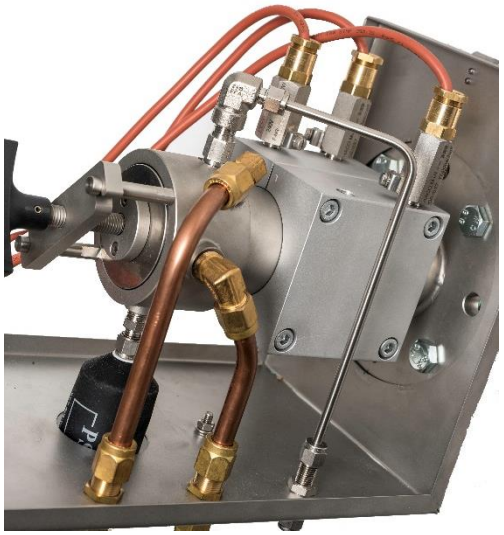
PSG Plus Probe

ATEX 90



Application

The heated gas sampling probes series **PSG Plus Probe ATEX 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 212cm2 (largest on the market) as well as comfortable and quick filter change without tools and dismounting of the heated sample line. Extremely simple maintenance of the **PSG Plus Probe ATEX 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 Probe ATEX 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 Probe ATEX 90** without condensation of water vapour and therefore without blocking of the filter. For elevated dust concentrations of up to 40g/m3 resp. 280g/m3 the **PSG Plus Probe ATEX 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

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PSG Perfect Sample Gas

Technical Data

Process gas sampling conditions PSG Plus Ex 90					
Pressure	p_{abs} = 50…600 kPa				80060528
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/m³ / 40g/m³ single stage / 280g/m³ dual stage				
Connections					
Standard Basic with standard filter unit	Sample gas		G1/4" f (DIN ISO 228/1)		
	Test gas (standard) / Tubing (option)		G1/4" f (DIN ISO 228/1) / 6mm tube		53500062
	Back purge (standard)	Tubing (option)	2 x G3/8" f (DIN ISO 228/1)	Single stage 12mm tube	53500037
				Double stage 12mm tube	53500044
Heating					
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				
Filter Properties PSG Plus					
Filter	Surface filter, ceramic coated				80060528
Porosity	0,3 µm				
Tightness	10-4 hPa l/s				
Dead volume	ca. 280 ml				
Dimensions	50/20 x 135 mm				
Protective Housing					
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				
Mounting					
Flange	DN 65, PN 6, 8-hole, form B according to DIN 2527				80060528
Installation angle	10°-35° inclination to horizontal position				
Materials in contact with sample gas					
Housing, flange, gas connections	Stainless steel SS 316Ti				80060528
Gasket	FPM				

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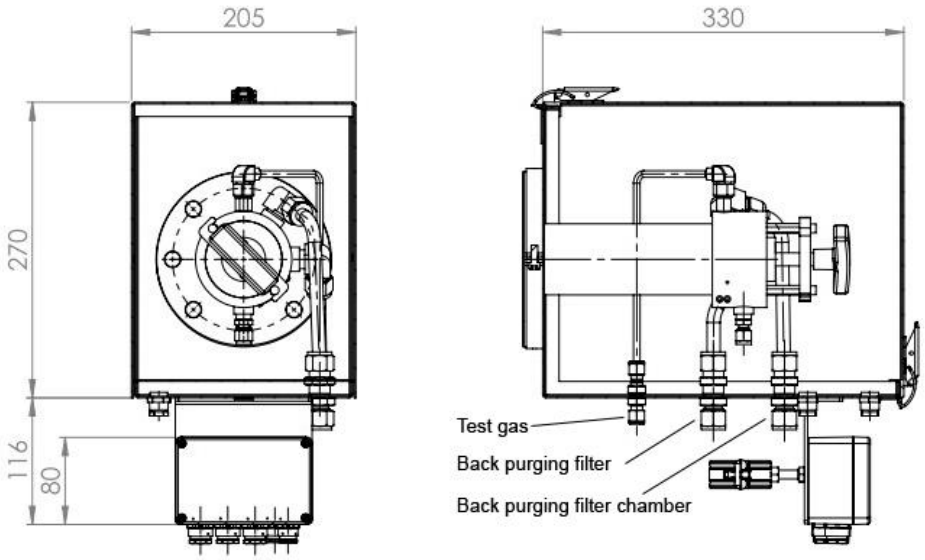
Dimensions



Dimensions in mm

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