GE
Water & Process Technologies

Fact Sheet

CE Series

Brackish Water RO Elements (Cellulose Acetate)

DESAL® MEMBRANE PRODUCTS

The C-Series family, a triacetate/diacetate blend, has a higher flux and better mechanical stability than standard cellulose acetate. CA-Series elements offer a lower per element cost and increased chlorine resistance compared to thin-film elements.

CE Brackish Water Elements are used for brackish water desalination and process stream concentration at 425 psig operating pressure (2,930 kPa).

Table 1: Element Specification

Membrane	C-Series, Cellulose Acetate

Model	Flow average gpd (m3/day)	Salt rejection average (NaCl)[1,2]	Salt rejection minimum (NaCl)[1,2]
CE2540FM	630 (2.4)	97.5 %	95.0 %
CE4025T	1,300 (4.9)	97.5 %	95.0 %
CE4026F	1,300 (4.9)	97.5 %	95.0 %
CE4040F	2,100 (7.9)	97.5 %	95.0 %
CE4040FM	2,000 (7.6)	97.5 %	95.0 %
CE4040C	2,150 (8.1)	97.5 %	95.0 %
CE4040NM	2,000 (7.6)	97.0 %	95.0 %
CE8040F	8,000 (30.3)	97.5 %	95.0 %
CE8040N	8,000 (30.3)	97.0 %	95.0 %

[1] Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.
[2] Testing conditions: 2,000 ppm NaCl solution at 425 psig (2,930 kPa) operating pressure, 77 °F, pH 6.5 and 15% recovery.

Model	Active Area ft² (m²)	Outerwrap	Part Number
CE2540FM	27 (2.5)	Fiberglass	1206854
CE4025T	59 (5.5)	Tape	1206870
CE4026F	59 (5.5)	Fiberglass	1206875
CE4040F	95 (8.8)	Fiberglass	1206878
CE4040FM	85 (7.9)	Fiberglass	1231443
CE4040C	95 (8.8)	Cage*	1206877
CE4040NM	85 (7.9)	Net*	1231790
CE8040F	350 (32.5)	Fiberglass	1206880
CE8040N	350 (32.5)	Net*	1231791

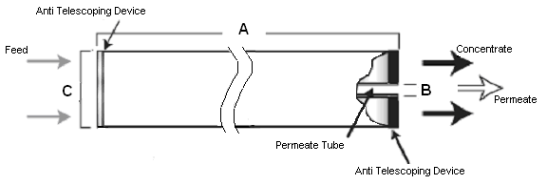


Figure 1: Element Dimensions Diagram – Female

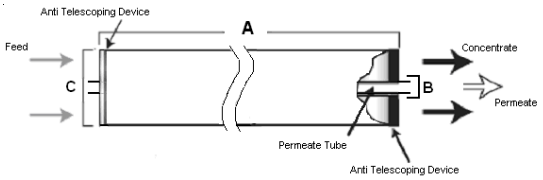


Figure 2: Element Dimensions Diagram – Male

Table 2: Dimensions and Weight

Model[1]	Dimensions, inches (cm)			Boxed
	A	B[2]	C[3]	Weight lbs (kg)
CE2540FM	40.0 (101.6)	0.75 (1.90) OD	2.4 (6.1)	5 (2.3)
CE4025T	25.0 (63.5)	0.625 (1.59)	3.9 (9.9)	5 (2.3)
CE4026F	26.0 (66.7)	0.625 (1.59)	3.9 (9.9)	6 (2.7)
CE4040F	40.0 (101.6)	0.625 (1.59)	3.9 (9.9)	8 (3.5)
CE4040FM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
CE4040C	40.0 (101.6)	0.625 (1.59)	3.9 (9.9)	8 (3.5)
CE4040NM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
CE8040F	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
CE8040N	40.0 (101.6)	1.125 (2.9)	7.9 (20.0)	32 (14.5)

[1]These elements are shipped dry.
[2]Internal diameter unless specified OD (outside diameter).
[3]The element diameter (dimension C) is designed for optimum performance in GE Water & Process Technologies pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.

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Table 3: Operating and CIP parameters

Typical Operating Pressure	140 - 400 psig (965-2,758 kPa)
Typical Operating Flux	10-18 GFD (17-30 LMH)
Maximum Pressure	450 psig (3,103 kPa)
Maximum Temperature	Operating: 86°F (30°C) Cleaning: 86°F (30°C
Recommended pH	Operating Range pH: 5.0-6.5, Cleaning Range pH: 3.0-8.0
Recommended Pressure Drop	Over an element: 12 psig (83 kPa) Per housing: 50 psig (345 kPa)
Chlorine Tolerance	1 ppm maximum continuous 30 ppm for 30 min during sanitization
Feedwater	NTU < 1 SDI < 5