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Product Name :
Cross Flow Membrane Filtration

Product Code :
LBNY-0005-10700053



Description :

The is available in two basic configurations. The standard is the simplest system. As standard the filtration assembly works with polymer membrane filters (90mm diameter) and sample filters are included for microfiltration (MF), ultrafiltration (UF), nanofiltration (NF) and reverse osmosis (RO). A backpressure valve is used to adjust the transmembrane pressure with a maximum allowable system pressure of 40 bar (analogue pressure indicator). A wider range of filters are available on request. It uses a high pressure stainless steel piston pump to circulate product from a food vessel to the filtration assembly with simple on/off control. The 50 is an enhanced unit, with all the additional benefits of computer control, data logging and diafiltration capability. There is also an electronic mass balance to measure the mass of permeate collected. This option also enables diafiltration using a peristaltic pump and high level sensor. It includes an electronic pressure sensor to measure filtration pressure (0-40 bar) and electronic temperature sensor (thermocouple) to measure retentate temperature. It also includes a feed pump speed controller, which enables the retentate cross flow velocity over the filtration membrane to be varied. The data from all these is logged in the software enabling plotting of permeate flow rate with time so that the effect of variables (filtration pressure, cross flow velocity, product temperature and diafiltration) on process performance can be determined. The software can be used to define the mass of permeate collected prior to addition of water/buffer (batch diafiltration). Communication to the PC (not supplied) is via an internal USB interface.

Features:

Suitable for microfiltration, ultrafiltration, nanofiltration and reverse osmosis membranes and pressures. Pressure operating range of 1-40 bar.
Uses a standard filtration size of 90mm enabling a wide range of filtration membranes to be used
Optional ceramic membrane available
Supplied with a range of polymer membranes.

Technical Specification :

Cross Flow Membrane Filtration



Laboratory Instrument India