



DuPont™ IntegraTec™ MB 50 TR

Modules for T-Rack™

(previously dizzer XL 1.5 MB 50 WT)

Key Features

Proven Multibore™ PES Fibers:

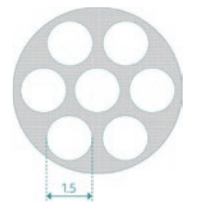
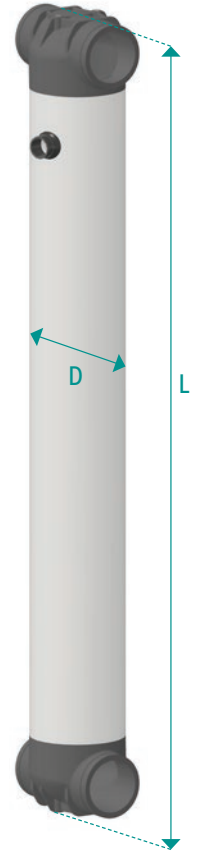
- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- Unique design for high solids loads.
- Optional coagulation can enhance the removal of algae and organics.

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 wastewater.
- Industrial water.
- Wastewater reuse.
- Ideal for second stage filtration systems.



Module Specification

General

| | | |
|----------------------------|--------------------|--|
| Part Number / GMID | IN-5101 / 12071527 | |
| 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 | 50 m ² | 538 ft ² |
| Module Length Including T-Piece (L) | 2,101 mm | 82.7 inch |
| Module Diameter (D) | 250 mm | 9.8 inch |

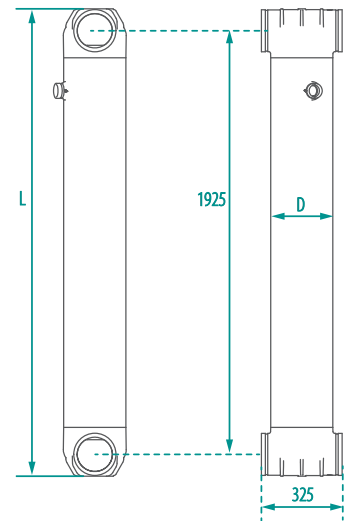
Weight and Volume

| | | |
|--|--------|----------|
| Shipping Weight (Module Only) | 56 kg | 123 lbs. |
| Weight Empty (Module and Corresponding Frame) | 69 kg | 152 lbs. |
| Weight Filled (Module and Corresponding Frame) | 136 kg | 300 lbs. |
| Hold-Up Volume Feed (CIP) | 34 L | 9.0 gal |
| Hold-Up Volume Membrane Structure (CIP) | 20 L | 5.3 gal |
| Hold-Up Volume Filtrate (CIP) | 23 L | 6.1 gal |



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/(m ² h) | 135 gfd | |
| Backwash Flow | 11.5 m ³ /h | 50.4 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/(m ² h) | 106 gfd | |
| Filtration Flow | 9.0 m ³ /h | 39.6 gpm | |
| Backwash Flux | 300 L/(m ² h) | 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 | m ² | ft ² |
| Single-Sided Connection to Manifold | | | | | | |
| 2 Rows Configuration | | | | | | |
| 4 | TR-4-2-1 | TD-1004 | 655 | 2.15 | 200 | 2,153 |
| 6 | TR-6-2-1 | TD-1006 | 985 | 3.23 | 300 | 3,229 |
| 8 | TR-8-2-1 | TD-1008 | 1,315 | 4.31 | 400 | 4,306 |
| 10 | TR-10-2-1 | TD-1010 | 1,645 | 5.40 | 500 | 5,382 |
| 12 | TR-12-2-1 | TD-1012 | 1,975 | 6.48 | 600 | 6,458 |
| 14 | TR-14-2-1 | TD-1014 | 2,305 | 7.56 | 700 | 7,535 |
| 16 | TR-16-2-1 | TD-1016 | 2,635 | 8.65 | 800 | 8,611 |
| 18 | TR-18-2-1 | TD-1018 | 2,965 | 9.73 | 900 | 9,687 |
| 20 | TR-20-2-1 | TD-1020 | 3,295 | 10.81 | 1000 | 10,764 |
| 22 | TR-22-2-1 | TD-1022 | 3,625 | 11.89 | 1,100 | 11,840 |
| 24 | TR-24-2-1 | TD-1024 | 3,955 | 12.98 | 1,200 | 12,917 |
| 26 | TR-26-2-1 | TD-1026 | 4,285 | 14.06 | 1,300 | 13,993 |
| 28 | TR-28-2-1 | TD-1028 | 4,615 | 15.14 | 1,400 | 15,069 |
| 30 | TR-30-2-1 | TD-1030 | 4,945 | 16.22 | 1,500 | 16,146 |
| 32 | TR-32-2-1 | TD-1032 | 5,275 | 17.31 | 1,600 | 17,222 |
| 34 | TR-34-2-1 | TD-1034 | 5,605 | 18.39 | 1,700 | 18,299 |

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 | | | | | | |
| 36 | TR-36-4-1 | TD-1036 | 2,965 | 9.73 | 1,800 | 19,375 |
| 40 | TR-40-4-1 | TD-1040 | 3,295 | 10.81 | 2,000 | 21,528 |
| 44 | TR-44-4-1 | TD-1044 | 3,625 | 11.89 | 2,200 | 23,681 |
| 48 | TR-48-4-1 | TD-1048 | 3,955 | 12.98 | 2,400 | 25,833 |
| 52 | TR-52-4-1 | TD-1052 | 4,285 | 14.06 | 2,600 | 27,986 |
| 56 | TR-56-4-1 | TD-1056 | 4,615 | 15.14 | 2,800 | 30,139 |
| 60 | TR-60-4-1 | TD-1060 | 4,945 | 16.22 | 3,000 | 32,292 |
| 64 | TR-64-4-1 | TD-1064 | 5,275 | 17.31 | 3,200 | 34,444 |
| 68 | TR-68-4-1 | TD-1068 | 5,605 | 18.39 | 3,400 | 36,597 |
| Double-Sided Connection to Manifold | | | | | | |
| 4 Rows Configuration | | | | | | |
| 72 | TR-72-4-2 | TD-1072 | 5,930 | 19.46 | 3,600 | 38,750 |
| 76 | TR-76-4-2 ³ | TD-1076 | 6,260 | 20.54 | 3,800 | 40,903 |
| 80 | TR-80-4-2 | TD-1080 | 6,590 | 21.62 | 4,000 | 43,055 |
| 84 | TR-84-4-2 ³ | TD-1084 | 6,920 | 22.70 | 4,200 | 45,208 |
| 88 | TR-88-4-2 | TD-1088 | 7,250 | 23.79 | 4,400 | 47,361 |
| 92 | TR-92-4-2 ³ | TD-1092 | 7,580 | 24.87 | 4,600 | 49,514 |
| 96 | TR-96-4-2 | TD-1096 | 7,910 | 25.95 | 4,800 | 51,667 |
| 100 | TR-100-4-2 ³ | TD-1100 | 8,240 | 27.03 | 5,000 | 53,819 |
| 104 | TR-104-4-2 | TD-1104 | 8,570 | 28.12 | 5,200 | 55,972 |
| 108 | TR-108-4-2 ³ | TD-1108 | 8,900 | 29.20 | 5,400 | 58,125 |
| 112 | TR-112-4-2 | TD-1112 | 9,230 | 30.28 | 5,600 | 60,278 |
| 116 | TR-116-4-2 ³ | TD-1116 | 9,560 | 31.36 | 5,800 | 62,430 |
| 120 | TR-120-4-2 | TD-1120 | 9,890 | 32.45 | 6,000 | 64,583 |
| 124 | TR-124-4-2 ³ | TD-1124 | 10,220 | 33.53 | 6,200 | 66,736 |
| 128 | TR-128-4-2 | TD-1128 | 10,550 | 34.61 | 6,400 | 68,889 |
| 132 | TR-132-4-2 ³ | TD-1132 | 10,880 | 35.70 | 6,600 | 71,042 |
| 136 | TR-136-4-2 | TD-1136 | 11,210 | 36.78 | 6,800 | 73,194 |

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).



Have a question? Contact us at:
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