



ETM Micro Capsule Filters

PTFE Membrane

ETM Micro Capsule cartridge and capsule filters consist of a single layer Polytetrafluoroethylene (PTFE) membrane. Designed to meet the needs of the electronics and high-purity chemical industries, ETM Micro Capsule products are resistant to virtually all chemicals making them very effective in removing particles in gas and non-aqueous liquid filtration. They are most often used as final filters at the point-of-use, such as at tools. The ETM Micro Capsule can also be ordered pre-wetted with water for use in aqueous solutions. Pore sizes range from 0.05 to 5.0 μm and the filter sizes scale from laboratory to full production using identical materials to ensure consistent results. Each filter is individually tested to ensure integrity.

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.

Fine Particle Removal

Tank Vent & Process Gas

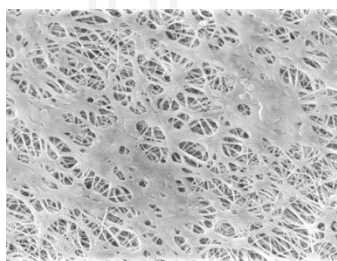


MICRO CAPSULES – Nominal Dimensions

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)



ETM Micro Capsule filters are recommended for:

- Compressed Air
- Pressurized Gases
- Non-Aqueous Chemicals
- Solvents
- Tank Ventilation

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.

Integrity Testing

PORE SIZE	BUBBLE POINT MINIMUM*	
	PSIG	BARG
μm		
0.05	43	3.0
0.10	22	1.5
0.22	15	1.0
0.45	9	0.62
1.0	6	0.41
3.0	2	0.14
5.0	1	0.07

* Bubble Point for membrane wetted with 60% IPA / 40% water solution.

Filtration Area (Nominal)

Area	0.51 ft ²
	474 cm ²

Construction Materials

Filtration Media	Polytetrafluoroethylene (PTFE) Membrane
Media Support	Polypropylene
End Caps, Center Core, Outer Support Cage, Micro Capsule Housing	Polypropylene
Sealing Method	Thermal Bonding

Extractables

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

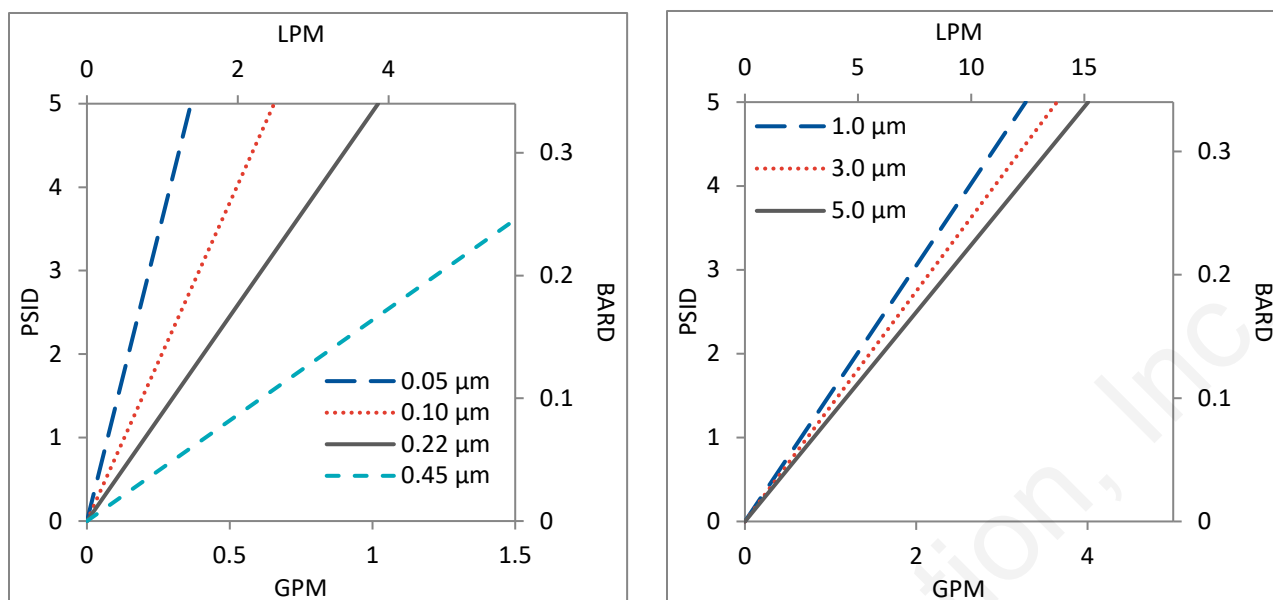
TOC and Conductivity

ETM Micro Capsule filter water effluent conforms with the TOC and water conductivity standards of SEMI Standard F63 after an appropriate flush with ultrapure water.

Non-Fiber Releasing

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

ETM Micro Capsules by Pore Size



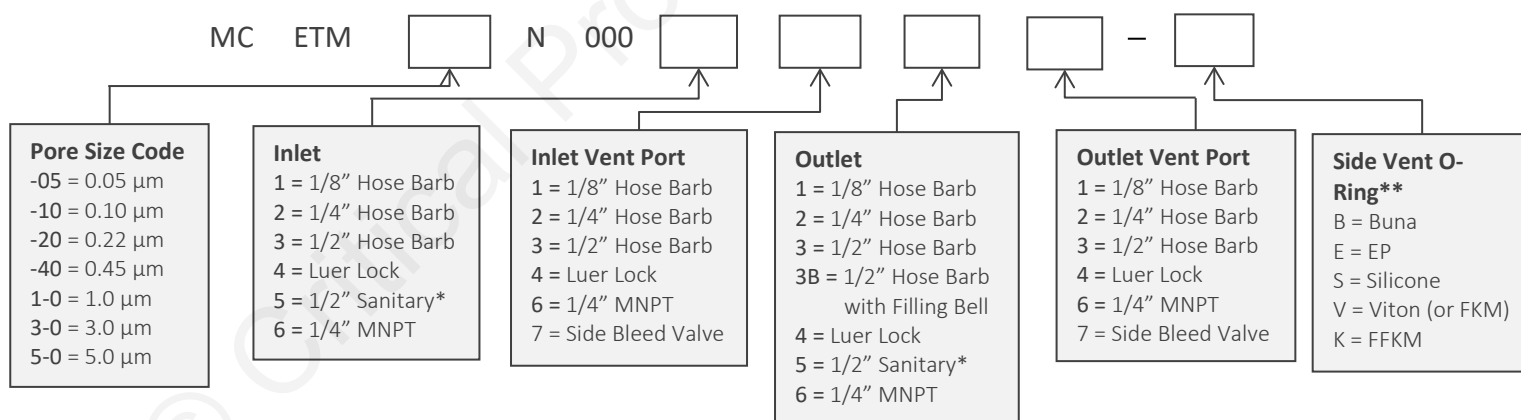
Flow rates for Micro Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a Micro capsule filter with 1/2" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the Micro capsule.

ETM 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 Ext. 106, 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



One Chestnut Street
Nashua, NH 03060
603.880.4420
FAX: 603.880.4536

CriticalProcess.com

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