

AP Series

Extreme Low Pressure Brackish Water RO Elements

The A-Series family of proprietary thin-film reverse osmosis membrane is characterized by high flux and relatively high sodium chloride rejection. AP brackish water elements are selected when extreme high flow and ultra-low operating pressures are desired.

The AP membrane element is designed specifically to operate at low energy high flow applications for beverage, light commercial, residential and general industrial applications.

Table 1: Element Specification

Membrane	Thin-film membrane (TFM*)		
Model	Average permeate flow gpd (m ³ /day) ^{1,2}	Average NaCl rejection ^{1,2}	Minimum NaCl rejection ^{1,2}
AP-90	2500 (9.5)	95%	92%
AP-365	10,000 (37.9)	95%	92%
AP-400	11,000 (41.6)	95%	92%

¹ Average salt rejection after 24 hours of operation. Individual flow rate may vary ±20%.

² Testing conditions: 500ppm NaCl solution at 75 psi (520kPa) operating pressure, 77°F (25°C), pH7 and 15% recovery.

Model	Active area ft ² (m ²)	Outer wrap	Part number
AP-90	90 (8.4)	Fiberglass	3063034
AP-365	365 (33.9)	Fiberglass	3056613
AP-400	400 (37.1)	Fiberglass	3134276

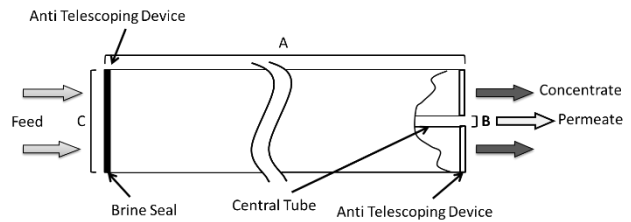


Figure 1b: Element Dimensions Diagram – Female

Table 2: Operating and CIP parameters

Typical Operating Pressure	70 psi (483 kPa gage)
Typical Operating Flux	10-20GFD (17-34LMH)
Maximum Operating Pressure	200 psi (1380 kPa gage)
Maximum Temperature	Continuous operation: 122°F (50°C) Clean-In-Place (CIP): 122°F (50°C)
pH range	Optimum rejection: 7.0-7.5, Continuous operation 4.0-11.0, Clean-In-Place (CIP): 1.0-13.0 ¹
Maximum Pressure Drop	Over an element: 12 psi (83 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater²	NTU <1 SDI <5

¹ Please refer to Cleaning Guidelines Technical Bulletin TB1194

² SDI is measured on a non-linear scale using a 0.45-micron filter paper. Additionally, finer colloids, particulates and microorganisms that pass through the filter paper and not measured in the SDI test, will potentially foul the RO element. For performance consistency and project warranty, please use Winflows projection



software and consult your GE representative

Table 3: Dimensions and Weights

Model ¹	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B ¹	C	
AP-90	Male	40.0 (101.6)	0.75 (1.90)	3.9 (9.9)	9 (4)
AP-365	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)
AP-400	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)

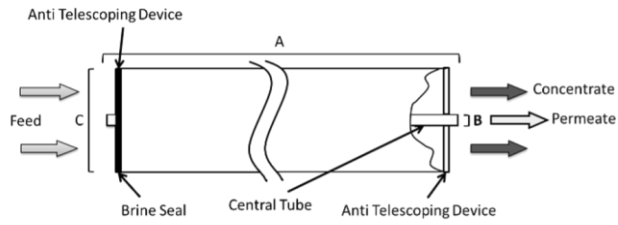


Figure 1a: Element Dimensions Diagram – Male