

# Domestic Reverse Osmosis Membranes



## Description

Hydranautics (Nitto Denko), a global leader in membrane technology, offers a range of residential reverse osmosis membranes. These elements are made using HYDRAblock™ Antibacterial technology, show minimal biological fouling which ensures longer life when compared with that of other conventional technologies. Marketed by the authorized partner Aventura, the superior class membranes ensure safe quality of water for drinking and other domestic consumption purposes.

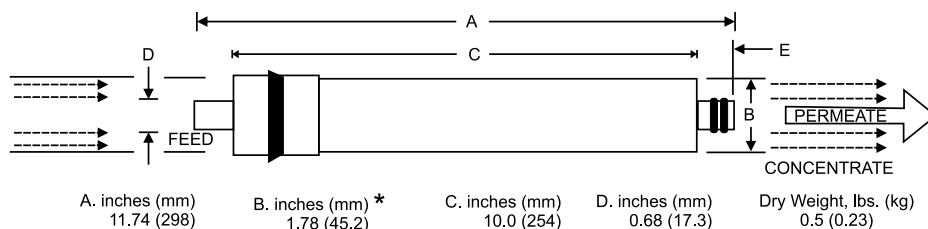
## Features

- ▶ HYDRAblock™ antibacterial technology
- ▶ Dry composite polyamide reverse osmosis membrane
- ▶ LD technology inside to prevent biological and colloidal fouling
- ▶ Higher resistance to bio-fouling
- ▶ High salt rejection
- ▶ High water permeability
- ▶ NSF approved

## Applications

The Hydranautics membranes are used for domestic drinking water treatment applications.

## Dimensions



\*Fits 2"sch 40 PVC pipe

Note: Core tube on brine seal side (dimension: "D") is plugged. Permeate flow is through 0-ring side of tube only.

## Technical Information

Model		Units	ESPA-50	ESPA-75
Specification				
Specification	Permeate Flow	gpd (m <sup>3</sup> /d)	50 (0.19)	75 (0.28)
	Salt Rejection	%	99.0	98.0
Type	Configuration		Spiral Wound	Spiral Wound
	Membrane Material		Composite Polyamide	Composite Polyamide
Application Limits*	Maximum Applied Pressure	psig (MPa)	300 (2.1)	300 (2.1)
	Maximum Chlorine Concentration	ppm	< 0.1	< 0.1
	Maximum Operating Temperature	°F (°C)	113 (45)	113 (45)
	pH range, continuous cleaning		3.0-10.0*	3.0-10.0*
	Maximum Feedwater Turbidity	NTU	1.0	1.0
	Maximum feedwater SDI (15 mins)		4.0	4.0
	Maximum Feed Flow	gpm (l/m)	3.0 (11)	3.0 (11)
	Maximum Pressure Drop for each element	psi	10	10

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

## Test Conditions

Elements are wet tested for quality assurance using the following conditions: (Data taken after 30 minutes of operation)

- ▶ 500 ppm Softened Tap Water
- ▶ 65 psi (0.45 MPa) Applied Pressure
- ▶ 77°F (25°C) Operating Temperature
- ▶ 15% Permeate Recovery
- ▶ 6.5 – 7.0 pH Range

### Note:

Minimum permeate flow for individual elements is 20 percent below listed flow. All membrane elements are supplied with a brine seal and o-rings. Most elements are packaged dry, sealed in polyethylene bags, and shipped in a cardboard box. Some elements are sealed in polyethylene bags containing less than 1.0% sodium meta-bisulfite solution and shipped in a cardboard box

### Disclaimer:

We believe the information provided here to be accurate. The information and data are offered in good faith, but without any guarantee as the conditions and methods of use of our products are beyond our control. The customer is fully responsible for the effects of incompatible chemicals or elements. The presence of free chlorine and other oxidizing agents will cause membrane failures and such damage is not covered under warranty. It is the customer's responsibility to determine the appropriateness of our products for their specific end uses.



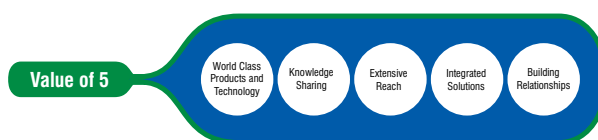
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