



Flat Sheet Membranes

UFX-pHt Series

The membranes are based on a unique construction of polypropylene (PP) support material. All the materials used in production of these membranes comply with FDA regulations (CFR) Title 21, and the membranes are thus suitable for use within food and pharmaceutical processing applications.

All Alfa Laval flat sheet membranes will be delivered with necessary lock and passage rings.

Designation	Process	MWCO	Characteristics
UFX10 pHt	UF	10,000	Polysulphone permanently hydrophilic

Recommended operation limits

Production

pH range	1-13
Pressure - bar	1-15
Temperature - °C	0-75

Cleaning (3 hours per day)*

pH range	1-13
Pressure - bar	1-5
Temperature, °C	0-75
NaOH, %	0.1-0.5
Na-EDTA, %	0.1-1.0
Mineral acid, %	0.1-0.5
Citric acid, %	0.1-1.0

Sanitation (1 hour per day)

Treated hot water water, only feed pump at 1 bar, °C	80
Chlorine (ppm) at 50 °C and pH 10	< 200
Hydrogen peroxide (ppm) at 25 °C	< 1000

* Please consult the Alfa Laval cleaning description/ water quality recommendation.

Note: The use of oxidation agents and similar chemicals might influence the actual membrane performance over time.

Standard dimensions and part number

Standard sheets 20 x 20 cm	Alfa Laval Module M10	Alfa Laval Module M20	Alfa Laval Module M37	Alfa Laval Module M38	Alfa Laval Module M39
523519	524252	522578	523478	522285	522330

Other flat sheet sizes may be available, please contact Alfa Laval.



Important information

New membranes must be cleaned prior to first use. The cleaning procedure should be in accordance with the instructions provided in the Alfa Laval cleaning description for the membrane type concerned. The customer is fully responsible for the effects of that any incompatible chemicals may have on the membranes.

- After initial wetting, the membranes must be kept moist at all times.
- If the operating specifications provided in this product description are not strictly followed, the limited warranty will be null and void.
- To prevent biological growth during system shutdowns, Alfa Laval recommends that membranes be immersed in a protective solution.
- Permeate-side back pressure should be avoided at all times.

Operation guidelines

Avoid any abrupt pressure or cross-flow variations on the membrane modules during start-up, shutdown, cleaning or other sequences, in order to prevent possible membrane damage.

Alfa Laval recommends the following start-up procedure from standstill to operating condition:

- The non-pressurized plant should be refilled with water.
- Feed pressure should be gradually increased over a 30–60 second time scale.
- Before initiating cross-flow at high permeate flux conditions (e.g. start-up at high temperatures), the set feed pressure should be maintained for 5–10 minutes.
- Cross-flow velocity at the set operating point should be gradually achieved over a period of 15–20 seconds.
- Temperature variations should be implemented gradually over a period of 3–5 minutes.

Alfa Laval reserves the right to change specifications without prior notification. ALFA LAVAL is a trademark registered and owned by Alfa Laval Corporate AB.

ESE00768EN 1203

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How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.