



# DuPont<sup>™</sup> IntegraTec<sup>™</sup> MB 55 H

# Modules Installed in Horizontal Pressure Vessels

(previously dizzer L 0.9 MB 55 Horizontal)

## **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:

• Ideal design to integrate in horizontal pressure vessels.

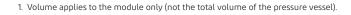
## **Key Applications**

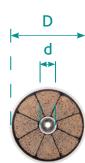
- · Municipal drinking water.
- Desalination RO pretreatment.
- · Industrial utility water.
- Designed as a replacement option in alternative UF systems.

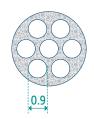


# **Module Specification**

General			
Part Number / GMID	IN-1111 / 12071524 (incl	IN-1111 / 12071524 (includes EP-0115 / 12070222)	
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 ft²	
Module Length	1,537.5 mm	60.5 inch	
Module Diameter (D)	220 mm	8.7 inch	
Filtrate Collector Inner Diameter (d)	42.6 mm	1.7 inch	
Maximum Insertion Depth of Interconnectors	50 mm	2.0 inch	
Weight and Volume			
Shipping Weight (Module Only)	31 kg	68 lbs.	
Weight Empty	31 kg	68 lbs.	
Weight Filled	71 kg	157 lbs.	
Hold-Up Volume Feed (CIP) <sup>1</sup>	13 L	3.4 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/(m²h)	135 gfd	
Backwash Flow	12.6 m³h	55.5 gpm	
Operating Limits (Maximum)			
Rate of Temperature Change	5 °C/min	9 °F/min	
Inlet Pressure (20 - 40 °C)	Please refer to the pressure vessel manufact	Please refer to the pressure vessel manufacturer.	
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/(m²h)	82 gfd	
Filtration Flow	9.9 m³h	43.6 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		

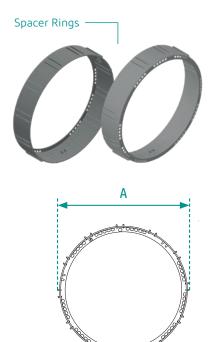
# Horizontal Connecting Kit for DuPont™ IntegraTec™ MB 55 H

## Characteristics

Kit Part Number / GMID	EP-0115 / 12070222	
Shipping weight	240 g	8.47 oz

Kit Content	Part number / GMID	Piece
Interconnector Set	EP-0106 / 12070214	1
Spacer Ring	KT-0178 / 12070623	2

Spacer Ring Specifications			
Material	Polypropylene whit	e	
Diameter External (A)	233.4 mm	9.19 inch	
Height (B)	46.0 mm	1.81 inch	
Weight	70 g	2.47 oz	



## Standard Interconnector Set

#### Characteristics

Set Content	Piece
Interconnector	1
O-Rings <sup>1</sup>	4

Interconnector Part Number / GMID	EP-1106 / 120702	32
Shipping Weight	100 g	2.81 oz

#### **Specifications**

Interconnector		
Material	PVC-U white	
Total Length (L)	109 mm	4.29 inch
Outer Diameter (D)	41.3 mm	1.62 inch
Inner Diameter (d) <sup>2</sup>	32.6 mm	1.28 inch
Depth of Insertion into Module (A)	50 mm	1.97 inch
Distance to Outer O-Ring (B)	8 mm	0.32 inch
Width of Stopper (C)	9 mm	0.35 inch
Excess Radius of Stopper (E)	4 mm	0.16 inch

O-Rings			
Material	Peroxide - cure	Peroxide - cured EPDM	
Thickness	4 mm	0.16 inch	
Inner Diamter	35 mm	1.38 inch	

- 1. Preassembled on Interconnector.
- 2. Only valid for Interconnector EP-0106.

# **Optional Solid Interconnector Set**

Depending on pressure vessel configuration, a solid interconnector can be ordered.

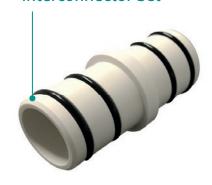
## Characteristics

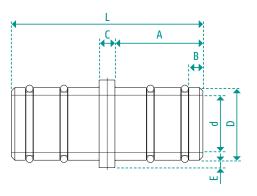
Set Content	Piece
Interconnector	1
O-Rings	4

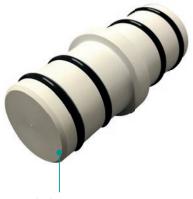
Interconnector Part Number	EP-0106 / 12070214	
Shipping Weight	210 g	7.41 oz

All other specifications are identical with the Standard Interconnector.

# Standard Interconnector Set







Solid Interconnector Set

#### 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 <u>DuPont™ IntegraTec™</u>
  <u>Pressurized UF In-Out I Series Assembly Manual</u> (Form No. 45-D02563-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 <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 I Series Process Requirements for</u> Horizontal Modules (Form No. 45-D02233-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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