Product Data Sheet
P series | Pressurized PES UF Module

DuPont™ IntegraTec™ MB 80 TR

Modules for T-Rack™

(previously dizzer XL 0.9 MB 80 WT)

Key Features

Proven Multibore™ PES Fibers:

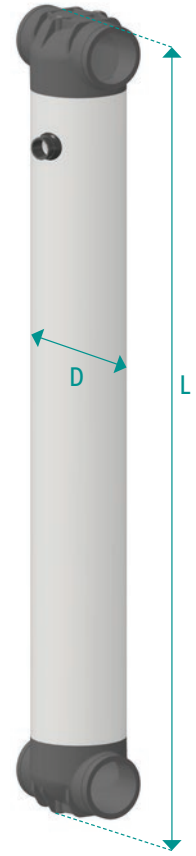
- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- Unique design for high solids loads.
- Optional coagulation can enhance the removal of algae and organics.

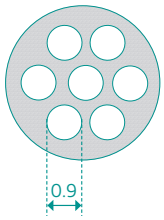
Optimized Module Design:

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

Key Applications

- Municipal drinking water.
- Desalination RO pretreatment.
- Industrial utility water.
- Industrial wastewater reuse.
- Ideal for large systems.





Module Specification

General		
Part Number / GMID	IN-5109 / 12071530	
Mode of Filtration	In-Out Pressurized	
Membrane Type	Multibore™	
Membrane Material	PESm	
Nominal Membrane Pore Size	0.02 µm	
Module Operating Process	Dead-end	
Housing Material	PVC-U, white	
Dimensions		
Active Membrane Area	80 m²	861 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)	54 kg	120 lbs.
Weight Empty (Module and Corresponding Frame)	67 kg	147 lbs.
Weight Filled (Module and Corresponding Frame)	133 kg	292 lbs.
Hold-Up Volume Feed (CIP)	33 L	8.7 gal
Hold-Up Volume Membrane Structure (CIP)	20 L	5.4 gal
Hold-Up Volume Filtrate (CIP)	31 L	8.3 gal

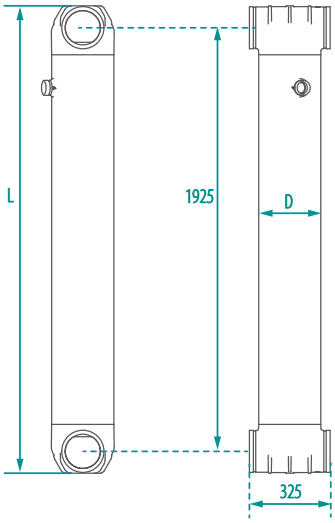
NSF
Certified to NSF/ANSI/CAN 61 & NSF/ANSI 419

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Form No. 45-D02243-en, Rev. 3
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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	18.4 m³/h	81.0 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	180 L/(m²h)	106 gfd
Filtration Flow	14.4 m³/h	63.4 gpm
Backwash Flux	300 L/(m²h)	176 gfd
Particle Size	300 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	320	3,444
6	TR-6-2-1	12071553	985	3.23	480	5,167
8	TR-8-2-1	12071554	1,315	4.31	640	6,889
10	TR-10-2-1	12071555	1,645	5.40	800	8,611
12	TR-12-2-1	12071557	1,975	6.48	960	10,333
14	TR-14-2-1	12071078	2,305	7.56	1,120	12,056
16	TR-16-2-1	12071558	2,635	8.65	1,280	13,778
18	TR-18-2-1	12071559	2,965	9.73	1,440	15,500
20	TR-20-2-1	12071560	3,295	10.81	1,600	17,222
22	TR-22-2-1	12071561	3,625	11.89	1,760	18,944
24	TR-24-2-1	12071563	3,955	12.98	1,920	20,667
26	TR-26-2-1	12071091	4,285	14.06	2,080	22,389
28	TR-28-2-1	12071092	4,615	15.14	2,240	24,111
30	TR-30-2-1	12071093	4,945	16.22	2,400	25,833

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

Number of Modules	T-Rack™ Unit	Part Number [1]	Length [2]		Membrane Area	
			mm	ft	m^2	ft^2
Single-Sided Connection to Manifold						
4 Rows Configuration						
32	TR-32-4-1	12071122	2,635	8.65	2,560	27,556
36	TR-36-4-1	12071096	2,965	9.73	2,880	31,000
40	TR-40-4-1	12071097	3,295	10.81	3,200	34,444
44	TR-44-4-1	12071098	3,625	11.89	3,520	37,889
48	TR-48-4-1	12071099	3,955	12.98	3,840	41,333
52	TR-52-4-1	12071100	4,285	14.06	4,160	44,778
56	TR-56-4-1	12071101	4,615	15.14	4,480	48,222
60	TR-60-4-1	12071102	4,945	16.22	4,800	51,667
Double-Sided Connection to Manifold						
4 Rows Configuration						
64	TR-64-4-2	12071123	5,270	17.29	5,120	55,111
68	TR-68-4-2 [3]	12071124	5,600	18.37	5,440	58,555
72	TR-72-4-2	12071105	5,930	19.46	5,760	62,000
76	TR-76-4-2[3]	12071106	6,260	20.54	6,080	65,444
80	TR-80-4-2	12071107	6,590	21.62	6,400	68,889
84	TR-84-4-2[3]	12071108	6,920	22.70	6,720	72,333
88	TR-88-4-2	12071109	7,250	23.79	7,040	75,778
92	TR-92-4-2[3]	12071110	7,580	24.87	7,360	79,222
96	TR-96-4-2	12071111	7,910	25.95	7,680	82,667
100	TR-100-4-2[3]	12071112	8,240	27.03	8,000	86,111
104	TR-104-4-2	12071113	8,570	28.12	8,320	89,555
108	TR-108-4-2[3]	12071114	8,900	29.20	8,640	93,000
112	TR-112-4-2	12071115	9,230	30.28	8,960	96,444
116	TR-116-4-2[3]	12071116	9,560	31.36	9,280	99,889
120	TR-120-4-2	12071117	9,890	32.45	9,600	103,333

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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