

## CPA7 Series

### High Flow, High Rejection RO membranes

The CPA7 series are the newest CPA brackish water RO membranes offering the highest salt rejection in the industry. These ultra-high rejection RO membranes are meant to fulfill your purest water quality requirements.

Where ultra-high purity water is required under difficult water conditions, the CPA7 membranes supply the best combination of high rejection and high flow capability in a brackish water RO element, compared to all commercial brackish water RO elements.

CPA7 membranes are useful in industries where high-purity water is critical like power generation, electronics, semiconductor, pharmaceutical and food & beverage.

The LD variant of these membranes using LD Technology® are available in 4" (CPA7-LD-4040) and 8" (CPA7-LD) diameters. The CPA7 MAX membrane has 440 ft<sup>2</sup> (40.9 m<sup>2</sup>) active membrane surface area which, reduces capital costs by requiring fewer pressure vessels and less floor space.

### Key Features of CPA7 membranes

- **Highest salt rejection – 99.8%**
- **High rejection of TOC, boron, silica and nitrate**
- **Greater tolerance to high pH cleanings**
- **Lower energy consumption**
- **Best combination of high rejection/ low energy in the membrane industry**

### CPA7 Features and benefits:

- **Enhanced membrane chemistry** for best permeate quality at lower feed pressure
- **Improved chemical resistance** for increased membrane life
- **Innovative feed spacer design** to reduce cleaning frequency and costs
- **Proprietary vented seal carrier** to eliminate pressure-shock damage during system startup

### CPA7 Applications:

- Boiler makeup water for power generation
- Industrial waste water recovery
- Zero Liquid Discharge (ZLD) / HERO process
- Ultrapure water for semiconductor manufacturing
- Ultrapure water for pharmaceutical industries



## Specified Performance\* and General Product Description:

	Model	Permeate flow* gpd (m <sup>3</sup> /d)	Salt Rejection* (nominal)	Feed Spacer Thickness (mil)	Membrane Active Area ft <sup>2</sup> (m <sup>2</sup> )
<b>CPA7 series</b>	<b>CPA7-LD-4040</b>	2,300 (8.7)	99.8%	34	80 (7.4)
	<b>CPA7-LD</b>	11,500 (43.5)	99.8%	34	400 (37.2)
	<b>CPA7 MAX</b>	12,600 (47.7)	99.8%	26-28	440 (40.9)

\* Test conditions: 1500 ppm NaCl solution, 1.55 MPa (225 psi) applied pressure, 15% recovery, operating temperature 25 °C. Specified Performance is based on data taken after approximately 30 minutes of operation. Actual testing of elements may be done at conditions which vary from these exact values; in which case, the performance is normalized back to these standard conditions. Permeate flow for individual elements may vary ±15 percent from the value specified.

## CPA7 series, Composite Polyamide RO membranes, for High Purity Water Production!

Hydranautics – A Nitto Group Company is a global leader in research, including reverse osmosis, nanofiltration, ultrafiltration, and microfiltration. Our membrane products (CPA, ESPA, LFC, SWC, ESNA, HYDRAcapMAX and HYDRAsub) are used extensively in municipal & industrial water and wastewater treatment.

Hydranautics has over 40 years experience in the membrane technology arena and are committed to creating innovative membrane technologies which provide clean water to a thirsty world.

Our Global Membrane Division is headquartered in Oceanside, CA, USA. With three state-of-the-art manufacturing sites located in Oceanside – CA – USA, Shiga – Japan and Shanghai – China, Hydranautics has a combined manufacturing area in excess of 1,400,000 ft<sup>2</sup> (130,064 m<sup>2</sup>). Our world-wide sales and customer service offices are located throughout Europe, Asia, the Middle East, North America and South America.



## Solutions You Need. Technologies You Trust!

### Hydranautics Corporate office

401 Jones Road, Oceanside, CA 92058, USA Toll Free: +1-800-CPA-PURE Tel: +1 760 901 2500 Fax: +1 760 901 2578  
Web: [www.membranes.com](http://www.membranes.com) Email: [hy-marketing@nitto.com](mailto:hy-marketing@nitto.com)

#### Americas

401 Jones Road,  
Oceanside,  
CA 92058, USA  
Tel: +1 760 901 2500

#### Europe and Africa

Calle Constitucion 3,  
3° 5° Sant Just  
Desvern,  
08960 Barcelona,  
Spain  
Tel: +34 934 731 722

#### Middle East

Office no. 31, Bldg no .  
S10122 (A2) South Zone,  
Jebel Ali Free Zone,  
P.O.Box 112839  
Dubai, UAE  
Tel: +971 4 889 5806

#### Indian Subcontinent

516 'C' Wing - 215  
Atrium, Andheri Kurla  
Road, Andheri (East),  
Mumbai 400059,  
India  
Tel: +91 22 4003 0500

#### China

15-16F, The Place Tower  
C, 150 Zunyi Road,  
Changning District,  
Shanghai 200051,  
P.R. China  
Tel: +86 21 5208 2255

#### SEA & Oceania

438 Alexandra Road  
#19-01/04,  
Alexandra Point,  
Singapore 119958  
Tel: +65 6879 3820

#### Japan

26F, Shinagawa  
Season Terrace,  
1-2-70, Konan,  
Minato-ku, 108-0075,  
Tokyo, Japan  
Tel: +81 3 6632 2044