# GE Power & Water Water & Process Technologies

### **Fact Sheet**

# SWRO.Zs Depth Cartridge Filters

Z.Plex\* Technology Depth Filter for Seawater Reverse Osmosis Pre-Filtration

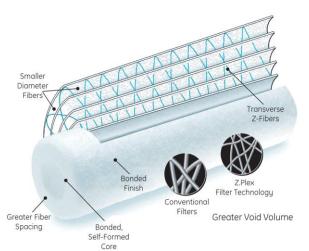


Figure 1: Z.Plex Filter Technology

# **Description and Use**

SWRO.Z is manufactured using patented Z.Plex filter technology (Figure 1) and is engineered for seawater RO pre-filtration. SWRO.Zs' proprietary filter matrix provides unmatched performance in these applications.

- Up to twice the life of conventional depth filters
- Up to 50% lower pressure drop
- Up to 100% greater dirt holding capacity
- Superior SDI reduction
- Melt-bonded exterior and core ensures no media migration
- Provides lower total cost of filtration operations
- Application in wide variety of feed waters
- FDA compliant

## **Typical Applications**

• Seawater RO pre-filtration

## **General Properties**

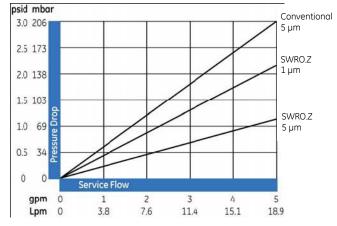
#### **Materials of Construction**

SWRO.Zs filters are made of 100% polypropylene construction. Tables 1 and 2 provide information on dimensions and flow performance.

#### Table 1: Dimensions

Nominal Outside Diameter	Nominal Inside Diameter
2.50" (6.4 cm)	1" (2.5 cm)

#### Table 2: SWRO.Zs 1 and 5 micron vs. Conventional 5 micron Flow Performance in Clean Water<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Data based on 10" length filter

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#### Micron Ratings, Lengths and End Adapters

- Micron ratings: 1 and 5 micron
- Standard lengths fit most housings custom lengths are also available
- Wide range of end adapters including self-sealing spring, 222 and 226 O-rings, and extended cores.

## **Additional Information**

SWRO.Z cartridge filters are made from thermally bonded fibers of polypropylene. GE certifies that it uses no resin binders, lubricants, antistatic or release agents, in the manufacture of these filter cartridges. The resin used for manufacturing the filter media meet the food contact requirements of the U.S. FDA 21CFR 177.1520. SWRO.Z cartridge filters meet the safety requirements of Article 3 of the EU Framework Regulation No. 1935/2004/EC and may be used as intended in all of the EU Member states in full compliance with the EU Plastics Regulation No. 10/2011. SWRO.Z cartridge filters meet the criteria for USP class VI-121'C Plastics.

GE 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 GE representative for more information.

Table 3 shows ordering information. If you are ordering SWRO.Z filters with standard ends (with no adapter on either end), select one designation from each of the first three columns. Your Product Order Number will look like this: SWRO.Zs 05-40. If you are ordering SWRO.Zs with end adapters, select designations from all applicable columns. Your Product Order Number will loo like this: SWRO.Zs 05-40 XK.

#### Table 3: Ordering Information

Туре	Micron Rating, mm	Cartridge Length inches (cm)	End #1 Adapter	End #2 Adapter	Material
SWRO.Zs I.D. = 1.0 O.D. = 2.5	01 = 1 05 = 5	40 (101.5) 50 (127.0) 60 (152.4) 70 (177.8)	<ul> <li>L = Extended Core</li> <li>E = 222 O-Ring</li> <li>F = 226 O-Ring</li> <li>X = Standard SWRO.Zs plain end (non-gasket)</li> <li>Y = Flat Gasket</li> </ul>	K =Self-seal springH =FinS =Solid EndX =Standard SWRO.Zs (no gasket)Y =Flat Gasket	O-Rings S = Silicone E = EPDM V = Viton <sup>2</sup> B = Buna P = Santoprene (flat gasket on- ly)

<sup>2</sup>Viton is a registered trademark of DuPont.

