

# PURAN

## Seawater Reverse Osmosis Membrane



### Description

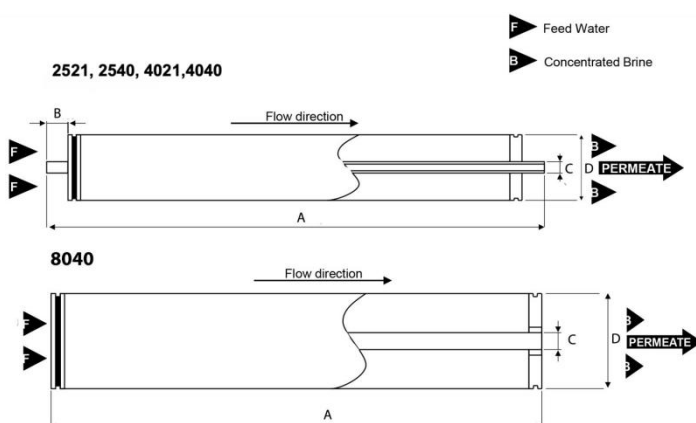
The PURAN sea water reverse osmosis membrane elements are used for the desalination of very high salinity water like sea water and other similar water. It has high salt rejection rate, stable performance and high flow rate working at standard pressure. It is used to produce pure water or ultra-pure water in fields of electronics, power, petrochemical, food, beverage and pharmacy.

### Technical Parameters

| Model           | Diameter<br>inch | Membrane Area<br>ft <sup>2</sup> (m <sup>2</sup> ) | Salt Rejection<br>Rate (%) | Product Flow Rate<br>gpd (m <sup>3</sup> /d) | Feed Spacer<br>Thickness (mil) | Boron Rejection<br>Rate % |
|-----------------|------------------|--|----------------------------|--|--------------------------------|---------------------------|
| PNSW-2521       | 2.5"             | 12(1.1)  | 99.5                       | 270(1.0)                                     | 28                             | 92                        |
| PNSW-2540       | 2.5"             | 28(2.6)  | 99.5                       | 600(2.3)                                     | 28                             | 92                        |
| PNSW-4021       | 4"               | 33(3.1)  | 99.5                       | 750(2.8)                                     | 28                             | 92                        |
| PNSW-4040       | 4"               | 85(7.9)  | 99.8                       | 1600(6.1)                                    | 28                             | 92                        |
| PNSWLE-4040     | 4"               | 85(7.9)  | 99.7                       | 1900(7.2)                                    | 28                             | 92                        |
| PNSW-8040       | 8"               | 400(37)  | 99.8                       | 9000(34)                                     | 28                             | 92                        |
| PNSWLE-8040     | 8"               | 400(37)  | 99.7                       | 11000(41.6)                                  | 28                             | 92                        |
| PNSWLE-8040-440 | 8"               | 440(40.9)  | 99.7                       | 12100(45.76)                                 | 28                             | 92                        |

|                    |  |                     |
|--------------------|--|---------------------|
| Type               | Configuration                          | Spiral wound        |
|                    | Membrane material                      | Composite Polyamide |
| Test Condition     | Feed water pressure                    | 800psi (5.52MPa)    |
|                    | Feed water temperature                 | 77°F (25°C)         |
|                    | Feed water concentration               | 32,000mg/l NaCl     |
|                    | Recovery rate                          | 8%                  |
|                    | Feed water pH                          | 8                   |
| Application limits | Maximum chlorine concentration         | 0.1ppm              |
|                    | Maximum operating temperature          | 113 °F (45°C)       |
|                    | Feed water pH range continuous working | 2.0 - 10.0          |
|                    | Maximum feed water turbidity           | 1.0 NTU             |
|                    | Maximum feed water SDI (15mins)        | 5.0                 |
|                    | Maximum pressure drop for each element | 13psi(0.09MPa)      |

### Dimension



Unit: inch(mm)

| Size | A          | B         | C          | D        |
|------|------------|-----------|------------|----------|
| 2521 | 21 (533.4) | 1.05 (27) | 0.75 (19)  | 2.5 (63) |
| 2540 | 40 (1016)  | 1.05 (27) | 0.75 (19)  | 2.5 (63) |
| 4021 | 21 (533.4) | 1.05 (27) | 0.75 (19)  | 4 (101)  |
| 4040 | 40 (1016)  | 1.05 (27) | 0.75 (19)  | 4 (101)  |
| 8040 | 40 (1016)  | -         | 1.125 (29) | 8 (201)  |