FilmTec[™] XLE PRO-4040 & XLE PRO-2540

Tape-Wrapped Low Energy Large Commercial Elements for Commercial Applications

Key Features

- High flux results in high yields
- Produce good water quality at very low applied pressure for drinking water and commercial applications

Key Applications

Drinking & Commercial water applications for plant sizes
≤ 500L/hr (0.5M3/hr) – Hotels, Restaurants, Cafes, Car wash, schools, refiling stations, etc.

Typical Properties

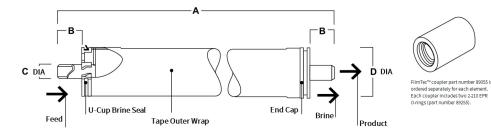
| Product | Part number | Active Area ft ² (m ²) | Permeate Flow Rate gpd (m³/d) | Stabilized Salt Rejection (%) |
|--------------|-------------|--|----------------------------------|----------------------------------|
| XLE PRO-4040 | 12082995 | 87 (8.1) | 2,750 (10.4) ±20% | 99.0 |
| XLE PRO-2540 | 12082909 | 28 (2.6) | 1,000 (3.8) ±20% | 99.0 |

1. Permeate flow and salt rejection based on the following test conditions: 77°F (25°C), 15% recovery, applied pressure 125 psig (8.7 bar), pH 8, and based on a 2,000 ppm NaCl feed stream.

2. Minimum salt rejection is 97.0%.

3. For the purpose of improvement, specifications may be updated periodically.

Element Dimensions



| | Dimensions – Inches (mm) 1 inch = 25.4 mm | | | |
|--------------|--|--------|------|------|
| Product | Α | В | С | D |
| XLE PRO-4040 | 40.0 | 1.05 | 0.75 | 3.9 |
| | (1,016) | (26.7) | (19) | (99) |
| XLE PRO-2540 | 40.0 | 1.19 | 0.75 | 2.4 |
| | (1,016) | (30.2) | (19) | (61) |

1. Refer to FilmTec[™] Design Guidelines for multiple-element systems of midsize elements

(Form No. 45-D01588-en).

2. FilmTec[™] XLE PRO-4040 Elements fit nominal 4-inch I.D. pressure vessel.



Operating and Cleaning Limits

| Membrane Type | Polyamide Thin-Film | |
|--|---------------------------------|--|
| | Composite | |
| Maximum Operating Temperature | 113°F (45°C) | |
| Maximum Operating Pressure | 600 psig (41 bar) | |
| Maximum Feed Flow Rate | 14 gpm (3.2 m ³ /hr) | |
| Maximum Pressure Drop | 13 psig (0.9 bar) | |
| pH Range | | |
| Continuous Operation ^a | 2 - 11 | |
| Short-Term Cleaning (30 min.) ^b | 1 - 13 | |
| Maximum Feed Silt Density Index | SDI 5 | |
| (SDI) | | |
| Free Chlorine Tolerance ^c | <0.1 ppm | |

General Information

- Keep elements moist at all times after initial wetting.
- If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void.
- To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution.
- The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements.
- Maximum pressure drop across an entire pressure vessel (housing) is 30 psi (2.1 bar).
- Avoid static permeate-side backpressure at all times.
- Avoid any abrupt pressure or cross-flow variations on the spiral elements during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. During start-up, a gradual change from a standstill to operating state is recommended as follows:
 - Feed pressure should be increased gradually over a 30-60 second time frame.
 - Cross-flow velocity at set operating point should be achieved gradually over 15-20 seconds.
- 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.

- 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 FilmTec™ Design Guidelines for multiple-element systems of 8-inch elements (Form No. 45-D01695-en) for more information.

Important Information

- Proper start-up of reverse osmosis water treatment systems is essential to prepare the membranes for operating service and to prevent membrane damage due to overfeeding or hydraulic shock. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved.
- Before initiating system start-up procedures, membrane pretreatment, loading of the membrane elements, instrument calibration and other system checks should be completed.
- Please refer to the application information literature entitled <u>Start-Up Sequence</u> (Form No. 45-D01609-en) for more information.

Regulatory Note

This product may be subject to drinking water application restrictions in some countries; please check the application status before use and sale.



All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from infringement of any patent or trademark owned by DuPont or others is to be inferred.

© 2023 DuPont. DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ^{sм} or ® are owned by affiliates of DuPont de Nemours Inc., unless otherwise noted.

Form No. 45-D03972-en, Rev. 4 April 2023



