



# Heated Gas Sampling Probe PSG Plus Ex 90



## Application

The heated gas sampling probes series **PSG Plus Ex 90** are used for continuous extractive gas analysis. They enable trouble-free representative sampling of hot predominantly dust and water vapour loaded gases. Typical applications are monitoring and protection of explosion-endangered plant components.

## Technology

The intelligent design with optimum gas guidance enables the filtration of sample gas at the outer filtration surface of 212cm<sup>2</sup> (largest on the market) as well as comfortable and quick filter change without tools and dismantling of the heated sample line. Extremely simple maintenance of the **PSG Plus Ex 90** is enabled due to a sophisticated corkscrew mechanism, which allows opening without effort also at sticking filter housing lid. The holohedral tight aluminium block heater in combination with the 3 self-regulating heating elements ensures a homogeneous heating of the complete **PSG Plus Ex 90** to 90°C.

## Functions

Due to the largest filtration surface on the market in combination with the homogeneous heating dust will always be separated reliably in the **PSG Plus Ex 90** without condensation of water vapour and therefore without blocking of the filter. For elevated dust concentrations of up to 40g/m<sup>3</sup> resp. 280g/m<sup>3</sup> the **PSG Plus Ex 90** can be equipped with an ultimate effective single or dual stage back purging with tubing of 12mm outer diameter which is unique on the market. This way filter chamber (single stage) as well as filter are purged thoroughly. The standard calibration resp. test gas connection enables the use of the **PSG Plus Ex 90** within emission measuring systems according to 13. and 17. BImSchV (EU-regulations 2000/76/EG and 2001/80/EG).

- ✓ Mounting in Ex zone 1 and 2
- ✓ Largest active filter surface on the market
- ✓ Corrosion resistant made of stainless steel SS316Ti
- ✓ Self-regulated heating to 90°C
- ✓ No cold spots
- ✓ Comfortable filter change without tools
- ✓ Single or dual stage back purging as option
- ✓ Test gas connection as standard
- ✓ Protective housing for outdoor installation
- ✓ 8-hole flange for variable mounting
- ✓ Upgradeable as option



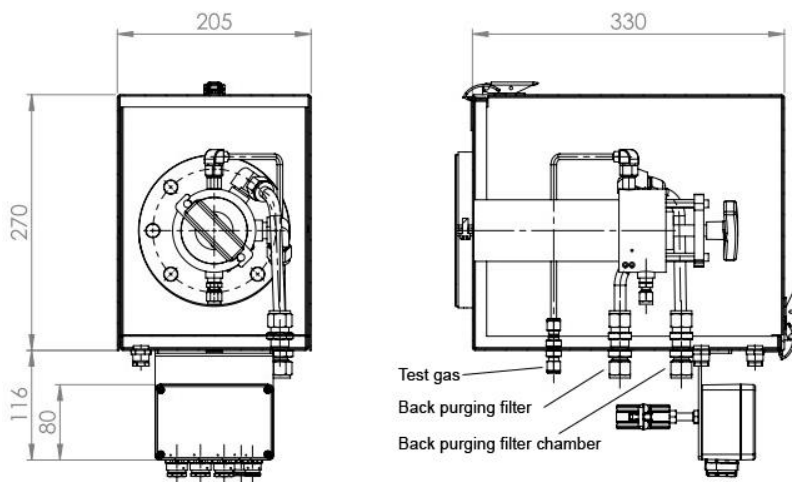


### Technical Data

				Part No.
<b>Process gas sampling conditions</b> PSG Plus Ex 90	Pressure	p <sub>abs</sub> = 50...600 kPa		<b>80060528</b>
	Temperature	max. 200 °C at probe inlet		
	Flow	30...1500 l/hr, referred to 100 kPa and 0 °C		
	Pressure drop	approx. 0,6 hPa at 100 l/hr		
	Max. dust content without and with back purging	3 g/m <sup>3</sup> / 40g/m <sup>3</sup> single stage / 280g/m <sup>3</sup> dual stage		
<b>Connections</b>	Sample gas	G1/4" f (DIN ISO 228/1)		53500062
	Test gas (standard) / Tubing (option)	G1/4" f (DIN ISO 228/1) / 6mm tube		
	Back purge (standard)	Tubing (option)	2 x G3/8" f (DIN ISO 228/1)	
<b>Heating</b>	Type	Block heater self-regulating	230VAC 50 Hz / 3 x 100W II 2G Ex d IIC T3 Gb	53500073
	Isolation	Additional insulation protective housing (only heating sleeve) for ambient temperature -30°C		53500038
	Temperature	90 °C		
	Temperature control	self-regulating		
<b>Filter Properties</b> PSG Plus	Filter	Surface filter, ceramic coated		<b>80060528</b>
	Porosity	0,3 µm		
	Tightness	10 <sup>-4</sup> hPa l/s		
	Dead volume	ca. 280 ml		
	Dimensions	50/20 x 135 mm		
<b>Protective Housing</b>	Dimensions	330 x 205 x 270 mm (L x B x T)		53500008
	Material	Stainless steel SS 304		
	Ambient temperature	-20°C ... +60°C		
	Weight	approx. 14 kg (complete probe)		
	Protection class connection box	IP67 EN 60529		
<b>Mounting</b>	Flange	DN 65, PN 6, 8-hole, form B according to DIN 2527		<b>80060528</b>
	Installation angle	10°-35° inclination to horizontal position		
	<b>Materials in contact with sample gas</b>	Housing, flange, gas connections	Stainless steel SS 316Ti	
	Gaskets	FPM		

State 05 / 2019 | Subject to change

### Dimensions



Dimensions in mm