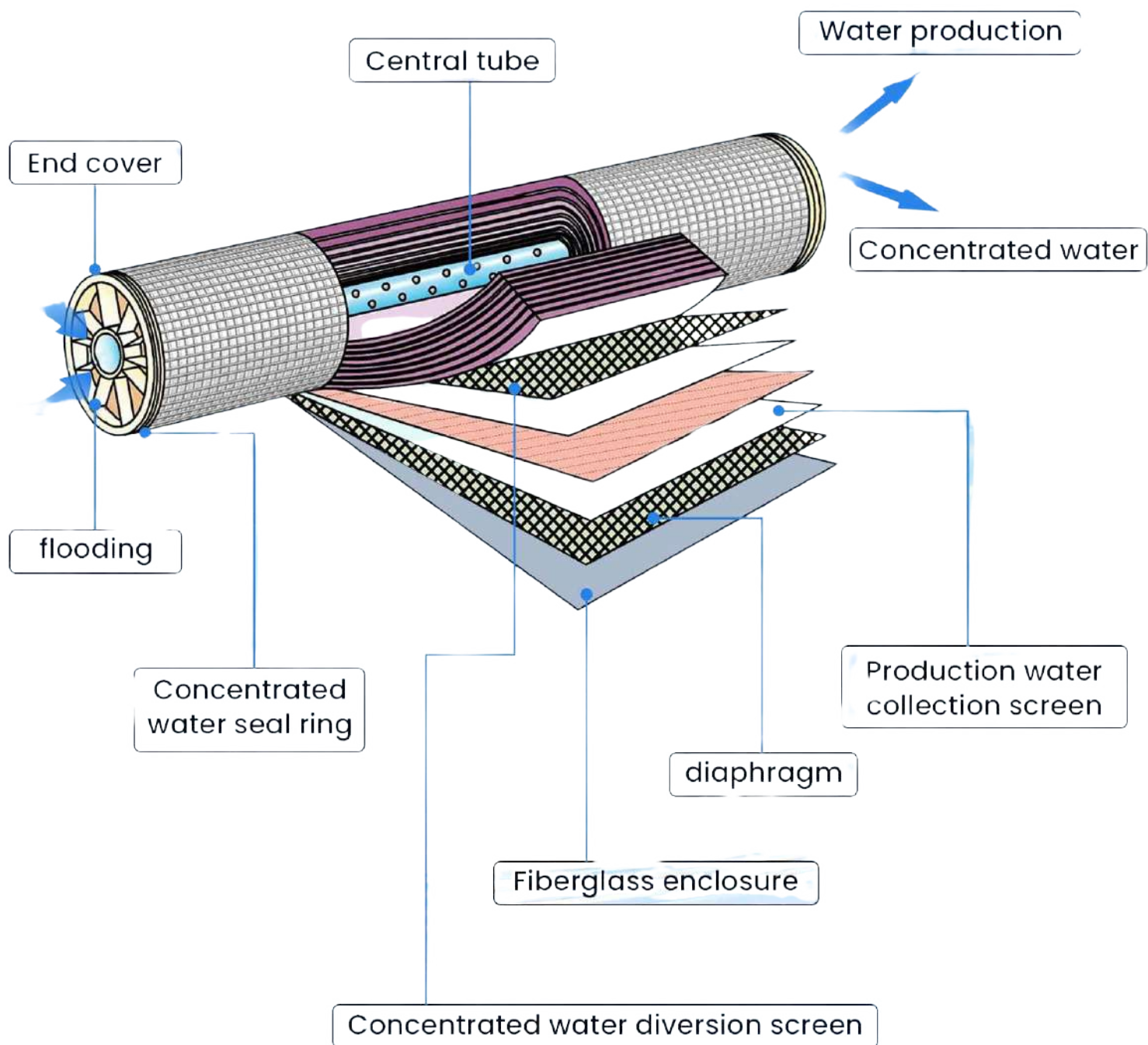


A close-up photograph of a reverse osmosis (RO) membrane housing. The housing is a light-colored, cylindrical plastic component. The end cap is removed, revealing the internal membrane and a central outlet. A stream of clear water is flowing out of the central outlet, creating a small splash. The background is blurred, showing other similar components and a blue surface.

RO MEMBRANE

Our RO Membrane delivers advanced filtration for pure, contaminant-free water. Made with high-performance materials, it's ideal for reverse osmosis systems in residential, commercial, and industrial applications.

RO MEMBRANE CHARACTERISTICS



SERIES	APPLICATION	MODEL
XLP SERIES Extra Low Power Consumption	Used for treating low-salinity water sources, including surface water, groundwater, tap water, and municipal water with salinity levels below 1000ppm . Application areas: Pure water production, boiler feed water, food processing, pharmaceuticals, and more. It is particularly suitable for use in the second stage of spiral RO desalination systems.	XLP-4040 XLP-400
ULP SERIES Ultra Low Energy Consumption	Used for water desalination of surface water, groundwater, tap water, and municipal water with salinity levels below 2000ppm . Application areas: Pure water production, boiler feed water, food processing, and pharmaceutical industries.	ULP-4040 ULP-4040HR ULP-4040HF ULP-400 ULP-400HR ULP-400HF
BW SERIES Brackish Water	Designed for water desalination of surface water, groundwater, tap water, and municipal water with salinity levels below 8000ppm . Application areas: Industrial pure water production, boiler feed water for power plants, high-salinity wastewater treatment, beverage water production, brackish water desalination, and more.	BW-4040 BW-4040 HR BW-4040 HF BWLE-4040 BWLE-4040FR BW-400 BW-400HR BW-440 BWLE-400 BWLE-440 BWLE-400FR
NF SERIES Nanofiltration	Used to remove organic matter, microorganisms, viruses, and most divalent and higher metal ions from water, while retaining part of the sodium, potassium, calcium, and magnesium ions.	NF 50 NF 70 NF 90
SW SERIES Seawater Desalination	Applied in sea-water desalination, high concentration brackish water desalination, boiler feed water of power plant, as well as waste water reuse and concentration & recovery of high added value substances in food and drug manufacturing.	SW-4040 SW-4040HF SW-400 SW-400HF SW-440HF
BWFR SERIES Ant-fouling	Suitable for Waste Water treatment with TDS below 10000ppm . Application area: Industrial wastewater with low levels of organic pollutants, urban wastewater, and moderately polluted water sources.	BWFR-4040 BWFR-4040 HR BWFR-400 BWFR-400 HR
SWFR SERIES Ant-fouling	Suitable for treatment of high concentration waste-water, TDS can be concentrated to 8000ppm . Application area: Wastewater reuse, zero-discharge high-concentration systems, food and pharmaceutical extraction processes, recovery of high-value products from wastewater, and various industrial water treatments, including high-concentration brackish water desalination and boiler feed water for power plants.	SWFR-4040 SWFR-400 SWFR-400HF SWFR-400HP

**INDUSTRIAL
RO MEMBRANE**

**98-99.8%
SALT REJECTION**

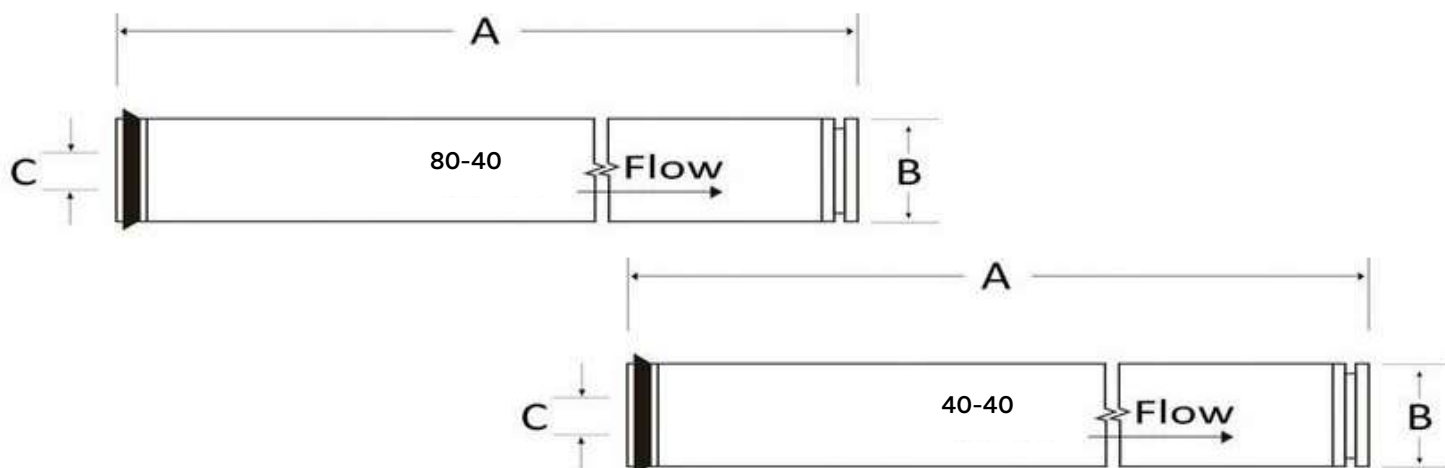
**500-32800
PPM**

**6000-13200
GPD**

**100-800
PSI**



INDUSTRIAL RO MEMBRANE



	A	B	C
8040	40" (1016 mm) +/- 1mm	7.9" (201 mm) +/- 1mm	1.12" (28.5 mm) +/- 1mm
4040	40" (1016 mm) +/- 1mm	3.9" (99 mm) +/- 1mm	0.75" (19 mm) +/- 1mm

+ Extreme Condition

- Maximum operating pressure: 600psi (4.14 Mpa)
- Largest feeding flow: (8040) 75gpm (17 m³/h). (4040) 16gpm (3.6 m³/h)
- Maximum influent temperature: 45°C
- Maximum influent SDI: 5.0
- Maximum residual chlorine concentration: <0.1mg/L
- Continuous operation pH: 3-10, Chemical Cleaning pH: 2-12
- Maximum pressure drop of single module: 15psi (0.1Mpa)

COMPONENT (UNIT)		TARGET LEVEL	POSSIBLE CONSEQUENCES OF EXCEEDING THE LIMIT	SUGGESTIONS FOR IMPROVEMENT
Suspension	Turbidity	<1.0NTU	Silt & Colloidal contamination	Flocculation & Sedimentation
	SDI ₁₅	<5.0		
Metal Oxides	Fe (mg/L)	<0.05	Fe & Mn Contamination	Oxidation + Use of dispersants
	Mn (mg/L)	<0.05		
Scaling Substances	CACO ₃	LSI<0	Concentrate flow precipitation	Lower feed water pH scale inhibitor addition
	Other insoluble Salts	/		
Organic Matter	OIL	0	Organic matter contamination	Activated carbon absorption
	TOC (mg/L)	<10		
	COD _{CR} (mg/L)	<20		
	BOD ₅ (mg/L)	<10		
Silica (mg/L)		<20	Colloidal Contamination	Addition of silicone inhibitor
pH		2-10	Too low or too high pH speeds up membrane ageing	Acid-base regulation
Temperature		5-45°C	Low temperatures promote salt scaling, while high temperatures accelerate membrane aging.	Heat exchanger
Oxidizing Agents	Residual Chlorine (mg/L)	<0.1	Oxidation of membrane elements	Activated carbon absorption
	O ₃ & Others	0		

RESIDENTIAL RO MEMBRANE



NOTE:

Can customized quality for 2000-3000 ppm.

RESIDENTIAL RO MEMBRANE

Models	Effective Membrane Area ft ² (m ²)	Stable Salt Rejection	Produced Water Quantity GPD
RO-1812-50	4.5(0.42)	95-98%	50
RO-1812-75	4.5(0.42)	95-98%	75
RO-1812-100	4.5(0.42)	95-98%	100

+ Operating Limit

- Maximum operating pressure: 150psi
- Maximum influent temperature: 45°C
- Maximum influent SDI15: 5.0
- Maximum influent turbidity: 1.0 NTU
- Maximum residual chlorine concentration: 0.1mg/L
- Influent pH range during continuous operation: 5-9

+ Performance Test Conditions

- Test Liquid type: 500ppm NaCl
- Test Pressure: 60psi (0.42MPa)
- Test Liquid Temperature: 25°C
- Recovery Rate: 40%