

Pressurized UF Specification

10" Module Series – TIPS Fiber

Memstar pressurized ultrafiltration (UF) hollow fiber modules combine advanced engineering concepts and best-in-class TIPS fiber technology to provide the highest performing ultrafiltration products in the market. These products are used in hundreds of plants globally to remove suspended solids, including bacteria, viruses, and organic and inorganic compounds. Typical applications include the treatment of tertiary wastewater, surface water, and seawater for reverse osmosis (RO) pre-treatment.

Key Features and Benefits

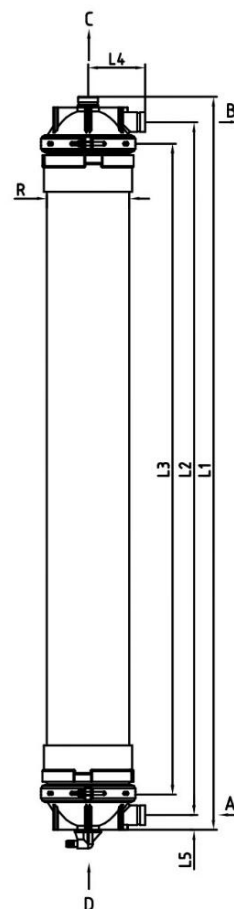
- High mechanical strength = Long life
- Extreme caustic and oxidant tolerance = Long life, challenging applications
- Industry leading membrane surface area = Fewer racks, smaller footprint
- No backwash = High recovery, less waste, lower CAPEX

Module Specifications

Module Types	UF-1010ET	UF-1015ET	UF-1020ET
Membrane Material	PVDF (TIPS)		
Nominal Pore Size (µm)	0.04		
Filtration Mode	Outside-In		
Housing Material	uPVC/ABS		
Potting Material	Epoxy/Polyurethane		
Filtration Surface Area (m2) [ft2]	55 [592]	80 [861]	120 [1,290]
Typical Filtrate Flowrate (m3/hr) [gpm]	2.2 – 6.6 [10 – 29]	3.2 – 9.6 [14 – 42]	4.8 – 14.4 [21 – 63]
Column volume (L) [gal]	25 [6.6]	40 [10.6]	55 [14.5]
Empty Weight (kg) [lbs]	39 [86]	53 [116.9]	71 [156.5]
L1 (mm) [inches]*	1,195 [47]	1,730 [68.1]	2,230 [87.8]
L2 (mm) [inches]*	1,072 [42.2]	1,607 [63.3]	2,109 [83]
L3 (mm) [inches]*	975 [38.4]	1,510 [59.5]	2,012 [79.2]
L4 (mm) [inches]*	173.5 [5.1]		
L5 (mm) [inches]*	45 [1.8]		
R (mm) [inches]*	250 [9.8]		
A**	Feed/Drain port - DN50		
B**	Filtrate Port – DN50		
C**	Concentrate port – DN50		
D	Air Inlet port - Ø 25/19		

*Approximate dimensions. Check with Memstar for the most up-to-date values and applicable drawings.

**DN50 clamps not included



MODULE OPERATING PARAMETERS	ALLOWABLE RANGE
Operating temperature (°C) [°F]	5 – 40 [41 - 104]
Typical flux (LMH) [gfd] ¹	40 – 120 [25 - 70]
Air Scour Flowrate (m³/hr/module) [cfm]	15 [9]
Instantaneous chlorine tolerance (ppm)	10,000
Maximum lifetime chlorine tolerance (ppm-hrs)	3,000,000
Maximum feed turbidity (NTU) ²	300
Maximum transmembrane pressure (bar) [psi]	2 [29]
Maximum feed pressure (bar) [psi] ³	3 [44]
Oil content in feed water (ppm)	< 2
pH range	Operating: 2 – 12; Cleaning: 1 – 14
Allowed particle size in feed water (mm) ²	≤ 0.5 ≤ 0.12 for seawater

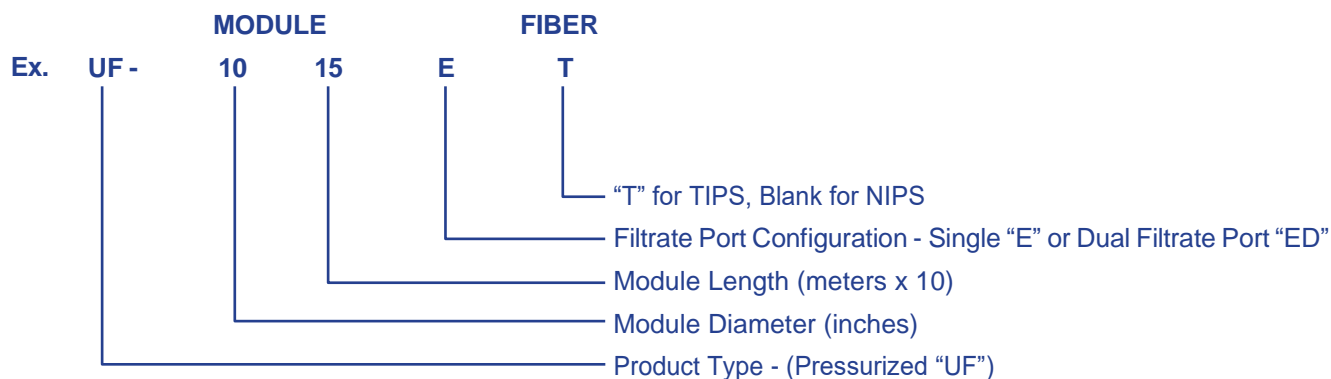


1. Design flux depends on feed type and water quality. Please consult Memstar for flux selection.

2. Please consult Memstar for higher values.

3. At temperatures of 40°C

Product Numbering Guide



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