

AG Series

Standard Brackish Water RO Elements

The A-Series, family of proprietary thin-film reverse osmosis 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

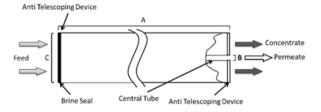
| Membrane | A-Series, thin-film membrane (TFM) |
|----------|------------------------------------|

| Model | Average Permeate Flow gpd (m³/day) | Average NaCl Rejection | Minimum NaCl Rejection | |
|-------------|---|------------------------------|------------------------------|--|
| AG2540TM | 750 (2.8) | 99.5% | 99.0% | |
| AG4026F | 1,600 (6.1) | 99.5% | 99.0% | |
| AG4040C | 2,400 (9.1) | 99.5% | 99.0% | |
| AG4040FM | 2,400 (9.1) | 99.5% | 99.0% | |
| AG4040TM | 2,400 (9.1) | 99.5% | 99.0% | |
| AG8040F | 10,000 (37.9) | 99.5% | 99.0% | |
| AG8040F 400 | 11,000 (41.6) | 99.5% | 99.0% | |
| AG8040F 440 | 12,000 (45.4) | 99.5% | 99.0% | |

⁽¹⁾ Average salt rejection after 24 hours of operation. Individual flow rate may vary ±20%.

Table 2: Element Properties (3)

| Model | Membrane Area ft ² (m ²) | Outer Wrap | Part Number |
|-------------|---|---------------|----------------|
| AG2540TM | 27 (2.5) | Tape | 1206729 |
| AG4026F | 60 (5.6) | Fiberglass | 1206756 |
| AG4040C | 90 (8.4) | Cage | 1206757 |
| AG4040FM | 85 (7.9) | Fiberglass | 3032513 |
| AG4040TM | 85 (7.9) | Tape | 3032514 |
| AG8040F | 365 (33.9) | Fiberglass | 3032515 |
| AG8040F 400 | 400 (37.2) | Fiberglass | 3032518 |
| AG8040F 440 | 440 (40.9) | Fiberglass | 3194307 |



Note: **4040C elements do not feature brine seal.

Figure 1: Element Dimensions Diagram - Female

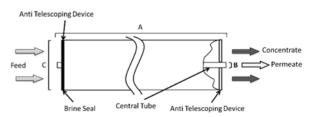


Figure 2: Element Dimensions Diagram - Male

⁽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.

Table 3: Dimensions and Weight (3)

| | | Dimensions, inches (cm) | | | Boxed |
|-------------|--------|--------------------------------|-----------------|---------------|------------------------|
| Model | Type | А | В | С | Weight Ibs. (kg) |
| AG2540* | Male | 40.0 (101.6) | 0.75 (1.90) | 2.4 (6.1) | 7 (3) |
| AG4026* | Female | 26.0 (66.7) | 0.625 (1.59) | 3.9 (9.9) | 9 (4) |
| AG4040C | Female | 40.0 (101.6) ⁽¹⁾ | 0.625 (1.59) | 3.9 (9.9) | 11 (5) |
| AG4040FM | Male | 40.0 (101.6) | 0.75 (1.90) | 3.9 (9.9) | 11 (5) |
| AG4040TM | Male | 40.0 (101.6) | 0.75 (1.90) | 3.9 (9.9) | 11 (5) |
| AG8040F | Female | 40.0 (101.6) | 1.125 (2.86) | 7.9 (20.1) | 35 (16) |
| AG8040F 400 | Female | 40.0 (101.6) | 1.125 (2.86) | 7.9 (20.1) | 35 (16) |
| AG8040F 440 | Female | 40.0 (101.6) | 1.125 (2.86) | 7.9 (20.1) | 35 (16) |

Table 4: Operating and CIP Parameters (3)

| Typical Operating Pressure | 200 psi (1,379 kPa) |
|----------------------------------|--|
| Typical Operating Flux | 10-20GFD (15-35 LMH) |
| 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: 2.0-11.0, Clean-In-Place (CIP): 1.0-13.0 (5) |
| Maximum Pressure Drop | Tape: 7 psi (48 kPa) over an element, 25 psi (172 kPa) over the vessel Cage and FRP: 15 psi (103 kPa) over the element, 60 psi (413 kPa) over the vessel |
| Chlorine Tolerance | 1,000+ ppm x hours, dechlorination recommended |
| Feedwater | NTU < 1 SDI ₁₅ < 5 |

⁽³⁾ Element properties and parameters are indicative numbers. Specific values by element may vary within normal element manufacturing tolerances.

(4) Includes interconnector, refer to Technical Bulletin TB1206.

⁽⁵⁾ Refer to Cleaning Guidelines Technical Bulletin TB1194