

1-3.1 Catalogues of Industrial RO Membrane Elements

Type	Model	Reject (%)	Average Permeate GPD (m ³ /d)	Working Pressure & Application Fields	Testing Conditions		
					Pressure psi (MPa)	Solution Concentr. (ppm)	Recovery Rate (%)
Extra Low Pressure Element	BW-XLE-8040	99.0	14000(53.0)	Working under ex-low pressure. Applicable to feed water with fairly low salinity.	125(8.6)	2000	15
	XLP-4040	98.5	2000(7.58)		100(6.9)	1500	15
Ultra Low Pressure Element	IU21-8040	99.0	11500(43.5)	Working under ultra-low pressure. Applicable to feed water with fairly low salinity.	150 (1.03)	1500	15
	IU22-8040	99.5	10500(39.7)				
	IU11-4040	99.0	2600(9.8)				
	IU-HR-4040	99.6	2200(8.3)				
Ultra Low Pressure Fouling Resistant Element	IU11-8040-FR	99.3	10000(37.8)	Working under low pressure. Applicable to feed water with small content of contaminants (organic substances, colloids).	150 (1.03)	1500	15
	IU12-8040-FR	99.3	11000(41.5)				
	IU11-4040-FR	99.0	2500(9.4)				
Brackish Water Element	IWL21-8040	99.5	10000(37.9)	Working under low pressure. Applicable to regular or high content brackish water.	225 (1.55)	2000	15
	IWL22-8040	99.5	11000(41.6)				
	IWL21-4040	99.5	2500(9.5)				
High-rejection Element	BW30HR-8040	99.75	10500(39.7)	Working under low pressure. Applicable to high content brackish water.	225 (1.55)	2000	15
	BW30HR-4040	99.7	2500(9.5)				
Ultra Low Pressure Fouling Resistant Element	IW11-8040-FR	99.5	10000(37.9)	Working under low pressure. Applicable to feed water with small content of contaminants (organic substances, colloids).	225 (1.55)	2000	15
	IW12-8040-FR	99.5	11000(41.6)				
	IW11-4040-FR	99.5	2500(9.5)				
Strengthened Fouling Resistant Element	CR-100	99.75	11000(41.6)	Applicable to feed water with small content of contaminants (organic substances, colloids).	225 (1.55)	2000	15
Sea water Element	SW30HRLE-8040	99.85	7500(28.4)	Working under high pressure, applicable to sea water	800(5.52)	32000	8
	SW30XLE-8040	99.8	9000(34.1)				
	SW-4040	99.7	1400(5.3)				

1-3.2 Catalog of Residential Membranes and Non-standard Membranes

Type	Model	Reject (%)	Average Permeate GPD (m ³ /d)	Working Pressure & Application Fields	Testing Conditions		
					Pressure psi (MPa)	Solution Concentr. (ppm)	Recovery Rate (%)
House hold Element	TW1812-75HR	99.0	75 (0.28)	Working under extremely low pressure. Applicable to residential water purifier and water purifying devices in hospital and laboratory for treatment of feed water with TDS lower than 500 ppm.	60 (0.41)	250	15
	TW1812-75	97.0	75 (0.28)				
	TW-2012-100HR	99.0	100 (0.38)				
	TW-2012-100	97.5	100 (0.38)				
	TW-2012-150	97.5	150(0.57)				
Special size Element	TW-2812-200	97.0	200(0.76)	Working under extremely low pressure. Applicable to automatic water dispenser and residential drinking fountain.	100 (0.69)	250	20
	TW-3012-300	97.0	300(1.14)		100 (0.69)	250	20
	TW-3012-400	97.0	400(1.51)		100 (0.69)	250	20
	TW-3013-400	97.0	400(1.51)		100 (0.69)	250	20
	TW-3012-500	97.0	500(1.89)		100 (0.69)	250	20
	TW-3013-500	97.0	500(1.89)		100 (0.69)	250	20
	TW-3013-600	97.0	600(2.27)		100 (0.69)	250	20
	TW-3013-700	97.0	700(2.65)		100 (0.69)	250	20

1-3.3 Catalog of Nanofiltration Membrane Elements

Type	Model	Reject (%)	Average Permeate GPD (m ³ /d)	Working Pressure & Application Fields	Testing Conditions		
					Pressure psi (MPa)	Solution Concentr. (ppm)	Recovery Rate (%)
Industrial NF Element	NF270-8040	30.0~50.0	11500(43.5)	Working under extremely low pressure. Applicable to production of drinking water and softening of feed water.	100(0.69)	2000 ppm CaCl ₂	15
		≥96.0	9000(34.1)			2000 ppm MgSO ₄	
	NF270-4040	30.0~50.0	2300(8.7)		100(0.69)	2000 ppm CaCl ₂	15
		≥96.0	2000(7.6)			2000 ppm MgSO ₄	
	NF90-8040	≥90.0	8500(32.2)	Working under extremely low pressure. Applicable to	100(0.69)	2000 ppm CaCl ₂	15
		≥98.0	10000(37.9)			2000 ppm MgSO ₄	

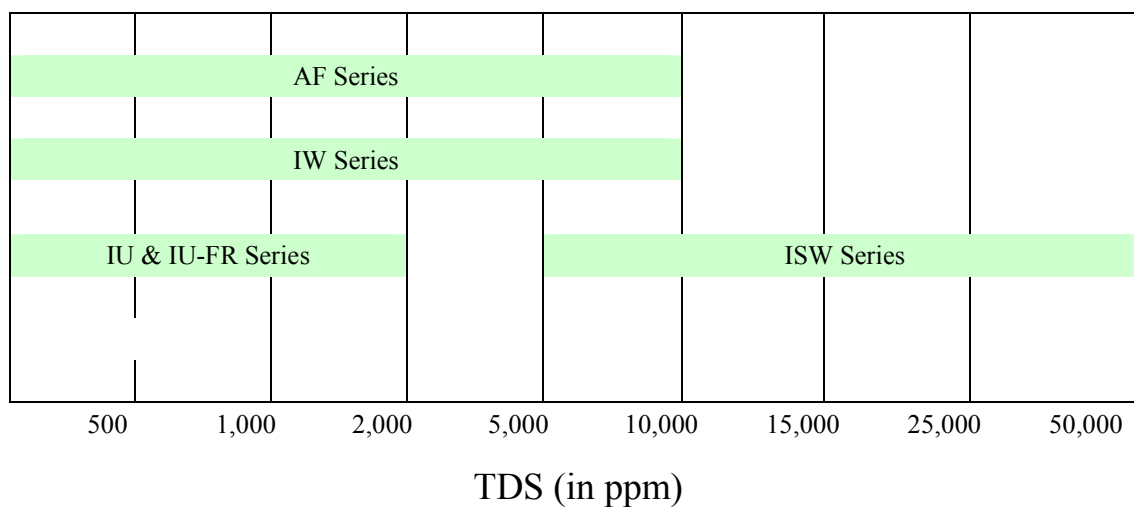
	NF90-4040	≥90.0	2200(8.3)	production of drinking water and softening of feed water.	100(0.69)	2000 ppm CaCl ₂	15
		≥98.0	2400(9.1)			2000 ppm MgSO ₄	

1-3.4 Special separation membrane

Type	Model	Reject (%)	Average Permeate GPD (m ³ /d)	Application	Feed Space	Testing Conditions		
						Pressure psi (MPa)	Solution Concentr. (ppm)	Recovery Rate (%)
Special separation Element	SNF1-8040	30.0~50.0	11500(43.5)	Special separation	34mil	100(0.69)	2000 ppm CaCl ₂	15
		≥96.0	9000(34.1)				2000 ppm MgSO ₄	
	SNF2-8040	≥90.0	8500(32.2)			100(0.69)	2000 ppm CaCl ₂	15
		≥98.0	10000(37.5)				2000 ppm MgSO ₄	
	SW-XC	99.8	8000(30.3)			800(5.52)	32000ppm NaCl	8

1-3.4 Guides to Selection of Membrane Elements

A. Section of Membrane Elements according to Salinity of Feedwater



B. Frame Diagram of Selection of Membrane Elements

