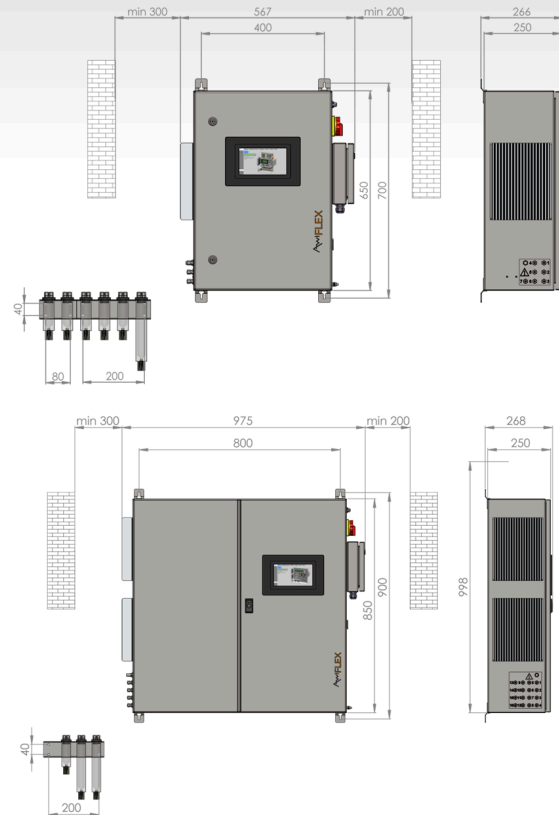




TECHNICAL DATA
AWIFLEX COOL /
AWIFLEX COOL XL



Subject to technical changes (17.1)

AWITE GAS ANALYSIS SYSTEMS

GENERAL INFORMATION	AWIFLEX	AWIFLEX XL
Installation dimensions (WxHxD in mm)	567 x 700 x 266	975 x 900 x 268
Weight	≤ 34 kg	≤ 72 kg

OPERATING CONDITIONS		
Ambient conditions	5 - 35 °C / 0 - 80 % relative humidity	
Installation height	≤ 2000 m above standard elevation zero (sea level)	
Protection type	IP 54	
Length suction line	≤ 100 m	
Max. gas inlet pressure	20 mbar rel. (optional 500 mbar or up to 50 bar)	
Min. gas inlet pressure	-20 mbar rel. (optional -350 mbar)	
Relative gas humidity	≤ 100%	

POWER SUPPLY		
Rated input voltage	100 - 240 VAC	
Input voltage range	85 - 265 VAC (Derating < 90 VAC: 2.5 % / Kelvin)	
Frequency range	50 - 60 Hz	
Power consumption¹	≤ 80 W	≤ 160 W
Power supply unit	24 VDC / 5 A	24 VDC / 10 A
AwiProtect	Over- and undervoltage protection, overcurrent protection	
Short Circuit Current Rating (SCCR)	100 A	

SENSOR SYSTEM

SENSOR ²	MEASURING PRINCIPLE	MEASURING RANGE	REPEATABILITY ³
Methane	Infrared sensor	0 - 10,000 ppm	± 1.0 %
	Infrared sensor	0 - 100 Vol.-%	± 0.1 %
Carbon dioxide	Infrared sensor	0 - 100 ppm / 0 - 500 ppm / 0 - 5,000 ppm	± 1.0 %
	Infrared sensor	0 - 100 Vol.-%	± 0.1 %
Carbon monoxide	electrochemical	0 - 2,000 ppm	± 1.0 %
	Infrared sensor	0 - 100 Vol.-%	± 0.8 %
Oxygen	electrochemical	0 - 25 Vol.-%	± 0.25 %
	Hydrogen sulphide	electrochemical	0 - 20 ppm
Hydrogen	electrochemical	0 - 200 ppm / 0 - 500 ppm	± 1.3 %
	electrochemical	0 - 1,500 ppm / 0 - 3,000 ppm / 0 - 5,000 ppm / 0 - 10,000 ppm	± 1.0 %
	electrochemical	0 - 20,000 ppm ⁴ / 0 - 50,000 ppm ⁴	± 1.0 %
	electrochemical	0 - 2,000 ppm / 0 - 5,000 ppm / 0 - 10,000 ppm / 0 - 20,000 ppm / 0 - 50,000 ppm	± 1.0 %
	Thermal conductivity	0 - 100 Vol.-%	± 0.8 %

¹ values might differ, see type plate of analysis system

² configurable and extendable as required

³ determined at the calibration point, given in % from upper measuring range value

⁴ with dilution and only in conjunction with auto-calibration

PROCESS CONNECTION		SOFTWARE FEATURES	
Threaded hose screw connection made of stainless steel 4/6 mm	standard	Display of the measured value progressions	graphical / tabular
Threaded stainless steel pipe screw connection 6 mm VA pipe	optional	Endless data storage	4GB microSD card
DATA INTERFACES			
Threaded hose screw connection made of stainless steel 1/8" / 1/4"	optional	Group error	potential-free
Threaded pipe screw connection, stainless steel 1/4" VA pipe	optional	Alarm outputs (optional)	potential-free
NUMBER OF MEASURING POINTS			
AwiFLEX	1-4	Analogue outputs (optional)	Analogue output 4 x 4 - 20 mA
AwiFLEX XL	1-9	AwiRemote (optional)	VNC ProcessView
External measuring point switch-over AwiSamplex for further measuring points		Ethernet (optional)	Modbus TCP Slave TCP Socket AwiView AwiRemote
Connection for discharge of exhaust air into the open or re-feeding of measuring gas into process pipe (relative pressure < 20 mbar)		Ethernet/IP (optional)	Ethernet/IP - I/O adapter (slave)
Connection for removal of condensate in provided condensate container		ProfiNet (optional)	ProfiNet RT - I/O device (slave)
MAXIMUM NUMBER OF DAILY MEASUREMENTS			
AwiFLEX	50, continuous	Profibus (optional)	Profibus DP slave
AwiFLEX XL	50, continuous	RS232 / RS485 (optional)	Modbus RTU Slave
SAFETY DEVICES			
Water sensor		USB (optional)	AwiView
Pressure sensor		Additional interfaces and transmission protocols on request	
Internal monitoring of leakages (CH ₄) by concentration measurement (interior) ⁵		CERTIFICATION	
Automatic overload detection and temporary shutdown of measuring channels for protecting the sensors		NRTL TÜV SÜD Mark (UL / CSA 61010-1) Certificate No. U8 17 12 83160 002	
Temperature monitoring in the interior		SIL 1 for O ₂ measurement according IEC 61508-2 (optional)	
Gas warning sensor AwiWarn for interior of the device	optional	OPTIONS	
AwiFLEX XL	optional	AwiDESULF Combi package for microbiological desulphurisation incl. compressor, control valves and controller output	
GAS PROCESSING			
Gas filter		Fuzzy controller for controlling valves, blowers among others	
Gas precision pressure regulator	optional	Integration of external sensors (analogue and digital), e.g. temperature, pressure, gas amount measurement, relative humidity	
Condensate traps		Calculation of calorific value, energy flow, CH ₄ - and humidity compensation etc.	
AwiCool gas cooler		Automatic calibration function	
Additional pressure control systems	optional	Measuring gas pump monitoring with switchover to redundant pump	
SPS			
AwiCore electronic module	expandable	Automatic measuring range detection to increase the measurement accuracy	
GAS TRANSMISSION			
Encapsulated analysis valves		Control of the gas analysis by higher-level controllers	
Durable diaphragm pump			
DISPLAY AND OPERATION			
Panel PC	7" TFT touch panel 1024x600		



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