PRODUCT INFORMATION LEWABRANE® RO B085 LE 4040



The Lewabrane [®] RO B085 LE 4040 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.

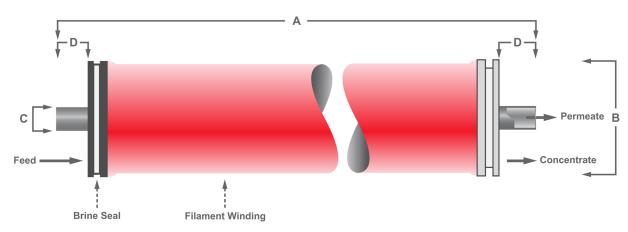
General Information

	Metric units	US units
Feed spacer thickness	0.86 mm	34 mil
Membrane area	7.9 m²	85 ft²
Salt rejection, av.	99.5 %	99.5 %
Salt rejection, min.	99.0 %	99.0 %
Permeate flow rate, av.	7.4 m³/d	2000 gpd
Permeate flow rate, min.	5.9 m³/d	1550 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 %.

These items are provided as general information only. They are approximate values and are not considered part of the product specifications.

Element Dimension



	A (Length)	B (Diameter)	C (OD)	D (Length)
Metric Units	1016 mm	100 mm	19 mm	26 mm
US Units	40 inch	3.9 inch	0.75 inch	1.05 inch



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

PRODUCT INFORMATION LEWABRANE® RO B085 LE 4040



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).

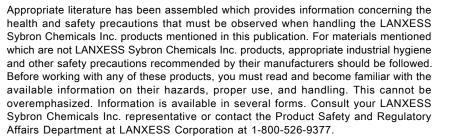
After Installation

- 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.



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

PRODUCT INFORMATION LEWABRANE® RO B085 LE 4040



The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

NOTE: The information contained in this publication is current as of the edition date. Please contact LANXESS Sybron Chemicals Inc. to determine if this publication has been revised. LANXESS Sybron Chemicals Inc. www.lpt.lanxess.com www.lanxess.com www.US.lanxess.com

Lewabrane®

Contact:

200 Birmingham Road Birmingham, NJ 08011



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