

with **Z.Plex[™]** Filter Technology







A revolutionary graded density filter

engineered specifically for reverse osmosis pretreatment applications.



GE Water Technologies

The Importance of —

Reverse Osmosis Pretreatment

Reverse osmosis (RO) pretreatment is key to extracting the longest life out of crossflow elements by removing RO membrane-plugging contaminants from source water. Effective pretreatment minimizes wear-andtear on your investment in membrane elements by reducing the Silt Density Index (SDI) to levels recommended by RO suppliers. However, high efficiency, effective RO pretreatment can mean frequent filter change-outs, a time consuming, budgetdraining process. **Until now.**

ROsave.Zs Filters — Saving Membrane Element Performance

GE Osmonics, a pioneer in RO technology with over 30 years of experience in engineering and servicing RO systems, is proud to unveil ROsave.Zs[™], a revolutionary depth filter. The filter has unmatched dirt holding capacity, lifetime, durability and performance optimized for RO pretreatment and RO system protection applications. Manufactured using patent pending Z.Plex[™] technology, and application-specific engineering, ROsave.Zs filters have much greater void volume and up to twice the dirt holding capacity of conventional filters. The filters are made of environmentally safe polypropylene for purity and ease of disposal.

ROsave.Zs Filter Benefits

Enhances SDI reduction and contaminant removal

Offers up to twice the dirt holding capacity and filter life

Minimizes pressure drop by up to half

Finished shell provides refined, clean appearance

Provides superior structural integrity without a support core

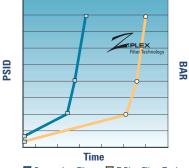
Maximizes time between change-outs

Designed to reduce labor and overall costs

Specifically engineered for RO pretreatment

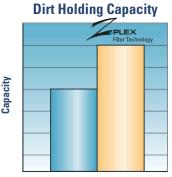
Pure polypropylene construction; NSF Standard 42 certified

Time vs Pressure Drop



Competitor Filter 🛛 Z.Plex Filter Technology

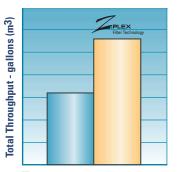
Z.Plex technology manufactured **R0save.Zs** filters have up to half the pressure drop of competitive filters = increased flow rates and lower energy costs.



Competitor Filter 🔲 Z.Plex Filter Technology

Z.Plex technology manufactured **R0save.Zs** filters offer up to twice the dirt holding capacity of competitive filters = longer life and lower filtration costs.

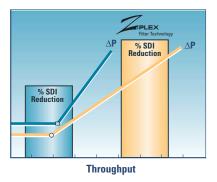
Filter Performance



Competitor Filter Z.Plex Filter Technology

Z.Plex technology manufactured **ROsave.Zs** filters deliver almost twice the throughput of competitive filters. The filters achieve this superior performance through a combination of higher dirt holding capacity and low pressure drop.

SDI Reduction



Competitor Filter 🔲 ROsave.Zs Filter

ROsave.Zs filters effectively reduce SDI and maintain their reduction capabilities over the life of the filter. SDI reduction is a key factor in maintaining the economic and efficient operation of an RO system.

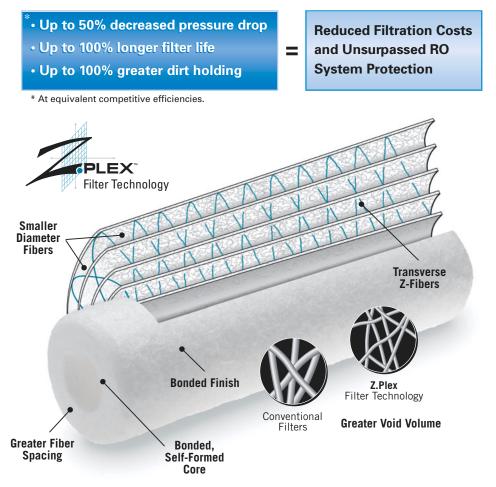
ROsave.Zs filters for RO and Nanofiltration (NF) Pretreatment Applications

- Automotive
- Beverage
- Biotech and Pharmaceutical
- Chemical
- Dairy
- Electronics
- Food
- Laundry and Washing
- Metalworking
- Mining
- Petroleum & Gas
- Municipal
- Power
- Pulp and Paper
- Seawater Desalination
- Textiles

Z.Plex —

Revolutionary Filter Technology for RO Pretreatment

Over 30 years ago GE Osmonics pioneered crossflow membrane technology. In 1983, GE Osmonics again pioneered change in the filtration industry when it broke new ground with a technique to produce true graded density depth cartridge filters. Now, GE Osmonics' new ROsave.Zs filter, with patent pending Z.Plex technology, redefines all previous standards for RO pretreatment performance and filter construction. Z.Plex technology integrates smaller diameter melt blown fibers, increased layer spacing and a 3-dimensional fiber matrix. These attributes provide ROsave.Zs filters:



The ROsave.Zs filter is uniquely engineered for water treatment applications, where fine silt particles contribute to the fouling tendency of reverse osmosis equipment. It is unequaled in capturing and holding water contaminants at lower pressure loss and longer life than most comparable filters. Beneath the filters' non-loading shell, the fibers and 3-dimensional web produce a multiplicity of debris-ensnaring voids. In subsequent layering, Z.Plex technology's proprietary fiber construction creates an increasing number of smaller voids all the way to the core, maximizing filter life and silt removal efficiency.

The inner core is formed as a final filtration layer for minute micron-level filtration. The core structure is bonded for unparalleled integrity, downstream cleanliness and rigidity without the presence of a support core. Similarly, the extremely porous yet bonded outer surface finish prevents the migration of loose fibers and provides a refined, clean appearance for applications where purity is critical.

Z.Plex Technology Filters — Worldwide

As a pioneer and leader in the RO industry, GE Osmonics has the technological expertise to engineer the optimum RO prefilter. Z.Plex technology represents GE Osmonics' devotion to excellence, serving to illustrate the company's commitment to developing technologically advanced filtration products.

ROsave.Zs filters are available worldwide with dedicated technical support for your application. Many more application specific Z.Plex technology enhanced melt blown filters will be available worldwide. For more information on the Z.Plex technology and product line, or to locate a dealer in your area, call (952) 933-2277 or toll-free in the U.S. 1-800-848-1750 or visit us online at www.zplextechnology.com.

GEOsmonics — Engineering Purity

GE Osmonics is one of the world's largest integrated manufacturers of fluid treatment equipment, filters, membranes and components for the industrial, commercial, institutional and residential markets. Featuring an extensive distribution organization, GE Osmonics also provides high-quality components to original equipment manufacturers (OEMs) for water treatment and process applications.

With sales offices throughout the United States and international offices around the world, GE Osmonics delivers filtration and purification solutions on a global scale.

ROsave.Zs Filters — Product Ordering Information

Туре	Micron Rating (µm)	Cartridge Length Inches (cm)	End 1 Adapter	End 2 Adapter
R0.Zs	01 = 1	9 ³ / ₄ (24.8)	X =	K = Self seal spring
	05 = 5	9 7/8 (25.1)	ROsave.Zs plain end	
I.D. = 1 in (2.5 cm)		10 (25.4)	(no gasket)	
0.D. = 2.5 in (6.4 cm)		19 ¹ / ₂ (49.5)		
		20 (50.8)		
		29 1/4 (74.3)		
		30 (76.2)		
		40 (101.6)		

Additional Information

ROsave.Zs depth cartridge filters are made from thermally-bonded fibers of polypropylene. GE Osmonics certifies that it uses no resin binders, lubricants, antistatic or release cartridges, and that the resin used for manufacturing the filter media meets the food contact requirements of the U.S. FDA 21 CFR regulations. When required, specify only FDA compliant sealing materials and end adapters.

GE Osmonics filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users shouldcarefully verify chemical compatibility. Please contact your GE Osmonics distributor for more information.



GE Water Technologies

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Components