

AP Series

FACT SHEET

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	A-series, thin-film membrane (TFM*)
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Model	Average permeate flow gpd (m ³ /day) (1)(2)	Average NaCl rejection (1)(2)	Minimum NaCl rejection (1)(2)
AP-90	2300 (9.1)	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 $\pm 20\%$.

(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

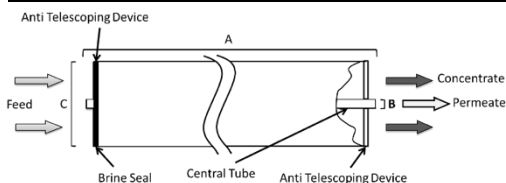


Figure 1: Element Dimensions Diagram – Male

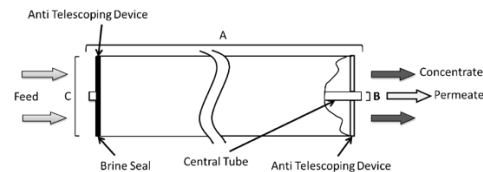


Figure 1b: Element Dimensions Diagram – Female

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 2.0-11.0, Clean-In-Place (CIP): 1.0-13.0(1)
Maximum Pressure Drop	Over an element: 15 psi (103 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater	NTU <1 SDI ₁₅ < 5

(1) Refer to Cleaning Guidelines Technical Bulletin TB1194

Table 3: Dimensions and Weights

Model	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B	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)