

External Pressure Dead-end Filtration Type POREFLON™ Module



Features

[Large volume water treatment]

Suitable for treatment of groundwater, surface water, effluent from clarifier and sand filter, etc., where the turbidity is relatively low and large-scale processing is necessary, and stable operation is achievable with high permeability (850LMH/bar).

[Durability]

Poreflon hollow fiber that has a high tensile strength is durable against shaking and flexing allows use for extended periods.

[Compatible with a wide range of wastewater]

Stable treatment capacity is achieved even for wastewater that contains oil and refractory organic matter.

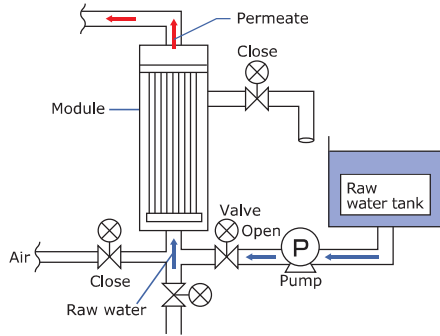
[Chemical resistance]

The module can be cleaned with chemicals from pH0 to 14, including high-concentration alkalis. It has a well flow rate recovery.

*The following conditions are for reference use and may require changes in operational conditions depending on raw water quality.

Example of filtration operating conditions

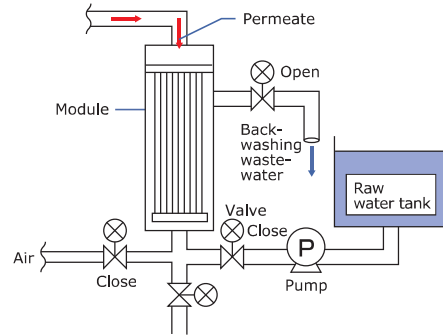
<Filtration flow chart>



Set flow rate	1~2m ³ /m ² /d
Trans membrane pressure	<100kPa
Temperature	<50℃
Regular pH range	0~14

Example of backwash operating conditions

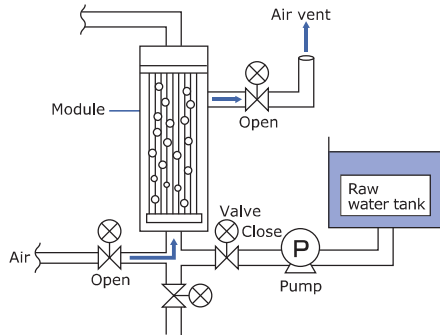
<Backwash flow chart>



Inlet pressure	<200kPa
Time	10-60sec
Frequency	Once/30-60min

Example of aeration operational conditions

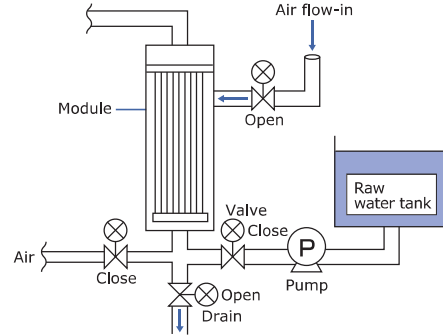
<Aeration flow chart>



Air flow rate	200L/min
Time	10-60sec
Frequency	After every backwash

Example of drain operational conditions

<Drain flow chart>



Time	10-30sec
Frequency	After every aeration

Standard chemical cleaning conditions

CEB(Chemical Enhanced, Backwash)

	Chemical concentration	Cleaning duration	Cleaning guideline
Target:Organic foulant	100 - 500mg/L NaOH+250~500mg/L NaClO (mixture)	30 min - 1 hours	1 - 4 times per day
Target:Inorganic foulant	100 - 1000mg/L HCl, H ₂ SO ₄ , Citric acid		

CIP-1(Maintenance cleaning)

	Chemical concentration	Cleaning duration	Cleaning guideline
Target:Organic foulant	0.5 - 1.0% NaOH+300~3000mg/L NaClO (mixture)	1 - 6 hours	Every 2 - 4 weeks
Target:Inorganic foulant	0.5 - 2.0% HCl, H ₂ SO ₄ , Citric acid		

CIP-2(Recovery cleaning)

	Chemical concentration	Cleaning duration	Cleaning guideline
Target:Organic foulant	1.0 - 4.0% NaOH+500~5000mg/L NaClO (mixture)	2 - 12 hours	Every 1 - 6 months
Target:Inorganic foulant	1.0 - 4.0% HCl, H ₂ SO ₄ , Citric acid(1 - 3%)		

* Cleaning conditions vary depending on the quality of the waste water to be treated and operating conditions.

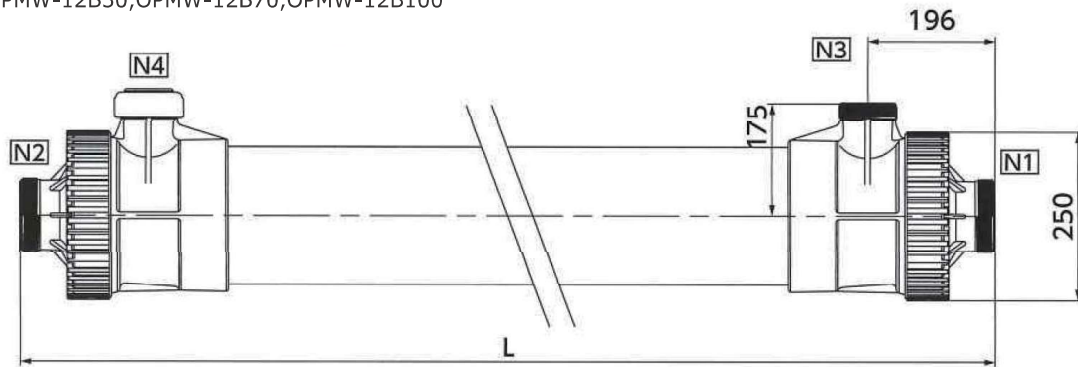
Standard specification List (All filtration membranes are made of PTFE)

Model No.			External pressure dead-end filtration type					
			OPMW					
			-11B50	-11B70	-11B100	-12B50	-12B70	-12B100
Membrane	Nominal pore size	μm	0.08	0.08	0.08	0.1	0.1	0.1
	Outer diameter	mm	2.0	2.0	2.0	2.0	2.0	2.0
	Membrane area	m ²	50	70	100	50	70	100
	Material		PTFE					
Material	Hydrophilic treatment		Hydrophilic					
	Cap		ABS resin					
	Potting		epoxy resin					
	Outer casing		ABS resin					
Dimensions	Length	mm	1800	2400	3300	1800	2400	3300
	Bottom section	mm	Diameter : 212					
Operating condition	Filtration method		External pressure dead-end filtration					
	Trans membrane pressure	Filtration	<100kPa					
		Backwash	<200kPa					
	Maximum temperature limit	°C	50*					
Operating & Cleaning pH range			0-14					
Others	Design water quality (TSS)		<30ppm (Max.100ppm)					
	Recovery ratio		>90%					
	Required pressure for aeration(kPa)		>18	>24	>33	>18	>24	>33

* If operating temperature is over 50 degrees centigrade, please feel free to ask us.

Figure of external form

OPMW-11B50,OPMW-11B70,OPMW-11B100
OPMW-12B50,OPMW-12B70,OPMW-12B100



*POREFLON™ Module and related technical information may be subject to control such as the Export Trade Control Ordinance. Please note that you are responsible for taking the necessary procedure including application for an export permission in cases where this product is applicable to the products subject to control.

Module type	L(mm)
OPMW-11B50,OPMW-12B50	1800
OPMW-11B70,OPMW-12B70	2400
OPMW-11B100,OPMW-12B100	3300

List of connection nozzles (DIN)

Sign	Connection joint	
N1	65	Permeate outlet, Backwash water inlet
N2	65	Raw water inlet, Air inlet, Drain outlet
N3	50	Air outlet, Backwasher water Outlet
N4	(Not in use)	Blind (Not in use)

Specifications are subject to change without notice.



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Sumitomo Poreflon

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