

# BWRO-8040-400FR

## Fouling-Resistant Brackish Water Reverse Osmosis Membrane Element

### Introduction

- ◆ Highly effective cleaning performance, robustness, and durability due to its wide cleaning pH range (1~13).
- ◆ A 34-mil feed spacer to lessen the impact of fouling on pressure drop across a vessel and enhance cleaning effectiveness.
- ◆ Automated, precision fabrication with membrane leaf efficiencies optimized to reduce the overall effect of fouling



### Application

- ◆ Industrial Wastewater Reuse
- ◆ Demineralization for industrial applications, such as: Power Generation, Steel & Metal, Chemical & Petrochemical.



### Parameters

Model	Typical Stabilized Salt Rejection (%)	Minimum Salt Rejection (%)	Permeate Flow Rate GPD (m <sup>3</sup> /d)	Area ft <sup>2</sup> (m <sup>2</sup> )
BWRO-8040-400FR	99.7	99.4	11000 (41.6)	400 (37.2)

### Test Condition

Test Solution	Tem. ( °C)	pH	Pressure psi (MPa)	Recovery (%)
2000mg/L NaCl	25	8.0	225 psi (1.55MPa)	15

- ◆ Test Condition: 2000mg/L NaCl, 225 psi, 25°C, pH7
- ◆ Flow rates for individual elements may vary but will be no more than ±15%
- ◆ Active area guaranteed ±3%

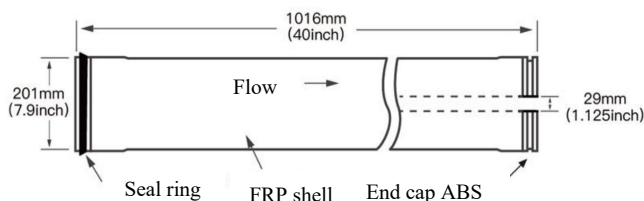
## Using Conditions

Maximum Operating Pressure	600 psi(4.14MPa)
Maximum Operating Temperature	45 °C
Maximum Feed Flow	84GPM (19m <sup>3</sup> /h)
Maximum Feed Silt Density Index (SDI)	5.0
Continuous Operation pH Range	2-11
Short-Term Cleaning (30 min.) pH Range	1-13
Maximum Pressure Drop Per Element	15psi (0.1Mpa)

## Cautions

- ◆ When the membrane element is first used, the water produced during the first hour should be discharged and not used.
- ◆ When the membrane element is manufactured, the dry type membrane element has no protective liquid. Once the element gets wet, it should remain in a moist state.
- ◆ The feed water pressure should be gradually increased within a time range of 30-60 seconds. Otherwise, it may cause irreversible damage to the membrane element.
- ◆ At any time, back pressure on the water production side should be avoided.
- ◆ The wet type membrane element is tested with water before leaving the factory, and is stored with a 1.5% sodium bisulfite solution (in winter, 10% propylene glycol antifreeze solution needs to be added). Then it is vacuum-packed.
- ◆ When the system is shut down for a long time, to prevent the growth of microorganisms, it is recommended to immerse the membrane element in a 1.5% (by weight) sodium bisulfite protective liquid and replace the protective liquid regularly.
- ◆ Users must strictly follow the operation limits and rules set in this manual. Otherwise, the company will not bear any consequences arising therefrom.
- ◆ Users are strictly prohibited from using any chemical substances that are destructive to the membrane element during storage and operation. If such chemical substances are used, the company will not bear any consequences arising therefrom.

## Dimensions and Packaging



Package Size: 1140\*240\*250 mm



Connector material code

3.02.09.0006

