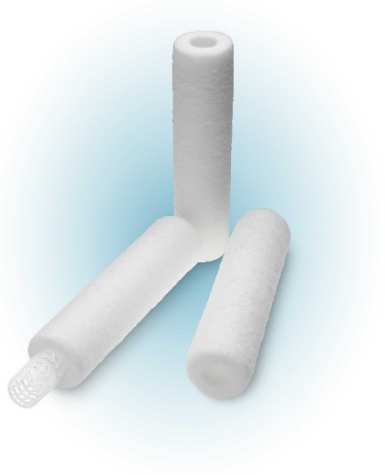
SWRO.Z

FACT SHEET

Z.Plex* technology depth filter for seawater reverse osmosis pre-filtration



Features and Benefits

- Engineered specifically for seawater reverse osmosis pretreatment
- Depth filter traps particles throughout the media
- True graded density offers longer filter lifetime
- Very low pressure drop and flow resistance
- Melt-bonded exterior ensures no media migration

Applications

- Seawater reverse osmosis pre-filtration for Veolia RO systems and universal equipment

Specifications

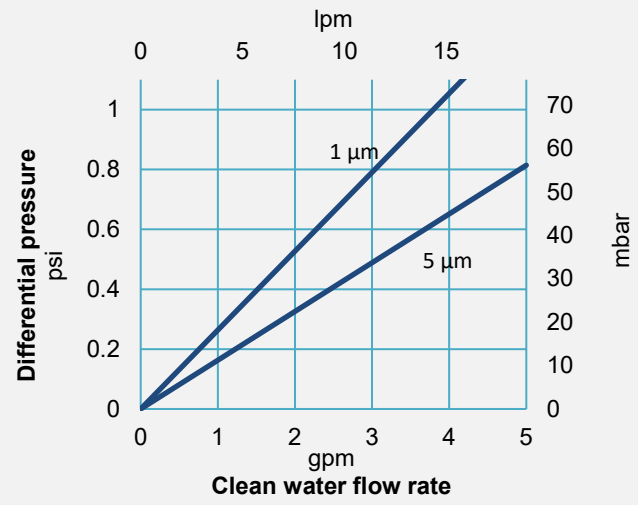
Table 1: Specifications and performance information

Ratings	1, 5 microns (nominal)
Inner Diameter (nominal)	1.1 in (2.5 cm)
Outer Diameter	*standard* 2.46 in (6.2 cm) *available upon request* 2.36 in (6.0 cm)
Lengths	40 in (101.6 cm) 50 in (127.0 cm) 60 in (152.4 cm) 70 in (177.8 cm)
Longer lengths up to 70 in may be available upon request	
Materials of Construction	
Filter Media	Polypropylene
Adapters	Polypropylene
Elastomer	Buna, EPDM, Silicone, Viton[1], Santoprene[2] (flat gasket only)
Performance Conditions	
Maximum pressure drop:	35 psid (2.4 bar) @ 77°F (25°C)
Recommended change-out pressure drop:	20 psid (1.4 bar) @ 77°F (25°C)

Efficiency Information

Table 2: Removal efficiency based on a modified ASTM 795 procedure

Micron Rating	Removal Rating (µm) at Various Efficiencies		
	90.0%	99.0%	99.9%
1 µm 5 µm	*Efficiency of nominal filters varies by application. See note for information on nominal filter efficiency*[3]		



Graph 1: SWRO.Z clean water flow rate based on a 10 in length filter

Quality

SWRO.Z filters are manufactured under a quality management system that has been certified to meet ISO 9001 standards. Each filter is assigned a lot code to ensure traceability of the data and materials used in the manufacturing process.

Certifications

- U.S. FDA 21CFR 177.1520 food contact requirements
- Article 3 of the EU Framework Regulation No. 1935/2004/EC safety requirements
- EU Plastics Regulation No. 10/2011 (may be used as intended in all compliant EU Member states)
- USP class VI-121'C Plastics criteria
- NSF 61 criteria
- ISO 9001 criteria

Veolia filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia representative for more information.

Ordering Information

Replace the numbers with your desired values from each column. Columns 3, 4, and 5 are optional depending on the desired configuration.

Example: SWRO.Z 05-40-XK

SWRO.Z	1	-	2	-	3	4	5

Table 3: Ordering information

	1	2	3	4	5
Type	**Micron Rating (nominal)**	**Cartridge Length**	**End #1 Adapter**	**End #2 Adapter**	**Elastomer Material**
SWRO.Z	01 = 1 µm 05 = 5 µm	40 in (101.6 cm) 50 in (127.0 cm) 60 in (152.4 cm) 70 in (177.8 cm) *Longer lengths up to 70 in may be available upon request*	 E = 222 O-Ring  F = 226 O-Ring  L = Extended Core  X = Standard Plain End (no gasket)  Y = Flat Gasket	 H = Fin  K = Self Seal Spring  S = Solid End  X = Standard Plain End (no gasket)  Y = Flat gasket	B = Buna E = EPDM P = Santoprene[2] (flat gasket only) S = Silicone V = Viton[1]

[1]Viton (Trademark of The Chemours Company)
[2]Santoprene (Licensed to Advanced Elastomer Systems, L.P.)
[3]Absolute-rated filters have been designed and tested to reject at least 99% of particles of the listed micron size. Nominal-rated filters have a wider distribution of pore sizes and therefore a wider distribution of rejected particle sizes. The nominal rating is primarily used to compare efficiencies across a filter family and between filter manufacturers. Efficiency is dependent on particle shape, size, composition, application, and testing protocol.

ISO 9001 registered