

Membrane separator—Coalescing Filter MCF-100-316L-220

Product Description

The **MaestroGuard™ Analytical Gas Filter** is specifically designed for critical gas analysis applications. It ensures reliable filtration to protect sensitive analytical equipment from contaminants, enhancing accuracy and longevity. This filter is suitable for explosive, corrosive, and inert gas environments, meeting the requirements of industrial gas preparation and analysis systems

Key Features

- **High Filtration Efficiency:** Holds back water, liquid hydrocarbons, acids, alkalis, glycols, and ultra-fine particles
- **Robust Construction:** Made from **316L stainless steel** for durability and resistance to corrosive gases
- **Compact Design:** Optimized size to fit into limited installation spaces.
- **MaestroGuard™ Membrane Filter Unit:** Ensures excellent chemical resistance and a long service life.
- **Maximum Operating Pressure:** Suitable for high-pressure service up to **220 bar** (depending on sealing element).
- **Temperature Range:** Operates up to **180°C**, depending on sealing material.
- **Easy Maintenance:** Quick assembly and disassembly for membrane replacement and cleaning, with no need to disconnect tubing.

Optional: rehealing treatment and embrittlement treatment to prevent possible hydrogen diffusion and material brittleness..

Technical Specifications

| Parameter | Specifications |
|-------------------|---|
| Housing Material | 316L Stainless Steel 1.4404 |
| Filter Material | MaestroGuard™ Membrane and Microfiber Coalescing Element |
| Porengröße | < 0,1µm |
| Gas Flow Rate | 160L/h air @ 30mbar pressure drop |
| Bypass flow Rate | Up to 300l/h |
| Pressure Range | Up to 220 bar* |
| Temperature Limit | –20°C up to 180°C* |
| Connections | NPT female |
| Housing Type | 2 part non welded |
| Applications | Gas Analysis: Explosive, Corrosive, and Inert Gases, including H ₂ |

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Datasheet MaestroGuard™ Filter
Type MCF-series

Date: 12/01/2025

Approved: WH

File: DS-MCF-Series-V01

Applications

- Gas preparation for analyzers measuring impurities (e.g., sulfur compounds, CO, CO₂, NO)
- Analytical systems measuring gas properties (dew point, calorific value)
- Laboratory and industrial gas systems for sensitive equipment
- Hydrogen production and related applications

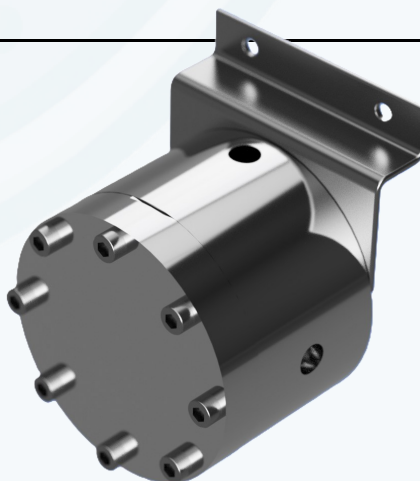
Benefits

- **Enhanced Protection:** Prolongs the life of analyzers and ensures consistent measurement accuracy.
- **Reliable Filtration:** Removes contaminants that could otherwise damage downstream equipment.
- **Customizable:** Available in multiple configurations for specific gas types and conditions.
- **User-Friendly:** Simplified installation and membrane replacement process.

Ordering Information

| Order Number | Description |
|-----------------------|--|
| MCF-100-316L-100 | MaestroGuard™ Gas Filter, Water and Oil repealent membrane 0,1µm, 100 bar, O-ring FKM |
| MCF-100-316L-100-FFKM | MaestroGuard™ Gas Filter, Water and Oil repealent membrane 0,1µm, 100 bar, O-ring FFKM |
| MCF-100-316L-100-PTFE | MaestroGuard™ Gas Filter, Water and Oil repealent membrane 0,1µm, 100 bar, O-ring PTFE |
| Option | |
| MBT-100-SS | Mounting Bracket in Stainless Steel 316L |
| Spare Parts | |
| SET-MCO-100-0,1-FKM | Service kit including Membrane, Microfibre Element, Support Pad, 2 x O-ring FKM |
| SET-MCO-100-0,1-FFKM | Service kit including Membrane, Microfibre Element, Support Pad, 2 x O-ring FFKM |
| SET-MCO-100-0,1-PTFE | Service kit including Membrane, Microfibre Element, Support Pad, 2 x O-ring PTFE |
| SS-100-316L | Sainless steel support screen, 316L |

Custom configurations are available upon request.



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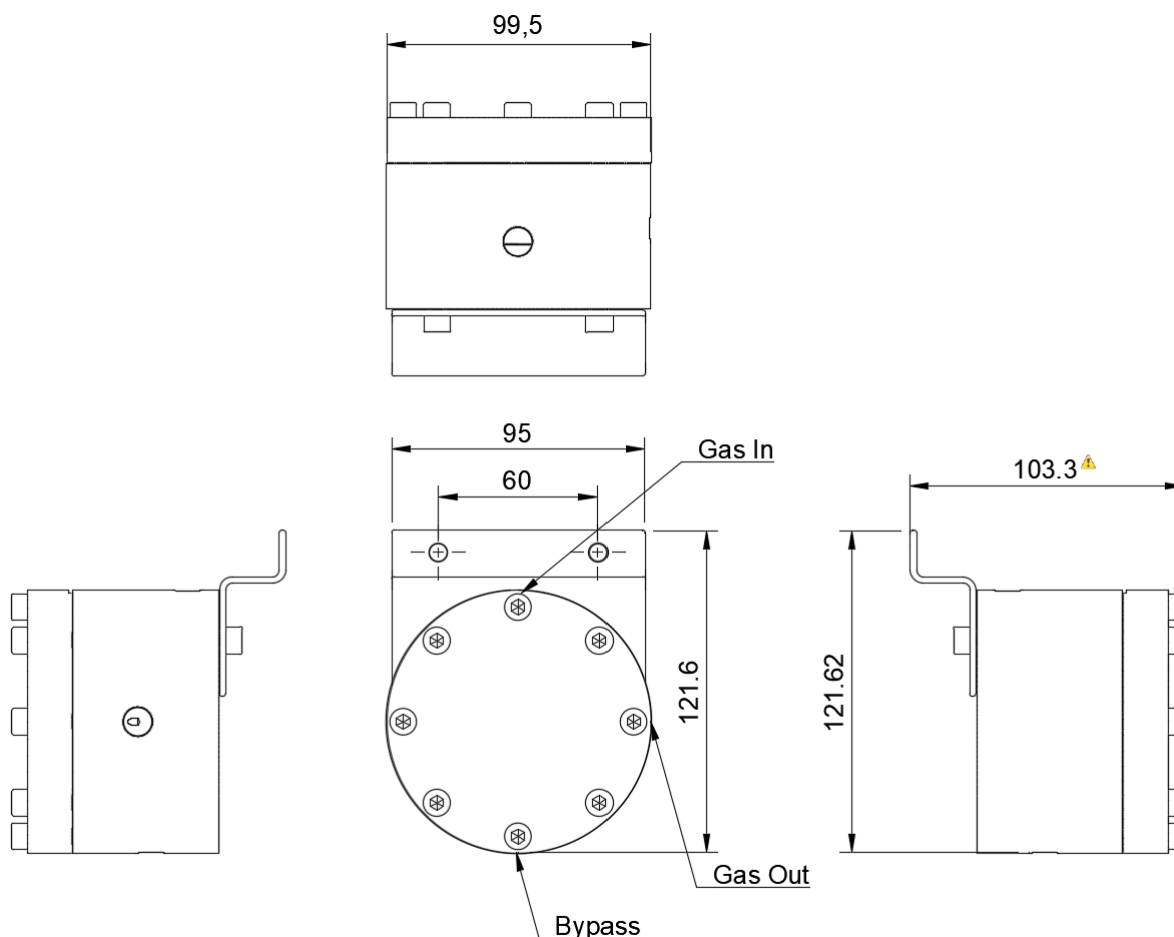
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Dimentions:



Contact Information

For inquiries and orders, contact us at:

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