



- 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 MGF10 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.

3 inlets and 2 filtered outlets can be used for particle filtration. Similarly, 2 inlets and 3 filtered outlets can be used for coalescence filtration. In so doing, connection 1, 2 and 3 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_MGF10.pdf

MDZ_E_D_MGF10_1.6 1/6

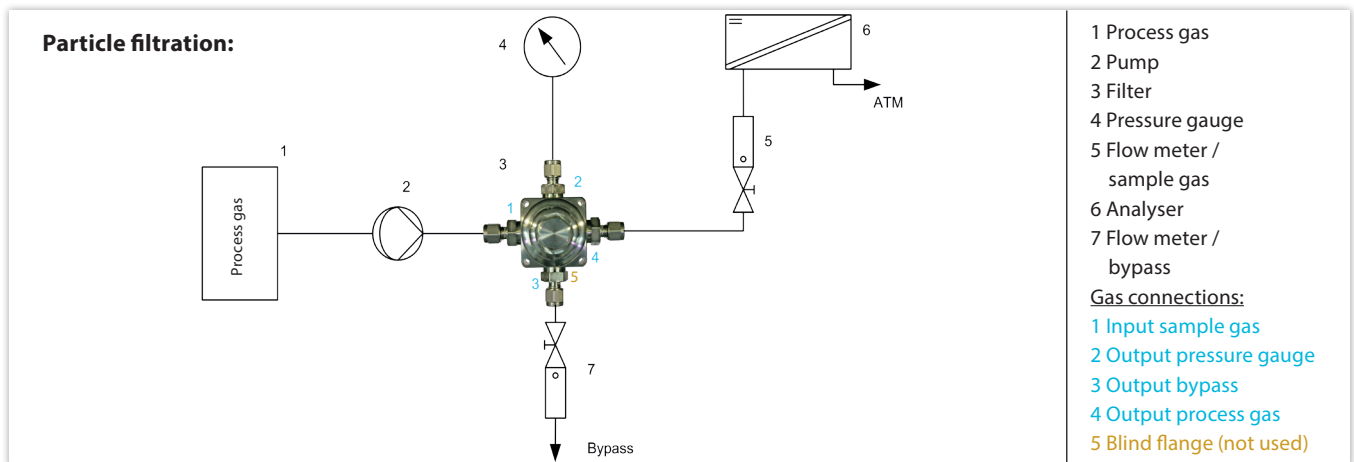
Technical data

- 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
- Gas connections: 1/4"NPT or G1/4"
- Material:
 - Housing: 316L
 - Filter elements: PTFE, microfibre
- Weight: ca. 1 kg
- Measurements (W x H x D): 50 x 107 x 50 mm

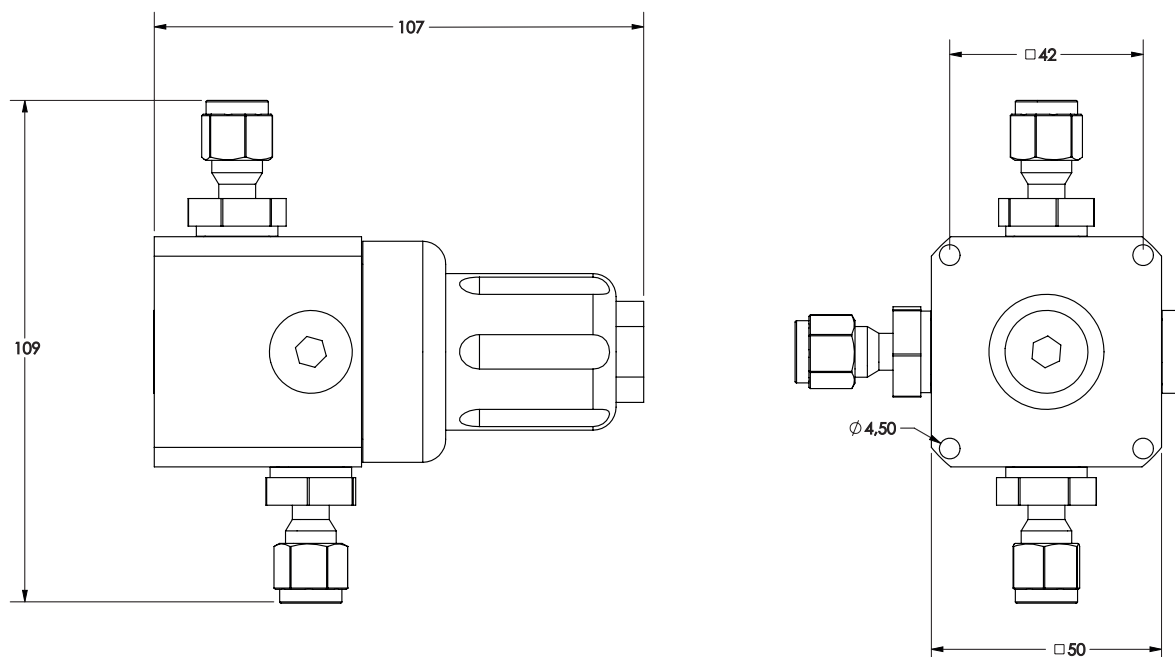
Options

- Wall mount bracket
- O-rings made from FKM & FFKM
- Filter elements

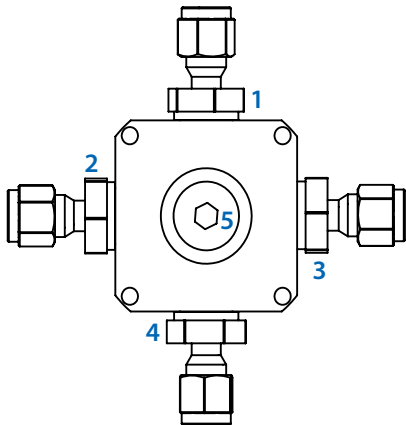
Application example



Dimension drawing / hole pattern



Filter connections (view from below)



Connections

- 1 Filter element outside
- 2 Filter element outside
- 3 Filter element outside
- 4 Filter element inside
- 5 Filter element inside

Particle filt.

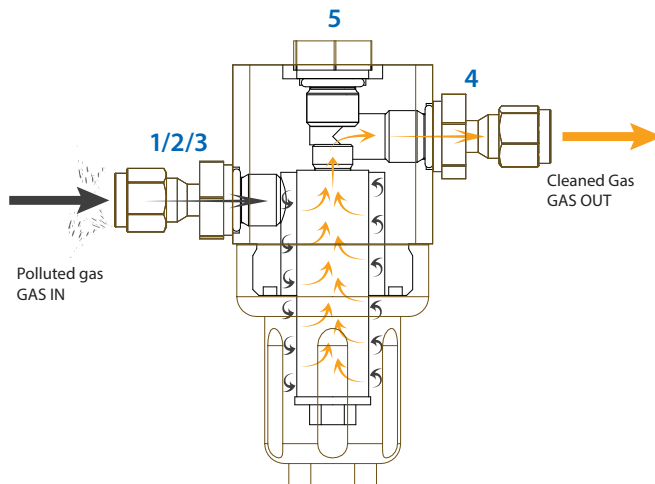
- Inlet
- Inlet
- Inlet
- Outlet
- Outlet

Coalescence filt.

- Outlet
- Outlet
- Outlet
- Inlet
- Inlet

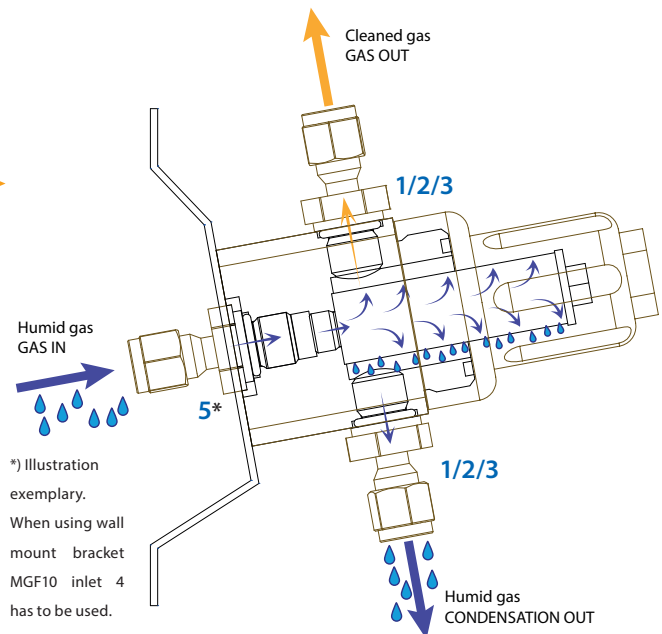
Particle filtration

Filter element flowing from **outside to inside**



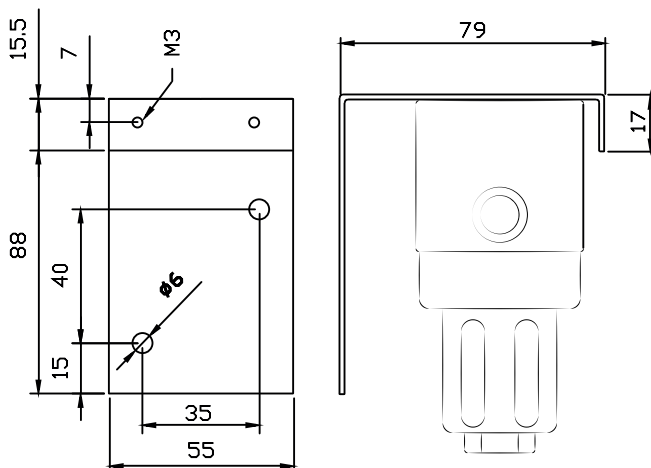
Coalescence filtration

Filter elements from **inside to outside**



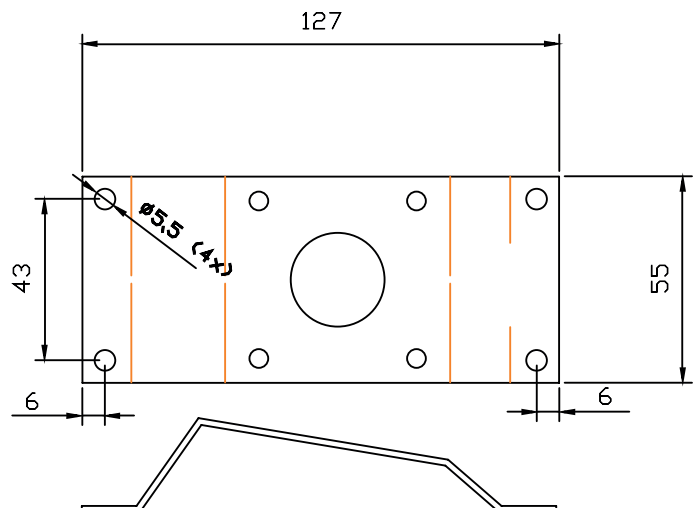
Wall mount bracket MGF10

Particle filtration



Wall mount bracket MGF10

Coalescence filtration



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

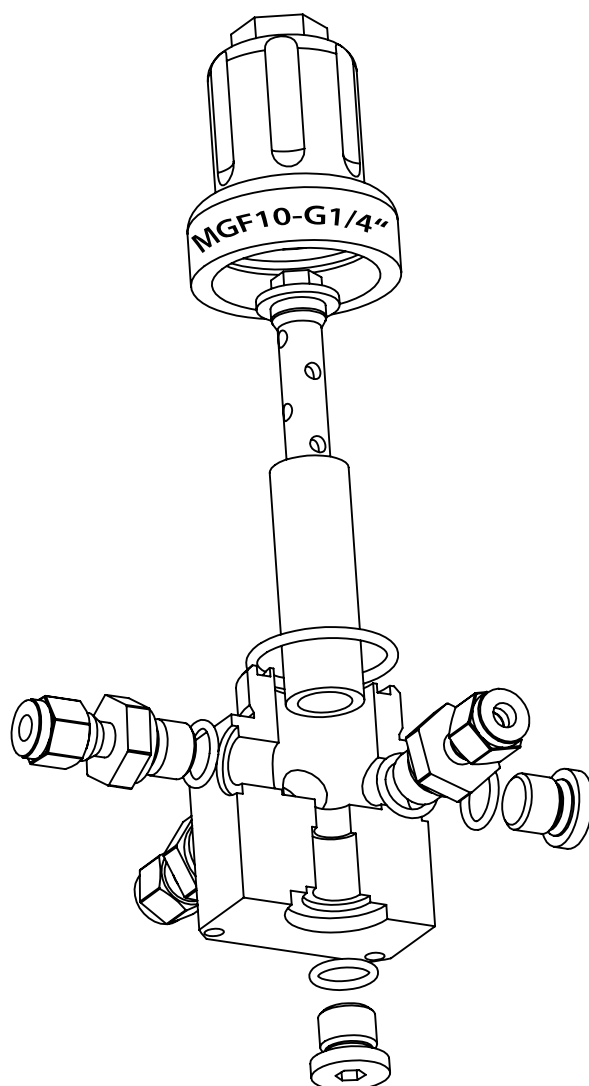
Product:

• MGF10-G1/4" [incl. 3x locking screw] [Filter elements and fittings are not included]	1023460
• MGF10-1/4"NPT [incl. 3x locking screw] [Filter elements and fittings are not included]	1024149
• MGF10-G1/4" SilicoNert@2000 [incl. 3x locking screw] [Filter elements and fittings are not included]	1030451
• MGF10-1/4"NPT SilicoNert@2000 [incl. 3x locking screw] [Filter elements and fittings are not included]	1030432

Order no.:

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



Accessories / Spare parts

• Locking screw	G1/4"	1016464
• Tube fitting; male connector	1/4"NPT Kl: 6 mm	1018549
• Tube fitting; male connector	1/4"NPT Kl: 8 mm	1018608
• Tube fitting; male connector	1/4"NPT Kl: 1/4"	1018684
• Tube fitting; male connector	1/4"NPT Kl: 3/8"	1021516
• Locking screw	1/4"NPT	1018924
• 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
• Wall mount bracket MGF10 coalescence filtration		1027011
• Wall mount bracket MGF10 particle filtration		1027121
• O-ring 30x2.5 for filter hood FKM (10 pcs.)		1026059
• O-ring 30x2.5 FKM; FKM-FEP coated (10pcs.)		1034876
• O-ring 30x2.5 for filter hood FFKM (Kalrez 6375)		1023716
• Adsorber unit (empty) for MGF10		1010382
• Hook spanner; DIN 1810		1017105



SAMPLE GAS FILTER

Type MGF10

