



BWLP-400-FFR

Full Flux Recovery, Brackish Water

LOW-FOULING, LOW-PRESSURE RO MEMBRANE ELEMENT

Product Overview

NanoStack™ Membrane Elements are a family of low-fouling RO elements incorporating a bio-inspired surface modification exhibiting superior hydrophilic properties. The result is a reduction in foulant adhesion, allowing the normal cross-flow velocity of the feed water to sweep unwanted contaminants more easily to drain.

NanoStack's active membrane surface area resists irreversible fouling, achieving full flux recovery during normal operation or after offline cleaning.

The performance of NanoStack membranes is especially impressive when treating notoriously challenging, high-fouling feed water. Used in conjunction with WaterSurplus' ImpactRO™ reverse osmosis system, NanoStack membranes deliver up to a 300% reduction in membrane fouling and a 200% increase in membrane life compared to conventional RO elements.

Product Specifications

Active Membrane Area ft ² (m ²)	Permeate Flow Rate GPD (m ³ /d)	Stabilized Salt Rejection %	Minimum Salt Rejection %	Feed Spacer mil
400 (37)	11,000 (41.6)	99.5	99.3	34

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 150 psi (10.3 bar), pH 7.5-8.
Permeate flows for individual elements may vary +/-15%.



A mm (in)	B mm (in)	C mm (in)	Weight kg (lbs.)
1,016 (40)	200 (7.9)	28.6 (1.125)	16 (35)

All dimensional information is indicative and for reference purpose only.
Please contact WaterSurplus for detailed technical specifications.

Operating Specifications

Max. Applied Pressure	Max. Chlorine Concentration	Max. Operating Temperature	pH Range, Continuous Cleaning	Max. Feedwater Turbidity	Max. Feedwater SDI	Max. Feed Flow	Max. Pressure drop (ΔP) per element
600 psi (41 bar)	<40 ppb	45°C (113°F)	2-12	1.0 NTU	5	75 gpm (17 m ³ /h)	15 psi (1.0 bar)

Clarifications

NanoStack membrane performance is contingent on reseller, integrator, or end user storing, installing, and operating the membrane in accordance with industry standards and the O&M manual, warranty document, and terms and conditions document provided by WaterSurplus at the time of sale or prior to commissioning.

NanoStack membrane elements installed into a conventional RO (versus ImpactRO) achieve up to a 100% reduction in membrane fouling and a 100% increase in membrane life compared to conventional RO elements.

Specifications are subject to change without notice. NanoStack is the Trademark of Surplus Management, Inc. dba WaterSurplus.

NSF certification pending.