

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.

Table 1: Element Specification

Membrane	Thin-film membrane (TFM*)		
Model	Average permeate flow gpd (m3/day) ^{1,2}	Average NaCl rejection ^{1,2}	Minimum NaCl rejection ^{1,2}
AG4040F LF, WET	2,300 (8.7)	99.5%	99.0%
AG8040F 400 LF, WET	11,000 (41.6)	99.5%	99.0%
AG8040F-400 LF, 34 WET	11,000 (41.6)	99.5%	99.0%

¹ Average salt rejection after 24 hours of operation.

Individual flow rate may vary ±20%.

² Testing conditions: 2,000ppm NaCl solution at 225psi (1,550kPa) operating pressure, 77°F, pH7 and 15% recovery.

Model	Active area ft ² (m ²)	Outer wrap	Part number
AG4040F LF, WET	85 (7.9)	Fiberglass	3056468
AG8040F-400 LF, WET	400 (37.2)	Fiberglass	3056466
AG8040F-400 LF, 34 WET	400 (37.2)	Fiberglass	3149711

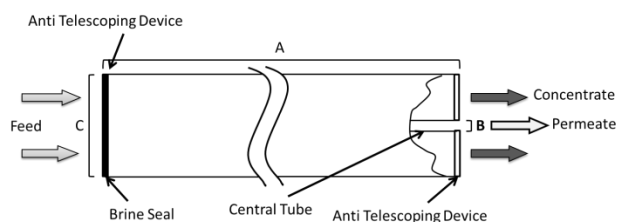


Figure 1: Element Dimensions Diagram - AG8040F-400 LF, ** WET

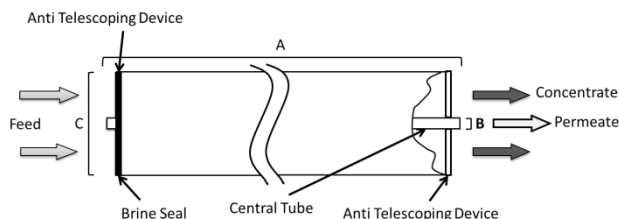


Figure 2: Element Dimensions Diagram – AG4040F LF, WET

Table 2: Dimensions and Weight

Model	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B	C	
AG4040*	Male	40.0 (101.6)	0.75 (1.9)	3.88 (9.9)	12 (5.5)
AG8040*	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)

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): 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
Feedwater ²	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.