# PRODUCT INFORMATION LEWABRANE® RO B400 LE



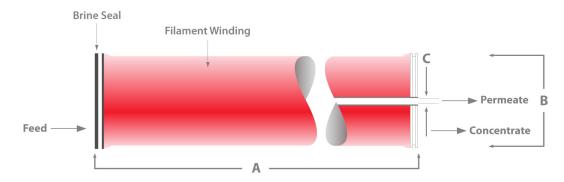
The Lewabrane ® RO B400 LE elements are spiral wound, composite polyamide membrane elements of higher permeability than standard pressure RO membranes. These RO membranes are characterized by a lower operating feed pressure than HR, HF and FR type membranes, and result in a lower energy consumption, hence the terminology of LE (Low Energy). These RO membranes are designed for industrial and potable water treatment applications, such as the treatment of brackish and low salinity waters.

### General Information

|                          | Metric units | US units            |
|--------------------------|--------------|---------------------|
| Feed spacer thickness    | 0.86 mm      | 34 mil              |
| Membrane area            | 37.2 m²      | 400 ft <sup>2</sup> |
| Salt rejection, av.      | 99.5 %       | 99.5 %              |
| Salt rejection, min.     | 99.0 %       | 99.0 %              |
| Permeate flow rate, av.  | 34.8 m³/d    | 9200 gpd            |
| Permeate flow rate, min. | 27.8 m³/d    | 7300 gpd            |

Element is tested under the following conditions: applied pressure 150 psi (10.3 bar), NaCl concentration 2000 mg/l, operating temperature 77 °F (25 °C), pH 7 and recovery rate 15 %.

## **Element Dimension**



|              | A (Length) | B (Diameter) | C (ID)     |
|--------------|------------|--------------|------------|
| Metric Units | 1016 mm    | 201 mm       | 29 mm      |
| US Units     | 40 inch    | 7.9 inch     | 1.125 inch |



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# **Application Data**

|                                 | Metric units | US units |
|---------------------------------|--------------|----------|
| Operating pressure, max.        | 41 bar       | 600 psi  |
| Operating temperature, max.     | 45 °C        | 113 °F   |
| Feed water SDI, max.            | 5            | 5        |
| pH range during operating       | 2 - 11       | 2 - 11   |
| pH range during cleaning        | 1 - 12       | 1 - 12   |
| Pressure drop per element, max. | 1.0 bar      | 15 psi   |
| Pressure drop per vessel, max.  | 3.5 bar      | 50 psi   |
| Chlorine concentration, max.    | 0.1 ppm      | 0.1 ppm  |

As with any product, use of the products mentioned in this publication in a given application must be tested (including field testing, etc.) by the user in advance to determine suitability.

### Additional Information

- Treat RO Elements with care; do not drop the element.
- Each RO Element is wet tested, preserved in a 1% weight sodium bisulfite solution, and vacuum packed in oxygen barrier bags.
- During storage, avoid freezing and direct sunlight. The temperature should be below 35 °C (95 °F).

### After Installation

- Keep the RO Elements wet, and use a compatible preservative for storage duration longer than 7 days.
- During the inital start up, discharge the first permeate to drain for 30 min.
- Permeate back pressure should not exceed feed pressure at any time.
- The RO Elements shall be maintained in a clean condition, unfouled by particulate matter or precipitates or biological growth.
- Consider cleaning, if the pressure drop increases by 20% or water permeability decreases by 10%.
- Use only chemicals which are compatible with the membrane.
- For additional information consult the Lewabrane® technical information available at www.lpt.lanxess.com.



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Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the LANXESS Sybron Chemicals Inc. products mentioned in this publication. For materials mentioned which are not LANXESS Sybron Chemicals Inc. products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms. Consult your LANXESS Sybron Chemicals Inc. representative or contact the Product Safety and Regulatory Affairs Department at LANXESS Corporation at 1-800-526-9377.

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This document contains important information and must be read in its entirety.

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