

AG Series

Standard Brackish Water RO Elements

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} |
|-----------------|--|---------------------------------------|---------------------------------------|
| 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% |
| AG4040FM | 2,200 (8.3) | 99.5% | 99.0% |
| AG4040FM WET | 2,200 (8.3) | 99.5% | 99.0% |
| 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% |
| AG8340F 400 | 10,500 (39.8) | 99.5% | 99.0% |

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 |
|-----------------|---|------------|-------------|
| AG2540TM | 29 (2.6) | Tape | 1206729 |
| AG4025T | 60 (5.6) | Tape | 1206754 |
| AG4026F | 60 (5.6) | Fiberglass | 1206756 |
| AG4040C | 90 (8.4) | Cage | 1206757 |
| AG4040FM | 85 (7.9) | Fiberglass | 3032513 |
| AG4040FM WET | 85 (7.9) | Fiberglass | 3035659 |
| AG4040TM | 85 (7.9) | Tape | 3032514 |
| AG8040C | 380 (35.3) | Cage | 1222546 |
| AG8040F | 365 (33.9) | Fiberglass | 3032515 |
| AG8040F WET | 365 (33.9) | Fiberglass | 3032516 |
| AG8040F 400 | 400 (37.2) | Fiberglass | 3032518 |
| AG8040F 400 WET | 400 (37.2) | Fiberglass | 3032519 |
| AG8040N | 365 (33.9) | Net | 1231784 |
| AG8040N 400 | 400 (37.2) | Net | 1231786 |
| AG8340F 400 | 400 (37.2) | Fiberglass | 3048370 |

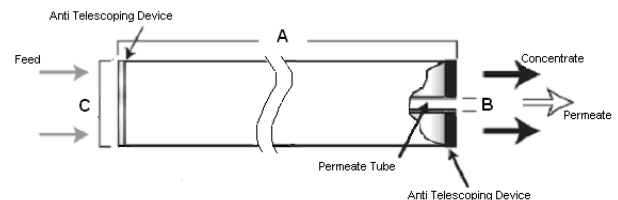


Figure 1: Element Dimensions Diagram – Female

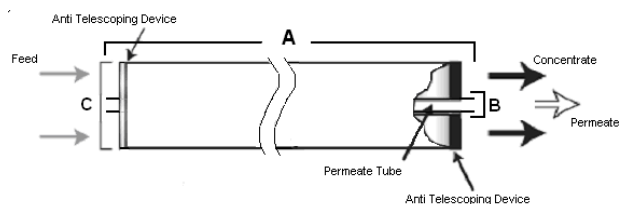


Figure 2: Element Dimensions Diagram – Male

Table 2: Dimensions and Weight

| Model ¹ | Dimensions, inches (cm) | | | Boxed |
|--------------------|-------------------------|-------------------|----------------|-----------------|
| | A | B ² | C ³ | Weight lbs (kg) |
| 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) |
| 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) |
| 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) |
| AG8340F 400 | 40.0 (101.6) | 1.125 (2.86) | 8.3 (21.1) | 42 (19.1) |

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 |