

WÖHLER

**Manual
Gas Sniffer**



Wöhler GS 300

1 General Information

1.1 Operation Manual Information

This operation manual allows you to work safely with the Wöhler GS 300 Gas Sniffer. Please keep this manual for your information.

The Wöhler GS 300 should be employed by professionals for its intended use only.

Liability is void for any damages caused by not following this manual.

1.2 Notes



WARNING!

Not following this warning can cause injury or death.



ATTENTION!

Not following this note can cause permanent damage to the device.



NOTE!

Useful information

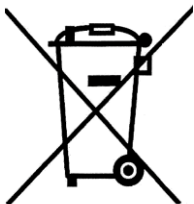
1.3 Intended Use

The Wöhler GS 300 Gas Sniffer is a gas leak detector for the tightness control and for the leakage testing of gas tubes.

The meter shows the concentration of methane and propane on a bar graph display from 0 ppm to 1200 ppm. It is suitable for the leakage detection of gas lines carrying combustible gases. The meter is not suitable for the measurement of the exact gas concentration. The meter can be used indoors only.

Do not use the meter for any other use than set out in this manual.

1.4 Information on disposal



Direction

Electronic equipment does not belong into domestic waste, but must be disposed in accordance with the applicable statutory provisions.

You may hand in any defective batteries taken out of the unit to our company as well as to recycling places of public disposal systems or to selling points of new batteries or storage batteries.

2 Technical Data

Description	Data
Sensor	Semiconductor
Range Methan	0 to 1,200 ppm
Propane	0 to 1,200 ppm
Alarm	intermittent beep and vibration alarm
Response Time	10 seconds, approx.
Warm up time	60 seconds, approx.
Environmental conditions:	
Operating Temperature	-5 to 45 °C
Storage Temperature	-20 to 45 °C
Rel. Humidity	<85%
Auto-Off-Function	After 20 min.
LC display	31 x 51 mm
Flashlight	2 LEDs
Power supply	4 mignon cells AA
Current consumption	ca. 100 mA
Battery life	in general 14 hours (continuous working), depending on the type
Dimensions	190 x 55 x 40 mm
Flexible Probe	440 mm
Connections	headphone and power supply unit

3 Important information



WARNING!

The Wöhler GS 300 may never be used in an environment where there is the risk of explosion. If the environment is suspected to conglomerate potentially explosive gases, in no case you must use the Wöhler GS 300. Batteries may not be taken from the device and/or be changed in such an environment.



ATTENTION!

Always store the device in a closed case at clean air. The sensor will be damaged, if it is exposed to extreme conditions for a long time, e.g. a high degree of relative humidity, extreme temperatures or pollution.



ATTENTION!

Avoid exposure to silicone adhesives, e.g. in cleaning tools. Silicone vapors will cause damage to the sensor.



ATTENTION!

High-density exposure to corrosive materials such as H_2S , SO_x , Cl_2 , HCl , etc. may cause corrosion or breakage of the lead wires or heater material.



ATTENTION!

Protect the sensor against salt water vapor and water. Sensor drift may occur when the sensor is contaminated by alkaline metals, especially salt water spray. Light condensation under indoor usage should not be a problem for sensor. However, if water condenses on the sensor's surface for a while, the sensor characteristics may still drift.



ATTENTION!

If water freezes on the sensing surface, the sensor would crack and alter characteristics.



ATTENTION!

Sensor performance may be also affected if exposed to a high density gas for a long time, regardless of the powering condition.

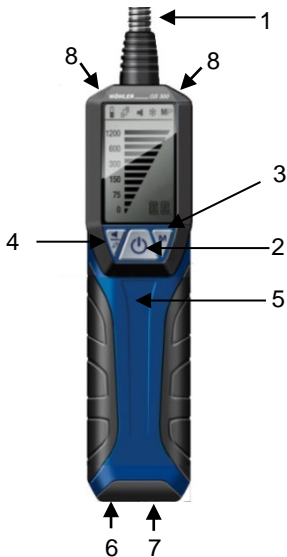


NOTE!

This meter cannot work well in zero or low oxygen atmosphere. This meter requires to operate under around 21% ambient oxygen environment in order to function properly.

4 Product

4.1 Meter



- 1 Flexible Probe
- 2 On/Off-key
- 3 Mode-key: Selection Propane / Methane
- 4 Alarm-key: Selection beep / vibration alarm / beep and vibration alarm / no alarm
- 5 Light-sensor
- 6 Earphone jack
- 7 Mains connection
- 8 Flashlight

Fig. 8: Gas Leak Detector

4.2 Screen

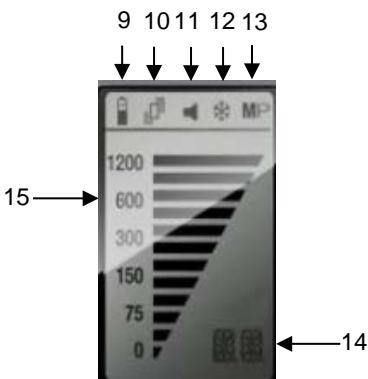


Fig. 9: Screen of the Gas Leak Detector

- 9 Battery Icon



ATTENTION!

Change batteries as soon as the battery icon appears

- 10 Vibration alarm
- 11 Acoustical alarm (beep)
- 12 without function
- 13 currently measured gas methane or propane
- 14 Calibration time, Countdown
- 15 Bar graph display

5 Operation

5.1 Switching the meter on and off



NOTE!

Switch on the meter in a non contaminated environment, e.g. outside.

- Press the ON/OFF key.

The warm up period will be 60 seconds. The warm up period is automatically extended as follows, if the meter has not been used for a longer period of time:

Last use of the meter	Warm up period
≤ 6 days	60 s
> 6 days	90 s
> 16 days	120 s
> 31 days	150 s
> 51 days	180 s
After placing the batteries	180 s

- After the warm up period, the measured value of the selected gas will appear on screen (methane or propane).
- To switch off the meter, keep the On/Off key depressed for 3 seconds.

The meter will switch off after 3 seconds.



NOTE!

If the Wöhler GS 300 has not been used for a long time, we recommend to repeat the warm up/calibration phase several times to achieve a higher sensitivity and accuracy.

- To do this, switch on the meter 2 or 3 times and off again after approx. 3 minutes each.

5.2 Selecting the measuring mode

Click mode-key to switch between the measuring modes methane and propane.

M (methane) or P (Propane) will be displayed in the upper right corner of the display.

5.3 Alarm setting

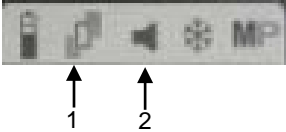


Fig. 10:
Icons vibration alarm (1) and beep (2)

- Press the alarm key several times until the required alarm setting is displayed.

A press on the alarm key will successively activate the vibration alarm and the beep together, the beep only, the vibration alarm only or it will turn off the alarm. The correspondent icons will appear on screen.

The meter beeps every one second to assure the meter is in normal working status (if the beep has been activated). The beep frequency will speed up while the detected gas concentration becomes higher. While you use the earphone, the meter will automatically mute but you can hear the beep through the earphone.

5.4 Leakage Checking

- Approaching the sensor to the pipe, slide slowly the sensor along the pipe; repeat the procedure from the other side of the pipe.

When the sensor is near to a leak, the bar graph display will show the gas concentration and the beep frequency or the vibration frequency will increase.

5.5 Flash light

In dark environment the display illumination and the flash light will switch on automatically.



NOTE!

It is not possible to switch on or off the display illumination and the flash light manually.

5.6 After the leakage testing

- Ventilate the sensor after each use. Expose the meter to fresh air for 2 minutes before starting a new leakage test.



NOTE!

If connecting lines, tools and the meter are stored in the same case, the gas may evaporate from the tools. The meter will detect this gas even after several days.

6 Changing the batteries



Fig. 11: Battery compartment on the backside of the meter

When battery voltage is low, a battery icon will appear on screen.

! ATTENTION!

Change batteries as soon as the battery icon appears

- Replace the batteries by 4 new mignon cells as follows:
- Open the battery compartment on the back of the unit. Replace the batteries. Observe the polarity indicated in the battery compartment.

👉 NOTE!

If the batteries have been changed, the warm-up time after switching on is 3 minutes.

7 Charging the rechargeable batteries



Fig. 12: Power supply pack 9 V

It is also possible to operate the meter with 4 rechargeable batteries AA.

- For charging the rechargeable batteries connect the meter to the power supply via the power supply pack. Plug the jack of the power supply unit into the mains connection at the bottom of the instrument, see fig. 1, part 7.

When charging is in progress the battery icon will blink.

When charging is complete the battery-symbol will disappear from screen.

⚠ WARNING! Risk of electrical shock!

Never touch the power supply pack with wet hands!

Protect the power supply pack against water and moisture!

Do not unplug the recharger by pulling the cable!
Do not use the power supply pack when the voltage requirements of the recharger and the supply do not match!

Charging the rechargeable batteries

The batteries can be recharged even while they are located in the meter.



NOTE!

It is possible to operate the meter when charging is in progress.



ATTENTION!

Ensure rechargeable batteries are equipped in the meter before charging. Never try to charge disposable batteries. Use 4 AA rechargeable batteries only.



NOTE!

To ensure maximum capacity use batteries of same age and condition only. Always replace a full set of batteries when necessary.

8 Declaration of conformity

The product

Produktname: Wöhler GS 300 Leakage Tester

complies with the key safety requirements set down in the guidelines of the Council for the Harmonization of the Legal Requirements of the Member States in relation to the electromagnetic compatibility (2014/30/EU).

The following standards were availed of to evaluate the product in respect of the electromagnetic compatibility:

EN 61326 : 1997 + A1 : 1998 + A2 : 2001 + A3 : 2003

EN 61000-4-2: 1995+A1:1998+A2 : 2001

EN 61000-4-3 : 2006

9 Accessories

Headphone with volume control

Order no. 55145

Power supply pack 9 V

Order no. 4281

Rechargeable batteries NiMH

Order no. 9407