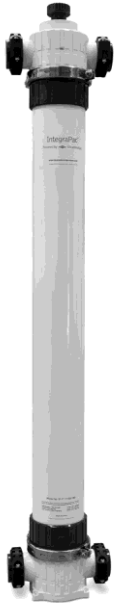




DOW IntegraPac™ Ultrafiltration Modules for Potable Use

Model IPD-51



The DOW IntegraPac™ Ultrafiltration IPD-51 modules are made from high strength, hollow fiber membranes engineered to reduce design and fabrication requirements with features and benefits including:

- 0.03 μm pore size which facilitates removal of bacteria, viruses, and particulates; Up to 5.90 log removal of bacteria, up to a 2.54 log removal of viruses, and <2.5 SDI filtrate quality
- PVDF polymeric hollow fibers for high strength and chemical resistance allows long membrane life
- Outside-in flow configuration for high tolerance to feed solids that help reduce the need for pretreatment processes
- Innovative end-caps facilitate direct coupling of modules, eliminating the need for piping manifolds
- Tested and Certified by NSF International under NSF/ANSI standard 61 ensuring safe use in drinking water applications

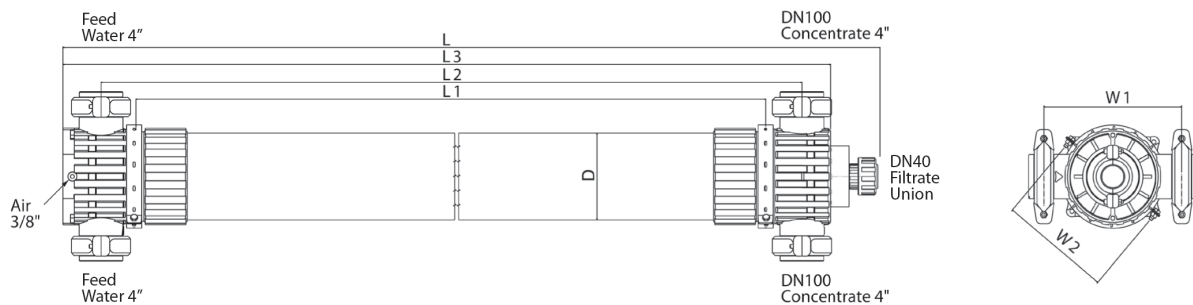


Due to its direct module coupling resulting in a compact design, these modules are an excellent choice for systems requiring a small footprint. The shorter IPD-51 module is suitable for applications with constraints in head space.

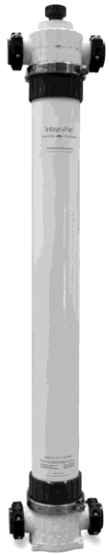
DOW IntegraPac™ Ultrafiltration IPD-51 modules can be used on a wide variety of water sources, such as groundwater, surface water, and seawater to produce safe and healthy drinking water.

DOW IntegraPac™ Ultrafiltration Module Specifications

Model	Type	Part Number	Membrane Area		Weight (empty/water filled)		Hold-Up Volume	
			m ²	ft ²	kg	lbs	liters	gallons
IPD-51	NSF/ANSI 61 Drinking Water	11033710	51	549	53/102	117/225	49	13



Model	Units	Length				Diameter	Width	
		L	L1	L2	L3	D	W1	W2
IPD-51	SI (mm)	1988	1500	1689	1864	225	360	342
	US (inch)	78.3	59.1	66.5	73.4	8.9	14.2	13.5



Operating Parameters

	SI Units	US Units
IPD-51 Filtrate Flux @25°C	50-115 l/m ² /hr	29 - 68 gfd
pH, Operating	2-11	2-11
pH, Cleaning	2-12	2-12
Temperature	1-40°C	34 - 104°F
Max. Inlet Module Pressure (@20°C)	6.25 bar	93.75 psi
Max. Operating TMP	2.1 bar	30 psi
Max. Operating Air Scour Flow	12 Nm ³ /hr	7.1 scfm
Max. Backwash Pressure	2.5 bar	36 psi
NaOCl (max)		2000 mg/L
TSS (max)		100 mg/L
Turbidity (max)		300 NTU
Particle Size (max)		300 µm
Flow Configuration		Outside-in
Expected Filtrate Turbidity		≤0.1 NTU
Expected Filtrate SDI		≤2.5

Important Information

Proper start-up of an ultrafiltration system is essential to prepare the membranes for operating service and to help prevent membrane damage. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved. Before initiating system start-up procedures, membrane pretreatment, installation of the membrane modules, instrument calibration and other system checks should be completed. Please refer to the product technical manual.

Operational Guidelines

Avoid any abrupt pressure variations during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. Flush the ultrafiltration system to remove shipping solution prior to start-up. Remove residual air from the system prior to start-up. Manually start the equipment. Target a filtrate flow of 60% of design during initial operations. Depending on the application, filtrate obtained from initial operations should be discarded. Please refer to the product manual.

General Information

If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void. Refer to the Dow Ultrafiltration Module Limited Warranty for more detail.

To prevent biological growth during extended system shutdowns, it is recommended that storage solution be injected into the membrane modules. Please refer to the product technical manual.

Regulatory Note

NSF/ANSI 61 certified drinking water modules require specific conditioning procedures prior to producing potable water. Please refer to the product technical manual flushing section for specific procedures. Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use and sales.

For more information about DOW IntegraPac™ ultrafiltration, call the Dow Water & Process Solutions business:

North America: 1-800-447-4369

South Africa: 0800 99 5078

Latin America: +55 11-5188-9222

Pacific: +800 7776-7776

Europe: 800-3-694-6367

China: +400 889-0789

Italy: 800-783-825

Or visit our website at www.dowwaterandprocess.com/integrpac

Warning: The use of this product does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

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