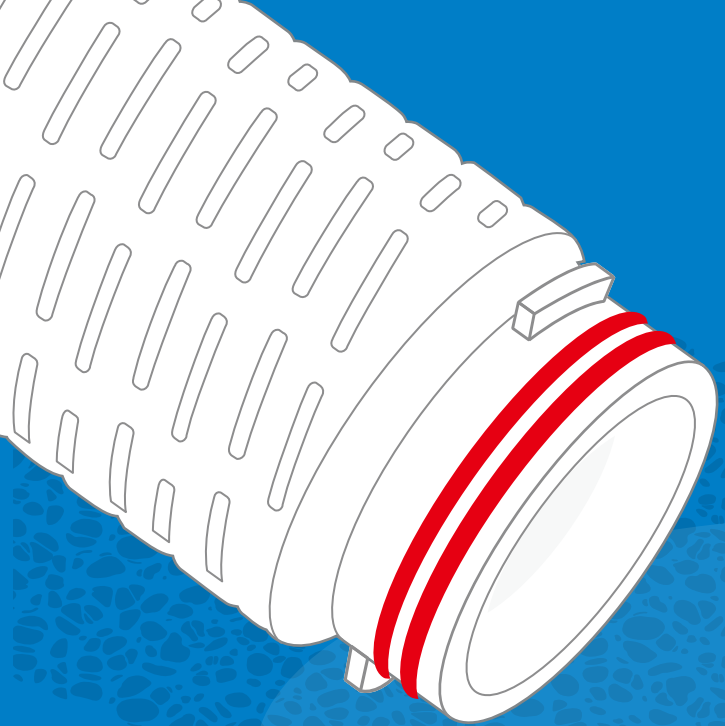


Filtration, Separation & Purification Solutions for Biopharma Applications





Filtration Separation Purification



Cobetter dedicates itself to providing Filtration, Separation, & Purification

Solutions across all industries. Cobetter provides over **1,800+** technical analysis reports annually

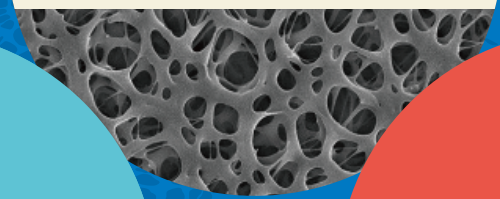
for customers in the pharmaceutical industry and over **2,000+** technical analysis reports annually

for customers in chemical, microelectronics and life sciences industries

Validation Center



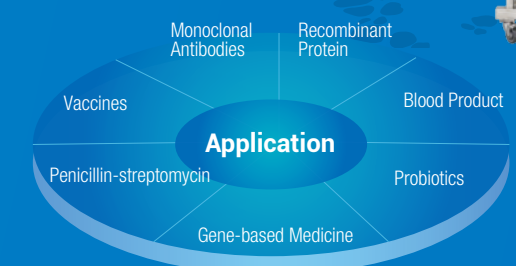
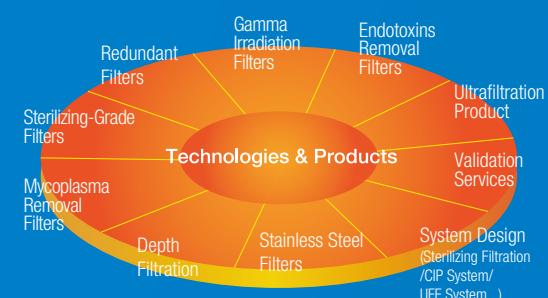
Membrane Manufacturing



Filter Manufacturing



Housing Manufacturing



C1 Factory
Membrane Filter Manufacturing
9400 SQM

C2 Factory
Depth Filter Manufacturing
9000 SQM

C3 Factory
Semiconductor Products Manufacturing
13600 SQM, 2019

C4 Factory
Sustainless Filter Manufacturing
& Fluoroplastics Resurtech Manufacturing
& Housing Manufacturing
28000 SQM

C5 Lab
R&D, Lab Center
41000 SQM, 2020

C6 Life Center
33000 SQM, 2021

C7 Factory
Diagnosis R&D Line
1300 SQM, 2020





Validation Expert
Taketomi Hidetoshi, Japanese
Previous Pall Lab Expert for
More Than 30 Years.

Validation Center

Accredited by China National Accreditation Service for Conformity (CNAS)
Established with an initial 10million USD investment



50+ Equipments
180+ SOP
80+ Engineers
Cover all the Validation Tests

Life & Science Validation Center

- ①⑥ **Bacterial Challenge Test** : Retention tests for Mycoplasma, B.diminuta, Serratia marcescens, lactobacillus, saccharomycetes, colibacillus and other microorganisms
- Chemical Analysis** : Extractable & Leachables , Chemical Compatibility test
- UV/PDA-HPLC** : UV/PDA scanning to determine extractables and leachables
- ④ **UPLC/MS** : Determine the nonvolatile and semivolatile of extractable & leachables quantitatively and qualitatively
- ⑤ **GC-MS** : Determine volatile/semi-volatile status of extractables and leachables quantitatively and qualitatively
- ② **IC/ICP-MS** : Analyze alkalis, halogen family, acid radicals, ammonia, and other ions quantitatively
- NVR** : Analyze non-volatile extractable from water, IPA, Acetone and other volatile solutions quantitatively
- FTIR** : Analyze polymers and oligomers in non-volatile extractable & leachables qualitatively
- ③ **SEM/EDS** : Analyze filter membrane defect, appearance, and impurities. SEM analysis of chemical compatibility

Advanced Japanese Quality Control Methods

Ensure that Every Product is Safe, Reliable, and Stable

Quality Assurance is based on the Quality Assurance System
- Focus on the Production Process

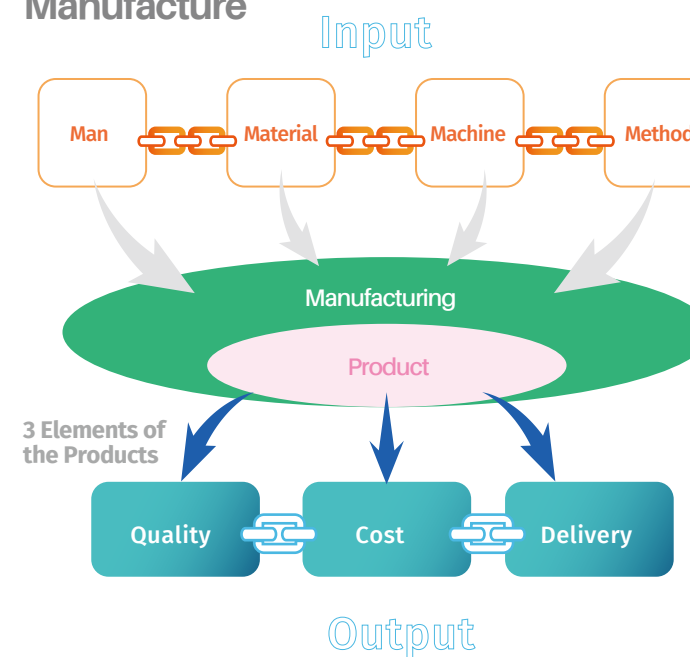
Implement 4M Quality Management Concept
- Process and System Simultaneous Completion

All Products are based on the QC Project Table
- Produced as per SOP for Stable Production

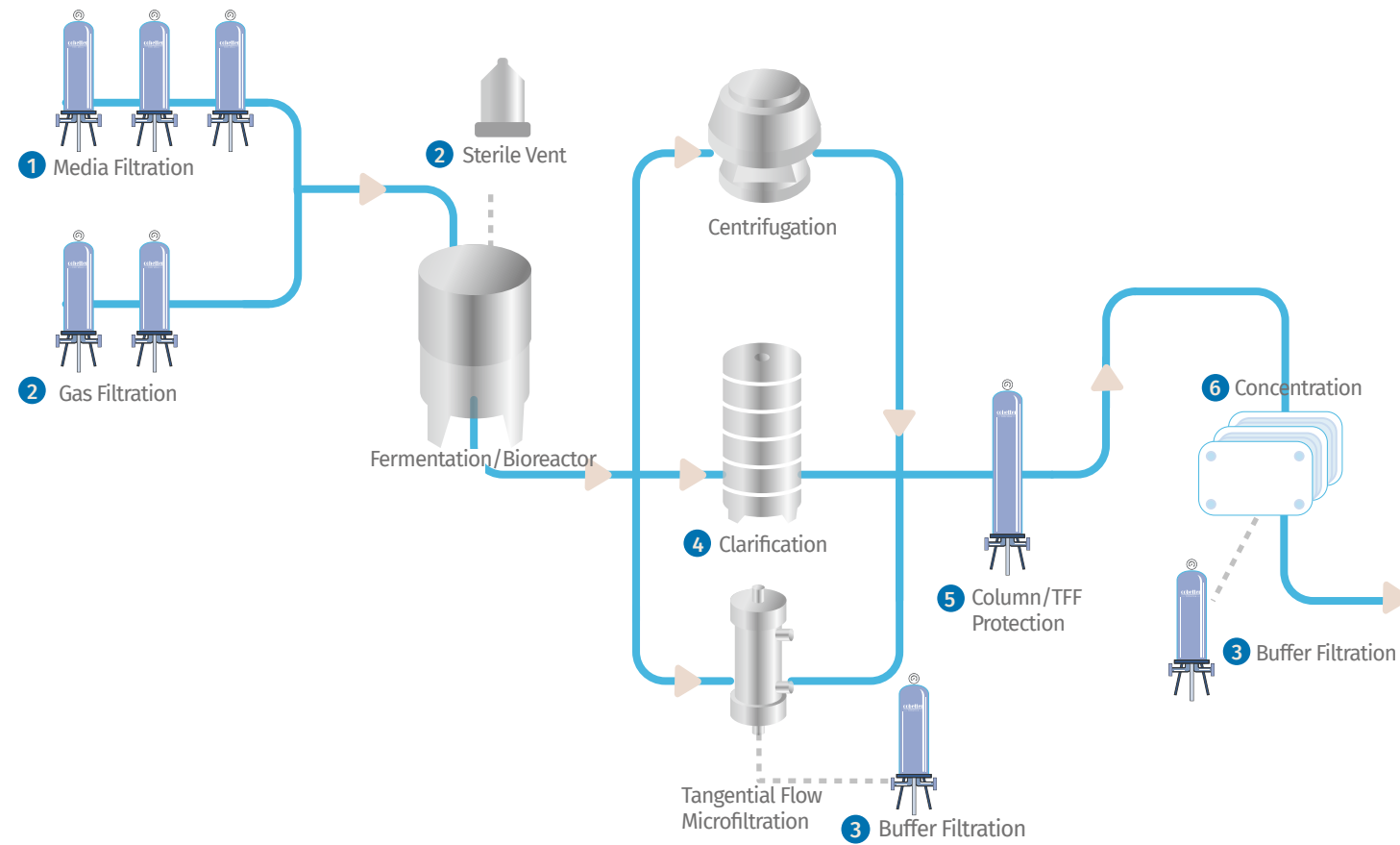


4M

Manufacture



Flow Diagram of Bioprocess



1 Media Filtration

Bioburden Reduction and Particle Control

- Greclary CHV -Glass Fiber
- Safetect PME -PES
- Purcise PLE -Double Layer PES

Sterilizing-grade Filtration

- Purcise SLE -Double Layer PES
- Purcise SPS -PES
- Corevital SMD -PVDF

Mycoplasma Removal

- Purcise MLE -Double Layer PES

2 Vent and Gas Filtration

- Safesure AFM -Hydrophobic PTFE
- Aegivast ACE -Hydrophobic PTFE
- Corevital APB -Hydrophobic PVDF

3 Buffer Filtration

- Purcise PLE -Double Layer PES
- Purcise PAF -PES
- Safetect PME -PES
- Corevital SAF -Double Layer PES
- Purcise SLE -Double Layer PES
- Purcise SPS -PES
- Corevital SMD -PVDF

4 Clarification Filtration

- Roheap CSD

6 Concentration and Purification

- Consieve UET -PES

5 Column / TFF Protection

Clarification

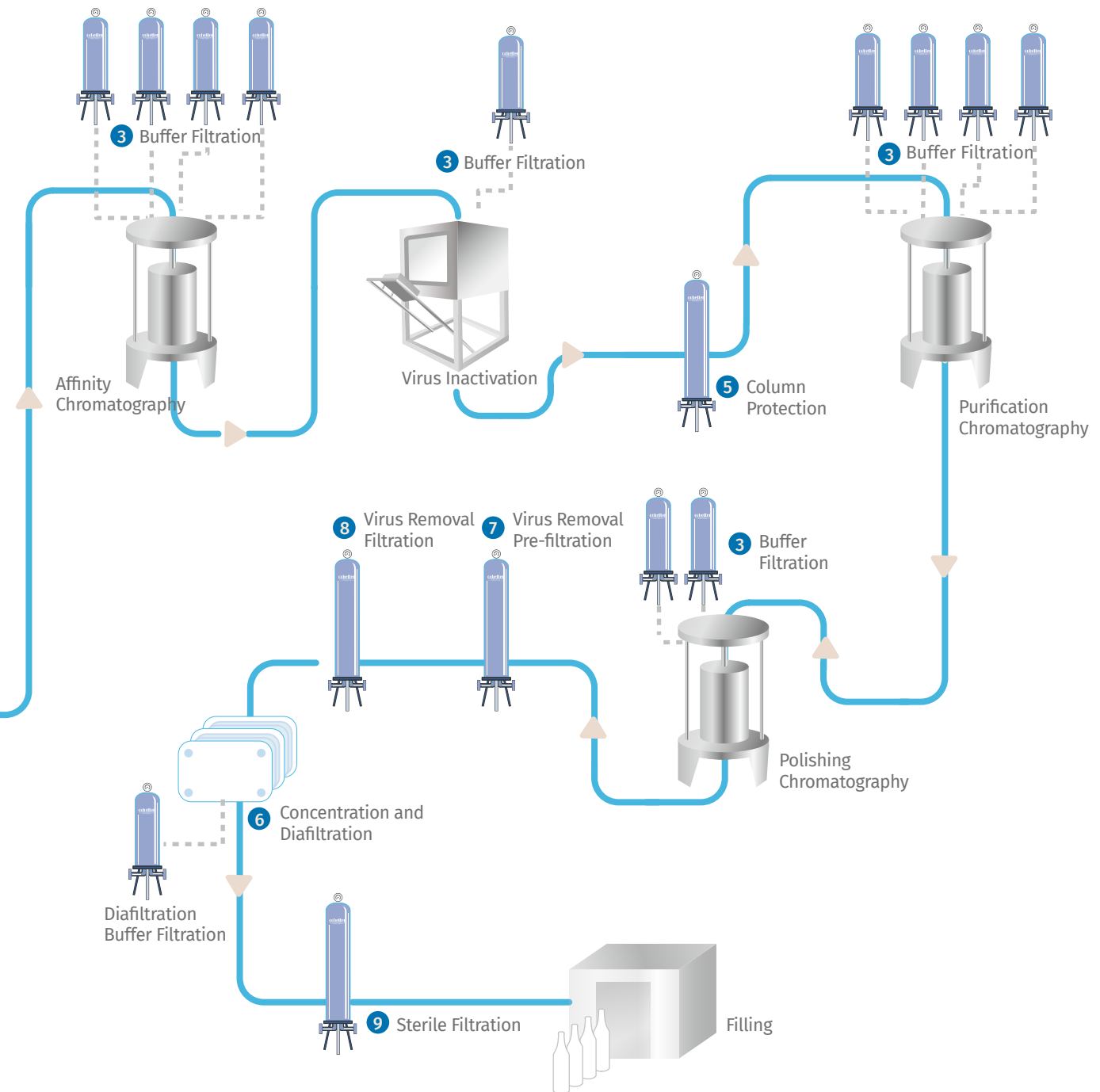
- Greclary CHV -Glass Fiber
- Excesal CHE -PP
- Excesal CHC -PP
- Excesal CHT -PP

Bioburden Reduction and Particle Control

- Purcise PLE -Double Layer PES
- Safetect PME -PES

Sterilizing-grade Filtration

- Purcise SLE -Double Layer PES



7 Viral Remove Prefiltration

- Purcise SLE -Double Layer PES
- Purcise SPS -PES
- Purcise MLE -Double Layer PES

8 Virus Clearance

- Viruclear -PES*
- * Being Developed

9 Sterile Filtration

- Purcise SLE -Double Layer PES
- Purcise SPS -PES

Bricap & Brisip Capsule Filter Series



Bricap/BriScale Disc Capsule Filters

Item	Diameter	Max. Length	Inlet/Outlet	Vent
Bricap V50D	64mm	70mm	6-13 mm (1/4"-1/2") Stepped Hose Barb	N/A
Bricap V50A	73mm	74mm		N/A
Bricap V42	56mm	47mm	6-9 mm (1/4"-3/8") Stepped Hose Barb	N/A
BriScale A50	64mm	71mm	6-13mm(1/4"-1/2") Stepped Hose Barb	Luer lock



Bricap C/D Series Capsule Filters

Item	Diameter	Max. Length	Inlet/Outlet	Vent/Drain
Bricap C01		106mm	14 mm (9/16") Sanitary Flange 19 mm (3/4") Sanitary flange	
Bricap C02	64mm	136mm	31 mm (1 1/4") Sanitary Flange	6mm Hose Barb
Bricap C03		173mm	6-13 mm (1/4"-1/2") Stepped Hose Barb 9.6mm (3/8") Hose Barb	



Brisip Series Capsule Filters

Item	Diameter	Max. Length	Inlet/Outlet	Vent/Drain
Brisip SP3	81mm	159mm	38 mm (1 1/2") Sanitary Flange	6mm Hose Barb Stäubli



Bricap L Series Capsule Filters

Item	Diameter	Max. Length	Inlet/Outlet	Vent/Drain
Bricap L02		142mm		
Bricap L03		190mm	14 mm (9/16") Sanitary Flange 19 mm (3/4") Sanitary flange	
Bricap L05	89mm	233mm	38 mm (1 1/2") Sanitary Flange 13 mm (1/2") Hose Barb	6mm Hose Barb
Bricap L10		347mm	14 mm (9/16") Hose Barb	
Bricap L20		585mm	16 mm (5/8") Hose Barb 19 mm (3/4") Hose Barb	
Bricap L30		838mm	25 mm (1") Hose Barb	

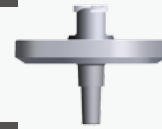


Bricap T Series Capsule Filters

Item	Diameter	Max. Length	Inlet/Outlet	Gauge Port	Vent/Drain
Bricap T10		354mm	38 mm (1 1/2") Sanitary Flange	14 mm (9/16") Sanitary Flange	
Bricap T20	89mm	592mm	38 mm (1 1/2") Sanitary Flange 19mm (3/4")	38 mm (1 1/2") Sanitary Flange No top port	6mm Hose Barb
Bricap T30	/152mm (Inlet/Outlet)	845mm	Sanitary Flange		

Inlet /Outlet Connections

C Female Luer Lok™ Inlet



P Male Luer Lok™ Outlet



K 14 mm (9/16")
Sanitary Flange

T 19 mm (3/4")
Sanitary Flange



F 31 mm (1 1/4")
Sanitary Flange

S 38 mm (1 1/2")
Sanitary Flange



Y 9.6 mm (3/8")
Single Stepped Hose Barb

H 13 mm (1/2")
Single Stepped Hose Barb

V 14 mm (9/16")
Single Stepped Hose Barb

X 16 mm (5/8")
Single Stepped Hose Barb

M 19 mm (3/4")
Single Stepped Hose Barb

D 25 mm (1")
Single Stepped Hose Barb



B 6-13 mm (1/4"-1/2")
Multiple Stepped Hose barb

E 6-9 mm (1/4"-3/8")
Multiple Stepped Hose barb



S-S 38 mm (1 1/2")
Sanitary Flange
(Only for T-Type Capsule)



Cartridge Filters

Nominal Length	Adaptor	Seal Material
5"	226/Fin	Silicone
10"	226/Flat	EPDM
20"	222/Fin	Viton
30"	222/Flat	TEV
40"	Double Open End	



Catalog

Clarification Filter Series

Roheap CSD Filter High Dirt Holding Capacity	P 10
Greclary CHV Filter High Dirt Holding Capacity and Retention Efficiency	P 13
Excesal CHC High Dirt Holding Capacity	P 15
Excesal CHT High Dirt Holding	P 17
Excesal CHE High Retention Efficiency	P 18

Pre-filtration and Redundant Filter Series

Purcise PAF Hydrophilic Sterile-Grade Filter with High Flow Rates	P 20
Purcise PLE Filter Hydrophilic Filter with Low Extractables	P 21
Corevital PME Hydrophilic Sterile-Grade Filter with Low Protein Binding	P 23
Corevital PMD Low Protein Binding and Hydrophilic Filter	P 29

Sterile-Grade Filter Series

Purcise SLE Filter Hydrophilic Sterile-Grade Filter with Low Extractables	P 22
Purcise SAF Filter Hydrophilic Sterile-Grade Filter with High Flow Rates	P 24
Purcise SPS Filter Hydrophilic Sterile-Grade Steam-in-Place (SIP) Filter	P 25
Corevital SMD Filter High Flow Rate, Low Protein Binding Hydrophilic Sterile Filter	P 28

Mycoplasma Removal Filter Series

Purcise MLE Filter Hydrophilic Filter with Low Extractables	P 26
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Gas Filtration Filter Series

Aegivast ACE Filter Hydrophobic Filter with High Retention Rates	P 31
Safesure AFM Filter Hydrophobic Filter with High Retention Rates	P 32
Corevital APB Filter Gamma-resistant Hydrophobic Filter	P 33

Other Products

TFF Cassettes /Stainless Holder /System	P 36
Integrity Test Instrument	P 38
Clean Steam Bag	P 39
Vaccum Filter	P 39
Filter Housing	P 40

Clarification Filter Series

Roheap CSD Filter High Dirt Holding Capacity



Features

- Filter media composed of lignocellulose and inorganic filter aids
- Gradient filter structure provides high dirt holding capacity and retention efficiency
- Low initial pressure difference and long service life
- Positive Zeta charge results in removal efficiency for host DNA, HCP, etc.

Applications

- Clarification of fermentation broth/cell cultures
- Filtration of blood and blood products
- Filtration of enzyme preparation
- Filtration of colloids/viscous liquids

Filter Material

Filter Media	Cellulose diatomite filter aid and ionic wet-strength resin
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Operating Conditions

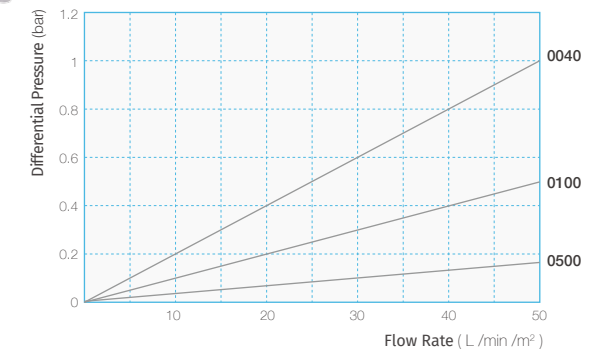
	Depth Filter	CDFC Capsule Filter
Max. Temperature	80°C	40°C
Max. Differential Pressure	0.24 MPa	0.3 MPa /40°C
Rinse	Flushing volume 50L/m ² , Flow Rate 10L/min/m ²	

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

EFA

Filter Forma	Single Layer	Double Layers
CDFC	23cm ²	23cm ²
L05	205cm ²	150cm ²
L10	450cm ²	250cm ²
CSCA	0.2m ²	0.15m ²
CSCB	1.16m ²	1m ²
CSD 12" Per Layer	0.11m ²	0.11m ²
CSD 16" Per Layer	0.23m ²	0.23m ²



Chemical Compatibility

Chemicals	Concentration	@20°C	@80°C
NaOH	2%	G	P
HCl	5%	G	P
HNO ₃	5%	G	P
H ₂ SO ₄	10%	G	P
Acetic acid	38%	G	G
Citric acid	10%	G	G
Peracetic acid	0.1%	G	G
Butanol	80%	G	G
Ethanol	80%	G	G

G = Recommended ; P = Not recommended

Leachables


B Series	Ion	ppb	Ion	ppb	D Series	Ion	ppb	Ion	ppb
	Mg	0.73	Ni	-		Mg	0.755	Ni	-
	Al	5.33	Cu	0.162		Al	3.86	Cu	-
	Ca	5.65	As	0.987		Ca	1.48	As	-
	Cr	0.071	Pb	-		Cr	0.082	Pb	-
	Fe	13.1				Fe	3.28		

Explanation: - means < 0.05ppb


Roheap Depth Part Number Configurator

Capsule Filter Example : CDFCSCSD0004PBP

Roheap CDFC Capsule Filter

C D F C	<input type="checkbox"/>	C S D	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	P
Filter Format	Number of Layers	Filter Media	Removal Ratings	Control Grade	Market
	S Single-Layer D Double-Layer		Single-Layer H001 H002 0004 0.04-0.2µm 0020 0.2-0.4µm 0040 0.4-0.6µm 0060 0.6-0.8µm 0100 0.8-1.5µm 0150 1.5-3.0µm 0300 3.0-6.0µm 0400 4.0-9.0µm 0500 5.0-12.0µm 0600 6.0-15.0µm 0700 7.0-18.0µm 0800 8.0-20.0µm Double-Layer H0HP 0.02-0.2µm 0102 0.04-0.4µm 0106 0.04-0.8µm 0140 0.04-9.0µm 4070 4.0-18.0µm	PB High removal rating PC High dirt holding capacity	P Pharmaceutical

Claricap Depth Capsule

C S C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	P
Filter Format	Size	Number of Layers	Removal Ratings	Control Grade	Market
	A 8 inch B 16 inch	S Single-Layer D Double-Layer	Single-Layer H001 H002 0004 0.04-0.2µm 0020 0.2-0.4µm 0040 0.4-0.6µm 0060 0.6-0.8µm 0100 0.8-1.5µm 0150 1.5-3.0µm 0300 3.0-6.0µm 0400 4.0-9.0µm 0500 5.0-12.0µm 0600 6.0-15.0µm 0700 7.0-18.0µm 0800 8.0-20.0µm Double-Layer H0HP 0.02-0.2µm 0102 0.04-0.4µm 0106 0.04-0.8µm 0140 0.04-9.0µm 4070 4.0-18.0µm	PB High removal rating PC High dirt holding capacity	P Pharmaceutical

Bricap L05/L10 Capsule Filter

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	C S D	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	P
Filter Format	End Cap	Filter Media	Number of Layers	Removal Ratings	Control Grade	Market
L05 5 inch L10 10 inch	SS 1 1/2" (38 mm) Sanitary Flange		S Single-Layer D Double-Layer	Single-Layer H001 H002 0004 0.04-0.2µm 0020 0.2-0.4µm 0040 0.4-0.6µm 0060 0.6-0.8µm 0100 0.8-1.5µm 0150 1.5-3.0µm 0300 3.0-6.0µm 0400 4.0-9.0µm 0500 5.0-12.0µm 0600 6.0-15.0µm 0700 7.0-18.0µm 0800 8.0-20.0µm Double-Layer H0HP 0.02-0.2µm 0102 0.04-0.4µm 0106 0.04-0.8µm 0140 0.04-9.0µm 4070 4.0-18.0µm	PB High removal rating PC High dirt holding capacity	P Pharmaceutical

CSD Depth Filter

C S D	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	D O E	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P
Filter Format	Media Layers	Removal Ratings	Control Grade	End Cap	Diameter	Number of Layers	O-ring Material	Market	
CSD	S Single-Layer D Double-Layer	Single-Layer H001 H002 0004 0.04-0.2µm 0020 0.2-0.4µm 0040 0.4-0.6µm 0060 0.6-0.8µm 0100 0.8-1.5µm 0150 1.5-3.0µm 0300 3.0-6.0µm 0400 4.0-9.0µm 0500 5.0-12.0µm 0600 6.0-15.0µm 0700 7.0-18.0µm 0800 8.0-20.0µm Double-Layer H0HP 0.02-0.2µm 0102 0.04-0.4µm 0106 0.04-0.8µm 0140 0.04-9.0µm 4070 4.0-18.0µm	PB High removal rating PC High dirt holding capacity	12 12 inch 16 16 inch	A 1 Layer W 2 Layers Y 3 Layers G 4 Layers B 5 Layers N 9 Layers X 10 Layers Q 11 Layers (only for single-layer media) T 12 Layers (only for single-layer media) F 15 Layers (only for single-layer media) D 16 Layers (only for single-layer media)	S Silicone E EPDM V Fluoroelastomer T FEP/PFA encapsulated O-rings F Fluorinated Polymer	P Pharmaceutical		

Clarification Filter Series

Greclary CHV Filter

High Dirt Holding Capacity and Retention Efficiency

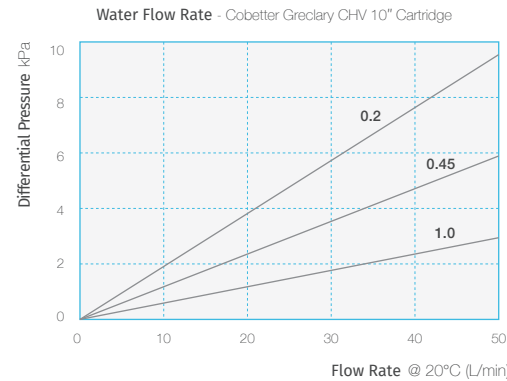


Features

- Composed of super-fine glass fiber media
- Rigid fiber material which is suitable for colloid filtration
- High dirt holding capacity and retention efficiency
- Low initial pressure, high flow rates and long service life

Applications

- Pre-filtration of cell culture medium
- Clarification of fermentation broth/cell cultures
- Filtration blood products/serums
- Filtration of colloids/viscous liquids



Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

Filter Type	Bricap C/L/T	Cartridge
Membrane	Glass Microfiber (GF)	Glass Microfiber (GF)
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	—
O-ring	—	Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	—
Removal Ratings	0.2/0.45/0.8/1.0/3.0/5.0µm	—

Effective Filtration Area

Bricap C	Bricap L	Bricap T	Cartridge
C01: 80cm ²	L03: 0.07m ²	T10: 0.24m ²	5" : 0.12m ²
C02: 200cm ²	L05: 0.12m ²	T20: 0.48m ²	10" : 0.24m ²
C03: 300cm ²	L10: 0.24m ²	T30: 0.72m ²	20" : 0.48m ²
	L20: 0.48m ²		30" : 0.72m ²
	L30: 0.72m ²		40" : 0.96m ²

Sterilization Capability

- Bricap C, Bricap L, Bricap T Series
- Filter Cartridges: Autoclave & SIP

Greclary Series Part Number Configurator (GF)

Capsule Filter Example : C01TTCHV02A1P

Bricap C Small Capsule Filter Series

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet	Membrane Type	Sterilization	Quantity/Package	Market
C01 Bricap C01 C02 Bricap C02 C03 Bricap C03 D01 Bricap D01	K 14 mm (9/16") Sanitary Flange T 19 mm (3/4") Sanitary Flange F 31 mm (1 1/4") Sanitary Flange A 6-13 mm (1/4"-1/2") Multiple Stepped Hose Barb with Filling Bell (liquids only) B 6-13 mm (1/4"-1/2") Multiple Stepped Hose Barb L 3.2mm(1/8") Hose Barb Y 9.6mm(3/8") Hose Barb H 13mm(1/2") Hose Barb V 14 mm (9/16") Hose Barb		CHV02 CHV 0.2µm CHV04 CHV 0.45µm CHV08 CHV 0.8µm CHV10 CHV 1.0µm CHV30 CHV 3.0µm CHV50 CHV 5.0µm	A Autoclavable	1 1 / pkg	P

Bricap Inline Capsule Filters Series

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
L03 Bricap L03 L05 Bricap L05 L10 Bricap L10 L20 Bricap L20 L30 Bricap L30	S 1 1/2" (38 mm) Sanitary Flange T 3/4" (19 mm) Sanitary Flange K 9/16" (14 mm) Sanitary Flange D 1" (25 mm) Hose Barb M 3/4" (19 mm) Hose Barb X 5/8" (16 mm) Hose Barb V 9/16" (14 mm) Hose Barb H 1/2" (13 mm) Hose Barb			A Autoclavable	1 1 / pkg	P

Bricap T Capsule

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
T10 Bricap T10 T20 Bricap T20 T30 Bricap T30	S 1 1/2" (38 mm) Sanitary Flange T 3/4" (19 mm) Sanitary Flange K 9/16" (14 mm) Sanitary Flange N without Gauge Port			A Autoclavable	1 1 / pkg	P

Cartridge Filter Example : ACHV02050S1P

Cartridge Filters

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cartridge Type	Media	Length	Code	O-ring Material	Quantity/Package	Market
A Standard Cartridge Pharmaceutical	CHV02 CHV 0.2µm CHV04 CHV 0.45µm CHV08 CHV 0.8µm CHV10 CHV 1.0µm CHV30 CHV 3.0µm CHV50 CHV 5.0µm	05 5 inch 10 10 inch 20 20 inch 30 30 inch 40 40 inch	0 DOE 2 226 / Flat 7 226 / Fin 3 222 / Flat 8 222 / Fin	E EPDM V Fluoroelastomer S Silicone P FEP/PFA encap-sulated O-rings	1 1 / pkg	P

Clarification Filter Series

Excesal CHT High Dirt Holding



Features

- Composed of multi-layer Polypropylene media
- High retention efficiency
- All raw materials meet NSF requirements No adhesives or surfactants

Applications

- Pre-filtration of cell culture medium
- Clarification of fermentation broth/cell cultures
- Pre-filtration blood products/serums
- Pre-filtration of colloids/viscous liquids

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

Filter Type	Bricap C/L/T	Cartridge
Membrane	Polypropylene (PP)	Polypropylene (PP)
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	—
O-ring	—	Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	—
Removal Ratings	0.5/0.6/0.8/1.5/5.0/10/20/40/70/90µm	

Effective Filtration Area

Bricap C	Bricap L	Bricap T	Cartridge
C01: 70cm ²	L02: 375cm ²	T10: 0.18m ²	5" : 0.09m ²
C02: 160cm ²	L03: 530cm ²	T20: 0.36m ²	10" : 0.18m ²
C03: 260cm ²	L05: 0.09m ²	T30: 0.54m ²	20" : 0.36m ²
	L10: 0.18m ²		30" : 0.54m ²
	L20: 0.36m ²		40" : 0.72m ²
	L30: 0.54m ²		

Sterilization Capability

- Bricap C, Bricap L, Bricap T Series
- Filter Cartridges: Autoclave & SIP

Clarification Filter Series

Excesal CHE High Retention Efficiency



Features

- Composed of double-layer Polypropylene media
- Inner layer uses nanofibers to provide high retention efficiency

Applications

- Pre-filtration of cell culture medium
- Clarification of fermentation broth/cell cultures
- Pre-filtration of blood products/serums
- Pre-filtration of colloids/viscous liquids

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Effective Filtration Area

BriScale A50	Bricap C	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01: 140cm ²	L03: 0.1m ²	T10: 0.36m ²	5" : 0.18m ²
	C02: 320cm ²	L05: 0.18m ²	T20: 0.72m ²	10" : 0.36m ²
	C03: 500cm ²	L10: 0.36m ²	T30: 1.08m ²	20" : 0.72m ²
		L20: 0.72m ²		30" : 1.08m ²
		L30: 1.08m ²		40" : 1.44m ²

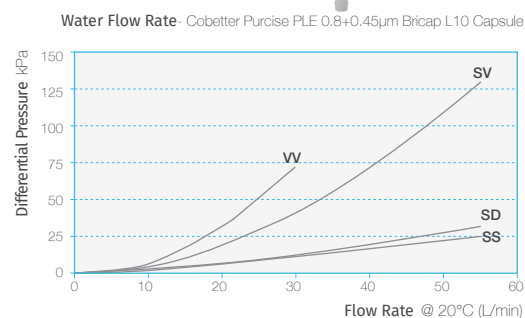
Sterilization Capability

- BriScale Disc, Bricap C, Bricap L, Bricap T Series and Filter Cartridges : Autoclave

Pre-filtration and Redundant Filter Series

Purcise PLE Filter

Hydrophilic Filter with Low Extractables



Features

- Composed of double-layer hydrophilic Polyestersulfone media
- Efficient bacteria and particulate retention
- Extensive chemical compatibility (pH 1-14)
- Low extractables

Applications

- Pre-filtration of cell culture medium
- Buffer filtration
- Pre-column/ ultra-filtration protection

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Material of Construction

Filter Type	Bricap C/D/L/T	Cartridge
Membrane	Hydrophilic Polyethersulfone (PES)	
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	
O-ring		Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	
Removal Ratings	0.8+0.45 µm / 1.0+0.65 µm / 1.5+0.8 µm	

Effective Filtration Area

BriScale A50	Bricap C/D	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01 : 180cm ²	L02: 0.12m ²	T10: 0.55m ²	5" : 0.28m ²
	C02 : 420cm ²	L03: 0.16m ²	T20: 1.1m ²	10" : 0.55m ²
	C03 : 660cm ²	L05: 0.28m ²	T30: 1.65m ²	20" : 1.1m ²
	D01 : 350cm ²	L10: 0.55m ²		30" : 1.65m ²
		L20: 1.1m ²		40" : 2.2m ²
		L30: 1.65m ²		

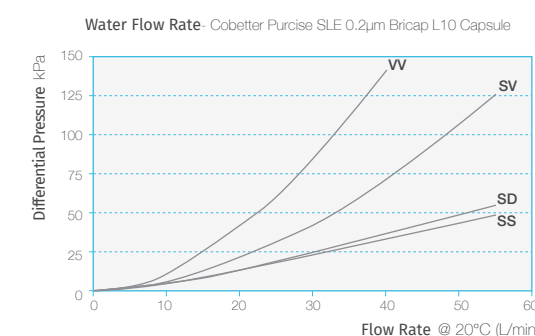
Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricap C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Atoclave package	25 cycle,30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min

Sterile-Grade Filter Series

Purcise SLE Filter

Hydrophilic Sterile-Grade Filter with Low Extractables



Features

- Efficient bacteria and particulate retention
- Extensive chemical compatibility (pH 1-14)
- Low extractables and low protein binding

Applications

- Sterilize filtration of cell culture medium
- Buffer filtration
- Pre-column/ultra-filtration protection
- Filtration of intermediate products/stock solutions
- Filtration of blood products/serums
- Sterile filtration of terminal products
- Filtration of colloids/viscous liquids

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

Filter Type	Bricap C/D/L/T	Cartridge
Membrane	Hydrophilic Polyethersulfone (PES)	
Support	Polypropylene (PP)	Polypropylene (PP)
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	
O-ring		Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	
Removal Ratings	0.2 µm / 0.45+0.2 µm / 0.65+0.2 µm 0.8+0.2 µm / 1.2+0.2 µm	

Effective Filtration Area

BriScale A50	Bricap C/D	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01 : 180cm ²	L02: 0.12m ²	T10: 0.55m ²	5" : 0.28m ²
	C02 : 420cm ²	L03: 0.16m ²	T20: 1.1m ²	10" : 0.55m ²
	C03 : 660cm ²	L05: 0.28m ²	T30: 1.65m ²	20" : 1.1m ²
	D01 : 350cm ²	L10: 0.55m ²		30" : 1.65m ²
		L20: 1.1m ²		40" : 2.2m ²
		L30: 1.65m ²		

Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricap C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Atoclave package	25 cycle,30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min

Pre-filtration and Redundant Filter Series

Corevital PME High Dirt Holding Capacity



Features

- Composed of double-layer Polyestersulfone media
- Extensive chemical compacity
- High dirt holding capacity

Applications

- Sterilize filtration of cell culture medium
- Buffer filtration
- Pre-column/ ultra-filtration protection

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

Filter Type	Bricap C/L/T	Cartridge
Membrane	Hydrophilic Polyethersulfone (PES)	
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	—
O-ring	—	Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	—
Removal Ratings	1.0+0.2µm	

Effective Filtration Area

BriScale A50	Bricap C/D	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01 : 180cm ² C02 : 420cm ² C03 : 660cm ² D01 : 350cm ²	L02 : 0.12m ² L03 : 0.16m ² L05 : 0.28m ² L10 : 0.55m ² L20 : 1.1m ² L30 : 1.65m ²	T10 : 0.55m ² T20 : 1.1m ² T30 : 1.65m ²	5" : 0.28m ² 10" : 0.55m ² 20" : 1.1m ² 30" : 1.65m ² 40" : 2.2m ²

Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricale C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Atoclave package	25 cycle,30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min

Sterile-Grade Filter Series

Purcise SAF Filter Hydrophilic Sterile-Grade Filter with High Flow Rates



Features

- Efficient bacteria and particulate retention
- Extensive chemical compatibility (pH 1-14)
- High flow rates

Applications

- Sterilize filtration of cell culture medium
- Buffer filtration
- Pre-column/ ultra-filtration protection
- Filtration of intermediate products/stock solutions
- Filtration of blood products/serums
- Sterile filtration of terminal products

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

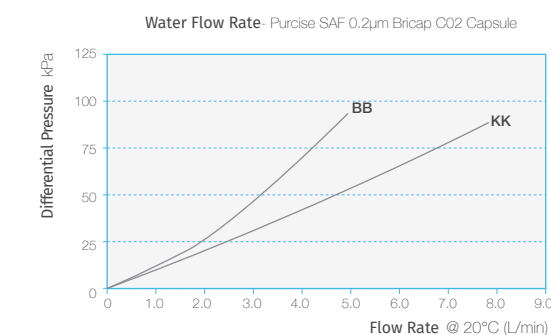
Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Effective Filtration Area

BriScale A50	Bricap C/D	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01 : 180cm ² C02 : 420cm ² C03 : 660cm ² D01 : 350cm ²	L02: 0.12m ² L03: 0.16m ² L05: 0.28m ² L10: 0.55m ² L20: 1.1m ² L30: 1.65m ²	T10: 0.55m ² T20: 1.1m ² T30: 1.65m ²	5" : 0.28m ² 10" : 0.55m ² 20" : 1.1m ² 30" : 1.65m ² 40" : 2.2m ²

Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricale C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Atoclave package	25 cycle,30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min



Materials of Construction

Filter Type	Bricap C/D/L/T	Cartridge
Membrane	Hydrophilic Polyethersulfone (PES)	
Support	Polyester (PET)	Polypropylene (PP)
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	Polypropylene (PP)
O-ring	—	Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	—
Removal Ratings	0.45+0.2 µm / 0.65+0.2 µm	

Sterile-Grade Filter Series

Purcise SPS Filter

Hydrophilic Sterile-Grade Steam-in-Place (SIP) Filter

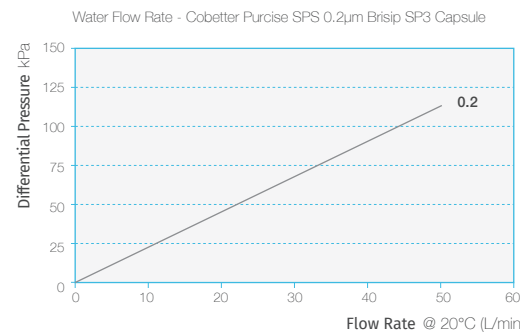


Features

- Efficient bacteria and particulate retention
- Extensive chemical compatibility (pH 1-14)
- Low extractables
- SIP

Applications

- Sterilize filtration of cell culture medium
- Buffer filtration
- Pre-column/ultra-filtration protection
- Filtration of intermediate products/stock solutions
- Filtration of blood products/serums
- Sterile filtration of terminal products
- Filtration of colloids/viscous liquids



Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Sterilization Capability

- **Brisip SP3** : Autoclave is optional (131°C, 30min, 10 times), SIP (135°C, 60 min, 8 times)

Purcise SPS (Liquid) Series Part Number Configurator (PES)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet Outlet	Membrane Type	Vent Valve / Drain Valve	Quantity/Package	Market
SP3 Brisip® SP3	S 1 1/2" (38 mm) Sanitary Flange	SPSN SPS 0.2µm	P 6 mm Hose Barb X Vent Stäubli Connector Drain 6 mm Hose Barb T Stäubli Connector	1 1 / pkg	P

Materials of Construction

Filter Type	Brisip SP3
Membrane	Hydrophilic Polyethersulfone (PES)
Support	Polypropylene (PP)
Core/Cage/End Cap	Polypropylene (PP)
Capsule Shell	Polyetherimide (PEI)
Capsule Vent O-ring	Silicone
Removal Ratings	0.2 µm
Filtration Area	0.15 m ²

Mycoplasma Removal Filter Series

Purcise MLE Filter

Hydrophilic Filter with Low Extractables



Features

- Composed of a double-layer hydrophilic Polyestersulfone (PES) media
- Efficient mycoplasma, bacteria and particulate retention
- Extensive chemical compatibility (pH 1-14)
- Low extractables

Applications

- Sterilize filtration of cell culture medium
- Pre-column/ultra-filtration protection
- Filtration of intermediate products/stock solutions
- Filtration of blood products/serums
- Sterile filtration of terminal products

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Effective Filtration Area

BriScale A50	Bricap C/D	Bricap L	Bricap T	Cartridge
A50: 20cm ²	C01 : 180cm ² C02 : 420cm ² C03 : 660cm ² D01 : 350cm ²	L02: 0.12m ² L03: 0.16m ² L05: 0.28m ² L10: 0.55m ² L20: 1.1m ² L30: 1.65m ²	T10: 0.55m ² T20: 1.1m ² T30: 1.65m ²	5" : 0.28m ² 10" : 0.55m ² 20" : 1.1m ² 30" : 1.65m ² 40" : 2.2m ²

Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricap C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Autoclave package	25 cycle, 30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min

Materials of Construction

Filter Type	Bricap C/D/L/T	Cartridge
Membrane	Hydrophilic Polyethersulfone (PES)	
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	—
O-ring	—	Silicone/EPDM/Viton/PTFE
Capsule Vent O-ring	Silicone	—
Removal Ratings	0.2+0.1 µm / 0.45+ 0.1 µm	

Gas Filtration Filter Series

Aegivast ACE Filter

Hydrophobic Filter with High Retention Rates



Features

- High retention rates
- Low pressure differential
- Efficient mycoplasma, bacteria and particulate retention

Applications

- Vent Filters for fermentors, tanks, etc.
- Sterile-grade filtration for compressed air, oxygen, nitrogen, etc.

Operating Conditions

Max Operating Temperature	50°C
Max Differential Pressure	0.24 MPa / 25°C
	0.42 MPa / 25°C (only for V50D)

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

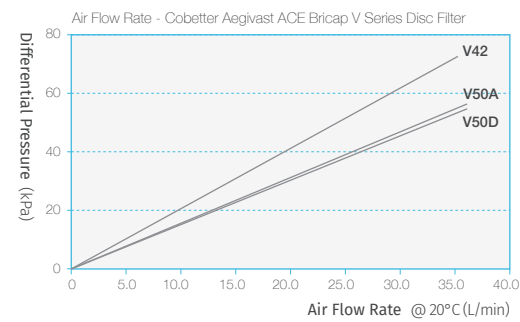
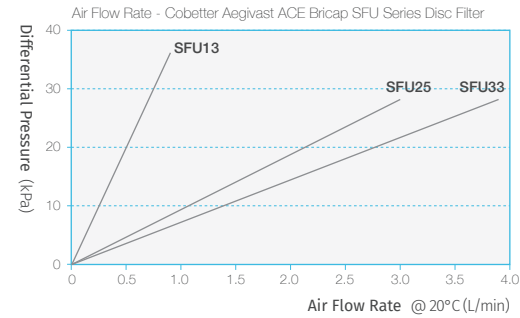
Type	Bricap SFU13 / SFU25 / SFU33	Bricap V42 / V50A / V50D
Membrane	Hydrophobic polytetrafluoroethylene(PTFE)	Hydrophobic polytetrafluoroethylene(PTFE)
Support layer	Polyester (PET)	Polyester or Polypropylene(PET/PP)
Core/Cage /End cap	Polypropylene(PP)	Polypropylene(PP)
Capsule shell	0.2 µm	

Effective Filtration Area

Bricap SFU	Bricap V
SFU13 : 0.72cm ²	V42 : 13.8cm ²
SFU25 : 3.4cm ²	V50A : 20cm ²
SFU33 : 4.5cm ²	V50D : 20cm ²

Aegivast ACE Series Part Number Configurator (PTFE)

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Capsule Formats	Inlet Outlet	Membrane Type	Sterilization	Quantity/Package	Market	
U13 Bricap® SFU13 0.72cm ²	CP Female Luer Lok™ Inlet and Male Luer Lok™ Outlet (Bricap SFU Series only)	ACEB ACE 0.2µm	A Autoclavable (Only Bricap V)	1 1 / pkg	P	
U25 Bricap® SFU25 3.4cm ²	EE 1/4"-3/8" (6-9 mm) Stepped Hose Barb Inlet and Outlet (Bricap V42 only)		G Gamma Compatible	2 2 / pkg		
U33 Bricap® SFU33 4.5cm ²	BB 1/4"-1/2" (6-13 mm) Stepped Hose Barb Inlet and Outlet (Bricap V50A & V50D only)		S Sterile	5 5 / pkg ((Only V42)		
V42 Bricap® V42 13.8cm ²						
V5A Bricap® V50A 20cm ²						
V5D Bricap® V50D 20cm ²						



Sterilization Capability

- Bricap SFU13 / SFU25 / SFU33 Disc : Autoclave, Gamma Irradiation or Pre-sterilization optional
- Bricap V42/V50A/V50D Disc: Autoclave (130°C, 30min, 20 times), Gamma irradiation or Pre-sterilization

Gas Filtration Filter Series

Safesure AFM Filter

Hydrophobic Filter with High Retention Rates



Features

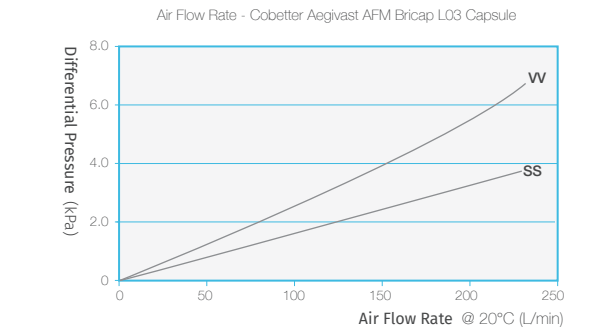
- Inherently hydrophobic membrane
- High retention rates
- Low pressure differential
- Efficient mycoplasma, bacteria and particulate retention

Applications

- Vent Filters for fermentors, tanks, etc.
- Sterile-grade filtration for air, oxygen, nitrogen, etc.

Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C
	0.1 MPa / 80°C



Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Materials of Construction

Filter Type	Bricap L/T	Brisip SP3	Cartridge
Membrane	Hydrophobic Polytetrafluoroethylene (PTFE)		
Support	Polypropylene (PP)	Polypropylene (PP)	Polypropylene (PP)
Core/Cage/End Cap	Polypropylene (PP)	Polypropylene (PP)	Polypropylene (PP)
Capsule Shell	Polypropylene (PP)	PEI polyetherimide (PEI)	---
O-ring	---	Silicone	Silicone
Capsule Vent O-ring	Silicone	Silicone	---
Removal Ratings	0.2 µm		

Effective Filtration Area

Bricap C	Bricap L	Bricap T	Brisip SP3	Cartridge
C01 : 200cm ²	L02 : 0.14m ²	T10 : 0.68m ²	0.2m ²	5" : 0.34m ²
C02 : 480cm ²	L03 : 0.2m ²	T20 : 1.36m ²		10" : 0.68m ²
C03 : 750cm ²	L05 : 0.34m ²	T30 : 2.04m ²		20" : 1.36m ²
	L10 : 0.68m ²			30" : 2.04m ²
	L20 : 1.36m ²			40" : 2.72m ²
	L30 : 2.04m ²			

Sterilization Capability

- Bricap L, Bricap T : Autoclave
- Brisip SP3, Filter Cartridge : Autoclave & SIP

Aegivast (Gas) Series Part Number Configurator (PTFE)

Capsule Filter Example : L03TTAFMBA1P

Bricap Inline Capsule Filters Series

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Capsule Formats	Inlet	Outlet	Membrane Type	Sterilization	Quantity/Package	Market
L02 Bricap L02	S 1 1/2" (38 mm) Sanitary Flange		AFMB AFM 0.2µm	A Autoclavable	1 1 / pkg	P
L03 Bricap L03	T 3/4" (19 mm) Sanitary Flange					
L05 Bricap L05	K 9/16" (14 mm) Sanitary Flange					
L10 Bricap L10	D 1" (25 mm) Hose Barb					
L20 Bricap L20	M 3/4" (19 mm) Hose Barb					
L30 Bricap L30	X 5/8" (16 mm) Hose Barb					
	V 9/16" (14 mm) Hose Barb					
	H 1/2" (13 mm) Hose Barb					

Bricap T Capsule

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
T10 Bricap T10	S 1 1/2" (38 mm) Sanitary Flange			A Autoclavable	1 1 / pkg	P
T20 Bricap T20	T 3/4" (19 mm) Sanitary Flange					
T30 Bricap T30	K 9/16" (14 mm) Sanitary Flange					
	N without Gauge Port					

Bricap SFU/V Disc Gas Filters

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
U13 Bricap SFU13	CP Female Luer Lok™ Inlet and Male Luer Lok™ Outlet (Bricap SFU Series only)			A Autoclavable	1 1 / pkg	P
U25 Bricap SFU25						
U33 Bricap SFU33	EE 1/4"-3/8" (6-9 mm) Stepped Hose Barb Inlet and Outlet (Bricap V42 only)					
V42 Bricap V42						
V5A Bricap V50A	BB 1/4"-1/2" (6-13 mm) Stepped Hose Barb Inlet and Outlet (Bricap V50A & V50D only)					
V5D Bricap V50D						

Brisip Steam-in-Place Capsule Filters

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Vent/ Drain	Quantity/Package	Market
SP3 BrisipSP3	S 1 1/2" (38 mm) Sanitary Flange			P 6 mm Hose Barb	1 1 / pkg	P
				X Vent Stäubli Connector Drain 6 mm Hose Barb		
				T Stäubli Connector		

Cartridge Filter Example : AAFMB050S1P

Cartridge Filters

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cartridge Type	Media	Length	Code	O-ring Material	Quantity/Package	Market
A Standard Cartridge Pharmaceutical	AFMB AFM 0.2µm	05 5 inch	0 DOE	E EPDM	1 1 / pkg	P
		10 10 inch	2 226 / Flat	V Fluoroelastomer		
		20 20 inch	7 226 / Fin	S Silicone		
		30 30 inch	3 222 / Flat	P FEP/PFA encap-sulated O-rings		
		40 40 inch	8 222 / Fin			

Gas Filtration Filter Series

Corevital APB Filter Gamma-resistant Hydrophobic Filter

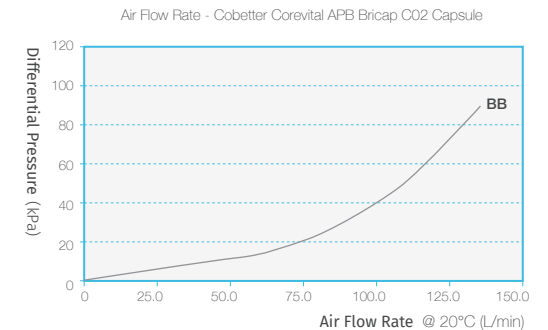


Features

- High retention efficiency
- Low differential pressure
- Efficient bacteria and particulate retention
- Gamma irradiation

Applications

- Vent Filters for fermentors, tanks, etc.
- Sterile-grade filtration for compressed air, oxygen, nitrogen etc.



Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	0.55 MPa / 25°C 0.1 MPa / 80°C

Biological Safety

Endotoxins	<0.25 EU/ml
Bio-compatibility	Meet the requirement of USP<87> In Vitro Cytotoxicity Test; Meet the criteria of the USP<88> Biological Reactivity Test for Class VI-121°C plastics

Effective Filtration Area

Bricap SFU/V	Bricap C/D	Bricap L	Bricap T	Cartridge
SFU13 : 0.72cm ²	C02 : 640cm ²	L03 : 0.25m ²	T10 : 0.75m ²	5" : 0.375m ²
SFU25 : 3.4cm ²	C03 : 1000cm ²	L05 : 0.375m ²	T20 : 1.5m ²	10" : 0.75m ²
SFU33 : 4.5cm ²	D01 : 450 cm ²	L10 : 0.75m ²	T30 : 2.25m ²	20" : 1.5m ²
V42 : 13.8cm ²		L20 : 1.5m ²		30" : 2.25m ²
V50A : 20cm ²		L30 : 2.25m ²		40" : 3.0m ²
V50D : 20cm ²				

Sterilization Capability

Sterilization Method/Filter Format	BriScale Disc, Bricap C/ L / T	Bricap D	Cartridge
Gamma-irradiation	25-45Kgy	/	/
Autoclave (126°C) applies only to Gamma-compatible package	5 cycle, 30min	/	/
Autoclave (130°C) applies only to Atoclave package	25 cycle,30min	25 cycle, 30min	50 cycle, 30min
SIP (135°C) applies only to cartridge	/	/	50 cycle, 30min

Corevital (Gas) Series Part Number Configurator (PVDF)

Capsule Filter Example :C01APBBSA1P | Cartridge Filter Example: AAPBB050S1P

Bricap C Small Capsule Filter Series

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet	Membrane Type	Sterilization	Quantity/Package	Market
C02 Bricap C02 C03 Bricap C03 D01 Bricap D01	K 14 mm (9/16") Sanitary Flange T 19 mm (3/4") Sanitary Flange F 31 mm (1 1/4") Sanitary Flange A 6-13 mm (1/4"-1/2") Multiple Stepped Hose Barb with Filling Bell (liquids only) B 6-13 mm (1/4"-1/2") Multiple Stepped Hose Barb L 3.2mm(1/8") Hose Barb Y 9.6mm(3/8") Hose Barb H 13mm(1/2") Hose Barb V 14 mm (9/16") Hose Barb		APBB APB 0.2µm	A Autoclavable G Gamma Compatible S Sterile	1 1 / pkg	P

Bricap Inline Capsule Filters Series

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
L02 Bricap L02 L03 Bricap L03 L05 Bricap L05 L10 Bricap L10 L20 Bricap L20 L30 Bricap L30	S 1 1/2" (38 mm) Sanitary Flange T 3/4" (19 mm) Sanitary Flange K 9/16" (14 mm) Sanitary Flange D 1" (25 mm) Hose Barb M 3/4" (19 mm) Hose Barb X 5/8" (16 mm) Hose Barb V 9/16" (14 mm) Hose Barb H 1/2" (13 mm) Hose Barb			A Autoclavable G Gamma Compatible S Sterile	1 1 / pkg	P

Bricap T Capsule

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
T10 Bricap T10 T20 Bricap T20 T30 Bricap T30	S 1 1/2" (38 mm) Sanitary Flange T 3/4" (19 mm) Sanitary Flange K 9/16" (14 mm) Sanitary Flange N without Gauge Port			A Autoclavable G Gamma Compatible S Sterile	1 1 / pkg	P

BriScale Disc

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Capsule Formats	Inlet	Outlet		Sterilization	Quantity/Package	Market
A50 U13 Bricap® SFU13 0.72cm² U25 Bricap® SFU25 3.4cm² U33 Bricap® SFU33 4.5cm² V42 Bricap® V42 13.8cm² V5A Bricap® V50A 20cm² V5D Bricap® V50D 20cm²				A Autoclavable G Gamma Compatible S Sterile	1 1 / pkg 2 2 / pkg	P

Cartridge Filter Example : AAPBB050S1P

Cartridge Filters

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cartridge Type	Media	Length	Code	O-ring Material	Quantity/Package	Market
A Standard Cartridge Pharmaceutical	APBB APB 0.2µm	05 5 inch 10 10 inch 20 20 inch 30 30 inch 40 40 inch	0 DOE 2 226 / Flat 7 226 / Fin 3 222 / Flat 8 222 / Fin	E EPDM V Fluoroelastomer S Silicone P FEP/PFA encap-sulated O-rings	1 1 / pkg	P

TFF Cassettes

Consieve UET Cassette membranes have a high retention efficiency and are easy to clean/install. Available in a wide range of configurations.

Due to its design, it is easy to amplify/increase based on specific process requirements. The inner gaskets make installation/cleaning/storage/replacement quick and easy. Low working volume and high efficiency ensure product yields.

Applications

- Biomacromolecules
- Dialysis
- Desalting
- Buffer replacement
- Analysis purification
- Endotoxin removal
- Macromolecular removal

Fields

- Blood products
- Vaccines
- Recombinant proteins
- Monoterpenes
- Plasmids
- Chemicals
- Chinese medicine injections



Information

Materials	PES
Material Features	Low protein binding and high product yield superior flow rates
PH Range	Broad chemical compatibility: pH 1-14
NMWL	5/8/10/30/50/100KD
Operating Temperature Range	4-50°C
Max. Operating Pressure	6.0 bar @ 25°C
Diffusion Flow (Air)	0.11 m² ≤12ml/min@1.0bar, 0.46 m² ≤50ml/min@1.0bar
Pressure Drop	0.3-0.6 bar (Circulation Flow Rate 6L/min/m²)

Types	Available Size	Applications	Throughput	Notes
Lab LA	100 cm² 0.11 m²	R&D R&D, Pilot Production	200-2000ml 5-50L	Membrane Cassette ;
Flow FL	0.46 m² 2.33 m²	Pilot Production, Large Scale Production Pilot Production, Large Scale Production	>50L >50L	Stainless Steel Holder required

TFF Cassettes Example : UFELA0005001P

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Application	Material of membrane	Format	NMWL	Effective Filtration Area	Industry
UF Ultrafiltration	E PES	LA FL	0005 5 KD 0008 8 KD 0010 10 KD 0030 30 KD 0050 50 KD 0100 100 KD	001 100 cm² 010 0.11 m² 050 0.46 m² 250 2.33 m²	P

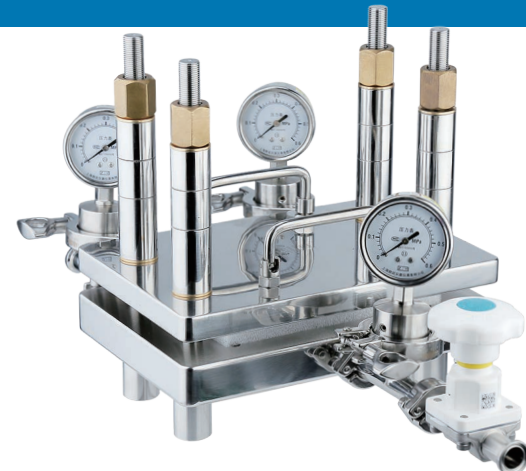
H-CFH TFF Stainless Steel Holder



0.1 m² Stainless Steel Holder

Process development and small-volume parentals production with an EFA of 0.1m².

Unique design is fully compliant with biopharmaceutical applications and their requirements.



0.5 m² Stainless Steel Holder

Accomodate an effective filter area of 0.5 m² -2.5 m² up to 5 m²

Ordering Information

	Effective Filtration Area	Filter Plate Material	Inlet/Outlet/Retentate	Seals Materials	Surface Finish	Design Pressure	Industry
H-CFH	01	S	T15	S	A	X	P
	01 0.1 m²	S 316L	T15 DN15	S Silicone	A Mirror Polish	X 0.6Mpa	P Pharmaceutical
	05 0.5 m²		T20 DN20				
	25 2.5 m²		T38 DN38				
	...						

TFF System

Cobetter is able to design TFF system based on customer specifications and requirements especially for Pilot Labs and Process Systems



Pilot System Throughput (50-100L)



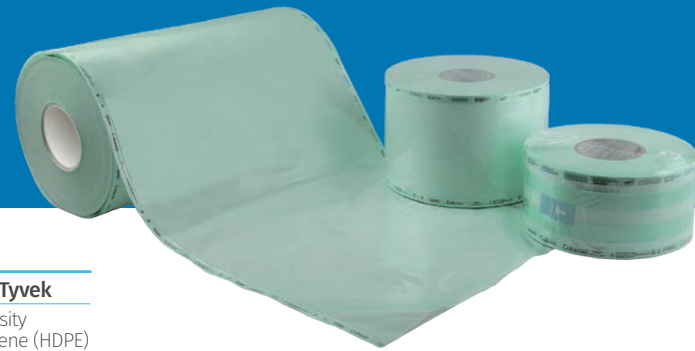
Integrity Test Instrument CF 7.2



Specifications

Power Requirements	100-240V AC , 50/60Hz 120W
Display Screen	7-inch High-Definition Color Touchscreen
Dimensions	450mm×280mm×190mm
Test Range	Bubble Point (BP) : 100-8000 mbar Diffusion Flow (DF) : 1-600ml/min Water intrusion : 0.01-100ml/min
Test Method	Manual Bubble Point Test Basic Bubble Point Test Enhanced Bubble Point Test Pressure Holding/Pressure Decay Test Diffusion Flow Test Water Intrusion Test
Max. Operating Pressure	10000 mbar (150 psi) at least 1000mbar higher than the highest tested bubble point
Minimum Input Pressure	Temperature Range : 5° C to 40° C
Operating Conditions	Relative Humidity : 10% to 80%
Test Time Range	Net Volume Test Time : 4mins±2mins Diffusion Flow Test : 8mins±2mins Bubble Point Test : 10mins±2mins Enhanced Bubble Point Test : 15mins±2mins Water Intrusion Test : established testing time ± 2minss
Print Function	English / Chinese language, Output Test parameters and result, Auto/manual print options
History Record Function	Unlimited test records storage with SD card; USB connection to output data
Language Options	English / Chinese

Cleansteam Bag



Breathing Side	Arjo60-70 Dialysis Paper	Dupont Tyvek
Holding Side	Temperature resistant medical composite membrane(PET+CPP)	High Density Polyethylene (HDPE)
Sterilization Indicators	Autoclave sterilization indicator Ethylene oxide sterilization indicator	
Package	Double-layer packaging; additional protection which protects the bags from scratching	

▲ Arjo60-70 Dialysis Paper

▼ Dupont Tyvek

Item	Media	Width		
M	Dialysis Paper	50mm	250mm	x 200mm
		75mm	300mm	2D P
		100mm	350mm	
		125mm	400mm	
		150mm	500mm	
		200mm		
T	Dupont Tyvek	75mm	250mm	x 100mm
		100mm	300mm	3D L
		150mm	350mm	
		200mm	400mm	
		210×297mm	500×830mm	800×1200mm
		300×830mm	600×800mm	900×900mm
	320×450mm	600×882mm	1000×1000mm	
	350×450mm	600×900mm	1000×1200mm	
	400×400mm	700×900mm	1200×1200mm	
	400×500mm	700×1000mm		
	450×700mm	800×900mm		
	500×600mm	800×800mm		
	500×650mm	800×900mm		



Vacuum Filter

Specification	150ml, 250ml, 500ml, 1000ml
Membrane	PES, CN, CA, NY
Removal Ratings	0.1 / 0.2 / 0.45µm

Item	Type	Size	Material of membrane	Market
C	Bottle + Filter bowl	150 150mL	MLEN PES 0.1	SLES PES 0.45+0.2
B	Only bottle	250 250mL	SLFN PES 0.22	MLEB PES 0.2+0.1
F	Only filter bowl	500 500mL	PAFS PES 0.45	SAFS PES 0.45+0.2
		01L 1000mL	SPFN PTFE 0.22	SMDS PVDF 0.45+0.2
			SMDN PVDF 0.22	
			0000 only bottle	



Filter Housing Catalog

Sanitary Liquid Filter Housing



	Number of Filter	Filter Length	Materials	End Cap	Housing Connection	Inlet/Outlet	Sealing Materials	Surface Finish	Design Pressure	Industry
H-SCF-A	01	05	F	S	I	T25	S	A	X	P
H-SCF-B	01 1 round	05 5 inch	F 304	S 226	T Tri-clamp	T25 Tri-clamp DN25	S Silicone	A Mirror polishing	X 0.6MPa	P Pharmaceutical
		10 10 inch	S 316L	T 222			E EPDM	B Internal Electrolytic-polishing	Y 1.0MPa	
		20 20 inch		D DOE			V Viton			
		30 30 inch					F PTFE			

Vent Housing



	Number of Filter	Filter Length	Materials	End Cap	Housing Connection	Inlet/Outlet	Sealing Materials	Surface Finish	Design Pressure	Industry
H-VCF	01	05	F	S	I	T25	S	A	X	P
H-VCF II	01 1 round	05 5 inch	F 304	S 226	T Tri-clamp	T25 Tri-clamp DN25	S Silicone	A Mirror Polish	X 0.6MPa	P Pharmaceutical
		10 10 inch	S 316L	T 222		T38 Tri-clamp DN38	E EPDM	B Internal Electro-polish		
						T50 Tri-clamp DN50	V Viton			

Gas Filter Housing



	Number of Filter	Filter Length	Materials	End Cap	Housing Connection	Inlet/Outlet	Sealing materials	Surface Finish	Design Pressure	Industry
H-GCF	01	05	F	S	I	T38	S	A	X	P
	01 1 round	05 5 inch	F 304	S 226	T Tri-clamp	T25 Tri-clamp DN25	S Silicone	A Mirror Polish	X 0.6MPa	P Pharmaceutical
	03 3 round	10 10 inch	S 316L		F Flange	T38 Tri-clamp DN38	E EPDM	B Internal Electro-polish	Y 1.0MPa	
		20 20 inch				T50 Tri-clamp DN50	V Viton			
		30 30 inch				F25 Flange DN25				

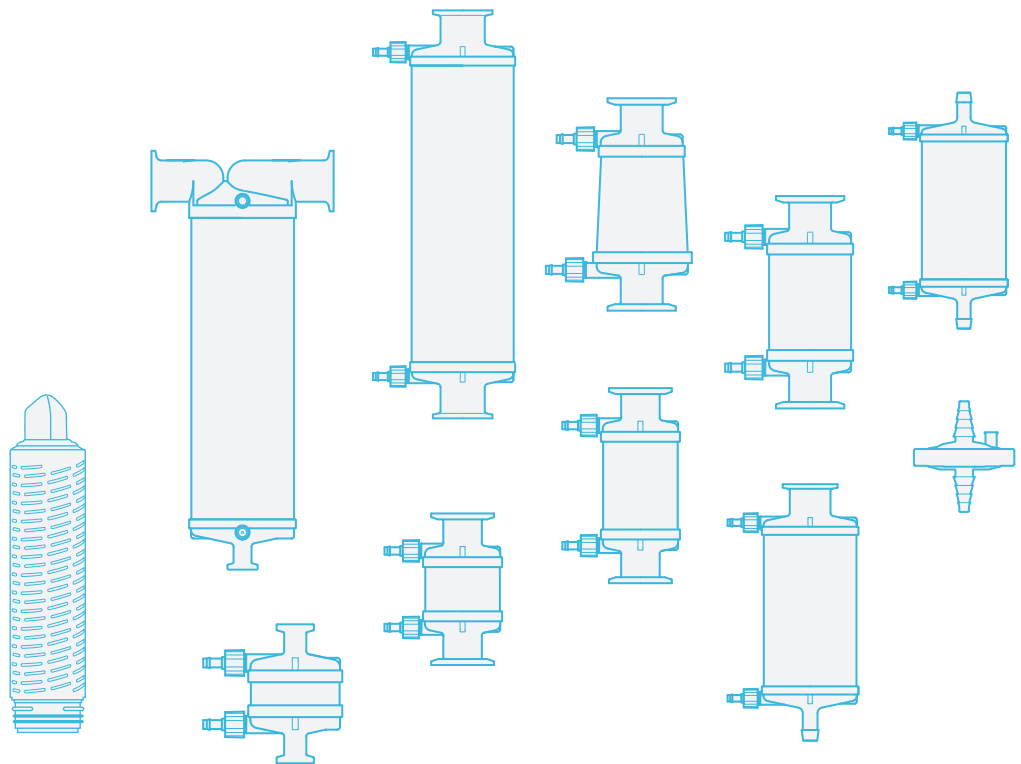
Steel Membrane Holder



	Number of Membrane	Membrane O.D.	Material	Housing Connection	Inlet/Outlet	Sealing Materials	Surface Finish	Design Pressure	Industry
H-DMF	01	47	F	I	T25	S	A	X	P
	01 1 membrane	47 47mm	F 304	T Tri-clamp	T25 Tri-clamp DN25	S Silicone	A Mirror Polish	X 0.6MPa	P Pharmaceutical
		90 90mm	S 316L	L Screwed Connection		E EPDM	B Internal Electro-polish		
		142 142mm				V Viton			
		200 200mm							
		293 293mm							

Cobetter Filtration

- Cobetter Customers are in more than **80** Countries.
- Japanese Customers numbers are **300**.
- We provide filters annually to **20,000** customers worldwide.



Please contact us for more information
Hangzhou Cobetter Filtration Equipment Co.,Ltd.

Sales Add 19/F Building B, Huanyu Business Center, No.626
Kejiguan Road, Binjiang District, Hangzhou 310052, China

Factory Heshang Industry Section, Xiaoshan,
Hangzhou 311265, China

Tel 400-070-4266

Fax +86-571-87704256

zh.cobetterfiltration.com