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:

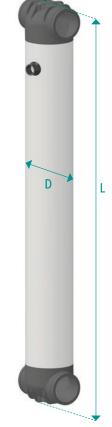
- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- · Unique design for high solids loads.
- Optional coagulation can enhance the removal of algae and organics.

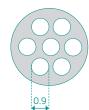
Optimized Module Design:

- 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.







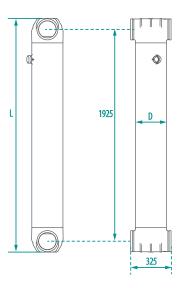


Module Specification

IN-5109 / 12071530	
In-Out Pressurized	
Multibore™	
PESm	
0.02 µm	
Dead-end	
PVC-U, white	
80 m²	861 ft²
2,101 mm	82.7 inch
250 mm	9.8 inch
57 kg	126 lbs.
70 kg	154 lbs.
135 kg	297 lbs.
33 L	8.7 gal
20 L	5.3 gal
24 L	6.3 gal
	In-Out Pressurized Multibore™ PESm 0.02 μm Dead-end PVC-U, white 80 m² 2,101 mm 250 mm 57 kg 70 kg 135 kg 33 L 20 L

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



T-Rack™ Configuration

Number of Modules			Len	Length ²		Membrane Area	
	T-Rack™ Unit	Part Number ¹	mm	ft	m²	ft²	
Single-Sided Connection to Mani	fold						
2 Rows Configuration							
4	TR-4-2-1	TD-1004	655	2.15	320	3,444	
6	TR-6-2-1	TD-1006	985	3.23	480	5,167	
8	TR-8-2-1	TD-1008	1,315	4.31	640	6,889	
10	TR-10-2-1	TD-1010	1,645	5.40	800	8,611	
12	TR-12-2-1	TD-1012	1,975	6.48	960	10,333	
14	TR-14-2-1	TD-1014	2,305	7.56	1,120	12,056	
16	TR-16-2-1	TD-1016	2,635	8.65	1,280	13,778	
18	TR-18-2-1	TD-1018	2,965	9.73	1,440	15,500	
20	TR-20-2-1	TD-1020	3,295	10.81	1,600	17,222	
22	TR-22-2-1	TD-1022	3,625	11.89	1,760	18,944	
24	TR-24-2-1	TD-1024	3,955	12.98	1,920	20,667	
26	TR-26-2-1	TD-1026	4,285	14.06	2,080	22,389	
28	TR-28-2-1	TD-1028	4,615	15.14	2,240	24,111	
30	TR-30-2-1	TD-1030	4,945	16.22	2,400	25,833	

^{1.} Rack parts without modules.

^{2.} Length excluding central header manifold. Tolerance to ISO 2768-1c.

			Length ²		Membr	ane Area
Number of Modules	T-Rack™ Unit	Part Number ¹	mm	ft	m²	ft²
Single-Sided Connection to Mani	fold					
4 Rows Configuration						
32	TR-32-4-1	TD-1432	2,635	8.65	2,560	27,556
36	TR-36-4-1	TD-1036	2,965	9.73	2,880	31,000
40	TR-40-4-1	TD-1040	3,295	10.81	3,200	34,44
44	TR-44-4-1	TD-1044	3,625	11.89	3,520	37,889
48	TR-48-4-1	TD-1048	3,955	12.98	3,840	41,333
52	TR-52-4-1	TD-1052	4,285	14.06	4,160	44,778
56	TR-56-4-1	TD-1056	4,615	15.14	4,480	48,22
60	TR-60-4-1	TD-1060	4,945	16.22	4,800	51,66
Double-Sided Connection to Man	iifold					
4 Rows Configuration						
64	TR-64-4-2	TD-1464	5,270	17.29	5,120	55,111
68	TR-68-4-2 ³	TD-1468	5,600	18.37	5,440	58,55
72	TR-72-4-2	TD-1072	5,930	19.46	5,760	62,00
76	TR-76-4-2 ³	TD-1076	6,260	20.54	6,080	65,44
80	TR-80-4-2	TD-1080	6,590	21.62	6,400	68,88
84	TR-84-4-2 ³	TD-1084	6,920	22.70	6,720	72,333
88	TR-88-4-2	TD-1088	7,250	23.79	7,040	75,778
92	TR-92-4-2 ³	TD-1092	7,580	24.87	7,360	79,222
96	TR-96-4-2	TD-1096	7,910	25.95	7,680	82,66
100	TR-100-4-2 ³	TD-1100	8,240	27.03	8,000	86,11
104	TR-104-4-2	TD-1104	8,570	28.12	8,320	89,55
108	TR-108-4-2 ³	TD-1108	8,900	29.20	8,640	93,00
112	TR-112-4-2	TD-1112	9,230	30.28	8,960	96,44
116	TR-116-4-2 ³	TD-1116	9,560	31.36	9,280	99,88
120	TR-120-4-2	TD-1120	9,890	32.45	9,600	103,33

^{1.} Rack parts without modules.

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 <u>DuPont™</u> 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 <u>DuPont™ IntegraTec™ Pressurized UF Out-In Module Preservation 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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