porvair filtration group

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/prefiltration 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 capsules deliver high flow and throughput with the broad chemical compatibility of a fluoropolymer, making them ideal for filtering aggressive aqueous solutions.

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.
- Non-fibre releasing.
- USP Class VI approved.
- Uses FDA compliant materials.

Ordering Information

Product Code: 7018-6 XXX - X - XX - X - X

Micron Rating (µm)	
P22	0.22
P45	0.45
P65	0.65
P80	0.80
001	1.0

Pre-sterilised	
N	Non-sterile
S	Sterile

Length (in)	
02	2
05	5
10	10
20	20
30	30

Inlet	
A	1/4" Female NPT
B	1/4" Male NPT
C	3/8" Female NPT
D	1/2" Female NPT
E	1/2" Male NPT
F	1" - 1 1/2" Sanitary
G	Hose Barb*

Outlet	
A	1/4" Female NPT
B	1/4" Male NPT
C	3/8" Female NPT
D	1/2" Female NPT
E	1/2" Male NPT
F	1" - 1 1/2" Sanitary
G	Hose Barb*

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

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

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-sterillised forms.

Note:

GPVDF capsules are not designed for steam-in-place (SIP).

Filtration Area

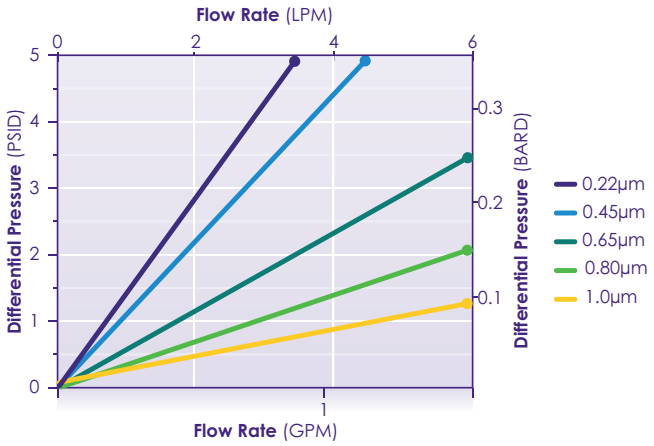
Capsule length				
2"	5"	10"	20"	30"
1.0ft² (0.09m²)	2.8ft² (0.26m²)	6.0ft² (0.56m²)	12.0ft² (1.11m²)	18.0ft² (1.67m²)

Maximum Operating Parameters

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

Clean Water Flow Rates

A 2" capsule with 1" sanitary inlet and outlet point, exhibits the flow-ΔP characteristics indicate below, for solutions with a viscosity of 1 centipoise.



Contact Information:

UK, New Milton Division
Tel: +44 (0)1425 612010
info@porvairfiltration.com

US, Ashland Division
Tel: +1 804 550 1600
infoUS@porvairfiltration.com

India, Mumbai Division
Tel: +91 22 2081 1148
infoIN@porvairfiltration.com