

Product Data Sheet

FILMTEC[™] SW30HR–380 Element

High Rejection, Seawater Reverse Osmosis Membranes

Description	 FILMTEC ™ SW30HR–380 Elements are a premium-grade seawater reverse osmosis element featuring both high active area and high salt rejection to offer the best long-term economics for seawater desalination systems. FILMTEC ™ SW30HR–380 delivers high boron rejection to help customers meet World Health Organization (WHO) and other drinking water standards. FILMTEC ™ SW30HR–380 elements deliver high performance over their operating lifetime without the use of oxidative post-treatments like many competitive products. This is one reason why FILMTEC ™ elements are more durable and may be cleaned more effectively over a wider pH range than other RO elements. Automated, precision fabrication with a greater number of shorter membrane leaves, reduces the overall effect of fouling and maximizes membrane efficiency.
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Product Type Spiral-wound element with polyamide thin-film composite membrane.

Typical Properties

	Act	tive		Permea	te Flow		
	A	rea	Feed Spacer	Ra	ite	Typical Stabilized Sal	lt Minimum Salt
FILMTEC™ Element	(ft ²)	(m²)	Thickness (mil)	(GPD)	(m³/d)	Rejection (%)	Rejection
SW30HR-380	380	35	28	6,900	24.6	99.7	99.65
		1. 2. 3. 4.	(5.5 MPa), 77°F (25°C), Permeate flows for indiv Stabilized salt rejection feedwater characteristic	, pH 8 and 8% vidual elemen is generally a cs and operat	recovery. ts may vary ± chieved with ing conditior	in 24 – 48 hours of continuc 1s.	
Element Dimensions		B [Fe	→	erglass Outer W	/rap	End Cap Brine	C DIA Dow supplies coupler part number 313198 with each element. Each coupler includes two 3-912 EPR o-rings (Dow FilmTec part number 151705).
			Α			В	С
FILMTEC™ Element			(in.) (mr	n)	(in.)	(mm)	(in.) (mm)

1. Refer to DuPont Water Solutions Design Guidelines for multiple-element applications. 1 inch = 25.4 mm

29 ID

1.125 ID

2. Element to fit nominal 8-inch (203-mm) I.D. pressure vessel.

1,016

40.0

201

7.9

SW30HR-380

	ab ab					
Operating and Cleaning Limits	Maximum Operating Temperature ^{a b}	113°F (45°C)				
	Maximum Operating Pressure ^b	1.000 psig (69 bar)				
	Maximum Element Pressure Drop 15 psig (1.0 bar)					
	pH Range Continuous Operation ^a 2 – 11					
	Short-Term Cleaning (30 min.) ^c	1-13				
	Maximum Feed Silt Density Index (SDI)	SDI 5				
	Free Chlorine Tolerance ^d	<pre></pre>				
		••• PP····				
	 a. Maximum temperature for continuous operation above pH 10 is 95°F (35°C). b. Operation at pressures up to 1,000 psig (69 bar) is allowable under certain conditions. Consult your DuPont representative for advice on applications above 1,000 psig (69 bar) and/or above 95°F (35°C). c. Refer to guidelines in "<u>Cleaning Procedures</u>" for more information. d. Under certain conditions, the presence of free chlorine and other oxidizing agents will cause premature membrane failure. Since oxidation damage is not covered under warranty, DuPont Water Solutions recommends removing residual free chlorine by pretreatment prior to membrane exposure. Please refer to technical bulletin "<u>Dechlorinating Feedwater</u>" for more information. 					
Additional Important Information	 Before use or storage, review these additional resources for important information: Usage Guidelines for FILMTEC™ 8" Elements System Operation: Initial Start-Up Handling, Preservation and Storage 					
	* Permeate obtained from first hour of operation should be discarded					
Product Stewardship	DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products— from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.					
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	cysts and pathogens from water. Effective cyst a the complete system design and on the operatioPermeate obtained from the first hour of operation	e of this product in and of itself does not necessarily guarantee the removal of nd pathogens from water. Effective cyst and pathogen reduction is dependent on nplete system design and on the operation and maintenance of the system. ate obtained from the first hour of operation should be discarded (or in a few Any concentrate or permeate obtained from the first hour of operation should be				
Regulatory Note	These membranes may be subject to drinking water application restrictions in some countries: please check the application status before use and sale.					

Have a question? Contact us at:

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