

SOLVENT FILTRATION APPARATUS

Parts

Funnel, filter head, receiving bottle, clamp of anodized aluminum, SS lid, rubber tube(0.8m), tube connector

Operation

- Carefully attach the filter head to the receiving bottleneck.
- 2. Put the membrane filter on the sieve, attach the funnel to the filter head, and attach the clamp.
- Connect the rubber tube to the vacuum nozzle of pump, the other side to the tube connector of the filtration apparatus.
- 4. Fill the solvent into the filter funnel and start up the pump. The solvent flows through the membrane in the filter head and into the receiving bottle due to the action of vacuum.



(Not including the pump)

Specification and Membrane selection

1, Specification

Model	Funnel	Pore Size of Filter	Material of Support Screen	Receiving Bottle	Suitable Membrane
T-50.1L	300ml	10µm	Pyrex glass	1000ml	Ф47огФ50
T-50.2L	500ml	10µm	Pyrex glass	2000ml	Ф60
T-50.PTFE	300ml	20µm	PTFE	1000ml	Ф47огФ50

2. Membrane Selection

The selection of the membrane is the key to achieve the best filtering effect . The membrane material must be suitable for the different characteristics of the filter medium and has to be chemical resistant against it . Available with pore size : $0.22\mu m$, $0.45\mu m$, $0.8\mu m$ and more . For 1L filter , the diameter of the membrane is φ 47mm or φ 50mm . For 2L filter , the suitable membrane diameter is φ 60mm .

3, Sterilization

All the solvent filtration apparatus can be autoclaved at 121°C for 20-30 minutes or sterilized with epoxyethane etc.

Attention

- 1. Depending on the different characteristics of the solutions, choose the suitable membrane filter between the funnel and the filter head, align the ground part and fix with clamp.
- 2. Press the switch to start the pump, put the solvent into the funnel to filter.
- 3. When filtering prevent overloading the collection bottle. Solvent into the pump may be hazardous or can damage the pump.
- 4. If there is leakage between filter head and funnel, please check whether ground part is align and the membrane is flat, and if the clamp is fixed and proper seated.
- 5. When the flow rate decreases, check whether there are excessive impurities on the membrane affecting the filtration speed and please replace the membrane filter if required.
- 6. The solvent filtration apparatus is fragile cargo , please do not move it entirely , and avoid taking the clamp to move .