

WPS Cartridge Filters

Polyethersulfone (PES) Membrane



WPS Filter Cartridges with symmetric polyethersulfone (PES) membrane are ideal for purified water filtration. The symmetric membrane used in WPS cartridges guards against bacterial growth during the long life of the filter, reducing the potential for biofilm accumulation in system piping. WPS cartridges are flushed with high purity water to remove manufacturing debris.

Construction Materials

Filtration Media	Symmetric Polyethersulfone (PES) 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

- ◆ Process Water
- ◆ DI Water
- ◆ Ultrapure Water
- ◆ Pharmaceutical Waters

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

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

Filtered Hot Water	90 °C (194 °F), 30 minutes, multiple cycles, max 3 psid forward flow
For all elevated temperature procedures above, 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 cartridge filters are made using materials that meet the FDA requirements for processing food and beverage products. These 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

WPS filters typically exhibit low levels of non-volatile residues.

Flow Rate

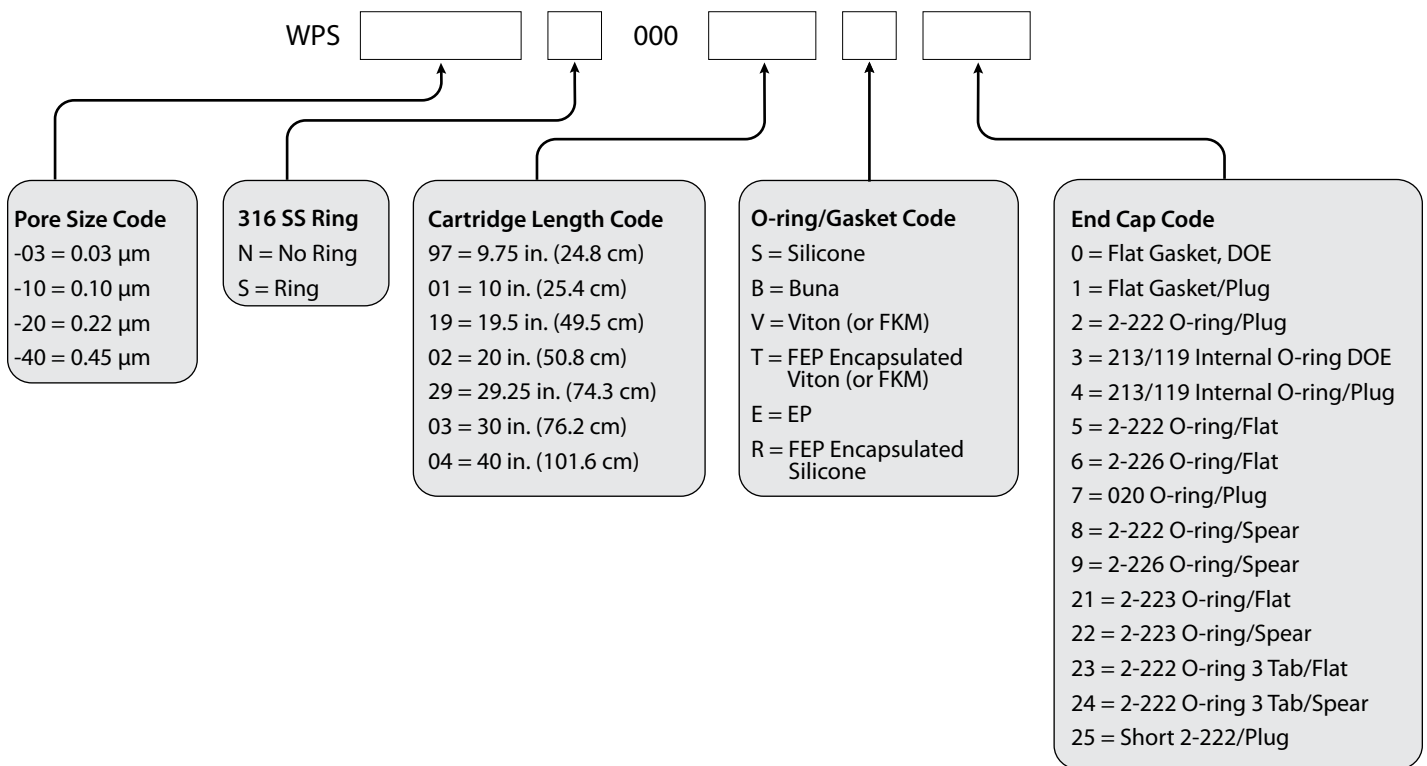
The Typical Flow Rates table represents typical water flow at a 1 psid (69 bard) pressure differential across a single 10 in. cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase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

Typical Flow Rates

Pore Size	0.03 µm	0.10 µm	0.22 µm	0.45 µm
GPM	1.5	2.5	3.2	6.0
LPM	5.67	9.46	12.11	22.71

Ordering Information

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



Request a **QUOTE** from your area representative



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