

## Seawater Desalination RO Membranes- GSW Series

Gsi Sea Water series are high-performance reverse osmosis (RO) membranes that have been specifically designed for seawater desalination. These membranes are made up of a supporting layer that is highly resistant to compression, a thick and dense flawless thin film layer, and they have excellent wear and chemical degradation resistance.

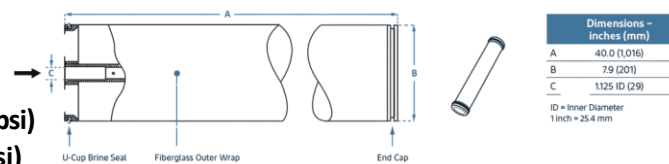
One of the significant advantages of these membranes is that they do not require any post-processing during the manufacturing process. This means that they are ready to use straight away, and there is no need for any additional treatments or modifications.

Another advantage of the Gsi Sea Water series is that they are capable of tolerating a wide range of pH levels. This makes the cleaning process more efficient, and regular acid and base cleaners can be used without the risk of damaging the membrane. This, in turn, leads to higher cleaning efficiency and a longer service life for the membrane. Because the membrane can be thoroughly cleaned, it can operate under lower pressure for an extended period of time. This leads to better performance during its service life and significantly reduces the overall operation costs of the seawater desalination system.

In summary, the Gsi Sea Water series RO membranes are a high-end solution for seawater desalination, offering high performance, low maintenance, and a longer service life, leading to significant cost savings over time.

### Operating Specifics

- pH Range Continuous Operation **2-11**
- PH Range Short-Term Cleaning **1-13**
- Maximum Operating Temperature **45°C (113°F)**
- Maximum Feed SDI **SDI 5.0**
- Maximum Operating Pressure **83 bar (1200psi)**
- Maximum Element Pressure Drop **1.0 bar (15psi)**
- Free Chlorine Tolerance **< 0.1 ppm**



Model	Membrane Area ft <sup>2</sup> [m <sup>2</sup> ]	Max. Salt Rejection	Min. Salt Rejection	Flux, gpd [m <sup>3</sup> /d]	A Inch [mm]	B Inch [mm]	C Inch [mm]
GSW8040-440HRLE	440[41]	99.80%	99.70%	8,200(31)	40(1,016)	7.9(201)	1.125(29)

### Rejection & Flux rate:

- 77°F (25°C)
- PH 8-feedwater
- 32,000 ppm NaCl solution
- 5.5 MPa (800 psi) pressure
- 8% recovery

### Details:

- Permeate flow for individual elements from the value specified: ±15 percent.
- Guaranteed active membrane area: ±4%.
- Stabilized salt rejection is generally achieved within 24-48 hours of continuous use; depending upon feedwater characteristics and operating conditions.