

# **POREFLON® Module**

## **Operating and Maintenance Manual**

**Submerged Cassette Type for MBR**



 **SUMITOMO ELECTRIC INDUSTRIES, LTD.**

## 4. Specification

### 4-1. Specification of Membrane Module

Specification of membrane module is shown in the table4.1.

Table4.1 Specification of membrane module

		SPMW-11B38	SPMW-11B57	SPMW-12B38	SPMW-12B57
Membrane	Type	Hollow fiber (Out to In)			
	Material	Hydrophilic treated PTFE			
	Nominal size (μm)	0.08		0.1	
	Nominal membrane area (m <sup>2</sup> )	38	57	38	57
Material of components	Cap, Skirt	ABS			
	Potting	Polyurethane + Epoxy resin			
Dimension	Length × width × height (mm)	840 × 50 × 2200	840 × 50 × 3220	840 × 50 × 2200	840 × 50 × 3220
Limitation	TMP (kPa)	Filtration 0-60			
	Temperature (°C)	< 50			

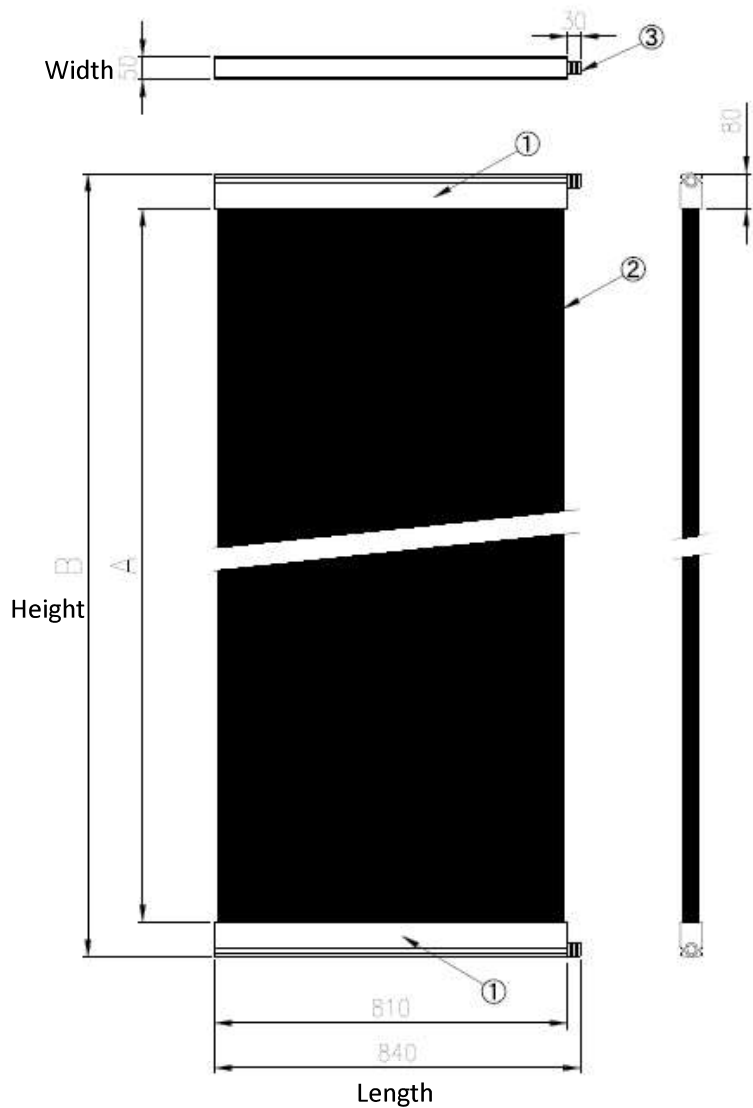
NOTE: (1) Through our manufacturing, potting resin residue sometimes adhere to the surface of the casing, it does not affect the operation.

(2) Although the end of hollow fiber is pale yellow at times, it is not a defect.

(3) The cassette type module is not sold separately but as a unit with a frame, aeration systems and surrounding equipment.

## 4-2. Structure of Membrane Module

Structure of membrane module is shown as the picture below.



	A	B
SPMW-11B38	2040	2200
SPMW-12B38		
SPMW-11B57	3060	3220
SPMW-12B57		

1	Casing
2	Hollow fiber
3	Permeate port

Figure4.1 Structure of Membrane module

## 4-3. Specification of Membrane Unit

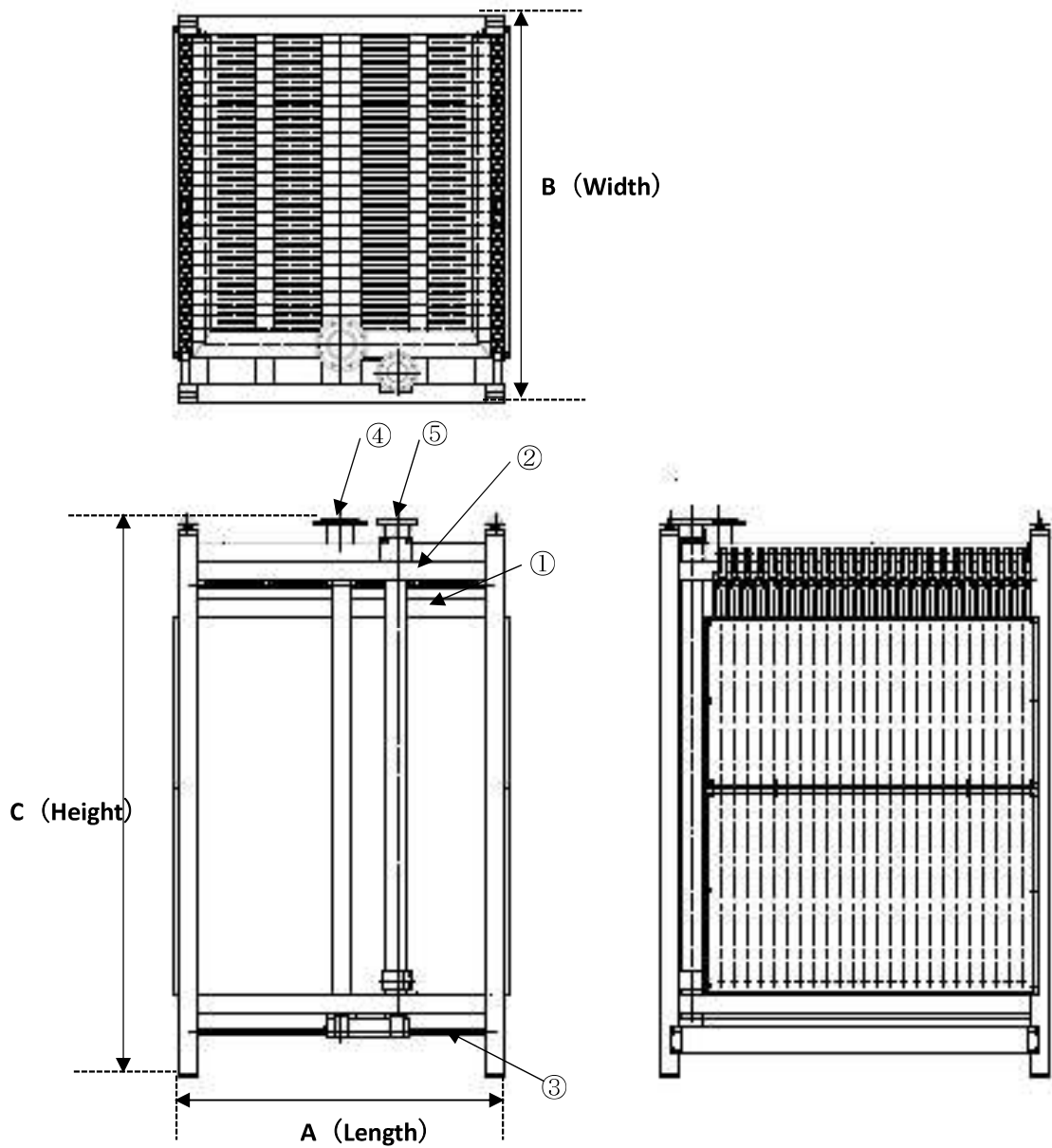
Specification of membrane unit is shown in the table4.2.

Table4.2 Specification of membrane unit (Unit with 48 membrane modules)

		SPMW-11B38 SPMW-12B38	SPMW-11B57 SPMW-12B57
Dimension	Length × width × height (mm)	1750 × 2084 × 2995	1750 × 2084 × 4015
Material of components	Frame	SUS304	
	Aeration pipe	ABS + PVC	
	Aeration port	SUS304	
	Permeate pipe	PVC	
	Permeate port	SUS304	
Weight (Dry)	Membrane module (Kg)	16 × 48	24 × 48
	Frame (Kg)	680	760
	Total (kg)	1448	1912
Weight (Wet)	Membrane module (Kg)	25 × 48	40 × 48
	Frame (Kg)	680	760
	Total (Kg)	1880	2680
Number of membrane modules		48	48
Membrane Area (m <sup>2</sup> )		1824	2736
Projection area (m <sup>2</sup> )		3.7	3.7

## 4-4. Structure of Membrane Unit

Assembly drawing is shown as the picture below.



	Number of membrane modules	A	B	C
SPMW-11B38, 12B38	48	1750	2084	2995
SPMW-11B57, 12B57				4015
SPMW-11B38, 12B38	36	1750	1667	2995
SPMW-11B57, 12B57				4015
SPMW-11B38, 12B38	24	1750	1117	2975
SPMW-11B57, 12B57				3995
SPMW-11B38, 12B38	12	1750	667	2925
SPMW-11B57, 12B57				3945

1	Membrane module
2	Frame
3	Aeration system
4	Permeate port
5	Aeration port

Figure4.2 Membrane unit structure