

Omni-Clear™ Z Series

High Flow Rate Expanded Surface Area Pleated Cartridges Utilizing Polyethersulfone Membrane



Description

Omni-Clear™ Z Series pleated cartridges are manufactured with advanced hydrophilic, asymmetric polyethersulfone membranes and all polypropylene components. The low protein binding nature of the filter membrane ensures suitability in many critical applications. The PES membrane provides sharp particle cut-offs and is compatible with a broad range of chemicals and pH extremes. Omni-Clear cartridges provide reliable particle retention and enhanced throughput for superior performance in critical applications.

Omni-Clear Series filter cartridges are constructed and assembled in a clean room and are 100% traceable. The cartridges are steam sterilizable and can withstand repeated autoclaving cycles, following standard USP guidelines. Omni-Clear filter cartridges are biologically safe and met the requirements of USP Class VI test for plastics. This range of filter cartridges is available in a wide range of configurations to fit most commercially available filter housings.

Features and Benefits

- Expanded surface area, high flow, filter cartridges, constructed of pleated polyethersulfone membranes, provide absolute particle retention and long on-stream life cycles.
- Cartridges are sealed using an advanced thermal bonding process and flushed with ultrapure water to ensure the lowest level of extractables.
- Each cartridge is stamped with product and lot number for identification and 100% traceability.
- Cartridges are manufactured to meet the high throughput requirements of critical applications.
- All cartridges are constructed and assembled in a Class 10,000 Clean Room environment to ensure minimal particle contamination.
- All materials of construction are FDA listed for food and beverage contact according to CFR Title 21 and meet the requirements under USP Class VI.
- Absolute removal ratings available from 0.1 to 1.2 µm.

Applications

- High Purity Water
- Large and Small Volume Parenterals
- Acids, Bases and Oxidants
- Pharmaceuticals / Biologicals
- High Purity Chemicals
- Fragrances
- Ophthalmic Solutions
- Inks and Dyes
- Wines
- Bottled Water

Materials of Construction

Filter Media	Polyethersulfone
Support Media	Polypropylene
Cage, Core, Endcaps	Polypropylene
O-Rings/Gaskets	EPR, Silicone, PTFE*

* Other materials available

Nominal Dimensions

Length Designation		A	B	C	D
Diameter	(in)	2.7	2.7	2.7	2.7
	(cm)	6.9	6.9	6.9	6.9
Length	(in)	10	20	30	40
	(cm)	25	51	76	102
Filtration Area	(ft ²)	8.5	17.0	25.5	34.0
	(m ²)	0.8	1.6	2.4	3.2

Sterilization

Autoclave	30 minutes	259 °F (126 °C)
In-line Steam	30 minutes	275 °F (135 °C)

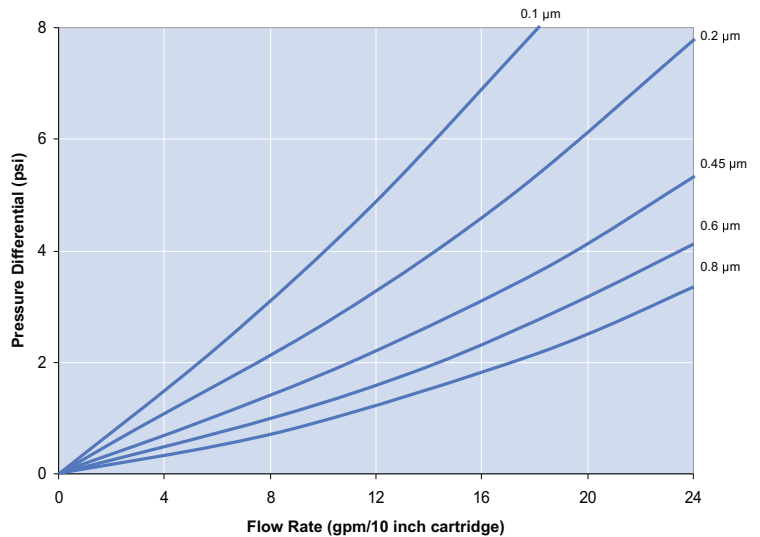
Flow Rate and Integrity

Part Number	Flow at 1 psid (gpm)	Integrity Values		
		Diffusive Flow Pressure (psi)	Diffusive Flow Volume (mL)	Minimum Bubble Point (psi)
10 inch Length				
S001Z	0.8	50	23	60
S002Z	2.8	36	23	45
S004Z	5.5	20	23	24
S006Z	8.0	14	23	16
S008Z	8.3	12	23	14

Cartridge Selection Guide

Cartridge Media Type	Grade	Filter Area	Series	Layers	Nominal Length (inches)	Cartridge Style	Gasket or O-Ring	Utilization
S	002	Z	S	1	A	3	03	N
S = Polyethersulfone Membrane	001 = 0.1 µm 002 = 0.2 µm 004 = 0.45 µm 006 = 0.65 µm 008 = 0.8 µm 022 = 0.2/0.2 µm 094 = 1.2/0.45 µm 096 = 1.2/0.65 µm	Z = Expanded Surface Area	S = Standard M = Microbial B = Biological E = Electronic P = Pharmaceutical	1 = Single 2 = Double	A = 10 B = 20 C = 30 D = 40	2 = DOE 3 = 222/Flat 6 = DOE/Internal 120 O-Ring 7 = 226/Fin 7A = 226/Flat 8 = 222/Fin	01 = EPR 03 = Silicone 04 = Nitrile 08 = Viton 09 = PTFE Gasket 11 = PTFE/Viton	N = Non-Steam Sterilizable S = Steam Sterilizable

Water Flow Rate



Compliance

	USP Class VI	FDA Listed Per 21 CFR
Filter Media	Pass	Yes
Support Media	Pass	Yes
Cage, Core, Endcaps	Pass	Yes

Operating Conditions

Maximum Differential Pressure	Maximum Operating Temperature
60 psid (4 bar)	68 °F (20 °C)
30 psid (2 bar)	140 °F (60 °C)

Purolator Liquid Process

8314 Tiogawoods Drive
Sacramento, CA 95828

Phone: 916-689-2328
Fax: 916-689-1035
E-mail: sales@purolator-lp.com

