

## SanRO®

SanRO, High Rejection RO Composite Membrane Elements are designed specifically for High Performance in USP and other high purity water systems. Elements with Sanitary, Full-fit outer-wraps eliminate "dead flow" areas for maximum bacteria control. SanRO components conform to FDA regulation CFR Title 21.

### Products:

Membrane Type	Description	Element Performance*			System Performance**	
		Permeate Flow / Rejection		% Rej	Applied Pressure, psig (MPa)	Permeate TDS, PPM
		GPD (m³/day) 8040                      4040				
SanRO ESPA2	High Rejection Energy Saver	13000 (49.2)	3300 (12.5)	99.5	136 (0.94)	17.3
SanRO CPA3	High Rejection Composite	10500 (39.7)	2600 (9.8)	99.6	158 (1.09)	10.8
SanRO LFC3	Low Fouling Composite	9000 (34.1)	2300 (8.7)	99.6	179 (1.23)	9.0
SanRO CPA4	High Rejection Composite	5500 (20.8)	1400 (5.3)	99.6	263 (1.81)	5.2

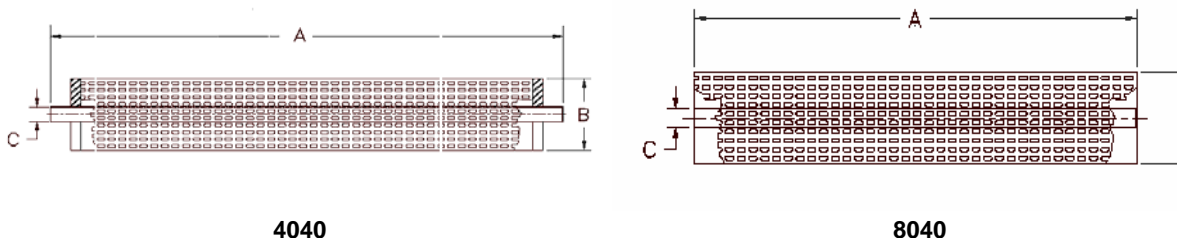
\* Element Performance is at 225 psig (1.55 MPa), 1500 mg/L NaCl, 15% Recovery, 77°F (25 °C).

\*\* Applied Pressure and Permeate TDS are projected values for a 2:2:1 array system operating at 15 GFD (26 LMH) average flux with 500 mg/L TDS feed (NaCl), 80% Recovery, pH 7, 77°F (25 °C).

<b>Type</b>	Configuration:	Sanitary (Full-Fit) Spiral Wound
	Membrane Polymer:	Composite Polyamide

<b>Application Data*</b>	Maximum Applied Pressure, psig (MPa)	600 (4.14)
	Maximum Chlorine Concentration, PPM	< 0.1
	Maximum Operating Temperature, °F (°C)	113 (45)
	Operating pH Range:	3.0 - 10.0
	Cleaning pH Range:	2.0 - 11.0
	Maximum Pressure Drop for a vessel, psig (MPa)	60 (0.41)

\* The limitations shown here are for general use. The values may be more conservative for specific projects to ensure the best performance and longest life of the membrane.



Size	A in (cm)	B in (cm)	C in (cm)	Area ft <sup>2</sup> (m <sup>2</sup> )
4040	40.0 (102)	3.98 (10.1)	0.750 (1.9) O.D.	90 (8.3)
8040	40.0 (102)	7.90 (20.1)	1.125 (2.9) I.D.	380 (35.2)

**Notice:** Elements are vacuum-sealed in a polyethylene bag containing less than 1.0% sodium meta-bisulfite solution, and then packaged in a cardboard box. Hydranautics believes the information and data contained herein to be accurate and useful. The information and data are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. Hydranautics assumes no liability for results obtained or damages incurred through the application of the presented information and data. It is the user's responsibility to determine the appropriateness of Hydranautics' products for the user's specific end uses. 5/1/06