

Specified Performance* and General Product Description:

Membrane Product	Model	Permeate flow* gpd (m ³ /d)	Salt Rejection* (nominal)	Feed Spacer Thickness (mil)	Membrane Active Area ft ² (m ²)
ESPA1	ESPA1-LD-4040	2,450 (9.3)	99.4%	34	80 (7.4)
	ESPA1	12,000 (45.4)	99.4%	26-28	400 (37.2)
ESPA2	ESPA2-4040	1,900 (7.2)	99.6%	26-28	85 (7.9)
	ESPA2-LD-4040	2,000 (7.6)	99.6%	34	80 (7.4)
	ESPA2-LD	10,000 (37.9)	99.6%	34	400 (37.2)
	ESPA2 MAX	12,000 (45.4)	99.6%	26-28	440 (40.9)
	ESPA2-LD MAX	12,000 (45.4)	99.6%	34	440 (40.9)
	ESPA2 1640	40,000 (151.4)	99.6%	28	1670 (155)
ESPAB	ESPAB MAX	9,000 (34.1)	99.3%	26-28	440 (40.9)
	ESPAB 1640	34,000 (128.7)	99.3%	28	1670 (155)
ESPA4	ESPA4-4040	2,500 (9.5)	99.2%	26-28	85 (7.9)
	ESPA4-LD-4040	2,350 (8.9)	99.2%	34	80 (7.4)
	ESPA4-LD	12,000 (45.4)	99.2%	34	400 (37.2)
	ESPA4 MAX	13,200 (50)	99.2%	26-28	440 (40.9)

*The 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.



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 ft² (130,064 m²). 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 Email: 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

407, Palm Spring
Center, Link Road,
Malad (West),
Mumbai 400064,
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