

GMB Capsule Filters

Melt Blown Polypropylene Depth Media



Continuous spun bonded polypropylene for a consistent media

High dirt holding capacity for long life

Protection of more expensive membrane filters

Wide range of retention ratings

Applications

- ◆ Wash Solutions
- ◆ Specialty Chemicals
- ◆ Waste Stream Cleaning
- ◆ Cosmetics
- ◆ Plating Solutions
- ◆ Potable Water
- ◆ Water System Prefiltration

GMB capsule filter media is made using a continuous spun bonding technology that assures a consistent polypropylene depth media. The 100% all polypropylene construction of GMB capsule filters gives broad chemical compatibility and extremely low extractables. These capsules offer exceptional value with 85% removal efficiency at their pore size rating plus high dirt holding capacity.

They are ideal for use where protection of more expensive membrane filters is important. With a wide range of ratings, users can find the right filter for their clarification or prefiltration application.

GMB capsule filters are used in a variety of industries. Applications include clarification of wine, beer, and fruit juices; prefiltration of fermentation broths and biological fluids in pharmaceutical production, protecting downstream filters for water systems and final filtration for CMP slurries in semiconductor making.

GMB Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
Melt Blown Polypropylene Depth	2" Module (5.08 cm)	5" Module (12.7 cm)	10" Module (25.4 cm)	20" Module (50.8 cm)	30" Module (76.2 cm)

Flow Rate / Filtration Area

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 2 inch capsule with 2 inch (5.08 cm) length module and 1/2 inch FNPT ports. The 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	1 µm	3 µm	5 µm	10 µm	20 µm	30 µm	50 µm	75 µm	100 µm
GPM	0.60	1.0	1.2	1.5	2.0	2.4	>3.0	>3.0	>3.0
LPM	2.27	3.78	4.54	5.67	7.57	9.08	>11.35	>11.35	>11.35

* For approximate flow rates for 5" through 30" capsules, refer to the appropriate cartridge data sheet

Construction Materials

Housing	Polypropylene
Filtration Media	Melt Blown Polypropylene Depth Media
Media Support	Polypropylene
End Caps	Polypropylene
Sealing Method	Thermal Bonding

Maximum Operating Parameters

Liquid Operational Pressure	80 psi (5.5 bar) at 20 °C (68 °F)
Gases Operational Pressure	60 psi (4.1 bar) at 20 °C (68 °F)
Operating Temperature	43 °C (110 °F) at 30 psi (2.1 bar) in water
Forward Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Reverse Differential Pressure	20 psid (1.4 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	20 psid (1.4 bard)

Integrity Test Information

Representative sample capsule elements are factory tested for integrity before shipment. Field duplication of these tests is not practical because of the absence of commercial portable testing equipment.

Sanitization/Sterilization

Chemical SanitizationIndustry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.

FDA and EC Compliance

All Critical Process Filtration capsule filters are designed to meet the FDA requirements for processing food and beverage products. The materials used to construct GMB capsule filters are 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 appropriate. Membrane filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

Ordering Information

Capsule order number example: General Service Grade Melt Blown Polypropylene Depth Media, 5 Micron Rating, Non-Sterile, 10" Length, 1/2" Male NPT Inlet, 1/2" Male NPT Outlet = CPGMB5-0N0001EE.

Extractables

GMB capsule filters typically exhibit low levels of non-volatile residues.

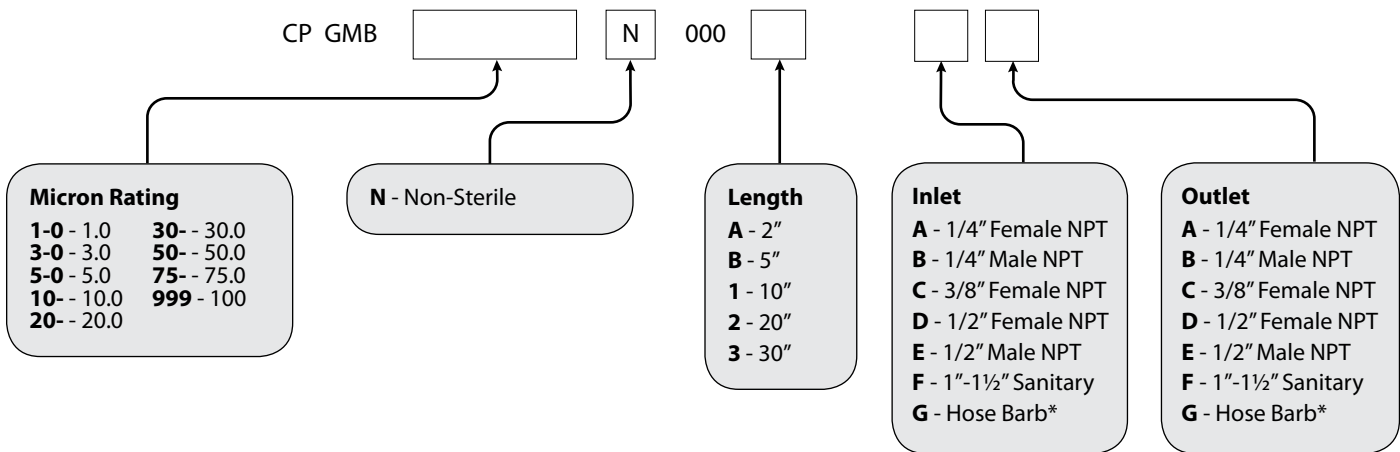
Quality Assurance and Standards

Critical Process Filtration uses state of the art computer controlled equipment to consistently produce high quality products as well as significantly reduce hand operations that can compromise quality. All manufacturing and testing is continuously monitored in real time so that data can be quickly and easily analyzed to facilitate improvements in both quality and cost.

The Critical Process Filtration manufacturing and quality systems meet rigorous ISO 9001:2008 standards. Each operation, including assembly, testing, cleaning, drying and packaging, is done in an appropriately rated clean room. Manufacturing is controlled using a sophisticated manufacturing system that networks work stations, manufacturing centers and inspection points. During the manufacturing and inspection processes, data is collected in real time to allow continuous quality monitoring and full traceability of all materials and processes.

Total Performance

Critical Process Filtration, Inc. is a vertically integrated manufacturer of filtration products to industries in which filtration is considered a critical part of the manufacturing process. We supply a complete line of products and services to help you cost effectively satisfy all your filtration requirements from a single source.



Hose Barb Diameter Ranges*

	Minimum	Maximum
Outer Diameters	11/32" (8.6mm)	9/16" (14.0mm)
Inner Diameters	5/32" (4.0mm)	13/32" (10.5mm)

Request a QUOTE from your area representative



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