Sanitary Membrane Overview (RO, NF, UF, MF)

High performance membrane for food, dairy, beverage and other sanitary applications

Parker custom designs and manufactures a broad range of membranes and elements of various molecular weight cutoffs and polymeric materials. The membranes are designed for use in Reverse Osmosis (RO), Nanofiltration (NF), Ultrafiltration (UF), and Microfiltration (MF) cross-flow applications.

A broad range of membrane formulations allows for flexibility in the design and operation of new and existing applications.

Contact Information

Parker-Hannifin Corporation
domnick hunter
Process Filtration - North America
2340 Eastman Avenue
Oxnard, California, USA 93030

toll free +1 877 784 2234
phone +1 805 604 3400
fax +1 805 604 3401
dhpsales.na@parker.com

www.parker.com/sanitarymembranes

Benefits

Reverse Osmosis (RO)
- High salt rejection
- Superior performance

Nanofiltration (NF)
- TFC Membrane
- >99% lactose rejection

Ultrafiltration (UF)
- High protein rejection
- Extended life
- Available in PES & PVDF

Microfiltration (MF)
- 0.3 & 0.5 micron ratings
- Resistant to oxidizers

Applications

Reverse Osmosis (RO)
- Condensate polishing
- Skim milk concentration
- Sweet/acid whey concentration

Nanofiltration (NF)
- Blood plasma concentration
- Sweet/acid whey concentration

Ultrafiltration (UF)
- Whole milk concentration
- Plasma fractionation
- High protein concentrate

Microfiltration (MF)
- Fat reduction in whey
- Concentration of cheese milk
- Milk protein separation

ENGINEERING YOUR SUCCESS.

Sanitary Membrane Overview

Reverse Osmosis (RO)

TYPE	MATERIAL	BACKING MATERIAL	pH RANGE* (CONTINUOUS)
RO2	Thin Film Composite	Polyester	3-10
RO3	Thin Film Composite	Polyester	3-10

*Consult Membrane Specification Sheet for cleaning guidelines

Nanofiltration (NF)

TYPE	MATERIAL	BACKING MATERIAL	pH RANGE* (CONTINUOUS)
ATF	Thin Film Composite	Polyester	3-10
NFA	Thin Film Composite	Polyester	3-10

*Consult Membrane Specification Sheet for cleaning guidelines

Ultrafiltration (UF)

TYPE	MATERIAL	BACKING MATERIAL	pH RANGE* (CONTINUOUS)	NOMINAL MWCO**
AFB	Polysulfone (PS)	Polypropylene	3-10	40,000
AFD	Polysulfone (PS)	Polyester	3-10	40,000
FD	Polyvinylidene fluoride (PVDF)	Polyester	3-10	30,000
FE	Polyvinylidene fluoride (PVDF)	Polyester	3-10	40,000
FF	Polyvinylidene fluoride (PVDF)	Polyester	3-10	100,000
FG	Polyvinylidene fluoride (PVDF)	Polyester	3-10	500,000
SB	Polyethersulfone (PES)	Polyester	3-10	5,000
SBA	Polyethersulfone (PES)	Polypropylene	3-12	5,000
SD	Polyethersulfone (PES)	Polyester	3-10	10,000
SDA	Polyethersulfone (PES)	Polypropylene	3-12	10,000
SF	Polyethersulfone (PES)	Polyester	3-10	20,000

*Consult Membrane Specification Sheet for cleaning guidelines
**The performance of UF membrane is dependent upon various process parameters. The nominal MWCOs specified are a relative guide to the membranes' rating. For a specific application, please consult with a technical representative.

Microfiltration (MF)

TYPE	MATERIAL	BACKING MATERIAL	pH RANGE* (CONTINUOUS)	NOMINAL RATING (µm)**
FG	Polyvinylidene fluoride (PVDF)	Polyester	2-10	0.3
FH	Polyvinylidene fluoride (PVDF)	Polyester	2-10	0.5

*Consult Membrane Specification Sheet for cleaning guidelines
**The performance of MF membrane is dependent upon various process parameters. The nominal (µm) specified are a relative guide to a membrane's rating. For a specific application, please consult with a technical representative.

Parker domnick hunter

ENGINEERING YOUR SUCCESS.