

Data Sheet



**Brackish Water
Reverse Osmosis (RO) Membranes**

LG BW 400 AFR
Anti-Fouling, High Rejection

Overview

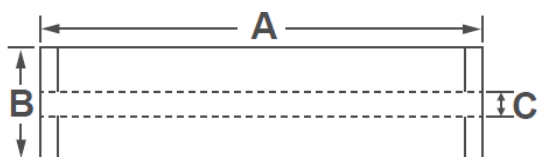
LG Chem's NanoH₂O™ brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. Incorporating innovative Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes provide superior performance along with intrinsic anti-fouling property and are suitable for applications where consistent and reliable performance is a must.

LG BW AFR membranes offer a combination of enhanced fouling resistance and high rejection: suitable for brackish water and water reuse applications with a challenging feed water.

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)	10,500 (39.7)	99.6	99.5	34

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 225 psi (15.5 bar), pH 7, Recovery 15%.
Permeate flows for individual elements may vary +25% / -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

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)

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Data Sheet



Brackish Water Reverse Osmosis (RO) Membranes

LG BW 400 AFR G2

Anti-Fouling, High Rejection, High Flow, High Durability
Equipped with fouling tolerant low dP spacer technology

Overview

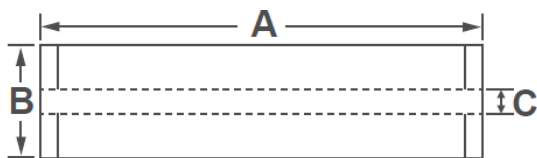
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LG BW 400 AFR G2 membranes offer a combination of enhanced fouling resistance, high rejection, flow, durability and reduce total cost of ownership: suitable for high salinity brackish water and wastewater reuse applications with a challenging feed water. LG BW 400 AFR G2 membranes incorporate state-of-the-art feed spacer technology, which can greatly reduce differential pressure and cleaning frequency.

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)	11,500 (43.7)	99.7	99.6	34, low dP

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 225 psi (15.5 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

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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 (1-13)
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)

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Data Sheet



**Brackish Water
Reverse Osmosis (RO) Membranes**

LG BW 400 ES
Energy Saving

Overview

LG Chem's NanoH₂O™ 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.

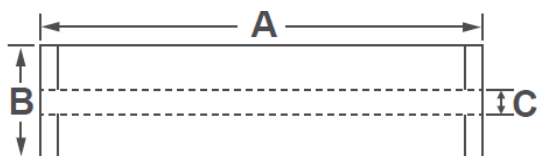
LG BW ES membranes offer high permeability at low feed pressure, significantly reducing operating costs: suitable for low to medium salinity brackish water applications.

Product Specifications

Active Membrane Area, ft ² (m ²)	Permeate flow rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
400 (37)	10,500 (39.7)	99.6	99.5	34*

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%.

*Low dP spacer is available upon special request.



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

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)

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Data Sheet



Brackish Water
Reverse Osmosis (RO) Membranes

LG BW 400 R
High Rejection

Overview

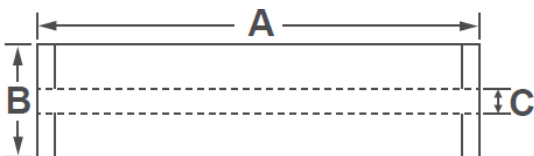
LG Chem's NanoH₂O™ brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. Incorporating innovative Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes provide superior performance along with intrinsic anti-fouling property and are suitable for applications where consistent and reliable performance is a must.

LG BW R membranes offer a combination of high rejection and reliability: suitable for high salinity brackish water and wastewater reuse applications.

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)	10,500 (39.7)	99.6	99.5	34

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 225 psi (15.5 bar), pH 7, Recovery 15%.
Permeate flows for individual elements may vary +25% / -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

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)

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Data Sheet



Brackish Water Reverse Osmosis (RO) Membranes

LG BW 400 R G2

Superior Rejection, High Flow, High Durability
Equipped with fouling tolerant low dP spacer technology

Overview

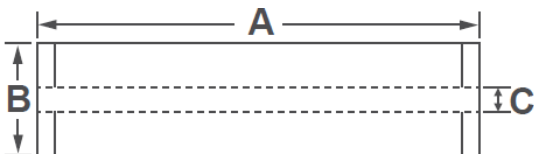
LG Chem's NanoH₂O™ brackish water RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world. Incorporating innovative Thin Film Nanocomposite (TFN) technology, all LG BWRO membranes provide superior performance along with intrinsic anti-fouling property and are suitable for applications where consistent and reliable performance is a must.

LG BW R G2 membranes offer a combination of superior rejection, flow and durability and reduce total cost of ownership: suitable for high salinity brackish water and wastewater reuse applications. LG BW 400 R G2 membranes incorporate state-of-the-art feed spacer technology, which can greatly reduce differential pressure and cleaning frequency.

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)	11,500 (43.7)	99.78	99.65	34, low dP

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 225 psi (15.5 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

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 (1-13)
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)

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Brackish Water Reverse Osmosis (RO) Membranes

LG BW 4040 AFR
Anti-Fouling, High Rejection



Overview

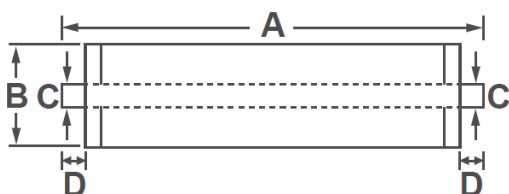
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LG BW AFR membranes offer a combination of enhanced fouling resistance and high rejection: suitable for brackish water and water reuse applications with a challenging feed water.

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
75 (7.0)	2,300 (8.7)	99.6	99.3	34

Test Conditions : 2,000 ppm NaCl at 25°C (77°F), 225 psi (15.5 bar), pH 7, Recovery 15%.
Permeate flows for individual elements may vary +/-20%.



A, mm (in.)	B, mm (in.)	C, mm (in.)	D, mm (in.)	Weight kg (lbs.)
1,016 (40)	100 (3.9)	19 (0.75)	29 (1.1)	4.0 (8.8)

Operating Specifications

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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	16 gpm (3.6 m ³ /h)
Max. Pressure drop (ΔP) for each element	15 psi (1.0 bar)

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**Brackish Water
Reverse Osmosis (RO) Membranes**
LG BW 4040 ES
Energy Saving



Overview

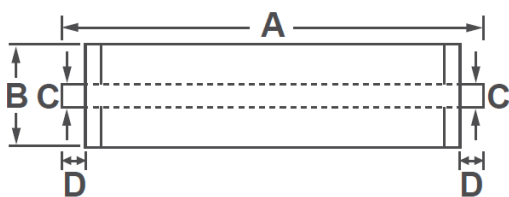
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LG BW ES membranes offer high permeability at low feed pressure, significantly reducing operating costs: suitable for low to medium salinity brackish water applications.

Product Specifications

Active Membrane Area, ft ² (m ²)	Permeate flow rate, GPD (m ³ /d)	Stabilized Salt Rejection, %	Minimum Salt Rejection, %	Feed Spacer, mil
85 (7.9)	2,500 (9.5)	99.5	99.2	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 +/-20%.



A, mm (in.)	B, mm (in.)	C, mm (in.)	D, mm (in.)	Weight kg (lbs.)
1,016 (40)	100 (3.9)	19 (0.75)	29 (1.1)	4.0 (8.8)

Operating Specifications

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Max. Applied pressure	600 psi (41 bar)
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pH Range, Continuous (Cleaning)	2-11 (2-12)
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Max. Feedwater SDI (15 mins)	5.0
Max. Feed flow	16 gpm (3.6 m ³ /h)
Max. Pressure drop (ΔP) for each element	15 psi (1.0 bar)

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Brackish Water
Reverse Osmosis (RO) Membranes

LG BW 4040 R
High Rejection

Overview

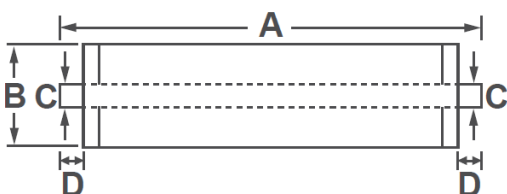
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LG BW R membranes offer a combination of high rejection and reliability: suitable for high salinity brackish water and wastewater reuse applications.

Product Specifications

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A, mm (in.)	B, mm (in.)	C, mm (in.)	D, mm (in.)	Weight kg (lbs.)
1,016 (40)	100 (3.9)	19 (0.75)	29 (1.1)	4.0 (8.8)

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Max. Applied pressure	600 psi (41 bar)
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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	16 gpm (3.6 m ³ /h)
Max. Pressure drop (ΔP) for each element	15 psi (1.0 bar)

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