ATMOSPHERIC OXYGEN SENSORS FOR GMH 569X AND GMH 369X

CLOSED SENSOR DESIGN GGO

CLOSED

GGO 581
Item No. 610029
Atmospheric oxygen sensor, closed design, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 569x

GGO 570
Item No. 607480
Atmospheric oxygen sensor, closed version, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 569x

GGO 381
Item No. 610030
Atmospheric oxygen sensor, closed version, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 369x

GGO 370
Item No. 601224
Atmospheric oxygen sensor, closed version, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 369x

GENERAL:

- Suitable for positive and negative pressure
- Use in gas-tight systems

APPLICATION:

Suitable for measurements in the atmosphere as well as in systems without or low overpressure or underpressure. This type of sensor has a screw thread and can be installed gas-tight in almost all systems either directly or using a tube adapter.

longer cable lengths of 4 m and 10 m on request

OPEN SENSOR DESIGN GOO

OPEN

GOO 581
Item No. 610033
Atmospheric oxygen sensor, open version, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 569x

GOO 570
Item No. 607482
Atmospheric oxygen sensor, open version, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 569x

GOO 381
Item No. 610034
Atmospheric oxygen sensor, open version, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 369x

GOO 370
Item No. 601228
Atmospheric oxygen sensor, open version, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 369x

GENERAL:

- Suitable for air or gas flow
- Fast temperature compensation

APPLICATION:

Due to the special sensor construction, the sample gas "flows around" the sensor and can escape into the open through the holes in the housing. If there is a slight flow onto the sensor, no pressure can build up that would falsify the measurement result.
Particularly suitable for measuring gases from pressurized cylinders, etc. and can also be used for room gas measurements without further ado.

longer cable lengths of 4 m and 10 m on request

CLOSED VERSION WITH PRESSURE CONNECTION GGA

FOR DEVICES WITH PRESSURE CONNECTION

GGA 581
Item No. 610031
Atmospheric oxygen sensor with pressure connection, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 5695

GGA 570
Item No. 607486
Atmospheric oxygen sensor with pressure connection, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 5695

GGA 381
Item No. 610032
Atmospheric oxygen sensor with pressure connection, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, suitable for GMH 3695

GGA 370
Item No. 607484
Atmospheric oxygen sensor with pressure connection, incl. GOEL 370, for protective gases with high CO_2 concentration and O_2<35 vol. % O_2, long life, suitable for GMH 3695

GENERAL:

This housing is ideal for devices with an external pressure connection (GMH 5695/3695). Especially in systems with overpressure or underpressure or with existing back pressure due to flow.

APPLICATION:

It can be mounted airtight (attention: observe the permissible operating pressure!).
The device pressure connection is connected to the sensor pressure connection. The device measures and compensates for the actual pressure at the sensor.

Longer cable lengths of 4 m and 10 m on request

Note: *not suitable for use in "underwater applications" (rebreather, etc.)*

FOR PRECISE GAS MEASUREMENT IN PROTECTIVE GAS APPLICATIONS

GOG 370
Item No. 482805
Atmospheric oxygen sensor with gas suction connection, incl. GOEL 370, protective gases with high CO_2 concentration and O_2<35 vol. %, O_2, long life,
gas connection: Ø4 mm conical for attaching needles, suitable for GMH 369x

GOG 381
Art.No.477532
Atmospheric oxygen sensor with gas suction connection, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2,
gas connection: Ø4 mm conical for attaching needles, suitable for GMH 369x

GOG 570
Art.No.475267
Atmospheric oxygen sensor with gas suction connection, incl. GOEL 370, protective gases with high CO_2 concentration and O_2<35 vol. %, O_2, long life,
gas connection: Ø4 mm conical for attaching needles, suitable for GMH 569x

GOG 581
Art.No.482806
Atmospheric oxygen sensor with gas suction connection, incl. GOEL 381, protective gases in general, precise also with O_2 <= 0.2 vol. % $O_2$and> 35 vol. % O_2, Gas connection: Ø4 mm conical for attaching needles, suitable for GMH 569x

GENERAL:

- Gas can be sucked in via the pressure connection, which is optimally routed to the sensor, therefore minimal gas consumption and very quickly.
- Commercially available medical needles (Luer lock) can be attached at the entrance.

APPLICATION:

- For precise gas measurement in protective gas applications.
- For example, use the GS 150 gas pump for priming.

TECHNICAL DATA FOR ATMOSPHERIC OXYGEN SENSORS Gxx 570/370 and Gxx 581/381

TECHNICAL SPECIFICATIONS:	Gxx 570/370	Gxx 581/381
Sensor element:	GOEL 370	GOEL 381
	Oxygen partial pressure sensor, built into the housing, interchangeable (temperature sensor integrated into the housing)	
Special features:	long service life for shielding gases with high O_2concentration and oxygen content <35 vol. % O_2	for the lowest O_2concentrations, for protective gases in general, precise even with very small measured values and over 35 vol. % O_2
Measuring range		
Oxygen partial pressure:	0..1100 hPa O_2	0..1100 hPa O_2
Oxygen concentration:	0.0..100.0 % O_2	0.0..100.0 % O_2
Response time: T_{90}	<10 s	<10 s
Accuracy (at 25 °C, 1013 hPa)		<1.5 % O_2
<2 % O_2	± 0.2 % O_2	± 0.1 % O_2
<25 % O_2	± 0.5 % O_2	± 0.5 % O_2
> 25 % O_2	± 0.5 % O_2	not specified
Working conditions:	0..45 °C 0..95 % RH (not condensing)	0..45 °C 0..95 % RH (not condensing)
Ambient pressure:	0.6..1.75 bar abs.	
Over/under pressure:	max. 0.25 bar (pressure difference sensor membrane to environment – if mounted)	
Storage temperature:	-15 .. + 60 °C	
Lifespan:	in air:> 4 years (warranty on sensor element: 12 months)	in air:> 2 years (warranty on sensor element: 12 months)
Device connection:	Gxx 3 ...: approx. 1.2 m long cable with mini-DIN connector; GGA / GGO / Gxx 5 ...: approx. 1 m long cable with 7-pole bayonet connection	
Housing dimensions:	GGA .../ GGO ...: approx. Ø 36 mm x 95 mm (150 mm including kink protection) GOO ...: approx. Ø 40 mm x 105 mm (160 mm including kink protection) housing with M16X1 screw thread (sensor can be coupled into line tube using the tube adapter supplied.)	
Weight:	approx. 135 g (GGO ...) or approx. 145 g (GOO .../ GGA ...)	
Scope of delivery:	GGA .../ GGO ...: sensor, tube adapter, T-piece; GOO ... : Sensor, tube adapter	

Note: *not suitable for use in "underwater applications" (rebreather, etc.)*

ACCESSORIES GMH 3692 / -95 AND GMH 5690 / -95

GOEL 370

GOEL 381

GOEL 370

Item No. 601490

Replacement sensor element oxygen (acidic electrolyte)

GENERAL:

Integrated in GGO 370, GGA 370, GOO 370 (for GMH 3690/91/92/95) or GGO 570, GGA 570, GOO 570 (for GMH 5690/95); universal sensor element, long-life, recommended for immersion gas and protective gases from 0.2..35 % O_2, also with an increased CO_2content.

Note: not suitable for use in "underwater applications" (rebreather, etc.)

GOEL 381

Item No. 610035

Spare sensor element oxygen (alkaline electrolyte)

GENERAL:

Integrated in GGO 381, GGA 381, GOO 381 (for GMH 3690/91/92/95) or GGO 581, GGA 581, GOO 581 (for GMH 5690/95); fast sensor element recommended for immersion gas and shielding gases from 0.0 to 100 % O_2, not permanent with increased CO_2content.

Note: not suitable for use in "underwater applications" (rebreather, etc.)

ACCESSORIES OR SPARE PARTS:

GZ-11

Item No. 603144

Flow adapter, M16x1 internal thread with 6/4 mm tube connection, for measuring the oxygen concentration

ESA 369

Item No. 603058

Tube adapter / flow diverter, M16x1 thread, for tubes with an inner diameter of 15 mm

ZOT 369

Item No. 603094

T-piece for plugging onto ESA 369 / ESA 100

GAS PUMP

SUPPLEMENT FOR GAS ANALYSIS AND AIR QUALITY MEASURING DEVICES

HIGHLIGHTS:

- Simple application
- Robust membrane pump
- Quiet
- Low gas flow
- Mobile operation with battery
- Battery level indicator

GS 150

Item No. 610005

Gas pump for gas sampling

APPLICATION:

E.g. in connection with residual oxygen measuring devices for protective gas applications, ...

TECHNICAL SPECIFICATIONS:

Working principle:	motor-operated membrane pump with inlet / outlet connection, battery-operated
Max. Negative pressure:	approx. -360 mbar
Delivery rate:	open: approx. 280 ml / min, with GDZ 29: approx. 150 ml / min
Connection:	universal pressure connection for 6/4 mm tube (inside Ø 4 mm)
Usable gases:	non-corrosive, dust-free gases; a condensate trap is recommended for high gas moisture
Service:	On / off slide switch
Environmental conditions:	+10 .. + 50 °C, 0..95 % RH
Battery / lifetime:	9 V block battery, approx. 10 h
Battery level indicator:	2 LEDs: full / weak
Scope of delivery:	device, battery, operating instructions

ACCESSORIES OR SPARE PARTS:

GDZ-29

Item No. 601599

Filter membrane including Luer locks (GDZ-32 and GDZ-33), prevents contamination from even the finest particles and liquids