AG Series

Standard Brackish Water RO Elements

DESAL® MEMBRANE PRODUCTS

The A-Series, family of proprietary thin-film reverse osmosis membrane elements are characterized by high flux and high sodium chloride rejection. AG Standard Brackish Water Elements are selected when high rejection and operating pressures as low as 200 psi (1,379 kPa) are desired. These elements allow moderate energy savings, and are considered a standard in the industry.

Table 1: Element Specification

Membrane	A-Series, Thin-Film Membrane (TFM*)

Model	Average permeate flow gpd (m^3/day) [1,2]	Average NaCl rejection [1,2]	Minimum NaCl rejection [1,2]
AG2540FM	710 (2.7)	99.5%	99.0%
AG2540TM	710 (2.7)	99.5%	99.0%
AG4025T	1,600 (6.0)	99.5%	99.0%
AG4026F	1,600 (6.0)	99.5%	99.0%
AG4040C	2,400 (9.1)	99.5%	99.0%
AG4040CM	2,400 (9.1)	99.5%	99.0%
AG4040FM	2,200 (8.3)	99.5%	99.0%
AG4040FM WET	2,200 (8.3)	99.5%	99.0%
AG4040NM	2,200 (8.3)	99.2%	98.5%
AG4040TM	2,200 (8.3)	99.5%	99.0%
AG8040C	9,900 (37.3)	99.5%	99.0%
AG8040F	9,600 (36.3)	99.5%	99.0%
AG8040F WET	9,600 (36.3)	99.5%	99.0%
AG8040F 400	10,500 (39.8)	99.5%	99.0%
AG8040F 400 WET	10,500 (39.8)	99.5%	99.0%
AG8040N	9,600 (36.3)	99.2%	98.5%
AG8040N 400	10,500 (39.8)	99.2%	98.5%

[1] Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.
[2] Testing conditions: 2,000 ppm NaCl solution at 225 psi (1,551 kPa) operating pressure, 77°F (25°C), pH 7.5 and 15% recovery.

Model	Membrane area ft^2 (m^2)	Outer wrap	Part number
AG2540FM	29 (2.6)	Fiberglass	1206727
AG2540TM	29 (2.6)	Tape	1206729
AG4025T	60 (5.6)	Tape	1206754
AG4026F	60 (5.6)	Fiberglass	1206756
AG4040C	90 (8.4)	Cage	1206757
AG4040CM	90 (8.4)	Cage	1206759
AG4040FM	85 (7.9)	Fiberglass	1206761
AG4040FM WET	85 (7.9)	Fiberglass	3013808
AG4040NM	85 (7.9)	Net	1231785
AG4040TM	85 (7.9)	Tape	1206774
AG8040C	380 (35.3)	Cage	1222546
AG8040F	365 (33.9)	Fiberglass	1206779
AG8040F WET	365 (33.9)	Fiberglass	1239765
AG8040F 400	400 (37.2)	Fiberglass	1206784
AG8040F 400 WET	400 (37.2)	Fiberglass	1239764
AG8040N	365 (33.9)	Net	1231784
AG8040N 400	400 (37.2)	Net	1231786

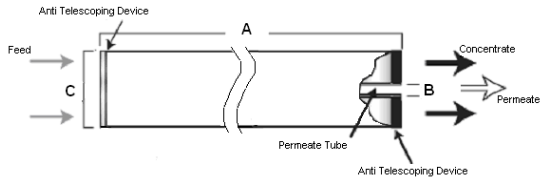


Figure 1: Element Dimensions Diagram – Female

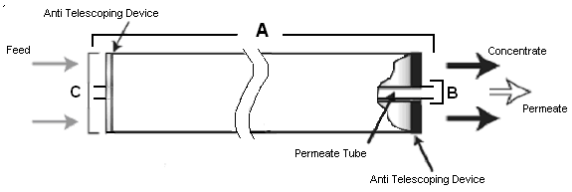


Table 2: Dimensions and Weight

Model[1]	Dimensions, inches (cm)			Boxed
	A	B[2]	C[3]	Weight lbs (kg)
AG2540FM	40.0 (101.6)	0.75 (1.90) OD	2.4 (6.1)	5 (2.3)
AG2540TM	40.0 (101.6)	0.75 (1.90) OD	2.4 (6.1)	5 (2.3)
AG4025T	25.0 (63.5)	0.625 (1.59)	3.9 (9.9)	5 (2.3)
AG4026F	26.0 (66.7)	0.625 (1.59)	3.9 (9.9)	6 (2.7)
AG4040C	40.0 (101.6)	0.625 (1.59)	3.9 (9.9)	8 (3.5)
AG4040CM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
AG4040FM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
AG4040FM WET	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
AG4040NM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
AG4040TM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
AG8040C	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
AG8040F	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
AG8040F WET	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)
AG8040F 400	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
AG8040F 400 WET	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)
AG8040N	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
AG8040N 400	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)

[1] These elements are bagged dried, unless specified WET, before shipping.
[2]Internal diameter unless specified OD (outside diameter).
[3]The element diameter (dimension C) is designed for optimum performance in GE pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.

Table 3: Operating and CIP parameters

Typical Operating Pressure	200 psi (1,379 kPa)
Typical Operating Flux	10-20GFD (15-35LMH)
Maximum Operating Pressure	Tape 450 psi (3,103 kPa) Other outerwrap: 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