

3.0 Parts List



1 upper manifold



6 fittings



1 lower manifold



3 elbow fittings



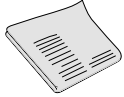
6 ft LFL Tygon® tubing



3 rotating lock rings



6 clamps

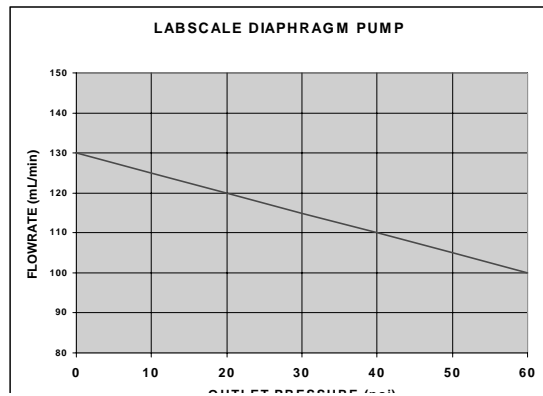


installation instructions

4.0 Pump Curve

The curve below is a typical pump curve for the Labscale diaphragm pump. The curve will aid in determining the number of Pellicon XL devices that can be run. For higher flow rates, a peristaltic pump (user supplied) can be used.

Curve for water at 25° C



MILLIPORE

Catalog No. XXMULTIMN

Labscale™ Multi Manifold Kit

Installation Instructions

Millipore BioProcess Division

To Place an Order or Receive Technical Assistance

For additional information in the U.S. and Canada call toll-free 1-800-MILLIPORE (1-800-645-5476)

In the U.S. FAX Orders (781) 533-8873

In CANADA FAX Orders (613) 225-9366

In all other countries, call (781) 275-9200

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1.0 Introduction



The Labscale Multi-Manifold kit allows the user to install up to three Pellicon® XL devices on a Labscale TFF System. The Multi-Manifold Kit can be used to:

- reduce filtration time by increasing the membrane surface area.
- test different membrane types at the same time.

2.0 Installation

2.1 Installing the manifolds

1. Remove plugs from the FEED, RET, PERM 1 and PERM 2 ports of the Labscale reservoir.
2. Align the two female ports of the lower manifold with the FEED and PERM 1 ports on the Labscale reservoir. Press the manifold firmly onto reservoir ports. Turn the lock nuts until snug.
3. Align the two female ports of the upper manifold with the RET and PERM 2 ports on the Labscale reservoir. Press the manifold firmly onto reservoir ports. Turn the lock nuts until snug.

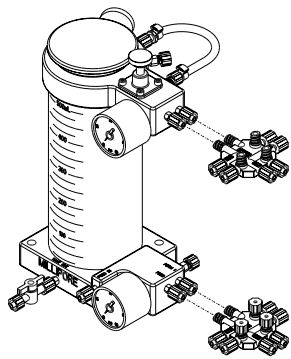


Figure 2-1: Install multi-manifolds on Labscale reservoir.

2.2 Installing the Pellicon XL Device(s)

1. Remove plugs from the device connection ports of both the lower and upper manifolds.
2. Align the lower manifold with the FEED and PERM 1 ports and the upper manifold with the RET and PERM 2 ports of the Pellicon XL device. Press the device firmly onto manifold ports. Turn the lock nuts until snug.

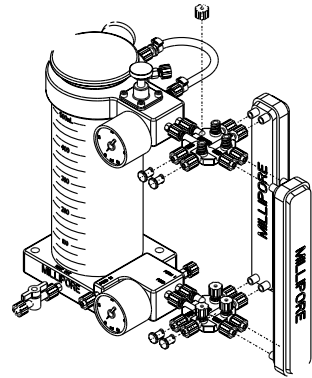


Figure 2-2: two Pellicon XL devices installed on multi-manifold.

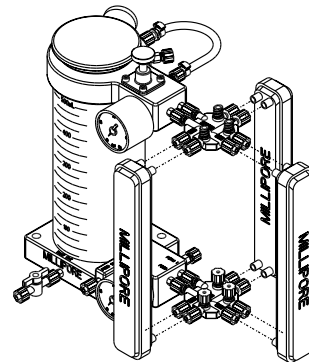


Figure 2-3: three Pellicon XL devices installed on multi-manifold.

2.3 Installing the Permeate Tubing

1. Cut tubing and install fittings and clamps as shown in figure 2-4.
2. Assemble elbow fittings (optional) as shown in figure 2-5.
3. Remove the plugs from the permeate fittings of the UPPER manifold.
4. Connect permeate tubing as shown in figure 2-6. Elbow fittings (optional) may be used as shown in figures 2-7 and 2-8.

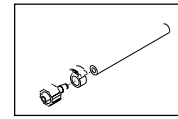


Figure 2-4

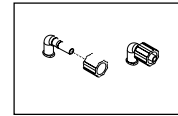


Figure 2-5

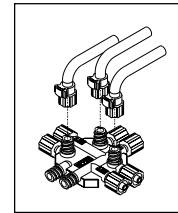


Figure 2-6

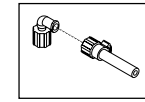


Figure 2-7

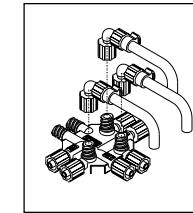


Figure 2-8

2.4 Operation

1. Check that all connections are tight.
2. Refer to the Labscale Operating Instructions for complete set up instructions.

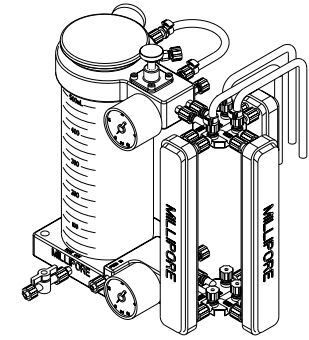


Figure 2-9: Multi-manifold and devices installed on a Labscale system.

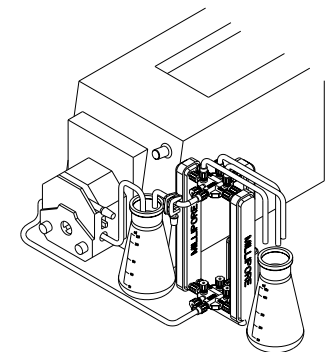


Figure 2-10: Multi-manifold and devices installed on a user supplied system.