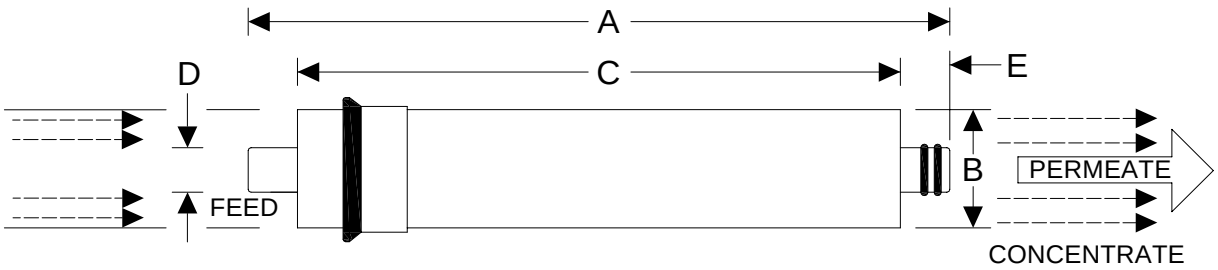
	Membrane Element	ESPA-50
Performance	Permeate Flow:	50gpd (0.19 m^3/d)
	Salt Rejection (Nominal):	99.0 %
Type	Configuration:	Spiral Wound
	Membrane Polymer:	Composite Polyamide
	Feed/ Brine Spacer Thickness:	16 mil (0.41 mm)
		HYDRAblock™ Inside!
		Antibacterial Technology
Application Data*	Maximum Applied Pressure:	300 psig (2.1 MPa)
	Maximum Chlorine Concentration:	< 0.1 PPM
	Maximum Operating Temperature:	113° F (45°C)
	pH Range; Continuous (Cleaning):	3.0 –10.0*
	Maximum Feedwater Turbidity:	1.0 NTU
	Maximum Feedwater SDI (15 mins):	4.0
	Maximum Feed Flow:	3 GPM (11 l/m)
	Minimum Ratio of Concentrate to Permeate Flow for any element:	5:1
	Maximum Pressure Drop for Each Element:	10 psi

***** 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

Elements are wet tested for quality assurance using the following conditions:

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
(Data taken after 30 minutes of operation)



A, inches (mm)	B, inches (mm) *	C, inches (mm)	D, inches (mm)	Dry Weight, lbs. (kg)
11.74 (298)	1.78 (45.2)	10.0 (254)	0.68 (17.3)	0.5 (0.23)

Core tube extension: E = 0.86” (21.8 mm)

* Fits 2”sch 40 PVC pipe

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

Notice: 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.

12/12/11

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