

WPS grade

*Polyethersulfone Membrane Media Filter Cartridges
engineered and manufactured for cost effective filtration*

Critical Process Filtration, Inc.® • One Chestnut Street • Nashua, NH • 03060
Telephone: 603-880-4420 Fax: 603-880-4536
Web Site: www.criticalprocess.com E-mail: sales@criticalprocess.com

WPS water grade Polyethersulfone cartridges are designed for general water purpose use, wherever a cost effective membrane filter is required. WPS cartridges are flushed with 17+ megohm-cm water to remove potential extraneous manufacturing debris. Priced below general purpose cartridges, WPS cartridges are still manufactured with the same careful attention to both quality and performance.

Construction Materials ¹

Filtration Media:Polyethersulfone
Filtration Media Support:Polypropylene
End Caps:Polypropylene
Center Core:Polypropylene
Outer support Cage:Polypropylene
O-rings: Buna, Viton, EP, Silicone, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton

¹ All materials of construction are FDA accepted. Final assemblies have been validated to pass USP class 6 Toxicology extractable tests, oxidizable substances for plastics, endotoxin level and other quality tests.

Membrane Bubble Point

(water wetted membrane)

Pore Size	Bubble Point
0.1 µm	60 Psi (4137 mbar)
0.22 µm	44 Psi (3034 mbar)
0.45 µm	25 Psi (1724 mbar)

Dimensions

Length:10 to 40 inches (25.4 to 101.6 cm) nominal

Outside Diameter:2.75 inches (7.0 cm) nominal

Filtration Area: 5.5 ft² (0.51 m²) Per 10" length

Ordering Information

The cartridge catalog number is made up of several variable characters i.e. pore size, length, O-ring material, and end cap code. For example: a 0.10 µm, 20 inch (50.8 cm) long cartridge with 2-222, Silicone O-rings, no spear (flat top) and no 316 SS Ring would be designated as: WPS*10N00002S5.



Flow Rate

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 10 inch cartridge element. The test fluid is water 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.

Pore Size	0.10 µm	0.22 µm	0.45 µm
GPM	2.0	3.5	6.0
LPM	7.57	13.24	22.71

Maximum Operating Parameters

Forward Differential Pressure: .. 50 psi (3.4 bar) at 20°C.

Reverse Differential Pressure: 40 psi (2.7 bar) at 20°C.

Maximum Operating Temperature:.... 180°F (82°C) at 10 psid (0.69 bar) in water.

Recommended Change Out 30 psid (2.07 bar)

