

Data Sheet



Brackish Water Reverse Osmosis (RO) Membranes

LG BW 440 ES L

Energy-saving membrane equipped with fouling tolerant low dP feed spacer technology

Overview

LG BW 440 ES L is engineered with an advanced feed spacer technology designed to optimize the flow regime on the membrane surface. The innovative technology combined with the well-proven LG BW ES membrane results in lower differential pressure and enhanced fouling tolerance. LG BW 440 ES L lead to a marked decrease in cleaning frequency, chemical usage, and energy consumption, and thus reduces your plant's overall operational costs. Maximize Plant Uptime with LG BW 440 ES L.

Product Specifications

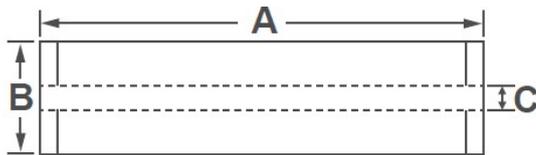
Active Membrane Area, ft ² (m ²)	Permeate Flow Rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
440 (41)	11,550 (43.7)	99.6	99.5	28, low dP

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%.

Referential Performance at 1,500 ppm NaCl

Active Membrane Area, ft ² (m ²)	Permeate Flow Rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
440 (41)	12,280 (46.5)	99.66	99.58	28, low dP

Test Conditions : 1,500 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)

All dimensional information is indicative and for reference purpose only. Please contact LG Chem for detailed technical specification.

Operating Specifications

For more information and operating guidelines, visit www.lgwatersolutions.com

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 m ³ /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. The information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. LG Chem assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. NanoH₂O is the Trademark of The LG Water Solutions or an affiliated company of LG Chem. All rights reserved. © LG Chem, Ltd.

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