

# Strengthened RO Membrane Element NSRO HR-440

- Excellent Rejection of **99.7%**
- Permeate flow increase of **20%** over conventional membrane
- Integrated desalination layer with improved fouling resistance



**Innovative design of feed spacer channel to optimise turbulent cross flow**

**Reduced pressure loss, simple and efficient installation, suitable across various applications**

**Nanosun Pte Ltd**

<https://www.nanosun-main.com/>

120 Pioneer Road #03-02 Singapore 639597

Tel: (65) 6795 0953

Fax: (65) 670 7607



## Brief Introduction

NS-HR RO element is suitable for treatment of brackish water, underground water and municipal water with TDS less than 10000 ppm.

### Typical Application:

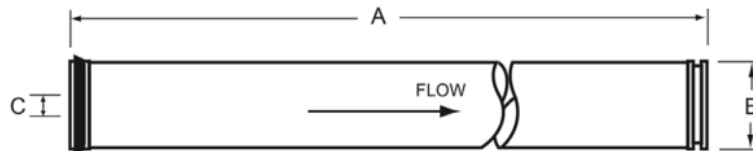
- Industrial pure water production, for example: semiconductor industry, electrical power, steel, chemical industry, etc.,
- Desalination of drinking water, for example: pure water, packaged water, etc.,

## Technical Specifications of RO Element

Model	Effective Membrane Area m <sup>2</sup> (ft <sup>2</sup> )	Average Permeate Flow m <sup>3</sup> /d (GPD)	Average Rejection Efficiency %	Min. Rejection Efficiency %	Inlet Channel Width mil
NSRO-HR440	40.9 (440)	47.3 (12500)	99.7	99.6	28
Testing Conditions	Testing Pressure			1.55 MPa (225psi)	
	Testing Solution Temperature			25°C	
	Concentration of Testing Solution (NaCl)			2000ppm	
	pH value of Testing Solution			7.0±0.5	
Operation Limits & Condition	Recovery Rate of Single Element			15%	
	Max. Working Pressure			4.14Mpa (600psi)	
	Max. Volume of Feed water			17m <sup>3</sup> /day (75gpm)	
	Max. Volume of Feed water			45°C	
	Max. Feed water SDI <sub>15</sub>			5	
	pH Range of Feed Water during Continuous Operation			2~11	
	pH Range of Feed Water during Chemical Cleaning			1~13	
	Residual Chlorine Concentration of Feed Water			<0.1ppm	
	Max. Pressure Drop of Single Membrane Element			0.1MPa (15psi)	
Max. Pressure Drop of Single Pressure Vessel with Six RO Membranes			0.34 MPa (50psi)		

- The above stated average values should not exceed ±15% of the nominal value. All technical data have been verified with absolute accuracy from long term testing.

## Dimensions of RO Element



A/mm (inch)	B/mm (inch)	C/mm (inch)
1016.0 (40)	201 (7.9)	29 (1.125)

- With the strive for technological improvement and advancement, the product information will be updated without advanced notice. With kindly request for revised product information at any point in time.

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