

Microcap™ GPVDF

Hydrophilic PVDF
Membrane Capsule Filters



Microcap™ GPVDF capsule filters consist of a single layer, hydrophilic, high capacity polyvinylidene fluoride (PVDF) membrane. These filters are used for bioburden control and clarification/pretreatment in aqueous liquids.

Pore sizes range from 0.22 to 1.0 µm and the filter devices scale from laboratory to full production using identical materials to ensure consistent results.

The hydrophilic GPVDF filters deliver high flow and throughput with the broad chemical compatibility of a fluoropolymer, making them ideal for filtering aggressive aqueous solutions.

Specifications

Materials of Manufacture

Housing:	Polypropylene
Filtration media:	Hydrophilic High Capacity Polyvinylidene Fluoride (PVDF) Membrane
Media support:	Polypropylene
End caps:	Polypropylene
Centre core:	Polypropylene
Outer support cage:	Polypropylene
Sealing method:	Thermal bonding

Typical Applications

Bioburden control in:

- SVPs and LVPs
- Buffers
- Plasma products
- WFI
- Serum
- Vaccines
- CIP solutions

Features and Benefits

- Excellent flow rates with high throughput.
- Excellent chemical compatibility.
- USP Class VI approved.
- Uses FDA compliant materials.

Sanitisation/Sterilisation

Autoclave:

121°C (250°F), 30 min, 5+ cycles

Chemical sanitisation: Performed using industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Pre-sterilised:

Hydrophilic PVDF capsules are offered in both non- and pre-sterilised forms.

Note:

GPVDF capsules are not to be used in steam.

Filtration Area (Nominal)

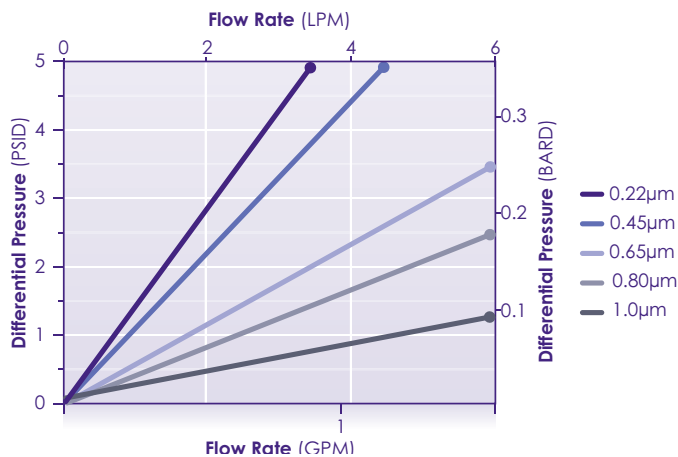
Capsule length				
2"	5"	10"	20"	30"
1.0ft ² (0.09m ²)	2.8ft ² (0.26m ²)	6.0ft ² (0.56m ²)	12.0ft ² (1.12m ²)	18.0ft ² (1.68m ²)

Maximum Operating Parameters

Capsules	
Liquid Operational Pressure	80 psi at 68°F (5.52 bard at 20°C)
Gases Operational Pressure	60 psi at 68°F (4.14 bar at 20°C)
Operating Temperature (water)	110°F at 30 psid (43°C at 2.07 bard)
Forward Differential Pressure	Liquid - 80 psid at 68°F (5.52 bard at 20°C)
Reverse Differential Pressure	50 psid at 68°F (3.45 bard at 20°C)
Recommended Changeout Pressure	35 psid (2.41 bard)

Flow Rates

(for 2" capsule with 1" sanitary inlet and outlet point)



Ordering Information

Product Code: 7018-6 - xxx - x - xx - x - x

Micron Rating (µm)	Pre-sterilised	Length (in)	Inlet	Outlet
P22 0.22	N Non-sterile	02 2	A 1/4" Female NPT	A 1/4" Female NPT
P45 0.45	S Sterile	05 5	B 1/4" Male NPT	B 1/4" Male NPT
P65 0.65		10 10	C 3/8" Female NPT	C 3/8" Female NPT
P80 0.80		20 20	D 1/2" Female NPT	D 1/2" Female NPT
001 1.0		30 30	E 1/2" Male NPT	E 1/2" Male NPT
			F 1" - 1 1/2" Sanitary	F 1" - 1 1/2" Sanitary
			G Hose Barb*	G Hose Barb*

*Fits hoses/tubes with inner diameter 11/32 to 9/16 inches

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