

ResOx residual oxygen measuring system

Handy device with 1 m cable range

Fine resolution with 0.01 % O₂

Independent battery-operated gas pump

IMPROVED SUCCESSOR TO OUR POPULAR GOG SETS

HIGHLIGHTS:

- With data logger and interface
- Pressure-compensated measurement – particularly important for rigid packages!
- Intelligent complete measuring system in a practical carry case

Membrane filter prevents unintended suction of particles / liquid

ResOx 5695-H

Art. no. 610040

Residual oxygen measuring system (for gases with elevated CO₂ percentage GOEL 370)**ResOx 5695-L**

Art. no. 610041

Residual oxygen measuring system (with recommended sensor element GOEL 381)

General:

New measuring system with gas pump for more measuring comfort - can now also be used in rigid packages and packages with low quantities of gas.

Application:

Quality control for MAP food packaging and comparable applications

Specifications:

Measuring channels: O₂, T, air pressure

Measurement ranges

O₂: 0.0 ... 100.0 % O₂ or displayed in hPa O₂/mmHg O₂

Temperature: 0.0 ... 50.0 °C

Air pressure: 300 ... 5000 hPa (Sensor: 500 ... 2000 hPa)

Additional functions: Min/max function – for comfortable measurement of the limit value
Pressure compensation in the gas path – negative pressure in the package/on the sensor is compensated for

Applicable sensors: GOEL 370, 381 etc.

Connections on the device

Sensor: 7-pin bayonet
Pressure port for hoses with inside Ø 4 mm

Output/ext. power supply: OUT socket: - 38400 baud interface
- Analogue output 0 ... 1 V, adjustable
- External 5 V power supply

Calibration: Quick calibration on air at the push of a button or 2-point / 3-point (Air +0 % and 100 %)

GLP: Calibrating interval, calibration history

Data logger: Cyclical: 10000, Single: 1000
Single value logger with measuring point entry

Pump: Motorised membrane pump with input/output ports, battery-operated

Max. negative pressure: approx. -360 mbar

Delivery rate: with GDZ 29 Filter: approx. 80 ml/min

Connection: Pressure port for hoses with inside Ø 4mm

Additional features: Waterproof device and sensor (IP65, IP67), protective armouring, backlighting

Scope of supply:

Ready-to-operate system: Display GMH 5695, incl. battery, sensor housing with pressure connection, incl. sensor, gas pump GS 150, incl. battery, connection lines, hoses/T-piece, 2 GDZ 29 filters, 2 GOG-N puncture needles Ø 0.9 mm, 1 GOG-B: 45 pcs. adhesive seal, carry case GKK 1420

QUICK MEASUREMENT:

- Apply adhesive seal
- Puncture with needle
- Switch on the pump
- Read the minimum value after approx. 20 s

With very rigid packages in which greater negative pressure arises during the measuring process, additional sealing must be provided. For this purpose, please observe the instructions in the measuring system operating manual

Accessories and spare parts:**GOG-A**

Art. no. 603043

Adhesive cellular foam (40 pcs.)

GOG-B

Art. no. 610013

Adhesive seal (45 pcs.)

GOG-N

Art. no. 603047

Puncture needle, Ø 0.9 mm (5 pcs.)

GDZ-29

Art. no. 601599

Filter membrane, including Luer locks (GDZ-25 and GDZ-26)

GS 150

Art. no. 610005

Gas pump

GOEL 370

Art. no. 601490

Spare sensor element, universal range, immersion gas, long-life

GOEL 381

Art. no. 610035

Spare sensor

USB 5100

Art. no. 601095

Interface adapter

GSOFT 3050

Art. no. 601336

Logger operating software

ResOx Residual Oxygen Measuring System



- Attractive price-performance ratio
- Quick measurement readings (approx. 20 s)
- Slim sensor housing enables easy handling, hose length allows freedom of movement
- With data logger: Measured values can be analysed on the PC with USB adapter and software (accessories)
- Watertight (IP 65 / IP 67)
- Pressure compensation

Available in two versions:

ResOx 5695-H

Residual oxygen measuring system
(for gases with elevated CO₂ percentage, sensor GOEL 370)

ResOx 5695-L

Residual oxygen measuring system
(for precise measuring in gases with more than 35% vol. or less than 0.3% vol. O₂, sensor GOEL 381)

General information

New measuring system with new gas pump for greater measuring convenience – can now also be used in rigid packages and packages with low quantities of gas.
The filter membrane protects the sensor from suctioning in particles or fluid unintentionally.

Use

For quality control of MAP food product packages and comparable applications

Scope of delivery

Ready-to-operate system: Measuring device GMH 5695, incl. battery, sensor housing with pressure connection, incl. sensor element GOEL 370 or 381, gas pump GS 150, incl. battery, operating manual, as well as brief application instructions, hoses/T-piece, 2 membrane filters, 2 GOG-N puncture needles Ø 0.9 mm, 1 GOG-B set (45 pcs. adhesive seal) for rigid as well as soft packaging. Delivery in the practical GKK 3700 case.

Technical data

Measuring channels	: Oxygen, temperature, air pressure
Measurement ranges O₂	: 0.0 ... 100.0% vol. O ₂ or display in hPa O ₂ /mmHg O ₂
Temperature	: 0.0 ... 50.0 °C
Air pressure	: 300 ... 5000 hPa (sensor: 500 ... 2000 hPa)
Additional functions	: Min/Max function – for convenient measuring of the final value Pressure compensation in the gas path – negative pressure in the package/ on the sensor is compensated
Applicable sensors	: GOEL 370, 381
Connections on the device	
Sensor	: 7-pin bayonet Pressure port for hoses with inside Ø 4 mm
Output/ext. supply	: OUT socket: – Interface 38400 baud – Analogue output 0–1 V, adjustable – Ext. supply 5 V
Calibration	: Quick calibration on air at the push of a button or 2-point/3-point calibration (air +0% and 100%)
GLP	: Calibrating interval, calibration history
Data logger	: Automatic: 10,000 data records, selectable cycle: 1 s ... 60 min Manual: 1000 data records with measuring point input
Pump	: Battery operated membrane pump with input/output port
Max. negative pressure	: Approx. –360 mbar
Delivery rate	: With membrane filter: approx. 80 ml/min
Connection	: Pressure port for hoses with inside Ø 4 mm
Additional features	: Device and sensor are watertight (IP 65, IP 67), protective armouring, backlighting

Data sheet

Handheld measuring devices

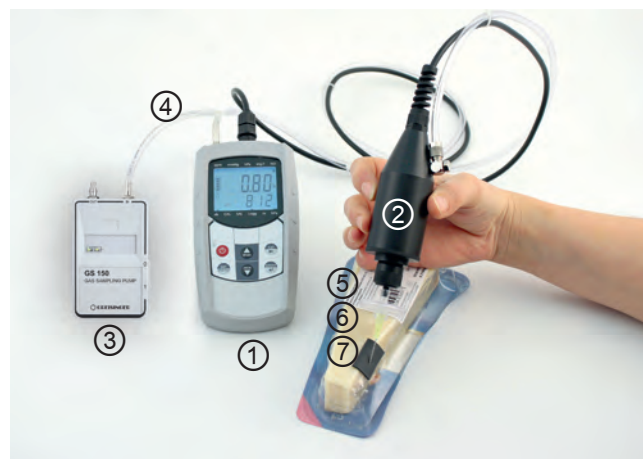
Ordering code

ResOX 5695 – 1.

1. Device	
H	ResOx 5695-H residual oxygen measuring system for gases with elevated CO ₂ percentage, sensor GOEL 370
L	ResOx 5695-L residual oxygen measuring system for precise measuring in gases with more than 35 % vol. or less than 0.3% vol. O ₂ , sensor GOEL 381)

Accessories and consumable items

1.	GOG-A, Art. no. 603043
	Adhesive cellular foam seals for soft packages (40 pcs.)
2.	GOG-B, Art. no. 610013
	Adhesive seals for rigid as well as soft packages (45 pcs.)
3.	GOG-N, Art. no. 603047
	Puncture needle, Ø 0.9 mm (5 pcs.)
4.	Membrane filter, Art. no. 601599
	Membrane filter prevents unintentional suctioning in of particles or fluid
5.	GS 150, Art. no: 610005
	Gas pump for gas sampling
6.	GOEL 370, Art. no.: 601490
	Spare sensor element, long-life, for gases with elevated CO ₂ percentage
7.	GOEL 381, Art. no.: 610035
	Spare sensor element, precise also for gases with more than 35 % or less than 0.3 % vol. O ₂
8.	GAK 5100, Art. no: 601095
	Interface adapter
9.	GSOFT 3050, Art. no.: 601336
	Read-out software



Components

No.	
①	Measuring device GMH 5695 incl. battery
②	Sensor housing with pressure connection, incl. GOEL sensor
③	Gas pump GS 150 incl. battery
④	Hose set
⑤	Membrane filter
⑥	GOG-N puncture needles, diameter 0.9 mm
⑦	GOG-B: 45 pcs. adhesive seals

Quick measurement

- Apply adhesive seal
- Puncture with needle
- Switch on the pump
- Read the minimum value after approx. 20 s

Calibration service with calibration certificate ISO-WPO3

Selection of the sensor element

Sensor element	GOEL 381 Standard for ResOx 5695-L	GOEL 370 (rev 2) Standard for ResOx 5695-H
Range of application	Protective gases in general, precise measurements with extremely low measuring value (e.g. <0.5% vol. O₂) and over 35% vol. O₂	Protective gases with high CO₂ concentration and oxygen content <35% vol. O₂
Continuous use at high CO ₂ values	–	+++
Brief use in CO ₂	+	+++
Use up to 100% vol. O ₂	+++	–
Suitability for measuring under 0.5 vol.% O ₂	+++	+
Speed/T90	++/<10 s	++/<10 s
Service life/hours per vol.% O ₂ /on air	+ /500,000% h />2 years	++ /1,200,000% h /max. 6 years
Measuring range	O ₂ partial pressure	0 ... 1100 hPa
	O ₂ concentration	0.0 ... 100.0% vol. O ₂
		0 ... 350 hPa
		0.0 ... 35.0% vol. O ₂ (reduced accuracy above this concentration)