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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:

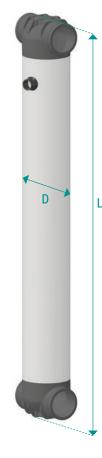
- Innovative end-cap design to suit T-Rack[™] S concept with simple assembly and scalability.
- Robust materials for long lifetime.
- Easy installation and low maintenance.
- All wetted parts corrosion free.

Key Applications

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

Module Specification	
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General		
Part Number	IN-5103	
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)	49 kg	108 lbs.
Weight Empty (Module and Corresponding Frame)	61 kg	134 lbs.
Weight Filled (Module and Corresponding Frame)	129 kg	284 lbs.
Hold-Up Volume Feed (CIP)	31 L	8.2 gal
Hold-Up Volume Membrane Structure (CIP)	16 L	4.2 gal
Hold-Up Volume Filtrate (CIP)	25 L	6.6 gal





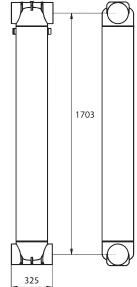




Form No. 45-D02245-en, Rev. 0 January 2023

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 pł	≤ 250,000 ppm x h (at pH ≥ 9.5)		
Concentration NaOCl	500 ppm			



T-Rack[™] Configuration

	T-Rack™ Unit	Part Number ¹	Length ²		Membrane Area	
Number of Modules			mm	ft	m²	ft²
2 Rows Configuration						
4	TR-S-4-2-1	TD-3204	655	2.15	160	1,722
6	TR-S-6-2-1	TD-3206	985	3.23	240	2,583
8	TR-S-8-2-1	TD-3208	1,315	4.31	320	3,445
10	TR-S-10-2-1	TD-3210	1,645	5.40	400	4,306
12	TR-S-12-2-1	TD-3212	1,975	6.48	480	5,167
14	TR-S-14-2-1	TD-3214	2,305	7.56	560	6,028
16	TR-S-16-2-1	TD-3216	2,635	8.65	640	6,889
18	TR-S-18-2-1	TD-3218	2,965	9.73	720	7,750
20	TR-S-20-2-1	TD-3220	3,295	10.81	800	8,611
22	TR-S-22-2-1	TD-3222	3,625	11.89	880	9,473
24	TR-S-24-2-1	TD-3224	3,955	12.98	960	10,334
26	TR-S-26-2-1	TD-3226	4,285	14.06	1,040	11,195
28	TR-S-28-2-1	TD-3228	4,615	15.14	1,120	12,056
30	TR-S-30-2-1	TD-3230	4,945	16.22	1,200	12,917
32	TR-S-32-2-1	TD-3232	5,275	17.31	1,280	13,778
34	TR-S-34-2-1	TD-3234	5,605	18.39	1,360	14,639
36	TR-S-36-2-1	TD-3236	5,935	19.47	1,440	15,501
38	TR-S-38-2-1	TD-3238	6,265	20.55	1,520	16,362
40	TR-S-40-2-1	TD-3240	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		Length ²		Membrane Area	
		Part Number ¹	mm	ft	m²	ft²
4 Rows Configuration						
16	TR-S-16-4-1	TD-3416	1,315	4.31	640	6,889
20	TR-S-20-4-1	TD-3420	1,645	5.40	800	8,611
24	TR-S-24-4-1	TD-3424	1,975	6.48	960	10,334
28	TR-S-28-4-1	TD-3428	2,305	7.56	1,120	12,056
32	TR-S-32-4-1	TD-3432	2,635	8.65	1,280	13,778
36	TR-S-36-4-1	TD-3436	2,965	9.73	1,440	15,501
40	TR-S-40-4-1	TD-3440	3,295	10.81	1,600	17,223
44	TR-S-44-4-1	TD-3444	3,625	11.89	1,760	18,945
48	TR-S-48-4-1	TD-3448	3,955	12.98	1,920	20,667
52	TR-S-52-4-1	TD-3452	4,285	14.06	2,080	22,390
56	TR-S-56-4-1	TD-3456	4,615	15.14	2,240	24,112
60	TR-S-60-4-1	TD-3460	4,945	16.22	2,400	25,834
64	TR-S-64-4-1	TD-3464	5,275	17.31	2,560	27,557
68	TR-S-68-4-1	TD-3468	5,605	18.39	2,720	29,279
72	TR-S-72-4-1	TD-3472	5,935	19.47	2,880	31,001
76	TR-S-76-4-1	TD-3476	6,265	20.55	3,040	32,723
80	TR-S-80-4-1	TD-3480	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 <u>DuPont[™]</u> <u>IntegraTec[™] Pressurized UF In-Out P Series Assembly</u> <u>Instructions for T-Rack[™] Manual</u> (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 <u>DuPont™</u> <u>IntegraTec™ Pressurized UF Out-In Module Preservation</u> <u>Instruction Manual</u> (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 <u>DuPont[™] IntegraTec[™]</u> <u>Pressurized UF In-Out P Series Process and Design Guidelines</u> (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 <u>DuPont™</u> <u>IntegraTec™ Pressurized UF Out-In Module Rinsing Procedure</u> (Form No. 45-D02947-en).

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