

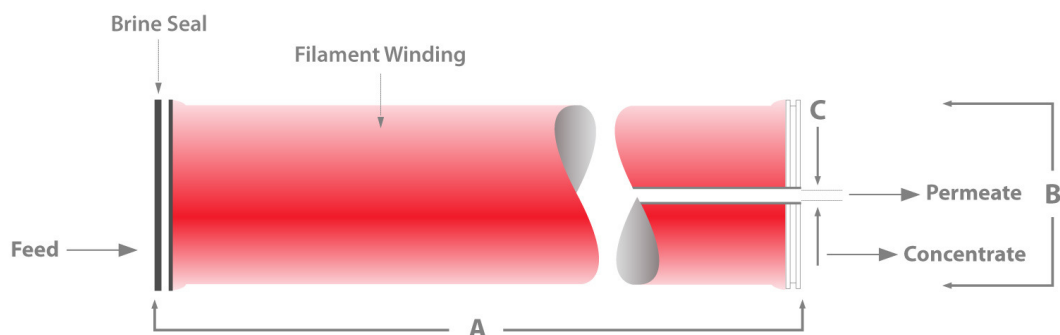
The Lewabrane® RO B440 HR elements are spiral wound, composite polyamide membrane elements designed for industrial water treatment applications, such as the treatment of brackish and low salinity waters for primary demineralization in boiler water and process water applications.

## General Information

	Metric Units	US Units
Feed spacer thickness	0.7 mm	28 mil
Membrane area	40.9 m <sup>2</sup>	440 ft <sup>2</sup>
Salt rejection, av.	99.7 %	99.7 %
Salt rejection, min.	99.3 %	99.3 %
Permeate flow rate, av.	41.7 m <sup>3</sup> /d	11000 gpd
Permeate flow rate, min.	33.4 m <sup>3</sup> /d	8800 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 Dimensions



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

## 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.	18.0 m <sup>3</sup> /h	80 gpm
Concentrate flow, min.	2.7 m <sup>3</sup> /h	12 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 initial 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.lpt.lanxess.com](http://www.lpt.lanxess.com).

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