Nitto

HYDRANAUTICS
Nitto Group Company

Membrane Element   ESPA1-LD-4040
(Low Fouling Technology)

| **Performance:** | Permeate Flow: | 2,450 gpd (9.27 m^3/d) |
| | Salt Rejection: | 99.4% (99.2% Minimum) |

| **Type** | Configuration: | Spiral Wound |
	Membrane Polymer:	Composite Polyamide
	Membrane Active Area:	80 ft^2 (7.4 m^2)
	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:	16 GPM (3.6 m^3/h)
	Maximum Pressure Drop for Each Element:	15 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

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

> 1500 ppm NaCl solution
> 150 psi (1.05 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)
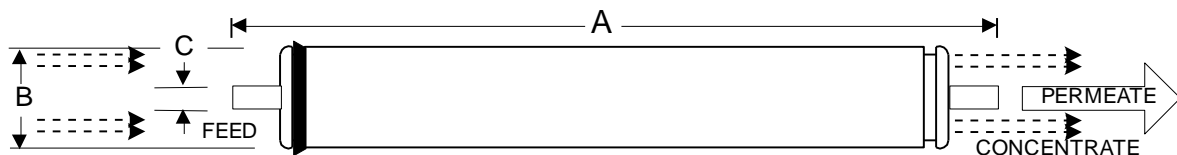
A, inches (mm)	B, inches (mm)	C, inches (mm)	Weight, lbs. (kg)
40.0 (1016)	3.95 (100.3)	0.75 (19.1)	8 (3.6)

Core tube extension = 1.05" (26.7 mm)

Notice: Permeate flow for individual elements may vary + or - 15 percent. 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% sodium meta-bisulfite solution and then packaged in a cardboard box.

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