



- ▶ *No risk of external contamination*
- ▶ *Saves steps and speeds collection*
- ▶ *No bulky samples to carry*
- ▶ *Batch or continuous on-line sampling*
- ▶ *Convenient in-process microbiological analysis*

MicropreSure® On-Line Filtration Samplers

Ready-to-use devices sample and test pharmaceutical water

Validation engineers and Quality Control specialists regularly sample the drops and tanks of process water loops to ensure low bacterial levels and to identify bio-contamination problems early. Traditional multi-step sampling methods are often inconvenient and a potential problem for time-pressed personnel. The routine of setting up lab equipment and processing samples can be rushed, sometimes at the expense of proper aseptic procedures.

By reducing the sampling process to a few simple steps performed within a closed system, the MicropreSure On-Line Filtration Sampler improves microbiological testing of purified water at the point-of-use. This on-line filtration sampler complies with USP/EP guidelines.

Closed Design for Accurate Sampling

The simple, protective design of the MicropreSure On-Line Filtration Sampler provides dependable microbiological sampling and reduces contamination risk in any environment. Organisms are captured on the membrane right at the collection site, providing a representative sample for accurate enumeration. Membrane handling is minimal, so operator skill and environmental control are less critical.

Fast and Reliable In-Process Collection

The MicropreSure On-Line Filtration Sampler saves steps and speeds collection — providing an easy method to secure the samples you need for tracking and trending process water purity. It uses the pressure in tanks or pressurized lines to process and collect samples through a microporous membrane within an enclosed chamber. And because the MicropreSure devices are securely locked together, sampling pressurized water lines will not create water leaks.

Sampling and Filtration in One Step

MicropreSure On-Line Filtration Samplers are sterile and ready to use. With MicropreSure On-Line Filtration Samplers, you sample and process in one step, eliminating the need to sterilize sample containers or transport them back to the laboratory. After processing, microbes are contained and protected within the lightweight MicropreSure devices that are easily carried.

Tests Larger Volumes

During validation, a 100 mL sample may not reveal low level microbial contaminants in a water sample. The MicropreSure On-Line Filtration Sampler allows for processing liters of water through its enclosed housing. In addition, the strong fit between the Luer fitting and the sanitary sampling valve means you can continuously sample over an extended period of time. Results can then reflect the average contamination over a batch, a shift, or a day.

Convenient In-Process Microbiological Analysis

MicropreSure is an innovative and convenient tool that allows water samples to be aseptically processed, right at the collection site. The membrane, enclosed in its own housing, is protected until it is ready to be processed in the laboratory.

MicropreSure On-Line Filtration Samplers Improve Traditional Multiple-step Sampling Methods:

- No assembly
- No sterilization
- No sample containers to transport
- No risk of external contamination

In-Process Water Analysis

Fast and easy preparation of in-process water samples using the MicropreSure device.



1. *Sample* directly through the MicropreSure On-Line Filtration Sampler via the sanitary sampling valve.



2. *Access* the membrane by connecting the MSOpener™ to a vacuum source, and placing the MicropreSure On-Line Filtration Sampler on top of the MSOpener.



3. *Incubate* the membrane by lifting the membrane and transferring it onto a media plate.

Specifications

Dimensions

<i>On-Line Filtration Sampler Height:</i>	45 mm (1.75 in.)
<i>Filter Diameter:</i>	47 mm
<i>Filter Area:</i>	9.10 cm ²
<i>Filter Pore Size:</i>	0.45 µm pore size
<i>Pressure Limit at 25 °C:</i>	3 bar/liter/min.
<i>Pressure Limit at 90 °C:</i>	1 bar/liter/min.
<i>Temperature Range:</i>	5 °C – 90 °C

Materials

<i>Filtration Chamber/Base:</i>	Polycarbonate
<i>Membrane:</i>	Mixed esters of cellulose, white, gridded
<i>Filtration Support:</i>	High density polyethylene

This Millipore product is manufactured in accordance with a Quality Management System that is approved by an accredited registering body to the appropriate ISO® 9000 Quality Systems Standard.

Ordering Information

Description	Qty/Pk	Catalogue No.
MicropreSure On-Line Filtration Sampler Sterilized, 0.45 µm, white, gridded	48	MSHA WGS 48

MSOpener

Complete vacuum manifold for accessing membrane	1	MSOP ENR 01
MSOpener tulip for mounting on Standard 3 or 6-place manifold	1	MSOP NMS 01
MSOpener head for Milliflex® Plus pump	1	MSPH EAD 01
Sterile Sampling Tube with Luer Fitting	100	M000 000 01

Identifying the Sampling Port Outlet and Choosing the Valve Adapter:

- If the sampling port outlet is a male Luer port (such as an ESP or Milliflex-P valve), use the MicropreSure On-Line Filtration Sampler without a sampling port adapter.
- If the sampling port outlet has a Tri-Clover® connection, install a MicropreSure sanitary sampling valve. Use the correct valve as follows:

Valve	Connection Size	Catalogue No.
Tri-Clover	1½ in.	MXPE SPT CL
NPT	¼ in.	MXPE SP1 4N
NPT	⅛ in.	MXPE SP1 8N

Valve Adapter	Outer Diameter	Catalogue No.
Simple tubing	3 mm	MSOS T03 03
	6 mm	MSOS T06 03
	8 mm	MSOS T08 03
	12 mm	MSOS T12 03
	20 mm	MSOS T20 03
	⅜ in.	MSST 316 03
	¼ in.	MSOS T14 03
	⅜ in.	MSOS T38 03

Male threaded connection	⅛ in. Gas	MSFM 18G 03
	⅛ in. NPT	MSFM 18N 03
	¼ in. Gas	MSFM 14G 03
	¼ in. NPT	MSFM 14N 03

Female threaded connection	⅛ in. Gas	MSLM 18G 03
	⅛ in. NPT	MSLM 18N 03
	¼ in. Gas	MSLM 14G 03
	¼ in. NPT	MSLM 14N 03

Tri-Clover	¾ in.	MSOT C34 03
	Mini Clamp	MSOT CMC 03
	1½ in.	MSOT C12 03

To Place an Order or Receive Technical Assistance

For additional information call your nearest Millipore office:

In the U.S. and Canada, call toll-free **1-800-MILLIPORE (1-800-645-5476)**

In the U.S., Canada and Puerto Rico, fax orders to **1-800-MILLIFX
(1-800-645-5439)**

Outside of North America contact your local office.

To find the office nearest you visit www.millipore.com/offices.

Internet: www.millipore.com

Technical Service: www.millipore.com/techservice

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Tri-Clover is a trademark of Alfa Laval, Inc.

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