

RiverFlow HR 4021

High Rejection Brackish Water RO Membrane

The **RiverFlow HR 4021** is designed for the desalination of brackish water, surface water, and groundwater with total dissolved solids (TDS) up to 5,000 mg/L. The membrane is suitable for a wide range of commercial and industrial water treatment applications, providing high-quality permeate and reliable long-term performance.

Typical applications include industrial process water production, brackish water desalination, wastewater reclamation and reuse, as well as advanced water treatment systems requiring high salt rejection and consistent operating efficiency.

SPECIFICATIONS

Permeate Flow:	1000 gpd / 3.8 m ³ /day
Membrane Area:	36 ft ² / 3.3 m ²
Salt Rejection:	99.5% (99.3% minimum)
Feed Spacer:	28 mil / 0.864 mm
Membrane Chemistry:	Thin-Film Composite Polyamide
Construction:	Spiral-Wound Fiberglass Outerwrap

OPERATING PARAMETERS

Maximum Operating Pressure	41.36 bar / 600 psi
Maximum Operating Temperature	45 °C / 113 °F
Cleaning pH Range	1.0 – 13.0
Chlorine Tolerance	< 0.1 ppm
Maximum Pressure Drop Element	1.03 bar / 15 psi
Maximum SDI15	5.0
Maximum Turbidity	1 NTU

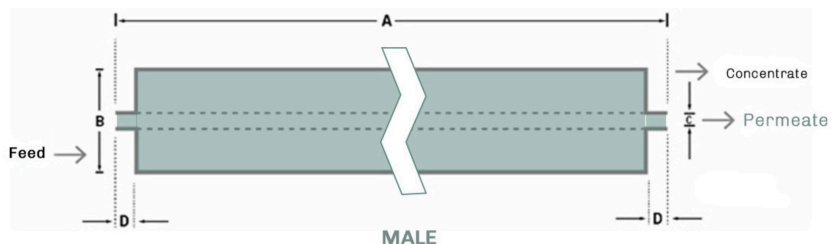
Test conditions: 2,000 ppm NaCl, 225 psi (15.5 bar), 77°F (25°C), pH=7±0.5, and 8% recovery.

Permeate flows for individual elements may vary +/-15%.

Stabilized salt rejection is generally achieved within 24-48 hours of continuous use; depending upon feedwater characteristics and operating conditions.

PHYSICAL DIMENSIONS

Dim. A	533.4 mm / 21.0 in
Dim. B	99 mm / 3.9 in
Dim. C	19 mm / 0.75 in
Dim. D	26.5 mm / 1.04 in
Weight	2.3 kg / 5.1 lb



ADDITIONAL INFORMATION

Start-up: Membrania recommends flushing elements for 30 minutes at low pressure and discarding permeate during the flush prior to operation. For a more detailed start-up procedure, please see Element Start-Up Guide.

Cleaning: Membrania elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see Membrane Cleaning Guide Water Application Elements.

Storage: Membrania elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see Element Storage Guides.

Regulatory: This product may be subject to drinking water application restrictions in some countries. Please check the application status before use and sale.



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