

Product Data Sheet

P series Pressurized PVDF UF Module



DuPont™ IntegraTec™ XP 51 IP IG

Modules for Rack Solution

(previously DuPont™ IntegraPac™ IP-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.

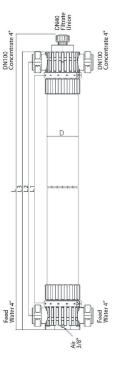
Key Applications

- 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	12091626	12091626	
Mode of Filtration	Out-In Pressurized	Out-In Pressurized	
Membrane Type	Hollow fiber	Hollow fiber	
Membrane Material	PVDF (Polyvinylider	PVDF (Polyvinylidene Fluoride)	
Membrane Pore Size	0.03 µm	0.03 μm	
Module Operating Process	Dead-end	Dead-end	
Other Wetted Module Components	Polyurethane, uPVC	Polyurethane, uPVC, EPDM, and ABS	
Dimensions			
Active Membrane Area	51 m²	549 ft²	
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	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/(m²h)	58.8 gfd	
Backwash Flow	5.1 m³h	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/(m²h)	64.5 gfd	
Filtration Flow	5.6 m³h	24.8 gpm	
Backwash Flux	120 L/(m²h)	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 <u>DuPont™</u> 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 <u>DuPont™ IntegraTec™ P Series</u> <u>PVDF-UF Out-In Process and Design Manual</u> (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 <u>DuPont™</u>
 <u>IntegraTec™ PVDF-UF Out-In P Series IntegraPac™ Rack</u>
 <u>Assembly Manual</u> (Form No. 45-D01776-en).



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