

DPS Capsule Filters

Double Layered Polyethersulfone (PES) Membrane



Excellent flow rates with high solids retention capacity

High quality filtration of process water, specialty chemicals, inks and dyes

Optimized double layer membrane design for high throughput

Applications

- ◆ Process Water
- ◆ DI Water
- ◆ Inks & Dyes
- ◆ Specialty Chemicals

DPS Capsules are hydrophilic and manufactured with two layers of polyethersulfone (PES) membrane optimized for the highest filtration area and solids holding capacity. PES membrane has excellent flow rates.

DPS capsule filters are used for removal of particulates from process water, and for final filtration of DI water, inks, dyes and specialty chemicals.

DPS capsule filters are particularly suited for high flow rate filtration of product streams that contain high contaminant loads and have elements that can adsorb to the media, such as preservatives. The lower binding characteristics of PES membrane make it a good choice for inks, dyes, specialty chemicals and service fluids.

DPS Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
Double Layered PES Membrane	1.0 ft ² (0.093m ²)	3.0 ft ² (0.279m ²)	7.0 ft ² (0.650m ²)	14.0 ft ² (1.301m ²)	21.0 ft ² (1.951m ²)

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 1.0 ft² (0.093 m²) of media with 1/2" 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	0.03 μm	0.10 μm	0.22 μm	0.45 μm	0.65 μm	0.80 μm	1.0 μm	1.2 μm
GPM	0.16	0.26	0.46	0.71	0.86	0.91	0.97	1.0
LPM	0.61	0.98	1.74	2.69	3.26	3.44	3.67	3.78

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

Construction Materials

Housing	Polypropylene
Filtration Media	Double Layered Polyethersulfone (PES) Membrane
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	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	50 psid (3.4 bard) at 20 °C (68 °F)
Reverse Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	35 psid (2.4 bard)

Sanitization/Sterilization

Autoclave250° F (121° C), 30 min, 5+ cycles
Chemical SanitizationIndustry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.
NoteDPS capsules are not to be used in steam.

FDA and EC Compliance

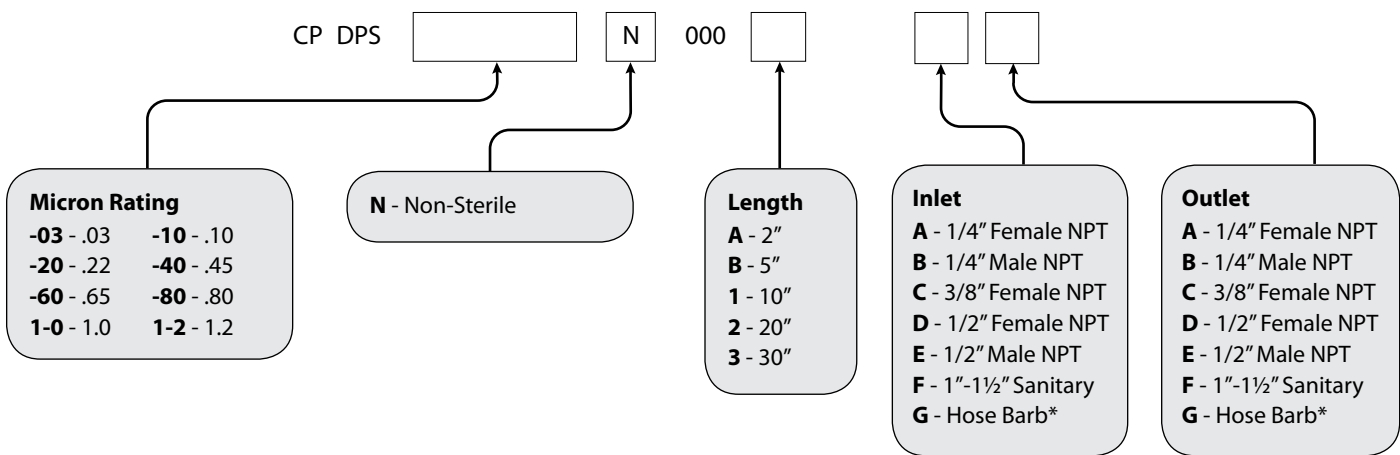
All Critical Process Filtration capsule filters are designed to meet the FDA requirements for processing food and beverage products. The materials used to construct DPS capsule filters are listed by the FDA as appropriate for use in articles intended for repeated food contact as specified in Title 21 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.

Extractables

DPS capsule filters generally exhibit low levels of non-volatile residues.

Ordering Information

Capsule order number example: General Service Grade Double Layered PES Membrane, 0.22 Micron Rating, Non-Sterile, 10" Length, Sanitary Inlet, Sanitary Outlet = CPDPS-20N0001FF.



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



Critical Process Filtration, Inc.

One Chestnut Street • Nashua, NH 03060
 Tel: 603.880.4420 • Fax: 603.880.4536

criticalprocess.com • sales@criticalprocess.com

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