MIX8410 Electrochemical Oxygen Gas Sensor

Version No.: 1.6

Features:
* High selectivity
* High accuracy
* Linear output
* Environmental protection design

Application:
* Industrial monitors
* HAVC oxygen monitoring
* Oxygen analysis meter
* Oxygen generator

MIX8410 is an electrochemical oxygen sensor developed by Mixsen. Under the catalysis of the electrode, a redox reaction occurs on the working electrode and the counter electrode, thereby generating a current. Through measure the current to get the concentration of oxygen.

Sensitivity Characteristics:
MIX8410 (25°C) linear output

Temperature dependency:
MIX8410 temperature dependency

Stability Characteristics:

Notice: In different applications used by different customers, the operation condition is different. Mixsen strongly recommend customers contact with Mixsen’s technician, especially when the detect gases are not in target gases list, Mixsen cannot responsible if customers has not asked for specifically tested by Mixsen.
 Specifications  

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Gas</td>
<td>Oxygen</td>
</tr>
<tr>
<td>Measurement Range</td>
<td>0 ~ 25%</td>
</tr>
<tr>
<td>Maximum Overload</td>
<td>30%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.1±0.03 mA</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±2%</td>
</tr>
<tr>
<td>Response Time (T90)</td>
<td>&lt; 10 Seconds</td>
</tr>
<tr>
<td>Recommend Resistor</td>
<td>100 Ω</td>
</tr>
<tr>
<td>Long Term drift</td>
<td>&lt;5% per year</td>
</tr>
<tr>
<td>Life Expectancy(in air)</td>
<td>2 Year</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-20 ~ 50˚C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>0 ~ 50˚C</td>
</tr>
<tr>
<td>Operating Humidity Range</td>
<td>15 ~ 90% RH, no-condensing</td>
</tr>
</tbody>
</table>

Note: All measurements were taken at 20˚C and 50%RH at 1013hP

 Structure and Dimensions:  

All dimensions in mm  
All tolerance ±0.1mm, unless otherwise stated

 Operating Note:  

* Cutting the contact metal ribbon.  
* When soldering the metal ribbons, the soldering tin was forbidden to contact with the sensor.  
* Aging the sensor no less than 30 mins before operation.  
* Keeping the sensor out of the volatile solvent.  
* Prohibit storage and operating the sensor in acidic or alkaline environment.

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