# **Product Specification of:**

# O<sub>2</sub> - Industrial Sensor / Type P-21A

## .: KEY FEATURE :.

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

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

Measurement Range:  $100 \text{ to } 210,000 \text{ ppm } O_2$ Expected Operating Life:  $\sim 75,000 \text{ Vol.\% h}$ 

Sensor Lifetime: 1 year, depending on humidity and O<sub>2</sub> concentration

**Electrical Connector:** 2 x slip-rings on PCB

Initial Output Signal:  $200 \mu A \pm 60 \mu A$  ambient air

Response Times (in operation): < 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

**Linearity Error:**  $\pm$  3 % of signal (above 1000 ppm)

Pressure Dependency:partial pressureOperating Temperature:-8 to 50 °CTemperature Compensation:none

Weight: approximately 38 g

Material in Contact with Media: PVDF, PTFE, stainless steel



# .: STORAGE CONDITIONS :.

Packaging:air tight coated plastic bagTemperature Range:recommended: 5 to 25 °C

maximum: 0 to 45 °C

Ambient Pressure: 750 to 1250 hPa Humidity: up to 100 % RH

**Shelf Life:** < 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 | $200~\mu$ A $\pm$ $60~\mu$ A       |  |
| O <sub>2</sub> - Sensor P-21A | 48 02 12 | 100 to 210.000 ppm | $200~\mu\text{A}\pm60~\mu\text{A}$ | resistance to acid gases, hydrocarbons, hydrogen |
| O <sub>2</sub> - Sensor P-31  | 48 04 12 | 100 to 210.000 ppm | $315~\mu\text{A}\pm70~\mu\text{A}$ | high output                                      |
| O <sub>2</sub> - Sensor P-41  | 48 01 13 | 1 to 10.000 ppm    | $460~\mu$ A $\pm$ $120~\mu$ A      |  |
| O <sub>2</sub> - Sensor P-41A | 48 02 13 | 1 to 10.000 ppm    | $400~\mu\text{A}\pm60~\mu\text{A}$ | resistance to acid gases, hydrocarbons, hydrogen |

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