Product Data Sheet

FilmTec™ XLE-440 LDP Element

Description

Ideal for: reverse osmosis plant managers and operators dealing with controlled-pretreatment and seeking high-quality permeate water with good rejection of nitrate, iron, hardness, and organic compounds such as pesticides, herbicides, and THM (trihalomethane) precursors at low operating costs.

FilmTec™ XLE-440 Element, the lowest pressure FilmTec™ RO Element:

- Provides lower energy costs and more productivity, especially in cold waters.
- Minimizes equipment CAPEX in designs with savings in elements and pumping due to the 440 ft^2 active area.
- Delivers the most effective cleaning performance, robustness, and durability due to its widest cleaning pH range (1 – 13) tolerance and the support of FilmTec technical representatives.
- Targets improved runnability in plants with high biofouling potential. Elements are equipped with advanced fouling-resistant and cleanability features, helping plants reduce the number of chemical cleanings, while maintaining water quality. Benefits of the FilmTec™ XLE-440 LDP Element include:
  - A reduction in feed-side pressure drop by up to 50%, improving system energy efficiency and hydraulic balance.‡
  - Fouling-resistant design, reducing the number of chemical cleanings by more than 20%.‡

‡ Relative to a leading fouling-resistant product currently available in the market.

Product Type

Spiral-wound element with polyamide thin-film composite membrane

Typical Properties

FilmTec™ Element	Active Area (ft^2)	Active Area (m^2)	Feed Spacer Thickness (mil)	Permeate Flowrate gpd	Permeate Flowrate (m^3/d)	Typical Stabilized Salt Rejection (%)	Minimum Salt Rejection (%)
XLE-440 LDP	440	41	28 LDP	14,000	53	99.0%	97.0%

1. Permeate flow and salt (NaCl) rejection based on the following standard test conditions: 2,000 ppm NaCl, 125 psi (8.6 bar), 77°F (25°C), pH 8, 15% recovery.
2. Flowrates for individual elements may vary but will be no more than ± 15%.
3. Stabilized salt rejection is generally achieved within 24 – 48 hours of continuous use, depending upon feedwater characteristics and operating conditions.
4. Sales specifications may vary as design revisions take place.
5. Active area guaranteed ± 5%.

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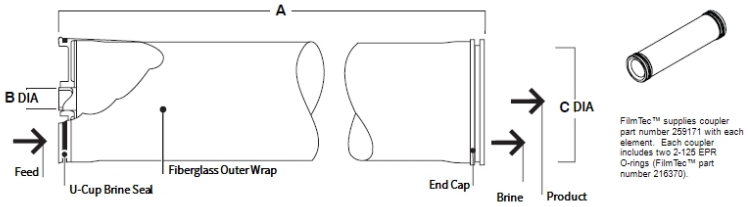
Element Dimensions



Dimensions – inches (mm)						1 inch = 25.4 mm
	A		B		C	
FilmTec™ Element	**(in)**	**(mm)**	**(in)**	**(mm)**	**(in)**	**(mm)**
XLE-440 LDP	40.0	1,016	1.125 ID	29 ID	7.9	201

1. Refer to FilmTec™ Design Guidelines for multiple-element systems of 8-inch elements (Form No. 45-D01695-en)
2. Element to fit nominal 8-inch (203-mm) I.D. pressure vessel.

Operating and Cleaning Limits

Maximum Operating Temperature [a]	113°F (45°C)
Maximum Operating Pressure	600 psig (41 bar)
Maximum Element Pressure Drop	15 psig (1.0 bar)
pH Range	
Continuous Operation [a]	2 – 11
Short-term Cleaning (30 min.) [b]	1 – 13
Maximum Feed Silt Density Index (SDI)	SDI 5
Free Chlorine Tolerance [c]	< 0.1 ppm

a. Maximum temperature for continuous operation above pH 10 is 95°F (35°C).
b. Refer to FilmTec™ Cleaning Guidelines (Form No. 45-D01696-en).
c. 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 Chlorination / Dechlorination (Form No. 45-D01569-en) for more information.

Additional Important Information

Before use or storage, review these additional resources for important information:

- Usage Guidelines for FilmTec™ 8" Elements (Form No. 45-D01706-en)
- Start-Up Sequence (Form No. 45-D01609-en)

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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Customer Notice

DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont personnel are available to answer your questions and to provide reasonable technical support. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont.

Please be aware of the following:

- The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.
- Permeate obtained from the first hour of operation should be discarded.

Regulatory Note

These products 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:

www.dupont.com/water/contact-us

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