**H2/M-4000**

**Hydrogen Gas Sensor in Mini Housing**

### MEASUREMENT

<table>
<thead>
<tr>
<th>Operation Principle</th>
<th>3-Electrode Electrochemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Range</td>
<td>0 – 4'000 ppm</td>
</tr>
<tr>
<td>Maximum Overload</td>
<td>8'000 ppm</td>
</tr>
<tr>
<td>Inboard Filter</td>
<td></td>
</tr>
<tr>
<td>Output Signal</td>
<td>10 ± 6 nA/ppm</td>
</tr>
<tr>
<td>Resolution (Electronics dependent)</td>
<td>&lt; 2 ppm</td>
</tr>
<tr>
<td>T90 Response Time</td>
<td>&lt; 60 sec</td>
</tr>
<tr>
<td>Typical Baseline Range (pure air, 20°C)</td>
<td>-20 ppm to 20 ppm</td>
</tr>
<tr>
<td>Maximum Zero Shift (&lt;20°C to +40°C)</td>
<td>40 ppm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>&lt; 5 % of signal</td>
</tr>
<tr>
<td>Output Linearity</td>
<td>Linear</td>
</tr>
<tr>
<td>Gain</td>
<td></td>
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### ELECTRICAL

- Rec. Load Resistor: 10 Ohm
- Bias (V_Sens-V_Ref): not recommended
- Conformity to RoHS directive: RoHS Compliance

### ENVIRONMENTAL

- Relative Humidity Range: 15 % to 90 % R.H. non-condensing
- Temperature Range: -20 °C to 50 °C
- Pressure Range: Atmospheric ± 10 %
- Pressure Coefficient: N.D.
- Humidity Effect: none

### LIFETIME

- Expected Operation Life: 2 years in air
- Expected Long Term Output Drift in air: < 2 % per month
- Storage Life: 6 months in container
- Rec. Storage Temperature: 5 °C – 20 °C
- Warranty Period: 12 months from date of dispatch

Performance data conditions: 20 °C, 50% RH, 1013 mbar

### MINIATURE-SIZE OUTLINE DIMENSIONS

- Reference: 13.5 mm PCD
- Sensing
- Counter
- 1.5 mm Pins on 13.5 mm PCD

### MECHANICAL

- Weight: 5.5 g
- Position Sensitivity: None

### APPLICATIONS

Safety and Process Control

### CROSS-SENSITIVITY DATA

The table below does not claim to be complete. Interfering gases should not be used for calibration.

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### ENVIRONMENTAL PERFORMANCE DATA

- Rec. Storage Temperature: 5 °C – 20 °C
- Storage Life: 6 months in container
- Filter Life: 6 months in container
- Expected Long Term Output Drift in air: < 2 % per month
- Expected Operation Life: 2 years in air
- Nominal Range: 0 – 4'000 ppm
- Maximum Overload: 8'000 ppm
- Inboard Filter: –
- Output Signal: 10 ± 6 nA/ppm
- Resolution (Electronics dependent): < 2 ppm
- T90 Response Time: < 60 sec
- Typical Baseline Range (pure air, 20°C): -20 ppm to 20 ppm
- Maximum Zero Shift (+20°C to +40°C): 40 ppm
- Repeatability: < 5 % of signal
- Output Linearity: Linear
- Gain: –

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