

info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289

2.5 x 21 INCH TAPE WRAP BRACKISH ELEMENTS

Model TR70-2521 -HF & TRH-2521

Membrane Type Crosslinked Aromatic Polyamide, Negative Charge

Element Configuration Spiral Wound, Tape Wrap

Performance Specification

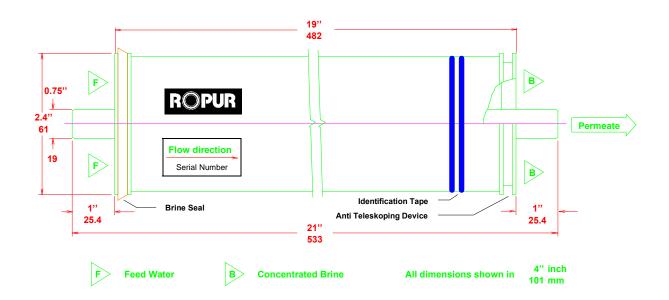
	TR70-2521-HF	TRH-2521
	High Flow	Low Pressure, High Flow
Salt Rejection avg. ^{1,2}	99.4 %	99.0 %
Product Flow Rate ^{1,2}	1'600 I/d (420 gpd)	1'400 I/d (370 gpd)
	Testconditions: A	Testconditions: B

Notes:

1	Test Conditions	<u>A</u>	<u>B</u>	
	Temperature	25	25	°C
	Feed Solution, Concentration	1500	500	ppm NaCl
	Feed Pressure	15	7.5	bar
	Brine: Permeate ratio	5:1	5 : 1	
	Feed pH	6.5 - 7.5	6.5 - 7.5	

- Average value for 100 elements after 1 hour operation Product Flow Rate +/- 15% Salt Rejection minimum 98 %
- ³ Minimum Performance data are for any single element

Dimensions:





Design Conditions

Recommended 1

Operating Pressure ^{2,3} Operating Temperature ⁴	< 15.0 < 35	•	(216 psi) (95 °F)
Feedwater Turbidity (SDI ₁₅) ^{2,5}	< 5		
Feedwater Chlorine Concentration	0	ppm	
pH Range, Continuous Operation ⁶	3- 11		
pH Range, Chemical Cleaning 7	2- 11		
Feed Flow Rate per Vessel	< 650	l/h	(3 gpm)
Brine Flow Rate per Vessel 9	> 250	l/h	(1 gpm)
Brine/Permeate Flow Ratio 8,	5 : 1		
Pressure Drop (per Element) 10	0.3	kg/cm²	(4 psi)
Pressure Drop (per Vessel) 10	1.0	kg/cm²	(14 psi)

Notes:

- The recommended design range means safe operational and design conditions under not so much fouling and scaling. If the TR-series elements are operated outside of the recommended design range, the effective membrane life may be reduced.
- ² High flux operation (operation under high permeate flow rate per single element) on feedwater turbidity greater than 3 or 4 SDI₁₅ generally results in frequent cleaning requirements. Operating pressure should be selected to maintain the flux rate, or permeate flow rate per single element.
- ³ Maximum 20 kg/cm² (288 psi)
- ⁴ Maximum 35 °C (95 °F)
- 5 SDI₁₅ = Silt Density Index measured according to ASTM D4189
- ⁶ Both feed and brine water must meet this range.
- ⁷ Cleaning and sterilization must meet the recommendations in the Technical Bulletin.
- 8 Flow ratio of brine to permeate for each single element
- ⁹ This figure may be reduced when there is low possibility of fouling and scaling
- ¹⁰ Element(s) must be cleaned when pressure drop increases to 1.5 times of the initial value.

The data and information contained in this data sheet are based on technical data and tests we believe to be reliable. They are offered in good faith for use by persons having appropriate technical skill at their own discretion and risk. Supplier has no control of design and operating conditions and consequently cannot assume any reliability for results obtained or damage incurred through the use of the product presented. ROPUR Membranes are continuously improved and therefore we reserve the right to modify or amend specifications without prior notice.