AQUAGAS MONITORING SYSTEMS

ANKERSMID Sampling

AHL Heated Sample Line Temperature controlled 200°C / 250°C

Description

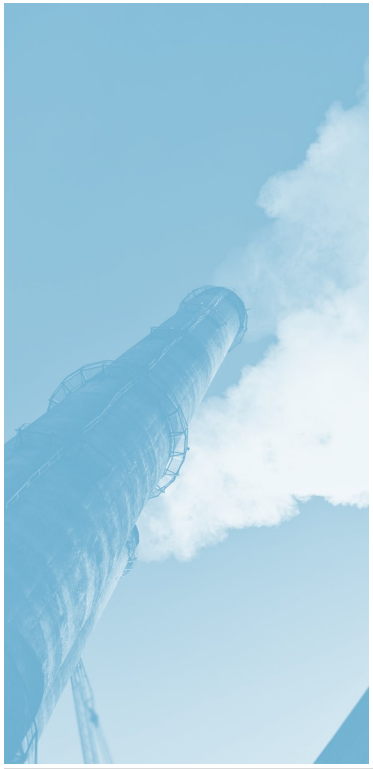
This electrically heated sample lines series AHL is designed for connecting to **all type of sampling equipment.** The use of heated line ensures that the gas components in the sample stream remain above their respective dew point and thereby eliminates the risk of condensation. Thanks to a **modular design** and a **large selection and combination of options**, the heated line AHL ensures safe and reliable sample transfer within CEMS or process monitoring systems. The ATEX heated sample lines series AHLX are designed to transport sample gas through explosive zone type 1 or 2.

Applications

The AHL heated sample lines are manufactured according to application's specification and completely confectioned in the factory at a fixed length. The sample line temperature is to be controlled by a Pt100 temperature controller (other temperature sensors on request). The heater used in this type is **ONE serial resistance**, twisted around the tube. This patented design **eliminates the occurrence of cold zones** or spots in the heated line, where a potential blockage could occur. We offer a variety of standard lines, which can be fit with many options upon request.

AHL Key Features

- Various type of outer jacket (UV resistant PA12 corrugated, high flexible smooth silicon, Polyamide braiding…)
- Large selection of inner tubes materials (PTFE, PFA, SS316…) and diameters (polytube, fixed or interchangeable…)
- Operating temperature adjustable up to 190C suitable to most of the application
- Integrated temperature sensor (PT100 or Thermocouple)
- Integrated power and/or signal cable to fed the sampling probe with power supply and/or report its status to the CEMS controller without the need of an additional cable run separately.
- Hard caps, stress relief cable, SS studs, glands…
- Quick-lock female connection cap for fast and reliable connection with CEMS and process monitoring system
- Fully certified Heated lines according to ATEX



ATC510/520 Temperature Controller

The ATC 510/520 is a plug-in device, **microprocessor-based (PID) temperature controller** suitable for a large range of sensors (PT100, Thermocouple…) and capable to handle multiple devices. The ATC510/520 wall mount enclosure is equipped with a grounding-type plug and a multi-pole plug for fast and easy connection with the regulated unit.

The user friendly ATC 510 / 520 interface and digital display allows **efficient settings checks and adjustments**. The desired operating temperature can be set using the respective control keys such as the alarm output thresholds. The actual value, set point and controller status are indicated via 4-digit display & LED and visible at all time.

AHL Specifications

ATC 510 / 520 Temperature Controller

Temperature sensor inputs	PT100 (standard)
	Pt500, Pt1000, Ni100, PTC1K, NTC10K (B 3435K)
	Thermo-couple type J, K, S, R
Switching capacity	ATC510 - Nominal 2300W (10A)
	ATC520 - Nominal 4600W (20A)
Technology	PID controller
Power supply	24 VDC - 240VAC
Enclosure	IP54 Polycarbonate Wall Mount Enclosure - 151 x 125 x 90 (w x h x d)
Connections	ATC510 - 7-pin multi-pole socket, incl. 2m power cable with grounding-type plug
	ATC520 - 5-pin multi-pole socket, incl. 2m power cable with grounding-type plug
Alarm contact	Free programmable contact 1 NO/NC, rating 250VAC, 16 A AC
Interface	LCD-display with 4-digit temperature display in °C (normal operation) as well as display of parameters and entry values during operator mode.

AHL Heated Line

Inner tube	Fix or interchangeable, up to three inner tubes
	DN 4/6, 6/8, 8/10 mm
	PFA, PTFE or SS316
Operating temperature	+250°C @ 20°C ambient
Outer Jacket	PA12 UV resistant corrugated / Highly flexible smooth silicone / Polyamide braiding (indoor)
	Line OD 43mm / Hard caps 47mm - minimum bending radius 270mm - 25 mm long studs
Length	Maximum 46 m
Power consumption	100 to 150 W/m
ATEX EX II 2G EExe ma IIC T3	**EX II** - Protected against explosion group II - **2G** 2G category (zone 1) -**EEX** European standard - e ensured as per DIN EN 60079-7 - **ma** ensured as per (moulding) DIN EN 60079-18 **IIC** gas group (hydrogen) - **T3** temperature class up to 200°

Options

ATEX

Built-in power lead to supply probe

Additional inner tubes for calibration and backflush flows

cable gland M40x1,5 and fast lock