

# BEV NF Series

## FACT SHEET

### Beverage and bottled water production

The BEV NF membrane element is engineered to provide beverage plants with consistent, high quality water for production of carbonated soft drinks, juices, and sport drinks. The BEV NF element will process most municipal or plant well-water to meet your alkalinity, hardness, and low sodium requirements. The BEV NF membrane element is chlorine tolerant and offers a salt passage profile that permits maximum water recovery by the NF.

The BEV NF membrane element is tested and certified by NSF International against NSF/ANSI Standard 61 for material requirements only.

Features include a Full-Fit\* design that eliminates the stagnant zone associated with industrial FRP elements and their brine seals, which can act as a site for bacterial growth. The BEV NF element forms a flush fit with the inner diameter of the membrane element housing, creating a self-cleaning effect. This design also offers less pressure resistance than an industrial FRP element, resulting in lower brake horsepower and substantial energy savings.

The BEV NF membrane is following a 100% Wet Test Quality Assurance.

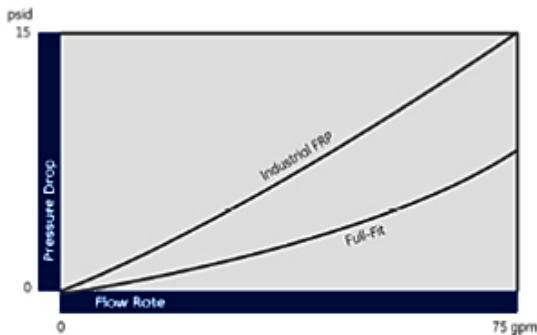


Figure 1: High Flow Rate at Low Pressure Drop.

Table 1: Element Specification

Membrane	Cellulose Acetate		
Model	Average permeate flow gpd (m <sup>3</sup> /day) (1,2)	Average MgSO <sub>4</sub> rejection (1,2)	Average NaCl rejection (1,2)
BEV-NF-FF	8,600 (32.6)	97.0%	60%

(1) Average salt rejection after 24 hours of operation. Individual flow rate may vary  $\pm 20\%$ .

(2) 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
BEV-NF-FF	365 (33.9)	Full-Fit*	1233033

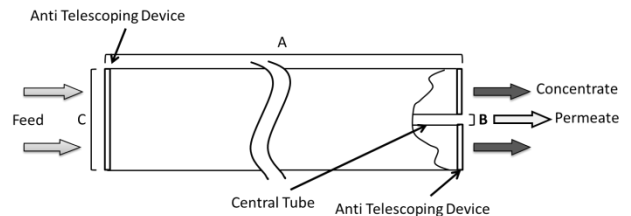


Figure 2 : Element Dimensions Diagram – Female

**Table 2: Dimensions and Weight**

Model	Dimensions, inches (cm)			Boxed
	A	B	C	Weight lbs. (kg)
BEV-NF-***-FF	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (15.9)

**Table 3: Operating and CIP parameters**

Typical Operating Pressure	60-200psi (413.7 - 1,379kPa)
Typical Operating Flux	10-20GFD (15-35LMH)
Maximum Operating Pressure	450psi (3,102kPa)
Maximum Temperature	Continuous Operation: 86°F (30°C) Clean-In-Place (CIP): 86°F (30°C)
Minimum Crossflow	30gpm (6.8 m <sup>3</sup> /hr)
pH Range	Continuous Operation: 5.0-6.5 Clean-In-Place (CIP): 3.0-8.0 (1)
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 <sub>15</sub> < 5

(1) Please refer to Cleaning Guidelines Technical Bulletin TB1194EN.