



GCWPS Micro Capsule Filters

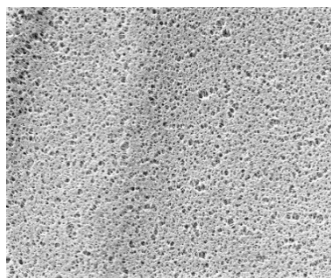
Single or Dual Layer
High Capacity PES Membrane

GCWPS Micro Capsule filters are part of Critical Process 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.

GCWPS Micro Capsule filters are constructed with a high capacity polyethersulfone (PES) membrane. They are used for reducing fine particles in aqueous liquids and prefiltering products with high particle loads. Pore sizes range from 0.1 to 1.0 μm .

GCWPS hydrophilic Micro Capsule filters have low binding characteristics that are ideal for filtering products with components that adsorb to filter media. GCWPS Micro Capsule filters deliver high retention, flow and throughput. Available as a single layer or dual layers of PES for greater retention.

Critical Process provides unrivaled delivery times, technical consulting before purchasing, and very competitively priced high-performance products. Our comprehensive testing & analysis and validation services support your team whenever they need it. Your process experts partnering with our filtration experts is how we deliver your company's solution right the first time.



GCWPS Micro Capsule filters are recommended for the filtration of:

- Process Water
- DI Water
- Clean-in-Place Solutions
- Chemicals
- Inks & Dyes

Fine Particle Removal

Clarification & Prefiltration



MICRO CAPSULES – Nominal Dimensions

Body Length: 1.9 in. (4.8 cm)

Overall Length: 2.8 to 3.8 in. (7.1 to 9.7 cm)

Outside Diameter: 2.6 in. (6.6 cm)

Maximum Operating Parameters

MICRO 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) Gas - 60 psi at 68 °F (4.14 bar 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)

Sanitization & Sterilization

Autoclave	250 °F (121 °C), 30 min, 25+ cycles
Chemical Sanitization	Performed using industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Extractables

GCWPS Micro Capsule filters typically exhibit low levels of non-volatile residues.

Non-Fiber Releasing

The GCWPS Micro Capsule filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters.

FDA and EC Compliance

Materials meet the requirements listed by the FDA as appropriate for use in articles intended for repeated food contact as specified in Title 21 CFR sections 174.5, 177.1500, 177.1520, 177.1630, 177.2440, and 177.2600 as applicable. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

Single Layer Filtration Area (Nominal)

Area	0.569 ft ²
	529 cm ²

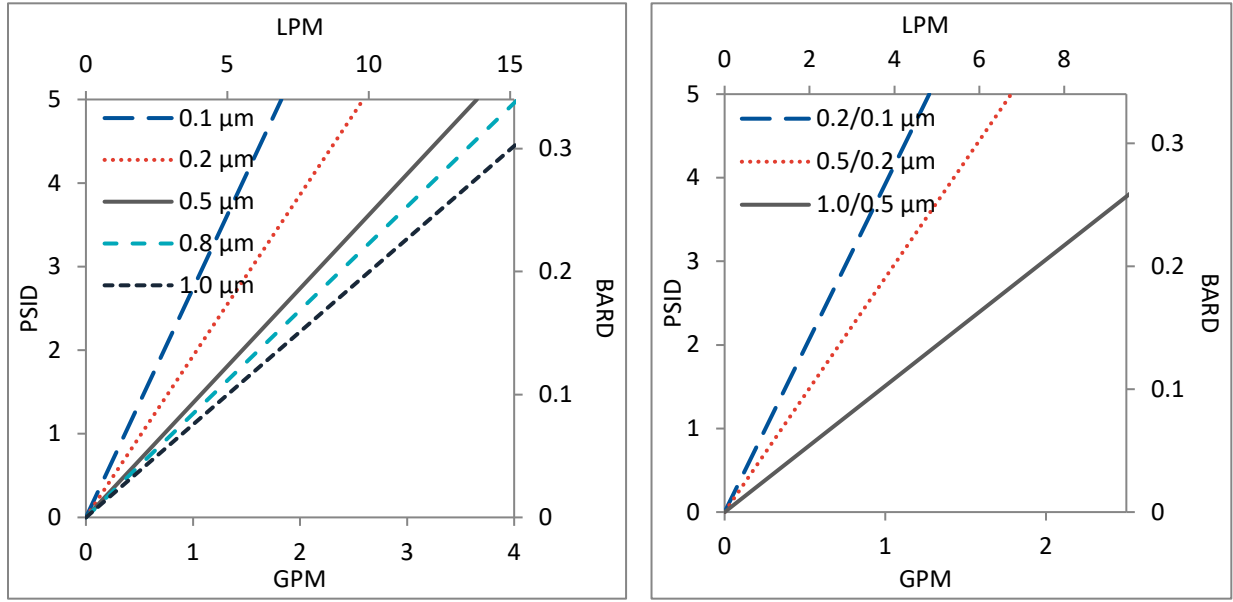
Double Layer Filtration Area (Nominal)

Area	0.45 ft ²
	418 cm ²

Construction Materials

Filtration Media	Single or Dual Layer High Capacity PES Membrane with Polyester Support
Media Support	Polypropylene
End Caps, Center Core, Outer Support Cage, Micro Capsule Housing	Polypropylene
Sealing Method	Thermal Bonding

Flow Rates for GCWPS Micro Capsules by Pore Size



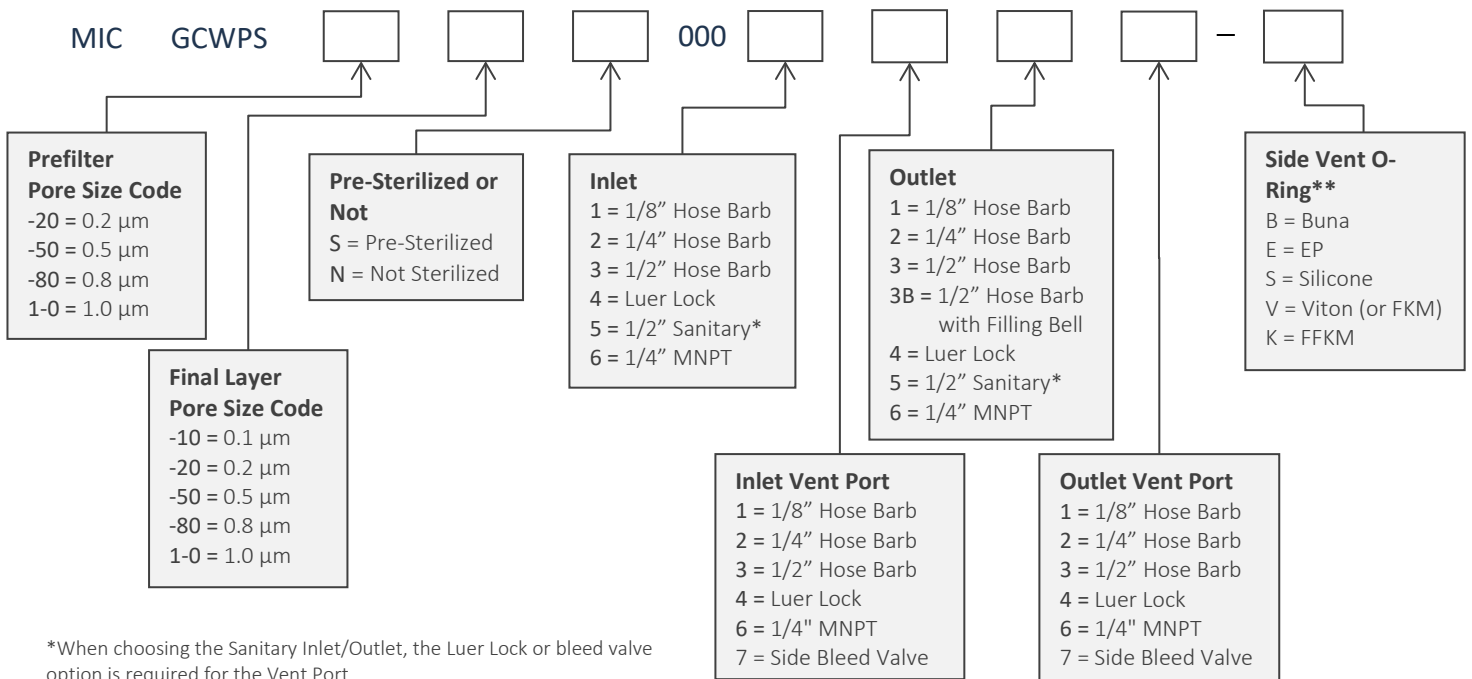
Flow rates for Cartridge filters are per 10-inch length. The test fluid is water at ambient temperature.

GCWPS Micro Capsule Filters Ordering Information

All Critical Process filters are configurable to meet customer specifications.
Fill in the corresponding codes in the boxes below to build your Part Number.

To consult with one of our technical team members, request a quote or place an order:
call (603) 880-4420 or [contact us here](#).

Micro Capsule Filters



*When choosing the Sanitary Inlet/Outlet, the Luer Lock or bleed valve option is required for the Vent Port

** O-Ring is only available on Bleed Valve



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Data Sheet GCWPS Micro DS Rev -