



# DuPont™ IntegraTec™ MB PRO 95

# Modules for Open Platform

## **Key Features**

- Innovative Multibore™ PRO 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 fit customer built skids.
  - Enhanced active filtration area to minimize footprint.
  - Robust materials for long lifetime.
  - Easy installation and low maintenance.
  - All wetted parts corrosion free.

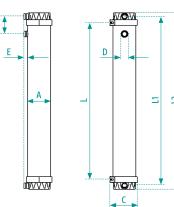
### **Key Applications**

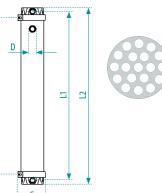
- Municipal drinking water.
- Desalination RO pretreatment.
- Ideal for large systems.



# **Module Specification**

General		
Part Number	IN-0122	
Mode of Filtration	In-Out Pressurized	
Membrane Type	Multibore™ PRO	
Membrane Material	PESm	
Nominal Membrane Pore Size	0.02 μm	
Module Operating Process	Dead-end	
Housing Material	PVC-U, white	
End Cap Material	PVC-U, grey	
End Cap Coupling Material	SS (EPDM sealing)	
Dimensions		
Active Membrane Area	95 m²	1,023 ft²
Module Length (L)	1,720 ± 1.5 mm	67.7 inch
Distance Top / Bottom Feed Port (L1)	1,834 ± 3.0 mm	72.2 inch
Length with End Caps (L2)	1,914 ± 3.0 mm	75.4 inch
Module Diameter (A)	250 ± 1.5 mm	9.8 inch
Distance Feed Top Port - Filtrate Port (B)	190 ± 1.5	7.5 inch
Outer Diameter End Cap Coupling Maximum (C)	295 mm	11.6 inch
Protruding Part of the Port (E)	40 ± 1 mm	1.6 inch
Filtrate / Backwash Port (D)	50.8 mm	2 inch
Weight and Volume		
Shipping Weight	58 kg	128 lbs.
Weight Empty	58 kg	128 lbs.
Weight Filled	110 kg	243 lbs.
Hold-Up Volume Feed (CIP)	22 L	5.7 gal
Hold-Up Volume Membrane Structure (CIP)	18 L	4.8 gal
Hold-Up Volume Filtrate (CIP)	21 L	5.4 gal







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#### **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	21.8 m³h	96.0 gpm	
Operating Limits (Maximum)			
Rate of Temperature Change	5 °C/min	9 °F/min	
Inlet Pressure (20 - 40 °C)	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	140 L/(m²h)	82 gfd	
Filtration Flow	13.3 m³h	58.6 gpm	
Backwash Flux	250 L/(m²h)	147 gfd	
Particle Size	230 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 latest version of the <u>DuPont™</u>
   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 <u>DuPont™ IntegraTec™ Pressurized UF In-Out Module</u> <u>Preservation Instruction Manual (Form No. 45-D02946-en).</u>

#### **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 In-Out Module Rinsing Procedure</u>
  (Form No. 45-D02947-en).



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