



- Filtration of liquids and gases
- Immission measurement
- Emission measurement
- Automotive
- Chemistry
- Petrochemistry
- Sampling with continuous bypass

In analytical technology impurities in the form of oil and fine particles occur and have to be filtered for sampling gas analysis.

This is exactly why the sample gas filter, type MGF110 was developed by CGS. Special features are a minimum dead volume, easy installation as well as a universal applicability as both a particle or coalescence filter.

2 inlets and 2 filtered outlets can be used for particle filtration. Similarly, 2 inlets and 2 filtered outlets can be used for coalescence filtration. Connection 5 of the filter will collect the liquid (oil).

Optional mount brackets enable flexibility in installation, adapted to your local conditions.

Due to its modular construction, filter elements can be changed with ease and quickly without removing any screws.

For connecting sample gas lines fittings of all common sizes are available.



Digital form at:
www.cgs-company.de/downloads/MDZ_E_D_MGF110.pdf

MDZ_E_D_MGF110_1.4 1/5

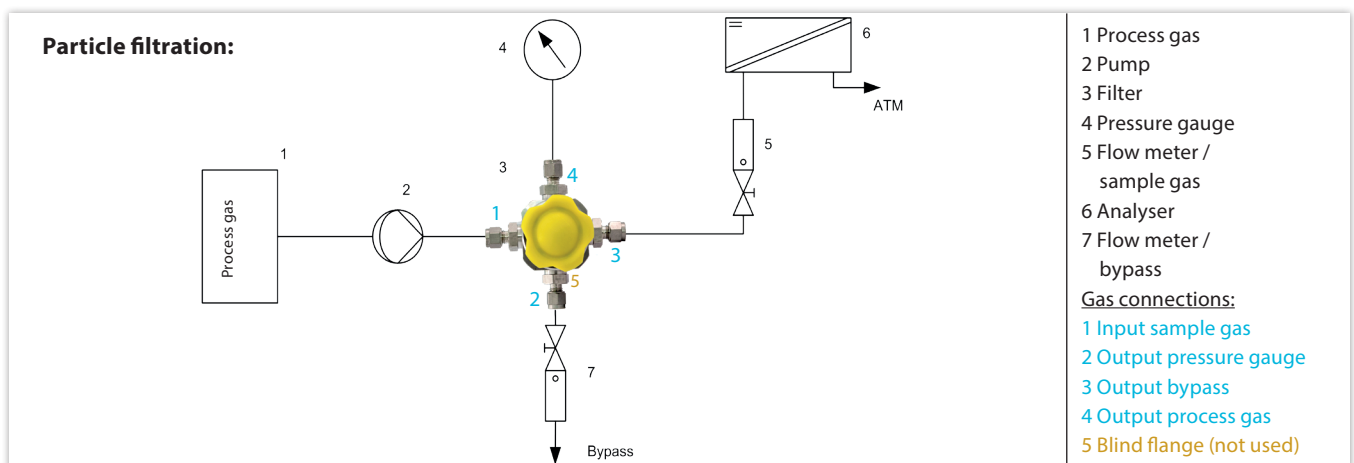
Technical data

- Max. operating temperature: -20°C to +200°C (with FKM)
- Max. recommended gas flow: 800 l air / h
- Max. internal pressure (housing): 190 bar
- Pressure drop at 100 l air / h: ca. 5 mbar*
- Pressure drop at 200 l air / h: ca. 10 mbar*
- *depending on filter element
- Gas connections: G1/4"
- Material:
 - Housing: 316L
 - Filter elements: see spare parts
- Weight: ca. 1.9 kg
- Measurements (W x H x D): 49 x 255 x 49 mm

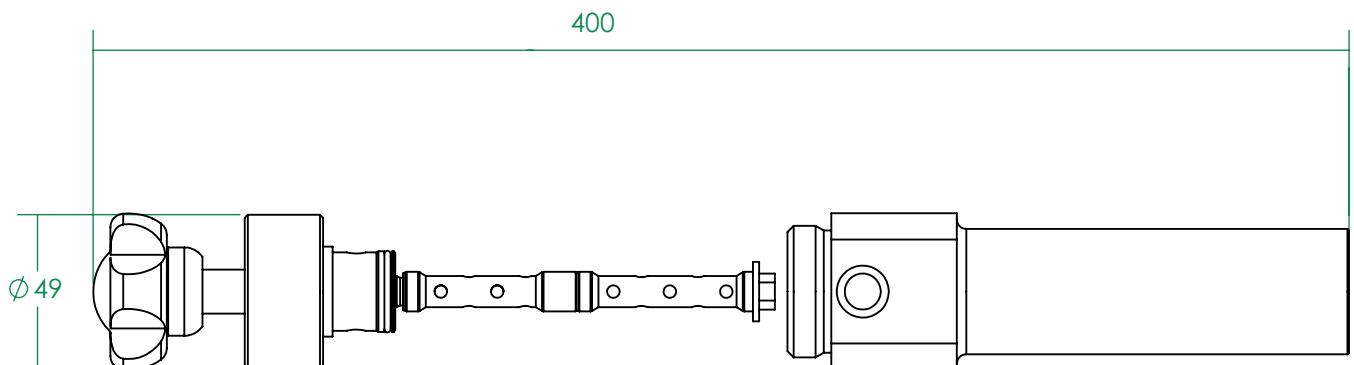
Options

- Wall mount bracket
- O-rings made from FKM & FFKM
- Filter elements
- Label plate with text

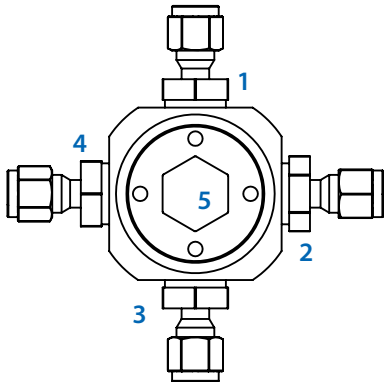
Application example



Dimension drawing / Mounting



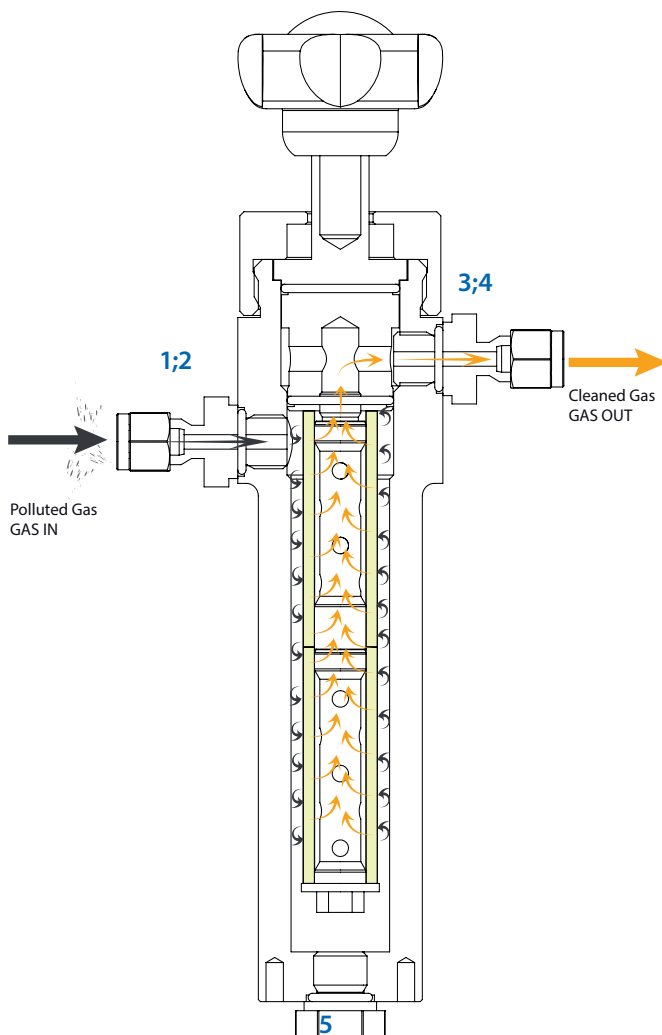
Filter connections (view from below)



Connections	Particle filtration	Coalescence filtration
1	Inlet	Outlet
2	Inlet	Outlet
3	Outlet	Inlet
4	Outlet	Inlet
5	Bypass or blind	Condensation out

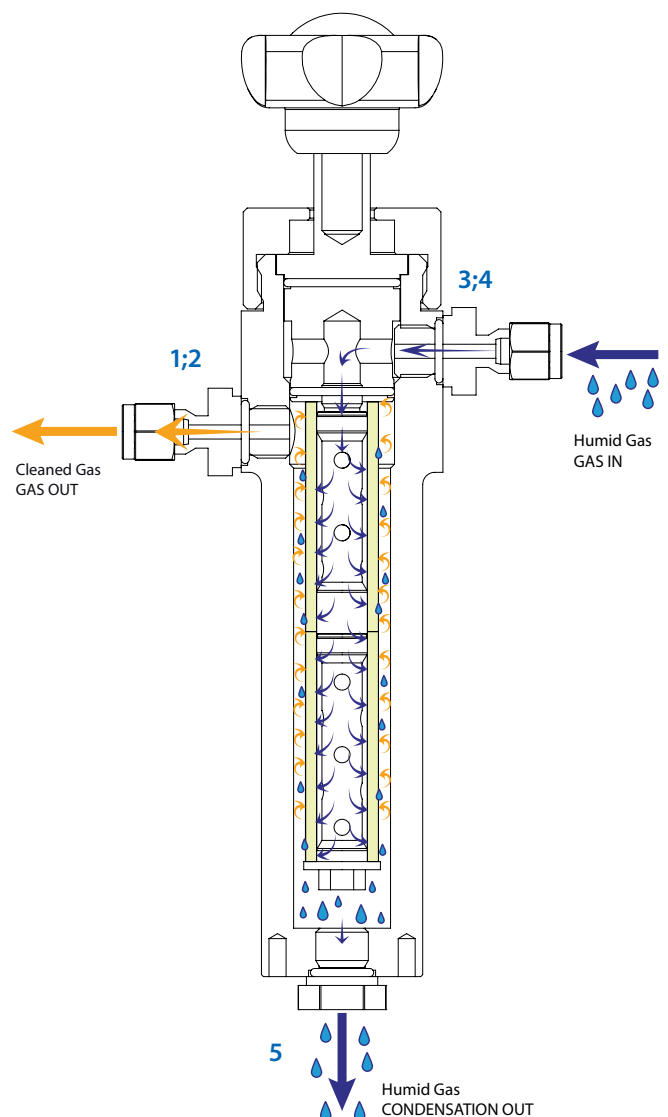
Particle filtration

Filter element flowing from **outside to inside**

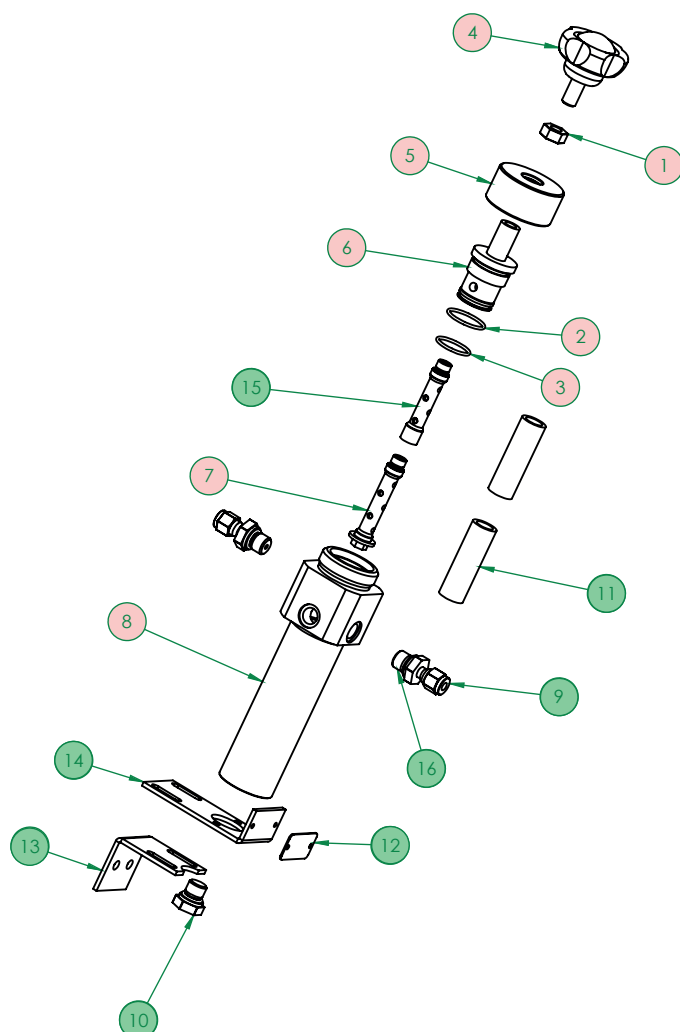


Coalescence filtration

Filter elements from **inside to outside**



Assembly drawing

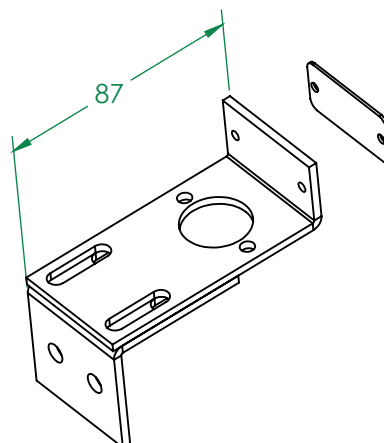
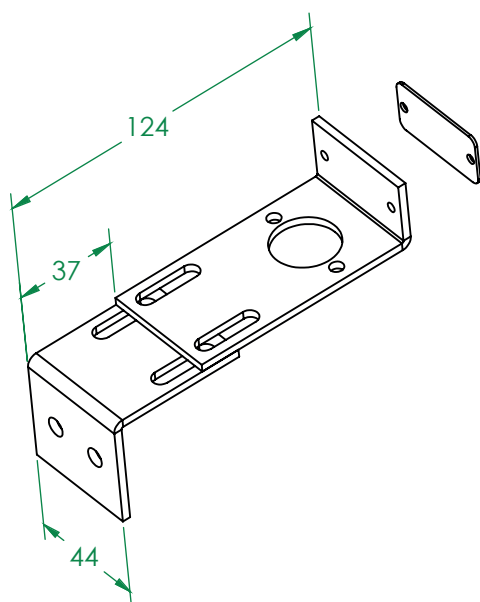


Main body

Options

POS.-No.	DESCRIPTION	AMOUNT
1	Screw nut M10	1
2	O-ring 25x4	1
3	O-ring 22x2	1
4	Five star knob	1
5	Filter union nut	1
6	Filter sealing body	1
7	Filter hood	1
8	MGF 110 base body	1
9	Fitting G1/4	0(5)
10	Locking screw G1/4	0(3)
11	Filter element	0(2)
12	Label plate 40X20	0(1)
13	Mounting plate	0(1)
14	Mounting plate	0(1)
15	Extension 55mm M10x10	0(1)
16	O-ring 12X2	5

Mounting plate MGF110



Service / Maintenance

For service and maintenance the common accident-prevention regulations has to be observed!
Use protective gloves, face mask and safety glasses to avoid contact with potential aggressive condensate!

Operation:

Changing filter elements if necessary / not later than 6 months
Depressurize the system! Filter should be purged with inert gas if necessary.
Then remove filter hood. Take away the unscrewed filter cartridge and clean the filter housing.
The new filter cartridge has to be put on the filter mount and screwed in the base body.
Check O-ring, mount filter hood and put the system into operation.
Saturated filter cartridges as well as any condensate that accumulates are considered to be special waste!

Time period:

Changing O-rings if necessary / not later than 12 months
Having changed O-rings the filter has to be proved for tightness!

Order numbers

Product:

- **MGF110** [incl. 3x Locking screw]
[Filter elements and fittings are not included]
- **MGF110 SilicoNert®2000** [incl. 3x Locking screw]
[Filter elements and fittings are not included]

Order no.:

1039422

1043263

Accessories / Spare parts

- | | | |
|--|---------------------|---------|
| • Filter element borsilicate 500°C 0.1 µm, 99.99% (Standard) | | 1023833 |
| • Filter element borsilicate 0.1 µm, 99.999% | | 1027010 |
| • Filter element PTFE 0.1 µm, 99.9% | | 1020739 |
| • Filter element borsilicate kynar 0.1 µm, 99.999% | | 1027013 |
| • Filter element for coalescence 0.1 µm, 99.999% | | 1027016 |
| • Filter element; stainless steel - straining mesh; 100 µm | | 1028032 |
| • Filter element; stainless steel - straining mesh; 40 µm | | 1031179 |
| • Filter element; stainless steel - straining mesh; 1 µm | | 1031275 |
| • Filter element; stainless steel; 5.0 µm | | 1029193 |
| • Filter element; stainless steel; 0.3 µm | | 1029201 |
| • Filter element; stainless steel; 0.2 µm | | 1029202 |
| • Tube fitting; male connector | G1/4" Kl: 6 mm | 1019026 |
| • Tube fitting; male connector | G1/4" Kl: 8 mm | 1018805 |
| • Tube fitting; male connector | G1/4" Kl: 1/4" | 1018682 |
| • Tube fitting; male connector | G1/4" Kl: 3/8" | 1027830 |
| • Locking screw | G1/4" | 1016464 |
| • O-ring 12x2 FKM (10 pcs.) | [for G1/4" fitting] | 1025955 |
| • O-ring 12x2 FKM; FKM-FEP coated (10pcs.) | [for G1/4" fitting] | 1034876 |
| • O-ring 12x2 FFKM (Kalrez 6375) | [for G1/4" fitting] | 1014399 |
| • O-ring 22x2 FKM (10 pcs.) | | 1036474 |
| • O-ring 25x4 FKM (10 pcs.) | | 1041930 |

