

GPM Cartridge Filters

Polypropylene Membrane



General Service Grade Polypropylene Membrane Filter Cartridges are designed for general purpose use wherever a cost effective, hydrophobic, chemically inert membrane filter is required. Designed to hold the maximum amount of filter media that can be effectively utilized in a cartridge, GPM filters lower the cost of filtration. GPM cartridges are flushed with high purity water to remove potential extraneous manufacturing debris. They are often used in place of PTFE membrane because of the lower cost and low extractables.

Construction Materials

Filtration Media	Polypropylene Membrane (absolute rated)
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding
O-rings	Buna, Viton® (or FKM), EP, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)

Applications

- ◆ Solvents
- ◆ Tank Vents
- ◆ Gases
- ◆ Compressed Air

Dimensions

Length	5 to 40 in. (12.7 to 101.6 cm) nominal
Outside Diameter	2.75 in. (7.0 cm) nominal
Filtration Area	7.0 ft ² (0.65 m ²) per 10 in. length

Integrity Test Information

Samples from each manufacturing lot are tested by water intrusion to ensure consistent performance.

Maximum Operating Parameters

Differential Pressure	
• Forward	50 psid (3.4 bard) at 20 °C (68 °F)
• Reverse	40 psid (2.7 bard) at 20 °C (68 °F)
Operating Temperature	82 °C (180 °F) at 10 psid (0.69 bard) in water
Recommended Changeout Pressure	35 psid (2.4 bard)

Sanitization/Sterilization

Autoclave	121 °C (250 °F), 30 min, multiple cycles
In-line Steam	135 °C (275 °F), 30 min, multiple cycles

For all elevated temperature procedures, a stainless steel support ring is required.

Chemical Sanitization

Performed using industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.

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.

FDA and EC Compliance

All Critical Process Filtration filters are designed to meet the FDA requirements for processing food and beverage products. The materials used to construct GPM 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.

Extractables

GPM filters generally exhibit low levels of non-volatile residues.

Flow Rate

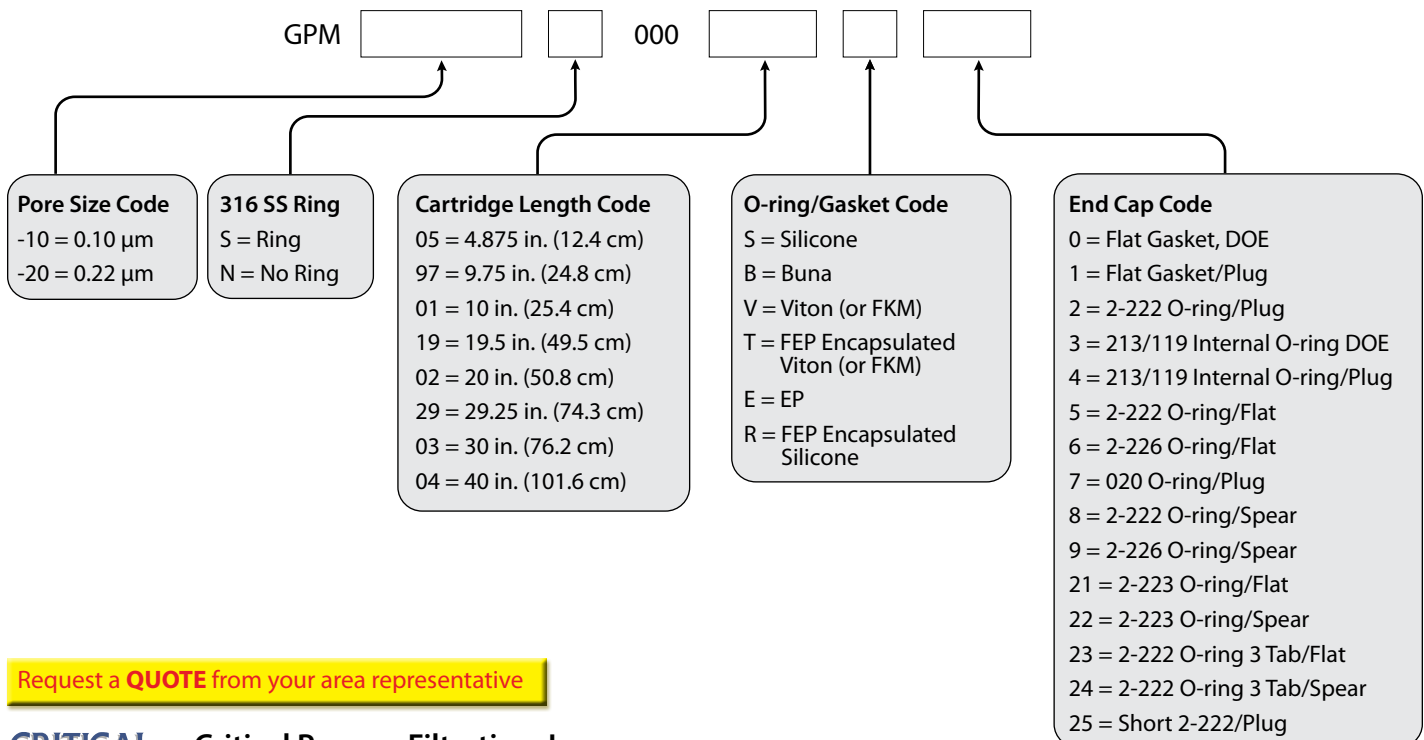
The Typical Flow Rates Table represents typical water and air flows at a 1 psid (69 mbard) pressure differential across a single 10 in. cartridge element. The test fluids are water and air at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Typical Flow Rates

Pore Size Rating	0.1 μm	0.2 μm
Liquid Flow Rates (gpm)	0.75	2.75
Air/Gas Flow Rates (scfm)	> 22	> 32

Ordering Information

Cartridge order numbers have several variables from pore size to end cap type. For example, General Service Grade Polypropylene Membrane, 0.22 Micron Rating (liquid), No SS Support Ring, 20" Length, Silicone O-Rings, 2-222/Flat End Cap Configuration = GPM-20N00002S5.



Request a **QUOTE** from your area representative



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