



Gas Sample Probe Series SP[®]

Electrically heated, compact version SP210-H / SP210-H/W

2-1.0.1

Special features

- Sampling of dust loaded process gases
- Small volume, fast response time
- Easy mounting and maintenance
- Self-regulated electrical heater
- Alarm contact for low temperature
- Outdoor mounting with protective cover
- Insitu probe tube optional

Applications

The M&C gas sample probes version SP210-H and SP210-H/W are applicable for continuous gas sampling. The compact design requires only limited space.

The gas sample probe SP210-H/W is equipped with an extra protective cover preferably for outdoor mounting.

Description

The design of the M&C probes version SP210-H and SP210-H/W guarantees simple mounting, safe operation and problem-free maintenance.

Changing the external filter element needs no tools and no disassembling of the sample line. The complete filter assembly is removed out of the probe head. This simplifies the checkup of the filter element and the gaskets. The filter area of the probe head respectively the insitu probe tube can be cleaned very easily without dismounting the sample probe. The large external filter element of ceramic with 2µm porosity is heated up with the stainless steel probe head to constant 180 °C, using a special selfregulated heating element. This avoids dew point problems at the probe flange and filter area. A heat insulation covers all sides of the probe and ensures an optimized heat distribution as well as safe operation.

The power supply of the probe can be in a range between 110V and 240V without switching. No thermostat or temperature limiter are necessary.

The separate thermo switch enables a low temperature monitoring (<160 °C, NO). For electrical connection a junction box with terminals is mounted.

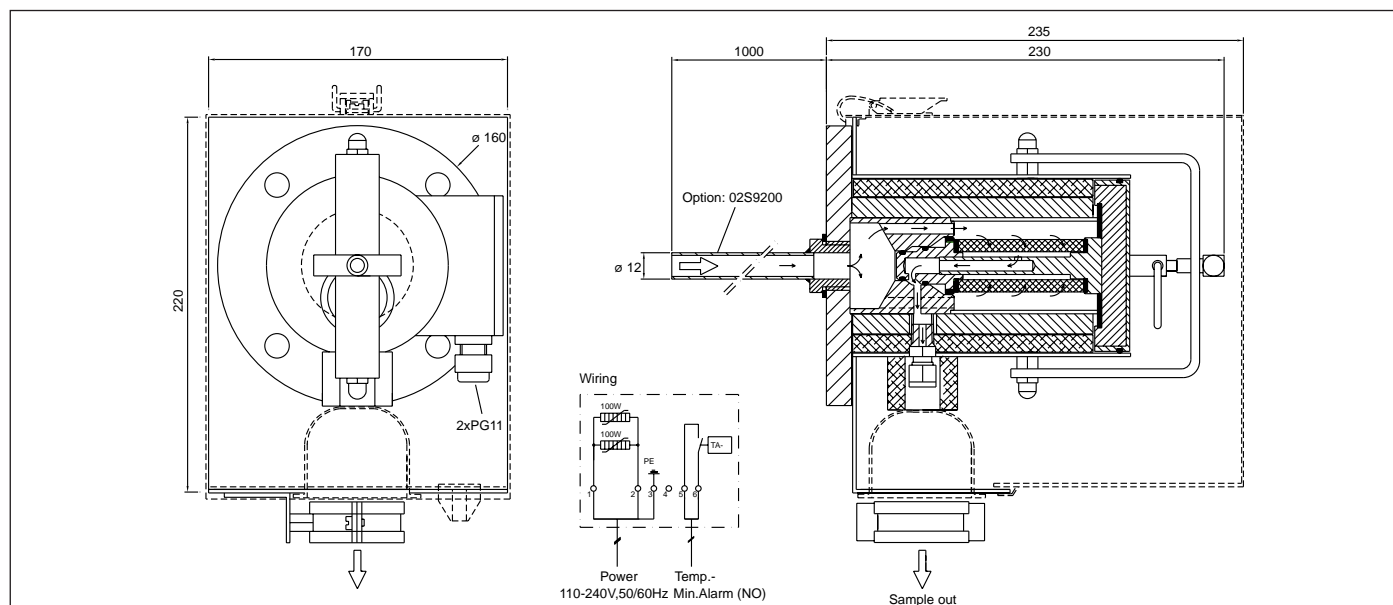
The gas sample probe SP210-H/W equipped with a protective cover with quick clamps is recommended for outdoor-mounting.

The stainless steel insitu probe tube SP210/SS (option) is screwed into the DN65 PN6 mounting flange.

The maximum operating temperature of the tube out of stainless steel is 600 °C.

In case to avoid cooling and condensation of the sample in the insitu tube from the sample point to the heated sample probe the SP 30-H or SP 35-H heated sampling tubes can be used.

Dimensionen



Dimensions in mm

Technical Data

Probe series SP®	compact version SP210-H	compact version SP210-H/W
Part No.	02S1000	02S1010
Protective cover		YES
Degree of protection	IP54 EN60529	IP55 EN60529
Insitu probe tube	SS210/SS optional*, operating temperature max. 600 °C	
Flow	max. 500NI/h at 600 °C	
Sample pressure	0,4 to 2 bar abs.	
Ambient temperature	-20 °C to +60 °C	
Dust load	max.1 g/m ³	
Filter chamber volume	100 ml	
Filter element	type S-2K, filter fineness 2 µm, ceramic	
Probe heating	+180 °C self-regulated	
Ready for operation	after 2 hours	
Low temperature alarm contact, alarm point	<160 °C, NO	
Low temperature alarm contact, contact rating	250V-3A AC, 30V-3A DC	
Connection sample outlet	1/4"-NPT inside with Swagelok tube connector ø6 x 1 mm	
Power supply	110 up to 240V 50/60Hz	
Power consumption	start up: 200VA, usual: 70VA, (fuse 6A)	
Electrical connection	terminals max. 2,5 mm ² , 2x PG11 cable glands	
Electrical equipment standard	EN 61010, EN 60335-1	
Mounting flange	DN65 PN6, B stainless steel 316Ti	
Material of sample contacting parts	stainless steel 316 / 316Ti, FPM, ceramic	
Dimensions	170x220x230 mm, w x h x d	170x220x235 mm, w x h x d
Weight	6,5 kg	8,5 kg

* Standard, other versions on request.

Options:

Part No.: 02 S 9200 Insitu probe tube out of stainless steel 316Ti type SP210/SS, connection G3/4" o, ø 10/12, length 1 m*, incl. flange gasket.

ΔP and T ₉₀ at flow of:	100	200	500	NI/hr
ΔP pressure loss with new filter element S-2K	4	7	15	mbar
T ₉₀ time with insitu probe tube SP210/SS	4,0	2,5	<1,0	sec