

# LABORATORY ULTRAFILTER



Non contractual photo

SERVICE: POWER CONSUMPTION 220V MONO - 3.6 KW WITH HEATING GROUP DIMENSIONS: 800 X 500 X 700

### **REFERENCE: MP351**

- Biological Application: Protein Purification
- Agri-food applications: Pre-concentration of skim milk to make precheese; Standardization of milk
- Choice of ceramic membranes resistant to pressure and regenerable, few consumables.
- Sanitary construction
- Little raw material 1 to 2 I maximum
- Analyzes: HPLC, electrophoresis, UV spectro
- TP, cleaning protocols provided

## The effectiveness of separation depends on :

- Transmembrane pressure (Diaphragm inlet / outlet pressure gauges on the retentate side, pressure gauge on the permeate side).
- The speed of passage on the membrane (pump outlet valve).
- The cutoff threshold: a membrane of 50 nm and 2 other membranes of 20 nm and 100 nm are proposed as an option
- The temperature (regulation of the temperature of the product) regulation hot / cold by group of heating 3 kW connected to the network

## **Technical specifications:**

#### The device is to be laid on bench. The basic model consists of :

- A stainless steel tank with a capacity of 5 liters and a double jacket with water circulation
- Air inlet on the pressurizable tank with pressure reducer, regulator and manometer.
- As standard, a ceramic membrane
- A centrifugal pump with flexible vanes, flow variation by winnowing.
- A flow control valve.
- Three manometers.
- Four ball valves, 2 diaphragm valves
- A thermometer
- Dead volume of the installation 500 ml maximum
- A control and protection box for the pump

### **OPTIONS:**

- Option 1: Study of the influence of the temperature thanks to a thermoregulator hot / cold. The tank is equipped with a double jacket with circulation of water, 2 hoses high temperature, 1 probe Pt 100? of length 250mn, 1 temperature limiter - Option 2: A 220V mono air compressor, 16A plug - Option 3: A 20 nm membrane - Option 4: A 50 nm membrane - Option 5: A 100 nm membrane Technical and educational documentation provided with the bench in paper form and CD-ROM with the technical documents of the suppliers of each component.