



DSS LabUnit M39L/H

Pilot laboratory equipment for membrane filtration



The DSS LabUnit M39L/H is specially developed for ultrafiltration and microfiltration of highly viscous products and fermentation broths. This module is ideal for a range of uses in industries that include biotechnology, pharmaceuticals, and food and beverages. To meet the demands experienced here, the module is designed for optimized flow dynamics, low energy consumption and pressure operation. The DSS LabUnit M39L/H is ideal for process development, scale-up, membrane testing, quality assurance and small-scale production.

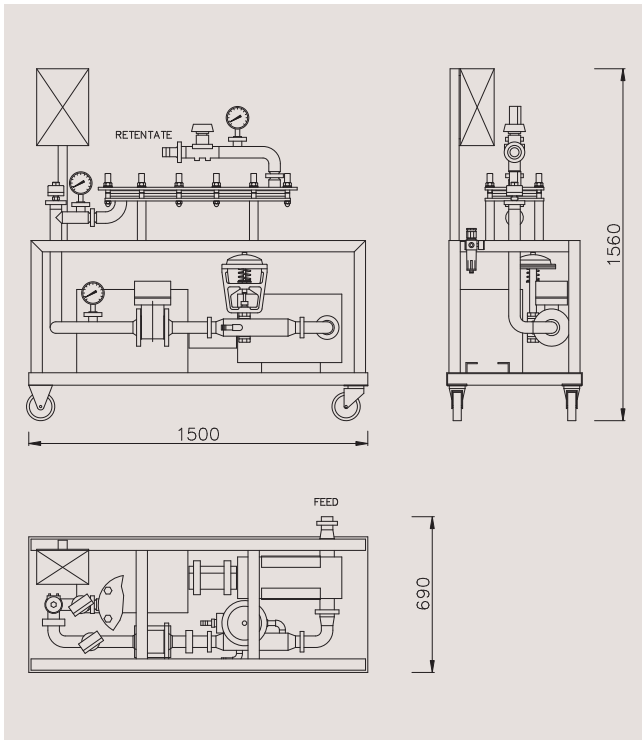
The unit is equipped with a lobe pump provided with a frequency converter to cover the wide range of cross-flows needed for testing. An electromagnetic flow transmitter measures the cross-flow.

The DSS LabUnit M39L/H is designed to provide rapid, precise process evaluations in laboratories and other test facilities, while keeping equipment and set-up costs to a

minimum. The unit utilizes the same size support plates and membranes as those found in the full-scale DSS Module M39L/H.

Advantages

- Rapid, easy exchange of membranes
- Can be coupled to the by-pass stream of an industrial plant
- Different channel height options to optimise flow and pressure
- Simultaneous test of up to five different membrane types
- Low internal volume
- All components manufactured in compliance with FDA regulations
- Flexible system design
- Flexible membrane area between 0.2-1.0 m²
- High operating temperature (up to 80°C)
- Flow pattern identical to full-scale systems



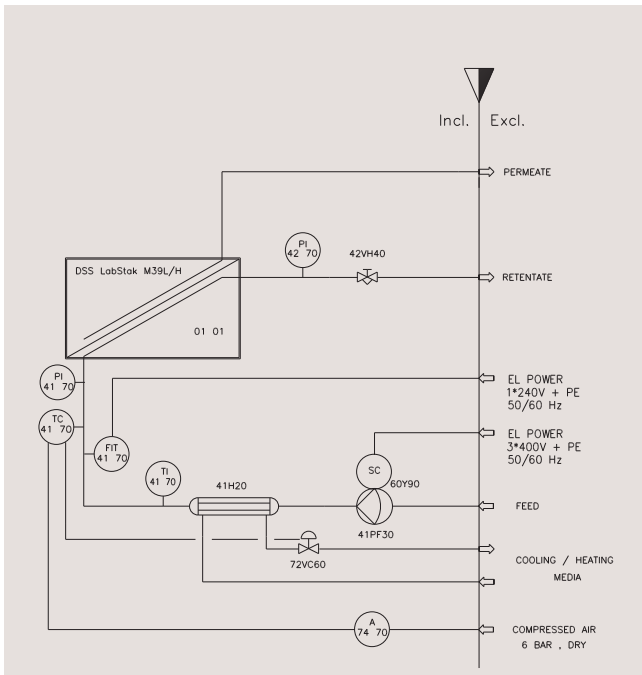
DSS LabUnit M39L/H data

Dimensions, l x w x h	1500 x 690 x 1560 mm
Weight	365 kg
Dead volume	7 litres

DSS LabUnit M39L/H connections

Feed inlet	Outer diameter 40 mm hose connection or 51 x 1.2 mm pipe or 51 mm ISO 2852 clamp
Retentate outlet	Outer diameter 40 mm hose connection or 51 x 1.2 mm pipe or 51 mm ISO 2852 clamp
Permeate outlets	Inner diameter 4 mm/ outer diameter 7.4 mm hoses
Cooling/heating water in/out	1/2" or outer diameter 14 mm hose connection/3/4" or outer diameter 27 mm hose connection
Electric power (motor)	3 x 400 V, 50 Hz, PE, 3 m cable
Electric power (flow transmitter)	1 x 240 V, 50 Hz, PE, 3 m cable

Flow diagram of typical installation:



DSS LabUnit M39L/H components

Module	DSS LabStak® M39L/H
Cross-flow pump	IBEX, type 622, 5-16 m³/h, 4 bar, 4 kW, with Hz-inverter (rpm control)
Heat exchanger (H)	Alfa Laval
Valve	Gemü
Pressure gauges (PI)	Wika, 2 pieces/0-10 bar + 2 pieces/0-4 bar
Flow transmitter (FIT)	Krohne

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Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval

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