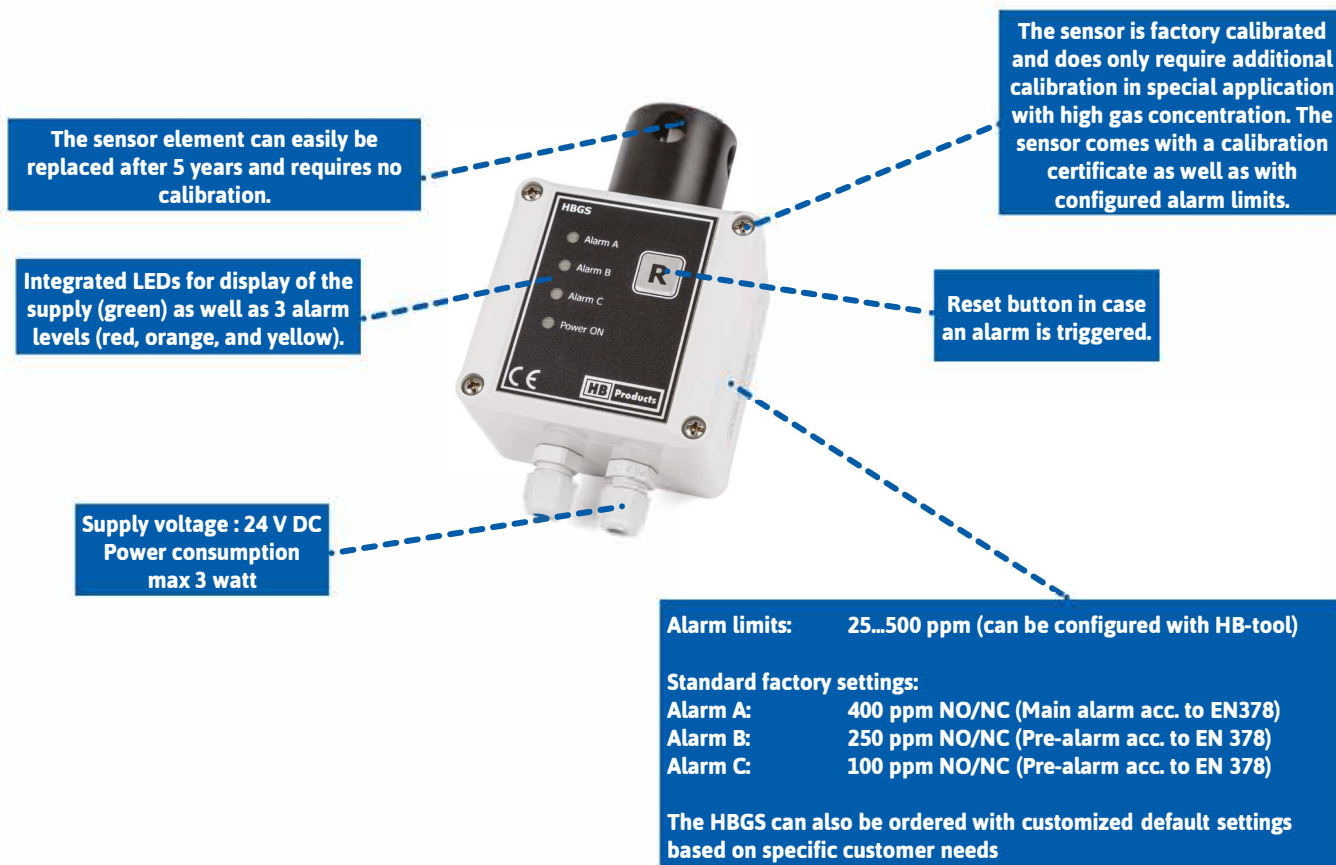


NH₃ Gas Leakage Sensor

Category: HBGS



Functional description:

HBGS fulfils the requirements for gas leakage measurement in accordance with F-GAS regulation EU/517/2014. HBGS detects NH₃ (R717) in a range of 25... 500 ppm. It is an independent unit that must be supplied with 24 V DC. It has 3 built-in digital alarm output and 1 analog 4... 20 mA output. The sensor can be set up using a PC with the HB Configuration Tool.

The sensor differentiates itself from other sensors on the market by having a measuring head that remains stable in the long-term (thick film metal oxide semiconductor type). The sensor element can easily be replaced. On the front, you can find 4 integrated LEDs for display of the supply (green) as well as 3 alarm levels (red, orange, and yellow). Similarly, there is a reset button

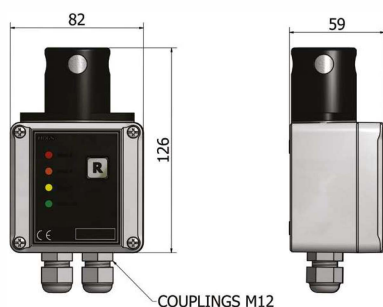
in case an alarm is triggered. The sensor is factory calibrated and does only require additional calibration in special application with high gas concentration. The sensor is optimized for use in areas where cleaning solvent are used. Built-in heating element ensures low ambient temperatures down to -20 °C.

The sensor comes with a calibration certificate as well as with preconfigured alarm limits.

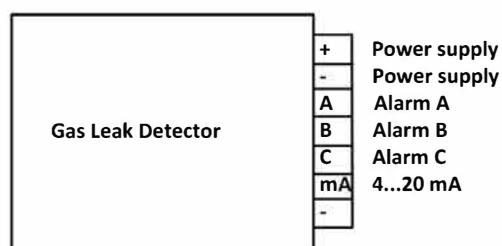
Technical data

Electrical connection		Mechanical specifications	
Measuring accuracy	+/-5% up to 250ppm	Cabinet size	82x59x126mm
Connection	Screw terminals		
Cable connection	2 x M12	Material	Plastic
Supply voltage	24 V DC – Power consumption max 3watt	Mounting	On walls with screws
Analog output	4...20 mA	Alarm	Can be configured with HB-tool
Max load:	500 ohm	Alarm limits	25 to 500 ppm
Digital output - relay:	3 x SPDT, 0.5A	Alarm A	400 ppm NO/NC (Main alarm acc. to EN378)
		Alarm B	250 ppm NO/NC (Pre-alarm acc. to EN 378)
		Alarm C	100 ppm NO/NC (Pre-alarm acc. to EN 378)
Installation conditions		Approvals	
Ambient temperature:	-20...+50°C	EMC Emission	EN 61000-3-2
Protection degree	IP20, box IP65	EMC Immunity	EN 61000-4-2
Vibrations	IEC 68-2-6 (4g)		

Mechanical dimensions



Electrical installations



Ordering code

House design	Gas	Measuring area	Ordering code
Front	NH ₃ (R717)	25... 500 ppm	HBGS-NH ₃



HBGS-NH₃-ServiceKit

Spare parts

Accessories for test and calibration	Gas	Ordering code
Part no. Sensor Part	NH ₃ (R717)	HBGS-NH ₃ -Detect-Unit
Part no. Service kit	NH ₃ (R717)	HBGS-NH ₃ -ServiceKit
Part no. Sounder/flash light	NH ₃ (R717)	Sounder Beacon