

AIR OXYGEN MEASURING TRANSDUCER



THE DEVICE IS ONLY INTENDED FOR CONTROL. IT IS NOT A REPLACEMENT FOR A MONITORING DEVICE SUBJECT TO AUTHORISATION!

OXY 3690 MP

Art. no. 602027

Air oxygen measuring transducer incl. sensor; For protective gases with a high O₂ concentration and oxygen content <35 vol.% O₂ (GOEL 370)

OXY 3690 MP-LO

Art. no. 602139

Air oxygen measuring transducer incl. sensor; For protective gases in general, precise even with very low measurements (e.g. <0.5 vol. % O₂) and above 35 vol.% O₂ (GOEL 381)

Specifications:

Measuring ranges:

Oxygen concentration: 0.0 ... 100.0 % O₂ (gaseous)
OXY 3690 MP: recommended range 0.2 ... 35.0 vol.% O₂ (reduced precision outside)
OXY 3690 MP-LO: also suitable for values ≤0.2 vol.% O₂

Temperature: -20.0 ... 50.0 °C

Accuracy device (at nominal temperature 25 °C):

Oxygen: ±0.1 % ±1 digit
Temperature: ±0.1 °C ±1 digit

Output signal (O₂ only): 4 ... 20 mA (2-wire - standard), 0 ... 10 V (3-wire - option)

Electric isolation: input electrically isolated

Auxiliary energy: 12 ... 30 V DC (at output 4 ... 20 mA)
 18 ... 30 V DC (at output 0 ... 10 V - option)

Perm. impedance (at 4 ... 20 mA): R_A [Ω] ≤ (U_v [V] - 12 V) / 0.02 A

Permissible load (at 0 ... 10 Volt): R_L >3000 Ω

Working condition: 0 ... +50 °C, 0 ... 95 % RH (non-condensing)

Storage temperature: -20 ... +70 °C

Reverse voltage protection: 50 V permanently

Display: approx. 10 mm high, 4-digit LCD-display

Housing: ABS (IP65 - with the exception of sensor plug)

Dimensions: 82 x 80 x 55 mm (without elbow-type plug and sensor plug)

Electric connection: elbow-type plug acc. to EN 175301-803/A (IP65), max. wire cross section: 1.5 mm², wire diameter from 4.5 ... 7 mm

Sensor connection: 5-pin jack connector, screwable

Calibration: 1-point calibration in atmospheric air

Air pressure compensation: 500 ... 2000 hPa abs., manually input

Oxygen sensor:

Sensor type: depending on the version, see above

Measuring ranges: 0.0 ... 100.0 % O₂

Response time T₉₀: <10 s, depending on temperature

Warranty: 12 months (assuming appropriate usage according to the manual)

Application area: suitable for air and pure oxygen, protective gases

Temperature compensation: integrated in sensor housing

Connection cable: approx. 1.3 m, with 5-pin plug, screwable

Operating pressure: 500 ... 2000 hPa (static).

For air and gas-stream use the option GOO.../MU.

Working condition: 0 ... +45 °C, 0 ... +95 % RH (non-condensing)

Storage temperature: -15 ... +60 °C

Dimensions of housing: approx. Ø 40 x 103 mm (153 mm incl. anti-buckling glanding), housing with M16x1-screw thread (sensor can be connected to line tubes by means of an included adapter piece)

Weight: approx. 135 g

Option:

AV010: Output signal 0 ... 10 V

GOO: Oxygen sensor, open sensor type, suitable for air and gas-stream. (further information p.r.t. page 77)

KL10: Sensor connection cable 10 m

LO: Design type for fast measurements of low oxygen contents (0 ... 25 %) with sensor element GOEL 381

Accessories and spare parts:

GOEL 370
 Art. no. 601490
 Spare sensor element

GOEL 381
 Art. no. 610035
 Spare sensor element

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Greisinger	
1.	O ² -sensor-element
0	GOEL 370, protection gases with higher CO ₂ concentrations and O ₂ concentrations below < 35 Vol. % O ₂
2	GOEL 381, precise measuring at low O ₂ (e.g. <0.5 Vol. % O ₂ or concentrations above 35 Vol. % O ₂)
2.	Sensor design
-GGO	Closed sensor
-GOO	Open sensor design
3.	Output signal
-A1	4-20 mA (2-wire)
-V2	0-10 V
4.	Measuring range
...	0,0 ... 100,0 % O ₂ , recommended measuring range 0.2 ... 35.0 Vol. O ₂ (beyond reduced precision)
-LO	0.0 ... 100.0 % Vol. O ₂ (also for values ≤0.2 % Vol. O ₂)
5.	Cable length
-L01	1.3 m
-L04	4 m
-L10	10 m