

CAPSFL©W CATALOG





FILTER TECHNOLOGY



CAPSFLOW INDEX



CSK series - Capsule Filter	Pag.
- Asymmetrical PES membrane Capsule Filters	2
- Hydrophobic ePTFE membrane Capsule Filters	4
- Polypropylene membrane Capsule Filters	6
CIK series - In Line Integrity Test Capsule Filter	
- Asymmetrical PES membrane Bio-burden Reduction Capsule Filters	10
- Hydrophobic ePTFE membrane Bio-burden Reduction Capsule Filters	12
- Polypropylene media General Application	14
CXK series - Steaming in Place Capsule Filter	18





CAPSFLOW

CSK series Capsule Filters



CSK series - Asymmetrical PES membrane Capsule Filters

Description and use

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

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



Typical Applications

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

Fitting Option

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

Maximum Operating Conditions

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

Toxicity

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

Filter Area

- 500 cm²
- 1000 cm²
- 1500 cm²
- 2100 cm²

Construction of Materials

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

Food Safety Compliance

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

Capsule Integrity Test Specifications

Gen Purpose		Low Bio		Ster Grade	
Pore size	Min.Bubble point	Pore size	Min.Bubble point		
0.04 μm	2.3 barg@22°C/IPA	0.2 μm	3.5 barg@22°C	0.2/0.04µm	2.3 Barg@22°C (IPA)
0.1 μm	4.8 barg@22°C	0.45 μm	2.3 barg@22°C	0.45/0.04µm	2.3 Barg@22°C (IPA)
0.2 μm	3.1 barg@22°C	0.65 μm	1.5 barg@22°C	0.45/0.2um	3.5 barg@22°C
0.45 µm	1.7 barg@22°C			0.65/0.2μm	3.5 barg@22°C
0.65 μm	1.3 barg@22°C			0.65/0.45µm	2.3 Barg@22°C
0 .8 μm	1.2 barg@22°C			0.8/0.45um	2.3 Barg@22°C
1.2 µm	0.8 barg@22°C			0.2/0.1um	1.7 Barg@22°C (IPA)
				0.45/0.1um	1.7 Barg@22°C (IPA)

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

CSK series - Hydrophobic ePTFE membrane Capsule Filters

Description and use

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



Benefits

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

Typical Application

- Sterile air feed
- Chemicals
- Pharmaceuticals
- Solvent

Fitting Option

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

Toxicity

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

Capsule Integrity

• Minimum burst pressure: 123.5 psi (8.5 barg)

Cartridge Integrity Test Specifications

Low Bio

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

Gen Purpose

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



Construction Materials

Filter Membrane: ePTFE

• Membrane Media Support: Polypropylene

Capsule: PolypropyleneInner Core: PolypropyleneOuter Cage: Polypropylene

Sealing Method: Thermal Bonding

Sanitization/Sterilization

Autoclavable

Filter Area

- 500 cm²
- 1000 cm²
- 1500 cm²
- 2100 cm²

Food Safety Compliance

Materials of construction comply with FDA regulations for food and

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

Maximum Operating Conditions

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

Product Type Membrane Type Membrane pore size Application Sterilization Size Fittings in / out Vent/Drain Revision CSK = Capsule Filter PT = PTFE phobic Application G G = Gen Purpose N = Not Sterile 05= 500 cm² 4NM=1/4"NPT-M NN = None 0 = Bag label 0010 = 0.1μm B = Low Bio 10 = 1000cm² 8NM = 3/8" NPT-M 1 = Housing Label 0020 = 0.2μm 0045 = 0.45μm 21 = 2100cm² 8NF = 3/8" NPT-F 4SL = 1/4" Swagelok 0100 = 1.0μm 5SL = 5/16" Swagelok 5SL = 5/16" Swagelok 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M 4HB = 3/4" HB 4HB = 3/4" HB 4BB = 3/4" HB 4BB = 3/4" AB 4BB = 1/4"-3/8" HB 1TC = 1" TC 1TC 1TC	ORDERING INFORMATION									
Filter Filte	Product Type	Membrane Type	Membrane pore size	Application	Sterilization	Size	Fittings in / out	Vent/Drain	Revision	
0020 = 0.2μm 15 = 1500cm² 2NM = 1/2" NPT-M 0045 = 0.45μm 21 = 2100cm² 8NF = 3/8" NPT-F 0065 = 0.65μm 4SL = 1/4" Swagelok 0100 = 1.0μm 5SL = 5/16" Swagelok 0300 = 3.0μm 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M Application B 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB	CSK = Capsule Filter	PT = PTFE phobic	Application G	G = Gen Purpose	N = Not Sterile	05= 500 cm ²	4NM=1/4"NPT-M	NN = None	0 = Bag label	
0045 = 0.45μm 21 = 2100cm² 8NF = 3/8" NPT-F 0065 = 0.65μm 4SL = 1/4" Swagelok 0100 = 1.0μm 5SL = 5/16" Swagelok 0300 = 3.0μm 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M Application B 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0010 = 0.1 \mu m$	B = Low Bio		$10 = 1000 cm^2$	8NM = 3/8" NPT-M		1 = Housing Label	
0065 = 0.65μm 4SL = 1/4" Swagelok 0100 = 1.0μm 5SL = 5/16" Swagelok 0300 = 3.0μm 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M 4pplication B 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB			$0020 = 0.2 \mu m$			$15 = 1500 \text{cm}^2$	2NM = 1/2" NPT-M			
0100 = 1.0μm 5SL = 5/16" Swagelok 0300 = 3.0μm 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M Application B 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0045 = 0.45 \mu m$			$21 = 2100 \text{cm}^2$	8NF = 3/8" NPT-F			
0300 = 3.0μm 8SL = 3/8" Swagelok 0500 = 5.0μm 4CM = 1/4" CPC-PLC-M 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0065 = 0.65 \mu m$				4SL = 1/4" Swagelok			
0500 = 5.0μm Application B 020 = 0.2μm 4CM = 1/4" CPC-PLC-M 4HB = 3/4" HB 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0100 = 1.0 \mu m$				5SL = 5/16" Swagelok			
Application B 4HB = 3/4" HB 0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0300 = 3.0 \mu m$				8SL = 3/8" Swagelok			
0020 = 0.2μm 8HB = 3/8" HB 48B = 1/4"-3/8" HB			$0500 = 5.0 \mu m$				4CM = 1/4" CPC-PLC-M			
48B = 1/4"-3/8" HB			Application B				4HB = 3/4" HB			
			$0020 = 0.2 \mu m$				8HB = 3/8" HB			
1TC = 1" TC							48B = 1/4"-3/8" HB			
							1TC = 1" TC			
					/ /					

CSK series - Polypropylene membrane Capsule Filters

Description and use

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



Benefits

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

Typical Application

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

Construction Materials

Filter Media: Polypropylene

Media Support: Polypropylene

End Caps: Polypropylene

Inner Core: Polypropylene

Outer Cage: Polypropylene

Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable
- Hot water

Toxicity

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

Capsule Integrity

Minimum burst pressure: 123.5 psi (8.5 barg)

Filter Area

- 500 cm²
- 1000 cm²
- 1500 cm²
- 2100 cm²



Food Safety Compliance

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

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

Maximum Operating Conditions

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



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



CAPSFLOW

CIK series In Line Integrity Test Capsule Filter



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

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

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

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



Typical Applications

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

Vent/Drain Option

Staubli

Stepped hose barb

Fitting Option

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

Maximum Operating Conditions

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

Toxicity

All materials meet the specifications far biologica! safety per USP Class VI -121"C far plastics

Filter Area

Size Filtration Area

- 2.5" = 1400 cm^2
- 5" = 2500 cm^2
- 10" = 6000 cm^2
- 20" = 12000 cm^2
- 30" = 18000 cm^2
- 40" = 24000 cm^2

Construction of Materials

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

Food Safety Compliance

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

Cartridge Integrity Test Specifications

Water wetted membrane

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

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



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

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

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



Benefits

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

Typical Application

- Sterile air feed
- Chemicals
- Pharmaceuticals
- Solvent

Capsule Integrity

• Minimum burst pressure: 123.5 psi (8.5 barg)

Construction Materials

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

Sanitization/Sterilization

Autoclavable

Cartridge Integrity Test Specifications

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

Filter Area

Size		Filtration Area
• 2.5"	=	1500 cm ²
• 5"	=	2700 cm ²
• 10"	=	6300 cm ²
• 20"	=	12600 cm ²
• 30"	=	18900 cm ²
• 40"	=	25200 cm ²

Fitting Option

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

Vent/Drain Option

- Staubli
- Stepped hose barb

Toxicity

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

Food Safety Compliance

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

Maximum Operating Conditions

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

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



CIK series - Polypropylene media General Application Capsule Filters

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



Benefits

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

Typical Applications

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

Construction Materials

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

Sanitization/Sterilization

- Autoclavable
- Hot water

Toxicity

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

Filter Area

Size		Filtration Area
• 2.5"	=	1480 cm ²
• 5"	=	2650 cm ²
• 10"	=	5500 cm ²
• 20"	=	11000 cm ²
• 30"	=	16500 cm ²
• 40"	=	22000 cm ²

Capsule Integrity

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

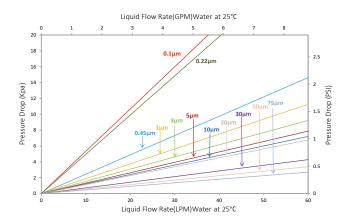
Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR.

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

Maximum Operating ConditionS

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





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



CAPSFLOW

CXK series Steaming in Place Capsule Filter

CXK series **Steaming in Place Capsule Filters**

Description and use

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

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



Benefits

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

Typical Application

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

Construction Materials

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

Traceability

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



Size

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

Toxicity

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

Food Safety Compliance

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

Filtration Area CXKPT (PTFE), CXKPS (PES)

• 2.5": 600 cm² **CXKNY (NYLON)**

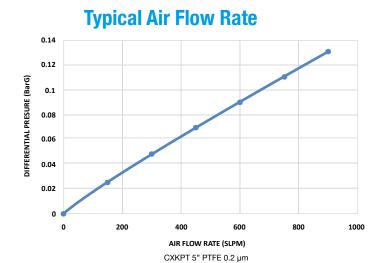
2.5": 700 cm²
 5": 2100 cm²
 5": 1700 cm²

Maximum Operating Conditions

CXKPT (PTFE) 0.2 µm:

• Maximum Pressure: 5.8 barg @ 40°C

Maximum Differential Pressure: 5barg @ 40°C



Performance data

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

^{*} CXKPT (PTFE - Hydrophobic) IPA Wetted membrane

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





WORLDWIDE

EUROPE

Italy Office Headquarter

GVS S.p.A. Via Roma 50 40069 Zola Predosa (BO) - Italy Tel. +39 051 6176311 gvs@gvs.com

Russia

GVS Russia LLC. Profsoyuznaya Street, 25-A, office 102 117418, Moscow Russian Federation (Russia) Tel. +7 495 0045077 gvsrussia@gvs.com

United Kingdom

GVS Filter Technology UK Vickers Industrial Estate Mellishaw Lane, Morecambe Lancashire LA3 3EN Tel. +44 (0) 1524 847600 gvsuk@gvs.com

Romania

GVS Microfiltrazione srl Sat Ciorani de Sus 1E - Comuna Ciorani Prahova România Tel. (+40) 244 463044 gvsro@gvs.com

Turkev

GVS Türkiye Nidakule Merdivenköy Mahallesi Bora Sokak No:1 Kat:7 - 34732 Istanbul Tel. +90 216 504 47 67 gvsturkey@gvs.com

ASIA

China

GVS Technology (Suzhou) Co., Ltd. Fengqiao Civil-Run Sci-Tech Park, 602 Changjiang Road, S.N.D. Suzhou, China 215129 Tel. +86 512 6661 9880 gvschina@gvs.com

GVS YIBO Medical Devices Co. Ltd. 17, Zhongshan East - Yuyao city, 315403 Zhejiang Province, China Tel. +86 574 6257 5697

Japar

GVS Japan K.K. KKD Building 4F, 7-10-12 Nishishinjuku Shinjuku-ku, Tokyo 160-0023 Japan Tel. +81 3 5937 1447 gvsjapan@gvs.com

Korea

GVS Korea Ltd #315 Bricks Tower 368 Gyungchun-ro(Gaun-dong), Namyangju-si, Gyunggi-do, Tel: +82 31 563 9873 gvskorea@gvs.com

India

GVS Filter India Pvt Ltd Unit No 35 & 36 on First Floor Ratna Jyot Industrial Premises Irla Lane, Irla Vile Parle, Mumbai 400056, India gysindia@gys.com

Malaysia

GVS Filtration Sdn.Bhd Lot No 10F-2B, 10th Floor, Tower 5 @ PFCC Jalan Puteri 1/2, Bandar Puteri 47100 Puchong, Selangor, Malaysia Tel: +60 3 7800 0062 gvsmalaysia@gvs.com

Thailand

GVS Thailand 88 Ratchadaphisek Rd, Office 10E03 - Khlong Toei, Bangkok 10110 gvsthailand@gvs.com

AMERICA

USA

GVS North America 63 Community Drive Sanford, ME 04073 - USA Tel. +1 866 7361250 gvsusa@gvs.com

GVS Filtration Inc. 2150 Industrial Drive Findlay, OH. 45840 - USA Tel. +1.419.423.9040 gvsfiltration@gvs.com

2200 W 20th Avenue Bloomer, WI 54724 - USA Tel. +1.715.568.5944 gvsfiltration@gvs.com

Puerto Rico

GVS Puerto Rico, LLC 98 Carr 194 - Fajardo, Puerto Rico, 00738-2988, USA Tel. +1.787.355.4100 gvspuertorico@gvs.com

México

GVS Filter Technology de Mexico Universal No. 550, Vynmsa Aeropuerto Apodaca Industrial Park, Ciudad Apodaca, Nuevo León, C.P. 66626 - México Tel. +52 81 2282 9003 gvsmex@gvs.com

Argentina

GVS Argentina S.A. Francisco Acuña de Figueroa 719 Piso:11 Of: 57 1416 Buenos Aires - Argentina Tel. +54 11 48614750 gvsarg@gvs.com

Braz

GVS do Brasil Ltda. Rodovia Conego Cyriaco Scaranello Pires 251 Jardim Chapadão, CEP 13193-580 Monte Mor (SP) - Brasil Tel. +55 19 38797200 gvs@gvs.com.br

PRODUCT COLLECTION - Capsflow Catalog

Copyright © 2022 GVS ® S.p.A. All Right Reserved - Printed in Italy Printing History: Version 13072022