

AG LF Series

Low Fouling Brackish Water Reverse Osmosis Elements

The A-Series LF proprietary thin-film reverse osmosis (RO) membrane elements are characterized by high flow, high sodium chloride rejection and low fouling surface properties. AG LF brackish water elements are selected when high rejection and operating pressures as low as 200 psi (1,379 kPa) are desired. These elements are recommended for brackish water with salt concentration (TDS) levels between 1,000 and 10,000mg/l or when very high salt rejection of monovalent ions is required.

AG LF high rejection brackish water elements feature a Fiberglass outer wrap.

Table 1: Element Specification

Membrane

AG8040F 400 LF, WET

Model	Average permeate flow gpd (m3/day) ^{1,2}	Average NaCl rejection ^{1,2}	Minimum NaCl rejection ^{1,2}
AG4040F LF, WE	ET 2,200 (8.33)	99.5%	99.0%

Thin-film membrane (TFM*)

99.5%

99.0%

10,500 (39.7)

 $^{^2}$ Testing conditions: 2,000ppm NaCl solution at 225psi (1,550kPa) operating pressure, $77^\circ F, \, pH7$ and 15% recovery.

Model	Active area ft² (m²)	Outer wrap	Part number
AG4040F LF, WET	85 (7.9)	Fiberglass	3056468
AG8040F 400 LF, WET	400 (37.2)	Fiberglass	3056466

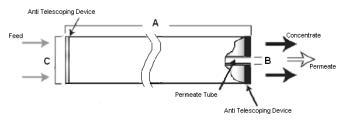


Figure 1: Element Dimensions Diagram - AG8040F 400 LF,
WET

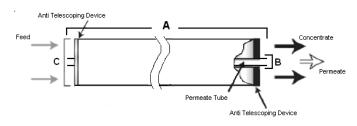


Figure 2: Element Dimensions Diagram - AG4040F LF, WET

Table 2: Dimensions and Weight

	Dimensions, inches (cm)			Boxed
Model ¹	Α	B ²	С	Weight Ibs (kg)
AG4040F LF, WET	40.0	0.75	3.88	12
	(101.6)	(1.9) OD	(9.9)	(5.5)
AG8040F 400 LF, WET	40.0	1.125	7.9	35
	(101.6)	(2.86)	(20.1)	(16)

¹These elements are bagged wet (WT) before shipping.

Table 3: Operating and CIP parameters

Typical Operating Pressure	200 psi (1,380 kPa)
Typical Operating Flux	10-20GFD (15-35LMH)
Maximum Operating Pressure	600 psi (4,137 kPa)
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): 2.0-11.5
Maximum Pressure Drop	Over an element: 12 psi (83 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater	NTU < 1 SDI < 5



¹ Average salt rejection after 24 hours operation. Individual flow rate may vary

² Internal diameter unless specified OD (outside diameter).