



CAPSFLOW





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CAPSFLOW

CIK series - Asymmetrical PES membrane General Application 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 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

Filter Area

10": 6000 cm²

Fitting Option

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

Vent/Drain Option

- Staubli
- Stepped hose barb

Toxicity

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

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 far 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 far 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 um	2.3 barg@22 °C/ IPA	≤ 25 ml/ 1.7barg
0.1 um	1.7 barg@22 °C/ IPA	≤ 25 ml/ 1.3barg
0.2 um	3.5 barg@22 °C	≤ 25 ml/ 2.8 barg
0.45 um	2.3 barg@22 °C	≤ 25 ml/ 1.7barg
0.65 um	1.6 barg@22 °C	≤ 25 ml/ 1.0barg
0.8 um	1.3 barg@22 °C	≤ 25 ml / 0.6barg
1.2 um	0.9 barg@22 °C	≤ 25 ml/ 0.6barg

ORDERING INFORMATION

Product Type	Min. Bubble point	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		



CAPSFLOW

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

Cartridge Integrity Test Specifications

Pore size	0.2 μm
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

- 10": 6400 cm²

Construction Materials

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

Sanitization/Sterilization

- Autoclavable

Capsule Integrity

- Minimum burst pressure: 123.5 psi (8.5barg)



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, 21CFR.

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

ORDERING INFORMATION

Product Type	Min.Bubble point	Membrane pore size	Application	Sterilization	Size	Fittings In/Out	Vent/Drain	Revision
CIK = Capsule InT Filter	PT = PTFE phobic	0020 = 0.2μm	B = Low Bio	N = Not Sterile	SS = 2.5" LL = 5" TE = 10" TW = 20" TH = 30" FO = 40"	5TC = 1.5" TC 2HB = 1/2" HB 4HB = 3/4" HB T2B = 1.5" TC/ 1/2" HB T4B = 1.5" TC/ 3/4" HB 2BT = 1/2"HB/ 1.5TC 2B4 = 1/2"HB/ 3/4"HB 4BT = 3/4"HB/ 1.5"TC 4B2 = 3/4"HB/ 1/2"HB	SS = St/St HH = HB/HB SH = St/HB HS = HB/St	0 = Bag label 1 = Housing label



CAPSFLOW

CIK series - Polypropylene membrane General Application

KCPP 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

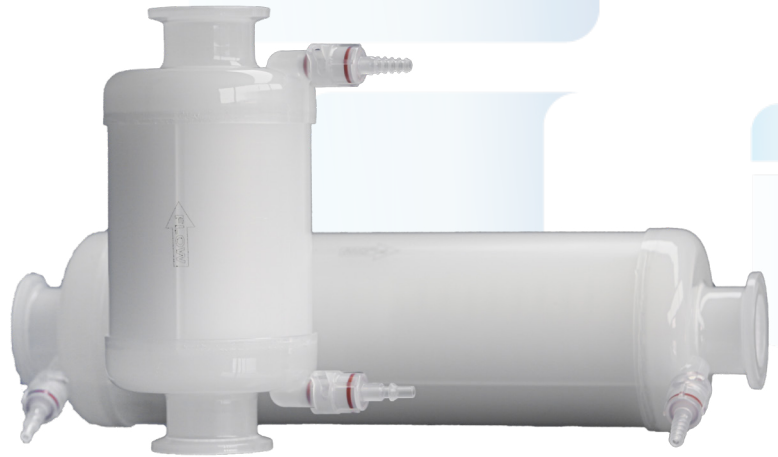
- Filter Media: Polypropylene
- Media Support: Polypropylene
- End Caps: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- Sealing Method: Thermal Bonding

Sanitization/Sterilization

- Autoclavable
- Hot water

Toxicity

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



Capsule Integrity

- Minimum burst pressure: 123.5psi (8.5barg)

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code 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

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

CAPSFLOW

Steaming in Place Capsule Filter CXK series

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

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. Rohns 2011/65/EU compliance.



NOMINAL DIMENSION

CXKPT, CXKPS

- 2.5" (84mm) ; Filtration area 600 cm²

CXKNY

- 2.5" (84mm) ; Filtration area 700 cm²

CXKPT, CXKPS

- 5" (159 mm) ; Filtration area 2100 cm²

CXKNY

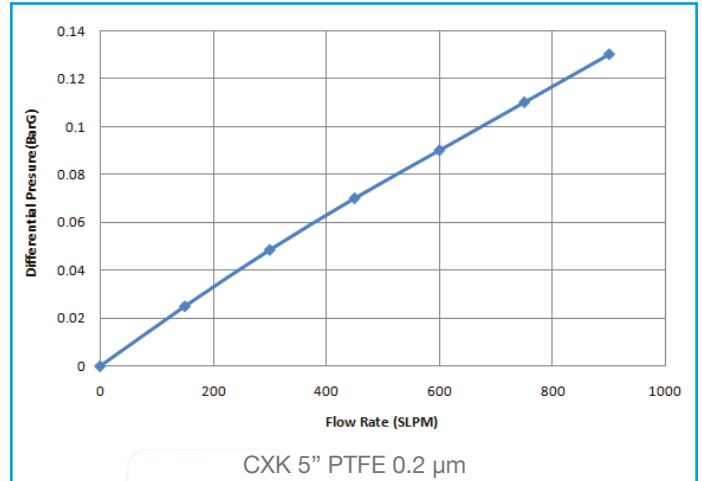
- 5" (159 mm) ; Filtration area 1700 cm²

Maximum Operating Conditions

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



Typical Air Flow Rate

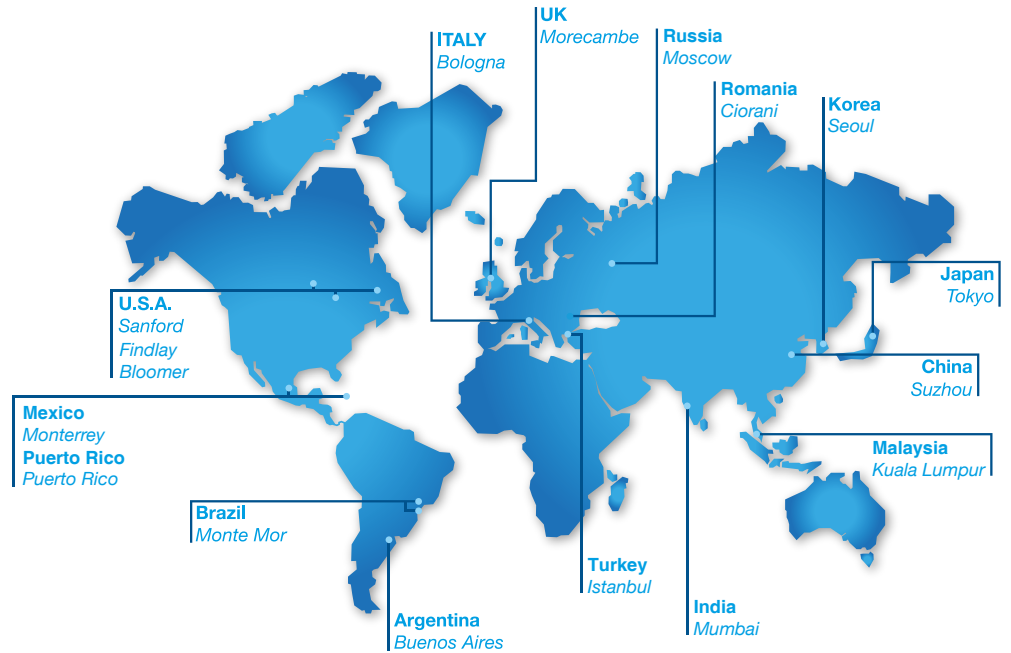


Performance data

	CXKPT			CXKPS				CXKNY		
Filter membrane	PTFE (Hydrophobic)			PES (Hydrophilic)				NYLON (Hydrophilic)		
Membrane pore size	0,05 um	0,1 um	0,2 um	0,45 um	0,1 um	0,21 um	0,45 um	0,1 um	0,21 um	0,45um
Flow rate 2,5"	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"	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)	1.4 (IPA)	0.5 (IPA)	1.8 (IPA)	3.6 (WATER)	2.6 (WATER)	4.5 (WATER)	3.3 (WATER)	1.9 (WATER)
N. SiP sterilization cycles	100 cycles @126 °C			50 cycles @126 °C				50 cycles @126 °C		

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 = 0.05μm (PT only)	X = Steaming in place	N = Not Sterile	SS = 2.5"	2TC = 2" TC,	SS = St/St	0 = Bag label
	PS = PES	0010 = 0.1μm			LL = 5"		HH = HB/HB	
	NY = NYLON	0020 = 0.2μm					SH = St/HB	
							HS = HB/St	



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