

ANKERSMID Stationary gas conditioning system

ASS 500 Series

Application

The stationary gas conditioning system ASS has been designed so that detailed gas analyses can be carried out continuously. The entire gas conditioning system is mounted on a plate for an easy installation in cabinets, containers and any kind of walls. The device guarantees a safe operation with minimum maintenance.



* Picture may vary

Description

The stationary system is suitable for variable, discontinuous and continuous operation. The components built into the system can be used for standard applications. For special requirements please ask us for other solutions.

The heated sample line is to be mounted directly at the sample gas inlet connector made of stainless steel.

A ball-valve can be fitted to the inlet terminal of the portable system in order to calibrate analyser(s) with check gas.

The amount of flow is determined by a sample gas diaphragm pump.

The sample gas pump (AMP) is activated automatically by means of an excess temperature contact on the cooler.

Optional flow meters with integrated needle valve are available. The flow meters are built-in as the electronic controller and are visible from outside when the carrying case is closed.

This unique microprocessor-controlled Peltier cooler is a powerful designed dew-point stabiliser. The dew-point is set at +4°C but can be changed at any value between +1°C and +15°C. The gas cooler is equipped with an innovative heat exchanger system.

A preliminary fine filter (AUF) is installed at the inlet of the gas sampling pump and can be equipped with a variety range of filter elements in different materials and porosities.

Any condensation is continually removed by a peristaltic pump type ASR25.

With the optional thermostatic paramagnetic O₂-sensor the APS is a suitable and reliable instrument for monitoring oxygen concentrations in various gas analytical control applications including process gas-, emission monitoring gas-, inert gas-, flue gas-, fermentation processes-, ambient air- and laboratory process control measurements.

- **Low maintenance and self-monitoring**
- **250NI/h flow rate**
- **Dew-point +4°C ± 0,1°C**
- **Ready-for-use in < 10 min**
- **Compact design**
- **Optimum reliability**
- **Universally equipped**
- **Optional paramagnetic O₂-sensor**
- **Excellent chemical resistance**



ANKERSMID Stationary gas conditioning system **Technical data**
ASS 500 Series

ASS Stationary system	ASS 500
Gas flow rate max.	250NI/h
Sample outlet dew-point	+1°C +15°C, factory setting: +4°C
Dew-point stability	±0,1°C
Sample inlet temperature	Max. +190°C
Sample inlet connection	Stainless steel connection DN4/6mm, suitable for heated sample lines
Sample inlet dew-point	Max. +50°C
Sample outlet connection	PVDF connection DN4/6mm (1x standard, additional connectors extra for each optional flow meter)
Ambient temperature	+5°C up to +45°C
Maximum pressure	3 bar abs.
Material of gas wetted parts	
Heat exchanger coating	PFA/PTFE
Diaphragm pump	Head: PPS, Valves: FKM, Membrane: PTFE-coated
Filter	Head, element holder: PVDF, Filter element: PTFE, Body: Duran® glass
Peristaltic pump	Tube: Novoprene®, Connectors: PVDF
Others	Tubing: PTFE, Inlet connector: SS316, Outlet connector: PVDF
Number of gas inlets	1 (Standard), max. 2
Number of gas outlets	1 (standard), max. 3
Filter porosity	2µm (standard), others on request
Total cooling capacity	Max. 245kJ/h (2 Peltier elements)
Storage temperature	-25°C up to +65°C
Ready-for-use	< 10min
Power supply	230V/50Hz (standard), 115V/60Hz or multi-voltage 85-230VAC with option APS 070
Power consumption	100VA
Electrical connection	Cold appliance plug with 1,5m cable
Mounting plate dimensions	500mm x 400mm x 3mm (W x H x D)
Electrical protection	Fuse 2A (10A with option APS 007)
Electrical equipment standard	EN61010
Weight approx.	~ 7kg

Maximum values in technical data's must be rated in consideration of total cooling capacity at 20°C ambient temperature and 4°C outlet dew-point

PTFE = Polytetrafluoroethylene (Teflon®)
PVDF = Polyvinylidenfluoride
PPS = Polypropylenesulphide (Ryton®)

PFA = Perfluoralkoxy-Polymere
FFPM = Perfluorelastomer (Kalrez®)
FKM = Fluorine Kautschuk Material



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Dimensions

