

# CD Series

## High Rejection Brackish Water RO 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.

CD High Rejection Elements are used for brackish water desalination and process stream.

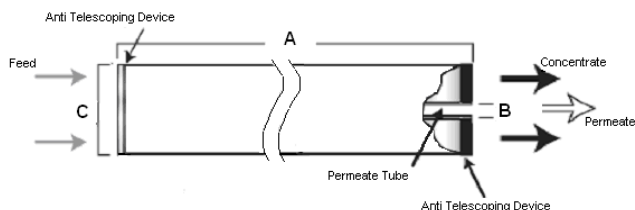
**Table 1: Element Specification**

Membrane	C-Series, cellulose acetate		
Model	Average permeate flow gpd (m <sup>3</sup> /day) <sup>1,2</sup>	Average NaCl rejection <sup>1,2</sup>	Minimum NaCl rejection <sup>1,2</sup>
CD4025T	1,000 (3.8)	98.5%	96.5%
CD4040F	1,600 (6.1)	98.5%	96.5%
CD8040F	6,000 (22.7)	98.5%	96.5%

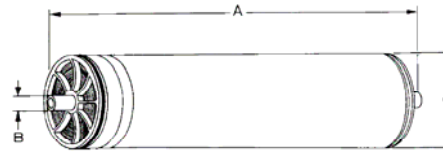
<sup>1</sup> Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

<sup>2</sup> Testing conditions: 2,000ppm NaCl solution at 425psi (2,930kPa) 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
CD4025T	55 (5.1)	Tape	1206834
CD4040F	90 (8.4)	Fiberglass	3050080
CD8040F	390 (36.2)	Fiberglass	1206837



**Figure 1: Element Dimensions Diagram - Female**



**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>	
CD4025T (see figure 1)	25.0 (63.5)	0.625 (1.59)	3.9 (9.9)	5 (2.3)
CD4040F (see figure 2)	40.0 (101.6)	0.75 (1.9)	3.9 (9.9)	8 (3.5)
CD8040F (see figure 1)	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	32 (14.5)

<sup>1</sup> Internal 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 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	140 - 400psi (965-2,758kPa)
Typical Operating Flux	10-18 GFD (17-30 LMH)
Maximum Operating Pressure	450psi (3,103kPa)
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: 12psi (83kPa) Per housing: 50psi (345kPa)
Chlorine Tolerance	1ppm maximum continuous 30ppm for 30 min. during sanitization
Feedwater	NTU < 1 SDI < 5



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