



Membrane Element

ESPA4-LD (Low Fouling Technology)

Performance: Permeate Flow: 12,000 gpd (45.4 m³/d)

Salt Rejection: 99.2% (99.0% minimum)

Type Configuration: Low Fouling Spiral Wound

Membrane Polymer:Composite PolyamideMembrane Active Area:400 ft² (37.1m²)Feed Spacer:34 mil (0.864 mm)

Application Data* Maximum Applied Pressure: 600 psig (4.14 MPa)

Maximum Chlorine Concentration: < 0.1 PPM
Maximum Operating Temperature: 113 °F (45 °C)
pH Range, Continuous (Cleaning): 2-10 (1-12)*
Maximum Feedwater Turbidity: 1.0 NTU
Maximum Feedwater SDI (15 mins): 5.0

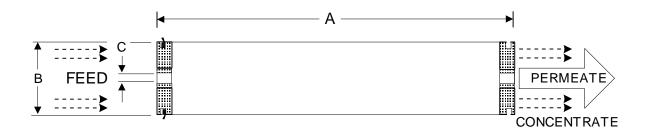
Maximum Feed Flow: 75 GPM (17.0 m³/h)

Maximum Pressure Drop for Each Element: 15 psi

Test Conditions

The stated performance is initial (data taken after 30 minutes of operation), based on the following conditions:

500 PPM NaCl solution 100 psi (0.7 MPa) Applied Pressure 77 °F (25 °C) Operating Temperature 15% Permeate Recovery 6.5 - 7.0 pH Range



A, inches (mm)	B, inches (mm)	C, inches (mm)	Weight, lbs. (kg)
40.0 (1016)	7.89 (200)	1.125 (28.6)	33 (15)

Notice: Permeate flow for individual elements may vary + or - 15 percent. Membrane active area may vary +/-4%. Element weight may vary. All membrane elements are supplied with a brine seal, interconnector, and o-rings. Elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulfite solution and then packaged in a cardboard box.

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^{*} 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.