



SP180-H

Gas Sample Probe Series SP®

Electrically heated, compact version with weather protection cover and test gas connection as standard
SP180-H

Special Features

- Sampling of dust loaded process gases
- Small volume, fast response time
- Easy mounting and maintenance
- Self-regulated electrical heating
- Alarm contact for low temperature
- With new isolation cover for outdoor mounting
- Test gas connection according to EN14181 for test gas feeding via filter element available as standard
- Insitu probe tube optional

Application

The M&C gas sample probe version SP180-H is applicable for continuous gas sampling. The compact design requires only limited space. The gas sample probe is equipped with a new protective cover and thus also suitable for outdoor mounting.

Description

The design of the M&C probe version SP180-H guarantees simple mounting, safe operation and problem-free maintenance.

Changing the external filter element needs no tools and no disassembling of the sample line. For the change of the filter element the complete filter assembly is removed out of the probe head. Easy checkup of the filter element and the gaskets, cleaning the filter area of the probe head respectively the insitu probe tube without dismounting the sample probe are only a few advantages of the M&C probe.

In the heated filter housing out of stainless steel the 2 micron ceramic filter element is located. More filter element materials are available as option. The compact design and the new all-round heat insulation and weather protection ensures an optimized heat distribution as well as safe operation without dew point lower deviation in the filter or flange area.

The heating of the gas sample probe to 180°C happens with special self-regulated heating elements within a range of 110V to 240V without switching.

No temperature controller respectively temperature limitation is 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 SP180-H has a calibration gas connection as standard according to EN14181 (regulation for calibration of emission monitoring systems) that enables calibration gas feeding via the filter element of the gas sample probe.

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.

For long and cold connection pieces or for dew point lower deviations in the process the heated probe tubes SP30-H or SP35-H are used (see 2.15).

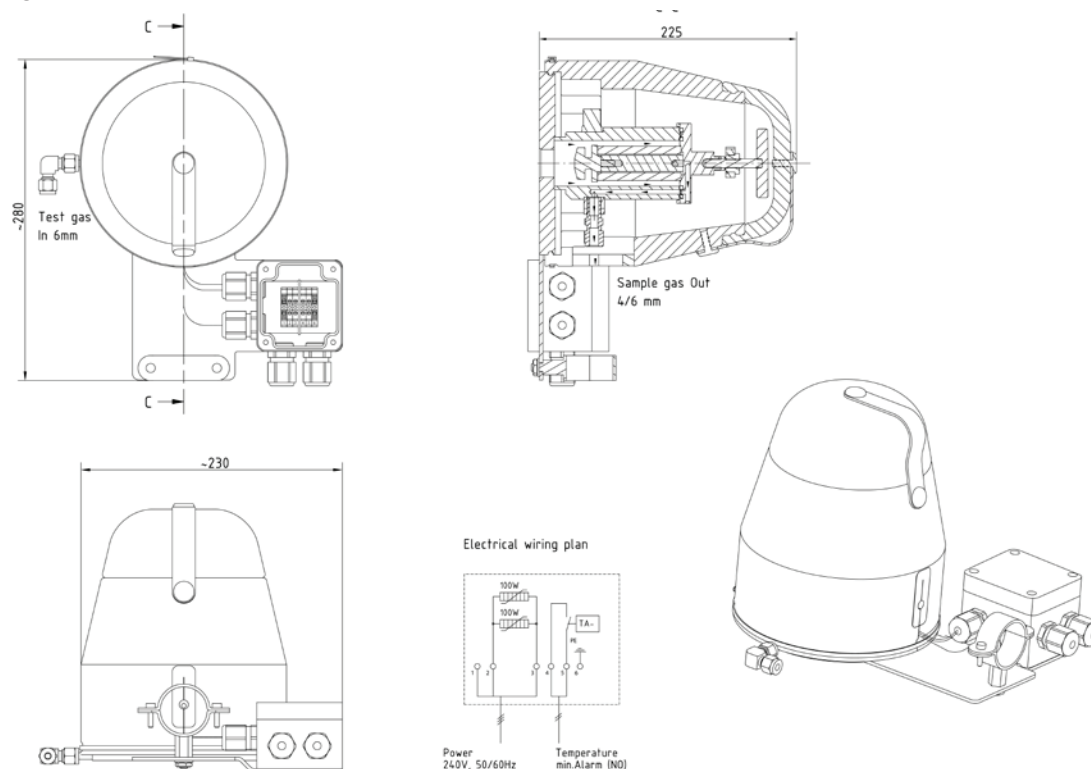
For solution of specific sampling problems you can find more filter elements, probe tubes and pre-filters in our wide range of M&C probe accessories (see 2.14 and 2.17).

Series SP®	Version SP180-H
Part No.	02S1800
Protective cover	yes
Outdoor mounting	yes
Degree of protection	IP54 EN60529
Sample temperature	max. 600 °C*
Sample pressure	0,4 to 6 bar abs.
Ambient temperature	-25 °C to +60 °C
Dust load	max.1 g/m ³
Filter chamber volume	70 ml
Filter element	type S-2K, filter porosity 2 µm, ceramic (others on request)
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 (DN4/6)
Connection calibration gas	Swagelok tube connector ø6 x 1 mm (DN4/6)
Power supply	110 up to 240V 50/60Hz
Power consumption	start up: 400VA, usual: 100VA, (fuse 6A)
Electrical connection	terminals max. 2,5 mm ² , 1xM20, 1xM16 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	230x280x225 mm, w x h x d
Weight	7,5 kg
Flow	max. 500 NI/hr
Options	
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.

* Standard, other versions on request.

ΔP and T90 at flow of:	100	200	500	NI/hr
ΔP pressure loss with new filter element S-2K	4	7	15	mbar
T90 time with insitu probe tube SP210/SS	4,0	2,5	<1,0	sec.

Dimensions



Dimensions in mm