

The A-Series, family of proprietary thin-film reverse osmosis membrane elements are characterized by high flux and excellent sodium chloride rejection. AK Low Pressure Brackish Water Elements are selected when high rejection and low operating pressures are desired. These elements allow significant energy savings since good rejection is achieved at operating pressures as low as 100 psig (689 kPa). AK4040FF Low Pressure Brackish Water elements feature a FRP outerwrap and 28 mil feed spacers. This element is designed with male end connections.

ELEMENT SPECIFICATIONS

Model	Flow		Active Area		Rejection		Part Number
	GPD	(m ³ /d)	ft ²	m ²	Average	Minimum	
AK4040FF	2,200	8.3	85	7.9	99.0%	98.0%	1206913

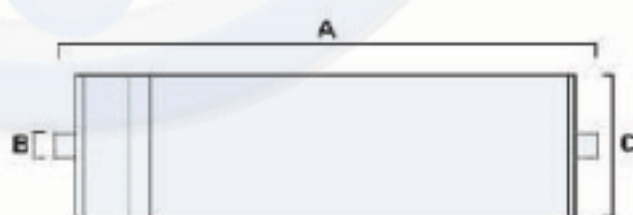
Specifications are based on a 500 mg/L NaCl solution at 115 psig feed pressure (793kPa), 17psig P₂(280g C), 15% recovery, pH 7.5 after 24 hours. Individual flux may vary +20%/-10%.

OPERATING AND DESIGN PARAMETERS

Membrane: Thin Film Membrane (TFM®)
 Typical Operating Pressure: 100psig (689 kPa)
 Maximum Pressure: 400psig (2758 kPa)
 Maximum Temperature: 122°F (50°C)
 Chlorine Tolerance: 1,000 ppm-hrs. Dechlorination recommended
 Optimum rejection pH: 7.0 - 7.5
 Operating pH range: 4.0 - 11.0
 Cleaning pH range: 2.0 - 11.5
 Maximum Pressure Drop: 10 psig (69kPa) per element
 50 psig (345kPa) per vessel
 Feed NTU: <1
 Feed SDI: <3
 Typical Operating Flux: 10 - 20 GFD (15-36 L.H-1.M-2)

ELEMENT DIMENSIONS AND WEIGHT

MODEL NUMBER LEGEND



Model	A inches (mm)	B inches (mm)	C* inches (mm)	Weight lbs (kg)
AK4040FF	40 (1016)	0.75 (19)	3.88 (99)	12 (5.5)

* The element diameter (dimension C) is designed for optimum performance in Osmonics pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.