

LC LE PRO-4040 Element

Designed for low energy applications

Key Features

- LC LE PRO-4040 delivers high quality water at low pressure at harsh water conditions, using The Company’s innovative, proprietary technology for low energy applications.
- Industry leading active area (94 sqft) which provides less fouling due to lower operating flux while still achieving higher flow.
- Offers high salt rejection at low pressure in harsh water conditions.
- Provides most effective cleaning performance, robustness and durability due to its widest cleaning pH range (1 – 13) and chemical tolerance.

Key Applications

- Light industrial and drinking water applications requiring stringent permeate quality.
- Harsh feed water conditions.
- Drinking water – Refilling stations, Bottling plants, Hotels, Schools, Institutions etc.

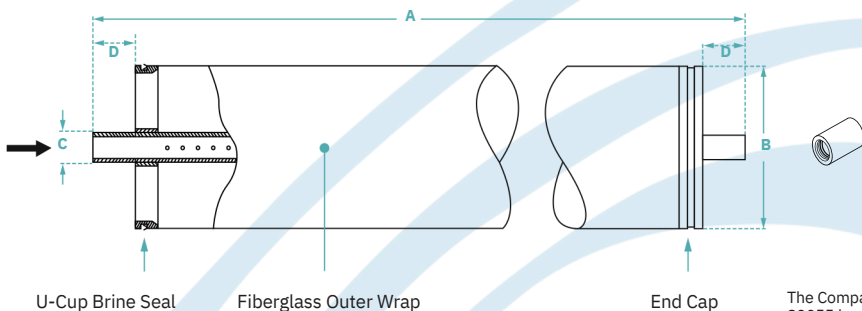


Typical Properties

Product	Part number	Active Area ft2 (m2)	Permeate Flow Rate gpd (m3/d)	Stabilized Salt Rejection (%)	Minimum Salt Rejection (%)
LC LE PRO-4040 element	12081512	94 (8.7)	2,600 (9.8)	99.5	99.0

1. Permeate flow and salt rejection based on the following standard conditions: 2,000 ppm NaCl, 150 psi (10.3 bar), 77°F (25°C), pH 8 and 15% recovery.
2. Flow rates for individual elements may vary but will be no more than 20% below the value shown.
3. Sales specifications may vary as design revisions take place.

Element Dimensions



Dimensions – inches (mm)	
A	40.0 (1,016)
B	3.9 (99)
C	0.75 OD (19)
D	1.05 (27)

OD = Outer Diameter
1 inch = 25.4 mm

The Company coupler part number 89055 is ordered separately for each element. Each coupler includes two 2-210 EPR O-rings (part number 89255).

1. For element weight information refer to [What is the weight of The Company elements as delivered?](#) (Form No. 45-D04811-en)
2. For element packaging and shipping information refer to [How are The Company elements packaged and shipped?](#) (Form No. 45-D04811-en)
3. The Company LC LE PRO-4040 Elements fits nominal 4-inch I.D.

Suggested Operating Conditions



Membrane Type	Polyamide Thin-Film Composite
Maximum Operating Temperature ¹	113°F (45°C)
Maximum Operating Pressure	600 psi (41 bar)
Maximum Pressure Drop	
Per Element	15 psi (1 bar)
Per Pressure Vessel (Maximum 2 Elements)	30 psi (2.1 bar)
pH Range	
Continuous Operation ¹	2 - 11 1 - 13 16
Short-Term Cleaning (30 min.) ²	gpm (3.6 m3/h)
Maximum Feed Flow ³	SDI 5 < 0.1 ppm
Maximum Feed Silt Density Index (SDI)	
Free Chlorine Tolerance ⁴	

1. Maximum temperature for continuous operation above pH 10 is 95°F (35°C).
2. Refer to [The Company Cleaning Guidelines](#) (Form No. 45-D01696-en).
3. For recommended feed and permeate flow rates, flux and recovery for various feed sources, refer to [The Company Design Guidelines for multiple-element systems of midsize elements](#) (Form No. 45-D01588-en).
4. Oxidation damage is not covered under warranty. The Company recommends removing residual free chlorine by pretreatment prior to membrane exposure. Please refer to [Dechlorinating Feedwater](#) (Form No. 45-D01569-en) for more information.

Important General Information

- Keep elements moist at all times after initial wetting.
- For successful operation of Reverse Osmosis (RO) and Nanofiltration (NF) membrane systems, the operation must follow the guidelines provided in the [The Company Reverse Osmosis / Nanofiltration Elements Operation Excellence and Limiting Conditions Tech Fact](#) (Form No. 45-D04388-en).
- 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.
- Avoid static permeate-side backpressure at all times.
- Permeate obtained from the first hour of operation should be discarded.
- 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.

Please consider good operating practices for the optimal performance of the Reverse Osmosis membrane elements to assure damage free operation:

1. [Loading of Pressure Vessels – Preparation & Element Loading](#) (Form No. 45-D01602-en)
2. System Operation, including plant [Start-Up Sequence](#) (Form No. 45-D01609-en) and [RO & NF Systems Shutdown](#) (Form No. 45-D01613-en)
3. [Handling, Preservation, and Storage](#) (Form No. 45-D03716-en)

Full information of plant design, system operation, and troubleshooting is given in the [The Company Reverse Osmosis Membranes Technical Manual](#) (Form No. 45-D01504-en).

Regulatory Note

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

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