

Commercial Elements

FACT SHEET

Small size spiral-wound membranes for commercial applications

Veolia Commercial Elements are spiral wound membranes designed for light industrial or commercial applications. For cost optimization, they feature a tape outer wrap.

AG and AK Series membranes are selected when high salt rejection is required. These elements 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)(3)	Average NaCl rejection (2)(3)	Minimum NaCl rejection (2)(3)
AG2521TM	300 (1.1)	99.65%	99.4%
AG3218T	700 (2.6)	99.65%	99.4%
AG4021TM	1050 (3.9)	99.65%	99.4%

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

Model	Average Permeate Flow gpd (m ³ /day) (4)(6)	Average NaCl Rejection (5)(6)	Minimum NaCl Rejection (5)(6)
AK2521TM	300 (1.1)	99.0%	98.0%
AK3218T	700 (2.6)	99.0%	98.0%
AK4021TM	1050 (3.9)	99.0%	98.0%

- (4) Individual flow rate may vary +25%/-15%.
- (5) Stabilized salt rejection after 24 hours operation.
- (6) Testing conditions: 500 ppm NaCl solution at 115 psi (793 kPa) operating pressure, 25°C (77°F), pH 7.5 and 15% recovery.

Table 2: Element Properties (7)

Model	Active area (m ²)	Outer wrap	Part number
AG2521TM	13 (1.2)	Tape	1206719
AG3218T	29 (2.7)	Tape	1206739
AG4021TM	42 (3.9)	Tape	1206750
AK2521TM	13 (1.2)	Tape	1206799
AK3218T	29 (2.7)	Tape	1206803
AK4021TM	42 (3.9)	Tape	1206812

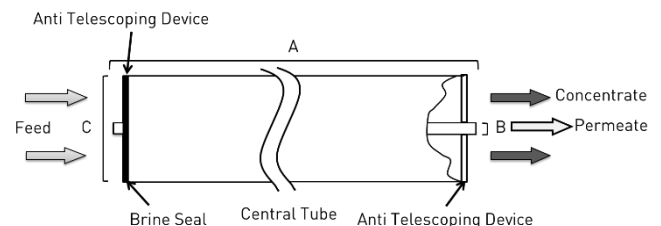


Figure 1: Element Dimensions Diagram – Male

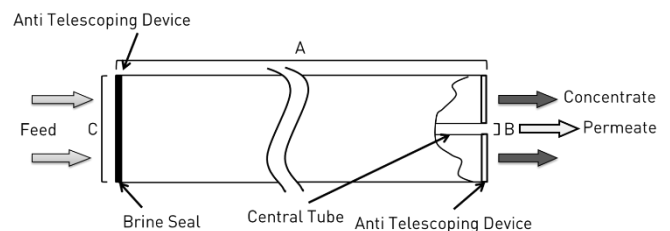


Figure 2: Element Dimensions Diagram – Female

Table 3: Dimensions and Weight (7)

Model	Type	Dimensions, inches (cm)			Boxed
		A	B	C	Weight lbs (kg)
**2521TM	Male	21 (53.3)	0.75 (1.90)	2.4 (6.1)	2.1 (0.9)
**3218T	Female	18 (45.7)	0.625 (1.60)	3.2 (8.1)	2.4 (1.1)
**4021TM	Male	21 (53.3)	0.75 (1.90)	3.9 (9.9)	3.3 (1.5)

Table 4: Operating and CIP parameters (7)

Typical Operating Flux	10-20 GFD (15-35 LMH)
Maximum Operating Pressure	400 psi (3,758 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: 3.0-10.0 Clean-In-Place (CIP): 1.0-13.0 (8)
Chlorine Tolerance	1,000 ppm-hours, dechlorination recommended
Feedwater	NTU < 1 SDI ₁₅ < 5

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

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