



# DuPont™ IntegraTec™ XP 77 IP IG

## Modules for Rack Solution

(previously DuPont™ IntegraPac™ IP-77XP)



### 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.
  - High active filtration area to maximize productivity.
  - 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.

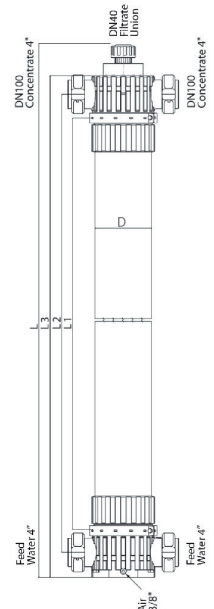
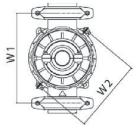
### Key Applications

- High recovery and large size filtration in:
  - Industrial utility water.
  - Industrial wastewater reuse.
  - Municipal wastewater filtration.
  - RO pretreatment.



### Module Specification

| General                                    |                                   |                     |
|--|-----------------------------------|---------------------|
| Part No / GMID                             | 12091628                          |                     |
| 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                       | 77 m <sup>2</sup>                 | 829 ft <sup>2</sup> |
| Module Length Overall (L)                  | 2,488 ± 3.0 mm                    | 98.0 ± 0.1 inch     |
| Module Length (L3)                         | 2,364 ± 3.0 mm                    | 93.1 ± 0.1 inch     |
| Module Length (L2)                         | 2,189 ± 3.0 mm                    | 86.2 ± 0.1 inch     |
| Module Length (L1)                         | 2,000 ± 3.0 mm                    | 78.7 ± 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                            | 81 kg                             | 178 lbs.            |
| Weight Empty                               | 66 kg                             | 146 lbs.            |
| Weight Filled                              | 119 kg                            | 262 lbs.            |
| Hold-Up Volume Feed (Clean-In-Place = CIP) | 38 L                              | 10.0 gal            |
| Hold-Up Volume Membrane Structure (CIP)    | 14 L                              | 3.7 gal             |
| Hold-Up Volume Filtrate (CIP)              | 12 L                              | 3.2 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                                    | 7.7 m <sup>3</sup> h           | 34.0 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                                  | 8.5 m <sup>3</sup> h           | 37.4 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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