse effects of hot sanitation. It is manufactured with rigid external clips to prevent damage during module loading and unloading and offer easy and reliable handling.

Features

- Washable under certain conditions, resulting in longer service life
- Easy and reliable handling rigid external clips protect filer sheet during module loading and unloading
- No adverse effects to filter sheets during hot sanitization or process filtration

Applications

Bio-Pharmaceuticals	Blood Products, Vaccine, Antibiotics, Growth Media,Buffer
Food Products	Syrups,Vinegar, Edible Oils,Sugars
Beverages	Wine, Beer, Juices, Soft Drinks, Cider,Liquor, Milk and dairy products
Cosmetics	Perfumes, Lotions, Shampoos, Deodorants, Colognes

Material of Constructions

Depth Filter Sheet	Cellulose fibers, Resins, Perlite, Diatomaceous earths, etc.
Core/ Support Separator	PP
Sealing	Silicone, EPDM, NBR, FKM, E-FKM

Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Managemet System
- Material of construction comply with FDA requlations for food and beverage contact use as detailed in the US Code of Federal Regulations 21 CFR
- Passed European Commission Directives (EU10/2011)

Ordering Information

BDS — C002 — D — 12 — S — 12

Removal Rating		End Cap Type	Outer Diameter	Seal Material	Construction
C002 = 0.2-0.4μm	C200 = 3-7μm	D =DOE with gaskets	8 = 8"	S = Silicone	7 = 7 Cell (8" SOE)
C004 = 0.4-0.6μm	C210 = 10-15μm	S =SOE with double o-rings(only avaiable for 8")	12 = 12"	E = EPDM	8 = 8 Cell (8" DOE)
C006 = 0.6-1μm	C230 = 25-30μm		16 = 16"	B = NBR	9 = 9 Cell (12", 16")
C100 = 1-3μm	C240 = 40-50μm			V = FKM	12 = 12 Cell (12", 16")
C150 = 2-5μm	C250 = 50-60μm				15 = 15 Cell (12", 16")
					16 = 16 Cell (12", 16")

Depth-stack Activated Carbon Filter Cartridges

Our Depth-Stack Filter Cartridges are new type of filter cartridge using depth filter sheets. It is designed using a double Separator concept. The Separator design increases the total stability of the filter cartridges as the separators fully support the sheet material. This design also prevents filter sheet deformities after heat treatments and adverse effects of contact with hot sanitation. It Is manufactured with rigid external clips to prevent damaging filter sheets during module loading and unloading while allowing for easy and reliable handling.

Applications

- Removing dissociative chlorine and volatine organic compounds(VOS) in solution
- Oil and aromatic series in solution
- Remove smell,odor,organic pigment
- Remove Metal Ion

Material of Constructions

Depth Filter Sheet	Carbon Cellulose、Activated Carbon、Resins,and etc
Core/Separator	PP
Double O-ring or flat gasket	Silicon、EPDM、NBR

Performance

Max Operating Temperature	80°C
Max Operating DP	2.0bar/25°C
	1.0bar/80°C

Ordering Information

DLDSC — C150 — D — 8 — E — 8

Revoval Rating	End Cap Type	Outer Diameter	Seal Material	Construction	
C150 = 5μm	D =DOE with gaskets	8 = 8"	S = Silicone	7 = 7Cell	8 = 8Cell
	S =SOE with double o-rings(only avaiable for 8")	12 = 12"	E = EPDM	9 = 9Cell	12 = 12Cell
		16 = 16"	B = NBR	14 = 14Cell	15 = 15Cell
				16 = 16Cell	

HF Series High Flow Pleated Filter Cartridges

HF Series High Flow Pleated Filter Cartridges are made of depth fine PP non-woven fabrics. The pleated filter cartridge is single open ended and in diameter of 6inch/152mm, inside to outside flow design ensures that the unwanted particles are trapped with the element. One HF filter replaces few standard 10" filter cartridges to reduce the operating costs and make change out quickly and easily for critical applications. The multiple layers with depth pleated design provides higher removal efficiency and longer service life than other cartridges of equal efficiency. All the PP configuration with good chemical compatibility ensures that can be used for wide applications.

Features

- Available in economic/nominal/absolute structure, particle removal rating from 0.5 to 100 micron
- 100% polypropylene components provide wide chemical compatibility, suitable for use in a variety of fluids
- With depth fine non-woven fabrics and scientific design, the filter is in a good structure, having high dirt holding capacity and resulting in longer service life
- The pleated media in large diameter reduces operating costs, makes change out quickly and easily and makes cartridge in longer service life
- Higher dirt holding capacity with large diameter reduces the changes times of cartridges

Applications

- Food & Beverage
- RO Pre-Filtration
- Process water(Pre-RO, Cooling...)
- Ground/Reclaimed/Wastewater
- Sea water desalination
- Oil & Chemical
- Power plant water treatment
- Machinery & Equipment

Dimensions

Outer Diameter	154mm
Length	20", 40", 60"

Material of Constructions

Media	PP, GF
Cage / Core / End Cap	PP
Sealing	Silicone, EPDM, FKM, E-FKM

Performance

Max. Operating Temperature	80°C
Max. Operating DP	2.4 bar@20°C
Recommended Change out DP	2.2 Bar@20°C

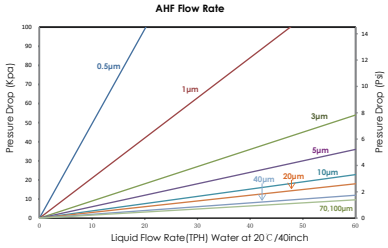
Quality

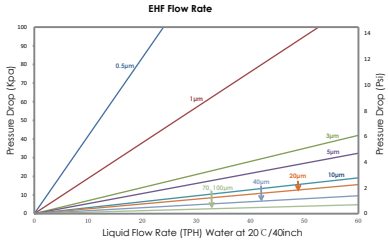
- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

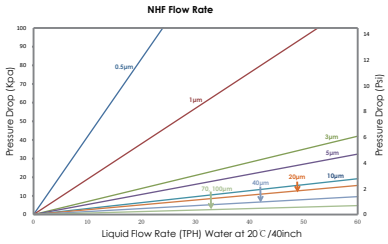
Food Contact Compliance

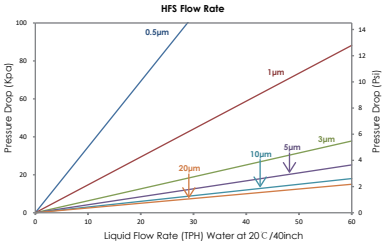
- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Class VI-121°C for plastics.
- Passed European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

Flow Rate



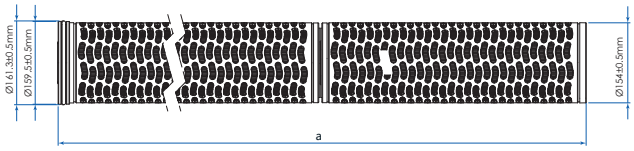






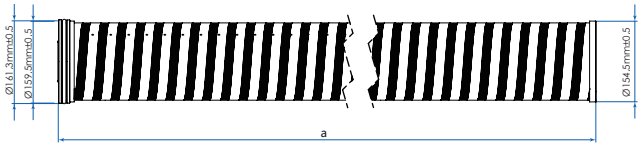
Dimensions

Cage



	20"	40"		60"
a	528.0±2	1016.0±2	1022.0±2	1538.0±3

Belt



	20"	40"	60"
a	528.0±2	1028.0±2	1538.0±3

Ordering Information

AHF — G0050 — P — B — 20 — S

Grade	Media Structure	Hardware Material	Appearance	Length	Seal Material
AHF (Absolute)	G0050 = PP0.5μm G0100 = PP1μm	P = PP	B = Belt	20 = 20"	S = Silicone
NHF (Nominal)	G0300 = PP3μm G0500 = PP5μm		C = Cage	40 = 40"	E = EPDM
EHF (Economic)	G1000 = PP10μm G2000 = PP20μm			60 = 60"	V = FKM
	G4000 = PP40μm G7000 = PP70μm				F = E-FKM
	G9900 = PP100μm				

HF — S — 0050 — B — 20 — S — P

Hardware Material	Media Structure	Appearance	Length	Seal Material	Core
S = Glass fiber	0050 = 0.5μm 0500 = 5μm	B = Belt	20 = 20"	S = Silicone	Blank = No
	0100 = 1μm 1000 = 10μm	C = Cage	40 = 40"	E = EPDM	P = PP core
	0300 = 3μm 2000 = 20μm		60 = 60"	V = FKM	
				F = E-FKM	

Single-round Sanitary Liquid Filter Housing

Single-round Sanitary Liquid Filter Housing is designed to meet the sanitary requirements. It adopts sanitary pipe fittings with crevice-free welding and sanitary design. It is easy to clean and disassemble, suitable for small flow filtration in low and medium pressure conditions. It is widely used in pharmaceutical, food and beverage industries.

Features

- Ultra-high polishing level, internal: Ra≤0.3μm, external: Ra≤ 0.4μm
- It meets GMP standards, adopts crevice-free welding and sanitary design, easy to clean, no residual liquids
- Vent/Drain Valve: the threaded sleeve is separated from stepped hose barb, so the connection tube will not rotate when venting or draining
- Body connection adopts strengthened clamp, maximum operating pressure can reach 1.0MPa
- Light in size, easy to install and disassemble, designed for low volume liquid filtration which can be used in pharmaceuticals etc.
- The housing leg adopts strengthened thread to make it have a longer service life, adjustable nut on the leg can adjust filter length to make it more convenient to use
- Suitable for CIP and SIP

Surface Finish

Finish Type	Passivated Electropolished Mechanical polishing
Polishing Type	Internal: Ra ≤ 0.3μm External: Ra ≤ 0.4μm

Materials

Filter Shell	304, 316L
Drain/Vent Valve	304, 316L
Tri-clamp	304
Stabilizer Blade	304
Seal Material	Silicone, FKM, EPDM

Operating Conditions

Design Pressure Option	0.6Mpa (6bar) 1.0Mpa (10bar)
Max. Operating Temperature	150°C

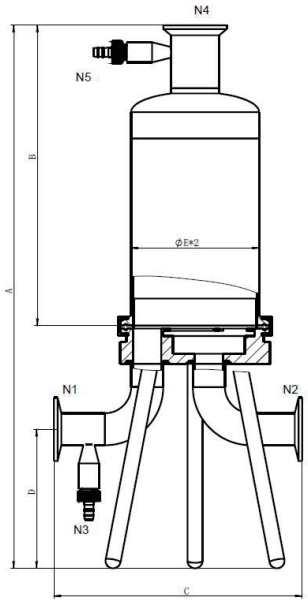
Connection

Shell Connection	Tri-clamp
Inlet & Outlet(N1, N2)	Tri-clamp / flange
Vent /Drain Valve(N3, N5)	Inner bole 4mm, connect with 8mm pipe
Pressure Gauge(N4)	TC-1.5"

Applications

- Pharmaceuticals: filtration of injections, antibiotics and other biological products
- Food and beverage: filtration of alcohol, beverage and drinking water etc.
- Petrochemical industry: filtration of oilfield water, organic solvents, acid and alkaline liquids etc.
- Microelectronics: pre-filtration of high-purity water

Drawing



Dimension

		Single round 5"	Single round 10"	Single round 20"	Single round 30"	Single round 40"
A	Total height (except pressure gauge kit)	421	548	802	1056	1310
B	The distance from inlet to outlet	198	198	198	198	198
C	Shell diameter	101.6	101.6	101.6	101.6	101.6
D	The height from inlet/outlet to the ground	110	110	110	110	110

Ordering Information

A	Q	J	01	05	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
A=Single round Sanitary Liquid Filter Housing	Q=226	J=304	01=1	05 = 5"	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished	X=0.6Mpa
	P=222	K=316L		10 = 10"	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished	Y=1.0Mpa
	F=DOE			20 = 20"	T32=TC 1.25"	V=FKM	P=Passivated		
				30 = 30"	T40=TC 1.5"				
				40 = 40"	F20=Flange DN20				
					F25=Flange DN25				
					F32=Flange DN32				
					F40=Flange DN40				
					...				

Multi-round Sanitary Liquid Filter Housing

Multi-round Sanitary Liquid Filter Housing can meet the use of large flow sanitary working conditions and different specifications of filter elements can be configured according to different flow rates. The crevice-free welding and sanitary design, make the housing drain thoroughly and easy to clean and disassemble. The Internal surface can be finely polished up to 0.3μm.

Features

- Ultra-high polishing level, internal: Ra≤0.3μm, external: Ra≤ 0.4μm
- It meets GMP standards, adopts crevice-free welding and sanitary design, easy to clean, no residual liquids
- Vent valve adopts tri-clamp which makes it more convenient to use
- Body connection adopts strengthened clamp, max. operating pressure can reach 1.0MPa
- The filter faceplate can be made detachable for full-angle cleaning
- Suitable for CIP and SIP

Applications

- Pharmaceuticals: filtration of injections, antibiotics and other biological products
- Food and beverage: filtration of alcohol, beverage and drinking water etc
- Petrochemical industry: filtration of oilfield water, organic solvents, acid and alkaline liquids etc
- Microelectronics: pre-filtration of high-purity water

Surface Finish

Finish Type	Passivated Electropolished Mechanical polishing
Polishing Type	Internal: Ra ≤ 0.3μm External: Ra ≤ 0.4μm

Materials

Filter Shell	304, 316L
Vent Valve	304, 316L
Eyebolt	304
Stabilizer Blade	304
Seal Material	Silicone, FKM, EPDM

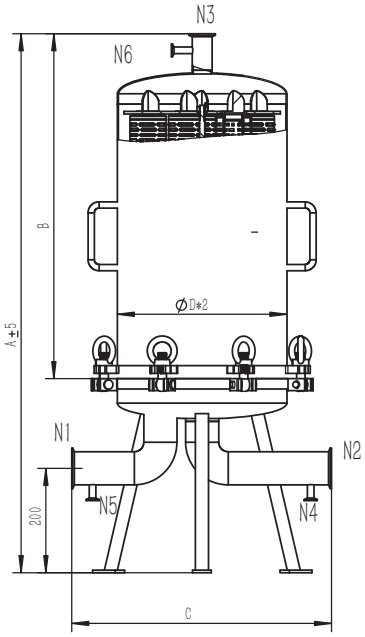
Operating Conditions

Design Pressure Option	0.6Mpa (6bar) 1.0Mpa (10bar)
Max. Operating Temperature	150°C

Connection

Shell Connection	Flange eyebolt
Inlet & Outlet(N1,N2)	Tri-clamp/ flange
Drain/Vent/Valve(N4,N5,N6)	Inner bole 4mm, connect with 8mm pipe
Pressure Gauge Type	TC-1.5"

Drawing



Dimension

		3 round				5 round				7 round	
		10"	20"	30"	40"	10"	20"	30"	40"	10"	20"
A	Total height (except pressure gauge kit)	750	1000	1250	1500	750	1000	1250	1500	750	1000
B	The distance from inlet to outlet	360	360	360	360	400	400	400	400	420	420
C	Shell diameter	219	219	219	219	219	219	219	219	273	273
D	The height from inlet/outlet to the ground	150	150	150	150	150	150	150	150	180	180

		7 round		9 round				12 round			
		30"	40"	10"	20"	30"	40"	10"	20"	30"	40"
A	Total height (except pressure gauge kit)	1250	1500	750	1000	1250	1500	750	1000	1250	1500
B	The distance from inlet to outlet	420	420	480	480	480	480	500	500	500	500
C	Shell diameter	273	273	325	325	325	325	350	350	350	350
D	The height from inlet/outlet to the ground	180	180	200	200	200	200	200	200	200	200

Ordering Information

B	Q	J	05	10	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
B=Multi-round Sanitary Liquid Filter Housing	Q = 226	J = 304	03 = 3	10 = 10"	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished	X=0.6Mpa
	P = 222	K = 316L	05 = 5	20 = 20"	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished	Y=1.0Mpa
	F = DOE		07 = 7	30 = 30"	T32=TC 1.25"	V=FKM	P=Passivated		
			09 = 9	40 = 40"	T40=TC 1.5"				
			12 = 12		T50=TC 2"				
					F20=Flange DN20				
					F25=Flange DN25				
					F32=Flange DN32				
					F40=Flange DN40				
					F50=Flange DN50				
					...				

Sanitary Pipeline Filter Housing

Sanitary Pipeline Filter Housing designed with compact structure is very cost-efficient. The feed liquid enters from top and leaves from bottom, it's connection mode adopts tri-clamp . It is equipped with vent and drain interfaces which can be used for gas and liquid filtration.

Features

- Ultra-high polishing level, internal: Ra≤0.3μm, external: Ra≤ 0.4μm
- Vent/Drain Valve: the threaded sleeve is separated from stepped hose barb, so the connection tube will not rotate when venting or draining
- Body connection adopts strengthened clamp, max. operating pressure can reach 1.0MPa
- The filter housing adopts compact design, materials flow in from top and out from bottom, is cost-effective and can meet sanitary requirements

Applications

- For liquid: particle filtration of pipeline liquids
- For gas: used in pipe connection or as a respirator
- Filtration of alcohol, beverage and edible oil etc

Surface Finish

Finish Type	Electropolished Mechpolished
Polishing Type	Internal: Ra ≤ 0.3 μm External: Ra ≤ 0.4 μm

Materials

Filter Shell	304, 316L
Drain/Vent Valve	304, 316L
Tri-clamp	304
Seal Material	Silicone, FKM, EPDM

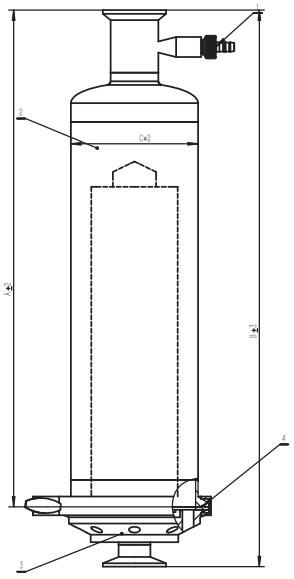
Operating Conditions

Design Pressure Option	0.6Mpa(6bar) 1.0Mpa(10bar)
Max. Operating Temperature	150°C

Connection

Shell Connection	Clamp
Inlet & Outlet	Tri-Clamp / Flange
Vent Valve	Inner bole 4mm Connect with 8mm pipe
Drain Valve	Inner bole 4mm Connect with 8mm pipe

Drawing



Dimension

		Single round 5"	Single round 10"	Single round 20"	Single round 30"	Single round 40"
A	Total height (except pressure gauge kit)	320	447	701	955	1209
C	Diameter	101.6	101.6	101.6	101.6	101.6

Ordering Information

C	Q	J	01	05	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
C = Sanitary pipeline filter housing	Q = 226	J = 304	01 = 1	05 = 5"	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished	X=0.6Mpa
	P = 222	K = 316L		10 = 10"	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished	Y=1.0Mpa
	F = DOE			20 = 20"	T32=TC 1.25"	V=FKM	P=Passivated		
				30 = 30"	T40=TC 1.5"				
				40 = 40"	T50=TC 2"				
					F20=Flange DN20				
					F25=Flange DN25				
					F32=Flange DN32				
					F40=Flange DN40				
					F50=Flange DN50				
					...				

Depth-stack Sanitary Filter Housing

H Series Lenticular Filter Housing is a new type of depth-stack Filter Housing. The structure is designed and manufactured according to sanitary requirements, the well-polished housing leaves no residual liquids and is easy for cleaning. The flow in and out both from bottom effectively avoid the liquid turbulence. It is available for 8", 12" and 16" diameter filters, which can be maximal to install 4 depth-stack filters to meet high flow rates requirements.

Features

- Ultra-high polishing level, internal: Ra≤0.3μm, external: Ra ≤0.4μm
- The flow in and out both from bottom effectively avoid the liquid turbulence. Specially designed drain valve can be equipped at inlet and outlet for easier liquid drainage
- The filter housing can be vertically installed up to 4 depth-stack cartridges, it has low cost-investment and high filtration efficiency
- Multi-segment opening options can make it more convenient to replace depth-stack cartridges and help to reduce liquid leakage

Applications

- Pharmaceuticals: filtration of biological products such as LVP, vaccines and serums etc.
- Food and beverage: filtration of alcohol, beer, beverage, syrup and edible oil etc.
- Chemical industry: filtration of grease and dirt, sludge and gelatinous materials etc.

Surface Finish

Finish Type	Electropolished Mechpolished
Polishing Type	Internal: Ra≤0.3μm External: Ra≤0.4μm

Material

Filter Shell	304, 316L
Vent Valve	304, 316L
Eyebolt	304
Leg	304
Seal Material	Silicone, FKM, EPDM

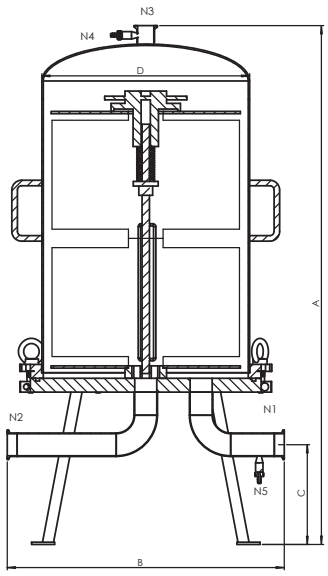
Operating Conditions

Design Pressure	0.6Mpa (6bar)
Max. Operating Temperature	150°C

Connection

Shell Connection	Eyebolt
Inlet & Outlet	Tri-clamp / Flange
Vent Valve/Drain Valve	Inner bole 4mm Connect with 8mm pipe
Pressure Gauge	TC-1.5"

Drawing



	16 inch Disc Filter						
	9 cells	12 cells	15 cells	16 cells	18 cells	24 cells	27 cells
A	847	847	847	847	1147	1147	1147
B	600	600	600	600	600	600	600
C	270	270	270	270	270	270	270
D	Φ450	Φ450	Φ450	Φ450	Φ450	Φ450	Φ450
	16 inch Disc Filter						
	30 cells	32 cells	36 cells	45 cells	48 cells	60 cells	64 cells
A	1147	1147	1447	1447	1447	1747	1747
B	600	600	600	600	600	600	600
C	270	270	270	270	270	270	270
D	Φ450	Φ450	Φ450	Φ450	Φ450	Φ450	Φ450
	12 inch Disc Filter						
	9 cells	12 cells	15 cells	16 cells	18 cells	24 cells	27 cells
A	847	847	847	847	1147	1147	1147
B	500	500	500	500	500	500	500
C	223	223	223	223	223	223	223
D	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356
	12 inch Disc Filter						
	30 cells	32 cells	36 cells	45 cells	48 cells	60 cells	64 cells
A	1147	1147	1447	1447	1447	1447	1447
B	500	500	500	500	500	500	500
C	223	223	223	223	223	223	223
D	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356	Φ 356
	8 inch Disc Filter						
	8 cells	16 cells	24 cells	32 cells			
A	755	893	1031	1169			
B	320	320	320	320			
C	150	150	150	150			
D	Φ250	Φ250	Φ250	Φ250			

Ordering Information

H	F	J	08	05	T20	S	E	E

Series	Connection	Shell Material	OD	No. of Filter Cells		Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)
H = Depth-stack sanitary filter housing	F = DOE	J = 304	8=8"	01=8	02=9	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished
		K = 316L	12=12"	03=12	04=15	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished
			16=16"	05=16	06=18	T32=TC 1.25"	V=FKM	P=Passivated	
				07=24	08=27	T40=TC 1.5"			
				09=30	10=32	T50=TC 2"			
				11=36	12=45	F20=Flange DN20			
				13=48	14=60	F25=Flange DN25			
				15=64		F32=Flange DN32			
						F40=Flange DN40			
						F50=Flange DN50			
						...			

Gas Filter Housing

Gas Filter Housing is suitable for removing particles from gases. In combination with filter cartridges, it can be used in high-purity, high-temperature gas sterile filtration,and etc.

Features

- Ultra-high polishing level, internal: Ra≤0.3μm, external: Ra≤ 0.4μm
- 226 double O-ring with locking tab cartridge adaptor ensures safe and secure sealing performance
- Tri-clamp body connection, easy cartridge changeout
- With different filter cartridges, it can be used in high-purity, high-temperature, aseptic, fermentation and other gas filtration area

Surface Finish

Finish Type	Electropolished Mechpolished
Polishing Type	Internal: Ra ≤ 0.3μm External: Ra ≤ 0.4μm

Materials

Filter Shell	304, 316L
Vent Valve	304, 316L
Tri-clamp	304
Stabilizer Blade	304
Seal Material	Silicone, FKM, EPDM

Operating Condition

Design Pressure Option	0.6Mpa (6bar) 1.0Mpa (10bar)
Max. Operating Temperature	150°C

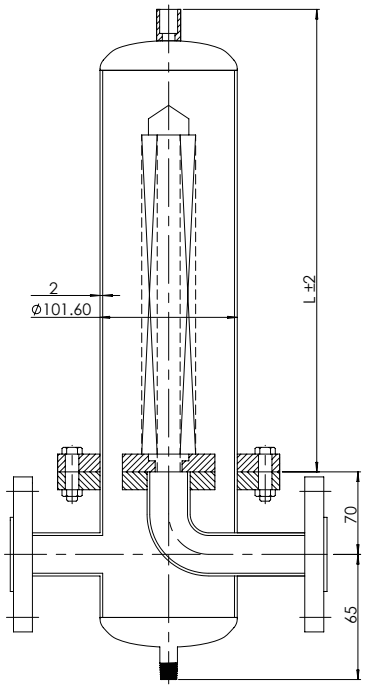
Connection

Shell Connection	Tri-clamp / Flange
Inlet & Outlet	Tri-clamp / Flange
Vent Valve	/
Pressure Gauge	G 1/4"

Applications

- Pharmaceuticals: gas sterilization and filtration in the production process of biological products
- Food and beverage: gas sterilization and filtration of beverage or fermented products
- Chemical industry: filtration of industrial gas such as coal gas, hydrogen, nitrogen and natural gas etc
- For laboratory: air humidity filtration

Drawing



Ordering Information

D	Q	J	01	05	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
D = Gas filter housing	Q = 226	J = 304	01=1	05 = 5"	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished	X=0.6Mpa
	P = 222	K = 316L	03=3	10 = 10"	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished	Y=1.0Mpa
	F = DOE		05=5	20 = 20"	T32=TC 1.25"	V=FKM	P=Passivated		
			07=7	30 = 30"	T40=TC 1.5"				
			...	40 = 40"	T50=TC 2"				
					F20=Flange DN20				
					F25=Flange DN25				
					F32=Flange DN32				
					F40=Flange DN40				
					F50=Flange DN50				
					...				

Sanitary Rebreather Filter Housing

Sanitary Rebreather Filter Housing is designed to meet sanitary requirements. It is suitable for gas sterilization filtration in pharmaceuticals and food industries. The role of its elbow can prevent large particles entering the filter housing.

Features

- Ultra-high polishing level , internal: Ra≤0.3μm, external: Ra ≤0.4μm
- It meets GMP standards, easy to clean, no residual liquids
- The elbow design can prevent external particles entering housing body

Applications

- Pharmaceuticals: sterilization filtration of exchanging gas for pharmaceutical containers
- Food and beverage: sterilization filtration of exchanging gas for alcohol, beverage and drinking water etc

Surface Finish

Finish Type	Electropolished Mechpolished
Polishing Type	Internal: Ra ≤ 0.3μm External: Ra ≤ 0.4μm

Material

Filter Shell	304, 316L
Clamp	304
Seal Material	Silicone, FKM, EPDM

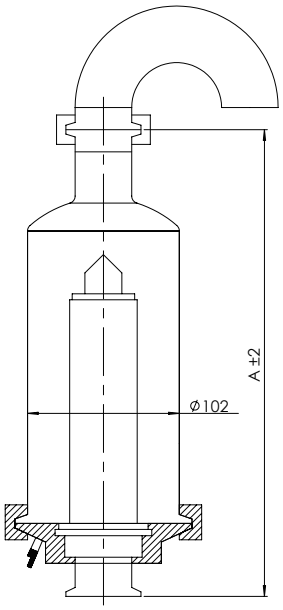
Operating Conditions

Design Pressure Option	0.6Mpa (6bar) 1.0Mpa (10bar)
Max. Operating Temperature	150°C

Connection

Shell Connection	Clamp
Outlet	Tri-clamp / Flange

Drawing



Dimension

		Single round 5"	Single round 10"	Single round 20"	Single round 30"	Single round 40"
A	Total Height (except elbow)	242	369	623	877	1131
B	Shell Diameter	101.6	101.6	101.6	101.6	101.6

Ordering Information

E	Q	J	01	05	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
E = Sanitary Rebreather Filter Housing	Q = 226	J = 304	01=1	05 = 5"	T20=TC 3/4"	S=Silicone	E=Electropolished	E=Electropolished	X=0.6Mpa
	P = 222	K = 316L		10 = 10"	T25=TC 1"	E=EPDM	M=Mechpolished	M=Mechpolished	Y=1.0Mpa
	F = DOE			20 = 20"	T32=TC 1.25"	V=FKM	P=Passivated		
				30 = 30"	T40=TC 1.5"				
				40 = 40"	T50=TC 2"				
					F20=Flange DN20				
					F25=Flange DN25				
					F32=Flange DN32				
					F40=Flange DN40				
					F50=Flange DN50				
					...				

High Flow Filter Housing

High flow filter housing are designed to accommodate our HF series filter cartridge and mainly used for large fluid flow rate applications, especially in water treatment. Our high flow filter housings are available in a variety of sizes from 1 to 7 filter elements in length of 20-inch, 40-inch and 60-inch lengths. SS high flow cartridge housing is manufactured by high quality SS304 or SS316L, suitable for high temperature, acid, alkali and chemical resistance filtration systems. The horizontal option to maximize ease of operation, or the vertical to minimize the system's footprint is available. Our housings are available in standard designs, as well as customizable configurations to suit your specific needs.

Features

- It adopts sanitary housing body, internal: Ra＜0.6μm, suitable for various filtering requirements
- It can be used with large size cartridges for high volume liquid filtration which has low cost-investment and high filtration efficiency
- Vertical and horizontal type can be provided according to customer requirements

Surface Finish

Finish Type	Passivated, Electropolished, Mechpolished, Sand blasting
Polishing Type	Internal: Ra ≤ 0.6μm External: Ra ≤ 0.8μm

Material

Filter Shell	304, 316L
Vent Valve	304, 316L
Eyebolt	304
Leg	304
Seal Material	Silicone, FKM, EPDM

Operating Conditions

Design Pressure	0.6Mpa (6bar)
Max. Operating Temperature	150°C

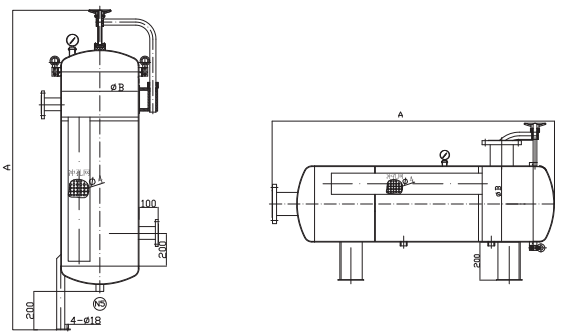
Connection

Shell Connection	Eyebolt
Inlet & Outlet	Tri-clamp / Flange
Pressure Gauge Type	G 1/4" bottom

Applications

- For general use: pre-filtration of RO system
- Water treatment: filtration of process water, condensed water, cooling water and waste water etc
- Chemical industry: filtration of acid and alkaline liquids, solvents, chilled water and saline water etc
- Power and energy: condensed water filtration in power plants etc

Drawing



Demension

		Single round				2 round				3 round			
		Vertical		Horizontal		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	219	219	219	219	400	400	400	400	450	450	450	450

		4 round				5 round				6 round			
		Vertical		Horizontal		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	500	500	500	500	550	550	550	550	600	600	600	600

		8 round				10 round			
		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	700	700	700	700	800	800	800	800

Ordering Information

M	H	J	01	20	T20	S	E	E	X

Series	Connection	Shell Material	Qty	Length	Inlet & Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
M = High flow filter housing	H=HF	J = 304	01=1	20 = 20"	T20=TC 3/4"	S=Silicone	E=Electropolished	E = Electropolished	X=Vertical inner pressure
		K = 316L	02=2	40 = 40"	T25=TC 1"	E=EPDM	M=Mechpolished	M = Mechpolished	Y=Horizontal inner pressure
		L = Carbon steel	03=3	60 = 60"	T32=TC 1.25"	V=FKM	P=Passivated	S = Sand blasting	W=Vertical outer pressure
			04=4		T40=TC 1.5"				Z=Horizontal outer pressure
			05=5		T50=TC 2"				
			06=6		F20=Flange DN20				
			08=8		F25=Flange DN25				
			10=10		F32=Flange DN32				
					F40=Flange DN40				
					F50=Flange DN50				
					...				

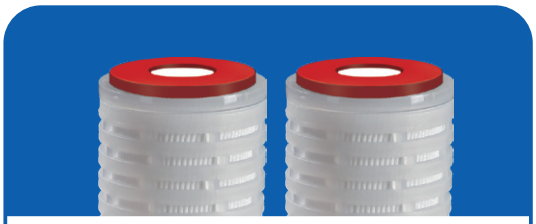
Filter Integrity Tester

DLE-301

FUNCTION INTRODUCTION

- Inspect the integrity of all kinds of filters,i.e.Pleated filter cartridge,disc membrane filter and capsule filter ect.
- Automatical running,easy to use.
- Process display in 10.4" screen in graphic.
- Inbuilt printer to print the results in real time.
- Records storage,inquiry,print and USB output.
- Imported high quality spare parts.
- Water spill-resistant.

Connection



Code F - (DOE)

Code M - (222/Flat)

Code T - (226/Flat)

Code P - (222/Fin)

Code Q - (226/Fin)

Code H - (213/Flat)

Code K - (222 SS Inser/Fin)

Code R - (226 SS Inser/Fin)

Code V - (226 SS Inser/Flat)

Code J - (222 SS Inser/Flat)

Code I - (226 PSU Inser/Flat)

Code G - (226 Insert/Fin)

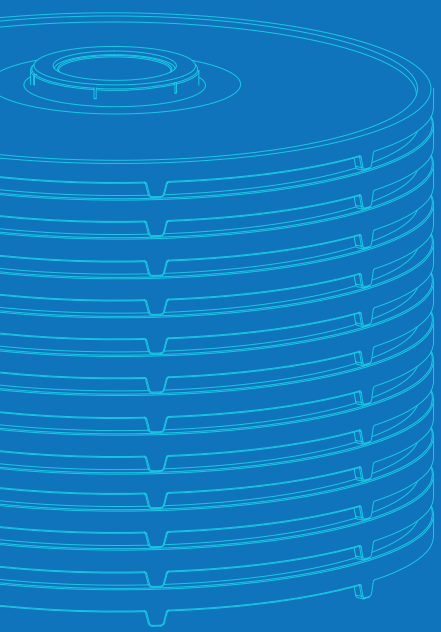
Darlly®
TOTAL FILTRATION SOLUTIONS

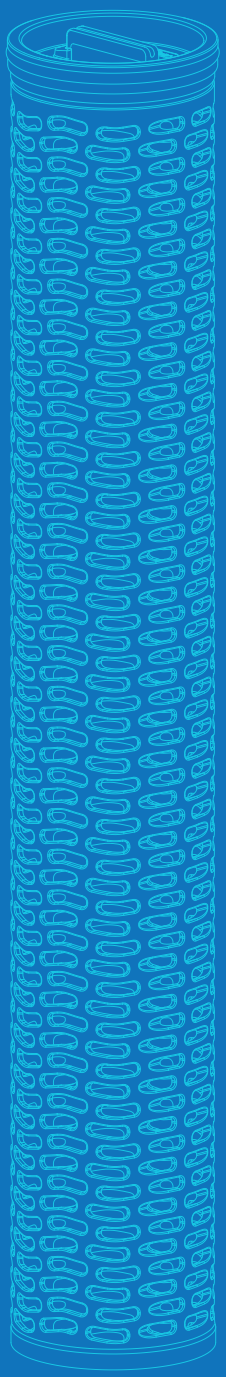
Chemical Compatibility Table

		PP	PES	PTFE	PVDF	Nylon	Silicone rubber	Fluoro rubber	EPDM
Acid	glacial acetic acid	R	NR	R	R	NR	LR	NR	LR
	hydrochloric acid(strong)	R	R	R	R	NR	NR	R	LR
	hydrochloric acid6N	R	R	R	R	NR	NR	R	LR
	nitric acid (strong)	R	---	R	R	NR	LR	LR	NR
	nitric acid6N	R	---	R	R	NR	LR	R	NR
	phosphoric acid (strong)	R	---	R	R	LR	NR	R	NR
	sulfuric acid (strong)	R	NR	LR	R	NR	NR	R	NR
	boric acid	R	R	R	R	R	R	R	R
	hydrofluoric acid6N	NR	---	R	R	NR	NR	--	NR
Alkali	ammonium hydroxide	R	R	R	LR	R	R	R	LR
	potassium hydroxide3N	R	R	R	LR	R	LR	R	R
	sodium hydroxide3N	R	R	R	LR	R	R	R	R
	sodium hydroxide6N	R	R	R	NR	R	R	R	LR
Halocarbon	carbon tetrachloride	LR	LR	LR	LR	LR	NR	R	NR
	trichloromethane	LR	NR	LR	LR	NR	NR	R	NR
	dichloroethylene	LR	NR	LR	LR	LR	NR	LR	LR
	FreonTF	LR	LR	LR	LR	LR	NR	R	NR
	FreonTMC	LR	NR	LR	LR	LR	NR	LR	NR
	dichloromethane	LR	NR	LR	LR	NR	NR	LR	NR
	trichloro ethylene	LR	LR	LR	NR	LR	NR	R	NR
Alcohol	amyl alcohol	R	R	R	R	R	NR	R	R
	Phenylcarbinol100%	NR	NR	NR	R	NR	LR	R	R
	butanol	R	R	R	R	R	NR	R	NR
	ethyl alcohol	R	R	R	R	R	R	R	R
	isopropanol	R	R	R	R	R	R	R	R
	methyl alcohol	R	R	R	R	R	R	R	R
	athylenglykol	R	LR	R	R	R	R	R	R
	glycerinum	R	LR	R	R	R	R	R	R
	propylene glycol	R	LR	R	R	R	R	R	R
Ether	diethyl ether	LR	LR	LR	LR	NR	LR	NR	NR
	isopropyl ether	R	---	R	R	---	NR	NR	NR
	dioxane	R	---	R	R	NR	NR	NR	
	Tetrahydrofuran	LR	NR	R	LR	R	NR	NR	R
ketone	acetone	R	NR	R	R	R	NR	NR	R
	cyclohexanone	NR	NR	NR	NR	NR	NR	NR	R
	methyl ethyl ketone	R	---	R	LR	R	NR	NR	R
	MIBK	R	NR	R	R	LR	NR	NR	LR
Benzene	benzene	LR	LR	NR	NR	LR	NR	R	NR
	methylbenzene	LR	NR	LR	LR	NR	NR	R	NR
	xylene	NR	LR	LR	LR	NR	NR	R	NR
Ester	amyl acetate	LR	---	LR	R	LR	NR	NR	R
	n-butyl acetate	LR	---	LR	R	LR	NR	NR	R
	acetic ether	R	LR	R	R	LR	NR	NR	R
	methyl acetate	R	NR	R	R	R	---	NR	R
	isopropyl acetate	R	R	R	R	R	LR	NR	R
Oil	cottonseed oil	R	---	R	R	R	R	R	LR
	lubricating oil	R	NR	R	R	R	R	R	R
	peanut oil	R	---	R	R	R	R	R	LR
	sesame oil	R	NR	R	R	R	R	R	R
	turpentine	LR	LR	LR	LR	LR	NR	R	NR
Others	aniline	LR	NR	LR	R	LR	NR	R	R
	DMF	R	NR	R	NR	NR	R	NR	R
	formaldehyde37%	R	R	R	R	R	R	NR	R
	formaldehyde4%	R	R	R	R	R	R	R	R
	gasoline	LR	LR	LR	LR	LR	NR	R	R
	ethan	LR	NR	LR	LR	LR	NR	R	NR
	kerosene	R	R	R	R	R	NR	R	NR
	phenol	R	NR	R	R	R	NR		NR
	acetonitrile	R	R	R	R	LR	---	NR	R
	nickel sulfate solution	R	---	R	R	R	R	---	R

R workable NR not recommended

LR workable in certain conditions This table is for reference only, for more information please contact Darlly.





Hangzhou Darlly Filtration Equipment Co.,Ltd.

Add:Xindeng Industrial Park, Fuyang, Hangzhou, Zhejiang Province, 311404, China

Tel:+86 571 63210677 63210177 Fax:+86 571 63256383

E-mail:sales@darllyfiltration.com Web:www.darllyfiltration.com