



Alfa Laval LabStak™ M37/38 module

LabStak™ modules for membrane filtration

Introduction

The Alfa Laval LabStak™ M37/38 module is designed to provide quick and precise evaluations in laboratories or other test facilities, while keeping equipment and set-up costs to a minimum.

It utilizes the same size support plates and membranes as those found in the full-scale plate-and-frame systems.

The Alfa Laval LabStak™ M37/38 module can be equipped with the whole range of flat sheet membranes from Alfa Laval for ultrafiltration and microfiltration.

Applications

The Alfa Laval LabStak™ M37/38 module is an ideal tool for process development, scale-up and membrane testing. It is also a popular choice for quality assurance and small-scale production.

Benefits

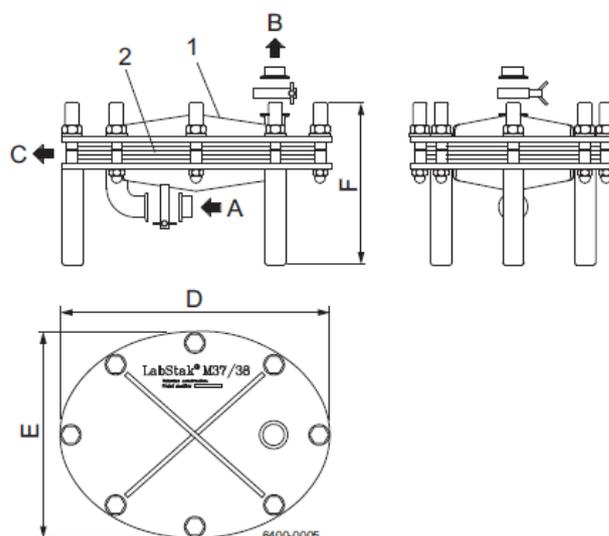
- easy exchange of flat sheet membranes
- can be coupled to the by-pass stream of an industrial plant
- different channel height options to optimize flow and pressure
- simultaneous test of up to seven different membrane types
- high operating temperature (up to 80°C)
- low internal volume
- flexible system design
- flexible membrane area between 0.11 and 1.05 m²
- all components manufactured in compliance with FDA and EEC regulations

Scope of supply

The Alfa Laval LabStak™ M37/38 module consists of a full-size plate-and-frame module for cross-flow membrane filtration.

The LabStak™ M37/38 module can be equipped with alternative plate set configurations, according to use.

Plate set options	Applications	Code No.
M37	Ideal for highly viscous liquids	PL745
M38L (Low channel)	Ideal for low viscous liquids	PL741
M38H (High channel)	Ideal for medium viscous liquids	PL777



- 1: Steel frame
- 2: Support plates and membranes
- A: Feed inlet
- B: Retentate outlet
- C: Permeate outlet
- D: 483 mm
- E: 373 mm
- F: 350 mm

Technical Data

Model	Alfa Laval LabStak™M37 module	Alfa Laval LabStak™M38L module	Alfa Laval LabStak™M38H module
Code number ¹ ,	108664	108664	108664
Code number ¹ , plate set	PL745	PL741	PL777
Membrane area, m ²	0.11 — 0.77	0.15 — 1.05	0.15 — 1.05
Max. inlet pressure ² , bar	6	6	6
Operating pH range	1 — 14	1 — 14	1 — 14
Max. operating temperature ² , °C	80	80	80
Cross-flow range, l/min.	20 — 35 / support plate in one section	5 — 15 / support plate in one section	10 — 35 / support plate in one section
Liquid capacity, l	0.2 + 2.1 l/m ² membrane area	0.2 + 1.2 l/m ² membrane area	0.2 + 1.4 l/m ² membrane area
Number of support plates	1 — 7	1 — 7	1 — 7
Number of sections	1, 2 or 3 uniform sections in series	1, 2 or 3 uniform sections in series	1, 2 or 3 uniform sections in series
Number of section stop discs	2, or 1 less than number of sections	2, or 1 less than number of sections	2, or 1 less than number of sections
Number of end plates	2	2	2
Number of flat sheet membranes	2 per support plate	2 per support plate	2 per support plate
Weight, kg	30 + 4.3 kg/m ²	30 + 3.2 kg/m ²	30 + 3.3 kg/m ²

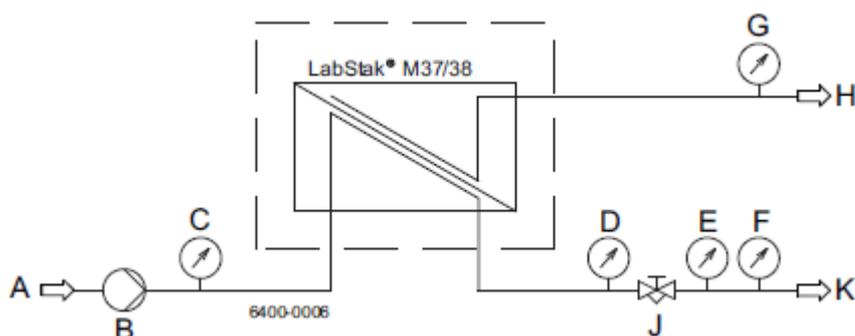
¹ Please specify code number when ordering

² depending on membrane type

Components

Item	Alfa Laval LabStak™M37 module	Alfa Laval LabStak™M38L module	Alfa Laval LabStak™M38H module
Support and spacer plates	Polysulphone (PSO)	Polysulphone (PSO)	Polysulphone (PSO)
Permeate outlet hose	Silicone rubber (Si)	Silicone rubber (Si)	Silicone rubber (Si)
Gasket and o-ring	Nitrile rubber (NBR)	Nitrile rubber (NBR)	Nitrile rubber (NBR)
Internal, product wetted steel parts	Acid resistant, AISI 316L	Acid resistant, AISI 316L	Acid resistant, AISI 316L
External steel parts	Stainless AISI 304	Stainless AISI 304	Stainless AISI 304
Cross-flow in/outlet connections	DN 38, ISO 2852 clamp	DN 38, ISO 2852 clamp	DN 38, ISO 2852 clamp
Permeate hose outlet connections, mm	ID 4.0, OD 7.4	ID 4.0, OD 7.4	ID 4.0, OD 7.4

Connections



A = Feed

B = Pump

C = Pressure

D = Pressure

E = Temperature

F = Flow

G = Flow

H = Permeate

J = Control valve

K = Retentate

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