

Commercial Elements

FACT SHEET

Small size spiral-wound elements for commercial applications

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

AG and AK Series are selected when high salts rejection is required. These elements are considered a standard in the industry.

AP Series operates at the lowest pressure results in significant energy savings.

HP Series is a nanofiltration element for partial water softening.

Table 1: Element Specification

Membrane	A-Series & H-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)
AG2521TM	300 (1.1)	99.5%	99.0%
AG3218T	700 (2.6)	99.5%	99.0%
AG4021TM	1050 (3.9)	99.5%	99.0%

(1) Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

(2) Testing conditions: 2,000ppm NaCl solution at 225psi (1,551kPa) operating pressure, 25°C (77°F), pH 7.5 and 15% recovery.

Model	Average permeate flow gpd (m ³ /day) (1)(3)	Average NaCl rejection (1)(3)	Minimum NaCl rejection (1)(3)
AK2521TM	300 (1.1)	99.0%	98.0%
AK3218T	700 (2.6)	99.0%	98.0%
AK4021TM	1050 (3.9)	99.0%	98.0%

(1) Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

(3) Testing conditions: 500ppm NaCl solution at 115psi (793kPa) operating pressure, 25°C (77°F), pH 7.5 and 15% recovery.

Model	Average permeate flow gpd (m ³ /day) (1)(4)	Average NaCl rejection (1)(4)	Minimum NaCl rejection (1)(4)
AP2521TM	300 (1.1)	95.0%	92.0%
AP4021TM	1050 (3.9)	95.0%	92.0%

(1) Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

(4) Testing conditions: 500ppm NaCl solution at 75 psi (520kPa) operating pressure, 25°C (77°F), pH 7.5 and 15% recovery.

Model	Average permeate flow gpd (m ³ /day) (1)(5)	Average NaCl rejection (1)(5)	Minimum NaCl rejection (1)(5)
HP4021TM	1050 (3.9)	98.0%	96.0%

(1) Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

(5) Testing conditions: 2000ppm MgSO₄ solution at 110psi (758kPa) operating pressure, 25°C (77°F), pH 7.5 and 15% recovery

Model	Active area ft ² (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
AP2521TM	13 (1.2)	Tape	3158782
AP4021TM	42 (3.9)	Tape	3158781
HP4021TM	42 (3.9)	Tape	3158299

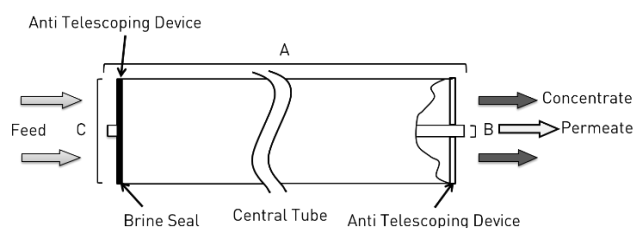


Figure 1: Element Dimensions Diagram – Male

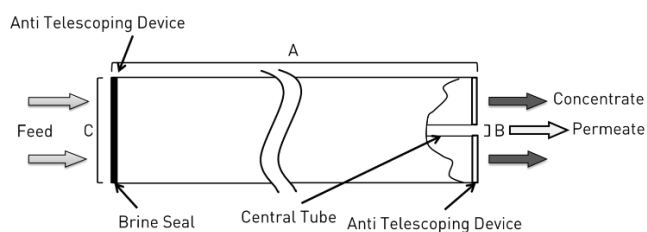


Figure 2: Element Dimensions Diagram – Female

Table 2: Dimensions and Weight

Model	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B	C	
**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 3: Operating and CIP parameters

Typical Operating Flux	10-20GFD (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 ⁽¹⁾
Chlorine Tolerance	1000 ppm-hours, Dechlorination recommended
Feedwater	NTU < 1 SDI ₁₅ < 5

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