

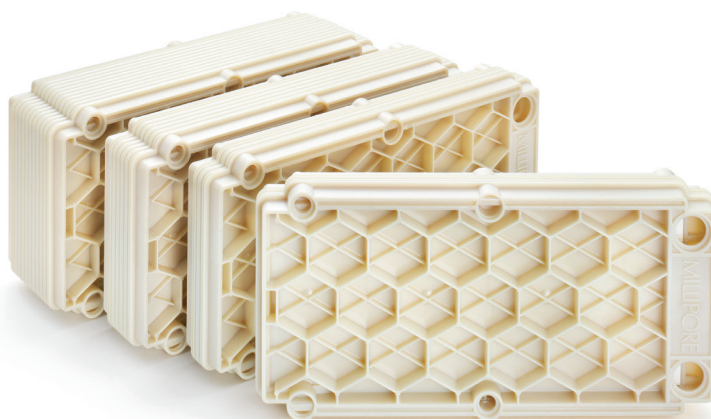
Data Sheet

Prostak™ Micro Filtration Modules

For Convenient and Economical Clarification/Concentration Applications

Prostak™ modules are tangential flow stacked plate membrane devices with open feed channels, made for use in Prostak™ tangential flow filtration (TFF) systems. The modules are thermoplastically bonded and contain neither adhesives nor compression-dependent membrane seals.

Prostak™ open-channel modules are available with microporous membranes and are steam sterilizable for at least 20 cycles.



Versatility

Prostak™ open-channel modules are available in four sizes: 2, 4, 10 and 20 Stak, making them applicable for bench-top, pilot and production scale systems.

Reliability

Membrane and module integrity is tested on every module during manufacturing.

The thermoplastic bonding makes them convenient to replace and increases safety by maximizing containment of hazardous fluids.

Easy to Validate

No adhesives and only two materials of construction simplify validation of extractables.

High Product Recovery

The open-channel design and the low hold-up volume allow for a high product recovery and makes the flow path gentle to process fragile cells and shear-sensitive materials.

Typical Applications

Concentration or Clarification of:

- Mammalian, bacterial and mycelial cell suspensions
- Emulsions and colloidal suspensions
- Viruses, proteins and other bio organic macromolecular solutions
- Polysaccharides and other high viscosity solutions
- Yeast, algae and other high solids suspensions
- Protein precipitates

Physical Specifications

Recommended Prefiltration	150 µm nominal			
Materials of Construction	Polysulfone (10% glass filled) plates; silicone gaskets; Membrane: Durapore® hydrophilic or hydrophobic PVDF microporous membranes			
Channel height	Approximately 0.5 mm			
	2 Stak	4 Stak	10 Stak	20 Stak
Dry Weight (kg)	1.6	2.1	3.6	6.2
Length (cm)	38.9	38.9	38.9	38.9
Width (cm)	19.8	19.8	19.8	19.8
Height (cm)	4.6	5.6	8.1	12.4
Approximate Internal Volume				
Total Volume (ml)	500	700	1250	2500
Feed Side (ml)	300	420	750	1500
Filtrate Side (ml)	200	280	500	1000
Effective Membrane Area (m²)	0.17	0.33	0.84	1.7

Operating Guidelines

Maximum Inlet Pressure		
at <50 °C	5.6 bar (81 psi)*	
at 50-80 °C	4.2 bar (61 psi)	
at 100-132 °C (Steaming)	2.7 bar (40 psi)	
Maximum Temperature		
Operating	90 °C	
Steaming	135 °C	
Maximum Transmembrane Pressure – Forward		
at <50 °C	4.2 bar (61 psi)*	
at 50-80 °C	2.1 bar (30 psi)	
at 100-132 °C (Steaming)	0.14 bar (2 psi)	
Maximum Transmembrane Pressure – Reverse	not recommended	
pH Range (<1 hr cycle)	short duration	continuous
Durapore® Hydrophilic PVDF Membrane	1 - 11	2 - 10
PZHK Membrane and Hydrophobic PVDF	1 - 13	2 - 12

*Note: Durapore® 0.65 µm membrane 3.5 bar maximum forward pressure

Ordering Information

Packaging: 1/pkg

Pore Size (µm)	2 Stak	4 Stak	10 Stak	20 Stak
Microporous Membranes – Hydrophilic PVDF Durapore® Membrane				
0.1	PSW AG0 21	PSW AG0 41	PSW AG1 01	SK2P 127 E1
0.22	PSGV AG0 21	PSGV AG0 41	PSGV AG1 01	SK2P 484 E0
0.45	PSHV AG0 21	PSHV AG0 41	PSHV AG1 01	SK2P 242 E9
0.65	PSDV AG0 21	PSDV AG0 41	PSDV AG1 01	SK2P 446 E0
Microporous Membranes – Hydrophobic PVDF Durapore® Membrane				
0.1	SK2P 015 W6	SK2P 016 W6	SK2P 017 W6	SK2P 018 W6
0.22	SK2P 300 W2	SK2P 384 W2	SK2P 343 W2	SK2P 344 W2
0.45	SK2P 012 W6	SK2P 013 W6	SK2P 014 W6	SK2P 013 W4
0.65	SK2P 009 W5	SK2P 020 W4	SK2P 030 W5	SK2P 010 W5
PZHK Membrane – Hydrophobic PVDF				
200*	SK2P 063 E0	SK2P 064 E0	SK2P 065 E0	SK2R B30 A1

*Nominal Molecular Weight Limit in kDaltons

For information on Prostak™ holders and systems, please contact your local account representative or visit www.merckmillipore.com





To Place an Order or Receive Technical Assistance

In Europe, please call Customer Service:

France: 0825 045 645

Germany: 01805 045 645

Italy: 848 845 645

Spain: 901 516 645 Option 1

Switzerland: 0848 645 645

United Kingdom: 0870 900 4645

For other countries across Europe,
please call: +44 (0) 115 943 0840

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