



- **Approved under**
ATEX (Ex) II 2G Ex d IIC T3
- **Universal use**
- **Adjustment of the mounting position by individual setup**
- **Easy flange mounting**
- **Easy to maintain**
- **Large filter surface**
- **Low dead volume**
- **Options**
Backflush system
Calibration gas switch

The gas sample probe MGS-020_Ex is used to continuously extract gas in processes that involve dust concentration, high temperatures and/or a high gas moisture content. The probe can be installed in explosion zone 2. Maximum operating temperature is 180°C.

The mechanical construction of gas sample probe MGS-020_Ex is designed for a user-friendly and easy to maintain installation. The insulated stainless steel housing contains a heated stainless steel filter body. This filter body is equipped with a large-surface ceramic surface filter. The filter material is made up of two layers. A fine-porous ceramic membrane layer is applied to the coarse-porous ceramic base material. The filter membrane offers a filtration grade of 0.5 micron, which ensures good filter efficiency. The sample gas enters the filter element from the outside in. The two-layer design of the filter element prevents the particles from depositing inside the filter. Instead, they deposit on the surface of the filter element and can be flushed back into the process using the optional backflush system. The design allows for the filter cartridge to be replaced even when the device is heated. To replace the filter element, open the upper housing door to pull the element up and out. Alternatively, a suitable calibration gas can be injected into the pre-filter. 3/2-way ball valves are used for the backflush system and the calibration gas injection. These are also available in a pneumatic version upon request.



Digital form at:
[www.cgs-company.de/
downloads/MDZ_E_D_MGS-020_Ex.pdf](http://www.cgs-company.de/downloads/MDZ_E_D_MGS-020_Ex.pdf)

Technical specifications

• Electrical Connector Housing

Material	Stainless steel 1.4571
Dimensions	100 x 150 x 60 mm
Temperature regulation	External
Power supply	230 V / 50 Hz
Cable gland	M20
Clamp connection	max. 2.5 mm ²
Temperature sensor	PT100
Heating element	Heating cartridge 400 W
Max. power consumption	400 W
Safety device	Temperature limiter

• Housing

Material	Stainless steel 1.4305; insulated on the inside
Dimensions	380 x 600 x 220 mm
Weight	9 kg

• Connections

Mounting flange	DN65/PN6
Flange material	Stainless steel 1.4571
Ambient temperature	-20°C ... +60°C
Pressure	0.4 - 3.5 bar (abs.)

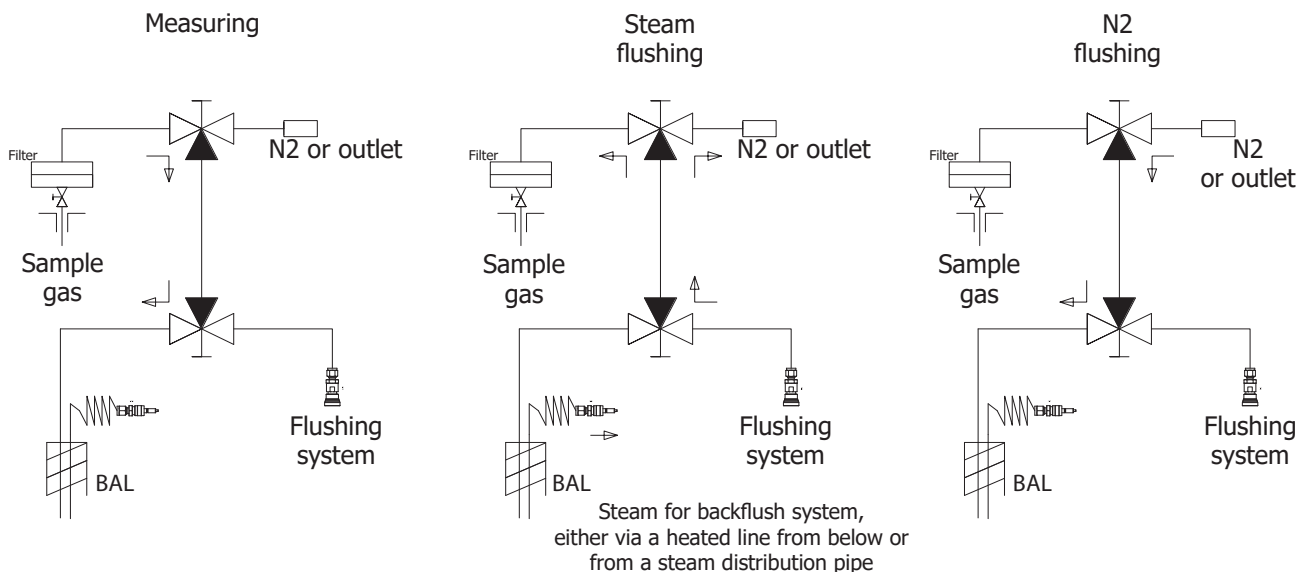
• Heated Filter Housing

Material	Stainless steel 1.4305
Filter element	Ceramic, 2x 152 mm
Filtration grade	0.5 µm
Filter handle	Plastic material

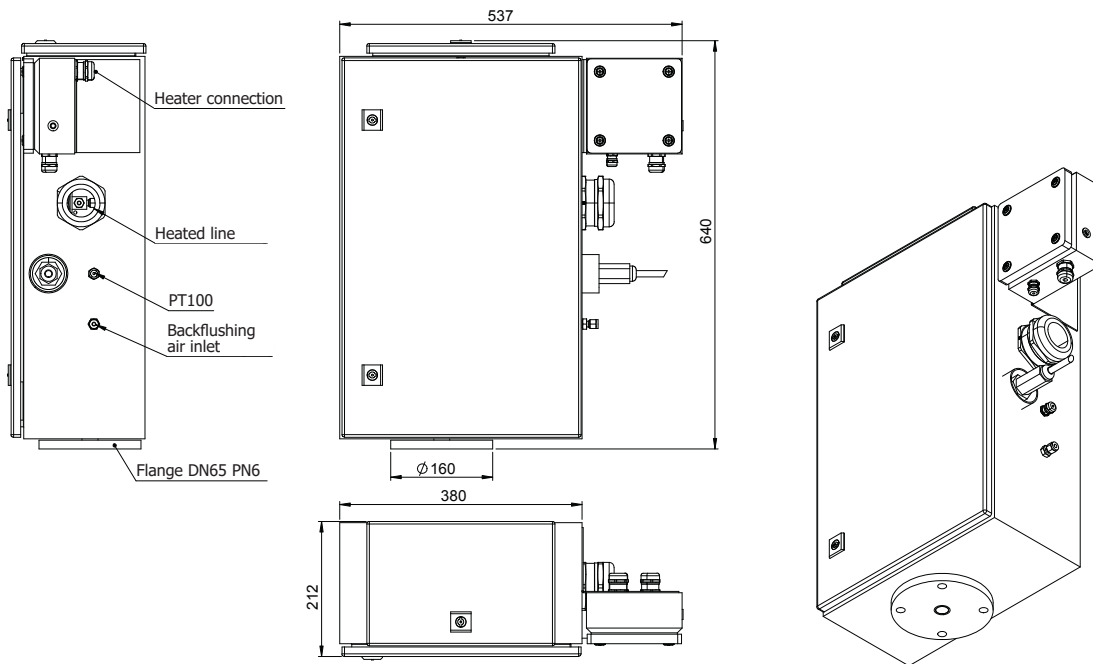
Accessories (upon request)

- Adapter flange
- Temperature regulator
- Connector housing for a heated analysis line/trace heating system

Gas flow diagram



Structural/dimensional drawing



Order number

Product

Heated gas sample probe; MGS-020_Ex; Stainless steel

Order number

1036138

Spare parts

Product

Filter element; set; ceramic filter 0.5 µm; 152 mm long; with O-rings and sealing washers

Flange gasket DN65 PN6B (67); industrial material; Novapress

Heating cartridge (Ex)

Mineral insulated resistance thermometer

Safety temperature limiter

Limit switch 230 VAC; GS 500-10-0

Order number

1011758

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