

Product Specification of:

## O<sub>2</sub> - Industrial Sensor / Type P-31

### :: KEY FEATURE ::

#### Sensor designed to detect trace amounts of oxygen.

*All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.*

<b>Measurement Range:</b>	100 to 210,000 ppm O <sub>2</sub>
<b>Expected Operating Life:</b>	~ 75,000 Vol.% h
<b>Sensor Lifetime:</b>	1 year, depending on humidity and O <sub>2</sub> concentration
<b>Electrical Connector:</b>	2 x slip-rings on PCB
<b>Response Times (in operation):</b>	< 180 s from 21 Vol.% down to 1000 ppm < 20 min from 21 Vol.% down to 250 ppm < 1 h from 250 ppm down to 100 ppm
<b>Linearity Error:</b>	± 3 % of signal (above 1000 ppm)
<b>Pressure Dependency:</b>	partial pressure
<b>Operating Temperature:</b>	- 8 to 50 °C
<b>Temperature Compensation:</b>	none
<b>Weight:</b>	approximately 35 g
<b>Material in Contact with Media:</b>	PVDF, PTFE, stainless steel



### :: STORAGE CONDITIONS ::

<b>Packaging:</b>	air tight coated plastic bag
<b>Temperature Range:</b>	recommended: 5 to 25 °C maximum: 0 to 45 °C
<b>Ambient Pressure:</b>	600 to 1750 hPa
<b>Humidity:</b>	up to 100 % RH
<b>Shelf Life:</b>	< 3 months recommended

### :: RELATED PRODUCTS ::

Product	Part-No.	Measurement Range	Output Signal	Other Specifics
O <sub>2</sub> - Sensor P-21	48 01 12	100 to 210.000 ppm	200 µA ± 60 µA	
O <sub>2</sub> - Sensor P-21A	48 02 12	100 to 210.000 ppm	200 µA ± 60 µA	resistance to acid gases, hydrocarbons, hydrogen
O <sub>2</sub> - Sensor P-31	48 04 12	100 to 210.000 ppm	315 µA ± 70 µA	high output
O <sub>2</sub> - Sensor P-41	48 01 13	1 to 10.000 ppm	460 µA ± 120 µA	
O <sub>2</sub> - Sensor P-41A	48 02 13	1 to 10.000 ppm	400 µA ± 60 µA	resistance to acid gases, hydrocarbons, hydrogen