

## Product Information

## Analysis - O2

# Air Oxygen Transmitter incl. Electrode OXY 3690 MP



- O<sub>2</sub>-sensor element exchangeable
- Appropriate to air with high CO<sub>2</sub>-concentrations
- Input electrically isolated

## Characteristics

The OXY 3690 MP measures the oxygen concentration in air. Depending on the selected design type the device is appropriate to either pure oxygen (i.e. low CO<sub>2</sub> concentration) or to air with very high CO<sub>2</sub> concentration.

## Technical data

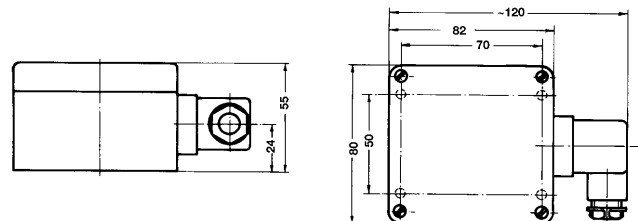
Measuring range  
Oxygen concentration : 0.0..100.0 % O<sub>2</sub>  
Temperature : -20.0..+50.0 °C  
Accuracy (transmitter) at 20.9 % O<sub>2</sub>, 1000 mbar abs.  
Oxygen : ±0.1 % ± 1 digit  
Temperature : ±0.1 °C ± 1 digit  
Output signal (only O<sub>2</sub>) : 4..20 mA (2-wire)  
0..10 V (3-wire)  
Electrical isolation : input electrically isolated  
Working temperature : 0..50 °C  
Power supply : 12..30 V DC at 4..20 mA  
18..30 V DC at 0..10 V  
Permissible impedance :  $R_A [\Omega] = (U_V [V] - 12 V) / 0.02 \text{ mA}$   
Permissible load :  $R_L > 3000 \Omega$   
Reverse voltage protect.: 50 V permanent  
Display : 10 mm high, 4-digit LCD display  
Electric connection : elbow-type plug (EN 175301-803/A),  
max. wire cross-section: 1.5 mm<sup>2</sup>,  
wire diameter from 4.5..7.0 mm  
Sensor connection : 5-pole screw-able diode socket  
Calibration : 1-point-calibration at atmospheric air  
Air pressure compensat.: 500..2000 hPa abs., manual input  
Over- / under-pressure : max. 0.25 bar  
Housing : ABS

## O<sub>2</sub>-sensor element

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
|                               | GOEL 370                                                                          |
| Measuring range               | 0.0..100.0 % O <sub>2</sub>                                                       |
| Response time T <sub>90</sub> | < 10 s                                                                            |
| Application                   | for air or pure oxygen or for air or air with high CO <sub>2</sub> -concentration |

Temp. compensation : integrated in oxygen sensor  
Connection cable : 1.3 m with 5-pole screw-able diode plug  
Working pressure : 500..2000 hPa (static)  
for air or gas inflow option GOO (oxygen probe GOO ... / MU) is needed

## Dimensions



Measuring probe : Ø 40 x 103 mm  
(153 mm incl. bend protection)

## Ordering code

1. 2. 3. 4.  
OXY3690MP - ☐ - ☐ - ☐ - ☐

| 1. O <sub>2</sub> -sensor element |                                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------------------|
| 0                                 | GOEL 370<br>for air and pure oxygen                                                       |
| 2. Sensor design                  |                                                                                           |
| GGO                               | closed sensor design<br>(suited for over- and under- pressure, used at gas-tight systems) |
| GOO                               | open sensor design<br>(e.g. suitable for air or gas inflow, pressure cannot be built up)  |
| 3. Output signal                  |                                                                                           |
| A1                                | 4..20 mA (2-wire)                                                                         |
| V2                                | 0..10 V (3-wire)                                                                          |
| 4. Cable length                   |                                                                                           |
| L01                               | 1.3 m cable                                                                               |
| L10                               | 10 m cable                                                                                |

Ordering example:  
OXY3690MP-0-GGO-A1-L01

## Accessories / Spare parts

### GOEL 370

Spare sensor element