Product Data Sheet
P series | Pressurized PES UF Module

DuPont™ IntegraTec™ MB 40 TR S

Modules for T-Rack™ S

(previously dizzer XL 1.5 MB 40 ST)

Key Features

Proven Multibore™ PES Fibers:

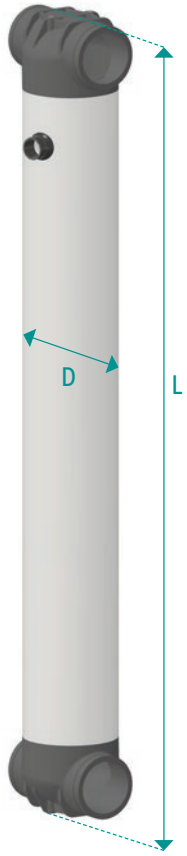
- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- Unique design for high solids loads.
- Optional coagulation can enhance the removal of algae and organics.

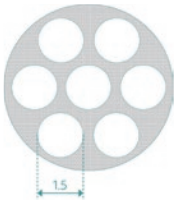
Optimized Module Design:

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

Key Applications

- Municipal wastewater.
- Industrial water.
- Wastewater reuse.
- Ideal for height restricted or containerized filtration solution.





Module Specification

General		
Part Number / GMID	IN-5103 / 12071529	
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	40 m²	431 ft²
Module Length Including T-Piece (L)	1,879 mm	74.0 inch
Module Diameter (D)	250 mm	9.8 inch
Weight and Volume		
Shipping Weight (Module Only)	47 kg	104 lbs.
Weight Empty (Module and Corresponding Frame)	59 kg	131 lbs.
Weight Filled (Module and Corresponding Frame)	124 kg	272 lbs.
Hold-Up Volume Feed (CIP)	31 L	8.1 gal
Hold-Up Volume Membrane Structure (CIP)	16 L	4.2 gal
Hold-Up Volume Filtrate (CIP)	30 L	8.0 gal

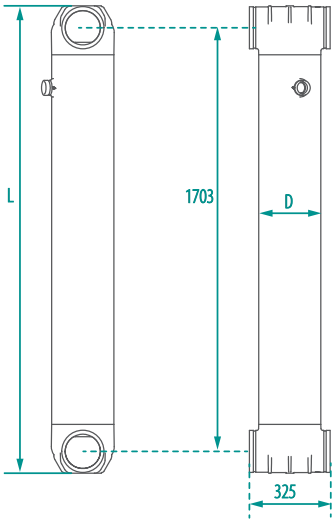
NSF
Certified to NSF/ANSI/CAN 61 & NSF/ANSI 419

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Form No. 45-D02245-en, Rev. 2
September 2024

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	9.2 m³/h	40.5 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	7.2 m³/h	31.7 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
2 Rows Configuration						
4	TR-S-4-2-1	12071170	655	2.15	160	1,722
6	TR-S-6-2-1	12071171	985	3.23	240	2,583
8	TR-S-8-2-1	12071172	1,315	4.31	320	3,445
10	TR-S-10-2-1	12071173	1,645	5.40	400	4,306
12	TR-S-12-2-1	12071174	1,975	6.48	480	5,167
14	TR-S-14-2-1	12071175	2,305	7.56	560	6,028
16	TR-S-16-2-1	12071176	2,635	8.65	640	6,889
18	TR-S-18-2-1	12071177	2,965	9.73	720	7,750
20	TR-S-20-2-1	12071178	3,295	10.81	800	8,611
22	TR-S-22-2-1	12071179	3,625	11.89	880	9,473
24	TR-S-24-2-1	12071180	3,955	12.98	960	10,334
26	TR-S-26-2-1	12071181	4,285	14.06	1,040	11,195
28	TR-S-28-2-1	12071182	4,615	15.14	1,120	12,056
30	TR-S-30-2-1	12071183	4,945	16.22	1,200	12,917
32	TR-S-32-2-1	12071184	5,275	17.31	1,280	13,778
34	TR-S-34-2-1	12071185	5,605	18.39	1,360	14,639
36	TR-S-36-2-1	12071186	5,935	19.47	1,440	15,501
38	TR-S-38-2-1	12071187	6,265	20.55	1,520	16,362
40	TR-S-40-2-1	12071188	6,595	21.64	1,600	17,223

1. Rack parts without modules.
2. Tolerance to ISO 2768-1c.

Number of Modules	T-Rack™ Unit	Part Number [1]	Length [2]		Membrane Area	
			mm	ft	m^2	ft^2
4 Rows Configuration						
16	TR-S-16-4-1	12071189	1,315	4.31	640	6,889
20	TR-S-20-4-1	12071190	1,645	5.40	800	8,611
24	TR-S-24-4-1	12071191	1,975	6.48	960	10,334
28	TR-S-28-4-1	12071192	2,305	7.56	1,120	12,056
32	TR-S-32-4-1	12071193	2,635	8.65	1,280	13,778
36	TR-S-36-4-1	12071194	2,965	9.73	1,440	15,501
40	TR-S-40-4-1	12071195	3,295	10.81	1,600	17,223
44	TR-S-44-4-1	12071196	3,625	11.89	1,760	18,945
48	TR-S-48-4-1	12071197	3,955	12.98	1,920	20,667
52	TR-S-52-4-1	12071198	4,285	14.06	2,080	22,390
56	TR-S-56-4-1	12071199	4,615	15.14	2,240	24,112
60	TR-S-60-4-1	12071200	4,945	16.22	2,400	25,834
64	TR-S-64-4-1	12071201	5,275	17.31	2,560	27,557
68	TR-S-68-4-1	12071202	5,605	18.39	2,720	29,279
72	TR-S-72-4-1	12071203	5,935	19.47	2,880	31,001
76	TR-S-76-4-1	12071204	6,265	20.55	3,040	32,723
80	TR-S-80-4-1	12071205	6,595	21.64	3,200	34,446

1. Rack parts without modules.
2. Tolerance to ISO 2768-1c.

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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Form No. 45-D02245-en, Rev. 2
September 2024