

Pre-Filter

Application

The **PSG Pre-Filter** is used in combination with gas sampling probes **PSG Basic Probe** and **PSG Plus Probe** for continuous extractive gas analysis. They serve for precisely representative sampling of sample gas with dust loads above $3\text{g}/\text{m}^3$. Typical applications are process monitoring and process optimization, e.g. in coal silos or cement plants.

Technology

The sinter metal filters series **PSG Pre-Filter** cover a temperature range of up to 900°C . By choosing an appropriate extension tube the position of the pre-filter in the process can exactly be determined. At risk of abrasion (erosion of filter material by dust particles with high speed) and for lifetime extension (deflection of dust particles) an appropriate deflector can be used. The **PSG Pre-Filter** have a G3/4"-male thread. All extension tubes have a R3/4"-male thread fitting to the female thread in the sample gas inlet of the gas sampling probes and a G3/4"-female thread for mounting of the pre-filter.

Functions

Due to filtration at the surface of the gas sampling **PSG Pre-Filter** with increasing operation time a steady growing dust layer (filter cake) is building up and acting as additional filtration layer. Moreover, it prevents a deep infiltration of dust particles into the sinter metal filter and thus has a service life prolonging effect.



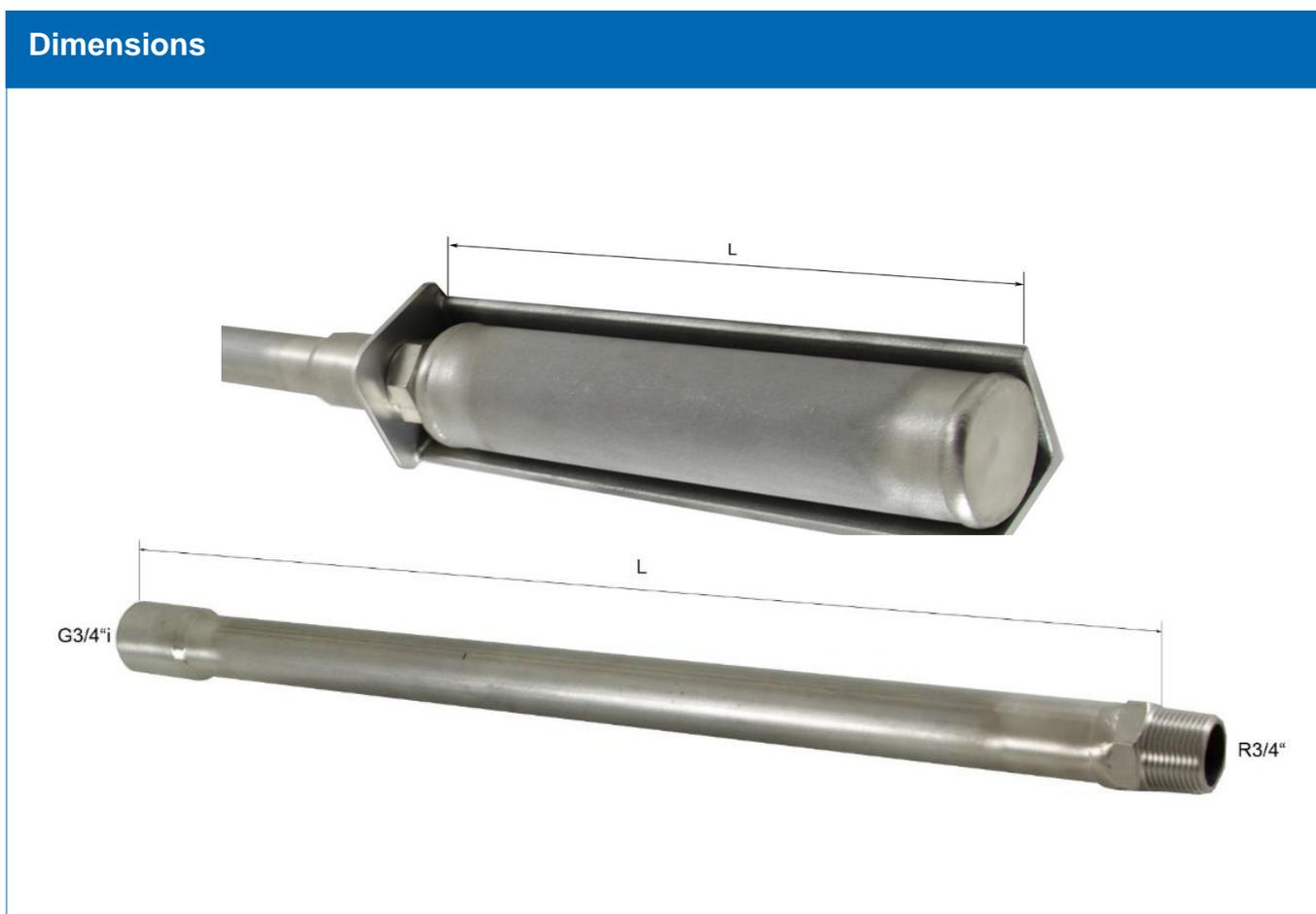
- ✓ Dust separation in the process
- ✓ For dust concentrations above $3\text{g}/\text{m}^3$
- ✓ Large active surface
- ✓ Long lifetime
- ✓ Low differential pressure even at high flow rates
- ✓ Corrosion resistant stainless steel or Hastelloy sinter metal filter
- ✓ Temperature resistant up to 900°C
- ✓ Sample length selectable with extension tube
- ✓ Quick and simple mounting
- ✓ Service life prolongation and protection against abrasion by deflector

Technical Data

PSG Pre-Filter	Max. Temp. [°C]	Length L [mm]	Connection	Porosity [µm]	Ø D [mm]	Part No.
Stainless steel	550	220	G3/4"a	2	45	80060492
		520			50	80060572
Extension tube*						
Stainless Steel	550	1000	R3/4"a – G3/4"i	-	26	80060526
Extension Stainless Steel		100				80060645
Deflector						
Stainless Steel	550	220	clamping plate	-	-	80060493
		520				80060632

*Standard length and standard extension, any arbitrary intermediate length is possible by shortening. Please indicate desired length with order.

Dimensions



Dimensions in mm