

NANO FILTRATION (NF) ELEMENT



MaxFlux NF Membranes is designed to allow certain low molecular weight (MW) molecules to pass through the membrane while hold bigger molecules. MaxFlux NF Elements have high ion selectivity which is designed for better salt separation and achieving more purified salt extractions. MaxFlux NF Membranes can be used for rejection of hardness and organic matter from water. Nanofiltration (NF) has been widely used in many fields including drinking water softening food processing, pharmaceuticals and biology industries

Size	Model	Stable Rejection		Average Permeated Flow GPD(T/D)	Active Membrane Area ft ² (m ²)
		500ppm NaCl	2000ppm MgSO ₄		
8 Inch	NF100-8040	>85	99	8500	400(37.2)
	NF200-8040	50-70	98	10000	400(37.2)
	NF300-8040	30-50	97	12000	400(37.2)
4 Inch	NF100-4040	>85	99	1800	85(7.9)
	NF200-4040	50-70	98	2000	85(7.9)
	NF300-4040	30-50	97	2400	85(7.9)

Permeate flow and salt passage based on the following test conditions: 500mg/l NaCl, 70 psi (0.48 MPa), 77°F (25°C), pH 7.5-8 and 15% recovery
2000mg/l MgSO₄, 70 psi (0.48 MPa), 77°F (25°C), pH 6.5-7 and 15% recovery

Operation Limits and conditions

Max. Working pressure	600psi(4.14MPa)
Max. Feed Water Temperture	45C
Max. Feed Water Flow	17.0m ³ /h (8040) 3.6m ³ /h (4040)
Max. Feed Water SDI ₁₅	5.0
Free Chlorine Concentration of Feed water	0.1mg/L
pH Range of Feed Water during Continuous Operation	2-11
pH Range of Feed Water during Chemical Cleaning	1-13
Max. Pressure Drop of Single Membrane Element	15psi





MaxFlux Element	Dimensions - inches (mm)			1 inch=25.4 mm	
	A	B	C	D	
NF 8040	40.0(1016)	7.9(201)	1.125ID(29)	/	
NF 4040	40.0(1016)	3.9(99)	0.75(19)	1.04(26.5)	

Projects

The reclaimed water reuse representative case

Project name: ShaoXing

Model: NF200-8040

Daily processing capacity: 6000TPD

Application: reclaimed water reuse

Operation date: October, 2014



Project name: Anhui Zhongke

Model: NF200-8040

Raw water: Undergroud water

Exchanging time: March,2015

Operation status:

System salt rejection is 88.9%, operation pressure is 0.5Mpa
Chemical cleaning frequency two times/month