

Sterilizing-Grade Filter Series

Corevital SND Filter

Hydrophilic Sterilizing-Grade Filter with Low Protein Adsorption



Features

Low protein adsorption
Great corrosion resistance, oxidation resistance
Great thermo-stability
Low leachables
Extensive chemical compatibility

Typical Applications

Filtration of blood products
Sterile filtration of antibiotic solution
Filtration of biological reagent and vaccine

Quality Control

100% integrity testing in manufacturing
Each filter is fully traceable with unique serial number
ISO 9001:2015 manufacturing facility

Removal Rating and Effective Filtration Area

	SNDN(0.2 µm)	SNDA(0.2/0.1 µm)	SNDB(0.2/0.2 µm)	SNDS(0.45/0.2 µm)	SNDH(0.65/0.2 µm)
A - Standard Cartridge (10")	0.55 m ²	0.55 m ²	0.55 m ²	0.55 m ²	0.55 m ²
H - High Area Cartridge 1 (10")	0.8 m ²	0.8 m ²	0.8 m ²	0.8 m ²	0.8 m ²
L - High Area Cartridge 2 (10")	1.04 m ²	1.04 m ²	1.04 m ²	1.04 m ²	1.04 m ²

Materials of Construction

Membrane	Hydrophilic polyvinylidene fluoride(PVDF)
Support	Polypropylene (PP)
Core/Cage/End Caps	Polypropylene (PP)
Cartridge End Cap Inserts	Polybutylene terephthalate (PBT) (Cartridge exclusive)
Cartridge End Cap O-rings	Silicone / EPDM / Fluoroelastomer / PFA encapsulated O-rings
Capsule Housing	Polypropylene (PP)
Capsule Vent O-rings	Silicone
SP3 Capsule Port Insert	316L Stainless Steel
SP3 Capsule Housing	Polyetherimide (PEI)
SP3 Capsule O-rings	Silicone

Maximum Differential Pressure

A - Standard Cartridge/ H - High Area Cartridge 1	Forward: 0.69 MPa @ 25 °C, 0.40 MPa @ 60 °C, 0.24 MPa @ 80 °C Reverse: 0.30 MPa @ 25 °C, 0.10 MPa @ 80 °C
L - High Area Cartridge 2	Forward: 0.55 MPa @ 25 °C, 0.40 MPa @ 60 °C, 0.24 MPa @ 80 °C Reverse: 0.30 MPa @ 25 °C, 0.10 MPa @ 80 °C
Capsule	Forward: 0.55 MPa @ 25 °C, 0.1 MPa @ 80 °C Reverse: 0.21 MPa @ 25 °C

Sterilization

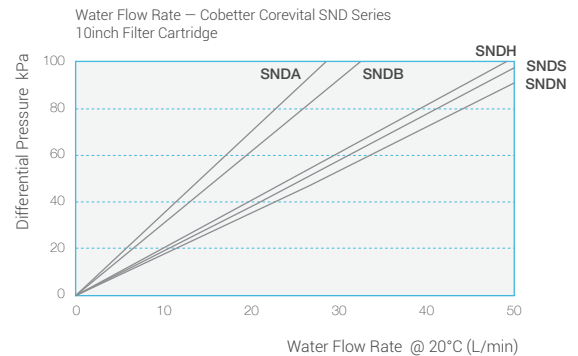
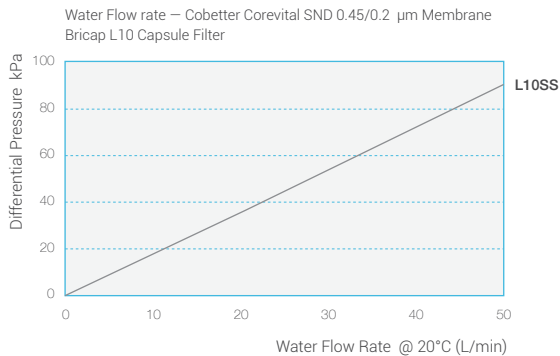
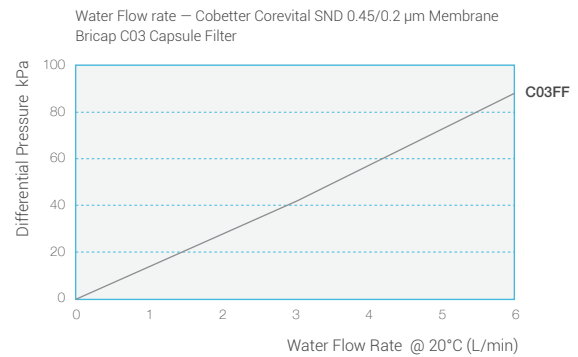
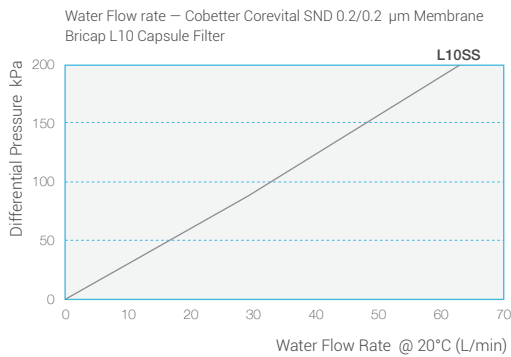
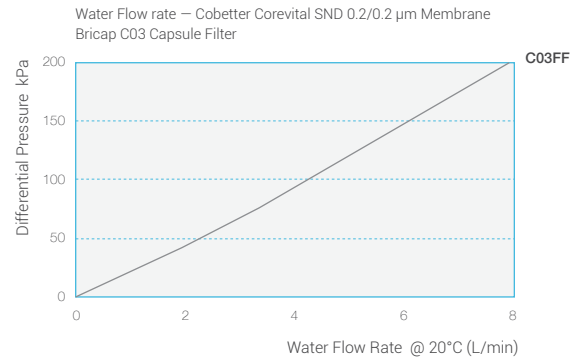
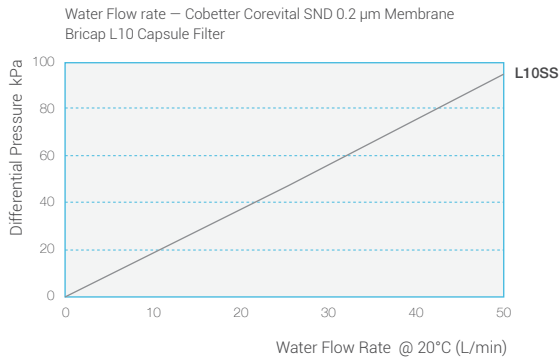
A - Standard Cartridge/ H - High Area Cartridge 1	Can be steam sterilized for 30 minutes at 135 °C with 50 cycles (< 30 kPa) Can be autoclaved 50 cycles for 30 minutes at 130°C
L - High Area Cartridge 2	Can be steam sterilized for 30 minutes at 135 °C with 30 cycles (< 30 kPa) Can be autoclaved 30 cycles for 30 minutes at 130°C
Capsule	Autoclavable capsules only: Can be autoclaved 25 cycles for 30 minutes at 130°C, (Can not be steam sterilized in-line) Gamma compatible capsules: Can be sterilized by gamma irradiation at 25-45 kGy or can be autoclaved 5 cycles for 60 minutes at 126 °C. (Can not be steamed in-line) Sterile capsule: Can be sterilized by gamma irradiation at 25-45 kGy Cleansteam bag sterile package: Pre-sterilized with autoclave for 30 minutes at 121°C

Notes: Gamma sterilized products cannot be re-sterilized with gamma irradiation or steam sterilization

Integrity Test Standards

	SNDN	SNDA
Standard - 10inch (0.55m ²)	Bubble Point@20 °C≥ 0.32 MPa, air, wetted with water Air Diffusion@20 °C≤ 28 ml/min @0.28 MPa, wetted with water	Bubble Point@20 °C≥ 0.48 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.386 MPa, wetted with water
Standard Q Series (0.55m ²)	Bubble Point@20 °C≥ 0.345 MPa, air, wetted with water Air Diffusion@20 °C≤ 28 ml/min @0.28MPa, wetted with water	Bubble Point@20 °C≥ 0.50 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.386 MPa, wetted with water
	SNDB	SNDS
Standard - 10inch (0.55m ²)	Bubble Point@20 °C≥ 0.32 MPa, air, wetted with water Air Diffusion@20 °C≤ 16 ml/min @0.28 MPa, wetted with water	Bubble Point@20 °C≥ 0.32 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.28 MPa, wetted with water
Standard Q Series (0.55m ²)	Bubble Point@20 °C≥ 0.345 MPa, air, wetted with water Air Diffusion@20 °C≤ 16 ml/min @0.28 MPa, wetted with water	Bubble Point@20 °C≥ 0.345 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.28 MPa, wetted with water
	SNDH	
Standard - 10inch (0.55m ²)	Bubble Point@20 °C≥ 0.32 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.28 MPa, wetted with water	
Standard Q Series (0.55m ²)	Bubble Point@20 °C≥ 0.345 MPa, air, wetted with water Air Diffusion@20 °C≤ 20 ml/min @0.28 MPa, wetted with water	

Flow Rates



Regulatory Compliance

- Effluent meets the USP<788> requirement of particulate matter in large volume injection.
- Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3(b)(6).
- Retention of 10^7 cfu/cm² *Brevundimonas diminuta* (ATCC 19146) according to ASTM F838
- Aqueous extraction from a cartridge contains less than 0.25EU/ml as determined by Limulus Amebocyte Lysate (LAL), meeting requirements of USP<85>.
- Components meet the requirement of USP <87> In Vitro Biological Reactivity Test.
- Components meet the criteria of the USP <88> Biological Reactivity Test for Class V-121 °C plastics.
- Components meet the FDA indirect Food Additive requirements cited in 21 CFR177-182.
- Based on the current information from our suppliers, all components used in the manufacture of this product are animal-free.

Notes: Contact Cobetter for more specification details.

Sterilizing-Grade Filter Series

Corevital SMD Filter

Hydrophilic Sterilizing-Grade Filter with High Throughput and Low Protein Adsorption



Features

High throughput
Low protein adsorption
Reliable retention of bacteria and particles

Typical Applications

Buffer filtration
Pre-column/ultra-filtration protection
Filtration of intermediate products/stock solutions
Filtration of serum and blood products, sterile filtration of terminal products
Filtration of colloidal or viscous liquids

Quality Control

100% integrity testing in manufacturing
Each filter is fully traceable with unique serial number
ISO 9001:2015 manufacturing facility

Removal Rating and Effective Filtration Area

	SMDN(0.2 μm)	SMDA(0.2/0.1 μm)	SMDB(0.2/0.2 μm)	SMDS(0.45/0.2 μm)	SMDH(0.65/0.2 μm)
A - Standard Cartridge (10")	0.55 m ²	0.55 m ²	0.55 m ²	0.55 m ²	0.55 m ²
H - High Area Cartridge 1 (10")	0.8 m ²	0.8 m ²	0.8 m ²	0.8 m ²	0.8 m ²
L - High Area Cartridge 2 (10")	1.04 m ²	1.04 m ²	1.04 m ²	1.04 m ²	1.04 m ²

Materials of Construction

Membrane	Hydrophilic polyvinylidene fluoride(PVDF)
Support	Polypropylene (PP)
Core/Cage/End Caps	Polypropylene (PP)
Cartridge End Cap Inserts	Polybutylene terephthalate (PBT) (Cartridge exclusive)
Cartridge End Cap O-rings	Silicone / EPDM / Fluoroelastomer / PFA encapsulated O-rings
Capsule Housing	Polypropylene (PP)
Capsule Vent O-rings	Silicone
SP3 Capsule Port Insert	316L Stainless Steel
SP3 Capsule Housing	Polyetherimide (PEI)
SP3 Capsule O-rings	Silicone

Maximum Differential Pressure

A - Standard Cartridge/ H - High Area Cartridge 1	Forward: 0.69 MPa @ 25 °C, 0.40 MPa @ 60 °C, 0.24 MPa @ 80 °C Reverse: 0.30 MPa @ 25 °C, 0.10 MPa @ 80 °C
L - High Area Cartridge 2	Forward: 0.55 MPa @ 25 °C, 0.40 MPa @ 60 °C, 0.24 MPa @ 80 °C Reverse: 0.30 MPa @ 25 °C, 0.10 MPa @ 80 °C
Capsule	Forward: 0.55 MPa @ 25 °C, 0.1MPa @ 80 °C Reverse: 0.21 MPa @ 25 °C

Sterilization

A - Standard Cartridge/ H - High Area Cartridge 1	Can be steam sterilized for 30 minutes at 135 °C with 50 cycles (< 30 kPa) Can be autoclaved 50 cycles for 30 minutes at 130°C
L - High Area Cartridge 2	Can be steam sterilized for 30 minutes at 135 °C with 30 cycles (< 30 kPa) Can be autoclaved 30 cycles for 30 minutes at 130°C
Capsule	Autoclavable capsules only: Can be autoclaved 25 cycles for 30 minutes at 130°C, (Can not be steam sterilized in-line) Gamma compatible capsules: Can be sterilized by gamma irradiation at 25-45 kGy or can be autoclaved 5 cycles for 60 minutes at 126 °C. (Can not be steamed in-line) Sterile capsule: Can be sterilized by gamma irradiation at 25-45 kGy Cleansteam bag sterile package: Pre-sterilized with autoclave for 30 minutes at 121°C

Notes: Gamma sterilized products cannot be re-sterilized with gamma irradiation or steam sterilization

Integrity Test Standards

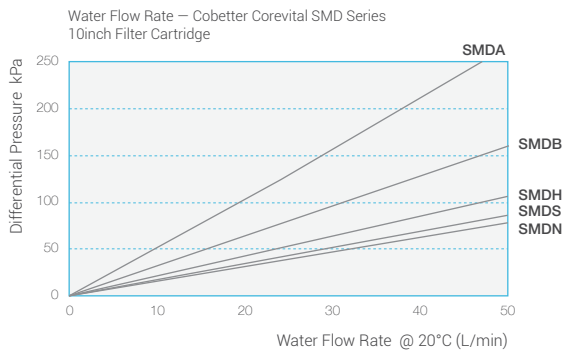
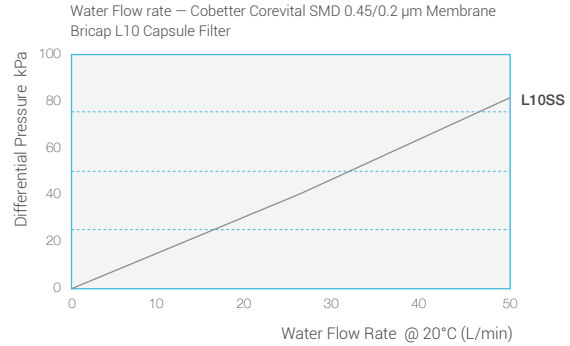
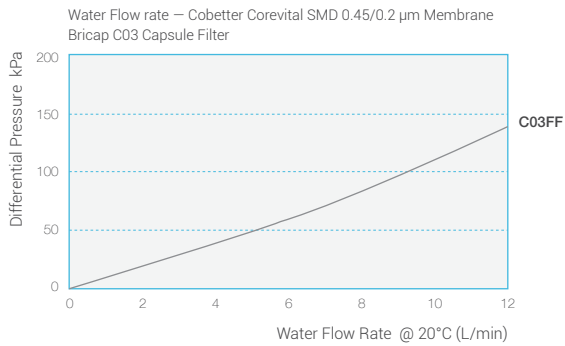
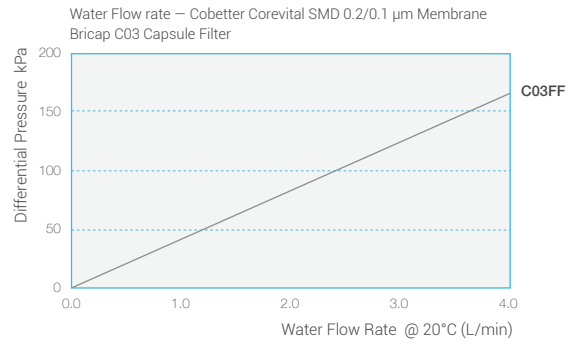
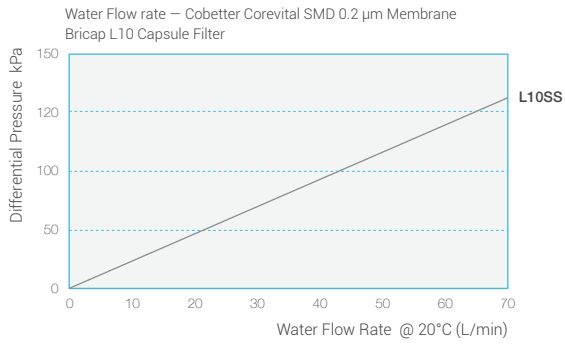
SMDN / SMDB / SMDS / SMDH

Standard - 10inch (0.55m ²)	Bubble Point@20 °C ≥ 0.32 MPa, air, wetted with water Air Diffusion@20 °C ≤ 20 ml/min @0.28 MPa, wetted with water
Standard Q Series (0.55m ²)	Bubble Point@20 °C ≥ 0.345 MPa, air, wetted with water Air Diffusion@20 °C ≤ 20 ml/min @0.28MPa, wetted with water

SMDA

Standard - 10inch (0.55m ²)	Bubble Point@20 °C ≥ 0.48 MPa, air, wetted with water Air Diffusion@20 °C ≤ 20 ml/min @0.386 MPa, wetted with water
Standard Q Series (0.55m ²)	Bubble Point@20 °C ≥ 0.50 MPa, air, wetted with water Air Diffusion@20 °C ≤ 20 ml/min @0.386 MPa, wetted with water

Flow Rates



Regulatory Compliance

- Effluent meets the USP<788> requirement of particulate matter in large volume injection.
- Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3(b)(6).
- Retention of 10^7 cfu/cm² *Brevundimonas diminuta* (ATCC 19146) according to ASTM F838
- Aqueous extraction from a cartridge contains less than 0.25EU/ml as determined by Limulus Amebocyte Lysate (LAL), meeting requirements of USP<85>.
- Components meet the requirement of USP <87> In Vitro Biological Reactivity Test.
- Components meet the criteria of the USP <88> Biological Reactivity Test for Class V-121 °C plastics.
- Components meet the FDA indirect Food Additive requirements cited in 21 CFR177-182.
- Based on the current information from our suppliers, all components used in the manufacture of this product are animal-free.

Notes: Contact Cobetter for more specification details.

Corevital SND/SMD

Ordering Information

Filter Cartridge



Cartridge Format

- A** Standard Cartridge
- H** H - High Area Cartridge(0.69-0.8m²)
- L** L - High Area Cartridge(1.0-1.2m²)



Membrane Type

- SNDN** SND 0.2 µm
- SNDA** SND 0.2/0.1 µm
- SNDB** SND 0.2/0.2 µm
- SNDS** SND 0.45/0.2 µm
- SNDH** SND 0.65/0.2 µm
- SMDN** SMD 0.2 µm
- SMDA** SMD 0.2/0.1 µm
- SMDB** SMD 0.2/0.2 µm
- SMDS** SMD 0.45/0.2 µm
- SMDH** SMD 0.65/0.2 µm



Length

- 02** 2.5 inch
- 05** 5 inch
- 10** 10 inch
- 20** 20 inch
- 30** 30 inch
- 40** 40 inch



Code

- 0** DOE
- 2** 226 / Flat
- 7** 226 / Fin
- 3** 222 / Flat
- 8** 222 / Fin
- 6** 222 / 3-Flange bayonet / Fin



O-ring Material

- S** Silicone
- E** EPDM
- V** Fluoroelastomer
- P** FEP/PFA encapsulated O-rings



Category

- Blank** Standard
- Q**



Pharmaceutical Grade

Bricap C Series Capsule Filter



Housing Type

- Blank** Standard
- K** Transparent



Capsule Format

- C01** BricapC01
- C02** BricapC02
- C03** Bricap C03



Inlet/Outlet

- T** 19 mm (3/4") Sanitary Flange
- K** 14 mm (9/16") Sanitary Flange
- F** 31 mm (1 1/4") Sanitary Flange
- V** 14 mm (9/16") Hose Barb
- H** 13 mm (1/2") Hose Barb
- Y** 9.6 mm (3/8") Hose Barb
- L** 3.2 mm (1/8") Hose Barb
- B** 6-13 mm (1/4"-1/2") Stepped Hose Barb (No Filling Bell)
- A** 6-13 mm (1/4"-1/2") Stepped Hose Barb with Filling Bell (Outlet only)

Bricap D Series Capsule Filter



Capsule Format

- D01** BricapD01



Inlet/Outlet

- B** 6-13 mm (1/4"-1/2") Stepped Hose Barb (No Filling Bell)
- A** 6-13 mm (1/4"-1/2") Stepped Hose Barb with Filling Bell (Outlet only)

Bricap L Series Capsule Filter



Housing Type

- Blank** Standard
- K** Transparent



Capsule Format

- L02** Bricap L02
- L03** Bricap L03
- L05** Bricap L05
- L10** Bricap L10
- L20** Bricap L20
- L30** Bricap L30



Inlet/Outlet

- S** 38 mm (1 1/2") Sanitary Flange
- T** 19 mm (3/4") Sanitary Flange
- K** 14 mm (9/16") Sanitary Flange
- D** 25 mm (1") Hose Barb
- M** 19 mm (3/4") Hose Barb
- X** 16 mm (5/8") Hose Barb
- V** 14 mm (9/16") Hose Barb
- H** 13 mm (1/2") Hose Barb
- Y** 9.6 mm (3/8") Hose Barb

Bricap T Series Capsule Filter



Capsule Format

- T10** Bricap T10
- T20** Bricap T20
- T30** Bricap T30



Inlet/Outlet

- SS** 38 mm (1 1/2") Sanitary Flange Inlet & Outlet
- SM** 38 mm (1 1/2") Sanitary Flange Inlet & 19 mm (3/4") Hose Barb Outlet



Gauge Port Type

- S** 38 mm (1 1/2") Sanitary Flange
- T** 19 mm (3/4") Sanitary Flange
- N** Without Gauge Port

Membrane Type	Sterilization	Quantity/Package	Category	Pharmaceutical Grade
SNDN SND 0.2 µm	A Autoclavable	1 1 /pkg	Blank Standard	Pharmaceutical Grade
SNDA SND 0.2/0.1 µm	G Gamma Compatible		Q	
SNDB SND 0.2/0.2 µm	S Sterile			
SNDS SND 0.45/0.2 µm	C Cleansteam Bag			
SNDH SND 0.65/0.2 µm	C Sterile Package			
SMDN SMD 0.2 µm				
SMDA SMD 0.2/0.1 µm				
SMDB SMD 0.2/0.2 µm				
SMDS SMD 0.45/0.2 µm				
SMDH SMD 0.65/0.2 µm				

Bricap HL Series Capsule Filter



Capsule Format

- HL02** Bricap HL02
- HL03** Bricap HL03
- HL05** Bricap HL05
- HL10** Bricap HL10
- HL20** Bricap HL20
- HL30** Bricap HL30



Inlet/Outlet

- S** 38 mm (1 1/2") Sanitary Flange
- T** 19 mm (3/4") Sanitary Flange
- V** 14 mm (9/16") Hose Barb
- D** 25 mm (1") Hose Barb
- H** 13 mm (1/2") Hose Barb
- Y** 9.6 mm (3/8") Hose Barb

Bricap HT Series Capsule Filter



Capsule Format

- HT02** Bricap HT02
- HT03** Bricap HT03
- HT05** Bricap HT05
- HT10** Bricap HT10
- HT20** Bricap HT20
- HT30** Bricap HT30



Inlet/Outlet

- SS** 38 mm (1 1/2") Sanitary Flange
- SM** 38 mm (1 1/2") Sanitary Flange Inlet and 19 mm (3/4") Hose Barb Outlet



Gauge Port Type

- S** 38 mm (1 1/2") Sanitary Flange
- T** 19 mm (3/4") Sanitary Flange
- N** None

Brisip SP3 Series Capsule Filter



Capsule Format

- SP3** Brisip SP3



Inlet/Outlet

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



Membrane Type

- SNDN** SND 0.2 µm
- SNDA** SND 0.2/0.1 µm
- SNDB** SND 0.2/0.2 µm
- SNDS** SND 0.45/0.2 µm
- SNDH** SND 0.65/0.2 µm
- SMDN** SMD 0.2 µm
- SMDA** SMD 0.2/0.1 µm
- SMDB** SMD 0.2/0.2 µm
- SMDS** SMD 0.45/0.2 µm
- SMDH** SMD 0.65/0.2 µm



Vent and Drain Valves

- P** Both using 6 mm hose barb
- X** Vent valve using quick coupling (compatible with Stäubli connector), and drain valve using 6 mm hose barb
- T** Both using quick coupling (compatible with Stäubli connector)
- V** Both using 13 mm (1/2") sanitary flange



Quantity/Package

- 1** 1 /pkg



Category

- Blank Q** Standard Pharmaceutical Grade



BriScale A50 Liquid Disc Filter



Disc Filter Format

- A50** BriScale A50



Inlet/Outlet

- BB** 6-13 mm (1/4"-1/2") Stepped Hose Barb Inlet and Outlet (No Filling Bell)
- BA** 6-13 mm (1/4"-1/2") Stepped Hose Barb Inlet and Outlet (Outlet with Filling Bell)

Bricap SFU Series Syringe Filter (No Vent)



Syringe Filter Format

- U13** Bricap SFU13
- U25** Bricap SFU25
- U33** Bricap SFU33



Inlet/Outlet

- CP** Female luer lock inlet and male luer lock outlet

Bricap SFV Series Syringe Filter (With Luer Vent)



Syringe Filter Format

- V25** Bricap SFV25



Inlet/Outlet

- CP** Female luer lock inlet and male luer lock outlet



Membrane Type

- HSNDN** HSND 0.2 µm
- LSNDN** LSND 0.2 µm
- HSNDA** HSND 0.2/0.1 µm
- LSNDA** LSND 0.2/0.1 µm
- HSNDB** HSND 0.2/0.2 µm
- LSNDB** LSND 0.2/0.2 µm
- HSNDS** HSND 0.45/0.2 µm
- LSNDS** LSND 0.45/0.2 µm
- HSNDH** HSND 0.65/0.2 µm
- LSNDH** LSND 0.65/0.2 µm
- HSMDN** HSMD 0.2 µm
- LSMDN** LSMD 0.2 µm
- HSMDA** HSMD 0.2/0.1 µm
- LSMDA** LSMD 0.2/0.1 µm
- HSMDB** HSMD 0.2/0.2 µm
- LSMDB** LSMD 0.2/0.2 µm
- HSMDS** HSMD 0.45/0.2 µm
- LSMDS** LSMD 0.45/0.2 µm
- HSMDH** HSMD 0.65/0.2 µm
- LSMDH** LSMD 0.65/0.2 µm



Sterilization

- A** Autoclavable
- G** Gamma Compatible
- S** Sterile
- C** Cleansteam Bag Sterile Package



Quantity/Package

- 1** 1 /pkg



Category

- Blank Q** Standard Pharmaceutical Grade



Membrane Type

- SNDN** SND 0.2 µm
- SNDA** SND 0.2/0.1 µm
- SNDB** SND 0.2/0.2 µm
- SNDS** SND 0.45/0.2 µm
- SNDH** SND 0.65/0.2 µm
- SMDN** SMD 0.2 µm
- SMDA** SMD 0.2/0.1 µm
- SMDB** SMD 0.2/0.2 µm
- SMDS** SMD 0.45/0.2 µm
- SMDH** SMD 0.65/0.2 µm



Sterilization

- A** Autoclavable
- G** Gamma Compatible
- S** Sterile



Quantity/Package

- 1** 1 /pkg



Category

- Blank Q** Standard Pharmaceutical Grade

