Product Data Sheet
P series | Pressurized PES UF Module

DuPont™ IntegraTec™ MB PRO 95 TR

Modules for T-Rack™

Key Features

Innovative Multibore™ PRO PES Fibers:

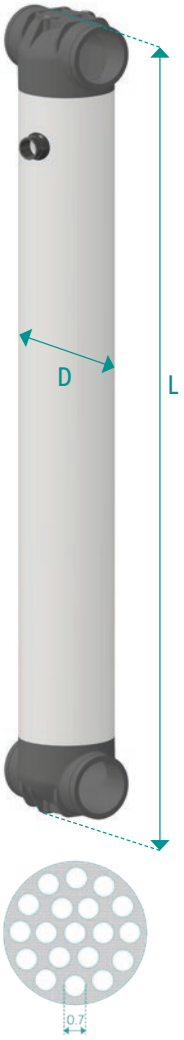
- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- Excellent filtration permeability.
- Optional coagulation can enhance the removal of algae and organics.

Optimized Module Design:

- Innovative end-cap design to suit T-Rack™ concept with simple assembly and scalability.
- Enhanced active filtration area to minimize footprint.
- Robust materials for long lifetime.
- Easy installation and low maintenance.
- All wetted parts corrosion free

Key Applications

- Municipal drinking water.
- Desalination RO pretreatment.
- Ideal for large systems.



Module Specification

General		
Part Number / GMID	IN-5122 / 12071531	
Mode of Filtration	In-Out Pressurized	
Membrane Type	Multibore™ PRO	
Membrane Material	PESm	
Nominal Membrane Pore Size	0.02 µm	
Module Operating Process	Dead-end	
Housing Material	PVC-U, white	
Dimensions		
Active Membrane Area	95 m²	1,023 ft²
Module Length Including T-Piece (L)	2,101 mm	82.7 inch
Module Diameter (D)	250 mm	9.8 inch
Weight and Volume		
Shipping Weight (Module Only)	52 kg	115 lbs.
Weight Empty (Module and Corresponding Frame)	65 kg	143 lbs.
Weight Filled (Module and Corresponding Frame)	132 kg	291 lbs.
Hold-Up Volume Feed (CIP)	32 L	8.4 gal
Hold-Up Volume Membrane Structure (CIP)	18 L	4.8 gal
Hold-Up Volume Filtrate (CIP)	35 L	9.3 gal

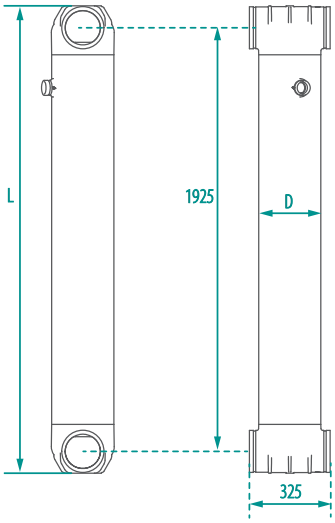
NSF
Certified to NSF/ANSI/CAN 61 & NSF/ANSI 419

MB PRO™
powered by
inge heart of pure water
a DuPont brand

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Suggested Operating Conditions

General	Details	
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating pH	3 - 11	
Cleaning pH	1 - 13	
Typical Filtration TMP	0.1 - 0.6 bar	1.5 - 8.7 psi
Typical Backwash TMP	0.3 - 2.0 bar	4.4 - 29.0 psi
Backwash Flux	230 L/(m²h)	135 gfd
Backwash Flow	21.8 m³/h	96.0 gpm
Operating Limits (Maximum)		
Rate of Temperature Change	5 °C/min	9 °F/min
Inlet Pressure	5 bar	73 psi
Rate of Pressure Change	0.5 bar/sec	7.3 psi/sec
Filtration TMP	1.5 bar	22 psi
Backwash TMP	3.0 bar	44 psi
Filtration Flux	140 L/(m²h)	82 gfd
Filtration Flow	13.3 m³/h	58.6 gpm
Backwash Flux	250 L/(m²h)	147 gfd
Particle Size	230 µm	
Exposure NaOCl	≤ 250,000 ppm x h (at pH ≥ 9.5)	
Concentration NaOCl	500 ppm	



T-Rack™ Configuration

Number of Modules	T-Rack™ Unit	Part Number [1]	Length [2]		Membrane Area	
			mm	ft	m²	ft²
Single-Sided Connection to Manifold						
2 Rows Configuration						
4	TR-4-2-1	12071552	655	2.15	380	4,090
6	TR-6-2-1	12071553	985	3.23	570	6,135
8	TR-8-2-1	12071554	1,315	4.31	760	8,181
10	TR-10-2-1	12071555	1,645	5.40	950	10,226
12	TR-12-2-1	12071557	1,975	6.48	1,140	12,271
14	TR-14-2-1	12071078	2,305	7.56	1,330	14,316
16	TR-16-2-1	12071558	2,635	8.65	1,520	16,361
18	TR-18-2-1	12071559	2,965	9.73	1,710	18,406
20	TR-20-2-1	12071560	3,295	10.81	1,900	20,451
22	TR-22-2-1	12071561	3,625	11.89	2,090	22,496
24	TR-24-2-1	12071563	3,955	12.98	2,280	24,542
26	TR-26-2-1	12071091	4,285	14.06	2,470	26,587
4 Rows Configuration						
28	TR-28-4-1	12071079	2,305	7.56	2,660	28,632
32	TR-32-4-1	12071122	2,635	8.65	3,040	32,722
36	TR-36-4-1	12071096	2,965	9.73	3,420	36,812
40	TR-40-4-1	12071097	3,295	10.81	3,800	40,903
44	TR-44-4-1	12071098	3,625	11.89	4,180	44,993
48	TR-48-4-1	12071099	3,955	12.98	4,560	49,083
52	TR-52-4-1	12071100	4,285	14.06	4,940	53,174

1. Rack parts without modules.
2. Length excluding central header manifold. Tolerance to ISO 2768-1c.

Form No. 45-D04341-en, Rev. 3
September 2024

Number of Modules	T-Rack™ Unit	Part Number [1]	Length [2]		Membrane Area	
			mm	ft	m^2	ft^2
Double-Sided Connection to Manifold						
4 Rows Configuration						
56	TR-56-4-2	12071080	4,615	15.14	5,320	57,264
60	TR-60-4-2[3]	12071081	4,945	16.22	5,700	61,354
64	TR-64-4-2	12071123	5,275	17.31	6,080	65,444
68	TR-68-4-2[3]	12071124	5,605	18.39	6,460	69,535
72	TR-72-4-2	12071105	5,930	19.46	6,840	73,625
76	TR-76-4-2[3]	12071106	6,260	20.54	7,220	77,715
80	TR-80-4-2	12071107	6,590	21.62	7,600	81,805
84	TR-84-4-2[3]	12071108	6,920	22.70	7,980	85,896
88	TR-88-4-2	12071109	7,250	23.79	8,360	89,986
92	TR-92-4-2[3]	12071110	7,580	24.87	8,740	94,076
96	TR-96-4-2	12071111	7,910	25.95	9,120	98,166
100	TR-100-4-2[3]	12071112	8,240	27.03	9,500	102,257
104	TR-104-4-2	12071113	8,570	28.12	9,880	106,347

1. Rack parts without modules.
2. Length excluding central header manifold. Tolerance to ISO 2768-1c.
3. Asymmetric module arrangement.

General Information

- Avoid any abrupt pressure variations during start-up, operation, shutdown, cleaning or other sequences to prevent possible membrane damage. The maximum pressure change allowable is 0.5 bar/s.
- For assembly please refer to the latest version of the DuPont™ IntegraTec™ Pressurized UF In-Out P Series Assembly Instructions for T-Rack™ Manual (Form No. 45-D02230-en).
- If operating limits and guidelines given in this bulletin are not strictly followed, any warranty will be null and void.
- To control biological growth during extended system shutdowns, a storage solution must be introduced into the membrane modules. For Detailed information, see the DuPont™ IntegraTec™ Pressurized UF Out-In Module Preservation Instruction Manual (Form No. 45-D02946-en).

Regulatory Note

- Certified drinking water modules require specific conditioning procedures prior to producing potable water. For operating parameters, please refer to the DuPont™ IntegraTec™ Pressurized UF In-Out P Series Process and Design Guidelines (Form No. 45-D02234-en).
- Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use.
- Flushing needs to be done according to the DuPont™ IntegraTec™ Pressurized UF Out-In Module Rinsing Procedure (Form No. 45-D02947-en).

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