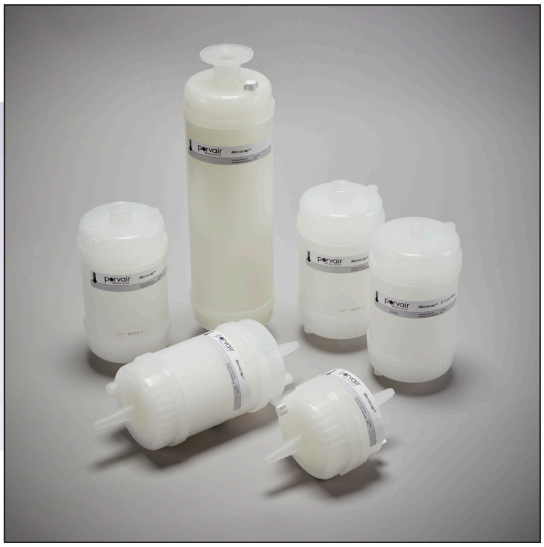
porvair filtration group

Microcap™ GGF

Pleated Glass Fibre Capsule Filters



Microcap™ GGF general service grade capsules are used for the removal of particulate contaminants from water, inks, dyes and speciality chemicals.

Made with glass fibre microfibre media and designed with the maximum filtration area, these filters can remove large amounts of particulate and other contaminants over a long filter life. Microcap™ GGF capsules protect critical membrane filters downstream by removing 99% of contaminants at the rated pore size.

Glass fibre depth media filters perform the critical upstream clarification of products. When used in final filtration systems, the filters protect the high-value membrane filters used downstream. Glass fibre depth media capsule filters are rinsed during production to remove manufacturing debris from the capsules.

Typical Applications

- Intermediates
- Buffers and growth media
- Bulk pharmaceutical chemicals
- LVPs and SVPs
- WFI, Water purification

Features and Benefits

- 99.9% efficiency at the rated pore size.
- Protect critical membrane filters downstream.
- Wide range of high efficiency retention ratings.
- High capacity for long life.

Ordering Information

Product Code: 7018- 8- [xxx] - [x] - [xx] - [x] [x]

Micron Rating (µm)	
P22	0.22
P45	0.45
001	1
005	5

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

Specifications

Materials of Manufacture

Housing:	Polypropylene
Filtration media:	Pleated Fiberglass Depth Media
Media support:	Polyester
End caps:	Polypropylene
Centre core:	Polypropylene
Outer support cage:	Polypropylene
Sealing method:	Thermal bonding
O-Rings:	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encap. Silicone, FEP Encap. Viton® (or FKM)

Sanitisation/Sterilisation

Autoclave:	120°C (250°F), 30 min, 5+ cycles
Chemical sanitisation:	Industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.
Note:	Microcap™ GGF capsules are not to be used in steam.

Flow Rate

The following table represents typical water flow at a one psi (69bar) pressure differential across a single 2 inch capsule with 1.0 ft² (0.093 m²) of media with 1/2" FNPT ports. The liquid test fluid is water at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore size (µm)	0.22	0.45	1.0	5.0
GPM	1.6	2.4	4	5
LPM	6.1	9.1	15.1	18.9

Maximum Operating Parameters

Liquid operational pressure:	5.5bar (80psi) at 20°C (68°F)
Gases operational pressure:	60psi (4.1bar) at 20°C (68°F)
Operating temperature:	43°C (110°F) at 2.1bar (30psi) in water
Forward differential pressure:	4.1bar (60psi) at 20°C (68°F)
Reverse differential pressure:	3.4bar (50psi) at 20°C (68°F)
Recommended changeout pressure:	2.4bar (35psi)

Filtration Area

Media	Capsule length				
	2"	5"	10"	20"	30"
Pleated Glass Fibre	0.8ft² (0.08m²)	2.3ft² (0.22m²)	5ft² (0.46m²)	10ft² (0.92m²)	15ft² (1.38m²)

Average – Filtration area varies with media thickness and porosity.

Integrity Test Information

Each capsule assembly is integrity tested before release. Field duplication of these tests is not practical because of the absence of commercial portable testing equipment.

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