



## **Brackish Water Reverse Osmosis Membranes**

#### **CPA**

#### **High Rejection Membranes**

CPA (Composite Polyamide) membranes set the standard for RO membranes – over 600 million gallons per day of pure water are produced by CPA elements for global municipalities and industries. CPA membranes are available in 4" and 8" diameters.

## **CPA Applications:**

- Treatment of well waters for municipal drinking water
- Production of boiler feed water in power plants
- Production of ultrapure water for semiconductor, pharmaceutical and food and beverage



## **CPA Product Offerings\*:**

CPA2-4040, CPA3, CPA5-LD-4040, CPA5-LD, CPA5 MAX, CPA6-LD, CPA6 MAX, CPA7-LD-4040, CPA7-LD, CPA7 MAX

#### **ESPA**

## **Energy Saving Membranes**

ESPA (Energy Saving Polyamide) membranes achieve high flux / lower pressure without compromising standards for high rejection. Since their introduction in the late 1990s, the ESPA membranes have gained wide acceptance in the water treatment industry due to the significant operational cost savings associated with their use. ESPA membranes are available in 4" and 8" diameters.

## **ESPA Applications:**

- Treatment of ground, surface and wastewater
- High purity industrial applications
- Boron reduction for potable and agricultural water
- Municipal waste water reclamation

# ESPA2 - LD MAX

## **ESPA Product Offerings\*:**

ESPA1-LD-4040, ESPA1, ESPA2-LD-4040, ESPA2-LD, ESPA2 MAX, ESPA2-LD MAX, ESPAB MAX, ESPA4-LD-4040, ESPA4-LD, ESPA4-LD HP, ESPA4 MAX

#### **LFC**

#### Low Fouling Membrane

LFC (Low Fouling Composite) membranes combine neutral surface charge and hydrophilicity, providing significant reduction in fouling rates and increasing membrane effciency by restoring nominal performance after cleaning. LFC membranes are available in 4" and 8" diameters.

## **LFC Applications:**

- Municipal wastewater treatment
- Industrial wastewater treatment
- Wastewater with organic fouling potential

## LFC Product Offerings\*:

LFC3-LD-4040, LFC3-LD



## **Seawater Reverse Osmosis Membranes**

#### SWC

## **High Rejection Membranes for Seawater Desalination**

SWC (Seawater Composite) membranes offer a consistently pure end-product with lowest energy consumption at varying levels of seawater salinities. SWC membranes are available in 4"and 8" diameters.

## **SWC Applications:**

- Conventional and hybrid seawater desalination plants
- Boron reduction for potable and agricultural water

## **SWC Product Offerings\*:**

SWC4-LD, SWC4 MAX, SWC5-LD-4040, SWC5-LD, SWC5 MAX, SWC6-LD, SWC6 MAX



## **Nanofiltration Membranes**

Hydranautics' broad line of nanofiltration elements include our ESNA, NANO and HYDRACoRe membranes that provide a range of salinity rejections from 30% to 90% but with high rejection for selected contaminants such as pesticides, natural organic matter (NOM), pathogens, sulfate, iron or other specific material. These nanofiltration membranes are available in 4" and 8" diameters.

#### **Applications:**

- Brackish water softening
- Removal of NOM, TOC and other organics
- Industrial waste water reclamation to achieve high recovery
- Sulfate removal from seawater

## **Product Offerings\*:**

ESNA1-LF-LD, ESNA1-LF2-LD, ESNA4-LD, NANO-SW-4040, NANO-SW, NANO-SW MAX, NANO-SW HP, NANO-SW MAX HP, NANO-SW UH, HYDRACoRe10-LD-4040, HYDRACoRe10-LD, HYDRACoRe50-LD-4040, HYDRACoRe50-LD

# Integration Membrane Solutions Design (IMSDesign Cloud)

IMSDesign Cloud the world's first cloud-based membrane projection software which can be accessed on www.imsdesign.com. It empowers you with the flexibility to perform membrane projections, anytime, anywhere using any device. This next gen integrated membrane projection software will enable you to simulate various combinations of RO, NF and UF membrane projections in a seamless manner.

Element specification sheets and technical bulletins are available at www.membranes.com. The LD variant of a membrane uses the low-differential LD Technology® which minimizes colloidal fouling when used with conventional pre-treatment equipment. LD membranes offer consistently low feed pressures and longer intervals between cleanings. The MAX variant of a membrane has 440 ft2 (40.9 m2) active membrane surface area. The increased membrane area reduces capital costs as fewer pressure vessels are required which also reduces the required floor space.

Installation references are also available upon request.

## Solutions You Need.

# Technologies You Trust!

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