

# LG BW 440 ES L

### Excellent Anti-Fouling Properties with Low Energy Consumption

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.

LG BW 440 ES L is an ideal solution for industrial process water and wastewater reuse systems seeking OPEX savings without compromising productivity. Moreover, the RO element is highly suited for second-pass SWRO systems, lowering the cost of desalination.

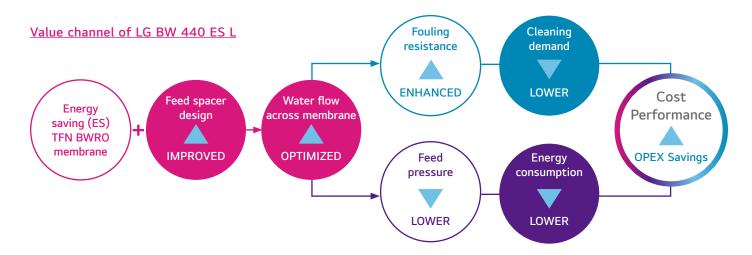
Product Specifications	
Permeate flow rate	11,550 GPD (43.7 m <sup>3</sup> /d)
Stabilized NaCl rejection	99.6%
Active membrane area	440 ft <sup>2</sup> (41 m <sup>2</sup> )



**Test conditions:** 2,000 ppm NaCl, 150 psi (10.3 bar) feed pressure, 15% recovery, pH 7

# LG NanoH<sub>2</sub>O<sup>M</sup> brackish water RO membranes, integrating the advanced low dP feed spacer, optimize water flow and turbulence across the membrane, resulting in:

- 1. Enhanced fouling resistance ▷ ► Lower cleaning demand
- 2. Lower feed pressure ▷ ▶ Reduced energy consumption



\*The following LG NanoH<sub>2</sub>O<sup>™</sup> brackish water RO membrane models integrate LG Chem's proprietary Low dP Feed Spacer: **BW 440 ES L, BW 400 ES L, BW 400 R G2, BW 400 R Dura, BW 400 AFR G2** 



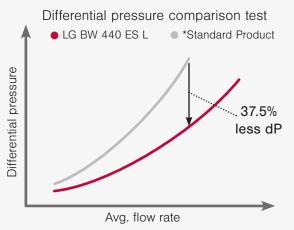
### Advantages of LG BW 440 ES L

#### Low differential pressures (LDP) vs. Standard 28-mil feed spacer comparison



# LG BW 440 ES L reduces differential pressure by 30–40% resulting in:

- Fewer cleanings ▷ ▶ less chemical use, labour, and plant downtime
- Lower feed pressure ▷ ▶ reduced energy consumption and CO<sub>2</sub> emissions
- Extended membrane lifespan ▷ ▶ fewer membrane replacements, and associated labour and plant downtime





### Key Advantages of LG BW 440 ES L



## Low differential pressure for low energy consumption

Lower feed pressure and specific energy consumption



## Reduced operating expenditure for plant operators

Fewer cleaning frequencies for lower RO system maintenance costs and obligations



### Advancing sustainability through improved RO efficiency

Reduced CO<sub>2</sub> emissions, consumable usage, and waste products

#### LG BW 440 ES L is ideal for the following applications: Industrial process water, Wastewater reuse, and Second-pass SWRO

#### www.lgwatersolutions.com

Please visit our website for regional contact information or email us at waterinfo@lgchem.com

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