

Microcap™ GPNSD

Nano-Spun Polypropylene
Depth Media



Microcap® GPNSD filters are part of Porvair Filtration's economical, general service product line that can be used to lower the total cost of filtration from simple to the most complex applications.

Produced using the same quality materials and manufacturing excellence as our other product lines, you can be assured of their performance, dependability and scalability.

While general service filters are not integrity tested or validated for retention, these highly efficient filters remove large amounts of contaminants early in the process to reduce the load on your expensive downstream filters. They are also useful as stand-alone clarifying or particle removal filters in less critical applications.

Microcap® GPNSD cartridge and capsule filters are made with Nano-spun Polypropylene depth media, which is the laying down of graded density fibers on a spinning core and used when filtering fluids with high contaminant loading. Pore sizes range from 0.5 to 100 µm.

The Microcap® GPNSD products are engineered to hold large amounts of contaminants and still provide 99% retention at the rated pore size. Microcap® GPNSD filters protect downstream membrane filters and improve process efficiency.

Typical Applications

Microcap® GPNSD filters are recommended for clarification & prefiltration of:

- High Purity Chemicals
- Fermentation Broths
- Wine, Beer, Juices
- Buffers & Biologicals
- Container Wash Solutions
- Inks & Dyes
- CMP Slurries
- Water Purification

Maximum Operating Parameters

	Cartridges	Capsules
Liquid Operational Pressure	N/A	80 psi at 68°F (5.52 bard at 20°C)
Gases Operational Pressure	N/A	60 psi at 68°F (4.14 bar at 20°C)
Operating Temperature (water)	140°F at 30 psid (60°C at 2.07 bard)	110°F at 30 psid (43°C at 2.07 bard)
Forward Differential Pressure	50 psid at 68°F (3.45 bard at 20°C)	50 psid at 68°F (3.45 bar at 20°C)
Reverse Differential Pressure	20 psid at 68 °F (1.38 bard at 20°C)	20 psid at 68°F (1.38 bard at 20°C)
Recommended Changeout Pressure	35 psid (2.41 bard)	35 psid (2.41 bard)

Sanitisation and Sterilisation

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

Materials of Manufacture

Product Code: 7018-5

Housing:	Polypropylene
Filtration media:	Melt-Blown Polypropylene Depth Media
Media support:	Polypropylene
End caps:	Polypropylene
Sealing method:	Thermal bonding
O-Rings:	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encap.

Ordering Information

Product Code: 7018-9



Micron Rating (µm)		Length		Inlet		Outlet		Side Vent Options		O-Rings (Bleed valves only)	
-50	0.50 (µm)	A	2"	A	¼" Female NPT	A	¼" Female NPT	1	Luer Lock	S	Silicone
1.0	1.0 (µm)	B	5"	B	¼" Male NPT	B	¼" Male NPT	2	Bleed Valve	E	EP
3.0	3.0 (µm)	1	10"	C	⅜" Female NPT	C	⅜" Female NPT			V	Viton
5.0	5.0 (µm)	2	20"	D	½" Female NPT	D	½" Female NPT			B	Buna
10	10 (µm)	3	30"	E	½" Male NPT	E	½" Male NPT			K	FFKM
20	20 (µm)			F	1" Sanitary	F	1" Sanitary				
55	50 (µm)			G	Hose Barb*	G	Hose Barb*				
999	100 (µm)			H	1½" Sanitary with side vent	H	1½" Sanitary with side vent				
				I	½" Single Stepped Barb with side vent	I	½" Single Stepped Barb with side vent				
						IB	½" Single Stepped Barb with filling bell and side vent				

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