



Pilot Laboratory Equipment for Membrane Filtration

LabStak® M37/38

The LabStak® M37/38 is ideal for process development, scale-up, membrane testing, quality assurance and smallscale production. It can be fitted with the whole range of flat sheet membranes for ultrafiltration and microfiltration.

The LabStak® M37/38 is designed to provide rapid, precise evaluations in laboratories or other test facilities, while keeping equipment and set-up costs to a minimum. The module utilizes the same size support plates and membranes as those found in the full-scale plate-and-frame systems.

Advantages

- Rapid, easy exchange of 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
- Low internal volume
- All components manufactured in compliance with FDA regulations
- Flexible system design
- Flexible membrane area between 0.11 and 1.05 m²
- High operating temperature (up to 80°C).

Plate set options

The module consists of a full-size plate-and-frame cross-flow membrane filtration module, type LabStak® M37/38. The module can be equipped with alternative plate set configurations, according to use.

M37

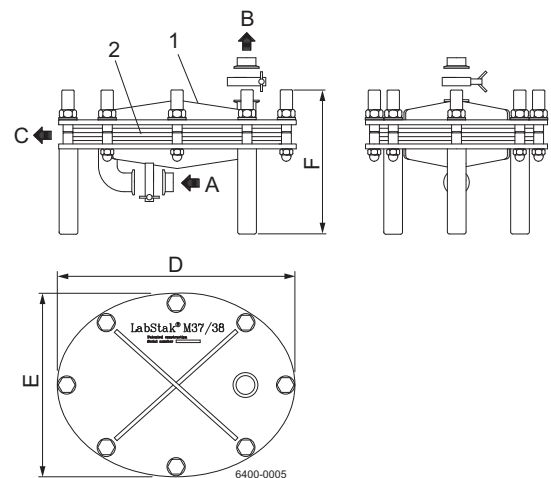
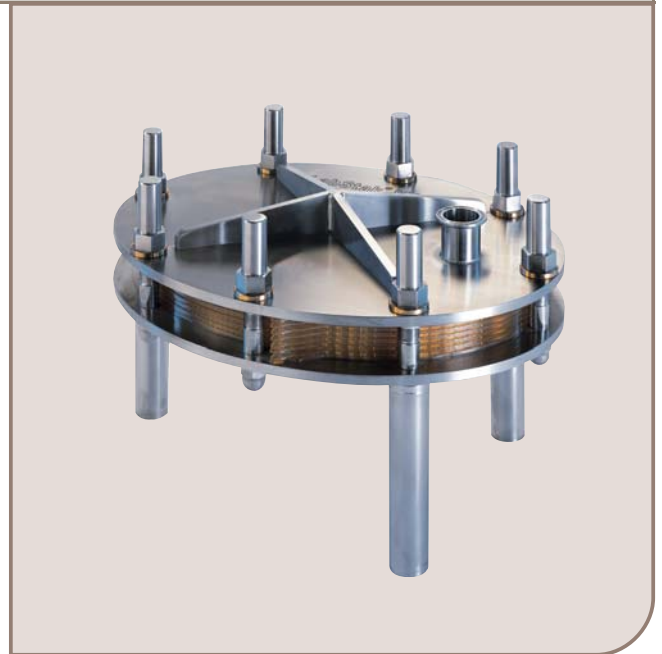
Ideal for highly viscous liquids, code no. PL 745

M38H

High channel, for medium viscous liquids, code no. PL 777

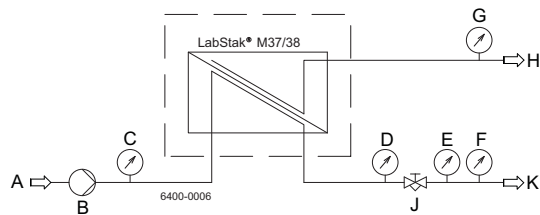
M38L

Low channel, ideal for low viscous liquids, code no. PL 741



Pos. Description of parts included

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



A = Feed
 B = Pump
 C = Pressure
 D = Pressure
 E = Temperature
 F = Flow
 G = Flow
 H = Permeate
 J = Control valve
 K = Retentate

Technical data

| | |
|--------------------------------|--|
| Number of support plates | 1-7 |
| Number of section stop discs | 2, or 1 less than number of sections |
| Number of end plates | 2 |
| Number of flat sheet membranes | 2 per support plate |
| Membrane area M37® | 0.11-0.77 m ² |
| Membrane area M38H® | 0.15-1.05 m ² |
| Number of sections | 1, 2 or 3 uniform sections in series |
| Basic liquid capacity = A | 0.2 litres |
| Liquid capacity M37 | A + 2.1 litres/m ² |
| Liquid capacity M38H | A + 1.4 litres/m ² |
| Liquid capacity M38L | A + 1.2 litres/m ² |
| Liquid flow M37 | 20-50 litres/min. per support plate contained in one section |
| Liquid flow M38H | 10-35 litres/min. per support plate contained in one section |
| Liquid flow M38L | 5-15 litres/min. per support plate contained in one section |
| Max. inlet pressure* | 6 bar |
| Max. operating temperature* | 80°C pH operation range* 1-14 |
| Basic frame weight = B | 30 kg |
| Module weight M37 | B + 4.3 kg/m ² |
| Module weight M38H | B + 3.3 kg/m ² |
| Module weight M38L | B + 3.2 kg/m ² |

*depending on membrane type

Module data

| | |
|--------------------------------|---------------------------|
| All external steel | Stainless, AISI 304 |
| Internal, product wetted steel | Acid resistant, AISI 316L |
| Support and spacer plates | Polysulphone (PSO) |
| Permeate outlet hose | Silicone rubber (Si) |
| Gasket and o-ring | Nitrile rubber (NBR) |

Connections

| | |
|------------------------|-----------------------|
| Cross-flow in-/outlets | DN 38, ISO 2852 clamp |
| Permeate hose outlets | ø 4/7.4 connection |

Code no. 108664

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How to contact Alfa Laval

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