

# AG LE Series

## FACT SHEET

## Low Energy Brackish Water RO Elements

The AG LE Series of thin-film reverse osmosis (RO) elements are designed to perform in brackish water applications where the customer and application seek to optimize energy performance with high rejection. AG LE Series elements optimize Veolia chemistry and manufacturing advancements to deliver differentiated performance over the life of the element.

**Table 1: Element Specification**

| Membrane | Thin-film membrane, polyamide |
|----------|-------------------------------|
|----------|-------------------------------|

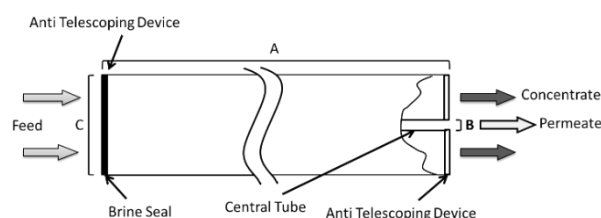
| Model          | Average permeate flow gpd (m <sup>3</sup> /day) (1,2) | Typical NaCl rejection (1,2) | Minimum NaCl rejection (1,2) |
|----------------|-------------------------------------------------------|------------------------------|------------------------------|
| AG8040F-400 LE | 8,500 (32.2)                                          | 99.0%                        | 98.5%                        |
| AG8040F-440 LE | 9,100 (34.5)                                          | 99.0%                        | 98.5%                        |

(1) Average salt rejection after 24 hours of operation. Individual flow rate may vary with a minimum of 6,800 gpd (25.7 m<sup>3</sup>/day) for the AG8040F-400 LE and 7,280 gpd (27.6 m<sup>3</sup>/day) for the AG8040F-440 LE.

(2) Testing conditions: 2,000 ppm NaCl solution at 150 psi (1,034 kPa) operating pressure, 77°F (25°C), pH 7 and 15% recovery.

**Table 2: Element Properties (3)**

| Model          | Active area ft <sup>2</sup> (m <sup>2</sup> ) | Outer wrap | Part number |
|----------------|-----------------------------------------------|------------|-------------|
| AG8040F-400 LE | 400 (37.2)                                    | Fiberglass | 3160987     |
| AG8040F-440 LE | 440 (40.9)                                    | Fiberglass | 3194309     |



**Figure 1: Element Dimensions Diagram – Female**

**Table 3: Dimensions and Weights (3)**

| Model          | Type   | Dimensions, inches (cm) |              |            | Boxed weight lbs (kg) |
|----------------|--------|-------------------------|--------------|------------|-----------------------|
|                |        | A                       | B            | C          |                       |
| AG8040F-400 LE | Female | 40.0 (101.6)            | 1.125 (2.86) | 7.9 (20.1) | 35 (16)               |
| AG8040F-440 LE | 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 | 150 psi (1,034 kPa)                                                |
| Typical Operating Flux     | 10-20 GFD (15-35 LMH)                                              |
| Maximum Operating Pressure | 600 psi (4,137 kPa)                                                |
| Maximum Temperature        | Continuous operation: 113°F (45°C)                                 |
| pH Range                   | Continuous operation 2.0-11.0, Clean-In-Place (CIP): 1.0-12.0 (4)  |
| Maximum Pressure Drop      | Over an element: 15 psi (103 kPa)<br>Per housing: 50 psi (345 kPa) |
| Chlorine Tolerance         | 1,000+ ppm-hours, dechlorination recommended                       |
| Feedwater                  | NTU < 1<br>SDI <sub>15</sub> < 5                                   |

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

(4) Please refer to Cleaning Guidelines Technical Bulletin TB1194.