External Pressure Dead-end Filtration Type
POREFLON™Module

Features

[Large volume water treatment]
This system is optimal for applications that require large volume treatment with relatively low turbidity. *General industrial wastewater treatment, water-insoluble oil-contaminated wastewater, water purification (ground water, surface water, etc.)

[Durability]
Poreflon hollow fiver 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 organicmatter.

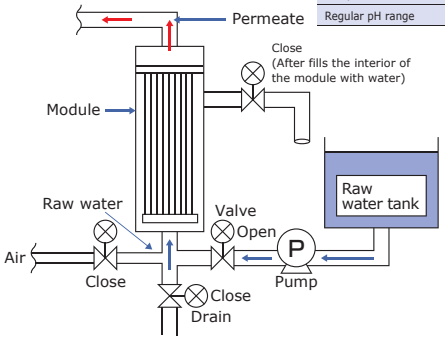
[Chemical resistance]
The module can be cleaned with chemicals from pH0 to 14, including high-concentration alkalis. It has a well flow rate recovery.

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

Example of filtration operating conditions

Raw water type	Low turbidity water	High turbidity water
Set flow rate	2m³/m²/d	1m³/m²/d
Trans membarne pressure	<100kPa	Same as left
Temperature	<50℃	Same as left
Regular pH range	1–13	Same as left

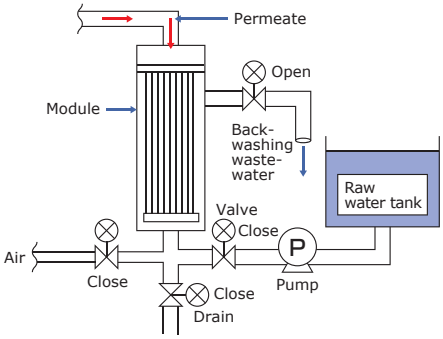
<Filtration flow chart>



Example of backwash operating conditions

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

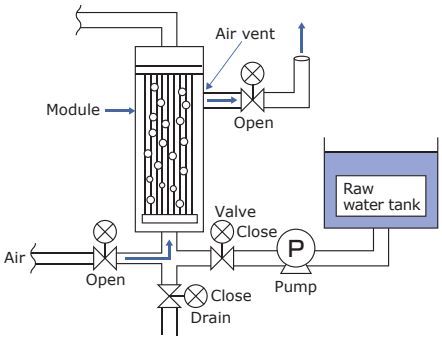
<Backwash flow chart>



Example of aeration operational conditions

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

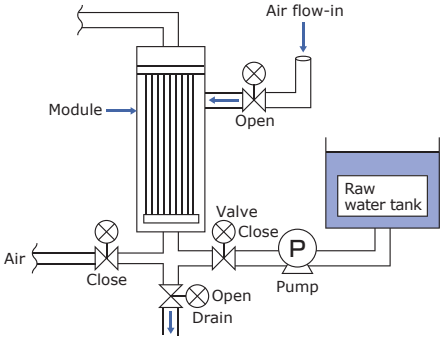
<Aeration flow chart>



Example of drain operational conditions

Time	10-30sec
Frequency	After every aeration

<Drain flow chart>



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_2SO_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_2SO_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_2SO_4, Citric acid(1 - 3%)		

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

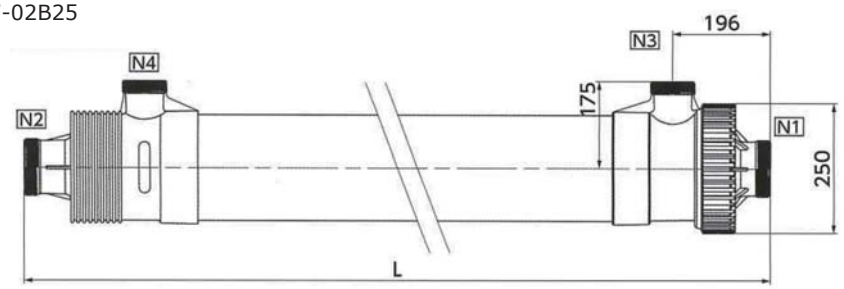
Standard specification List (All filtration membranes are made of PTFE)

Model No.			External pressure dead-end filtration type							
			OPMW							
			-01B25	-11B50	-11B70	-11B110	-02B25	-12B50	-12B70	-12B100
Membrane	Nominal pore size	μm	0.08	0.08	0.08	0.08	0.1	0.1	0.1	0.1
	Inner diameter	mm	1.1	1.0	1.0	1.0	1.1	1.0	1.0	1.0
	Outer diameter	mm	2.3	2.0	2.0	2.0	2.3	2.0	2.0	2.0
	Membrane area	m^2	25	50	70	100	25	50	70	100
	Material		PTFE							
	Hydrophilic treatment		Hydrophilic							
Material	Cap		ABS resin							
	Potting		Heat & chemical-resistant epoxy resin							
	Supporting bar		PVC resin	—			PVC resin	—		
	Outer cashing		ABS resin							
Dimensions	Length	mm	1330	1800	2400	3300	1330	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	℃	50*							
	Operating pH range		0-14							
	Cleaning pH range		0-14							

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

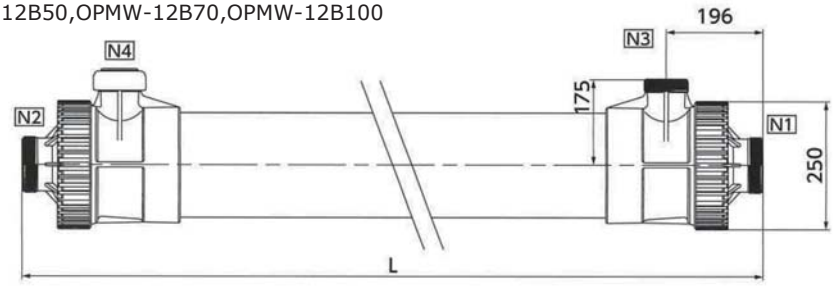
Figure of external form

OPMW-01B25
OPMW-02B25



Module type	L(mm)
OPMW-01B25,OPMW-02B25	1330
OPMW-11B50,OPMW-12B50	1800
OPMW-11B70,OPMW-12B70	2400
OPMW-11B100,OPMW-12B100	3300

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



List of connection nozzles

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

*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.

Specifications are subject to change without notice.

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