



# DuPont™ IntegraTec™ N 42 - L20N v2

Pressurized and Submerged Module

## Key Features

### Proven N PVDF Fibers:

- Improved chemical and abrasion resistance.
- Optimized dimensions to maximize packing density with high solid tolerance.

### Optimized Module Design:

- Unique double ended filtration submerged design with CSII rack
- Highest packing density with high solid loading tolerance
- High backwash efficiency with Low energy consumption
- Ease of use operation and in-place maintenance
- Reduced Capital with less civil & construction cost
- Optimized design to suit large size installations
- High tolerance for algae and organic with inline coagulation

## Key Applications

New and retrofit submerged filtration of high solids water in:

- Municipal drinking water.
- Secondary effluent.
- Desalination RO pre-treatment.



## Module Specification

### General

Part number / GMID	12038594
Mode of Filtration	Out-In Submerged
Membrane Type	Hollow fiber
Membrane Material	PVDF (Polyvinylidene Fluoride)
Nominal Membrane Pore Size	0.04
Module Operating Process	Deadend
Other Wetted Module Components	Polyurethane, Polyethylene, Polyamide, EPDM

### Dimensions

Active Membrane Area	42.1 m <sup>2</sup>	453 ft <sup>2</sup>
Module Length (Overall) (L)	1,800 mm	70.9 inch
Module Diameter (D)	119 mm	4.7 inch

### Weight and Volume

Shipping Weight	12 kg	26 lbs.
Weight Empty	12 kg	26 lbs.
Hold-Up Volume Feed (Clean-In-Place = CIP)	Depends on tank size	
Hold-Up Volume Filtrate (CIP)	Depends on rack/piping sizes	



## Suggested Operating Conditions (pressurized)

General	Details	
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating pH	6 - 9 <sup>1</sup>	
Cleaning pH	2 - 11 <sup>2</sup>	
Typical Filtration Trans-Membrane Pressure (TMP)	0.1 - 1.4 bar	1.5 - 20 psi
Typical Backwash TMP	0.3 - 1.4 bar	5 - 20 psi
Backwash Type	Filtrate backwash with air scouring	
Backwash Flux	105 L/(m <sup>2</sup> h)	62 gfd
Backwash Flow	4 m <sup>3</sup> h	17.6 gpm
Operating Limits (Maximum)		
Rate of Temperature Change	n.a.	n.a.
Inlet Pressure	5 bar	75 psi
Rate of Pressure Change	0.5 bar / 7.25 psi (feed side only) , Higher permitted on filtrate side	
Filtration TMP	1.4 bar	20 psi
Backwash TMP	1.4 bar	20 psi
Filtration Flux	120 L/(m <sup>2</sup> h)	71 gfd
Filtration Flow	5.1 m <sup>3</sup> h	22.2 gpm
Backwash Flux	105 L/(m <sup>2</sup> h)	62 gfd
Particle Size	300 µm	
Exposure NaOCl	≤ 1,250,000 ppm x h (at pH ≥ 6.5, 40 °C)	
Concentration NaOCl	1,500 ppm	

## Suggested Operating Conditions (submerged)

General	Details	
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating pH	6 - 9 <sup>1</sup>	
Cleaning pH	2 - 11 <sup>2</sup>	
Typical Filtration Trans-Membrane Pressure (TMP)	0.1 - 0.85 bar	1.5 - 12.5 psi
Typical Backwash TMP	0.3 - 0.85 bar	5 - 12.5 psi
Backwash Type	Filtrate backwash with air scouring	
Backwash Flux	105 L/(m <sup>2</sup> h)	62 gfd
Backwash Flow	4 m <sup>3</sup> h	17.6 gpm
Operating Limits (Maximum)		
Rate of Temperature Change	n.a.	n.a.
Inlet Pressure	0.85 bar	123 psi
Rate of Pressure Change	n.a.	n.a.
Filtration TMP	0.85 bar	12.5 psi
Backwash TMP	0.85 bar	12.5 psi
Filtration Flux	102 L/(m <sup>2</sup> h)	60 gfd
Filtration Flow	4.3 m <sup>3</sup> h	18.9 gpm
Backwash Flux	105 L/(m <sup>2</sup> h)	62 gfd
Particle Size	300 µm	
Exposure NaOCl	≤ 1,250,000 ppm x h (at pH ≥ 6.5, 40 °C)	
Concentration NaOCl	1,500 ppm	

1. Exposure to chloramines is not recommended in feeds below 6.5 pH.
2. Initial flushing of new modules followed by a cleaning cycle is recommended prior to use. Please refer to Memcor technical bulletin "Guidelines for flushing new Memcor® 'N' Series Modules" for further details.
3. Please contact your sales representative and request the latest version of the manual

## 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.
- Please refer to the [DuPont™ IntegraTec™ PVDF-UF Out-In S Series CSII MemRack™ Assembly & Maintenance Guide](#) (Form No. 45-D04540-en)<sup>3</sup>
- If operating limits and guidelines given in this bulletin are not strictly followed, any warranty will be null and void.

## Regulatory Note

- Certified drinking water modules require specific conditioning procedures prior to producing potable water. For operating parameters, please refer to [DuPont™ IntegraTec™ PVDF-UF Out-In S Series CSII MemRack™ Operating & Maintenance Guide](#) (Form No. 45-D04541-en).<sup>3</sup>
- Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use.



Have a question? Contact us at:  
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