MAESTROGUARD®

ANALYZER PROTECTION FILTERS

MF-100 ADVANCED FINAL ANALYZER PROTECTION



A high-capacity stainless-steel analyzer protection filter for demanding gas analysis systems — designed to stop liquids, aerosols, condensate and fine particles before they reach sensitive analyzers.

The MaestroGuard® MF-100 provides advanced final analyzer protection by stopping liquids, aerosols, condensate and fine particles before they reach sensitive analyzers.

With its larger membrane area compared to the MF-60, the MF-100 supports higher protection capacity, stable sample flow and fast recovery after liquid carry-over.



THE PROBLEM:

- Liquid carry-over condensate & aerosols
- Analyzer contamination
- Measurement drift & false alarms
- Service calls, downtime & cost

THE SOLUTION: MAESTROGUARD'S MF-100

An advanced high-capacity final protection filter with larger membrane area. It stops liquids, aerosols, condensate and fine particles before they reach the analyzer — helping protect measurement stability, reduce downtime and extend analyzer service life.

ADVANCED PROTECTION

Larger membrane area for demanding analyzer applications

STABLE SAMPLE FLOW

Low internal volume, supports higher sample flow and low pressure drop.

RELIABLE & DURABLE

316L stainless steel construction with chemically resistant materials for long service life.

MAKE MF-100 YOUR STANDARD FINAL PROTECTION FOR DEMANDING GAS ANALYSIS.

HIGH-CAPACITY.

Larger membrane area for demanding analyzer protection.

RELIABLE.

Helps protect analyzer performance and improve uptime.

OEM-READY.

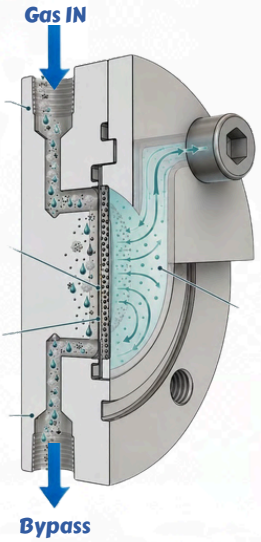
Suitable for analyzer cabinets, skids and sample conditioning systems.

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MF-100 – TECHNICAL OVERVIEW

Compact. Reliable. Final Protection.

HOW IT WORKS



Contaminated sample gas enters the MF-100 housing.

Contaminated
The 0.1 µm absolute 100% PTFE membrane acts as a final barrier against liquids, aerosols and fine particles.
.
A continuous bypass flow sweeps across the upstream membrane surface, carrying separated liquids and contamination toward the bypass outlet and helping prevent accumulation on the membrane.

Only the protected clean gas stream passes through the membrane and flows to the analyzer

Only the protected gas fraction passes through the 0.1 µm absolute PTFE membrane and continues to the analyzer.

WHY MF-100?

- Advanced final analyzer protection
- Larger membrane area for higher flow capacity
- Sweep flow across the membrane surface
- Continuous removal of separated liquidse
- 0.1 µm absolute – 100% PTFE membranes
- Reduces analyzer contamination, drift & downtime

TECHNICAL SPECIFICATIONS

Housing Material	Stainless steel 316L (1.4404)
Filter Element	MaestroGuard® membrane
Filtration Efficiency	< 0.1 µm absolute
Max Operating Pressure	Up to 100 bar
Temperature Range	—200°C to 260°C (depending on seal)
Flow Rate*	160 L/h air @ 100 mbar, customizable (Bypass flow: 1–3 Nl/min typical)
Internal Volume	< 10 ml total, < 4 ml downstream
Connections	1/4 NPT female or on request
Seal Materials	FKM, FFKM, PTFE
Compliance	EN 10204 3.1, CE, ATEX, PED 2014/68/EU, ISO 11114-4, ISO 1516 / NACE MR0175

* Higher flow rates can be achieved by using a membrane with a larger pore size.

ORDERING INFORMATION

- **MF-100-316L-100-FKM-V1** 100 bar, O-ring FKM
- **MF-100-316L-100-FFKM-V1** 100 bar, O-ring FFKM
- **MF-100-316L-100-PTEF-V1** 100 bar, O-ring PTFE
- Option: MB-MF/MCF-100-S5 — mounting bracket in 316L
- Service kits available for FKM, FFKM and PTFE versions

TYPICAL USES

- Analyzer protection for gas sample systems
- Hydrogen and electrolyzer applications
- Moisture and dew point analysis
- Environmental and emissions monitoring
- Process gas conditioning
- OEM analyzer cabinets and skids

Reliable gas analysis starts with a clean, protected sample.

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