

# Nano-filtration Membrane Elements

## Description

Puran nano-filtration membrane elements adopts special Japanese composite membrane sheet without electric charge. It has relatively acute molecular weight cut off that makes high performance in mineral drinking water production, color removing, salt concentration and special elements separation and concentration.

## Technical Parameters

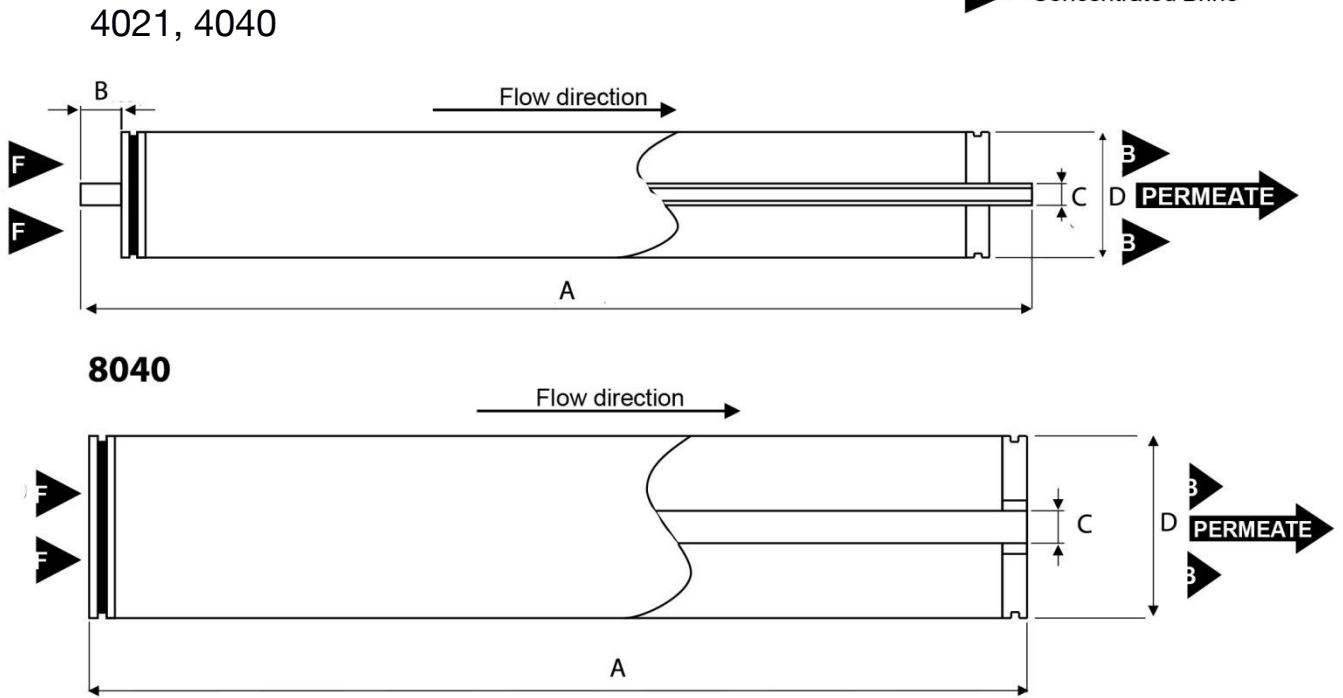
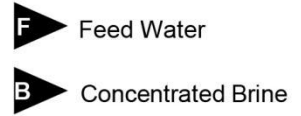
Model	Diameter inch	Membrane Area ft <sup>2</sup> (m <sup>2</sup> )	Salt Rejection Rate %		Product Flow Rate gpd (m <sup>3</sup> /d)	Working Pressure Psi(bar)	Application
			NaCl	MgSO <sub>4</sub>			
PN4021NF-80	4"	34(3.2)	75-85	96	1000(3.7)	110(7.5)	Mineral drinking water
PN4040NF-80	4"	85(7.9)	75-85	96	2500(9.3)		
PN8040NF-80	8"	400(37)	75-85	96	12000(45)		
PN4021NF-40	4"	34(3.2)	50-60	96	960(3.6)	72(5)	ATD: ABS Outer wrap: FRP App: Color removing
PN4040NF-40	4"	85(7.9)	50-60	96	2400(9.2)		
PN8040NF-40	8"	400(37)	50-60	96	12000(45)		
PN4021NF-70	4"	34(3.2)	70-80	98.5	760(2.9)	110(7.5)	ATD: ABS Outer wrap: FRP App: Separate salts
PN4040NF-70	4"	85(7.9)	70-80	98.5	1900(7.4)		
PN8040NF-70	8"	400(37)	70-80	98.5	9500(36)		
PN4021NF-200	4"	34(3.2)	85-95	96	760(2.9)	110(7.5)	ATD: PS Outer wrap: Cage App: Food, Pharmaceutical industries
PN4040NF-200	4"	85(7.9)	85-95	96	1900(7.4)		
PN8040NF-200	8"	400(37)	85-95	96	9500(36)		

\* The feed spacer thickness is optional of 34mil. Membrane module sufficient area and product flow rate will be decreased accordingly.

Type	Configuration	Spiral wound
	Membrane material	Composite Polyamide
Test Condition	Feed water pressure	800psi (5.52MPa)
	Feed water temperature	77°F (25°C)
	Feed water concentration	32,000 mg/l NaCl
	Recovery rate	8%
	Feed water pH	8
Application limits	Maximum chlorine concentration	0.1ppm
	Maximum operating temperature	113 °F (45°C)
	Feed water pH range continuous working	2.0 - 10.0
	Maximum feed water turbidity	1.0 NTU
	Maximum feed water SDI (15mins)	5.0
	Maximum pressure drop for each element	13psi(0.09MPa)

\* The limitations shown here are for general use. Operating at more conservative values for specific projects may ensure the best performance and longest life of the membrane.

# Dimensions



## Sizes – inch (mm)

Model	A	B	C	D
PN4021NF	21(533)	1.05(27)	0.75(19)	4(101)
PN4040NF	40(1016)	1.05(27)	0.75(19)	4(101)
PN8040NF	40(1016)	-	1.125(29)	8(201)

## Note

Permeate flow for individual elements may vary +15% or -15%. All membrane elements are supplied with a brine seal, interconnector, and o-rings. Elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulphate solution and 10% propylene glycol, and then packaged in a cardboard box.