

# CPA5-LD

## High Flow, High Rejection, Low Fouling Brackish Water RO Membranes

**CPA5-LD from the LD Technology™ innovative low fouling membranes, achieves the highest flow and highest salt rejection for the most difficult of brackish feed water conditions**

Where ultrahigh purity water is required under difficult feedwater conditions, the CPA5-LD gives the most desirable combination of high rejection and high flow.

For industries such as power, semiconductor, food and beverage, where high purity water is critical to operations, CPA5-LD gives you the most desirable combination of performance and efficiency.

CPA5-LD helps reduce RO system power consumption and the membrane resistance to biological and colloidal fouling helps reduce the number of cleanings required, lowering the overall cost of your operation.

### Applications:

- Boiler makeup water for power generation
- Ultrapure water for semiconductor manufacturing
- Ultrapure water for pharmaceutical industries
- Industrial waste water recycling
- Zero liquid discharge/HERO process

### Performance:

Permeate Flow	11,000 gpd (41.6 m <sup>3</sup> /d)
Salt Rejection	99.7 % (99.6 % minimum)

### Applications Data:

pH Range, Continuous (Cleaning)	2-11 (1-13)*
Maximum Feedwater SDI (15 min)	5.0
Maximum Feed Flow	75 GPM (17.0 m <sup>3</sup> /h)

\* The limitations shown here are for general use. For specific projects, operating at more conservative values may ensure the best performance and longest life of the membrane. See Hydranautics Technical Bulletins for more detail on operation limits, cleaning pH, and cleaning temperatures.

### Test Conditions:

1500 PPM NaCl solution
225 psi (1.55 MPa) Applied Pressure
77°F (25° C) Operating Temperature
15% Permeate Recovery
6.5 - 7.0 pH Range

### Key Benefits

- High permeate flow - 11,000 gpd (41.6 m<sup>3</sup>/d)
- High salt rejection - 99.7 % (99.6 % minimum)
- High rejection of boron - 92%
- Lowest biological and colloidal fouling
- Greater tolerance to high pH cleanings
- Lower energy consumption



## Features:

- **Enhanced membrane chemistry** for increased chemical resistance
- **Innovative spacer design** to minimize trapping of small colloidal particles
- **HYDRAblock™ technology** providing biostatic properties to minimize proliferation of biological fouling
- **Proprietary vented seal carrier** to eliminate pressure-shock damage during system startup.

## CPA5-LD, Composite PolyAmide RO Membranes,

## For Your Water Treatment Needs!



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

Nitto Denko and Hydranautics have 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 131,000 m<sup>2</sup> (1,400,000 ft<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 1-800-CPA-PURE Phone: 760-901-2500 Fax: 760-901-2578 Email: [info@hydranautics.com](mailto:info@hydranautics.com)  
Website: [www.membranes.com](http://www.membranes.com)

Americas Hydranautics	Europe/Africa Hydranautics	Middle East Hydranautics	Indian Subcontinent Hydranautics	S.E. Asia/Australia Nitto Denko	Japan Hydranautics-Nitto Denko Corp.
401 Jones Road Oceanside, CA 92058, USA Tel: +760-901-2500 Tel: 1-800-CPA-PURE Fax: +760-901-2578	Wilhelmina Singel 116, NL 6221 BL Maastricht, The Netherlands Tel: +31-(0) 43-350 3470 Fax: +31-(0)43-350 3489	DAFZ, Building No.6WA, Office No.828, PO Box 29 38 35, Dubai - UAE Tel: +971 4 2146820/1 Fax: +971 4 2146822	407, Palm Springs Center, Link Road, Malad (West), Mumbai 400 064, India Tel: +91-22-40030500 Fax: +91-22- 40030496	(Singapore) Pte Ltd 3 Temasek Ave. # 07-01/05 Centennial Towers, Singapore 169074 Tel: +65-6879-3820 Fax: +65-6223-7690	61-7, Azasasadani, Yamadara Kusatsu, Shiga, 525- 0042, Japan Tel: +81-77-565-3656 Fax: +81-77-565-3515