

Water Technologies & Solutions fact sheet

OSMO* BEV UF series

ultrafiltration element for beverage and bottled water production

The OSMO BEV UF membrane element is engineered to provide beverage plants with consistent, high quality water for production of carbonated soft drinks, juices, and sport drinks. The OSMO BEV UF element creates an absolute barrier to cryptosporidium, giardia, and rejects color, and organics (naturally occurring tannins, humics, fulvics, etc.). The OSMO BEV UF element offers true multiple barrier security with the lowest energy consumption. It has a nominal MWCO of 6,000Da.

Features include a Full-Fit* design that eliminates the stagnant zone associated with industrial fiberglass wrapped elements and their brine seals, which can act as a site for bacterial growth. The OSMO BEV UF 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 fiberglass wrapped element, resulting in lower brake horsepower and substantial energy savings.

The OSMO BEV UF membrane is following a 100% Wet Test Quality Assurance. OSMO BEV UF series is certified to NSF/ANSI 61.

Table 1: Element Specification

Membrane	P-Series, Polyethersulfone
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Model	Active area ft ² (m ²)	Outer wrap	Part number
OSMO-BEV-UF-FF	350 (32.5)	Full-Fit*	1233034

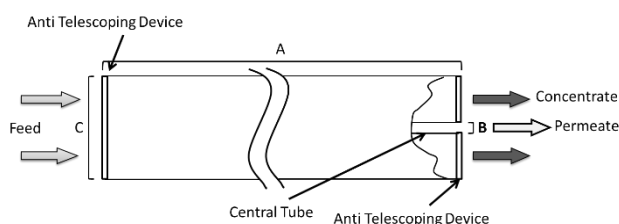


Figure 1: Element Dimensions Diagram – Female

Table 2: Dimensions and Weight

Model	Dimensions, inches (cm)			Boxed Weight lbs (kg)
	A	B	C	
OSMO-BEV-UF-FF	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)

Table 3: Operating and CIP parameters

Typical Operating Pressure	30-60 psi (207-414 kPa)
Typical Operating Flux	10-20GFD (15-35LMH)
Maximum Operating Pressure	450 psi (3,102 kPa)
Maximum Temperature	Continuous operation: 122°F (50°C) Clean-In-Place (CIP): 122°F (50°C)
Minimum Crossflow	30gpm (6.8 m ³ /hr)
pH range	Continuous operation: 4.0-11.0, Clean-In-Place (CIP): 1.0-13.0 (1)
Maximum Pressure Drop	Over an element: 12 psi (83 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	5,000 ppm days
Feedwater	NTU < 1 SDI < 5
Recommended Single Element Recovery	< 15%

(1) Refer to Cleaning Guidelines Technical Bulletin TB1194.