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**TAILIN** 



### **Tailin: Integrated Solution Provider in Life Science**

Founded in 2002, Tailin is a leading company in the life science field.

Talin's core competency is technological innovation and strong manufacturing ability.

In order to provide the whole solutions for customers, we manufacture most of the critical equipment by ourselves including the aseptic isolator, containment isolator, VHPS decontamination system, glove leak tester, sterility test pump, and consumables.

Up to today, Tailin has got more than 300 Chinese patents and drafted many National and Industry standards in the name of the first author.

Tailin has nearly 1,000 employees, of which there are more than 200 R&D engineers, accounting for 20%.

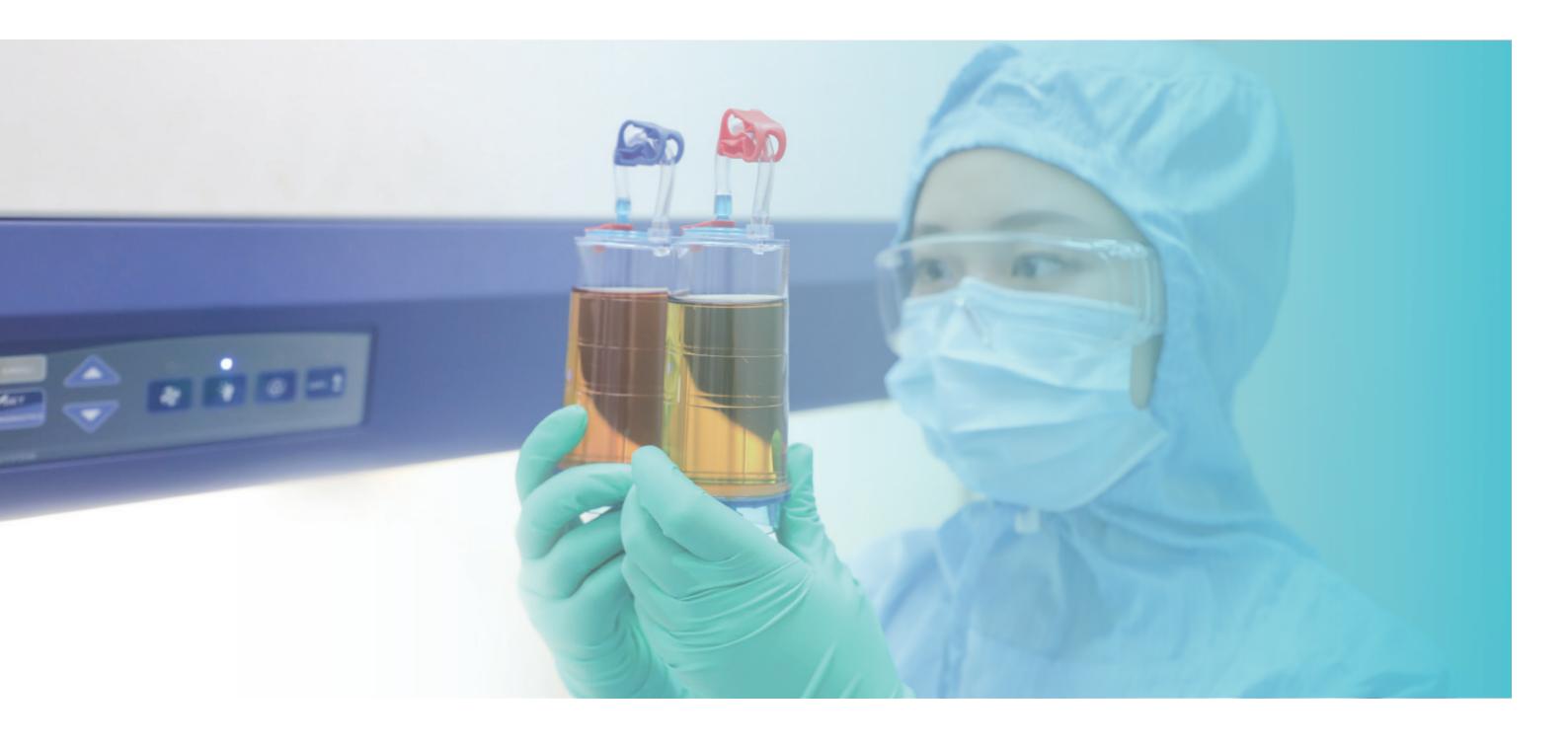
Furthermore, Tailin has experienced validation teams working closely with customers and developed qualification strategies based on regulations to guarantee fast approvals by the authorities.

Due to the high quality and excellent service, Tailin become a well-known company in the fields with high standard requirements such as biopharmaceutical, cell& gene therapy, P3 labs, manned space, etc.

Nowadays, Tailin has built a solid relationship with lots of famous multi-national pharmaceutical groups, laboratories, and institutes spread in more than 40 countries and territories in the world. In the future, Tailin will keep going all out to serve customers better and grow together with our partners.

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# **Sterility Test System**

- 1. Sterility Test Pump
- 2. Built-in Sterility Test Pump for Isolator
- 3. Sterility Test Canister

- 4. Rapid Sterility Test System
- 5. Accessories
- 6. Lactamases

### **Sterility Test Pump**

#### HTY-ASL02

- + Toughened and water-proof glass panel
- + Two pressure modes: Normal/\*Pressure Alert
- + SOP function: store up to 300 test recipes
- + Support to input SOPs from PC
- + Powerful motor with digital current control technology
- + Speed memory function
- + Safety hood to avoid glove pinching
- + Water-proof pedal switch
- + Safety protection of over current, over voltage, over load and block
  - Pump head automatically locked
  - Max.300 test recipes storage
  - Easy tube loading
  - Timer function
  - Fit for other brand canisters
  - No electrical spark, explosion-proof

\*The pressure alert mode is for Tailin canisters, it will alert the operator and automatically reduces the pump speed till to pressure returns to normal.



#### **Technical Parameters**

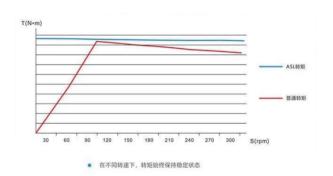
Power: AC95-260V/50-60Hz,120W	Net Weight: 20kg	Material: Stainless Steel
Screen: 4.3" Colorful LCD	Test Recipes: Up to 300 groups	Dimensions: 22.5x40.0x13.5cm
Ambient Temperature: 15~35°C	Speed: 1-300pm	Timer: 1-999S
Ambient RH: Below 70%		

### **Sterility Test Pump**



#### **SOP Mode**

It can preset the test process and parameters, and store up to 300 recipes



#### **Stable Speed**

Running at stable speed to ensure the reliable filtration

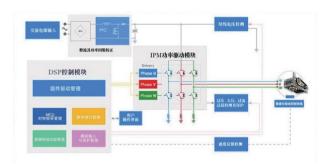


**Easy Tube Loading** 



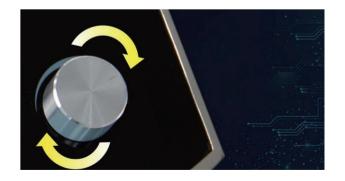
#### **Powerful Motor**

Consistent torque at different speeds to meet the various filtration needs



#### **Digital Current Control**

Digital current control to realize stable speed and excellent running performance



**Digital Pulse Knob** 

### **Sterility Test Pump**

#### **HTY-602S**

- + Resistant to gas decontamination in isolator
- + Compact design frees working space in isolator
- + Fully water-proof design
- + Safety hood to avoid glove pinching
- + Safety protection of over current, over voltage, over load and block
  - Easy tube loading
  - Touch control
  - Support 4-speed preset
  - Fit for other brand canisters











Resistant to gas decontamination Waterproof and dustproof interface

Suitable for using in isolator

#### **Technical Parameters**

Power: AC220V/50HZ,65W	Net Weight: 13kg	Bottle Holder Height: 43cm
Speed: 15-300rpm	Dimensions: 23.0x31.0x11.5cm	Material: Stainless Steel

### **Sterility Test Pump**

#### **HTY-APL01/02**



- + Glass touch panel
- + Easy tube loading
- + Two pressure modes: Normal /\*Pressure Alert Mode
- + Speed memory
- + Digital pulse knob
- + Safety hood to avoid glove pinching
- + Water- proof pedal switch
- + Safety protection of over current, over voltage, over load and block

\*Pressure alert mode is for Tailin canisters, it will alert the operator and automatically reduces the pump speed till to pressure returns to normal.

#### **HTY-602A**



- + Glass touch panel
- + Speed memory
- + Water-proof pedal switch
- + Safety hood to avoid glove pinching
- + Safety protection of over current, over voltage, over load and block
- Colorful LCD screen
- Temperature display
- Digital pulse speed knob
- Pre-set 4 speed for one-click starting

#### **Technical Parameters**

Power: AC220V/50-60Hz,90W	Bottle Hold Height: 43cm
Speed: 15-300pm	Dimensions: 22.5x40.0x11.2cm
Net Weight: 16kg	Material: Stainless Steel

#### **Technical Parameters**

Power: AC220V/50-60Hz,65W	Bottle Holder Height: 43cm
Speed: 15-300pm	Dimensions: 23.0x31.0x11.0cm
Net Weight: 11kg	Material: Stainless Steel

### **Sterility Test Pump**

#### **HTY-601**



- + Minimalist design frees working space
- + Mirror polished stainless steel easy to clean
- + Safety hood to avoid glove pinching
- + Most economical choice
- Small
- Economical
- One button start/stop
- Suitable for LVP samples

#### **Technical Parameters**

Power: AC95-260V/50-60Hz,60W	Bottle Holder Height: 43cm
Speed: 15-300pm	Dimensions: 22.5x34.0x10.5cm
Net Weight: 11.5kg	Material: Stainless Steel

### Built-in Sterility Test Pump for Isolator

#### HTY-ASL01 ISO/02 ISO



- + Embedded design to minimalize space occupancy
- + Easy tube loading and fit for other brands canisters
- + Two pressure mode: Normal/\*Pressure Alert
- + SOP function: store up to 300 test recipes
- + Powerful motor with digital current control technology
- + Speed memory function
- + Safety hood to avoid glove pinching
- + Water-proof pedal switch
- + Safety protection of over current, over voltage, over load and block

#### **Technical Parameters**

Power: AC95-260V/50-60Hz,120W	Test Recipes: Up to 300 groups
Screen: 4.3" colorful LCD	Speed: 1-300pm
Ambient Temperature: 15~35°C	Timer: 1-999S
Ambient RH: Below 75%	Bottle Holder Height: 33cm
Net Weight: 19kg	Material: Stainless Steels

<sup>\*</sup> The pressure alert mode is for Tailin canisters, it will alert the operator and automatically reduces the pump speed till to pressure returns to normal.

### Built-in Sterility Test Pump for Isolator



**Designed for Sterility Test Isolator** 

Compact design frees the working space



Water-proof

Water-proof glass panel is easy to clean



Easy Tube Loading, Pump Locked Automatically



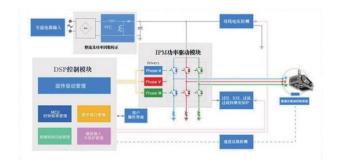
**SOP Mode** 

It can store up to 300 groups of test recipes



**Digital Pulse Knob** 

Speed knob designed to be operated with isolator gloves



#### **Digital Current Control**

Digital current control to realize stable speed and excell running performance

### Built-in Sterility Test Pump for Isolator

#### **HTY-APL06 ISO**



- + Glass touch panel
- + Easy tube loading
- + Two pressure modes: Normal /\*Pressure Alert Mode
- + Speed memory
- + Digital pulse knob
- + Safety hood to avoid glove pinching
- + Water- proof pedal switch
- + Safety protection of over current, over voltage, over load and block

\*Pressure alert mode is for Tailin canisters, it will alert the operator and automatically reduces the pump speed till to pressure returns to normal.

#### **HTY-602 ISO**



- + Easy tube loading
- + Preset 3 commonly used speed
- + Glass touch panel
- + Compact design frees working space in isolator
- + Safety hood to avoid glove pinching
- + Safety protection of over current, over voltage, over load and block

#### **Technical Parameters**

Power: AC220V/50-60Hz,90W	Bottle Hold Height: 33cm
Speed: 1-300pm	Dimensions: 23.0x30.5x1.0cm (Not incl. the sunken part)
Net Weight: 18kg	Material: Stainless Steel

#### **Technical Parameters**

Power: AC220V/50-60Hz,65W	Bottle Hold Height: 33cm
Speed: 15-300pm	Dimensions: 23.0x30.5x1.0cm (Not incl. the sunken part)
Net Weight: 16kg	Material: Stainless Steel

### **Sterility Test Canister**



#### Double layer package for easy use in clean room

Double layer package to reduce the surface disinfection workload and the contamination risk. Good quality dialysis material to ensure both the package integrity and sterile condition.





#### Pop-up cap with lanyard

A newly designed cap with a lanyard, the cap pops up when there is excess pressure inside and the cap is never missed during the testing process.

#### Pre-installed clamps for easy operation

Although the clamps are small parts, they have passed stringent tests including flow distribution, open and close test, sterilization resistance test, impact test, etc.



- + Ultrasonic welding process for best sealing performance and high-pressure resistance
- $+ High \ quality \ composite \ tubing \ with \ long-lasting \ tensile, we ar, and \ pressure \ resistance \ to \ ensure \ trouble-free \ large-volume \ filtration$
- + Pre-sterilized by EO or irradiation following European CE and international standards to ensure sterile performance
- + Bacterial challenge test, microbial growth recovery, and sterility test to ensure authentic and reliable sterility test results

### Sterility Test of Small Volume Samples

Small doses are packaged in vials, some of which are less than 5 mm in diameter, and the rubber stoppers are even smaller. Traditional sterility testing methods may involve the following risks:

- 1. The use of syringes for dissolution and transfer, with high volumes of manipulation, repeated needle punctures, high risk of contamination, and difficulty in ensuring the integrity of the vial stopper.
- 2. The use of a single-hole needle adapter, where the sample is forcibly withdrawn from the vials without auxiliary air, the build-up of negative pressure upstream can affect the integrity of the filtration membrane, and there is also some risk of contamination due to the rapid replenishment of air and the negative pressure in the line as the needle is pulled out.
- 3. Forced piercing of the stopper with a conventional needle will result in deformation of the needle, affecting subsequent operations, and has a high probability of dislocating the stopper and damaging the integrity of the vials, increasing the risk of contamination.





A newly designed needle with an outer diameter of only 2.0 mm easily pierces the vial stopper without compromising the integrity of the stopper and vial mouth. The length of the needle has been optimized to reduce the amount of liquid left in the vial and to avoid uneven distribution of the sample in the vial.

#### Liquid sample in small vial

For liquid samples in a small vial, the DGB206 canister is recommended. Pierce the specially designed needle into the vial, start the pump, and pump all the samples to be tested in the container in turn (pausing to avoid inhaling air when changing vials. If the total volume of a batch of samples is less than 100 ml, it is recommended to dilute them appropriately before filtration), and then filtered them to achieve uniform sample distribution in the vials.





#### Powder sample in small vial

The NKFX220 canister is recommended for powder samples in small vials. It adopts a three-needle adapter, and the middle needle is designed for a small vial. Pierce the needles in the vial, start the pump, and invert the dissolution liquid bottle, transferring the diluted liquid to the closed container for the next filtration.

### **Sterility Test Canister**

#### **Ordering Information**

Applications		EO Pre-Sterilized		Irradiation Pre-Sterilized
		Pouch Package	Blister Box Package	Pouch Package
Without Antibiotics		PY2202	-	PY2202D*
LVP in Bottle	Without Antibiotics	PY220	B-PY220	PY220D
	Contain Antibiotics	KSF220	B-KSF220	KSF220D
	Without Antibiotics	APY220-P* (for oily product)	-	-
Liquid in Ampoule	Without/Antibiotics	APY220	B-APY220	APY220D
	Contain Antibiotics	APY220	B-AP-Y220	APY220D
Powder in Vial	Without Antibiotics	DGB220	B-DGB220	DGB220D
	Contain Antibiotics	KDGB220	B-KDGB220	KDGB220D
Powder in Ampoule	Without Antibiotics	DGA220	-	DGA220D
Powder III Ampoule	Contain Antibiotics	KDGA220	-	KDGA220D
Difficult Soluble Powder in a Vial, With Antibiotics		NKF220	B-NKF220	NKF220D
LVP in Collapsible Bag		SDY220	B-SDY220	SDY220D
Medical Instrument with Male Luer Connector		YLQ220	-	YLQ220D
Medical Instrument with Female Luer Connector		YLX220*	-	YLX220D*
Viscous Liquid (biological products)		CN220	B-CN220	CN220D
Lyophilized Powder for Injection (biological products)		DCN220	-	DCN220D
Pre-fill	ed Syringe	PFS2*	-	PFS2D*
Emulsion or Hard Filtrating Aqueous Samples		-	EVS2	-

### Rapid Sterility Test System

#### Innovative Technology: Canister with Color Indicator





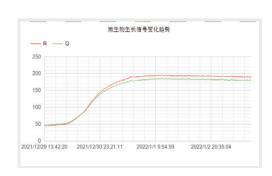
**RST Series of Canister** 

Automated Incubation and Digital Image Analysis Station

#### **Principle**

RST series of canisters adopt innovative color sensing technology. The microbial growth signal is quickly recognized by a  $CO_2$  sensor at the bottom of the canister and is converted into a microbial growth signal by a digital camera scanning the image for color change and automated interpretation.





Color changes correspond to microbial growth signals

### Accessories

#### **Lab Vibrator HTY-VS01**

The HTY-VS01 is used to shake the canister during sterility testing of antibiotic drugs to accelerate dissolution. It can reduce adsorption, improve the effect of filtration membrane flushing and avoid false negative results.

- + Fully enclosed design, resistant to gas decontamination
- + Digital display with one-touch start/stop
- + Adjustable shaking speed with timer function
- + Tempered glass touch panel
- + Suction cup base to prevent movement during operation



#### **Technical Parameters**

Power: AC95-260V/50-60Hz,25W	Timing: 1-99 min. or continuous running	Size: 17.0x18.0x15.5cm
Vibration Frequency: ≥28Hz	RMS Amplitude: ≥0.1mm	Net Weight: 6kg

#### **Canister Stand**



- + Made of 316L stainless steel
- + Patented openings for reliable fixation
- +Specially designed handle for easy handling and simple operation
- + Stackable design to save space

10 holes: 31.5x12.0x2.0 (5.0) cm

20 holes:31.5x23.0x2.0 (5.0) cm

### Lactamases



#### **Penicillinase**

Penicillinases are defined as a group of enzymes with varying specificity for hydrolysis beta-lactam compounds. The enzyme activity can reach 5 million units/mL which is superior to the conventional Penicillinase from Bacillus cereus.

+ Effective hydrolysis of beta-lactam antibiotics, including penicillin G, ampicillin, amoxicillin, pimecillin, carbenicillin, ticarcillin, furocillin, meloxicillin, cephalexin generation, etc.

Product	Physical Form	Pack Size	Activity
Penicillinase	Liquid	3mL	≥15million IU/vial
Penicillinase	Liquid	5mL	≥15million IU/vial

#### Cephalosporinase

Cephalosporinase is used to inactivate almost all current cephalosporins. Inactivate cephalosporin antibiotics, including: cefadroxil,cefradine, cephalexin.

+Used for the sterility testing of cephalosporin raw materials and injectable cephalosporin drugs.

+ Used for the microbial limit test of oral and othe rcephalosporin antibiotics.

Product	Physical Form	Pack Size	Activity
Cephalosporinase	Liquid	7mL	≥2million IU/vial
Cephalosporinase	Liquid	5mL	≥2million IU/vial
Cephalosporinase	Powder	-	≥2million IU/vial

### Lactamases

#### **Metallo Enzyme**

Metalloenzymes are  $\beta$ -lactamases and are used to inactivate carbapenem (penicillin) antibiotics with better results than penicillinase.

+ It can effectively inactivate the beta-lactam antibiotics especially carbapenems

+ Used for the sterility test of β-lactam antibiotics raw materials and injectable drugs + Used for the microbial limit test of oral and other β-lactam antibiotics

Product	Physical Form	Pack Size	Activity
Metallo enzyme	Lyophilized powder	-	≥2million IU/vial

#### Glucocerebrosidase

Glycopeptidase inactivates vancomycin and teicoplanin by opening the amide bond, mainly through the purified protein of the recombinant gene, so that it loses the antibacterial properties of the antibiotic.

- + It can effectively inactivates vancomycin, teicoplanin
- + Used for the sterility test of vancomycin and teicoplanin injectables
- + Used for the microbial limit test of vancomycin and
- teicoplanin oral drugs

Product	Physical Form	Pack Size	Activity
Glycopeptidase	Lyophilized powder	-	≥100 IU/vial

### Lactamases

#### **Macrocyclic Lactonase**

Macrocyclic Lactonase is a genetically modified recombinant protein, water soluble, with a molecular weight of around 70,000. The principle is to inactivate the antimicrobial properties of macrolides.

- + It can effectively inactivates macrolide antibiotics
- + Used for microbial limit test of oral and other macrolide
- +Used for sterility test of macrolide antibiotics injectables
- antibiotics

Product	Physical Form	Pack Size	Activity
Macrocyclic Lactonase	Lyophilized powder	-	≥10 IU/vial

#### **How to Use**





- +Liquid: Each vial is used directly for sterility test
- + Lyophilized Powder: Each vial is dissolved in 5mL of sterile water and used for the sterility test
- + Storage: It is recommended to store the product desiccated at 2–10  $^{\circ}\text{C}$
- + The product as supplied is stable for 12 months when stored properly
- +Package: 10 vials/box



# **Microbial Limit Test System**

- 1. Microbial Limit Tester
- 2. Microbial Limit Test Manifold
- 3. Laboratory Pumps
- 4. Microbial Limit Test Funnels

- 5. Membrane Filters
- 6. Membrane Dispenser
- 7. Sterile Vacuum Filter Unit
- 8. Automatic Colony Counter

### Microbial Limit Test System



Microbial limit testing in the pharmaceutical industry is a highly regulated and complex area. With decades of experience, Tailin offers you an easy-to-use system with excellent service.

Tailin's microbial limit testing system is based on the membrane filtration method and consists of a range of instruments and consumables such as microbial limit testers/manifolds, vacuum/diaphragm pumps, funnels, filter membranes, membrane dispensers, automatic colony counters, etc.

The system complies with EP, USP, ChP, GMP, and ISO7704 requirements.

#### **How to Use**

#### A complete microbial limit test system consists of

• Option 1: Microbial Limit Tester + Funnels + Membrane Filter • Option 2: Microbial Limit Test Manifold + Laboratory Pumps + Funnels + Membrane Filter

When using Tailin's microbial limit test system, there are flexible product combinations available.

Combinations	Microbial Limit Testers (Built-in Pumps)	Microbial Limit Test Manifold	Laboratory Pumps	Filter Unit	Funnels	Membrane Filters
Option 1	HTY-310/ HTY-305SP/HTY-302/ HTY-102S	N/A	N/A	S60 F47BP-1001	N/A	N/A
Option 2	HTY-310/ HTY-305SP/HTY-302 /HTY-102S	N/A	N/A	N/A	F47BM/F47BN F47/F60	N/A
Option 3	N/A	HTY-30X series	HTY-30A (Vacuum Pump) HTY-30B (Diaphragm Pump)	S60 F47BP-1001	N/A	N/A
Option 4	N/A	HTY-30X series	HTY-30A (Vacuum Pump) HTY-30B (Diaphragm Pump)	N/A	F47BM/F47BN F47/F60	YES

<sup>\*</sup>Accessories can help you optimise your microbial limit testing workflow

### Microbial Limit Test System

#### F47/F60 Funnel







sample, and start filtering.



2. Install the funnel, add the testing 3. Remove the funnel.



4. Incubate and count.

#### F47BM/F47BN Funnel



1. Install the funnel.



2. Add the testing sample, and start 3. Remove the funnel. filtering.





4. Incubate and count.

#### F47BP-1001 Funnel



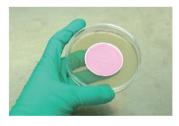
1. Install the funnel.



2. Add the testing sample, and start 3. Option 1 Add liquid medium to 4. Option 2 Transfer the membrane, filtering.



form a Petri dish without removing incubate and count. membranes and filtering.



#### **S60 Filtration Funnel**



1. Install the funnel and filtering sample.



2. Reverse the funnel and fill in medium.



3. Put on the cover to form a petri 4. Incubate and count.



<sup>1.</sup> Automatic Membrane Dispenser HTY-EMD01 2. Automatic Colony Counter ASC-2000

### Microbial Limit Tester

#### HTY-310

- + Color LCD screen with tempered glass touch panel
- + Built-in SIP automatic disinfection program
- + Countdown running function, different pump head can be set for different running times
- + Four types of pump heads can be freely selected
- + Pump heads can be moist heat sterilized at 121°C
- + Built-in diaphragm pump, direct drainage, no need for filter bottles
- + Built-in check valve to eliminate backflow and prevent contamination
- + Larger discharge port for a smoother drain



- Four pump heads
- SIP automatic disinfection
- High-performance diaphragm pump made in Europe
- Test results could be printed

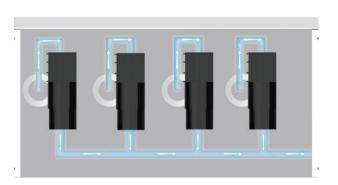
#### **Technical Parameters**

Power: AC220V/50Hz,145W	Noise: ≤ 65dB(A)	
Size: 50.0x26.0x12.0cm	Flow Rate: 1500mL/min	
Type of Pump Heads: PF47,PB47, PF60, PS60		
Consumables: S60 filtration funnel, F47, F60, F47B funnel with disc membrane filters		

### Microbial Limit Tester



**Built-in Diaphragm Pump** 



**SIP Automatic Disinfection Function** 



**32-bit ARM Microcontrollers** 



**Glass Touch Panel for Easy Operation** 



**External Printer for Test Results Printing** 



Quick-fit Pump Heads Could Be Heat Sterilized

### Microbial Limit Tester

#### **HTY-305 SP**

# STAILIN' STAILI

- + Three pump heads
- + Built-in diaphragm pump made in Europe, direct drainage, no need for filter bottles
- +Color LCD screen with tempered glass touch panel
- + Built-in SIP automatic disinfection program
- + Countdown running function, different pump head can be set for different running times
- + Four types of pump heads can be freely selected
- + Pump heads can be moist heat sterilized at 121°C
- + Equipped withcheck valve to prevent backflow and contamination
- + Larger discharge port for a smoother drainage

**Technical Parameters** 

membrane filters.

#### HTY-302



- + Suitable for the microbial limit test of viscous liquid samples
- + Three pump heads
- + Vacuum pump is built in and should be used together with a filter bottle for drainage
- + Four types of pump heads can be freely selected
- + Pump heads can be moist heat sterilized at 121°C
- + Each pump head can be in operation independently
- + Manual drainage

#### Technical Parameters

Power: AC220V/50Hz,135W	Noise: ≤ 65dB(A)		
Size: 38.0x26.0x12.0cm	Flow Rate: 1500mL/min		
Type of Pump Heads: PF47,PB47, PF60, PS60			
Consumables: S60 filter unit, F47, F60, F47B funnel with disc			

Power: AC220V/50Hz,30W Noise: ≤ 65dB(A)

Size: 38.0x23.0x10.0cm Flow Rate: 25 L/min(pumping flow)

Type of Pump Heads: PF47,PB47, PF60, PS60

Consumables: S60 filter unit, F47, F60, F47B funnel with disc membrane filters

### Microbial Limit Tester

#### **HTY-102S**



- +Single pump head
- + Built-in SIP automatic disinfection program
- +Color LCD screen with tempered glass touch panel
- + Countdown running function, different pump head can be set for different running times
- + Four types of pump heads can be freely selected
- + Pump heads can be moist heat sterilized at 121°C
- + Built-in diaphragm pump, direct drainage, no need for filter bottles
- + Equipped with check valve to prevent backflow and contamination
- + Larger discharge port for a smoother drain

#### **Technical Parameters**

Power: AC220V/50Hz,60W	Noise: ≤ 65dB(A)		
Size: 20.0x23.0x10.0cm	Flow Rate: 1500mL/min.		
Type of Pump Heads: PF47,PB47, PF60, PS60			
Consumables: S60 filter unit, F47, F60, F47B funnel with disc membrane filters.			

### Microbial Limit Test Manifold

#### **HTY-305 Series**



- + All stainless steel construction
- +All components can be disassembled for clean and steam sterilization
- + Four types of pump heads can be freely selected
- + Each pump head can be in operation independently
- + Used with the laboratory diaphragm pump or vacuum pump
- +One/three/six pump heads are available

#### **Technical Parameters**

Model	Pump	Heads	Consumables	Membranes	Laboratory Pumps
Model	Q' ty	Туре	Consumables	Membranes	Laboratory Furrips
HTY-301A/B/C	1	A: PF47A	A: F47 funnel	A: Ø47mm	HTY-30A Vacuum Pump
HTY-303A/B/C	2	B: PF60A	B: F60 funnel	B: Ø60mm	HTY-30B Diaphragm Pump
HTY-306A/B/C	3	C: PB47A	C: F47B funnel	C: Ø47mm	

### **Laboratory Pumps**

#### **HTY-30B**



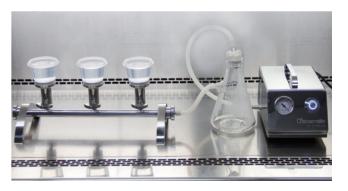
- + High performance diaphragm pump, no filter bottle required
- + Faster flow rate 5L/min
- + One button start /stop, easy to use
- + Compact and quiet
- +Used with the microbial test manifold, funnel and membrane filter to form the microbial test system



#### HTY-30A



- + High-performance vacuum pump, and should be used together with a filter bottle for drainage
- + One button start /stop, easy to use
- + Used with the microbial test manifold, funnel and membrane filter to form the microbial



#### **Technical Parameters**

Power: AC220V/50Hz,60W	Noise: ≤ 60dB(A)
Size: 20.0x23.0x12.5cm	Flow Rate: 5L/min.
Net Weight: 5kgs	Material: Stainless Steel

#### **Technical Parameters**

Power: AC220V/50Hz,30W	Noise: ≤ 65dB(A)	
Size: 14.0x25.0x11.0cm	Flow Rate:25L/min.	
Net Weight: 3kgs	Material: Stainless Steel	
Vacuity: 30Kpa (absolute pressure); -70Kpa ( relative pressure		

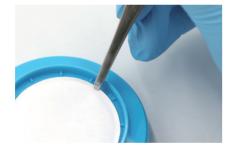
### Microbial Limit Test Funnels

#### F47BP-1001





Ready-to-use, once the sample has been filtered, the liquid medium can be added directly for incubation and counting without the need for additional agar and a Petri dish



Specially designed notch make membrane transfer easier



Pre-sterilized disposable base



Funnel with graduation marks, smooth surface to reduce liquid residue



The media absorbent pad locks in the media and provides sufficient nutrients



Stackable to save space

### Microbial Limit Test Funnels

#### F47BM/F47BN



- + Pre-sterilized, 100mL or 250mL volume
- + Specially designed base to reduce the liquid residue
- + Specially designed notch make membrane transfer easier
- + Base, funnel and membrane filter can be selected separately
- + Disposable base with drainage hole to avoid contact with the pump head
- + Pump heads no need flame sterilization

#### **Filtration Funnel S60**



- + Ready-to-use, no need petri dish and tweezer
- +Sterile package
- +Integrated design, no need to transfer membrane
- + Perfect contact betweent the membrane and culture media

#### F47/F60



+ Sterile package

+100mL or 250mL volume



100mL F47 Funnel



250mL F47 Funnel



250mL F60 Funnel

Top Cover





Cup

Support Base

Base Cover

### Microbial Limit Test System Summary

#### Summary

Device	Pump	Pump Heads	Funnels	Membrane Filters
			F47	Ø47 mm
		PF47	F47-R100	Ø47 mm
			F47-R250	Ø47 mm
HTY-310		PF60	F60-R250	Ø60 mm
HTY-305S	Built-in Pump	PS60	S60	Integrated Ø60mm MCE
HTY-302 HTY-102S			F47BM (blue base,for drugs without antibiotics)	Integrated Ø47mm MCE
		PB47	F47BN (red base,for drugs contain antibiotics)	Integrated Ø47mm Nylon
			F47BM-R250 (blue base)	Integrated Ø47mm MCE
HTY-301A			F47	Ø47 mm
HTY-303A		PF47A	F47-R100	Ø47 mm
HTY-306A			F47-R250	Ø47 mm
HTY-301B HTY-303B HTY-306B	HTY-30A (Vacuum Pump) HTY-30B	PF60A	F60-250	Ø60 mm
	(Diaphragm Pump)		F47BM (blue base,for drugs without antibiotics)	Integrated Ø47mm MCE
HTY-301C HTY-303C HTY-306C		PB47A	F47BN (red base,for drugs contain antibiotics)	Integrated Ø47mm Nylon
			F47BM-R250 (blue base,for drugs without antibiotics)	Integrated Ø47mm MCE

### Membrane Filters



- + Wide range of membrane filters to meet different filtration needs
- +Uniform pore size and high porosity
- + Excellent flow rate
- +Gridded / Plain membrane for option
- + Sterile individual package or continuous package

Membrane Filters	Pore Size	Description	Diameter	Catalog No.
			Ø47mm	1001
		Sterile, <b>plain</b> white	Ø50mm	1002
			Ø60mm	1225
			Ø47mm	Ø47mm         1001           Ø50mm         1002           Ø60mm         1225           Ø47mm         G1001           Ø50mm         G1002           Ø60mm         G1225           Ø47mm         1233           Ø50mm         1234           Ø47mm         G1233           Ø50mm         1324           Ø47mm         G1323           Ø50mm         G1324           Ø47mm         1323B           Ø50mm         G1324B           Ø47mm         2001           Ø50mm         2002           Ø60mm         2225           Ø47mm         2123           Ø50mm         2124           Ø60mm         2125           Ø47mm         3223           Ø50mm         3224
	0.45µm	Sterile, white <b>gridded</b>	Ø50mm	G1002
			Ø60mm	1001 1002 1225 G1001 G1002 G1225 1233 1234 G1233 1323 1324 G1323 G1324 1323B 1324B G1323B G1324B 2001 2002 2225 2233 2123 2124
		Ctorilo <b>plain</b> white <b>continuous poeksos</b>	Ø47mm	1233
MCE		Sterile, <b>plain</b> white, <b>continuous package</b>	Ø50mm	1234
MCE		Sterile, white <b>gridded</b> , <b>continuous package</b>	Ø47mm	G1233
		Sterile, <b>plain</b> white	Ø47mm	1323
		Sterile, <b>plani</b> writte	Ø50mm	1324
		Sterile, white <b>gridded</b>	Ø47mm G1323	
		Sterne, write gridded	Ø50mm	G1324
	0.8µm	Sterile, <b>plain Black</b>	Ø47mm	1323B
		oterne, plant black	Ø50mm	1324B
		Sterile, <b>gridded Black</b>	Ø47mm	G1323B
		Sterile, gridded black	Ø50mm	G1324B
	0.45μm	Sterile, <b>plain</b> white	Ø47mm	2001
			Ø50mm	2002
	υ.43μπ		Ø60mm       G12         Ø47mm       123         Ø50mm       123         Ø47mm       G12         Ø47mm       132         Ø50mm       G13         Ø50mm       G13         Ø47mm       1323         Ø50mm       G132         Ø47mm       G132         Ø50mm       G132         Ø50mm       200         Ø50mm       200         Ø60mm       222         Ø47mm       212         Ø50mm       212         Ø50mm       322         Ø50mm       322         Ø60mm       322         Ø60mm       322         Ø60mm       322         Ø47mm       300	
N66		Sterile, plain white, <b>continuous package</b>	Ø47mm	2233
			Ø47mm	2123
	0.22µm	Sterile, <b>plain</b> white	Ø50mm	2124
			Ø60mm	2125
			Ø47mm	3223
DEC	0.45µm	Sterile, <b>plain</b> white	Ø50mm	3224
			Ø60mm	3225
PES			Ø47mm	3007
	0.22μm	Sterile, <b>plain</b> white	Ø50mm	3008
			Ø60mm	3125

### Membrane Dispenser

#### HTY-EMD01



- + Built-in infrared sensor for no-touch dispensing
- + Easy loading of sterile membrane filter rolls
- + Compact size that saves space under the laminar airflow

#### **Technical Parameters**

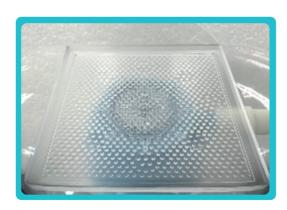
Size: 25.0x17.0x26.0cm	Weight:4.5kgs
Battery: 12V Li-ion	Main Construction: Stainless Steel

### Sterile Vacuum Filter Unit



- + Free of pyrogens, DNase and RNase
- + Irradiation pre-sterilized
- + Square filter surface with more than 20% increase in filter area
- + Highly transparent material for easy observation
- + Third laboratory certified
- + Top filter and bottom collector bottle have graduation marks
- + Hose connector can fit multiple hose diameters

Sterile bottle cap



\*High flow rate funnel design



### Sterile Vacuum Filter Unit

#### **Operation Guide**



1. Remove the funnel and cap from the packaging.



2. Connect the vacuum pump tubing to the hose connector.



3. Add the solution to the funnel.



4. Start the vacuum pump for filtration.



5. After filtering, switch off the vacuum pump, turn the handle 45° to release the pressure and remove the pump tubing.



6. Unscrew the funnel and quickly fix the cap on the bottle.

### Sterile Vacuum Filter Unit

#### **Ordering Information**

Membranes and Pore Size	Volume	Catalog No.
	150ml	VFP2200150
PES 0.22μm	200ml	VFP2200250
	500ml	VFP2200500
	1000ml	VFP2201000
	150ml	VFV2200150
DVDE 0.33	200ml	VFV2200250
PVDF 0.22μm	500ml	VFV2200500
	1000ml	VFV2201000
	150ml	VFM2200150
MCE 0.22um	200ml	VFM2200250
MCE 0.22μm	500ml	VFM2200500
	1000ml	VFM2201000
	150ml	VFN2200150
NIVLONI 0 22	200ml	VFN2200250
NYLON 0.22μm	500ml	VFN2200500
	1000ml	VFN2201000

### **Automatic Colony Counter**

#### **ASC-2000**

- + "Zero-click"operation: automatically recognize the counting area, instant shooting
- + Convenient operation: simple and clear system interface
- + Quick counting: 1000 cfu per second
- + Results high accuracy: internal and adherent areas of the culture dish are all counted
- + Use the watershed algorithm to segment fusion colonies to ensure accurate results
- + Flexible design: suitable for multi-size, different models of petri dishes
- + Sterilization function: UV disinfection and sterilization to avoid cross-contamination
- + Scan recording: supports QR code or barcode recording
- + Ultra-high definition camera: 20 million pixels

### Digital Imaging System



- + 12 million pixel lens
- + 1.1" large target surface, wide field of view(150\*150mm)
- + Counting for Multi-size culture dishes
- + SONY IMX183 series CMOS
- + 20 million pixel color high-definition camera
- +1" photosensor, clearer shooting, and more abundant details

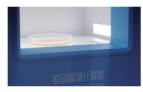
#### Colony Counting System



- + English version, user-friendly software interface
- + Two modes for selection: petri dish with membrane and normal petri dish, to satisfy most using situations
- + Advanced image processing algorithm: better determining, segmenting and counting of the colony
- + Can connected with LIMIS system
- + Comply with 21 CFR Part 11 requirements
- + Result traceability: photo storage in the computer
- + Result export: pdf, jpg, bmp, png, excel



#### **Lighting System**



The bottom backlight and the left and right side light sources are arranged with high-density LEDs,matched with a nano-level diffuse reflector, the light is soft,and the colonies from the center to the edge can be uniformly illuminated to high-light the outline.

### **Closed Chamber for Petri Dish**



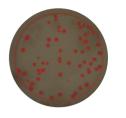


- + Simple metal chassis
- + Drop-down hovering board in the chamber to effectively block the interference of ambient light and ensure the imaging effect
- + In-built 254nm UV lamp, can kill the internal contaminated colonies and meet the needs of UV mutagenesis of special bacteria
- + Puling down the hovering board can effectively block UV rays to ensure safe use

### **Automatic Colony Counter**

### Optimization Analysis Algorithm for Petri Dish with Membrane

The colony recognition algorithm designed for the petri dish with membrane can accurately segment and count the shallow colonies on the membrane.





ASC-2000

other brands

#### **Parameters**

Function	X brand	I brand	ASC-2000
'Zero-click' complete automatic calculation	Х	Х	✓
Code scanning	Χ	✓	✓
Recognizing petri dish automatically	X	✓	✓
Recognizing calculating area automatically	X	✓	✓
Switch between Calculation interface & colony interface	X	✓	<b>✓</b>
UV disinfection	✓	X	✓
Specific area exclusion	$\checkmark$	✓	✓
Sensitivity adjustment	✓	✓	✓
Automation degree	Low	Low	High
Time consuming	Long	Long	Short
Software difficulty	Difficult	Difficult	Easy
Camera pixel	2000W, 1'' photosensor	500W	2000W, 1'' photosensor
Petri dish with membrane	Manual operation and selections	Manual selections	Auto calculation
Max. petri dish dimension	90mm	Round: 150mm Square: 120mm	Round: 150mm Square: 120mm
Software interface	Complex mode & interface, difficult to operate	Simple & user-friendly interface, easy to operate	Simple & user-friendly interface, easy to operate
Configuration	Machine and computer: Leno*-4G storage, 512G hard disk, I3-10 generation processor, Integrated graphics, 19-inch screen	Only machine	Machine and computer: DELL-16G storage, 512G SSD +1T storage, I5-11 generation processor, MX330-2G Discrete graphics card, 23.8-inch screen



# **Filtration Membrane**

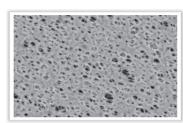
- 1. PES Flat Membrane
- 2. Reinforced PES Flat Membrane
- 3. Nylon Flat Membrane
- 4. MCE Flat Membrane

- 5. Hydrophilic PVDF Flat membrane
- 6. Reinforced Hydrophilic PVDF Flat Membrane
- 7. Nitrocellulose (NC) Membrane IVD Series

 $^{39}$ 

### PES Flat Membrane





PES membrane is natural hydrophilic, good wettability and asymmetric pore structure, so it has super high water throughput.

PES membranes are known for their thermal stability, durability, and resistance to acidic and alkaline solutions. It shows very low protein adsorption and low extractable levels.

#### **Features**

- + High water flux
- + Unique asymmetric pore structure
- + Low protein adsorption and low extractable levels
- + High porosity and uniformity
- + High retention capacity

- + Broad chemical compatibility
- + Resistant to different sterilization methods such as autoclave, EO,
- + Natural hydrophilic, good filtration efficiency with a high flow rate
- + Excellent inter and intra-lot consistency

#### **Applications**

Suitable for process filtration in food & beverage, pharmaceutical, semiconductor, laboratory filtration, and water treatment.

Storilo Eiltration

General Filtration

IV Infusion

**Bioburden Reduction Filtration** 

Biopharma

### PES Flat Membrane

#### **Specifications**

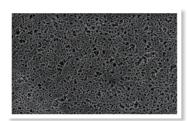
Membrane	PES	PES	PES
Support Layer	NO	NO	NO
Pore Size	0.1µm	0.22µm	0.45µm
Bacteria Retention	N/A	LRV≥7 (Brevundimonas adiminuta)	LRV≥7 (Serratia marescens)
Bubble Point	≥0.185MPa (Anhydrous Ethanol)	0.37~0.56MPa (Purified Water)	0.25~0.35MPa (Purified Water)
Flow Rate	≥8.9mL/min/cm²	≥15.6mL/min/cm²	≥20.8mL/min/cm <sup>2</sup>
Thickness	110~140μm	110~140μm	110~140μm

#### **Ordering Information**

Туре	Pore Size	Code	Width (mm)	Length (mm)	
	0.1μm	010	254/270		
	0.22μm	022		100/200	
	0.45µm	045			
PES	0.65µm	065			
	0.8µm	080			
	1.2μm	120			
	3µm	300			
	5μm	500			

### Reinforced PES Flat Membrane





The Reinforced PES membrane is hydrophilic by nature. It casts the polyethersulfone onto the support layer, giving it excellent mechanical strength and easy thermal bonding.

It has excellent heat resistance, acid and alkaline resistance, very low protein binding, and low extractability.

Tailin 's reinforced PES membranes meet pharmaceutical-grade requirements. It uses a unique technology to achieve an optimized combination of retention efficiency and flux.

#### **Features**

- + Excellent mechanical strength
- + Unique asymmetric pore structure
- + Low protein binding and low extractability
- + High porosity and uniformity
- + Compatible with different sterilization methods such as autoclave, EO and Gamma irradiation
- + Natural hydrophilic, good filtration efficiency with a high flux

- + Consistent quality between batches
- + Broad chemical compatability
- + Resistant to different sterilization methods such as autoclave, EO,
- + Natural hydrophilic, good filtration efficiency with a high flow rate
- + Excellent inter and intra-lot consistency

#### **Applications**

Suitable for process filtration in food & beverage, pharmaceutical, semiconductor, laboratory filtration, and water treatment.

**Sterile Filtration** 

IV Infusion Filter

IV Drip Set

Tangential Flow Filtration Cassettes

### Reinforced PES Flat Membrane

#### **Specifications**

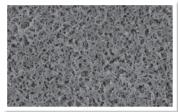
Membrane	Supported PES	Supported PES
Support Layer	PET	PET
Pore Size	0.22µm	0.45μm
Bacteria Retention	LRV≥7 (Brevundimonas diminuta)	LRV≥7 (Serratia marescens)
Bubble Point	0.32~0.50MPa (purified water)	0.22~0.32MPa (purified water)
Flow Rate	≥13.9mL/min/cm²	≥17.8mL/min/cm²
Thickness	120~160μm	120~160μm

#### **Ordering Information**

Туре	Pore Size	Code	Width (mm)	Length (mm)
	0.1μm	010	254/270	
	0.22μm	022		100/200
	0.45µm	045		
TLPESB	0.65µm	065		
	0.8µm	080		
	1.2µm	120		
	3μm	300		
	5μm	500		

### Nylon Flat Membrane





The nylon membrane is made of polyamide 66. It is hydrophilic in nature with good chemical compatibility. It can filter all water-based liquids and most organic solutions such as alcohols, hydrocarbons, ethers, esters, ketones, etc. The nylon membrane is widely used for sample collection, pre-filtration, sample testing and removal of particles, bacteria and micro-organisms.

Tailin's reinforced nylon membrane meets pharmaceutical grade requirements. PET is used as a support layer to increase mechanical strength. It has very low extractability and provides excellent flow diffusion.

#### **Features**

- + Naturally hydrophilic, high flow rate
- + Very low extractable, ensuring an accurate test result
- + Good resistance to heat, cold, and oil
- + Excellent mechanical strength

- + Resistant to various sterilization methods such as autoclave, EO, and gamma irradiation
- + Excellent inter and intra-lot consistency

#### **Applications**

Filtration applications in the medical, food & beverage, drinking water, microelectronics, fine chemicals, and laboratory industries.

- Laboratory applications: pre-filtration of samples and mobile phases. Food & Beverage: Removal of bacteria, micro-organisms, and contaminants.
- Water treatment: removal of suspended solids, colloids, etc.
- Pharmaceutical industry: removal of particles and bacteria.

### Nylon Flat Membrane

#### **Specifications**

Membrane	Nylon	Nylon
Support Layer	PET	PET
Pore Size	0.22µm	0.45µm
Bacteria Retention	LRV≥7 (Brevundimonas diminuta)	LRV≥7 (Serratia marescens)
Bubble Point	0.32~0.45MPa	0.20~0.30MPa
Flow Rate	≥3.7mL/min/cm <sup>2</sup>	≥11.8mL/min/cm²
Thickness	90~130μm	90~130μm

#### **Ordering Information**

Туре	Pore Size	Code	Width(mm)	Length(mm)
	0.22μm	022		100/200
	0.45µm	045	312	
	0.65µm	065		
TLNYB	0.8µm	080		
	1.2μm	120		
	3µm	300		
	5μm	500		

### MCE Flat Membrane





MCE flat membranes are made from a mixture of cellulose nitrate and cellulose acetate, which can retain microorganisms and particles from fluids. They are widely used in aqueous solution sterile filtration, aqueous solution clarification, particle collection and analysis, microbial detection, air monitoring, mobile phase (aqueous phase) filtration for HPLC, etc.

#### **Features**

- + Good hydrophilicity and easy wetting
- + Smooth membrane surface, high porosity, good retention effect, suitable for microbial retention and growth
- + Uniform membrane pores, high porosity, high flow rate, and fast filtration
- + Excellent mechanical strength
- + Good thermal stability
- + Excellent inter and intra-lot consistency

#### **Applications**

MCE membranes are suitable for high flow rate, and high volume applications, mainly for sterilizing-grade filtration and microbiology testing of aqueous solutions.

- Microbiological Analysis
- HPLC sample preparation
- Particle counting in liquids or aerosols
- Sterilization and particle removal filtration in laboratories and small production processes
- Filtration of culture media, culture solutions for sterilization
- Determination of E. coli in water
- Determination of bacteria and particles in pharmaceuticals

### MCE Flat Membrane

#### **Specifications**

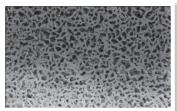
Membrane	MCE	MCE
Support Layer	PET	PET
Pore Size	0.22µm	0.45µm
Bacteria Retention	LRV≥7 (Brevundimonas diminuta)	LRV≥7 (Serratia marescens)
Bubble Point	0.32~0.45MPa	0.185~0.28MPa
Flow Rate	≥6.2mL/min/cm <sup>2</sup>	≥20.8mL/min/cm²
Thickness	85~130μm	85~130μm

#### **Ordering Information**

Туре	Pore Size	Code	Width(mm)	Length(mm)
	0.22μm	022		100/200
	0.45µm	045	310	
	0.65µm	065		
TLMCEB	0.8µm	080		
	1.2µm	120		
	3µт	300		
	5μm	500		

### Hydrophilic PVDF Flat Membrane





Hydrophilic PVDF membranes are widely used for the filtration of culture media and other protein solutions due to their very low protein adsorption, high water flux, and broad chemical compatibility. Hydrophilic PVDF membranes have excellent heat and oxygen resistance and are also used for solvent filtration and chromatographic sample preparation.

#### **Features**

- + Excellent chemical compatibility
- + Very low protein retention
- + Excellent heat and oxidation resistance
- + Good mechanical strength

- + Good hydrophilicity
- + Resistant to different sterilization methods such as
- autoclave, EO, and Gamma irradiation
- + Excellent inter and intra-lot consistency

#### **Applications**

Suitable for filtration in the food & beverage, pharmaceutical, laboratory, and chemical industries.

**General Filtration** 

**Solvents Filtration** 

Sterile Filtratio

Biopharma

### Hydrophilic PVDF Flat Membrane

#### **Specifications**

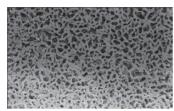
Membrane	Hydrophilic PVDF	Hydrophilic PVDF	Hydrophilic PVDF
Support Layer	No	No	No
Pore Size	0.1μm	0.22µm	0.45μm
Bacteria Retention	N/A	LRV≥7 (Brevundimonas diminuta)	LRV≥7 (Serratia marescens)
Bubble Point	≥0.50MPa	≥0.330MPa	≥0.170MPa
Flow Rate	≥5mL/min/cm²	≥9mL/min/cm²	≥30mL/min/cm²
Thickness	100~120μm	100~120μm	100~120μm

#### **Ordering Information**

Туре	Pore Size	Code	Width(mm)	Length(mm)
	0.1μm	010		
	0.22μm	022		
	0.45µm	045		
TLPVDF	0.65µm	065	254/270	100/200
	0.8µm	080		
	1.2μm	120		
	3µm	300		
	5μm	500		

### Reinforced Hydrophilic PVDF Flat Membrane





Reinforced hydrophilic PVDF membranes have a supported layer. They are widely used for the filtration of culture media and other protein solutions due to their very low protein adsorption, high water flux, and broad chemical compatibility. Hydrophilic PVDF membranes have excellent heat and oxygen resistance and are also used for solvent filtration and chromatographic sample preparation.

#### **Features**

- + Excellent chemical compatibility
- + Very low protein retention
- + Excellent heat and oxidation resistance
- + Superior mechanical strength

- + Good hydrophilicity
- + Resistant to different sterilization methods such as autoclave,

EO, and Gamma irradiation

+ Excellent inter and intra-lot consistency

#### **Applications**

Suitable for filtration in the food & beverage, pharmaceutical, laboratory, and chemical industries.

**General Filtration** 

**Solvents Filtration** 

Sterile Filtration

Biopharma

### Reinforced Hydrophilic PVDF Flat Membrane

#### **Specifications**

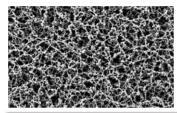
Membrane	Reinforced PVDF	Reinforced PVDF	Reinforced PVDF
Support Layer	PET	PET	PET
Pore Size	0.1µm	0.22μm	0.45μm
Bacteria Retention	N/A	LRV≥7 (Brevundimonas diminuta)	LRV≥7 (Serratia marescens)
Bubble Point	≥0.50MPa	≥0.280MPa	≥0.160MPa
Flow Rate	≥4mL/min/cm²	≥10mL/min/cm²	≥25mL/min/cm <sup>2</sup>
Thickness	120~140μm	120~140μm	120~140μm

#### **Ordering Information**

Туре	Pore Size	Code	Width (mm)	Length (Meters)
	0.1μm	010		
	0.22μm	022		
	0.45µm	045		
TLPVDFB	0.65µm	065	254/270mm	100/200mm
	0.8µm	080		
	1.2μm	120		
	3μm	300		
	5μm	500		

### Nitrocellulose (NC) Membrane IVD Series





The TLNC series of backed nitrocellulose membranes are specially designed for lateral flow immunoassays. It cast the cellulose nitrate solution on the clear polyester backing. It has excellent mechanical strength that will perfectly fit all diagnostic manufacturer production needs..

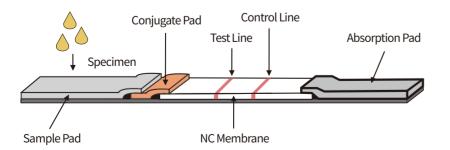
#### **Features**

- + Excellent chemical compatibility
- + Uniform pore structure
- + Excellent protein binding
- + Unique coding on each volume to ensure traceability

#### **Applications**

- + COVID-19 Rapid Test Kit
- + Pregnancy Test Kit
- + HbsAg Test Kit
- + Narcotics Identification Kit

#### **Lateral Flow Immunoassay**



### Nitrocellulose (NC) Membrane IVD Series

Parameters	TLNC095B	TLNC120B	TLNC140B	TLNC180B
Membrane Material	Nitrocellulose	Nitrocellulose	Nitrocellulose	Nitrocellulose
Thickness(incl backing) [μm]	215~255	215~255	215~255	215~255
Capillary Speed CFT¹ [s/40mm]	75~115	100~150	110~180	140~230
Pore Size[μm]	12	10	8	5
Backing	Polyester	Polyester	Polyester	Polyester
Protein Adsorption [μg BSA/cm2]	28	28	28	28
Inner Dia of Reel Core[mm]	76.2	76.2	76.2	76.2
Reel Core Material	Polyethylene	Polyethylene	Polyethylene	Polyethylene
Width <sup>3</sup> [mm]	20/25	20/25	20/25	20/25
Length³ [m]	50/100	50/100	50/100	50/100

1. Capillary speed could be customized according to actual needs. 2. Backing thickness could be customized. 3. The membranes width and length could be customized.

Catalog No.	Descriptions
TLNC095B20100	Nitrocellulose membrane with backing, <b>20mm</b> X100m, 1 roll/box.
<b>TLNC095B</b> 25100	Nitrocellulose membrane with backing, <b>25mm</b> X100m, 1 roll/box.
<b>TLNC120B</b> 20100	Nitrocellulose membrane with backing, <b>20mm</b> X100m, 1 roll/box.
<b>TLNC120B</b> 25100	Nitrocellulose membrane with backing, <b>25mm</b> X100m, 1 roll/box.
TLNC140B20100	Nitrocellulose membrane with backing, <b>20mm</b> X100m, 1 roll/box.
<b>TLNC140B</b> 25100	Nitrocellulose membrane with backing, <b>25mm</b> X100m, 1 roll/box.
<b>TLNC180B</b> 20100	Nitrocellulose membrane with backing, <b>20mm</b> X100m, 1 roll/box.
<b>TLNC180B</b> 25100	Nitrocellulose membrane with backing, <b>25mm</b> X100m, 1 roll/box.

Specifications subject to change without notice.



# **Pretreatment Instruments**

- 1. Laboratory Blender
- 2. Gravimetric Diluter
- 3. Laboratory Homogenizer
- 4. Sterile Bags
- 5. Ampoule Opener
- 6. Aerosol-based Drug Sampler

### Laboratory Blender/Gravimetric Diluter

#### **Laboratory Blender HTY-763**



- + High-speed motor, fast and workload reduced
- + One button start/stop
- +Unique design, no leakage
- +The mixing blade is integrated into the cup
- +Cup can be steam sterilized

# **Gravimetric Diluter HTY-ADS01**



- + Large size LCD display
- + Glass touch panel
- +Automatic dilution, fast and accurate
- + Built-in calibration process to ensure accuracy

#### **Technical Parameters**

Weighing Range:0-1000g	Dilution Fa	actor:1-999
Weighing Range:0-1000g	Dilution A	ccuracy:>98%
Max.Weighing without Bag (	Opener:0-2,000	0g
Dilution Time:<15S (25g san	nple at 10x dilı	ution).
Dimensions(L*W*H):20.0x24	.4x20.6cm	Weight:7.3kg
Distribution Mode:Proportion	onally/By weig	ht/Hand gun
Speed Mode:Fast /Standard		
Pump Selection: pump A/pu	ımp B/AB san	ne liquid / AB different liquid
Connections: RS232 printer	JACK1 hand g	gun, JACK2 foot switch
Size:38.0x24.0x28.0cm W	eight: 13kg	Power: AC220V 50HZ

#### **Technical Parameters**

Power Supply: AC220V/50Hz	Speed:1,000-20,000 RPM
Cup Volume: 300/500 mL	Power:400W
Timing:1-300 seconds	Weight:7.3kg
Cup Material:Polymer/Stainless	s steel (optional)
Size(L*W*H):20.0x24.4x20.6cm	
Size(L*W*H):20.0x24.4x20.6cm	

### Laboratory Homogenizer

## **Laboratory Homogenizer HTY-BM01**

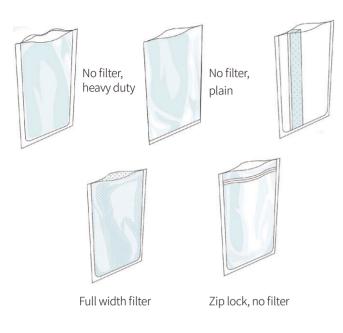


#### **Technical Parameters**

Capacity: 500-400 mL	Timing: 1 second-1 hour OR contiunous run
Power: AC220V/50Hz, 500W	Blend Speed: 1-16 times/second
Weight: 30kg	Dimensions (L*W*H): 41.5x28.0x30.0cm

### Sterile Bags

#### **Sterile Bags**



### Pore size <250µm

Lateral filter

- + Sterile, no risk of cross-contamination between samples
- + Compatible with all laboratory homogenizers
- + Suitable for 1g to 400g samples

#### **Bag Rack**

- + Fit for 400mL bag
- + All stainless steel, robust and can be stacked
- + Can be steam sterilized
- + Size: 36.5\*21.0\*20.0cm
- + Drip tray is optional

Material: Nylon /LDPE Thickness: 70μm



Туре	W*H (mm)	Volume	Packaging
No filter, plain	180*300	400mL	25pcs* 20packs, 500pcs/Carton
Zip lock, no filter	190*320	400mL	25pcs* 20packs, 500pcs/Carton
Full width filter	190*300	400mL	50pcs* 10packs, 500pcs/Carton
Lateral filter	190*300	400mL	25pcs* 20packs, 1500pcs/Carton
No filter, heavy duty	190*300	400mL	25pcs* 20packs, 500pcs/Carton

### Ampoule Opener/Aerosol-based Drug Sampler

#### **Ampoule Opener HTY-ABK03**



- + High-speed motor, fast and workload reduced
- + One button start/stop
- +Unique design, no leakage
- +The mixing blade is integrated into the cup
- +Cup can be steam sterilized

#### **Aerosol-based Drug Sampler HTY-ACB03**



- + Enclosed sampling to prevent leakage and external contamination
- +The sampling needle assembly is removable and resistant to heat sterilization
- +Adjustable clamp suitable for different size aerosol containers

#### 3 steps to open the ampoule







- 1. Insert the ampoule head into the jaws of the opener.
- 2. Move the ampoule gently along the blades.
- 3. Break and open the ampoule.







#### **Technical Parameters**

Material: SS316L	Dimensions: 19.0x23.0x31.0cm	
Handle Length:27cm	Weight:5kg	
Consumables: KYLQ sterility test canisters		