

# AO-RO-8040HR

## Acid-Oxidant RO Membrane Element

### Introduction

◆ The anti-oxidation membrane element (AO-RO-8040HR) is manufactured through a special process, which enhances the anti-oxidation property of the membrane element, enabling it to withstand a certain amount of oxidative substances. It features extremely high operating pressure, very high salt rejection etc. It is suitable for the treatment of brackish water containing a small amount of oxidative substances, as well as dual oxidation purification, etc.

### Application

- ◆ Electronic-grade H<sub>2</sub>O<sub>2</sub> (27%-60%) preparation
- ◆ Purification and concentration of chemical products (isopropanol etc.)
- ◆ Desalination of seawater, treatment of high-salt wastewater, and treatment of wastewater containing oxidizing substances, etc.



### 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> )
AO-RO-8040HR	99.8	99.7%	7500 (28.0)	400 (37.2)

### Test Condition

Test Solution	Tem. ( °C)	pH	Pressure psi (MPa)	Recovery (%)
32000mg/L NaCl	25	7.0	800 psi (5.5MPa)	8

- ◆ Test Condition: 32000mg/L NaCl, 800 psi, 25°C, pH7
- ◆ Flow rates for individual elements may vary but will be no more than ±15%
- ◆ Active area guaranteed ±3%

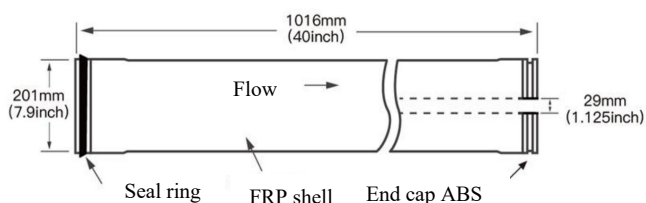
## Using Conditions

Maximum Operating Pressure	1200 psi(8.28MPa)
Maximum Operating Temperature	45 °C
Maximum Feed Flow	84GPM (19m <sup>3</sup> /h)
Maximum Feed Silt Density Index (SDI)	5.0
Application Environment (pH)	2-12
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

