

## PHILOSEP Megaflux-MBR Cassette Frame Specification

Product	Megaflux-MBR
<b>Performance</b>	
Design Flux	5 ~ 40 L/m <sup>2</sup> ·hr, 25°C (MBR process for sewage treatment or wastewater treatment)
<b>Membrane</b>	
Type	Reinforced capillary(Hollow fiber)
Membrane Polymer	PVDF
Pore Size	0.1 μm(MF), 0.03 μm(UF)
<b>Element</b>	
Dimension (Φ 46 mm)	L 935 mm(R4), L 1,290 mm(R3), L 1,890 mm(R2)
Membrane area	0.551 m <sup>2</sup> (R4), 0.785 m <sup>2</sup> (R3), R2 : 1.180 m <sup>2</sup> (R2)
<b>Module</b>	
Dimension	
R4 (W 62 mm x H 1,066 mm)	L 402 mm(R4-5), L 528 mm(R4-7), L 654 mm(R4-9)
R3 (W 62 mm x H 1,478 mm)	L 402 mm(R3-5), L 528 mm(R3-7), L 654 mm(R3-9)
R2 (W 62 mm x H 2,077 mm)	L 402 mm(R2-5), L 528 mm(R2-7), L 654 mm(R2-9)
Membrane area	
R4	2.755 m <sup>2</sup> (R4-5), 3.857 m <sup>2</sup> (R4-7), 4.959 m <sup>2</sup> (R4-9)
R3	3.925 m <sup>2</sup> (R3-5), 5.495 m <sup>2</sup> (R3-7), 7.065 m <sup>2</sup> (R3-9)
R2	5.900 m <sup>2</sup> (R2-5), 8.260 m <sup>2</sup> (R2-7), 10.620 m <sup>2</sup> (R2-9)
<b>Application Data</b>	
Maximum Operating Pressure	400 mmHg
Recommended Operating Pressure	50 ~ 200 mmHg
Maximum Operating Temperature	104 °F (40 °C)
pH	2 ~ 10

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### Operation Parameters

Standard Operating Sequence	6 min filtration – 2 min pause repeat operation (Time changed depends on raw water quality or pilot quality)
Backwash Frequency(CEB)	Maintenance cleaning : once / week Recovery cleaning : once / 1~3 month
Air Scour Feed Time	Continuous
Air Flow Rate	Cassette frame projected area(m <sup>2</sup> ) x 75 Nm <sup>3</sup> /hr x 1.2 x 1/60
Used Air	Blower

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### Chemical Enhanced Back Wash (CEB)

Backwash Cycle	Maintenance cleaning : once / week Recovery cleaning : once / 1~3 month (depends on raw water quality or pilot quality)
Back wash chemical	Maintenance cleaning : NaOCl 300 ~ 500 ppm Recovery cleaning : NaOCl 3,000 ppm (Increase/ Decrease depends on raw water quality or pilot quality)

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### Chemical Cleaning

Conditions	When the operating pressure is 400mmHg greater than the initial operating pressure, and cannot be recovered by M/C and R/C then chemical cleaning should be done.
Time	4 ~ 6hr
Chemical	Inorganic : 1-2% Oxalic acid or 1~2% Citric acid Organic : NaOCl 3,000ppm
Temperature	30 ~ 35 °C

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● **Megaflux-MBR cassette frame specification**

\*Sewage Treatment Standards

Cassette Frame	Capacity* (m <sup>3</sup> /d)	Weight (kg, Dry)	Aeration (Nm <sup>3</sup> /min)	Cassette Frame Dimension (W x L x H, mm)
Megaflux-MBR 10	10	45	0.38	593 x 508 x 1,340
Megaflux-MBR 20	20	74	0.61	593 x 818 x 1,340
Megaflux-MBR 30	30	97	0.79	593 x 1,066 x 1,340
Megaflux-MBR 40	40	121	1.01	719 x 1,128 x 1,340
Megaflux-MBR 50	50	149	1.24	719 x 1,376 x 1,340
Megaflux-MBR 60	60	136	1.07	719 x 1,190 x 1,750
Megaflux-MBR 70	70	139	0.88	593 x 1,190 x 2,350
Megaflux-MBR 80	80	148	0.96	719 x 1,066 x 2,350
Megaflux-MBR 90	90	166	1.07	719 x 1,190 x 2,350
Megaflux-MBR 100	100	185	1.18	719 x 1440 x 2,350
Megaflux-MBR 200	200	385	2.40	1,438 x 1,438 x 2,350

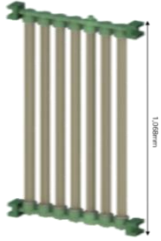



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● **Megaflux-MBR cassette frame composition**

			
<p>R4 Module (H : 1,068mm)</p>	<p>R3 Module (H : 1,478mm)</p>	<p>R2 Module (H : 2,078mm)</p>	<p>Megaflux-MBR Cassette</p>

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