

## AIR OXYGEN MEASURING TRANSDUCER

**OXY 3690 MP**

Art. no. 602027

Air oxygen measuring transducer incl. sensor; For protective gases with a high O<sub>2</sub> concentration and oxygen content <35 vol.% O<sub>2</sub> (GOEL 370)**OXY 3690 MP-LO**

Art. no. 611786

Air oxygen measuring transducer incl. sensor; For protective gases in general, precise even with very low measurements (e.g. <0.5 vol. % O<sub>2</sub>) and above 35 vol.% O<sub>2</sub> (GOEL 381)

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

**Specifications:****Measuring ranges:**

**Oxygen concentration:** 0.0 ... 100.0 % O<sub>2</sub> (gaseous)  
**OXY 3690 MP:** recommended range 0.2 ... 35.0 vol.% O<sub>2</sub>  
 (reduced precision outside)  
**OXY 3690 MP-LO:** also suitable for values ≤0.2 vol.% O<sub>2</sub>

**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 (O<sub>2</sub> 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<sub>A</sub> [Ω] ≤ (U<sub>v</sub> [V] - 12 V) / 0.02 A

**Permissible load (at 0 ... 10 Volt):** R<sub>L</sub> >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 mm<sup>2</sup>, 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:**

**Type:** depending on the version, see above

**Measuring range:** 0.0 ... 100.0 % O<sub>2</sub>

**Response time T<sub>90</sub>:** <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.

**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 <sub>2</sub> sensor element	
	0	GOEL 370, protection gases with higher CO <sub>2</sub> concentrations and O <sub>2</sub> below < 35 vol. % O <sub>2</sub>
	2	GOEL 381, precise measuring at low O <sub>2</sub> (e.g. <=0.2 vol. % O <sub>2</sub> or > 35 vol. % O <sub>2</sub> )
2.	Version	
	GGO	Closed sensor version
	GOO	Open sensor design
3.	Output signal	
	A1	4 ... 20 mA (2-wire), Standard
	V2	0 ... 10 V
4.	Measuring range	
		0 ... 100 % Vol. O <sub>2</sub> , recommended 0.2 ... 35 % vol. O <sub>2</sub> (beyond reduced precision)
	LO	0 ... 100 % vol. O <sub>2</sub> (also for values <=0.2 % Vol. O <sub>2</sub> )
5.	Cable length	
	L01	1.3 m
	L04	4 m
	L10	10 m
		further lengths on request