

# DuPont™ IntegraTec™ XP 51 IP

## Modules for Rack Solution

(previously DuPont™ IntegraPac™ IPD-51XP)



### Key Features

- Proven XP™ Hydrophilic PVDF Fiber:
  - Superior fouling and chlorine resistance.
  - High colloidal particulate, bacteria, and virus log removal rate.
  - Excellent filtration permeability.
  - Easy cleaning and wettability.
- Optimized Module Design:
  - Innovative end cap to direct coupling of modules in IP skids with simple assembly and scalability.
  - Short module design to suit height restricted or containerized installation.
  - High operation recovery with high air scouring tolerance.
  - Reduced chemical consumption with maintenance cleanings protocol.
  - Robust materials for long lifetime.
  - Easy installation and low maintenance.

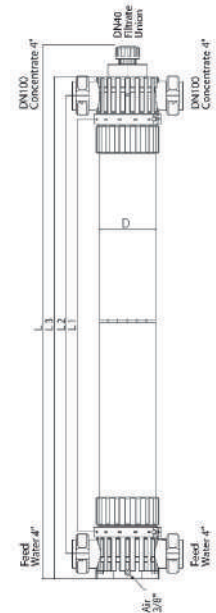
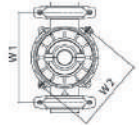
### Key Applications

- High recovery, height restricted, or containerized filtration in:
  - Municipal drinking water.
  - Industrial utility water.
  - Industrial wastewater reuse.
  - Municipal wastewater filtration.
  - RO pretreatment.



## Module Specification

General		
Part No / GMID	12091627	
Mode of Filtration	Out-In Pressurized	
Membrane Type	Hollow fiber	
Membrane Material	PVDF (Polyvinylidene Fluoride)	
Membrane Pore Size	0.03 μm	
Module Operating Process	Dead-end	
Other Wetted Module Components	Polyurethane, uPVC, EPDM, and ABS	
Dimensions		
Active Membrane Area	51 m <sup>2</sup>	549 ft <sup>2</sup>
Module Length Overall (L)	1,988 ± 3.0 mm	78.3 ± 0.1 inch
Module Length (L3)	1,864 ± 3.0 mm	73.4 ± 0.1 inch
Module Length (L2)	1,689 ± 3.0 mm	66.5 ± 0.1 inch
Module Length (L1)	1,500 ± 3.0 mm	59.1 ± 0.1 inch
Module Diameter (D)	225 mm	8.9 inch
Module Width (W1)	360 mm	14.2 inch
Module Width (W2)	342 mm	13.5 inch
Weight and Volume		
Shipping Weight	69 kg	152 lbs.
Weight Empty	53 kg	117 lbs.
Weight Filled	102 kg	225 lbs.
Hold-Up Volume Feed (Clean-In-Place = CIP)	32 L	8.5 gal
Hold-Up Volume Membrane Structure (CIP)	9 L	2.4 gal
Hold-Up Volume Filtrate (CIP)	9 L	2.4 gal



## Suggested Operating Conditions

General	Details	
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating pH	2 - 11	
Cleaning pH	2 - 12	
Typical Filtration Trans-Membrane Pressure (TMP)	0.4 - 1.5 bar	5.8 - 21.8 psi
Typical Backwash TMP	0.6 - 2.0 bar	8.7 - 29.0 psi
Backwash Type	Air scour with liquid backwash	
Backwash Flux	100 L/(m <sup>2</sup> h)	58.8 gfd
Backwash Flow	5.1 m <sup>3</sup> h	22.4 gpm
Operating Limits (Maximum)		
Rate of Pressure Change	0.5 bar/sec	7.3 psi/sec
Inlet Pressure	6.25 bar (at 20 °C)	90.7 psi
Filtration TMP	2.1 bar	30.5 psi
Backwash TMP	2.5 bar	36 psi
Filtration Flux	110 L/(m <sup>2</sup> h)	64.5 gfd
Filtration Flow	5.6 m <sup>3</sup> h	24.8 gpm
Backwash Flux	120 L/(m <sup>2</sup> h)	70.6 gfd
Particle Size	300 µm	
Exposure NaOCl	≤ 1,500,000 ppm x h	
Recommended max. instantaneous exposure NaOCl	2,000 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 [DuPont™ IntegraTec™ PVDF-UF Out-In P Series IntegraPac™ Rack Assembly Manual](#) (Form No. 45-D01776-en).
- If operating limits and guidelines given in this document are not strictly followed, any warranty will be null and void.
- To control biological growth during extended system shutdowns, storage solution has to be introduced into the membrane modules.

## Regulatory Note

- Certified drinking water modules require specific conditioning procedures prior to producing potable water. For operating parameters, please refer to the [DuPont™ IntegraTec™ P Series PVDF-UF Out-In Process and Design Manual](#) (Form No. 45-D00874-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™ PVDF-UF Out-In P Series IntegraPac™ Rack Assembly Manual](#) (Form No. 45-D01776-en).



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