

User Manual

for the **SGP2** Sample Gas Pump
for pumping gases and for 1-
point calibration with CO₂-free
air



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1 About This Document

1.1 Purpose

This user manual provides you with all the information you need for quick startup and safe operation of the **SGP2** sample gas pump. Therefore, please read this user manual before startup. Keep this user manual in a safe place for future reference.

1.2 Target Audience

This operating manual is intended for trained laboratory personnel, such as biological-technical assistants (BTA), chemical-technical assistants (CTA), etc.

The contents of this user manual must be made available to qualified personnel and implemented accordingly.

Qualified personnel must be trained in the GLP guidelines ("Good Laboratory Practice") and must comply with them.

Qualified personnel must have received safety training on the applicable safety regulations.

1.3 Symbols and Signal Words



This symbol indicates a potential hazardous situation that could result in personal injury. It is used in combination with the following signal words:

⚠ DANGER

High-risk hazard.

Failure to comply will result in death or serious injury.

⚠ WARNING

A hazard with a moderate level of risk.

Failure to comply may result in death or serious injury.

⚠ CAUTION

Hazard with a low level of risk.

Failure to comply may result in minor or moderate injury.

NOTICE

Failure to comply may result in property damage and impair the product's function.



This symbol indicates the danger of toxic substances.

About This Document



This symbol indicates the danger of hand injuries.



This symbol indicates the danger of corrosive substances.



This symbol is a note that protective clothing should be worn.



This symbol is a note that eye protection should be used.



This symbol is a note that hand protection should be used.



This symbol is a note that you should wear face protection.



This note indicates that safety shoes should be worn.



This symbol is a note that respiratory protection should be used.



This symbol is a note indicating a mandatory action.



This symbol is a note that indicates that you should follow the operating instructions.



Note

This symbol is a note that indicates helpful, additional information.



Reference

This symbol is a note indicating additional information outside of this document



List

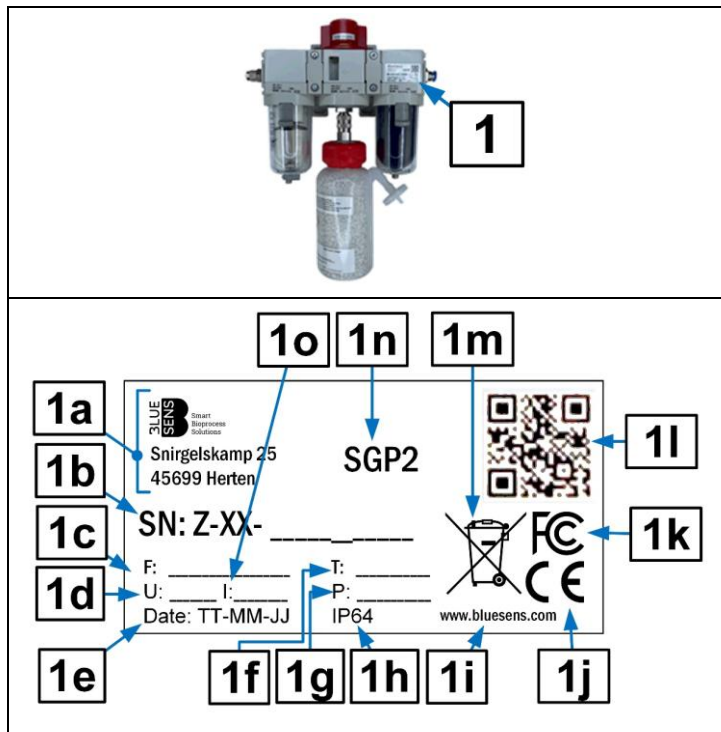
The bullet point indicates a list in which the order of the items has no particular significance.

1.

Sequence of Steps

Numbers indicate steps that must be performed in a specific order.

1.4 Nameplate



I-tem	Designation	I-tem	Designation
1	Nameplate	1h	Protection class
1a	Manufacturer Identification and Address	1l	Manufacturer's website
1b	Serial Number	1j	EU marking
1c	Flow rate [mL/min.]	1k	US labeling
1d	Voltage [V]	1l	QR code
1e	Date of manufacture	1m	Label: "Do not dispose of with household waste"
1f	Temperature range [K(°C)]	1n	Product name
1g	Pressure range [Pa (bar)]	1o	Current [A]

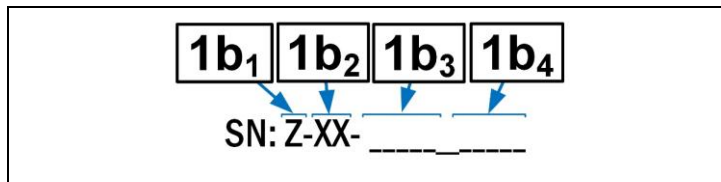
The nameplate on the product must always be kept legible. If the nameplate becomes illegible or is lost, it must be replaced immediately!

To order a new nameplate, you must provide the serial number (SN)!



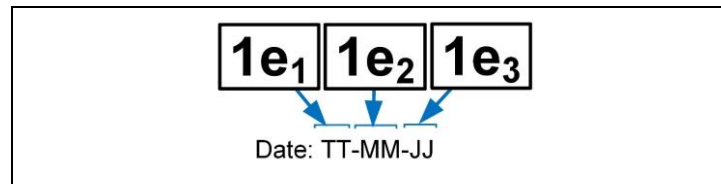
For a replacement, contact BlueSens Service.

1.4.1 Serial Number



I-tem	Description	I-tem	Description
1b ₁	Internal ID	1b ₃	Type identifier
1b ₂	Part group	1b ₄	Serial number

1.4.2 Production Date



I-tem	Description	I-tem	Description
1e ₁	Day	1e ₃	Year (last two digits only)
1e ₂	Month		

2 For your security

2.1 General

The **SGP2** left our factory in a tested and ready-to-operate condition.



Please read this operating manual carefully before installing and commissioning the **SGP2**.

This user manual contains safety and warning instructions that must be followed to ensure safe operation.



Please keep this operating manual in a safe place for future reference.

The **SGP2** must never be operated under conditions that do not comply with the specified technical specifications and the information on the nameplate.

Maintenance and repairs may only be performed by qualified and properly trained personnel who are familiar with the associated dangers and warranty provisions.

2.2 Authorized Personnel

All procedures described in this operating manual must be performed exclusively by trained technical personnel authorized by the plant operator.

Qualified personnel must be trained in the GLP guidelines (“Good Laboratory Practice”) and must comply with them.

Qualified personnel must have received safety training on the applicable accident prevention and safety regulations, including those pertaining to the gas being pumped.

For safety and warranty reasons, any modifications to the **SGP2** that go beyond the normal operating procedures described in this manual may only be performed by personnel from **BlueSens gas sensor GmbH**.

2.3 Intended Use

As described in the Technical Data, the **SGP2** is a device for conveying non-corrosive and non-explosive gases (primarily fermenter exhaust gases) in the field of biotechnology.



⚠ DANGER

The **SGP2** is not ATEX-certified
There is a risk of serious or fatal injury.

- ➔ The **SGP2** must only be used in well-ventilated areas

The CO_2 absorber for single-point calibration is highly caustic, can irritate the respiratory tract, and is highly corrosive to metals. The container must not be opened or damaged!



⚠ DANGER

Highly caustic and corrosive to metals!

The components of the CO_2 absorber are highly caustic and cause severe chemical burns; they are also highly corrosive to metal and can cause leaks.

There is a risk of serious to fatal injuries.

- ➔ Read the Safety Data Sheet!
- ➔ Protect your skin!
- ➔ Protect your eyes!
- ➔ Never open the container!
- ➔ Dispose of damaged containers immediately in an environmentally responsible manner in accordance with local laws and regulations!
- ➔ Handle spilled contents with the utmost caution!





⚠ CAUTION

Respiratory tract irritation



The components of the test agent may irritate the respiratory tract.

- Read the Safety Data Sheet!
- Wear respiratory protection!
- Exhaust fumes!
- Ventilate the room thoroughly afterward!



NOTICE

Corrosive to metal!

The components of the test agent are highly corrosive to metals. Components may be damaged. Leaks may occur.

- Read the safety data sheet!
- Inspect components for corrosion!
- Replace damaged parts!

2.4 Storage and Transport

When not in use, store the **SGP2** at temperatures between 273K and 333K (0 and +60 °C). The relative humidity should not exceed 75% (non-condensing). Also, be aware that dust can clog the **SGP2**. Store it in a closed cabinet or box.

Protect the **SGP2** from impacts and vibrations during transport

2.5 WARNING Regarding Improper Use

The **SGP2** must not be used for medical applications or in the presence of flammable gases or vapors.

Any use other than the intended use described in this manual is considered improper. The manufacturer is not liable for any damage resulting therefrom. The risk lies solely with the operator.

The **SGP2** must not be used in explosive atmospheres.

2.6 General Safety Instructions

If used improperly or for purposes other than those intended, the **SGP2** may pose application-specific DANGERS.

Observe the following general safety instructions:

- If leaking fluid could pose a danger, the necessary safety precautions must be taken before commissioning.

- In addition, the condensate trap should be checked from time to time and emptied if necessary.
- Any liquid that comes into contact with the **SGP2** must be wiped up immediately.
- The **SGP2** must only be operated when securely mounted.
- Use a damp cloth to clean the surface of the **SGP2**. You can also wipe the **SGP2** down with a mild disinfectant.
- Protect the **SGP2** from impacts and vibrations during transport.

**Note!**

Please also observe the additional safety and warning instructions in all of the following chapters.

3 Product Description

The **SGP2** sample gas pump is used to convey the gas to be analyzed from a (fermenter) exhaust line to the sensor.

3.1 Overview of the SGP2:

	Designation	I-tem	Designation
2	Condensate separator	4	CO2 absorber cartridge
3	Pump unit	5	Valve

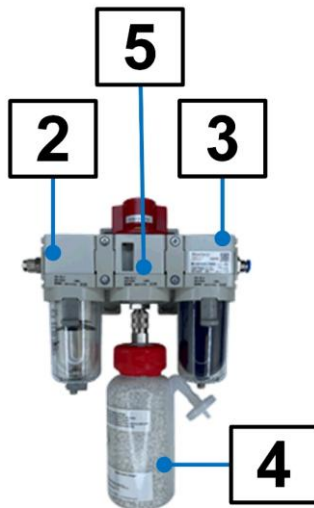


Fig.1: Front view of the **SGP2**

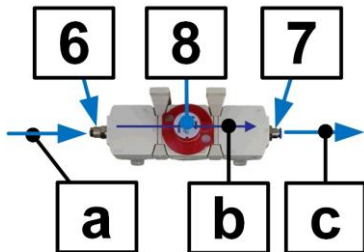


Fig.2: Top view of the **SGP2**

I-tem	Designation	I-tem	Designation
6	Gas inlet, screw connection, PTFE hose	a	Gas inlet
7	Gas outlet, quick-connect coupling, PUR hose	b	Gas flow direction
8	Selector switch Measure (Measurement Mode)/1-pt Calib (1-point calibration)	c	Gas Outlet

3.2 Design

The **SGP2** consists of a condensate separator for collecting condensate and filtering the measurement gas, a valve for switching between measurement and calibration modes, and a pump unit containing the pump itself and the CO_2 absorber cartridge.

3.3 Operating Principle

The **SGP2** is based on the principle of an oscillating positive-displacement pump.

The motor moves an internal shaft back and forth. This motion is transmitted to the elastic diaphragm, which, in conjunction with two check valves, generates the pumping action.

3.4 Accessories

The following accessories are required for commissioning an **SGP2**:

3.4.1 Included in the scope of delivery

	Item Number	Description	Illustration
1.	Z-XX-00209	SGP2 Sample Gas Pump	 <p>Fig.3</p>
2.	Z-KA-00040	Power connection cable for sample gas pump, 3-pin	 <p>Fig.4</p>

	Item Number	Description	Illustration
3.	Z-NT-00011	24V power supply set, including internal connector	 <p>Fig.5</p>
4.	Z-XX-00190	PTFE tubing, 6x4 mm, natural, 3 m	 <p>Fig.6</p>
5.	Z-XX-00109	Polyurethane (PUR) tubing, 6x4 mm, black, 1 m	 <p>Fig.7</p>

	Item Number	Description	Illustration
6.	Z-BA-Multi-SGP2	SGP2 User Manual (this document)	No illustration

3.4.2 Consumables

	Item Number	Description	Image
1.	Z-XX-00323	CO ₂ Absorber Replacement Cartridge for SGP2	 <p>Fig. 8</p>

4 Installation

4.1 General Notes

The **SGP2** was protected by special packaging during transport to the installation site.

Keep this packaging for maintenance purposes. It protects the **SGP2** from the usual stresses of transport.

However, before installation, check whether the **SGP2** has been damaged due to improper transport or incorrect storage.

If the **SGP2** is damaged in any way, safe operation is no longer possible, and the **SGP2** must not be installed or put into service.

Verify that the included materials, such as tubing, are suitable for your process conditions (pressure, temperature, etc.).

Installation should only be performed under the supervision of qualified personnel and in compliance with all applicable occupational safety regulations.

Note that the specified operating conditions must be adhered to at all times.

4.2 Unpacking and Assembly

All parts are securely packaged and must be inspected for damage during unpacking. For assembly, you will need accessories 3 and 4 from section 3.4.1 .

Assemble the **SGP2** as follows:

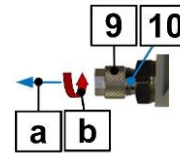


Fig. 9

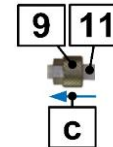


Fig. 10

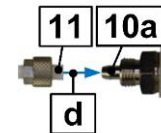


Fig. 11

1. Unscrew the union nut (Item 9) from the hose connection (Item 10) (Item b, red arrow) and remove it (Item a, blue arrow).
2. Slide the union nut (Item 9) onto the white PTFE hose Z-XX-00190 (Item 11, suction hose) (Item c; blue arrow).
3. Slide the hose (item 11) onto the hose connection (item 10a) as far as it will go (item d; blue arrow).

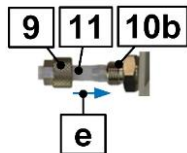


Fig. 12

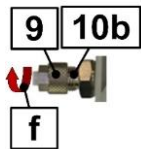


Fig. 13

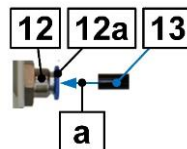


Fig. 14

4. Slide the cap nut (Item 9) over the hose (Item 11) onto the hose connection thread (Item 10b) (Item e; blue arrow).

5. Screw the union nut (Item 9) onto the hose connection thread (Item 10b) (Item f, red arrow).

6. Insert the black PUR hose Z-XX-00109 (Item 13, outlet hose) through the blue ring (Item 12a) as far as it will go (Item a; blue arrow).
 - The quick-connect coupling (Item 12) secures the hose (Item 13).
 - Check that the hose (Item 13) is securely seated by pulling on it (Item 13).

Remove the black PUR hose

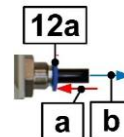


Fig. 15

1. Press the blue ring (Item 12a) in as far as it will go (Item a; red arrow) and hold it in place while pulling out the black hose (Item 13) (Item b; blue arrow).

4.3 Electrical connection

Notice!

DANGER of damage to the SGP2 due to improper installation.

This may result in property damage and impaired functionality

➔ Read the installation instructions carefully. Proceed step by step.

Notice!

DANGER of damage to the **SGP2** from using parts that are not approved for the **SGP2**.

This may result in material damage and impaired functionality

- ➔ Use only the original connectors, cables, and power supplies (see 3.4.1)

Notice!

DANGER of damage to the **SGP2** due to a short circuit
This may result in material damage and impaired functionality

- ➔ Never plug in or unplug the **SGP2** while it is connected to the power supply.

Notice!

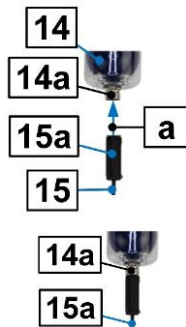
DANGER of damage to the **SGP2** due to improper operation/use

There is a risk of material damage and operational malfunctions

- ➔ Please follow the instructions for operation and use of the **SGP2** described in this user manual.

4.3.1 Turning On

Prepare the pump's power supply



1. Connect the 3-pin socket (Item 15a) of the power connection cable Z-KA-00040 (Item 15) to the 3-pin plug (Item 14a) of the pump unit (Item 14).

Fig.8
Connecting the Power Supply to the System

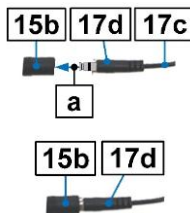


Fig.9

2. Connect the plug (Item 17d) on the cable (Item 17c) of the Z-NT-00011 power supply to the socket (Item 15b) on the power connection cable Z-KA-00040.

Prepare the power supply

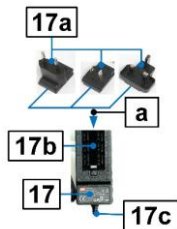


Fig.10

1. Select the appropriate adapter (Item 17a) from the Z-NT-00011 power supply set for the on-site power supply.
2. Insert the adapter (Item 17a) into the contact rail (Item 17b) (Item a; blue arrow) until it clicks into place.
 - Check that it is securely locked in place.
3. Connect the power supply (Item 17) to the on-site power supply.



Note

Once the **SGP2** is connected to the power supply, it automatically begins pump operation.

5 Operation

5.1 Pumping

The **SGP2** begins pumping as soon as it is powered on. There are no control elements.



Note

The **SGP2** delivers the gas as soon as it is powered on.

5.1.1 Measurement Mode

To enter measurement mode, set the switch to “Measure.”

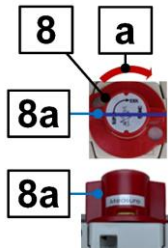
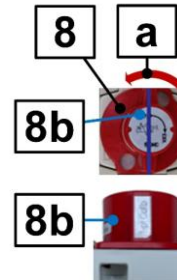


Fig.11

1. Turn the selector switch (Pos. 8) to “Measure” (Pos. 8a) (Pos. a; red arrow).

5.1.2 1-Point Calibration

For 1-point calibration, set the valve to “1-pt Calib.”



1. Turn the switch (Pos. 8) to “1-pt Calib.” (Pos. 8b) (Pos. a; red arrow).

Fig. 20

After a purge time specified in the instructions for the downstream sensor, the 1-point calibration can be performed on that sensor.

5.2 Draining the Condensate Trap

There are two ways to remove the condensate from the condensate trap.

5.2.1 By opening the drain valve

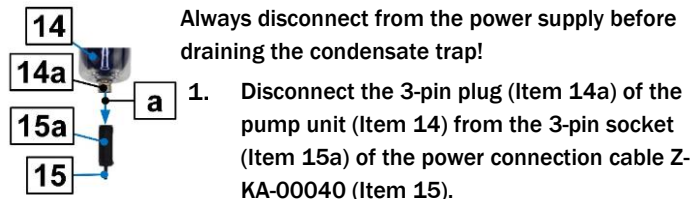


Fig.12

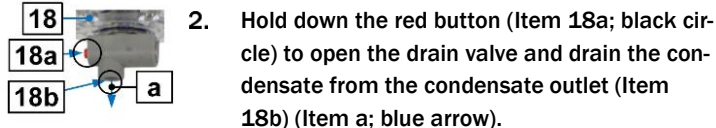


Fig.13

1. Disconnect the 3-pin plug (Item 14a) of the pump unit (Item 14) from the 3-pin socket (Item 15a) of the power connection cable Z-KA-00040 (Item 15).
 2. Hold down the red button (Item 18a; black circle) to open the drain valve and drain the condensate from the condensate outlet (Item 18b) (Item a; blue arrow).
- The condensate flows out (item a; blue arrow) of the condensate trap (item 18).
 - Have a collection container ready!

5.2.2 By removing the condensate trap

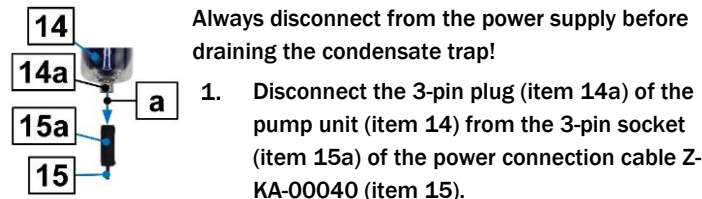


Fig.14

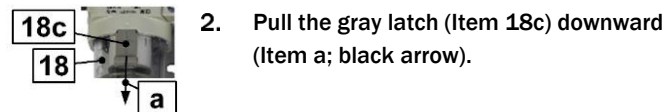


Fig. 24

1. Disconnect the 3-pin plug (item 14a) of the pump unit (item 14) from the 3-pin socket (item 15a) of the power connection cable Z-KA-00040 (item 15).
2. Pull the gray latch (Item 18c) downward (Item a; black arrow).



Fig. 15



Fig. 26

Installation of the condensate trap



Fig. 27

3. Rotate the condensate trap (item 18) 45° to the left (item b; red arrow).

4. Pull the condensate trap (Item 18) downward (Item c; black arrow).

1. Slide the condensate trap (Item 18) upward (Item a; black arrow).



Fig. 28

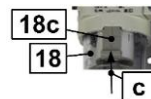


Fig. 29

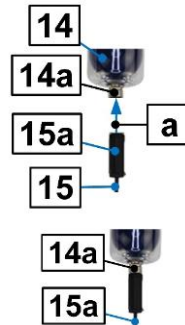


Fig. 30

2. Rotate the condensate trap (Item 18) 45° to the right (Item b; red arrow).

3. Slide the gray latch (item 18c) upward (item a; black arrow) until it clicks into place.

4. Connect the 3-pin socket (Item 15a) of the power connection cable Z-KA-00040 (Item 15) to the 3-pin plug (Item 14a) of the pump unit (Item 14).

5.3 Replacing the CO_2 Absorber Cartridge

5.3.1 Replacement Interval

Under normal use (one 1-pt calibration per month with a 3-hour purge duration), the CO_2 absorber cartridge must be replaced at least once a year.

The absorber contains an indicator that shows when it is spent.

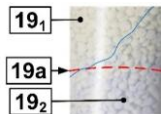


Fig. 31



Fig. 32

- Unused absorbent material (Item 19₁) is whitish.
- Used absorbent material (Item 19₂) can be recognized by a slight blue tint.
 - If the bluish discoloration extends beyond the mark (Item 19a; upper edge of the top adhesive label), the cartridge (Item 19) must be replaced early.
 - Adequate CO_2 absorption is no longer guaranteed.

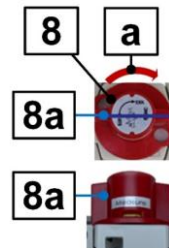


Fig.16

1. Turn the selector switch (Item 8) to “Measure” (Item 8a) (Item a; red arrow).

5.3.2 Cartridge Replacement

Before removing or inserting the absorber cartridge, set the selector switch to measurement mode.



DANGER

Highly caustic and corrosive to metals!



The components of the CO_2 absorber are highly caustic and cause severe chemical burns; they are highly corrosive to metal and can cause leaks.



There is a risk of serious to fatal injuries.



→ Read the safety data sheet!



→ Protect your skin!

→ Protect your eyes!

→ Never open the container!

→ Dispose of damaged containers immediately in an environmentally responsible manner in accordance with local laws and regulations!

→ Handle spilled contents with the utmost caution!



CAUTION

Respiratory tract irritation



The components of the test agent may irritate the respiratory tract.

→ Read the Safety Data Sheet!

→ Wear respiratory protection!

→ Exhaust fumes!

→ Ventilate the room thoroughly afterward!

Even though the CO_2 absorber cannot leak under normal conditions during cartridge replacement, protective clothing must be worn during the replacement process!

5.3.2.1 Remove the cartridge

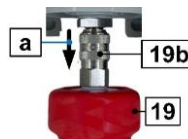


Fig. 34

1. Push the coupling ring (Item 19b) all the way toward the absorber cylinder (Item 19) (Item a; black arrow).
 - The coupling is disengaged!
 - The absorber bottle (Item 19) is pushed slightly out of position.



Fig. 35

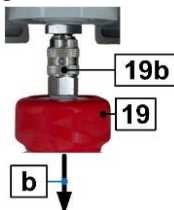


Fig. 35



Fig. 36



Note

Used absorber bottles must be transported, stored, and disposed of in accordance with local regulations for hazardous materials to prevent damage.

2. Pull the absorber bottle (Item 19) with the coupling ring (Item 19b) out of the coupling (Item 19c; black arrow).
 - The coupling on the pump (Item 19c) becomes visible.
 - The absorber bottle (Item 19) is now free and can be removed.

5.3.2.2 Install the cartridge

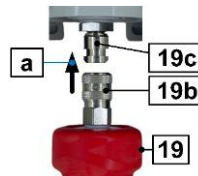


Fig. 37

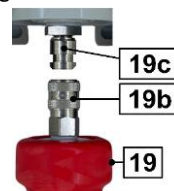


Fig. 38

1. Align the absorber bottle (Item 19) with the coupling ring (Item 19b) and the coupling on the pump (Item 19c) (Item a; black arrow).
 - Both coupling parts (Items 19b and 19c) are now aligned with each other.

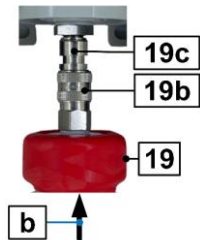


Fig. 37



Fig. 38

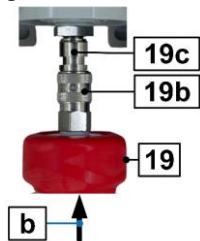


Fig. 39

2. Insert the absorber bottle (Item 19) with the coupling ring (Item 19b) and the coupling on the pump (Item 19c) into the coupling ring (Item 19b) (Item b; black arrow).

- Both coupling parts (Items 19b and 19c) are now aligned with each other.

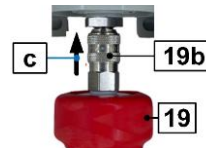


Fig. 40

4. Slide the absorber bottle (Item 19) with the coupling ring (Item 19b) onto the coupling on the pump (Item 19c) as far as it will go (Item c; black arrow). (Item a; black arrow).

- The coupling ring (Item 19b) must snap into place!
- Test to ensure a secure connection!

6 Troubleshooting

Problem	Possible Cause	Solution
Measurement gas is not reaching the sensor	The intake hose is not connected to the fermenter's exhaust line	Check to see if the intake hose is connected correctly
	The outlet hose is not properly connected to the sensor	Check to see if the outlet hose is connected correctly
	The hoses are reversed	Observe the flow direction indicated on the SGP2
	If necessary, check that any valves in the delivery line are open	Check to see if all valves are open
	No power supply	Check whether the power supply cable is connected.

Problem	Possible Cause	Solution
	Suction hose disconnected and/or clogged	Clear the blockage
Water is dripping from the sensor	The condensate trap is full	Empty the condensate trap

7 Maintenance

The condensate trap and the absorber cartridge must be checked regularly.

The inspection interval depends heavily on usage patterns.

In the case of daily use with high humidity levels, the condensate must be drained after 36 hours at the latest. At that time, the color of the absorber material should also be checked to see if it has turned blue.

The **SGP2** itself is maintenance-free.

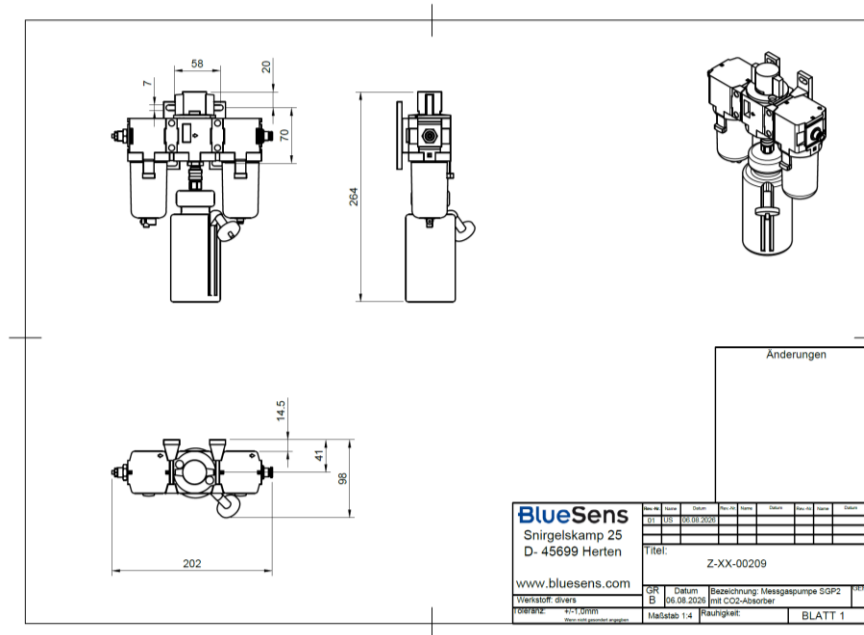


Note

If signs of wear appear on other parts of the **SGP2**, please contact **BlueSens gas sensor GmbH**.

8 Appendix

8.1 Technical Drawing



8.2 Technical Specifications

Application-Specific Data	
Maximum flow rate	400 ml/min
Maximum suction capacity	35 kPa (350 mbar)
Included hose	Natural PTFE and black PUR, each 6 mm OD, 4 mm ID
Recommended hose dimensions	6 mm OD, 4 mm ID
Electrical Inputs and Outputs	
Power supply	24 V DC
Maximum current consumption	100 mA
Pin Assignment M8 - 3-pin - Plug	 +24 V GND N.C

Operating Conditions	
Permissible ambient temperature range	278 K – 328 K (5 – 55 °C) during continuous operation 273 K – 330 K (0 – 60 °C) during transport and storage
Permissible gas temperature	278 K – 328 K (5 – 55 °C), briefly up to 453 K (180 °C)
Permissible ambient pressure range	80 kPa – 130 kPa (0.8 – 1.3 bar)
Permissible relative pressure in the exhaust line	Up to 30 kPa (0.3 bar)
Maximum duty cycle	100%
Mechanical Specifications	
Width	145 mm

Mechanical Specifications	
Height	156 mm (195 mm with 3-pin connector)
Depth	71 mm
Weight	Approx. 0.53 kg
Protection rating	IP64
Power Supply Input	
Voltage	100–240 V AC
Frequency	50–60 Hz
Maximum current consumption	0.7 A
Noise	
Emission sound pressure level Lp(A) during measurement operation	38.3 dB(A)
Emission sound pressure level Lp(A) during 1p calibration mode	36.2 dB(A)
Sound power level Lw(a)	49.6 dB(A)

8.3 Warranty

The warranty period is governed by the **BlueSens gas sensor GmbH** Terms and Conditions.



Note

Failure to comply with this user manual, improper handling (e.g., opening the **SGP2**), or the use of a power supply other than the original one may result in the loss of warranty coverage.

8.4 Service and Support

Our qualified customer service team is happy to assist you as your partner.

If necessary, please contact your dealer or us directly:

Phone: +49 2366 4995 567 or
by email at service@bluesens.de

USA: 847 201 3124 or
by email to service@bluesens.com

8.5 Recycling and Disposal

The **SGP2** you purchased from us, along with its accessories and packaging, are recyclable.

- The **SGP2** is packaged to protect it from damage during shipping. Please recycle any packaging you no longer need through your local recycling program.
- Recycle and dispose of the **SGP2**, along with its accessories and packaging, in accordance with the national legal regulations applicable to you.
- The  symbol on the **SGP2** indicates that, within the EU, you must not dispose of the **SGP2** with regular waste but must instead recycle it separately.
- We recommend returning the **SGP2** and accessories to be disposed of to **BlueSens gas sensor GmbH**. To do so, you will need a **return number**, which you can obtain from our service team at service@bluesens.de along with the applicable return address. We guarantee professional disassembly and environmentally responsible recycling of all components! This service is, of course, free of charge for you.
- If any personal data is stored on the **SGP2**, it must be deleted or removed before returning the device.

8.6 Legal Notice

SGP2 User Manual – English, translated from German

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Version V1.0 Rev. 261027 001

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The accuracy of the information in this user manual has been carefully verified. Nevertheless, **BlueSens gas sensor GmbH** assumes no liability

for consequences resulting from any errors in the description or illustrations. The General Terms and Conditions of **BlueSens gas sensor GmbH** in effect at the time of the order apply.

BlueSens gas sensor GmbH

Snirgelskamp 25

D-45699 Herten, Germany

Phone: +49 (0)2366/4995500

Fax: +49 (0)2366/4995599

Email: service@bluesens.de

Website: www.bluesens.de

Information current as of: October 2026

8.7 CE CERTIFICATE



Declaration of Conformity for Machinery
(EC Machinery Directive 2006/42/EC)

The company

BlueSens gas sensor GmbH
Snirgelskamp 25
D-45699 Herten
Germany

that the SGP 2, as of the delivery date:

October 1, 2026

- complies with the relevant provisions of the EC Machinery Directive (2006/42/EC), including any amendments in effect at the time of this declaration,
- complies with the relevant provisions of the following additional EC Directives and their amendments in effect at the time of this declaration:
 - 2006/42/EC
 - 2003/10/EC
 - 2011/65/EU
 - 2014/35/EU
 - 2014/30/EU
 - Regulation (EC) No. 1272/2008

that the following harmonized standards (or parts thereof) have been applied:

- DIN EN ISO 12100:2011-03
- DIN EN ISO 12100 Correndum 1:2013-08
- DIN EN ISO 60204-1:2019-06
- DIN EN 82079-1:2021-09
- DIN EN 61000-2-2:2020-05
- DIN EN 55011:2022-05
- DIN EN IEC 61326-1:2022-11

that the following national standards and technical regulations (or parts thereof) were applied:

Herten, October 1, 2026
Place, Date

Udo Schmalke,
Managing Director

BlueSens Gas Sensor GmbH
Managing Directors:
Udo Schmalke
Registered in Herten/Bochum, HRB 5488
VAT ID No. DE33460492

Mailing Address
Snirgelskamp 25
45699 Herten
Germany

Contact information
Phone: +49 (0)2346 4995-500
Fax: +49 (0)2346 4995-599
Email: info@bluesens.de



8.8 FCC CERTIFICATE



FCC Declaration of conformity

Herewith the company

BlueSens gas sensor GmbH
 Snirgelskamp 25
 D-45699 Herten
 Germany

Declare under our sole responsibility, that the
 Foam sensor SGP 2 when used together with our accessories power supply and cable
 since delivery date:

01.10.2026

meets all legal requirements based, conforms to the following specifications:

- FCC 47 CFR, 15B, §15.107 • FCC 47 CFR, 15B, §15.109

The declaration applies to all manufactured according to the tested prototype

Herten, 01.10.2026

Place, Date

Udo Schmalz
 Managing Director/representative



BlueSens gas sensor GmbH

Geschäftsführer:

Dr. Holger Möller Dr. Udo Schmalz
 Snirgelskamp 25
 D-45699 Herten
 HR-KNN: HRN 4965492

Postanschrift:

Snirgelskamp 25
 D-45699 Herten
 BRD

Kontaktangaben:

Telefon: +49 (0)2368 4995-500
 Telefax: +49 (0)2368 4995-505
 E-Mail: info@bluesens.de



8.9 Safety Data Sheets

See attachment!