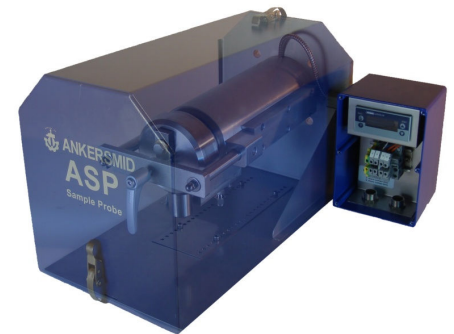


## Gas Sample Probe Series ASP

Version ASP 300, ASP 400, ASP 500 Heated



### 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.

As the ASP is available in 3 different lengths, it is suitable for applications with low to very high dust loads.

Depending on the acid dew point, the standard probe operates at 180°C or when necessary with a high temperature version at 320°C (e.g. Denox applications).

### Description

Due to its modular design and various options, the Ankersmid heated sample probe filters cover the **widest** range of applications.

With a choice of 3 different lengths of heated filter body, a filter element of 150mm length, suitable for most applications up to 1g dust/m<sup>3</sup> can be integrated. 250mm filters are used for applications up to 4g dust/m<sup>3</sup>; with the optional blow-back function dust loads of up to 10g/m<sup>3</sup> can be handled.

The 500mm model filter has a capacity for dust up to 10g/m<sup>3</sup>.

When this type is equipped with blow-back option, it handles up to 20g/m<sup>3</sup>. For even higher dust loads, a primary filter is positioned on top of the first filter.

The big advantage is that both filters **are replaceable without dismantling the probe**. The benefit is that all filters can therefore be replaced with a minimum of tools and in the shortest possible time.

The cleaning of the sample tube or the preliminary filter can be effected by extracting the filter from the probe.

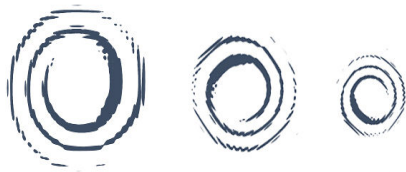
The probe temperature is controlled by a microprocessor based PID-controller. Alarm or fault contacts can be programmed and the temperature can be changed only by user-code. The standard sensor is PT100, whereas Fe-CuNi is standard for the high temperature version.

We offer the option of 2-way Modbus/RS485 communication that combines **all** Ankersmid controllers, so that digital communication with the control room is possible.

The following features are offered in all 3 lengths of probes:

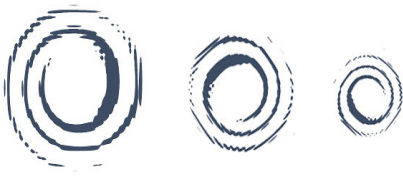
- Calibration gas can be injected into the probe through a check valve directly to the sample outlet. No calibration gas is lost into the stack.
- An isolation valve with pneumatic control shuts off the sample outlet from the internal filter area in case of blow-back.
- Through a high flow **back-flush** inlet we can clean the filter and the inlet sample tube so less maintenance is necessary in high dust load applications. This inlet can be controlled by a pneumatic or electric valve, and also in combination with a volume chamber for high pressure flow.

- **Retractable sample tube, change pre-filter or sample tube without dismantling the probe**
- **Optional back-flush possibility and closing the sample gas outlet**
- **Very universal applicability**
- **Compact and modular design suited for most applications**
- **Reduce operator exposure to safety risks**
- **Easy mounting**
- **Easy maintenance**
- **Digital communication**
- **Patented construction**

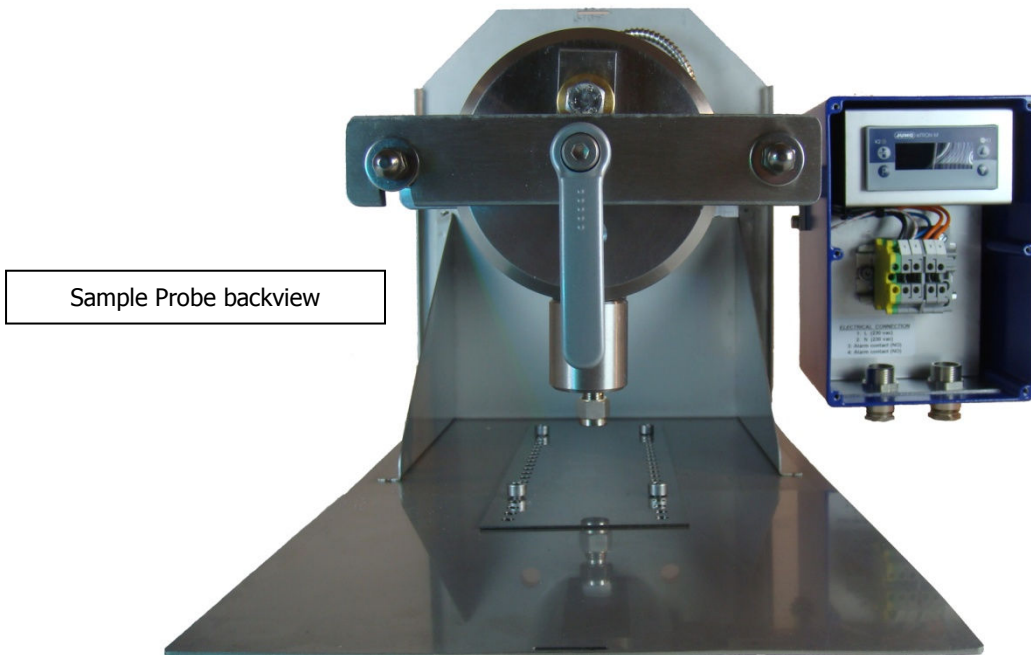
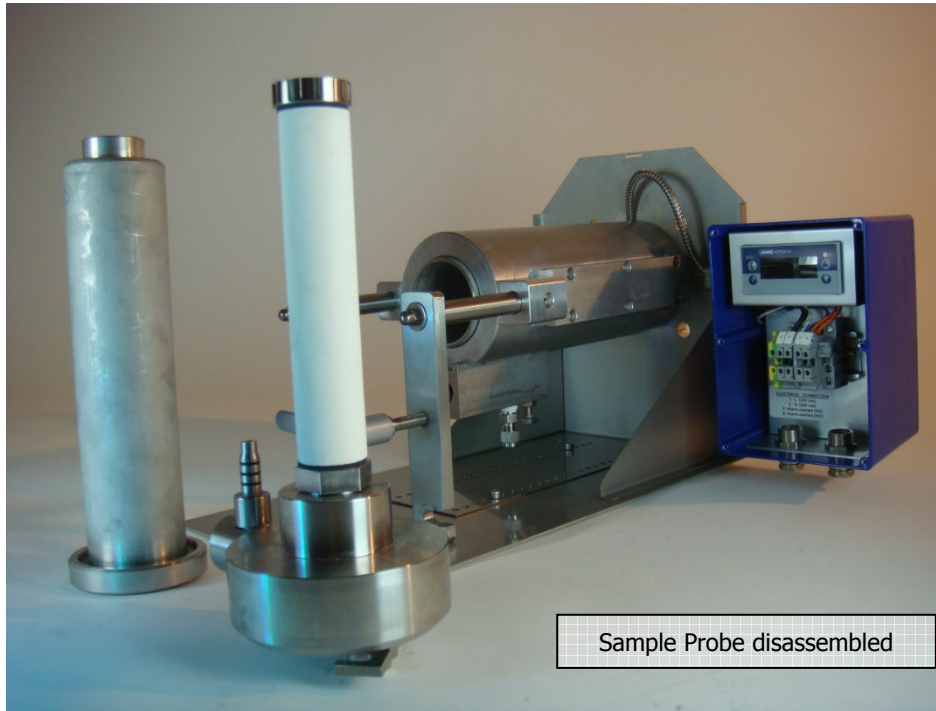


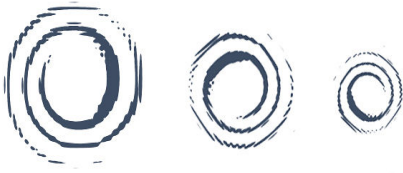
**Technical data**

Version	ASP 30X		ASP 40X		ASP 50X	
Integrated filter Length	<b>150mm</b>		<b>200mm</b>		<b>500mm</b>	
Integrated back-flush	available		available		available	
Protective cover	yes					
Degree of protection	IP55 EN60529					
Wet Materials	Stainless steel 316					
Sealing materials	FPM/ Viton® for 180°C and Graphite for 320°C					
In situ probe tube/pre-filter	Optional 200 or 500mm, stainless steel, 2µm or 20µm					
Sample pressure max.	0,5-6 bar abs.					
Ambient temperature	-20°C to +65°C					
Filter chamber volume	300cm <sup>3</sup>		480cm <sup>3</sup>		760cm <sup>3</sup>	
Filter element, porosity	Ceramic, 2µm		stainless steel 316, 2µm		stainless steel 316, 2µm	
Thermostatic Control	0-180°C Pt 100 Option 0-320°C Fe-CuNi					
Electronic Controller	Digital programmable PID-controller with optional RS485 Modbus					
temperature alarm contact	Free programmable contact, rating: 250V, 3A~, Factory set at alarm point: ΔT 20°C					
Sample gas outlet connection	1x 1/4" NPTi					
Test gas connection	1/4" NPTi					
Back flush connection	1/4 "NPTi					
Power supply	180°C					
	230VAC/ 800W		230VAC/1200W		230VAC/1500W	
	115VAC/ 800W		115VAC/1200W		115VAC/1500W	
	320°C					
Power supply	230VAC/ 1100W		230VAC/1500W		230VAC/1800W	
	115VAC/ 1100W		115VAC/1500W		115VAC/1800W	
Electrical connections	Terminals max. 4mm <sup>2</sup> , 2x PG 13,5 cable gland					
Electrical equipment standard	EN 61010, EN 60519-1					
Mounting flange	DN65 PN6-B, SS316 other connections optional or on request					
Weight	16 kg		19 kg		24 kg	
<b>ΔP at flow of:</b>	<b>100</b>	<b>200</b>	<b>500</b>	<b>1000</b>	<b>1500</b>	<b>NI/h</b>
ΔP with new filter element 2µ, 150mm	0,009	0,013	0,025	0,055	0,090	bar
ΔP with new filter element 2µ, 250mm	0,005	0,010	0,018	0,030	0,050	bar
ΔP with new filter element 2µ, 500mm	0,002	0,004	0,010	0,015	0,025	bar



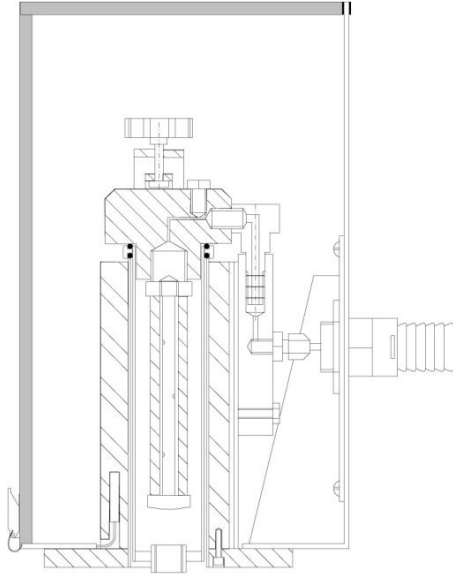
## Pictures



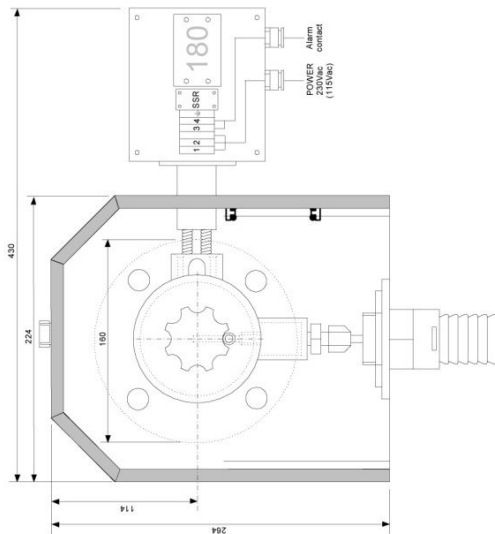


**Technical drawing**

**SIDE VIEW**



**FRONT VIEW**



REV.	ECH. NO.	First Drawing	08/04/08	FL	KL
0			DATE	BY	CHKD / APP.
DRAWN		REVISION DESCRIPTION	Ankersmid Sampling		
F. Leyskens		DATE	Neerlandweg 22 2610 Wilrijk Belgium http://www.ankersmid.com		
CHECKED		Ankersmid Sampling	FILE		
K. Leyskens		GAS SAMPLE PROBE	REV 0		
ENGINEER		ASP Series	SHEET 1 OF 1 DWG NO.		
APPROVED		SCALE			