## **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** 

Membrane	C-series , cellulose acetate			
Model	Average permeate flow gpd (m3/day) 1.2 Average MgSO <sub>4</sub> rejection 1.2		Minimum MgSO <sub>4</sub> rejection <sup>1,2</sup>	
CK8040F	9,000 (34.1)	97.0%	94.0%	

 $<sup>^{1}</sup>$  Average salt rejection after 24 hours operation. Individual flow rate may vary  $\pm 25\% - 15\%$ .

 $<sup>^{2}</sup>$  Testing conditions: 2,000ppm MgSO4 solution at 225psi (1,551kPa) operating pressure,  $77^{\circ}\text{F}$ , pH 6.5 and 15% recovery.

Model	Active area ft² (m²)	Outer wrap	Part number
CK8040F	365 (33.9)	Fiberglass	1233927

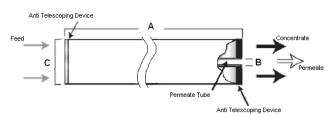


Figure 1: Element Dimensions Diagram - Female

## Table 2: Dimensions and Weight

	Dimensions, inches (cm)			Boxed
Model <sup>2</sup>	Α	<b>B</b> <sup>1</sup>	C <sup>3</sup>	Weight Ibs (kg)
CK8040F	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)

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

## 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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<sup>&</sup>lt;sup>2</sup> These elements are dried then bagged before shipping.

<sup>&</sup>lt;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.