LG Water Solutions

Proven Quality Keeps Repeating Customer

Brackish Water RO Membranes

Global Reference

Brackish water

Greece
Chemitec-2014
Industrial process

India
Sima Labs, New Delhi-2016
Industrial Waste Water Recycle

Korea
LG Display-2015/2016
UPW

Hanhwa TOTAL-2016
Cooling water

USA
City of Scottsdale, Arizona-2016
Golf Course Irrigation

Brazil
Veolia-2016
Industrial process

Saudi Arabia
AES arabia-2015
Drinking water

Malaysia
ECO Solution-2016
Process Water

Mackenzie-2016
Boiler

Chile
Embonor (CocaCola)-2015
Beverages

Overview

LG Chem's thin-film nanocomposite (TFN) membranes offer lower water treatment costs by improving energy efficiency and productivity. We provide reliable and trouble free performance and have already proven our performance and quality by generating return clients. The new LG BW 400 AFR boasts a proprietary chemistry that reduces performance deterioration due to organic and biological fouling, a common problem in various water treatment applications. We offer industry-standard 8-inch and 4-inch element configurations that retrofit easily into standard pressure vessels.

LG BW R — **High rejection membranes**
Well suited for high salinity feed water and high quality permeate requirements

LG BW ES — **Energy-Saving membranes**
Well suited for low saline water or potable water production

LG BW AFR — **Anti-Fouling membranes**
Well suited for challenging feed water across varying operating conditions

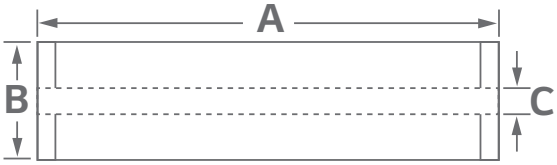
Product Specifications

Configuration: 8-inch spiral wound / Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

Product	Flow rate m^3/d (GPD)	Minimum NaCl rejection (%)	NaCl rejection (%)	Active area m^2 (ft^2)	Feed spacer (mil*)
LG BW 400 R	39.7 (10,500)	99.5	99.6	37 (400)	34
LG BW 440 R	43.7 (11,550)	99.5	99.6	41 (440)	28
LG BW 400 ES	39.7 (10,500)	99.5	99.6	37 (400)	34
LG BW 440 ES	43.7 (11,550)	99.5	99.6	41 (440)	28
LG BW 400 AFR	39.7 (10,500)	99.5	99.6	37 (400)	34

Note : *LG BW 400 R, LG BW 440 R, LG BW 440 AFR_The above values are normalized to the following conditions : 2,000 ppm NaCl, 15.5bar (225 psi), 25°C (77°F), pH 8, 15% recovery. Permeate flows for individual elements may vary +/- 15%.

Note : *LG BW 400 ES, LG BW 440 ES_The above values are normalized to the following conditions : 2,000 ppm NaCl, 10.3bar (150 psi), 25°C (77°F), pH 8, 15% recovery. Permeate flows for individual elements may vary +/- 15%.



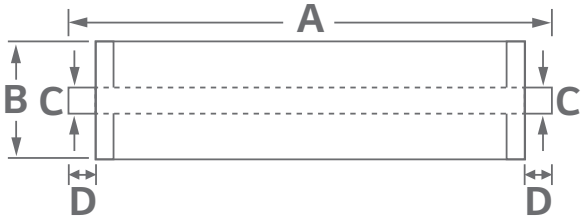
Length A	Element O.D. B	Perm tube I.D. C	Weight kg (lbs.)
1,016 mm (40 in.)	200 mm (7.9 in.)	28.6 mm (1.125 in.)	16.4 (36)

Configuration: 4-inch spiral wound / Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

Product	Flow rate m^3/d (GPD)	Minimum NaCl rejection (%)	NaCl rejection (%)	Active area m^2 (ft^2)	Feed spacer (mil*)
LG BW 4040 R	9.5 (2,500)	99.3	99.6	7.9 (85)	28
LG BW 4040 ES	9.5 (2,500)	99.2	99.5	7.9 (85)	28
LG BW 4040 AFR	8.7 (2,300)	99.3	99.6	7.4 (80)	34

Note : *LG BW 4040 R, LG BW 4040 AFR_The above values are normalized to the following conditions : 2,000 ppm NaCl, 15.5bar (225 psi), 25°C (77°F), pH 8, 15% recovery. Permeate flows for individual elements may vary +/- 20%.

Note : *LG BW 4040 ES_The above values are normalized to the following conditions : 2,000 ppm NaCl, 10.3bar (150 psi), 25°C (77°F), pH 8, 15% recovery. Permeate flows for individual elements may vary +/- 20%.



Length A	Element O.D B	Core tube I.D C	Core tube Extension D	Weight kg (lbs.)
1,016 mm (40 in.)	100 mm (3.9 in.)	19 mm (0.75 in.)	28 mm (1.1 in.)	3.6 (8.0)

Operating Specifications

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

Max. Applied pressure:	4.14 MPa (600 psi)
Max. Chlorine concentration:	< 0.1 ppm
Max. Operating temperature:	45°C (113°F)
pH Range, Continuous (Cleaning):	2-11 (2-13)
Max. Feedwater turbidity:	1.0 NTU
Max. Feedwater SDI (15 mins):	5.0
Max. Pressure drop (ΔP) for each element:	1 bar (15 psi)