Data Sheet

Brackish Water
Reverse Osmosis (RO) Membranes

LG BW 440 ES

Energy Saving

Overview

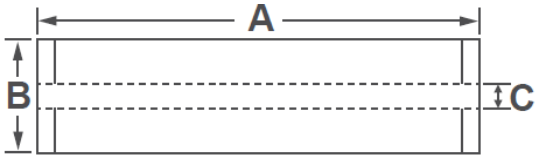
LG Chem's NanoH_2O™ brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. Incorporating innovative Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes provide superior performance along with intrinsic anti-fouling property and are suitable for applications where consistent and reliable performance is a must.

LG BW ES membranes offer high permeability at low feed pressure, significantly reducing operating costs: suitable for low to medium salinity brackish water applications.

Product Specifications

Active Membrane Area, ft² (m²)	Permeate Flow Rate, GPD (m³/d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
440 (41)	11,550 (43.7)	99.6	99.5	28

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 150 psi (10.3 bar), pH 7, Recovery 15%.
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)

Operating Specifications

Max. Applied pressure	600 psi (41 bar)
Max. Chlorine concentration	< 0.1 ppm
Max. Operating temperature	45°C (113°F)
pH Range, Continuous (Cleaning)	2-11 (2-12)
Max. Feedwater turbidity	1.0 NTU
Max. Feedwater SDI (15 mins)	5.0
Max. Feed flow	75 gpm (17 m³/h)
Max. Pressure drop (ΔP) for each element	15 psi (1.0 bar)

The Membrane Elements performance is expressly conditioned on Buyer's storing, installing, operating, and maintaining Product in accordance with industry-accepted good practices and Seller's written instructions provided in the Seller's Technical Manual, which consists of LG Chem, Ltd Technical Service Bulletins ("TSB") and Technical Applications Bulletins ("TAB") and may be viewed and downloaded at www.lgwatersolutions.com.