



Submerged UF Specification

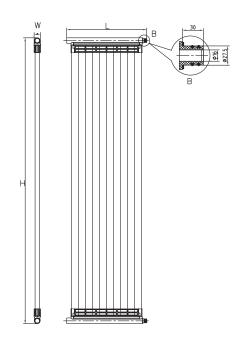
Memstar submerged membrane bioreactor (MBR) modules combine advanced engineering concepts and best-in-class TIPS fiber technology to provide the highest performing MBR ultrafiltration products in the market. These modules are typically applied in MBR applications treating municipal and industrial wastewaters, from a wide variety of industries such as textile, petrochemical, refinery, and food and beverage.

Key Features and Benefits

- High mechanical strength = Long life
- Extreme caustic and oxidant tolerance = Long life, challenging applications
- Patented air scouring device = Low energy consumption
- High packing density = Fewer skids, smaller footprint
- Dense crystalline and monolithic structure = Direct Integrity Testing capability

Module Specifications

Module Type	SMM-1015T	SMM-1522T	SMM-2030T
Membrane Material	PVDF (TIPS)		
Nominal Pore Size (um)	0.04		
Filtration Mode	Outside-in		
Housing Material	ABS		
Potting Material	Epoxy/Polyurethane		
Filtration Surface Area			
(m²)[ft²]	15 [161]	22 [237]	30 [323]
Wet Weight (kg) [lbs]	9 [20]	11 [24]	13 [29]
L (mm) [inches]	571 [22.5]	571 [22.5]	571 [22.5]
W (mm) [inches]	45 [1.8]	45 [1.8]	45 [1.8]
H (mm) [inches]	1040 [40.9]	1540 [60.6]	2040 [80.3]
Filtrate Pipe Port Pipe Port	Single OD32 UPVC	Dual OD32 UPVC	Dual OD32 UPVC

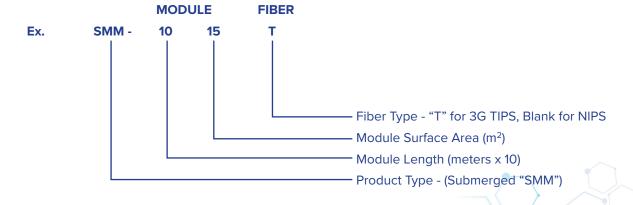


MODULE OPERATING PARAMETERS	ALLOWABLE RANGE	
Operating temperature (°C) [°F]	5 – 45 [41-113]	
Typical flux (LMH) [gfd] ¹	8 – 30 [5-18]	
Instantaneous chlorine tolerance (ppm)	5,000	
Maximum lifetime chlorine tolerance (ppm-hrs)	1,000,000	
Maximum transmembrane pressure (bar) [psi]	0.5 [7]	
Maximum backwash pressure (bar) [psi]	0.5 [7]	
Oil content in feed water (ppm)	< 2	
pH range	Operating: 1 – 12; Cleaning: 1 – 14	
Air scour rate (m³/hr/module) [cfm/module]	2 - 2.5 [1.3 - 1.6]	
Membrane tank MLSS² (mg/L)	5,000-10,000 Recommended - 6,000-8,000	
Particle size in feed water ³ (mm)	≤ 2	



- 1 Flux selection depends on feed type and water quality. Please consult Memstar for flux selection.
- 2 Please consult Memstar for higher values.
- 3 The primary concern is sharp objects entering the treatment system such as branches, plastic pieces, sand, etc.

Product Numbering Guide





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