## PRODUCT INFORMATION LEWABRANE® RO B085 FR 4040



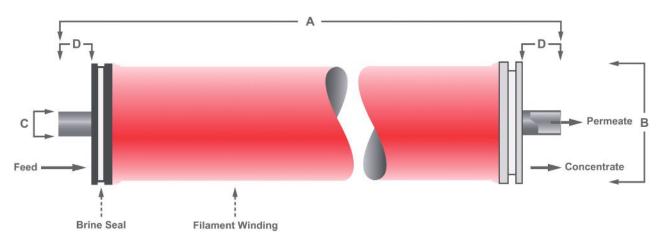
The Lewabrane® RO B085 FR 4040 elements are spiral wound, composite polyamide membrane elements designed for industrial water treatment applications. The Lewabrane® FR elements are designed to provide more turbulence in the feedwater spacer in combination with the high crosslinked low surface charge Lewabrane membrane. These new RO elements are recommended for brackish and low salinity feedwaters that are expected to have higher biological and organic fouling tendencies.

### **General Information**

|                          | Metric Units | US Units |
|--------------------------|--------------|----------|
| Feed spacer thickness    | 0.86 mm      | 34mil    |
| Membrane area            | 7.9 m²       | 85 ft²   |
| Salt rejection, av.      | 99.5 %       | 99.5 %   |
| Salt rejection, min.     | 99.0 %       | 99.0 %   |
| Permeate flow rate, av.  | 8.9 m³/d     | 2400 gpd |
| Permeate flow rate, min. | 7.1 m³/d     | 1900 gpd |

Element is tested under the following conditions: applied pressure 15.5 bar (225 psi), NaCl concentration 2000 mg/l, operating temperature 25 °C (77 °F), pH 7 and recovery rate 15 %.

## **Element Dimension**



|              | A (Length) | B (Diameter) | C (OD)    | D (Length) |
|--------------|------------|--------------|-----------|------------|
| Metric Units | 1016 mm    | 100 mm       | 19 mm     | 26 mm      |
| US Units     | 40 inch    | 4.0 inch     | 0.75 inch | 1.05 inch  |



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

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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        |
| Feed flow, max.                 | 4.0 m³/h     | 18 gpm   |
| Concentrate flow, min.          | 0.6 m³/h     | 3 gpm    |
| 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  |

### 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.
- 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.lewabrane.com.

This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

LANXESS Deutschland GmbH BU LPT D-50569 Köln

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