

PROFLUX (Ultra filtration)

Description

PROFLUX filters utilize ultra PES capillary membrane which provides excellent strength and controlled performance conditions. The specific layers through the wall of the membrane define the performance profile. Ultra PES has a distinctive 3-layer morphology. The separation layer on the inside of the membrane controls the filtration performance.

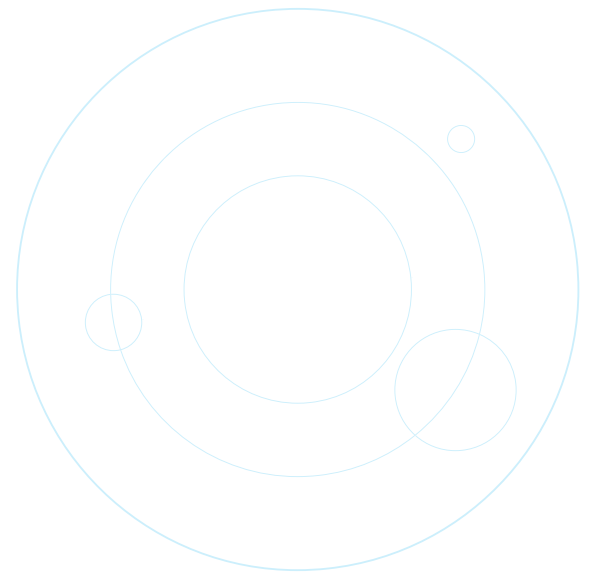
The support layer provides overall durability of the membrane.

The protection layer provides strength to the membrane during the back flush cycle.



Features

- Superior performance and lower operating cost
- High flow rate
- Low fouling tendency
- Easy to clean
- Optimized feed flow
- Low pressure to operate
- High surface area



Module Characteristics

Membrane Characteristics		Housing Characteristics	
Membrane Type	Hollow Fiber, Inside - Out	Housing Material	Glass Fiber Reinforced Plastic
Membrane Material	Modified Polyethersulfone	Potting Material	Polyurethane
MWCO, Nominal	80 kDa	Sealing Material	EPDM, O-Ring
Outer / Inner Diameter	1250 µm / 800 µm	Connectors	3" Victaulic (76.1 mm)
Min. Transmembrane Flow	0.65 ml / min cm ² bar	Shipping Weight	40 kg
Recommended Cut Off Prefiltration	100 µm	Weight Filled With Liquid	135 kg
Burst Pressure	≥ 1200 kPa (174 psi)	Membrane Surface Area	61 m ² (653.4 ft ²)
Implosion Pressure	≥ 700 kPa (101.5 psi)	Max. Working Pressure	400 kPa (58 psi)
		Max. Working Temperature	104 °F / 40 °C
		pH-Range During Cleaning	2-12

Typical Application & Operating Data

Operating mode	Dimension	Dead End / Cross Flow
Typical flux range, filtration	l/m ² *h	70 - 120
Typical flux range, backwash	l/m ² *h	150 - 250
Filtrate flow rate range	m ² /h	4 - 8
Typical transmembrane pressure, filtration	kPa (psi)	10 - 70 (1.45 - 10.15)
Typical transmembrane pressure, backwash	kPa (psi)	20 - 200 (2.9 - 29)
Backwash frequency	h ⁻²	1 - 4
Backwash duration	sec.	20 - 90
CEB frequency (maximum)	d ⁻²	1 - 8
CEB duration	min	2 - 10
Typical instantaneous chlorine tolerance	ppm	100 - 200
Typical free chlorine exposure	ppm / h	200000
Typical instantaneous hydrogen peroxide tolerance	ppm	200
Typical cleaning chemicals		NaOCl, HCl, NaOH, H ₂ O ₂ , Citric Acid, Enzymatic Compounds

Performance Comparison

