

UNIT OF MEASURE: BOTH ENGLISH METRIC



AK8040F-400

Brackish Water Desalination Reverse Osmosis, Low Energy

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). AK8040F-400 Low Pressure Brackish Water elements feature a FRP outerwrap and 27 mil feed spacers. This element is designed with flush end connections.

Element Specifications

Model	Flow	Active Area	Avg. Rejection	Min. Rejection	Part Number
AK8040F-400	10,500 GPD (39.7 m ³ /d)	400 ft ² (37.2 m ²)	99%	98%	1206821

Specifications are based on a 500 mg/L NaCl solution at 115 psig operating pressure (793 kPa), 77°F (25°C), 15% recovery, pH 7.5 after 24 hours. Individual flux may vary +25%/ -15%.

Operating and Design Parameters

- Membrane:** Thin Film Membrane (TFM[®])
- Typical Operating Pressure:** 110 psig (758 kPa)
- Maximum Pressure:** 400 psig (2,758 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 (69 kPa) per element
50 psig (345 kPa) per vessel
- Feed NTU:** <1
- Feed SDI:** <3
- Typical Operating Flux:** 10-20 GFD (15-35) L.H-1.M-2

Element Dimensions and Weight

Model Number Legend

