

## ANKERSMID sample probe ASP 611/613/622 Series



### Application

The ASP gas sample probes are designed for continuous gas sampling in difficult processes with gases of high or low dust content, different temperatures and extreme humidity.

### Description

Due to its modular design and various options, the Ankersmid heated sample probe filters cover the widest range of applications. In the heated filter body a filter element of 150mm length, suitable for most applications up to 1g dust/m<sup>3</sup>, is integrated. A 180mm long filter with an outer diameter of 40mm and made of stainless steel can be optionally used for applications up to 4g dust/m<sup>3</sup>; with the blow-back function dust loads of up to 10g/m<sup>3</sup> can be handled. For even higher dust loads, a primary filter has to be positioned as pre-filter.

A significant advantage is that all filters are replaceable without dismantling the probe without using any tools and in the shortest possible time. Cleaning and exchanging of unheated sample tubes or preliminary top-filters can be affected by extracting the filter from the probe.

The probe temperature with Exd-temperature sensor type Pt100 is controlled by an ATEX-certified controller-limiter unit with temperature alarm.

The probe is delivered with valid ATEX-certificates for all electrical components.

The following features are offered for all probes:

- Test gas can be injected directly into the probe according to EN14181 (regulation for calibration of emission monitoring systems) that enables calibration gas feeding via the filter element of the gas sample probe.
- Test gas can be injected into the probe through a check valve directly to the sample outlet so that no calibration gas is lost to the stack.
- An isolation valve with pneumatic control shuts off the sample outlet from the internal filter area in case of blow-back.
- Cleaning of filter and the sample tube through a high-flow inlet ports so less maintenance is necessary in high dust load applications. This inlet can be controlled by pneumatic or electric valves, and also in combination with a volume chamber for high pressure flow.



\* Pictures may vary


- **Retractable inner probe body for easy changement of pre-filter and/or (unheated) sample tube without dismantling the probe**
- **Back-flush/calibration possibility as standard**
- **Test gas connection according to EN14181 for calibration/test gas feeding via filter element optional**
- **Very universal applicability**
- **Compact and modular design suited for most applications**
- **Universal support for heated sample line by pre-lasered cut-outs for M40-gland connection in the bottom plate and additional optional clamp**
- **Reduce operator exposure to safety risks**
- **Easy mounting**
- **Easy maintenance**
- **Patented construction**



**ANKERSMID Sample probe**  
ASP 611/613 Series



**Technical data**

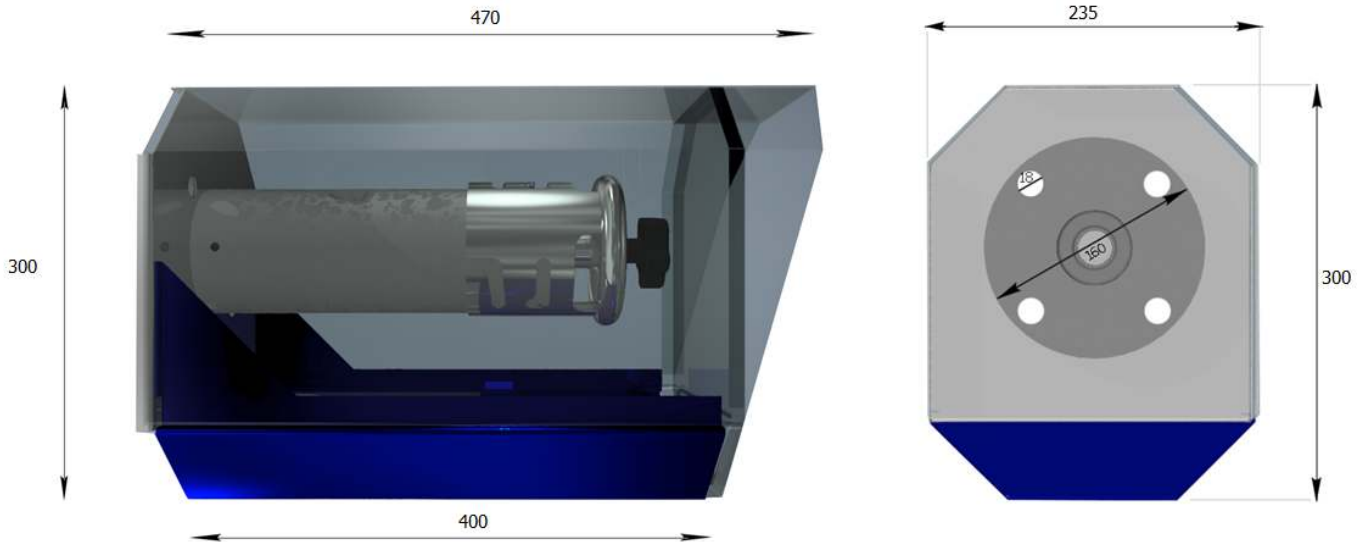
Gas Sample Probe Version	ASP 611	ASP 613
Integrated filter length	150mm	
Integrated back flush	optional	
Protective cover	yes	
Electrical Terminal box	IP54	
Gas wetted Materials	Stainless steel 316, ceramics	
Sealing materials	FPM, Viton®	
Max. dust loading	1g/m <sup>3</sup> (with back purge: 10g/m <sup>3</sup> )	
Time before ready for use	Approx. 45 minutes	
Sample pressure max.	0,5-6 bar abs.	
Ambient temperature	-20°C to +65°C	
Filter chamber volume	300cm <sup>3</sup>	
Filter element porosity	2µm	
Filter element material	Ceramics	
Thermostatic Control	0-180°C, Exd-Pt100	
Electronic Controller	Electronic controller	
Mounting area of controller	inside Ex-zone 1, 2, 21, 22	outside Ex-zone
Temperature alarm contact	<120°C, 1 change-over contact, 230V 1,5AAC, 0,5ADC	
Sample gas outlet	¼" NPT f	
Test gas connection (option)	¼" NPT f	
Back flush connection (Option)	¼" NPT f	
Power supply	230VAC/400W (standard), 115VAC/400W	
Electrical connections	3 x 1,5mm <sup>2</sup>	
Electrical equipment standard	EN60529	
Marking	 II2G EEx d e ib IIC T3	
Mounting flange	DN65 PN6B, SS316 other connections optional or on request	
Weight	±20 kg	
Overall dimensions	~ 440 x 470 x 360mm (w x h x d)	



## ANKERSMID Sample probe ASP 611/613 Series

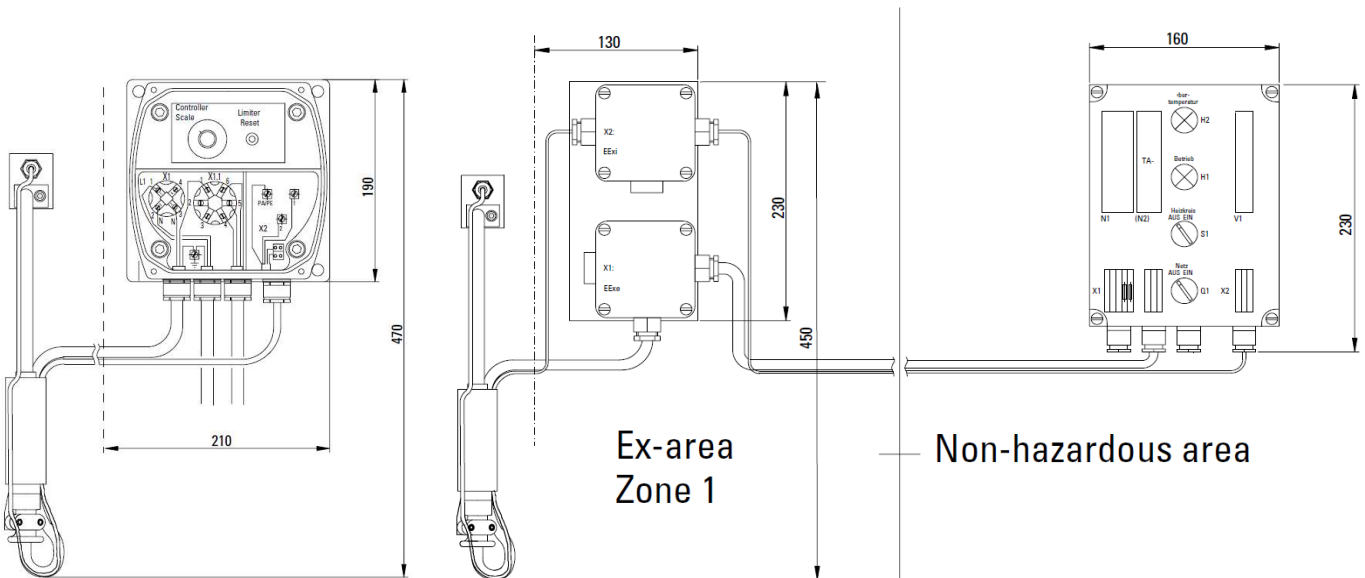


## Dimensions



## ANKERSMID Sample probe ASP 611/613 Series

## Controller



Sample probe type ASP 611 controller


Sample probe type ASP 613 controller



**ANKERSMID Sample probe**  
ASP 620/622 Series



**Technical data**

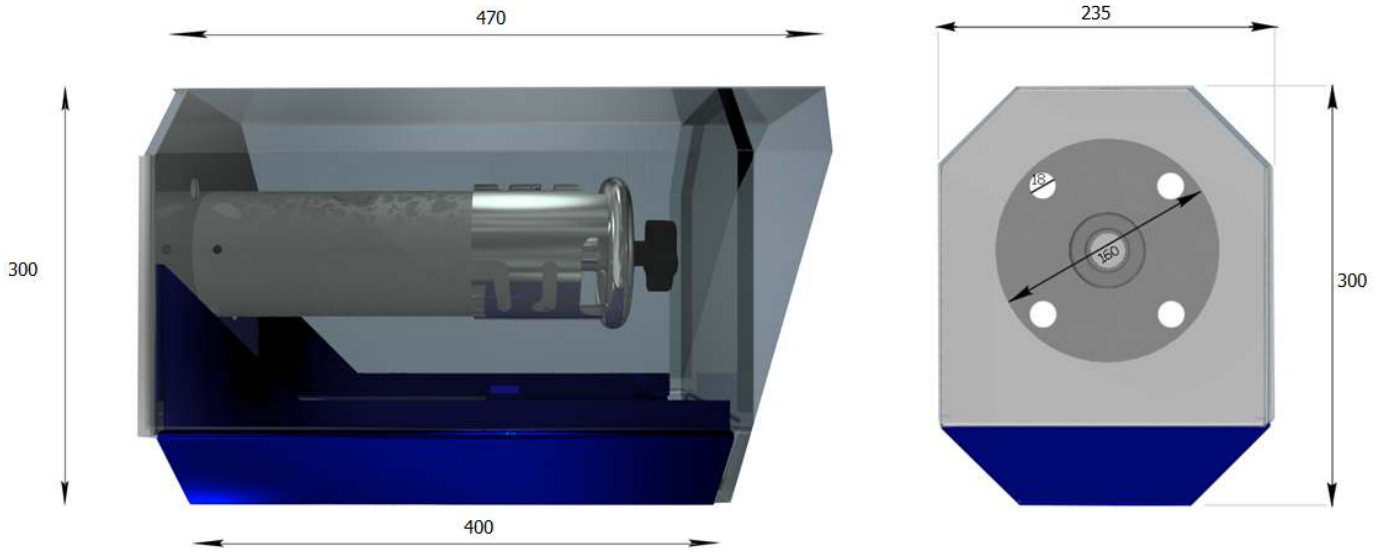
Gas Sample Probe Version	ASP 620	ASP 622
Integrated filter length	150mm	
Integrated back flush	optional	
Protective cover	yes	
Electrical Terminal box	IP54	
Gas wetted Materials	Stainless steel 316, ceramics	
Sealing materials	FPM, Viton®	
Max. dust loading	1g/m <sup>3</sup> (with back purge: 10g/m <sup>3</sup> )	
Time before ready for use	Approx. 45 minutes	
Sample pressure max.	0,5-6 bar abs.	
Ambient temperature	-20°C to +65°C	
Filter chamber volume	300cm <sup>3</sup>	
Filter element porosity	2µm	
Filter element material	Ceramics	
Thermostatic Control	0-180°C, Exd-Pt100	
Electronic Controller	Electronic controller	
Mounting area of controller	inside Ex-zone 1, 2, 21, 22	outside Ex-zone
Temperature alarm contact	<120°C, 1 change-over contact, 230V 1,5AAC, 0,5ADC	
Sample gas outlet	¼" NPT f	
Test gas connection (option)	¼" NPT f	
Back flush connection (Option)	¼" NPT f	
Power supply	230VAC/400W (standard), 115VAC/400W	
Electrical connections	3 x 1,5mm <sup>2</sup>	
Electrical equipment standard	EN60529	
Marking	 II3G, Ex nR IIB T3	
Mounting flange	DN65 PN6B, SS316 other connections optional or on request	
Weight	±20 kg	
Overall dimensions	~ 440 x 470 x 360mm (w x h x d)	



## ANKERSMID Sample probe ASP 620/622 Series

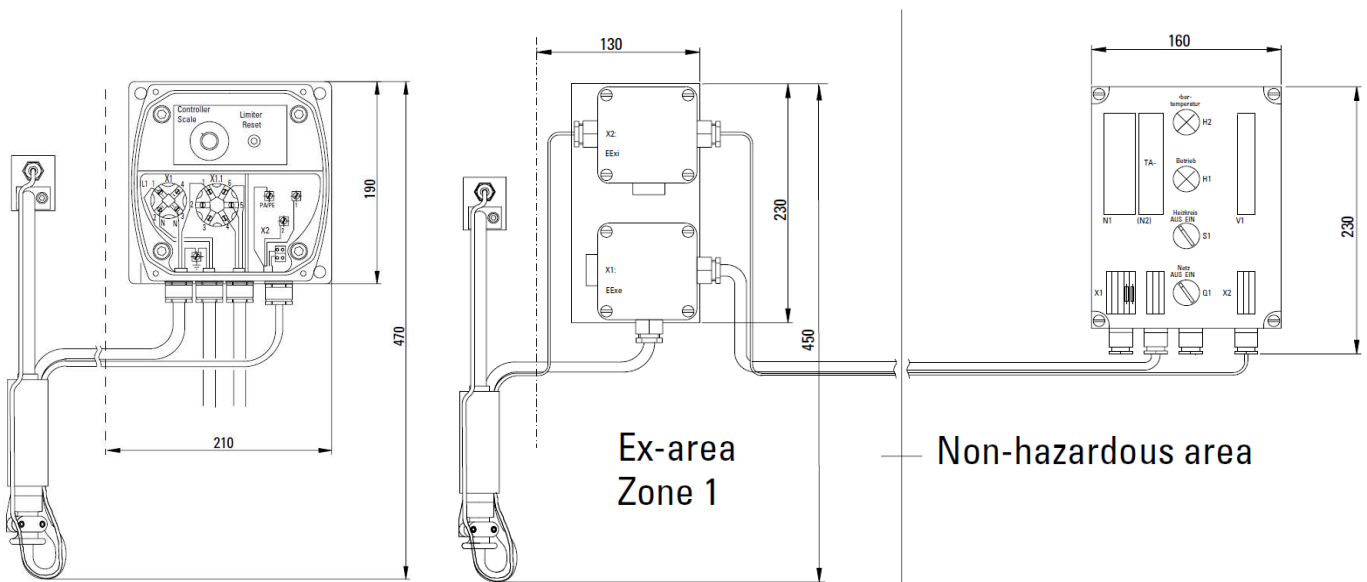


## Dimensions



## ANKERSMID Sample probe ASP 620/622 Series

## Controller



Sample probe type ASP 620 controller

Sample probe type ASP 622 controller



## ANKERSMID Sample probe ASP 630/640 Series



## Technical data

Gas Sample Probe Version	ASP 630	ASP 640
Integrated filter length	150mm	
Integrated back-flush/calibration	Yes	
Gas-wetted materials	Stainless steel 316	
Sealing materials	Viton®	
Max. dust loading	1g/m <sup>3</sup>	
Max. sample temperature	Depending on sample tube	
Time before ready-for-use	Approx. 30min	Depending on steam
Insitu pre-filter	Optional	
Sample pressure max.	0,5-4 bar abs.	
Ambient temperature	-20°C to +60°C	
Filter element porosity, material	2µm, ceramics (other materials on request)	
Operating temperature	+180°C	Max. 200°C
Temperature control	Self-limiting heater cartridge with over-temperature safety switch-off	Steam (pressure regulators and valves not included)
Temperature alarm contact rating	250V-10A AC (NO)	---
Sample gas outlet	¼" f NPT	
Test gas/blowback connection	¼" f NPT	
Mounting flange	DN65 PN6b	
Sample gas inlet	G ¾" f	
Power supply	230VAC, max. 0,265KW (115VAC on request)	---
Inrush current	Max. 4A	---
Degree of Protection	IP66 (PTC-cartridge) IP66 (Junction box)	IP66 (Junction box)
ATEX-protection	(Ex) II 2 G, Ex d IIC T3 (heater) (Ex) II 2 G, Ex e IIC T4 (junction box)	---
Electrical connections	Junction box with cable glands, Terminals (5pcs.), 2,5mm <sup>2</sup>	Junction box with cable gland, Terminals (3pcs.), 2,5mm <sup>2</sup>
Protection system (by customer)	Ground-fault circuit interrupter Fuse	---
Dimensions	Approx. 260 x 150 x 230mm (l x w x h) with weather protection shield	
Weight	Approx. 6 kg	