

# DuPont™ IntegraTec™ MB 55

## Modules for Open Platform

(previously dizzer L 0.9 MB 55 Vertical)

### Key Features

#### Proven Multibore™ PES Fibers:

- Exceptional physical strength and chemical resistance.
- High colloidal particulate, bacteria and virus log removal rate.
- Excellent filtration permeability.
- Optional coagulation can enhance the removal of algae and organics.

#### Optimized Module Design:

- Open platform design to adapt with customer built skids.
- Large active filtration area.

### Key Applications

- Municipal drinking water.
- Desalination RO pretreatment.
- Industrial utility water.

This product is designed as a replacement option for alternative UF systems.

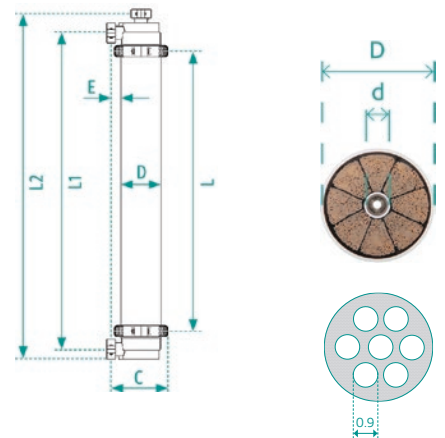


### Module Specification

General	
Part Number	IN-2111
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	55 m <sup>2</sup>	592 ft <sup>2</sup>
Module Length (L)	1,537.5 ± 1.5 mm	60.5 inch
Distance Top / Bottom Feed Port (L1)	1,737.5 ± 1.5 mm	68.4 inch
Length with End Caps (L2)	1,898 ± 3.0 mm	74.7 inch
Module Diameter (D)	220 ± 1.5 mm	8.7 inch
Filtrate Collector Inner Diameter (d)	42.60 mm	1.7 inch
Outer Diameter End Cap Coupling Maximum (C)	312.5 mm	12.3 inch
Port Length (E)	55 ± 1 mm	2.2 inch

Weight and Volume		
Shipping Weight (Module Only)	40 kg	88 lbs.
Weight Empty	40 kg	88 lbs.
Weight Filled	87 kg	192 lbs.
Hold-Up Volume Feed (CIP)	20 L	5.3 gal
Hold-Up Volume Membrane Structure (CIP)	14 L	3.7 gal
Hold-Up Volume Filtrate (CIP)	15 L	4.0 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 <sup>2</sup> h)	135 gfd
Backwash Flow	12.6 m <sup>3</sup> h	55.5 gpm
Operating Limits (Maximum)		
Rate of Temperature Change	5 °C/min	9 °F/min
Inlet Pressure (20 - 40 °C)	3 bar	44 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	140 L/(m <sup>2</sup> h)	82 gfd
Filtration Flow	9.9 m <sup>3</sup> h	43.6 gpm
Backwash Flux	300 L/(m <sup>2</sup> h)	176 gfd
Particle Size	300 µm	
Exposure NaOCl	≤ 250,000 ppm x h (at pH ≥ 9.5)	
Concentration NaOCl	500 ppm	

## 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 [DuPont™ IntegraTec™ Pressurized UF In-Out P Series Modules for Open Platforms Assembly Instructions](#) (Form No. 45-D02231-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. Detailed information is given in 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).



All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. DUPONT ASSUMES NO OBLIGATION OR LIABILITY FOR THE INFORMATION IN THIS DOCUMENT. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from infringement of any patent or trademark owned by DuPont or others is to be inferred.