

# 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 an 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.

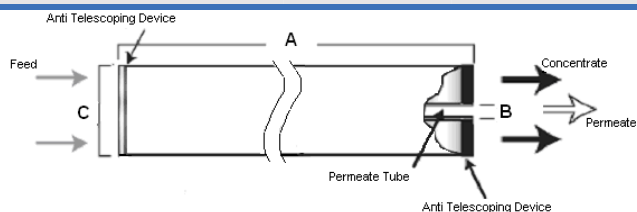
**Table 1: Element Specification**

Model	Average permeate flow gpd (m3/day) <sup>1,2</sup>	Average MgSO <sub>4</sub> rejection <sup>1,2</sup>	Minimum MgSO <sub>4</sub> rejection <sup>1,2</sup>
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%

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

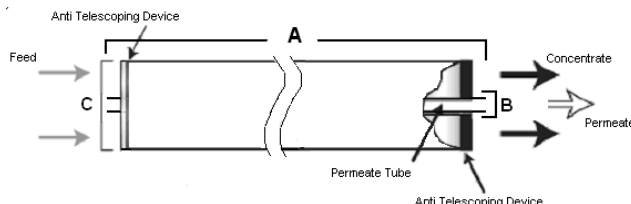
<sup>2</sup> Testing conditions: 2,000ppm MgSO<sub>4</sub> solution at 225psi (1,551kPa) operating pressure, 77°F, pH 6.5 and 15% recovery.

Model	Active area ft <sup>2</sup> (m <sup>2</sup> )	Outer wrap	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**

a product of  
**ecomagination™**



**Figure 2: Element Dimensions Diagram - Male**

**Table 2: Dimensions and Weight**

Model <sup>2</sup>	Dimensions, inches (cm)			Boxed Weight lbs (kg)
	A	B <sup>1</sup>	C <sup>3</sup>	
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)

<sup>1</sup> Internal diameter unless specified OD (outside diameter).

<sup>2</sup> These elements are dried then bagged before shipping.

<sup>3</sup> 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 psi (414 - 1,379 kPa)
Typical Operating Flux	10-18 GFD (17-30 LMH)
Maximum Operating Pressure	450 psi (3,103 kPa)
Maximum Temperature	Continuous operation: 86°F (30°C) Clean In Place (CIP): 86°F (30°C)
pH Range	Continuous operation: 5.0-6.5, Clean In Place (CIP): 3.0-8.0
Maximum Pressure Drop	Over an element: 12 psi (83 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	1ppm maximum continuous 30ppm for 30 min. during sanitization
Feedwater	NTU < 1 SDI < 5

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