# **MEMBRAPOR** Specification Sheet



# Hydrogen Peroxide Gas Sensor H2O2/MB-2000

H2O2 Gas Sensor in Miniature Housing

### **Applications**

- Discontinuous Measurement
- Sterilization Process

### **Measurement**

| Operation Principle                        | 3-Electrode Electrochemical   |
|--|-------------------------------|
| Nominal Range                              | 0 - 2000 ppm                  |
| Maximum Overload                           | 4000 ppm                      |
| Inboard Filter                             | -                             |
| Output Signal                              | 50 ± 10 nA/ppm                |
| Resolution (Electronics dependent)         | < 1 ppm                       |
| T90 Response Time                          | < 60 s                        |
| Typical Baseline Range (pure air, 20°C)    | 0 ppm to 40 ppm <sup>1)</sup> |
| Maximum Zero Shift (+20°C to +40°C)        | N.D.                          |
| Repeatability                              | < 2 % of signal               |
| Output Linearity                           | Linear                        |
| Gain (Only applies to 4-Electrode sensors) | -                             |

1) Fresh sensors with bias need 24 - 72 h for stabilization of the baseline.

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Membrapor AG Birkenweg 2 CH-8304 Wallisellen Switzerland

#### Performance data recorded at 20 – 25 °C, 30 - 50% RH, 900 - 1100 mbar

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| <u>Electrical</u>                      |                                 |
|--|---------------------------------|
| Rec. Load Resistor                     | 10 - 33 Ω                       |
| Bias (V_Sens-V_Ref)                    | +300 mV                         |
| Conformity to RoHS directive           | RoHS Compliance                 |
| Environmental                          |                                 |
| Relative Humidity Range                | 15 % to 90 % RH non-condensing  |
|  | -20 °C to 50 °C                 |
| Temperature Range                      | -20 °C 10 50 °C                 |
| Pressure Range                         | Atmospheric ± 10%               |
| Pressure Coefficient                   | N.D.                            |
| Humidity Effect                        | None                            |
| Lifetime                               |                                 |
| Lifetime                               |                                 |
| Expected Operation Life                | 2 years in air                  |
| Expected Long Term Output Drift in air | < 2 % signal loss per month     |
| Filter Life                            |                                 |
| Storage Life                           | 6 months in container           |
| Rec. Storage Temperature               | 5°C - 20°C                      |
| Warranty Period                        | 12 months from date of dispatch |

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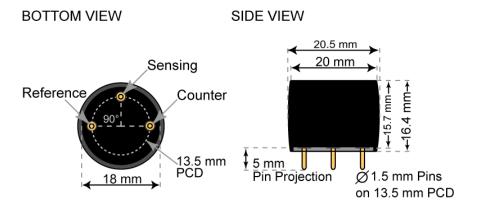
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## Hydrogen Peroxide Gas Sensor H2O2/MB-2000

#### **Miniature-Size Outline Dimensions**



± 0.10 mm

### **Mechanical**

| Weight           | 5.5 g         |
|------------------|---------------|
| Orientation      | Any           |
| Housing material | Polycarbonate |

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|--|---|
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### **Cross Sensitivity Data**

The table below does not claim to be complete. Interfering gases should not be used for calibration. Please contact Membrapor AG for further support regarding cross sensitivities.

Interfering Gas

Cross-Sens. [%]

 ${\rm SO}_2$ 

100

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