



Sterility Test Apparatus

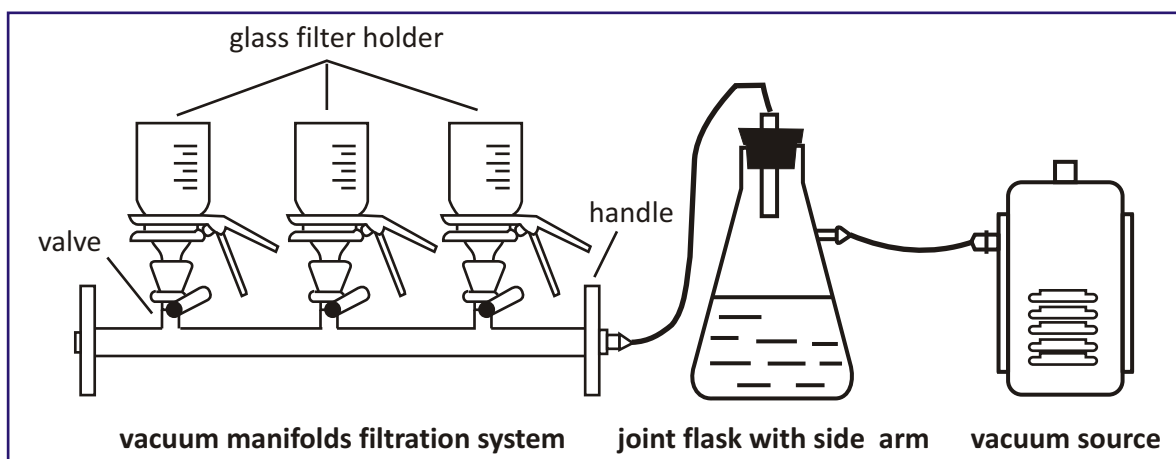
Vacuum Filtration Manifold
HPLC Solvent & Sample Filtration

Solvent Filtration Vacuum Manifold



The ATHENA Filtration Systems are complete in their components, designed to immediately set to work for laboratory filtration needs. The Athena Vacuum Pumps feature an oil free piston design, the Athena Pumps are a diaphragm design and can survive many harsh chemical environments and the Athena Pumps are an integrated oil free piston pump design that offers a safe, easily portable compact size.

These filtration systems have a range of capabilities to suit general laboratory liquid filtering as well as filtering of corrosive fluids, suspended solids testing, filtering in microbiology in which sterilization is necessary, or other specialized filtering tasks.



Model is used for sterility testing of antibiotics and pharmaceuticals. Microbiological analysis of retained particles. Yeast and mold detection. Waste water and particulate contamination analysis. Vacuum filtration of solvents and aqueous solutions.

Multiple Vacuum Filtration Systems

Athena has single solvent filter and multi – filtration manifolds for different applications. Multibranch Manifold filter is particular design and produce for several samples filtrate at the same time. It is more convenient for 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 manifold filter operate together.

The Application Of Multiple Vacuum Filtration Systems As Follows

- Widely used for chemistry analyses
- Biochemical-pharmaceutical sanitation test environment test
- Water quality analyses
- Foodstuffs and beverage test
- Science research and so on.
- Vacuum filter aqueous, organic or corrosive liquids for particulate contamination analysis.
- It is recommended for HPLC solvent filtration and it has the function of out gas to guarantee the clean of mobile
- Phase and avoid the blockage of HPLC liquid flow path



SS Vacuum Filtration Systems

The vacuum filtration manifold is designed and manufactured for simultaneous filtration of multiple samples. It is more convenient to select manifold filter for the operator who needs to filter multiple samples simultaneously. Since each of the sterile PVDF syringe filters has an independent control valve, only a single vacuum pump can be used to support single or multiple simultaneous operation.

All stainless steel multi filter holder can filter operation in the high temperature of 180 °C; the quality of hard glass bottle and cup made of fine filtration temperature range above 200 °C resistance. The Stainless Steel alloy clamp design is reasonable and compact, and the filter cup can be conveniently combined with the middle filter head to ensure strict sealing without leakage. At the same time 316 sanitary stainless steel material acid and alkali resistance, corrosion resistance, easy to high temperature disinfection, make the analysis results more stable and reliable.

Structural Characteristics:

- The cup filter is made of stainless steel, which has the characteristics of high temperature resistance, corrosion resistance, impact strength and so on.
- Stainless steel material, replace the glass material, durable, greatly reduce man-made damage, reduce the cost of opening Branch.
- Easy to high temperature disinfection (120° C, 30min) acid and alkali resistance, corrosion resistance.
- At the same time, the 3 samples can be filtered, greatly improving the work efficiency.
- Suitable for laboratory sample filtration work; injection of drugs, large infusion of sterile detection; microbial limit test.
- Each filter with a separate valve, can be used alone, can also be used.

Product name	Sterility test filter holder
Application	Model is used for sterility testing of antibiotics and pharmaceuticals. Microbiological analysis of retained particles. Yeast and mold detection. Waste water and particulate contamination analysis. Vacuum filtration of solvents and aqueous solutions.
Material of construction	Stainless steel 316, funnel, lid, base, SS support screen (Teflon coated on request) and SS spring clamp
Filter size	Diameter – 47mm
Filtration area	10.5 sq. cm
Funnel capacity	300ml/500ml
Pressure	Vacuum only
Connections	Standard silicon rubber stopper for Mounting filtration assembly on 1liter Filtration flask or on Athena sterility test manifold systems.
Vent connections	Luer port on SS lid for adopting 13mm syringe filter holder (not provided with the unit)
Size Appx.	Diameter 80mm * 210mm height
Weight	1 kg

Pre Installation Requisite for HPLC



Model: **ATV-15 (2.7)**

Max. Flow: 15 LPM

Vacuum: 22" Hg (554 mm)

Max. Pressure: 25 PSig, 1/20 HP

1 Filter holder

Model: **ATV-75-S (9.0)**

Max. Flow: 45 LPM

Vacuum: 27" Hg (680 mm)

Max. Pressure: 55 PSig, 1/4 HP

For 3 branch Filtration



Six Stainless Steel multi band filter features

- 1) Six SS Solvent Sterility membrane filter apparatus fastener design, fetching, convenient for single hand operation and membrane has the advantages of simple operation, the use of more efficient.
- 2) Modular design: the solvent filter system connector is equipped with an independent switch, can be a separate sample filter, but also can filter multiple samples at the same time, in the detection of a large number of samples can save a lot of time. In the process of filtration, the utility model adopts an integrated solution, a non pollution oil-free piston vacuum pump and a liquid storage bottle which can be sterilized by high temperature. The whole filtration system can be placed safely and efficiently in the laboratory, clean room, clean bench.
- 3) Design detailed scientific: first using high-quality 316L stainless steel membrane support pad, ensure the membrane does not appear rupture or perforation in the filtration process, guarantee the accuracy of sample testing, it can make the entrapped microbial distribution in the membrane surface is uniform, then the experimental results in observation.
- 4) To prevent secondary pollution: filtration system in stainless steel filter cup is arranged on the upper cover of air vents, air filter installed optional, to avoid the two pollution in filtration.
- 5) To improve the efficiency of detection: to improve the efficiency of detection: stainless steel filter sterilization method can adopt 121 degrees sterilization for 20-30 minutes, 180 degrees 60 minutes, dry heat sterilization can be used more efficient sterilization method: the filtration system matching with high temperature burning flame sterilizer, achieve sterilization purpose.
The inner wall of the filter cup is provided with a clear capacity calibration line, which is convenient for quantitative addition.
- 6) Durable material: filter, filter connector, valve, filter holder, filter cover, membrane support pad and other major accessories are made of 316 high-quality stainless steel, not easy to damage.

Sterility Testing Filtration Manifold (C-Funnel) Feature:



Pre Installation Requisite for HPLC

Solvent Filtration Kit



Solvent Filtrations Assembly Glass / SS
(upper part) with 1 lit. Bottom Flask Glass Size 47mm

It used to filter the Solvent (mobile phase) for HPLC & other analytical application. Upper part is of Glass or SS as per requirement.



Nylon 66 Membrane Filter Ø47mm x 0.45µ
other sizes & porosity (like 0.2µ) also available



Vacuum Pump for above Model ATH-15
Max. Flow - 15 LPM, Vacuum - 22" Hg (554 mm)
Max. Pressure - 25 Psig, 1/20 HP

Sample Filtration Kit



Nylon 66 Membrane Filter
Size: Ø 13 x 0.2 µ (Porosity)

Other sizes & porosity also available



Ø 13mm S. S. Filter Holder /
Ø 13mm P. P. Filter Holder



5ml Glass Hypodermic Syringe (Indian) /
5ml Gas Tight Syringe (Indian)



ATHENA TECHNOLOGY

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