



MURUGAPPA
membranes



PROSEP Series
MEMBRANES
Enriching Lives With Purity

Murugappa Membranes
(A Division of Parry Enterprises India Limited)

Murugappa Membranes
PES UF MEMBRANE PRODUCT BROCHURE



About Us

Murugappa Membranes is the membrane manufacturing division of Parry Enterprises India Limited (PEIL), one of the oldest companies within the Murugappa Group.

PEIL has been manufacturing polymer-based products for more than 40 years in India. Murugappa Membranes has a world class HF membrane manufacturing facility located at Palej, Gujarat. Our technical expertise lies in UF, MBR, direct-NF and other membrane solutions.

Murugappa Membranes offers high-performance PES (Polyethersulfone) ultrafiltration membranes. These membranes are engineered with advanced antifouling hydrophilic properties, ensuring superior filtration efficiency, high permeability, and excellent chemical resistance. These membranes are widely recognized and utilized across various industries, including water and wastewater treatment, pharmaceuticals, dairy, chemicals, oil and gas. The membranes are valued for their outstanding water quality, significant potential for water reuse, and enhanced process control, making them an ideal choice for applications requiring reliable and sustainable filtration solutions.

We passionately follow our moto 'Membranes - Enriching Lives with Purity' fueling our commitment to create a clean and sustainable environment. With your passion and our commitment, come, Let's create a sustainable future together; one drop at a time.

Why Murugappa PROSEP PES Ultrafiltration Membranes



Very High Flux



Higher Resistance to Fouling



Broad pH Range Compatibility



Enhanced Water Quality



Increased Hydrophilicity



Higher Resistance to Scaling



Good Mechanical Strength



Easy Sterilization & Reusability



Increased Service Life



Higher Chemical Tolerance



Low Protein Binding



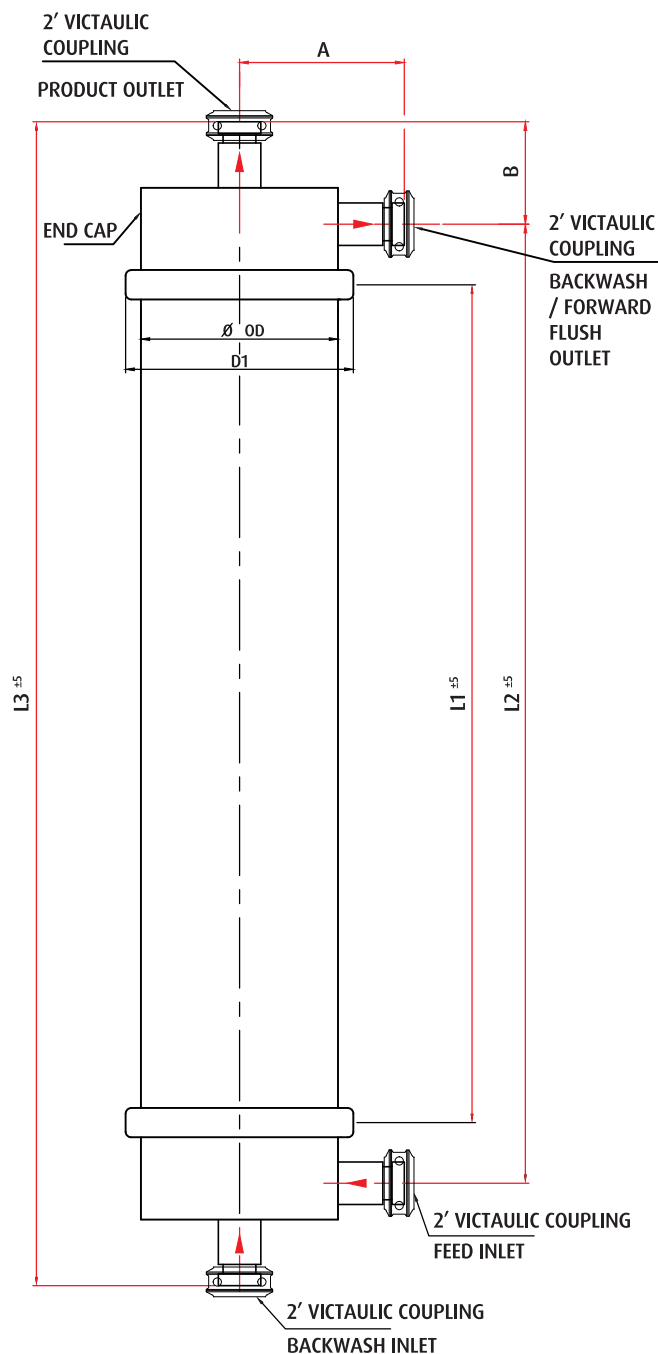
Less Requirement for Chemicals

GENERAL TECHNICAL SPECIFICATIONS

Parameter	Value	
Type	Hollow Fiber Ultrafiltration	
MOC-Membrane	Antifouling Hydrophilic Polyethersulfone	
Fiber ID	Single Bore	Multi Bore
Capillary Per Fiber	1	7
Fiber ID	1.0 mm	0.9 mm
Fiber OD	1.5 mm	4 mm
Pore size	0.02-0.07 micron	0.02-0.07 micron
MWCO	100 kDa	100 kDa

Basic Technical Datasheet

Membrane Model	OD (mm)	D1 (mm)	A (mm)	B (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Area m ²
MM - PROSEP - 030SB/MB	200	270	157	70	750±5	845±5	995±5	30
MM - PROSEP - 040SB/MB	200	270	157	70	1530±5	1625±5	1765±5	40
MM - PROSEP - 055SB/MB	225	270	157	70	1530±5	1625±5	1765±5	55
MM - PROSEP - 065SB/MB	225	270	157	70	1830±5	1925±5	2065±5	65
MM - PROSEP - 085SB/MB	280	320	230	85	1830±5	1950±5	2120±5	85



OPERATIONAL DATA	
Parameter	Value
Operating mode	IN-to-OUT
Operating Flux Range (LMH)	40 - 150
Max Operating Feed Pressure (Bar)	2.5
Max Operating Temperature (°C)	45
Trans membrane Pressure (Bar)	0.8 - 1.5
pH Range Operation	4-11
Backwash Flux (LMH)	150 - 200
Max Backwash Pressure (Bar)	3
Filtration Duration (Mins)	20 - 60
Backwash Duration (Mins)	0.5 - 1
Forward Flush Duration (Mins)	0.5 - 1
Chemical Enhanced Backwash Frequency	0 - 4 times per day

INLET WATER	
Parameter	Value
Turbidity (NTU)	≤ 10
TSS (ppm)	≤ 10

OUTLET WATER	
Parameter	Value
Turbidity (NTU)	≤ 0.5
TSS (ppm)	≤ 1
SDI	≤ 3
Bacteria Removal (log)	≥ 6
Virus Removal (log)	≥ 4

Applications



Municipal Water Treatment

Ensuring clean and safe drinking water by providing advanced filtration and removing contaminants in municipal water treatment.



Industrial Process

Optimal filtration, reducing fouling and ensuring reliable performance in applications like water treatment, chemical filtration, and oil & gas processing etc.



Agricultural Irrigation

Enhancing crop yield and water efficiency by providing purified reused water for irrigation.



Power Generation

Efficiently remove suspended solids, replacing multi-step pretreatment processes like clarification and media filtration.



Food and Beverage Industry

Improving product quality and process efficiency by providing effective filtration solutions for liquid clarification and purification



Pharmaceutical and Healthcare

Selective separation and concentration applications in various processes.

Murugappa membranes PROSEP PES UF Membrane Modules



Advanced Technology

Our membranes are developed using the latest advancements in membrane science.



Customer Support

Dedicated technical support and customer service to assist with your specific needs.



Quality Assurance

Rigorous testing and quality control ensure consistent performance and reliability.



Sustainability

Committed to provide eco-friendly solutions that reduce environmental impact.

For more information or to request a quote, please contact us at

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