

Diaphragm Vacuum Pump

Solvent Filtration Apparatus

**PAGE 7-23** 

Syringe Filter

PAGE 43-48

# **EQUIPMENT DISPLAY**









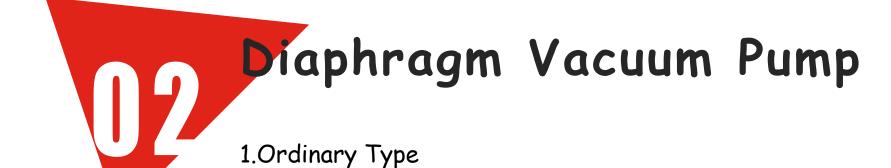












2. Anticorrosive Type

# **Ordinary Type**







GM-0.20

GM-0.33A

GM-0.5A







GM-0.5B

GM-1.0A

GM-2

# **Anticorrosive Type**



GM-0.33A (Anticorrosive)



GM-1.0A (Anticorrosive)



GM-0.5A (Anticorrosive)



GM-2 (Anticorrosive)



GM-0.5B (Anticorrosive)



GM-0.5BF (Anticorrosive)

# Anticorrosive Type





GM-0.25F (Anticorrosive) GM-0.5F (Anticorrosive)

# FEATURES

- The vacuum pumps works without any medium(oil or water) and does not produce the 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 works more smoothly, thus ensuring the ideal vacuum degree and higher air velocity.
- Using frictionless membrane body movement, does not produce heat, no friction consumption. The diaphragm adpots imported rubber, making the pumps have longer service life.
- Automatic cooling exhaust system is designed in the body, ensures continuous operation 24 hours a day.
- The pressure slightly adjustable design can satisfy a certain range of vacuum and gas velocity.

- Imported classic bearing makes the pumps operate smoothly, low noise, and high efficiency.
- Special motor is ODM provided by the 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 reach 130°C, it will automatically power off, to protect the motor from being damaged in the long time running work.
- Small volume and light weight, easy to move, spaces saving, convenient to repair and maintenance.

# FEATURES——Anticorrosive Type

- Corrosion resistance, able to tolerance almost all strong acid (including aqua regia), strong alkali, strong oxidizer, reductant, and variety of organic solvents.
- The parts in contact with the gas of anticorrosive pump is with TEFLON surface treatment, which have complete ability of resistance to chemical corrosion.
- The diaphragm has the non-stick surface, most solid material and impurity particles can not conglutinate on the surface.

# **SPECIFICATION**

### GM-0.20

- · Speed of evacuation (L/Min): 15
- Ultimat epressure vacuum : ≥ 0.075 Mpa( 250 mbar)
- Voltage: 220V /50HZ
- 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) : 320 x 200 x 240
- · Noise level (dB): <60
- Weight (kg): 4.5



Ordinary Type



### GM-0.33A

- Speed of evacuation (L/Min): 20
- Ultimate pressure vacuum : ≥ 0.08 Mpa( 200 mbar)
- Voltage: 220V /50HZ
- Motor power (w): 160W
- Inlet (mm): Ø 6
- Outlet (mm) : Inner Silencer
- Temperature of working environment (°C): 7 40
- · Function: Vacuum
- · Pump head: 1
- Temp of the body (°C): ≤55
- Dimensions (LXBXH) (mm):  $350 \times 210 \times 340$
- Noise level (dB): <60</li>
- Weight (kg): 8
- Diaphragm : NBR
- Valves : NBR



Ordinary Type



Anticorrosive Type



### GM-0.5A

- Speed of evacuation ( L /Min ): 30
- Ultimate pressure vacuum : ≥ 0.08 Mpa(200 mbar)
- Voltage: 220V /50hz
- Motor power: 160W
- Pressure : ≥ 30 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 ) :  $\leq$ 55
- Dimensions (LXBXH) (mm): 320 x 220 x 350
- Noise level ( d B ): <60</li>
- Weight ( kg ) : 8
- Diaphragm : NBR
- · Valves: NBR



Ordinary Type



Anticorrosive Type



### GM-0.5B

- Speed of evacuation ( L/Min ) : 30
- Ultimate pressure vacuum : ≥ 0.095Mpa( 50 mbar)
- Voltage: 220V /50hz
- 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 ):  $\leq$ 55
- Dimensions (LXBXH) (mm):  $410 \times 230 \times 350$
- Noise level (dB): <60</li>
- Weight ( kg ): 10
- Diaphragm: NBR



Ordinary Type



Anticorrosive Type



### GM-1.0A

- Speed of evacuation (L/Min): 60
- Ultimate pressure vacuum : ≥ 0.08 Mpa (200 mbar )
- Voltage:220V /50hz
- 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 (°C): ≤55
- Dimensions (LXBXH) (mm):  $410 \times 250 \times 350$
- Noise level (dB): <60</li>
- Weight ( kg ): 10
- Diaphragm : NBR
- · Valves : NBR



Ordinary Type



Anticorrosive Type



### GM-2

- Speed of evacuation: 120 L /Min
- Ultimate pressure vacuum ≥ 0.08 MPa (200mbar)
- Voltage: 220V /50hz
- Motor power: 300W
- Inlet (mm): Ø 9
- Outlet (mm): Ø 9
- Temperature of working environment (  $^{\circ}$ C ): 7 40
- · Fuction: Vacuum & Pressure
- Pump head:2
- Temp of the body (°C): ≤55
- Dimensions (L×W×H) (mm):  $460 \times 260 \times 400$
- Noise level (dB): <60</li>
- Weight (kg): 19



Ordinary Type



Anticorrosive Type



# NEW PRODUCT GM-0.25F(Patented Product)

• Speed of evacuation ( L /Min ): 15

Ultimate pressure vacuum : ≥ 50mbar (0.095mpa)

• Voltage: 220V /50hz

• Motor power: 90w

• Inlet &Outlet: φ6mm

• Temperature of working environment ( $^{\circ}$ C): 7-40

· Function: Vacuum & Pressure

· Pump head: 2

Temp of the body (°C): ≤50

• Dimensions ( $L \times W \times H$ )(mm): 240x150x167

Noise level(dB): <60</li>

· Weight: 6Kg

### FEATURES:

The new GM-0.25F anticorrosive pump adopts double pump head design, double chamber adopts PTFE material. The design is more reasonable, the precision has reached a new height, the limiting vacuum reaches 100Mbar. The rated power has been upgraded from the original ordinary 75W to 90W. Compact structure, better performance, belonging to energy-saving pump.





# NEW PRODUCT GM-0.5BF

• Speed of evacuation (L/Min): 30

Ultimate pressure vacuum : ≥ 0.097MPa(30mbar)

Voltage: 220V /50hz

Motor power: 160w

Inlet: φ6mm

• Temperature of working environment ( $^{\circ}$ C): 7 - 40

· Function: Vacuum

• Pump head: 2

• Temp of the body ( $^{\circ}$ C):  $\leq$ 55

• Dimensions (L×W×H)(mm):  $410\times230\times350$ 

Noise level(dB): <60</li>

Weight: 10.5Kg

### FEATURES:

The gas chamber uses PTFE material, this material has the characteristics of anti-acid, anti-alkali, anti-organic solvents, almost insoluble in all solvents. After transformation and deep processing, precision has reached a new height, limit vacuum degree has reached 30 Mbar, more suitable for vacuum filtration, decompression finishing, air concentration, centrifugal acceleration, solid phase extraction, etc.





# MEW PRODUCT GM-0.5F (Patented Product)

# **FEATURES**

- 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,
   high 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 and advanced structure obtained patents of China.

### GM-0.5F

- Speed of evacuation ( L /Min ): 30
- Ultimate pressure vacuum : ≥ 0.0985MPa ( 15mbar)
- · Voltage: 220V/50hz
- Motor power: 160w
- Inlet &Outlet: φ6mm
- Temperature of working environment ( $^{\circ}$ C): 7 40
- · Function: Vacuum & Pressure
- Pump head: 2
- Temp of the body ( $^{\circ}$ C ):  $\leq$ 55
- Dimensions (L×W×H)(mm):  $460 \times 330 \times 260$
- Noise level(dB): < 60</li>
- Weight: 13.5Kg
- · Diaphragm: PTFE Coated

### Application

- 1.Rotary Evaporator; 2.Vacuum Concentration; 3.Vacuum Distillation;
- 4. Vacuum Drying; 5. Air Sampling; 6. Vacuum Desiccator.....





# Solvent Filtration Apparatus



# APPLICATIONS

Mainly used in filtration of aqueous phase, organic phase and corrosive liquid, particularly recommended 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.



# FEATURES

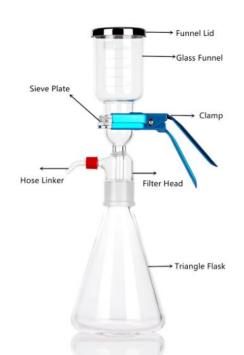
- 1. This product is made of high-quality extra hard glass, no air bubble, sparking and crystal-clear thickness is even.
- 2. The performance of pressure resistance and leakproofness is very good, it can be used for sterilization at high temperature of  $121^{\circ}$ C and high pressure.
- 3. The PTFE type is acid and alkali resistant, Corrosion resistant, can filter all kinds of aqueous solution, the organic solution and corrosive liquids.
- 4. The product flows faster, ground-glass is standard. Its size agrees with the international standard size to fit for many foreign brands.

# COMPOSITION

The solvent filtration apparatus often works with JINTENG diaphragm vacuum pump GM-0.33A.

### Components of the filter:

- · Funnel Lid
- · Glass Funnel
- · Clamp
- · Filter Head
- Triangle Flask
- · Hose linker
- · Rubber hose





Model	Funnel	Pore Size of Sieve Plate	Material of Sieve Plate	Triangle Flask	Suitable Membrane
JTFA0202	300ml	10µm	High Borosilicate Glass	1000ml	φ47 or φ50mm
JTFA0203	500ml	1.5mm	PTFE	1000ml	φ47 or φ50mm
JTFA0206	300ml	10µm	High Borosilicate Glass	2000ml	φ60mm

# Manifolds Vacuum Filtration



# Four Types of Manifolds Vacuum Filtration









# EachType has 1/3/6-branch

Manifolds Vacuum Filtration(1/3/6-Branch)						
Glass Funnel Type	Rubber Plug Type	Integral Type	Magnetic Type			
Glass Funnel Type	Rubber Plug Type	Integral Type	Magnetic Type			
Glass Funnel Type	Rubber Plug Type	Integral Type	Magnetic Type			

# FEATURES

- Manifolds Vacuum Filtration is particular designed and produced for several samples filtration at the same time, high speed, high efficiency, and less labor exertion.
- It is more convenient for the operator who needs to filtrate several samples at the same time. Because each filter holder has individual control valve, only one set vacuum pump can sustain the single or Multi-branch filter operate together.
- Stainless steel nature of the Vacuum Filtration Holders and Manifolds can filtrate solvent at 180°C; 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 funnel together with the middle filter head, becoming integrated,
  and assure them not to leak. Simultaneity, stainless steel 316L is resistant
  to acids alkalis, and be able to bear corrosion, easy to sterilize with hightemperature. Therefore, it makes the analysis result much more
  stabilization and trustiness.

# APPLICATIONS

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



Whole set of the Filtration System:

<u>Diaphragm Vacuum Pump</u> + <u>3L Receiver Bottle</u> + <u>Manifolds Vacuum Filtration</u>



# Microbial Enumeration Tester



# PPLICATION

- Microbial Enumeration Tester 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 funnels and 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.

# FEATURES

- Working with the high-performance diaphragm pump, no need any water or oil, greatly reducing the pollution to the environment;
- Button switch control, easy and intuitive to operate;
- One main unit can be used with two pump heads, with more choice and higher cost performance;
- Three heads or six heads can be operated at the same time or independently, with high working efficiency;
- The holder and filter head can be quickly disassembled and assembled, and can be sterilized by damp heat at 121 °C;
- The filter head can be quickly sterilized by flame to facilitate continuous experimental operation;
- The 316L stainless steel holder is no polishing, retaining the original blade pattern, reducing dust, and protecting the environment.









2. Sterile 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 filter samples to choose the appropriate membrane filter.

### MATERIALS

Nylon , MCE , PES , PP , PTFE , PVDF,GF

### SPECIFICATION

- Diameter: 13mm, 25mm, 47mm, 50mm, 60mm, 150mm, 300mm
- Pore size : 0.22μm, 0.45μm, 0.8μm









### Diameter: 100/200/300mm











# FEATURES(Sterile Type)

- 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.









# 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 : 0.22μm, 0.45μm



# Syringe Filter

• Economic Type



- Ultrasonic Welding Type
  - Sterile Type



# FEATURES

- 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, not need 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 7 bar.

# **Economic Type**

## · MATERIALS

Nylon66 , PES , PTFE , PVDF, MCE, PP

## · SPECIFICATION

• Diameter: 13mm, 25mm, 33mm

• Pore size : 0.22μm, 0.45μm,0.8μm











# Ultrasonic Welding Type

# MATERIALS

Nylon66, PES, PTFE, PVDF

### SPECIFICATION

• Diameter: 4mm, 13mm, 25mm

Pore size : 0.22μm, 0.45μm

Package: 100pcs/pkt









# Sterile Type

### MATERIALS

Nylon66 , PES , PTFE , PVDF, MCE

### SPECIFICATION

Diameter: 4mm, 13mm, 25mm, 33mm

• Pore size : 0.22μm, 0.45μm







## **APPLICATIONS**

 Sterile syringe 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.

### **FEATURES**

- 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



