

## Ecosoft membrane 4" EXLP-4040

Ecosoft 4" EXLP-4040 extra low pressure membrane element for commercial use.

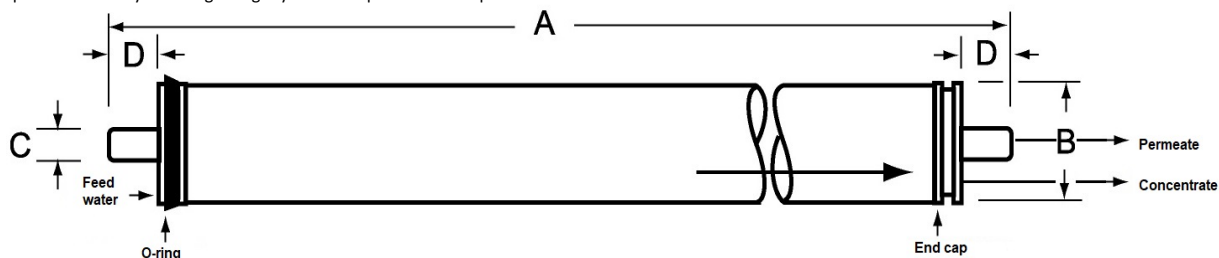
### Features

Ecosoft 4" EXLP-4040 series membrane elements have great performance and efficiency, operating at very low pressure. The EXLP membranes are manufactured with technology that provides continuous and reliable system operation.

### Specifications

Element type	No	Active area (m <sup>2</sup> )	Operating pressure (bar)	Permeate flow rate (m <sup>3</sup> /day)	Stabilized salt rejection (%)
EXLP-4040		9.3	6.9	9.8	98.0

1. Permeate flow rate and salt (NaCl) rejection are based on the following test conditions: 500 mg/L NaCl, 25°C, permeate recovery as specified below
2. Permeate flow rate for one element does not exceed ±20% of the nominal value.
3. Minimal stabilized salt rejection 97,5%.
4. Product specifications may be changed slightly in case of product development.



Element type	Max. volume of feed water (m <sup>3</sup> /h)	Size of membrane element - mm			
		A	B	C	D
EXLP-4040	3,6	1016	99,7	19,1	26,7

1. The standard permeate recovery is given for a single element. The permeate recovery is calculated by dividing the permeate flow rate by the feed water flow rate

### Limitations of the operating conditions

- Membrane type: polyamide thin-film composite
- Max. temperature of feed water<sup>1</sup>: 45°C
- Max. working pressure: 41 bar
- Max. element pressure drop: 1,0 bar
- pH range during continuous operation<sup>1</sup>: 3-10
- pH range during short flash (30 min)<sup>2</sup>: 2-12
- Max feed water SDI: SDI 5
- Residual Chlorine concentration of feed water<sup>3</sup>: <0,1 mg/L

<sup>1</sup> For continuous operation at pH above 10, the maximum temperature is 35°C.

<sup>2</sup> Check the rinsing instructions in the specification sheet.

<sup>3</sup> Under certain conditions, the presence of free chlorine and other oxidizing agents can cause premature membrane degradation. Since oxidation damage is not covered by the warranty, ECOSOFT recommends removing residual chlorine during the pretreatment stage before it reaches the membranes.

### Important information

Proper startup of RO systems helps prepare the membranes for functional service and prevents damage due to excessive water supply or hydraulic shock. Following the proper startup procedure will also help to keep the system operating parameters in line with the design values and achieve the desired performance and water quality. Before starting up the system, membrane preparation, media loading, instrumentation calibration, and other system checks should be performed. For more information, please refer to the "Startup Procedure" material.

### Recommendations for operation

Avoid any pressure or flow sudden changes inside the roll elements during startup, shutdown, rinsing, etc. to avoid possible membrane damage. During startup, it is recommended to slowly bring the system from the standstill state to the operating state as follows: Increase the outlet water pressure gradually over 30-60 seconds. The operating flow rate should be reached gradually over 15-20 seconds. The permeate obtained during the first hour of operation is drained.

### General information

After the initial moistening, always keep the elements wet. If the operating conditions and recommendations in this document are not followed, the warranty will be void and canceled. To prevent biofouling during long periods of inactivity, it is recommended to immerse the membrane elements in preservation solutions. The customer is fully responsible for all consequences of using reagents and lubricants incompatible with the membrane elements. The maximum differential pressure across the entire length of the housing is 1 bar. Always avoid backpressure from the permeate side.