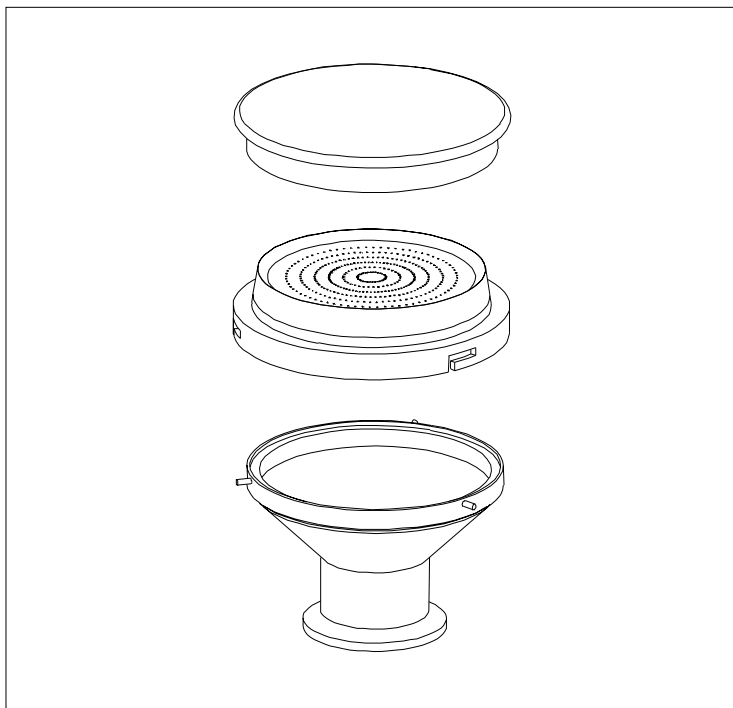


# M Air T<sup>TM</sup> Sampling Head for Isolators

User Guide



MILLIPORE

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## Introduction

Millipore's M Air T™ Sampling Head is designed to precisely sample airborne microorganisms in barrier environments and aseptic manufacturing areas. Its unique micro-perforated sieve captures the small microorganisms typically found in barrier environments. The pre-sterilized M Air T agar cassettes used with the M Air T Sampling Head are easier to handle, especially when wearing gloves, than agar strips, significantly reducing the risk of inadvertent contamination. You can order M Air T cassettes in double packaging for easy wipe-down in the transfer chamber. The M Air T Sampling Head is manufactured from stainless steel with sanitary Tri-Clover® connections, making it autoclavable. Inside a barrier environment with vertical laminar flow, some turbulence can exist at and just above the work surface. The M Air T Sampling Head can be supported on a stand above this "turbulence zone." You can use the M Air T Sampling Head with the pumps commonly used for sampling barrier environments.

## Applications

The M Air T Sampling Head is suited for a variety of applications.

### Pharmaceutical

- Evaluation of microbiological quality of isolators
- Evaluation of microbiological quality of confined areas such as Blow Fill Seal (BFS) sterile showers and large laminar flow hoods
- Analysis of trends in aseptic conditions
- Evaluation of decontamination procedures

**Food and Beverage**

- Evaluation of decontamination of suspended material in the air, critical in HACCP (Hazard Analysis by Critical Control Point) procedures.

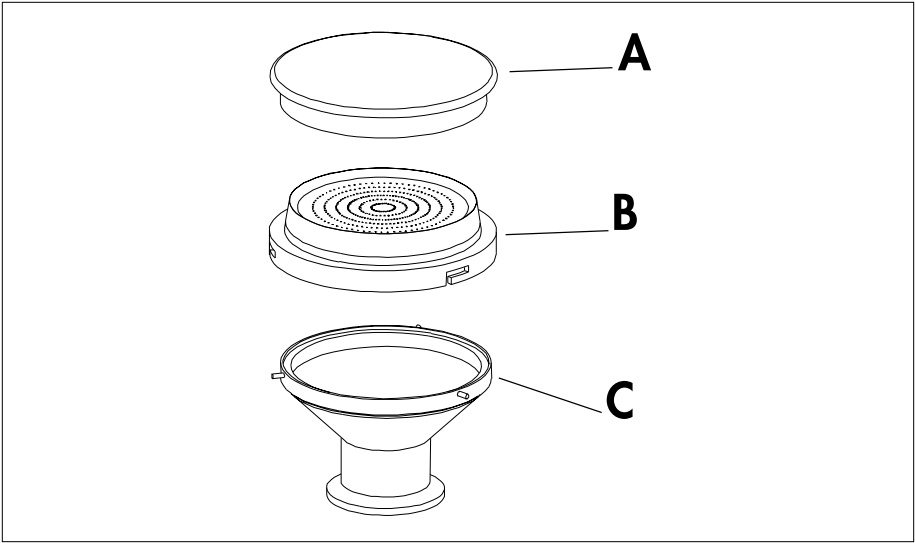
**Hospitals**

- Evaluation of microbiological quality of isolators and laminar flow hoods for preparation of sterile bags for pharmacy.
- Detection of pathogenic microorganisms present in the air of pharmacy rooms, operating theaters or other critical treatment areas.

**Electronics Industry**

- Separation of particulate and microbial contaminants in clean rooms.

**Diagram of Components**



Letter	Description	Function
A	Sieve cover	Protects the sieve during storage
B	Sieve	Captures microorganisms using 611 micro-perforations
C	Head	Supports the M Air T cassette

## Precautions/Limitations

- Autoclave all parts at 121°C for 20 minutes before introducing them into the isolator.
- Connect the unit to a grounded vacuum pump system able to suck air with a flow rate at 136 L/min +/- 10%.
- Use only M Air T cassettes with this unit.
- The sampling head is compatible with the common chemical products used for isolator sterilization (for example, peracetic acid and hydrogen peroxide).

## Assembling the Head in an Isolator

1. Using the TC 1.5" connectors, connect the sampling head to the silicone tube. Clamp the tube onto the splined end fitting.

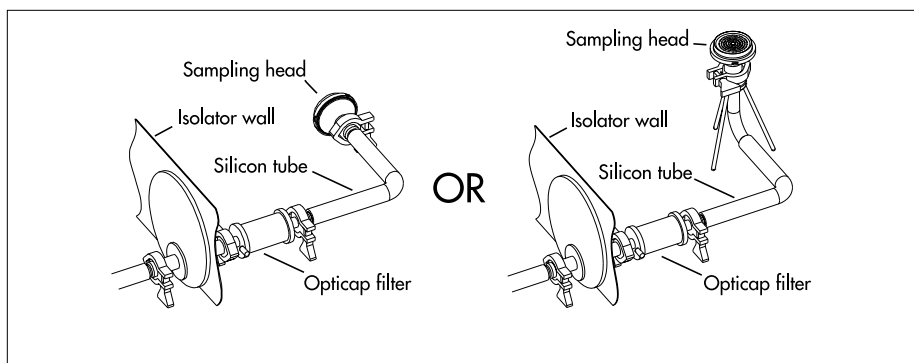
NOTE: Millipore recommends using a filter cartridge in this configuration to prevent any risk of isolator contamination. Millipore recommends using an Opticap™ filter (Cat. No. KTGR 04T C3) with an Aervent™ membrane.

2. Connect the silicone tube to the Opticap filter.

NOTE: Install the Opticap filter with the arrow pointing in the direction of the air flow. Depending on the type of isolator, the Opticap filter can be placed either at the isolator inlet, or connected directly to the sampling head.

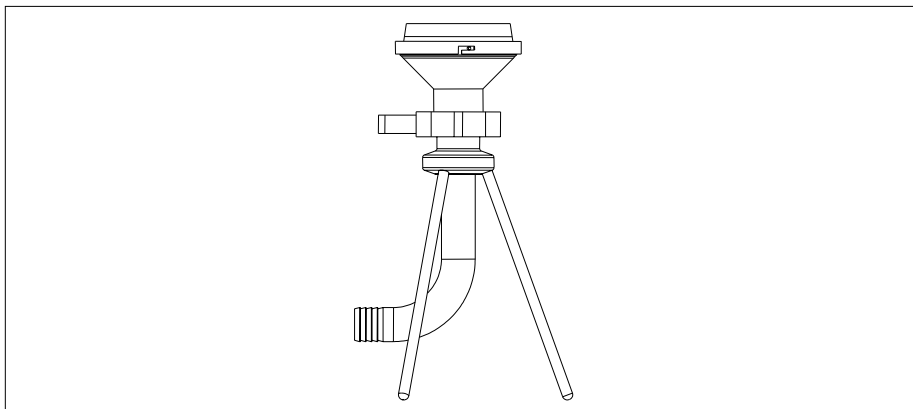
3. Connect the Opticap filter to the isolator's TC 1.5" inlet.

NOTE: For a setup in a laminar flow isolator or in laminar flow hood, Millipore recommends using the M Air T tripod for isokinetic air sampling (Cat. No. ATBF EET 01).



## Assembling the Head in a Laminar Flow Hood

1. Install the sampling head on the tripod.

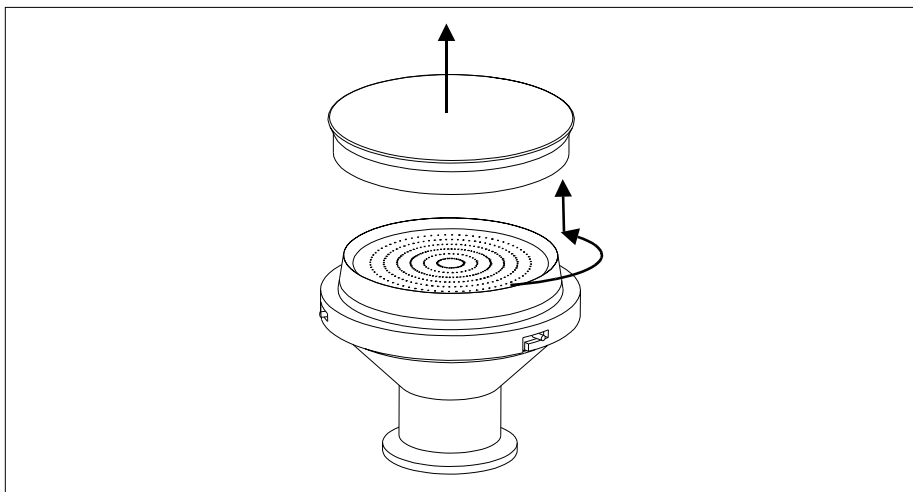


2. Connect the M Air T tripod to the pump inlet using the silicone tube.

## Installing the M Air T Cassette

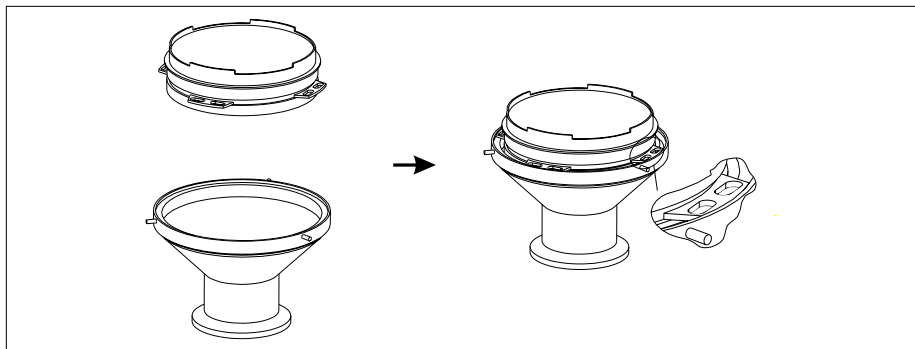
The M Air T cassette, in its gamma irradiated, double-sleeve packaging, has been qualified and validated to be compatible with the usual sterilizing agents used for sterilization of isolators.

1. Remove the cover. Loosen and remove the sieve from the analyzer by twisting it clockwise.

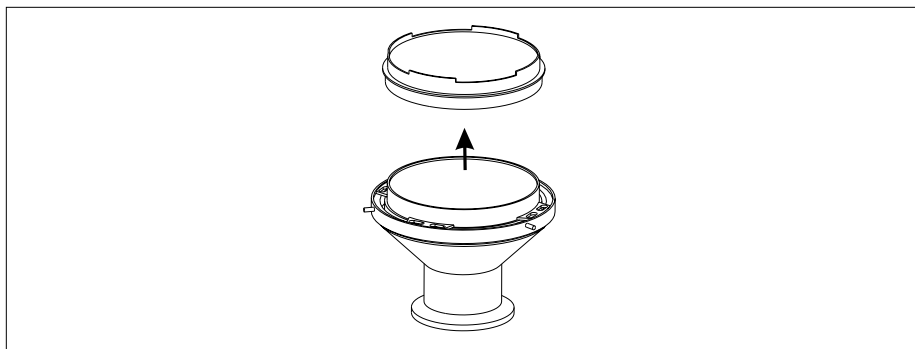


## Installing the M Air T Cassette, continued

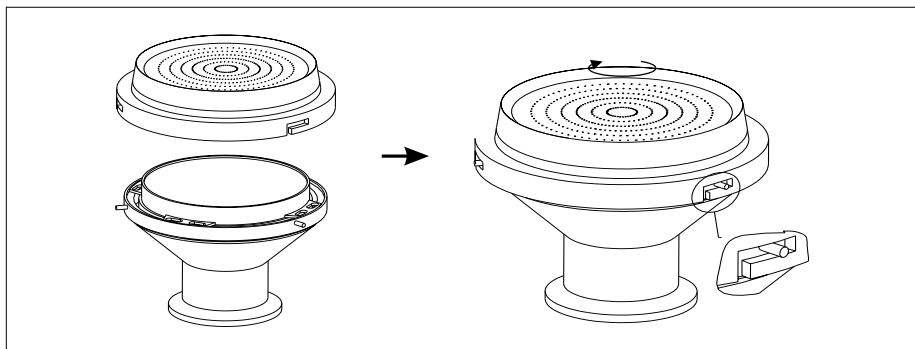
2. Grasp the cassette wings and place it on the sampling head. Lock the cassette into place.



3. Remove the cover and place it on a work surface with the inside facing down.

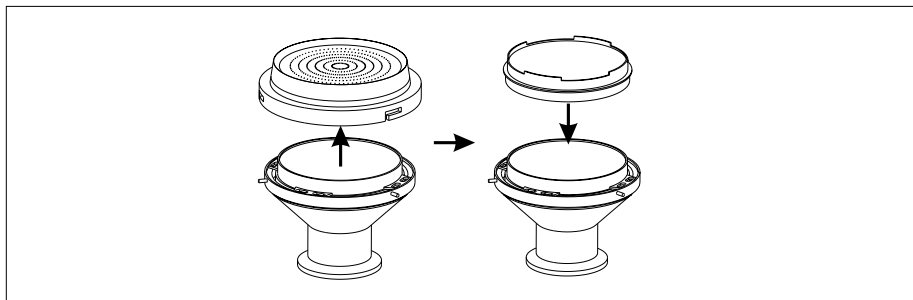


4. Place the sieve on the cassette and lock it into position.

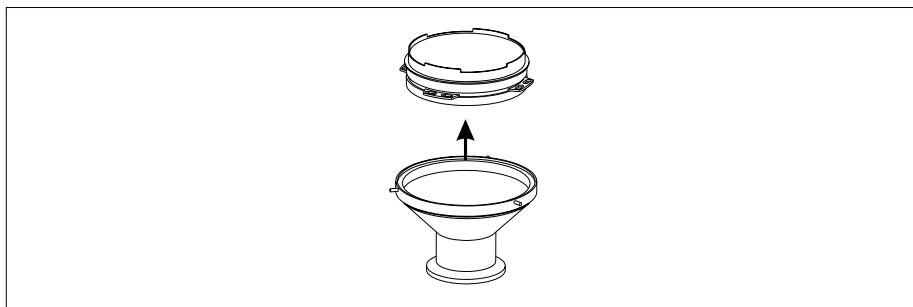


## Installing the M Air T Cassette, continued

5. Take the sample. After sampling, loosen the sieve, remove it and replace the cassette cover.



6. Remove the cassette by grasping the "wings" and lifting it off the sampling head.



7. Label the cassette.

NOTE: Incubate the cassette upside down.



## Specifications

Sampling head: 90 mm wide × 60 mm high

611-hole sieve: 97 mm wide × 23 mm high

Tripod\*: 160 mm wide × 210 mm high

## Materials of Construction

Cassette holder and sieve: 316 AISI stainless steel

Sieve cover: Polyacetal

Tripod\* tube: 316 AISI stainless steel

Tripod\* legs: 304 AISI stainless steel

*\* The tripod is an optional part of the M Air T system.*

## Product Ordering Information

This section lists the catalogue numbers for M Air T Head for Isolators. See the Technical Assistance section for information about contacting Millipore. You can also buy Millipore products on-line at [www.millipore.com/purecommerce](http://www.millipore.com/purecommerce).

Description	Qty	Catalogue Number
M Air T Isolator Sampling Head, with sieve	1	ATBH EAD 01
M Air T Isolator Pump	1	ATBP UMP 01
M Air T Isolator Tripod	1	ATBF EET 01
M Air T Isolator Printer	1	ATBP RNT 01
M Air T Isolator Tubing, 3 meters, with 4 clamps	1	ATBT UBE 01

## Product Ordering Information, continued

Description	Qty	Catalogue Number
<b>Accessories</b>		
M Air T Isolator Sieve, 611 holes	1	ATBS EVE 01
<b>For use in isolator:</b>		
M Air T prefilled TSA cassette, double wrapped in isolator packaging, gamma irradiated	24	ATSM TTB 24
M Air T prefilled TSA + peroxide cassette, double wrapped in isolator packaging, gamma irradiated	24	ATSM TPB 24
Opticap filter, PTFE membrane, 0.2 µm, EO sterile	3	KTGR 04T C3
<b>For use in laminar flow hood:</b>		
M Air T prefilled TSA cassette, double wrapped, gamma irradiated	60	ATSM TTD 60
M Air T prefilled Sabouraud dextrose cassette, double wrapped, gamma irradiated	60	ATSM SDD 60
M Air T prefilled TSA + Pnase cassette, double wrapped, gamma irradiated	60	ATSM PND 60
M Air T empty cassette, EO sterilized	114	ATSM C01 14

## Technical Assistance

For more information, contact the Millipore office nearest you. In the U.S., call **1-800-MILLIPORE** (1-800-645-5476). Outside the U.S., see your Millipore laboratory catalogue for the phone number of the office nearest you. You can reach us by e-mail at [tech\\_service@millipore.com](mailto:tech_service@millipore.com) or visit our web site ([www.millipore.com](http://www.millipore.com)).

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