**Product Data Sheet**
P series | Pressurized PVDF UF Module

# 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:**

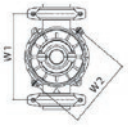
- Innovative end cap to direct coupling of modules in IP skids with simple assembly and scalability.
- Short module design to suit height restricted or containerized installation.
- High operation recovery with high air scouring tolerance.
- Reduced chemical consumption with maintenance cleanings protocol.
- Robust materials for long lifetime.
- Easy installation and low maintenance.

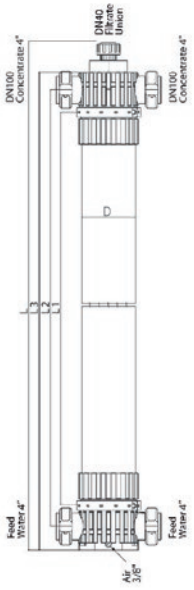
### Key Applications

**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 m² | 549 ft² |
| Module Length Overall (L) | 1,991 ± 3.0 mm | 78.4 ± 0.1 inch |
| Module Length (L1) | 1,500 ± 1.5 mm | 59.1 ± 0.1 inch |
| Module Length (L2) | 1,692 ± 3.0 mm | 66.6 ± 0.1 inch |
| Module Length (L3) | 1,867 ± 3.0 mm | 73.5 ± 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 |

Certified to NSF/ANSI/CAN 61

Form No. 45-D01161-en, Rev. 7
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## 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/(m²h) | 58.8 gfd |
| Backwash Flow | 5.1 m³/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/(m²h) | 64.5 gfd |
| Filtration Flow | 5.6 m³/h | 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 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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