



Product Data Sheet
I series | Integrated PES UF Module

LENNTECH
WATER TREATMENT SOLUTIONS



DuPont™ IntegraTec™ MB 55 H

Modules Installed in Horizontal Pressure Vessels

(previously dizzyer 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.

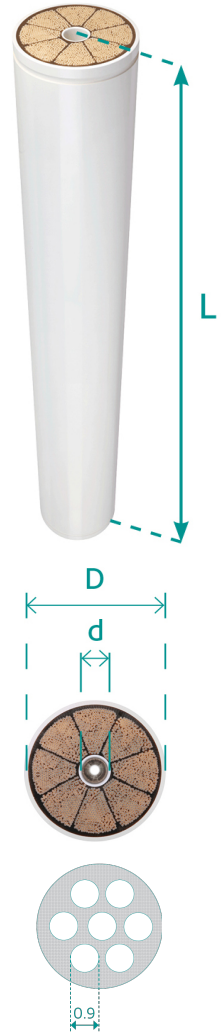
Key Applications

- Municipal drinking water.
- Desalination RO pretreatment.
- Industrial utility water.
- Ideal to replace horizontal filtration systems.

Module Specification

General		
Part Number	IN-1111 (includes EP-0115)	
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 m²	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 (Clean-In-Place = CIP) ¹	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

1. Volume applies to the module only (not the total volume of the pressure vessel).



powered by



Suggested Operating Conditions

General		Details
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating pH	3 - 11	
Cleaning pH	1 - 13	
Typical Filtration Trans-Membrane Pressure (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 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	

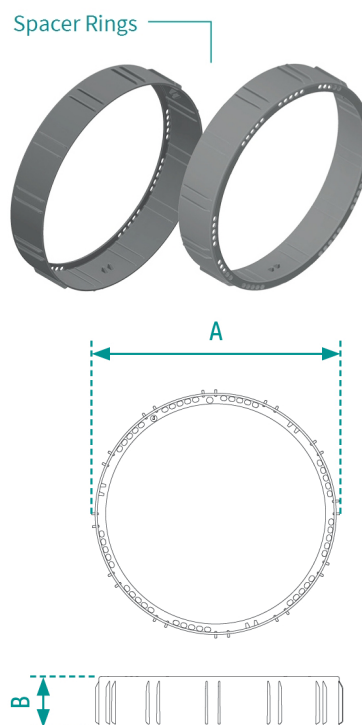
Horizontal Connecting Kit for DuPont™ IntegraTec™ MB 55 H

Characteristics

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

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

Spacer Ring Specifications		
Material	Polypropylene white	
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 ¹	4

Interconnector Part Number	EP-0106	
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) ²	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 - cured EPDM	
Thickness	4 mm	0.16 inch
Inner Diameter	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.

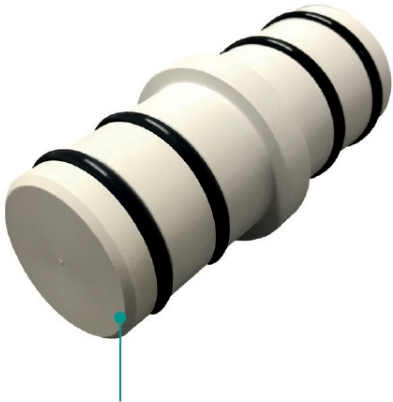
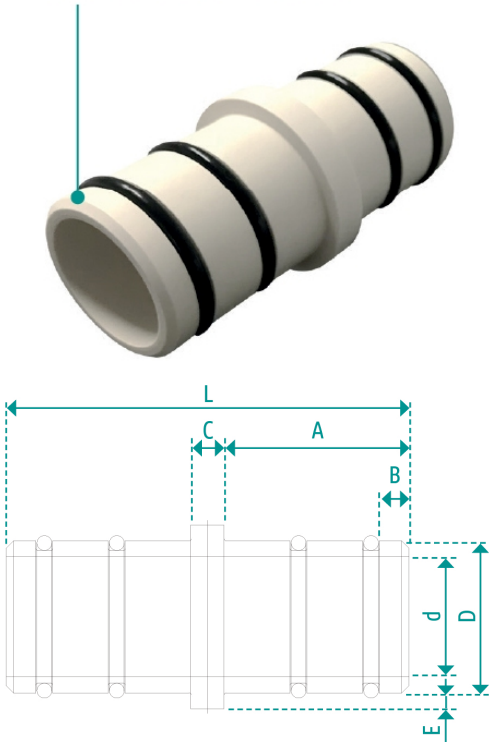
Characteristics

Set Content	Piece
Interconnector	1
O-Rings	4

Interconnector Part Number	EP-1106	
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 [DuPont™ IntegraTec™ Pressurized UF In-Out I Series Assembly Manual](#) (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 [DuPont™ IntegraTec™ Pressurized UF In-Out 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 I Series Process Requirements for 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 [DuPont™ IntegraTec™ Pressurized UF In-Out Module Rinsing Procedure](#) (Form No. 45-D02947-en).



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