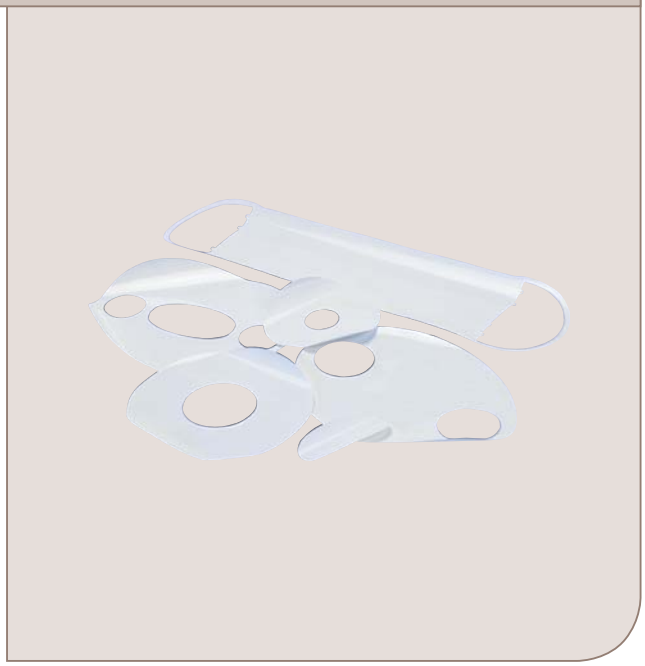
Flat Sheet Microfiltration Membranes

MFP Series



The range of fluoro polymer microfiltration membranes from Alfa Laval covers a broad spectrum of pore sizes and flux properties. The MFP membranes are based on a unique construction on polypropylene (PP) support material that provides optimum cleaning conditions.

Alfa Laval flat sheet membranes are available by the metre, as standard sheets (size 20 x 20 cm), and of course in Alfa Laval plate-and-frame module configurations.

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

Designation	Characteristics	Pore size*
MFP2	Fluoro polymer	0.2 µm
MFP5	Fluoro polymer	0.5 µm
MFP8	Fluoro polymer	0.8 µm

* Note: Pore size measured using standard bubble point method.

All components comply with EU Regulation (EC) 1935/2004 and Commission Directive 2002/72/EC as well as FDA regulations (CFR), Title 21.

Membrane designation: Alfa Laval MFP 2		
Alfa Laval MFP	=	Membrane type
2	=	Pore size code

Recommended operation limits

Production	MFP
pH range (25°C)	1-11
Typical operating pressure, bar	1-3
Temperature, °C	5-60

Cleaning (2-4 hours per day)	MFP
Pressure, bar	1-3
Temperature, °C	5-65
pH range (25°C)	1-11.5

Sanitation (½ hour per day)	MFP
Treated hot water at 0.2 bar, °C	80
Chlorine (ppm) at 50°C and pH 10 - 11	<500
Hydrogen peroxide (ppm) at 25°C	<1000

Membrane type	Standard sheets 20 x 20 cm	Alfa Laval Module M10	Alfa Laval Module M20	Alfa Laval Module M39
MFP2	526084	526083	525485	526916
MFP5	526856	528010	526006	525424
MFP8	531938	531939	531940	531616

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 in the Alfa Laval cleaning description for the membrane type concerned.
- The customer is fully responsible for the effects that any incompatible chemicals may have on the membrane.
- 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 should be immersed in a protective solution.
- Avoid permeate-side back pressure at all times.
- Alfa Laval recommends using original lock rings/strips for installation of the membrane sheet on the plates.

Operation guidelines

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

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

- The unpressurized plant should be refilled with water.
- Feed pressure should be gradually increased over a 30–60 second time scale.
- Before initiating cross-flow velocity across the plate-and-frame modules, the feed pressure should be maintained for 1-5 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.

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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.