

CK Series



Water Softening NF Elements (Cellulose Acetate)

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

CK Nanofiltration Elements are used for water softening, color removal, and reduction of THM potential when chlorine is required.

Table 1: Element Specification

Membrane	C-series , cellulose acetate
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Model	Flow average gpd (m3/day) ¹	Salt rejection average (MgSO ₄) ^{1,2}	Salt rejection minimum (MgSO ₄) ^{1,2}
CK2540FM 30D	600 (2.3)	97.0%	94.0%
CK4040FM	2,000 (7.6)	97.0%	94.0%
CK8040F 365	9,000 (34.1)	97.0%	94.0%
CK8040N	9,000 (34.1)	97.0%	94.0%

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

² Testing conditions: 2,000 ppm MgSO₄ solution at 225 psig (1,551 kPa) operating pressure, 77°F, pH 6.5 and 15% recovery.

Model	Active Area ft ² (m ²)	Outerwrap	Part Number
CK2540FM 30D	27 (2.5)	Fiberglass	1231009
CK4040FM	90 (8.4)	Fiberglass	1233930
CK8040F 365	365 (33.9)	Fiberglass	1233927
CK8040N	365 (33.9)	Net*	1231792

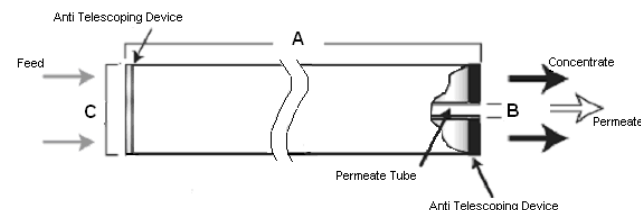


Figure 1: Element Dimensions Diagram - Female

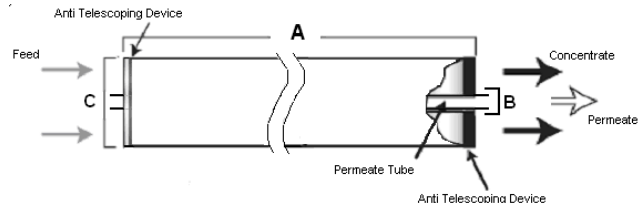


Figure 2: Element Dimensions Diagram - Male

Table 2: Dimensions and Weight

Model ²	Dimensions, inches (cm)			Boxed Weight lbs (kg)
	A	B ¹	C ³	
CK2540FM 30D	40.0 (101.6)	0.75 (1.90) OD	2.4 (6.1)	5 (2.3)
CK4040FM	40.0 (101.6)	0.75 (1.90) OD	3.9 (9.9)	8 (3.5)
CK8040F 365	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)
CK8040N	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)

¹Internal diameter unless specified OD (outside diameter).

²These elements ship dry.

³ The element diameter (dimension C) is designed for optimum performance in GE Water & Process Technologies pressure vessels. Others pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.

Table 3: Operating and CIP parameters

Typical Operating Pressure	60-200 psig (414 - 1,379 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



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