

# SWRO.Zs

## Water Technologies & Solutions 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 as opposed to string wound filters
- 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 SUEZ RO systems and universal equipment

#### specifications

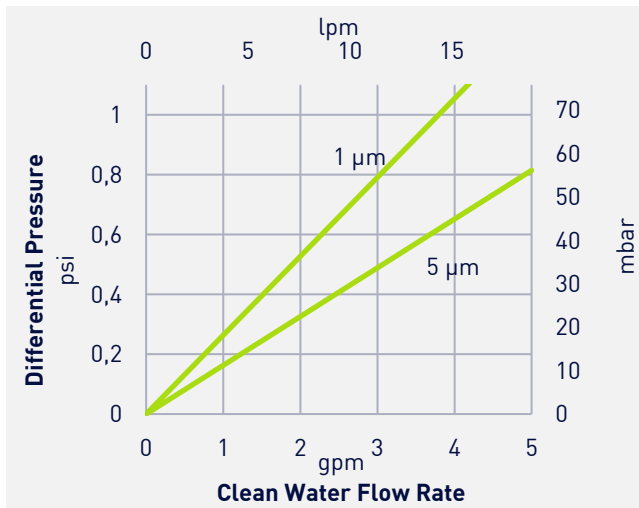
**Table 1: Specifications and performance information**

<b>Ratings</b>	1, 5 microns (nominal)	
<b>Inner Diameter (nominal)</b>	1 in (2.5 cm)	
<b>Outer Diameter</b>	<i>standard</i>	2.46 in (6.2 cm)
	<i>available upon request</i>	2.36 in (6.0 cm)
<b>Lengths</b>		
	40 in (101.6 cm)	60 in (152.4 cm)
	50 in (127.0 cm)	70 in (177.8 cm)
	<i>Longer lengths up to 70 in may be available upon request</i>	
<b>Materials of Construction</b>		
Filter Media	Polypropylene	
Adapters	Polypropylene	
Elastomer	Buna, EPDM, Silicone, Viton <sup>1</sup> , Santoprene <sup>2</sup> (flat gasket only)	
<b>Performance Conditions</b>		
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	<i>Efficiency of nominal filters varies by application. See note for information on nominal filter efficiency<sup>3</sup></i>		
5 µm			



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

### quality

SWRO.Zs 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

SUEZ 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 SUEZ 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.Zs 05-40-XK



**Table 3: Ordering information**

	1	2	3	4	5
Type	Micron Rating (nominal)	Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material
SWRO.Zs	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) <i>Longer lengths up to 70 in may be available upon request</i>	 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 <sup>2</sup> (flat gasket only) S = Silicone V = Viton <sup>1</sup>

<sup>1</sup>Viton is a registered mark of DuPont

<sup>2</sup>Santoprene is licensed to Advanced Elastomer Systems, L.P.

<sup>3</sup>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.

