

2. Anti-corrosion type



- The product could work with out any medium and does not produce pollution. The gas exchange room is placed with filtering material, to ensure that the air is clean.
- New material and new technology are adopted in production. It is convenient to move, and work smoothly, thus ensuring the ideal vacuum degree and higher air velocity.
- Using frictionless membrane body movement, does not produce heat, no friction consumption. Imported rubber diaphragmhas corrosion resistance and long servicelife.
- Automatic cooling exhaust system is designed in the body, ensures continuous operation 24 hours a day.
- The pressure adjustable design can satisfy a certain range of vacuum and gas velocity.

- Bearing imported classic bearing, smooth operation, low noise, high efficiency.
- The parts in contact with the gas of anticorrosive pump is with TEFLON surface treatment, which have complete ability of resistance to chemical corrosion.
- Special motor is ODM provided by the export of professional motor manufacturer and has got the European CE certification. It has the reasonable rotation design, equipped with a power overheat protector, when the pump body temperature reached 130 degrees, it will automatically power off, to protect the motor from being damaged in the long running work.
- Small volume and light weight, easy to move, save space, conveni ent repair and maintenance.

### FEATURES——Anticorrosive -Optional Features

- Corrosion resistance, able to tolerance almos tall strong acid (including aqua regia), strong alkali, strong oxidizer, reductant, and variety of organic solvents.
- Withstand high and low temperatures, can be used in temperature of  $190^{\circ}$ C to  $260^{\circ}$ C.
- Non-stick surface, most solid material and impurity particles can not conglutinate on the surface.

### **SPECIFICATION**

- Speed of evacuation (L/Min): 12
- · Ultimat epressure vacuum : ≥ 0.075 Mpa

- Voltagerating: 220V / 110V; 50Hz / 60Hz
- Motor power (w): 75W
- · Pressure : ≥ 30Psi
- Inlet (mm) : Ø6
- Outlet  $(mm) : \emptyset 6$
- Temperature of working environment ( $^{\circ}$ C): 7 40
- · Function: Vacuum & Pressure
- · Pump head : Nylon
- · Temp of the body (°C): <55
- Dimensions (LXBXH)(mm):  $195 \times 98 \times 156$
- · Noiselevel (DB): <60
- · Weight (kg): 4



### GM-0.33II

- Speed of evacuation ( L /Min ): 20
- Ultimate pressure vacuum : ≥ 0.08 Mpa

- Voltagerating: 220V / 110V; 50Hz / 60Hz
- Motor power (w): 160W
- Inlet (mm) : Ø 6
- Outlet (mm): InnerSilencer
- Temperature of working environment ( $^{\circ}$ C): 7 40
- · Function: Vacuum
- Pumphead: 1
- Temp of the body ( $^{\circ}$ C): < 55
- Dimensions (LXBXH) (mm):  $215 \times 120 \times 235$
- Noiselevel (DB): <60</li>
- Weight (kg): 7.5
- Diaphragm: NBR
- Valves : NBR





Anticorrosive

### GM-0.50

- Speed of evacuation (L/Min): 30
- Ultimate pressure vacuum : ≥ 0.08 Mpa

- Voltagerating: 220V / 110V; 50Hz / 60Hz
- Motor power: 160W
- Pressure : ≥ 0 Psi
- Inlet (mm) : Ø 6
- Outlet (mm) : Ø 6
- Temperature of working environment ( $^{\circ}$ C): 7 40
- · Function: Vacuum & Pressure
- Pumphead: 1
- Temp of the body ( $^{\circ}$ C): < 55
- Dimensions (LXBXH) (mm):  $210 \times 160 \times 235$
- Noiselevel (DB): <60</li>
- Weight (kg): 8
- Diaphragm : NBR
- · Valves: NBR







Anticorrosive

### GM-0.50II

- Speed of evacuation ( L /Min ): 30
- Ultimate pressure vacuum : ≥ 0.095Mpa

- Voltagerating: 220V / 110V; 50Hz / 60Hz
- Motor power (w): 160W
- Inlet (mm): Ø 6
- Outlet (mm): Silencer
- Tempe rature of working environment ( $^{\circ}$ C): 7 40
- · Function: Vacuum
- Pump head: 2
- Temp of the body ( $^{\circ}$ C ): < 55
- Dimensions (LXBXH) (mm):  $300 \times 120 \times 235$
- Noiselevel (DB): <60</li>
- Weight (kg): 10
- Diaphragm: NBR





Anticorrosive

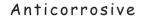
### GM-1.00

- Speed of evacuation (L/Min): 60
- Ultimate pressure vacuum : ≥ 0.08 Mpa

- Voltage rating: 220V / 110V; 50Hz / 60Hz
- Motor power (w): 160W
- Pressure : ≥ 30Psi
- Inlet (mm) : Ø 6
- Outlet (mm): Ø 6
- Temperature of working environment (°C): 7 40
- Function: Vacuum & Pressure
- Pump head: 2
- Temp of the body ( $^{\circ}$ C): < 55
- Dimensions (LXBXH) (mm):  $300 \times 160 \times 235$
- Noiselevel (DB): <60</li>
- Weight (kg): 10
- · Anticorrosive Diaphragm : NBR
- Valves: NBR









### GM-2

- Speed of evacuation: 120 L /Min
- Ultimate pressure vacuum ≥ 0.08 MPa

200mbar

- Voltagerating: 220V / 110V; 50Hz / 60Hz
- Motor power: 300W
- Inlet (mm): Ø 9
- Outlet (mm): Ø 9
- Temperature of working environment ( $^{\circ}$ C): 7 40
- Extreme pressure Note: Vacuum & Pressure
- Pumphead : double
- The highest tempe rature of pump body work : 55°C
- Dimensions (L  $\times$ W $\times$ H) (mm): 390  $\times$  150  $\times$  250
- Noiselevel (DB) ≤ 60
- Weight (kg): 20







Anticorrosive

### NEW PRODUCT GM-0.5F

- Air chamber and air road using PTFE material. This model has strong resistance to chemical corrosion resistance and organic solvent properties.PTFE is also known to be chemically resistant and well engineered.
- Bearing imported classic bearing, smooth operation, low noise, hi gh efficiency. The valve sheet USES FFPM rubber material, which is characterized by good toughness and resistance to chemical erosion.
- The products use high-grade electrical power system design.
   Automatic cooling exhaust system is designed in the body,
   ensures continuous operation 24 hours a day.
- The high precision vacuum pump improved the efficiency of the laboratory.
- The appearance of the atmosphere and advanced structure obtained two patents of China.

- Speed of evacuation environment(L/Min): 30
- Extreme pressure vacuum : ≥ 0.095MPa

15mbar

- Voltage rating: 220V / 110V; 50Hz / 60Hz
- Motor power: 160w
- Inlet: φ 6mm
- · Outlet: φ 6mm
- Temperature of working environment (  $^{\circ}$ C ) : 7 40
- · Function: Vacuum & Pressure
- · Pump head : double
- Temp of the body ( $^{\circ}$ C): < 55
- Dimensions (L×W×H)(mm):  $370 \times 144 \times 275$
- · Noiselevel(DB): ≤ 60
- Weight: 13.5Kg

### · Application

- 1.Rotary evaporator; 2.Vacuum concentration; 3.Vacuum vacuum distillation;
- · 4. Vacuum drying





## Sovent Filration Apparatus



### APPLICATIONS

 Mainlyused in filtration of aqueous phase, organic phase and corrosive liquid, particularlyre commended for HPLC mobile phase, there is a degassing effect to ensure the clean of mobile phase, prevent the blockage of HPLC liquid road. It can also be used for sterility test, aseptic filtration, aseptic filtration of heats ensitive material.

- 1. This product is made of high-quality extra hard glass, no air bubble, sparking and crystal-clear thickness is even.
- 2. The performance of with standing voltage and its leakproofness is very good, it can be used for sterilization at high temperature of 121°C and high pressure.
- 3. The PTFE type is acid and alkali resistant, Corros ion resistant, can filter all kinds of aqueoussolution, the organic solution and corrosive liquids.
- 4. The product flows faster, ground-glass is standard. It's size agrees with the international standard size to fit for many foreign brands.

### COMPOSITION

- Filter system solvent consists of solvent filter components and vacuum pump.
- Filter include :
- 1 The triangle fluid bottle
- (2) The core filter head
- 3 The filter bowl
- 4 The clamp
- (5) Dust cover
- 6 Rubber hose
- 7 Hose linker







Model	Funnel	Pore Size of Filter	Material of support screen	Receiving Bottle	Suitable Membrane
T-50.1L	300ml	10μm	Pyrex glass	1000ml	Ø 47 or Ø50
T-50.2L	500ml	<b>1</b> 0μm	Pyrex glass	2000ml	Ø60
T-50.PTFE	300ml	20μm	PTFE	1000ml	Ø 47 or Ø50

### Manifolds Vacuum Filtration



### APPLICATIONS

 Widely used for chemistry analyse, iochemical, pharmaceutical, sanitation test, environment test, watr quality analyze, beverage and science research and so on.

- Multi-branch Manifold filter is particular design and produce for several samples filtrate at the same time. At present domestic laboratory filtrate liquid usually adopts the glass nature core, while this method only filtrate one sample once, and it has low speed, low efficiency, and less labor exertion.
- It is more convenience for the operator who needs to filtrate several samples at the same time. Because each filter holder have individual control valve, only one set vacuum pump can sustain the single or Multibranch manifold filter operate together.
- Stainless steel nature of the Vacuum Filtration Holders and Manifolds can filtrate at180°C temperaturep; and the high-quality extra hard glass is elegant in workmanship, and be able to bear up 200°C range of temperature. The clamp of alumoinum alloy designed rational and closed, it can make the filter bowl together with the middle filter head become an organic, and assure them airproof not to leak. Simultaneity, type 316L stainless steel resistant to acids alkalis, and be albe to bear corrosion, easy to high-temperature sterilization. Therefore, it makes the analyze result much more stabilization and trustiness.

















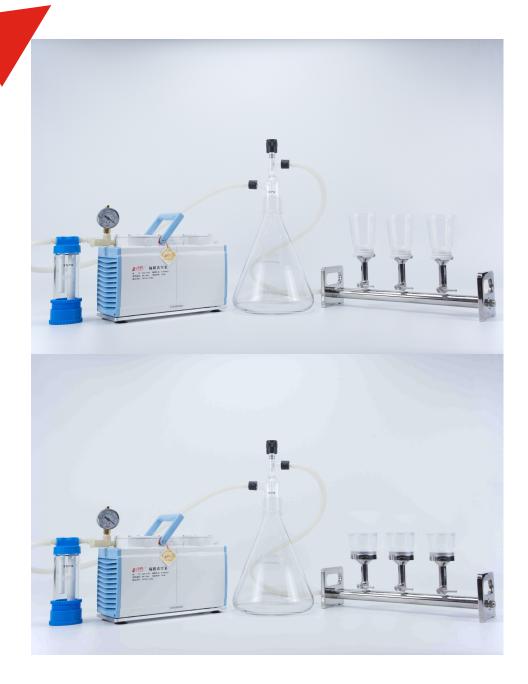
### Control Stainless Sreel Microbial Filtration



### APPLICATION

- Microbial limit filtration system is a special equipment for microbial limit inspection designed and manufactured according to the relevant provisions of the Pharmacopoeia.
- This product uses high-performance diaphragm pump, direct discharge, no need for suction filter bottle, and can be used with different pump heads. The filter bowl or limit incubator forms a complete membrane filtration unit.
- During the test, the test solution is filtered through a membrane, and the microorganisms in the test solution are trapped on the filter membrane, and then cultured to form macroscopic colonies and counted to detect the amount of bacteria contained in the test sample. These products are suitable for microbiological restriction testing of purified water and water for injection.

- Built-in miniature high-performance diaphragm pump, no need to pump the filter bottle, greatly reducing the occupation of the console space, and more convenient to use;
- Button switch control with indicator light, easy and intuitive to operate;
- One main unit can be used with two pump heads, with more choice and higher cost performance;
- Three pump or six pump heads can be operated at the same time or independently, with high working efficiency;
- The pump head can be quickly disassembled and assembled, and can be sterilized by damp heat at 121 °C alone;
- The pump head can be quickly sterilized by flame to facilitate continuous experimental operation;
- The 316L stainless steel casing is mirror polished, the surface is smooth and flat, easy to clean and disinfect;









## Membrane Filter



### APPLICATIONS

 The product is mainly used in mobile phase of chromatographic analysis and sample filter, to protect the chromatographic column and infusion pump pipe system and the sampling valve not contaminated. Widely used in gravimetric analysis, trace analysis, colloid separation asterility test. According to the filte rsamples to choose the appropriate membrane filter.

### MATERIALS

Nylon, MCE, PES, PP, PTFE, PVDF

### SPECIFICATION

- Diameter: 13mm, 25mm, 47mm, 50mm, 60mm, 150mm, 300mm
- Pore size : 0.2μm, 0.45μm, 0.8μm









## Syringe Filter 17



- 1. The shell adopts low dissolution, chemical stability, excellent polypropylene material, ultrasonic welding, edge combined meticulous, no leakage, high pressure resistance.
- 2. It is the most effective method, to filter by syringe filter, need not change membrane and cleaning, save a lot of time.
- 3. The products adopt imported high quality microporous membrane filter, the adsorption of the sample is small, most of the low or high value sample recovery, thereby reducing the waste.
- 4. The standard interface is convenient to link with all kinds of syringe, also can be directly connected with the valve 7725 needles, filtered sample directly.
- 5. This product is specially designed, can with stand the burst pressure of 8 bar.

### MATERIALS

• Nylon, PES, PTFE, PVDF

### SPECIFICATION

• Diameter: 13mm, 25mm

Pore size : 0.2μm, 0.45μm, 0.8μm









- 1. What is difference between hydrophilic and hydrophobic membrane filters?
- Hydrophilic membrane filters are typically used with water and aqueous solutions. They can also be used with compatible non-aqueous fluids.
  Hydrophilic membrane filters are typically not used for air, gas or vent filtration since the filters would block flow if inadvertently wetted, by condensation for example. Hydrophobic membrane filters are typically used with compatible non-aqueous fluids. They are also commonly used as air, gas, or vent filters.
- Hydrophobic membrane filters are sometimes used with water or aqueous solutions; and, in these applications, they must first be prewet with a low surface tension, water miscible fluid prior to use.
- 2. What are the advantages of MCE membranes?
- MCE membranes feature fast flow rates, a high protein binding capacity, and great thermal stability, making them a staple for many environmental and biological laboratories. Furthermore, they are available as presterilized, individually wrapped membranes, and can include a gridded pattern for quantifying microbial growth.

- 3. What are the advantages of Nylon membranes?
- Nylon Membranes exhibit high protein binding, solvent resistance, and dimensional stability due to support by inert polyester.
- 4. What are the advantages of PES membranes?
- PES Membranes are low protein binding, PES membrane filters are ideal for tissue culture media sterilization, life science and microbiology fluid applications.
- 5. What are the advantages of PTFE membranes?
- PTFE Membranes are extremely hydrophobic and exhibit superior chemical compatability with agressive solutions.
- 6. What are the advantages of PVDF membranes?
- Polyvinylidene difluoride (PVDF) membrane filters are mechanically strong, exhibit superior chemical resistance, and high thermal stability.

# Sterile Syringe Filter & Sterile Membrane Filter



### APPLICATIONS

Sterilized needle filter is a fast, convenient and reliable small-volume filtration treatment device commonly used in laboratories. It is mainly used for pre-filtration of samples, sterilization of laboratory biological fluids, culture media and media additives. Its filtration diameter is 13mm, 25mm, and the processing capacity is from 0.5ml to 200ml.

### MATERIALS

• Nylon , PES , PTFE , PVDF

### SPECIFICATION

• Diameter: 13mm, 25mm

Pore size : 0.2μm, 0.45μm,

- 1. Quick and easy to use, the media is out of the limits
- 2.Gamma ray sterilization
- 3. No heat source
- 4. Easy to tear open sticker in a single package
- 5. Unique white and easy to open outer box design, not easy to pollute
- 6. Each box has a batch number for easy quality tracking





### APPLICATIONS

 The microporous membrane filter is mainly used for the filtration of mobile phase and samples during the autobiographic analysis, especially for preventing autobiographic column and infusion pump line system and sample valve from pollution. They are widely used for gravimetric analysis, microanalysis, colloid separation and sterility test.

### MATERIALS

· Nylon, MCE

### SPECIFICATION

• Diameter: 47mm, 50mm

Pore size : 0.2μm, 0.45μm,

- Produced in 100,000-level purification workshop
- It adopts aseptic independent packaging, no need to sterilize, easy to use, out-of-the-box, effectively avoiding the risk of recontamination after sterilization.
- Mesh membrane is the most ideal choice for microbial detection and bacterial count.
- · Sterilization method: Ethylene oxide.

