Innovator Cross Flow Filtration Kit

The Innovator Cross Flow Filtration Kit enables operation of cross flow cells with small working and hold-up volumes. With a total hold-up volume <1 liter in the test cell and circulation line, this bench-scale tangential flow filtration (TFF) system is ideal for filtering valuable feed solutions and/or small sample volumes.

This assembly is suitable for microfiltration, ultrafiltration, and nanofiltration separations using Sterlitech’s Innovator (CF016) or Explorer (CF042) membrane test cells. Our flat sheet membranes are available in pre-cut coupons to fit these cells.

The system comes complete with a gear pump, feed carboy, stand-mounted membrane test cell, and all the necessary tubing, pressure control valve, flow and pressure sensors. Test cells sold separately.

APPLICATIONS:
- Protein purification and concentration
- Clarification of fermentation batches
- Size fractionation of biomolecules
- Sample filtration from pilot or full-scale processes

STANDARD FEATURES:
- Pressure control valve to adjust the pressure in the system
- Variable speed knob on the pump to adjust feed flow rate
- Cell stand for easy access to membrane and tubing
- Stainless steel or inert thermoplastic construction of wetted parts

SPECIFICATIONS:

Materials
PEEK/PTFE Gear Pumps with Variable Speed Control Polypropylene Carboy Feed Tank

Membrane Sample Size
CF016: 1.78 x 1.78 in (4.52 x 4.52 cm)
CF042: 2.3 x 4.4 in (5.8 x 11.2 cm)

Effective Membrane Area
CF016: 3.2 in² (20.6 cm²)
CF042: 6.5 in² (42 cm²)

Flow Rates
0.01-0.84 GPM (0.032-3.2 LPM)

Data Monitoring
Digital Flow and Pressure Sensors
Optional Conductivity, Temperature, pH, and Weight Monitoring

Operating Pressure Range
0-80 psi (0-5.5 bar)

Electrical Supply
110V/60Hz, 1 Ph or 220V/50Hz, 1 Ph

System Dimensions/Weight
1 x 1 x 1 m
15 lbs