

Electrochemical oxygen sensor



PRODUCTS FEATURES

- High precision, long life
- · Fast response speed, back to zero quickly
- · Low power consumption, high sensitivity
- Wide linear range
- · Strong anti-interference ability
- Excellent repeatability and stability



Electrochemical oxygen sensor

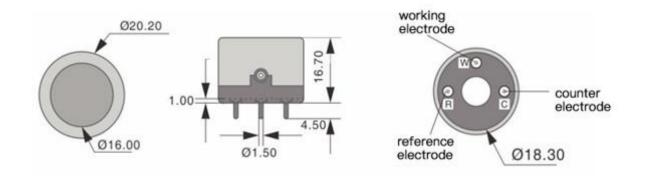
1. Technical parameter

Parameter	Condition
Model	O2
Detection range	0~25%VOL
Maximum load concentration	30%VOL
Output signal	100±20 μA IN AIR
Zero drift	0.6% VOL
Resolution	0.1% VOL
Response time	< 20s
Bias voltage	0
Load resistance	100Ω
Temperature range	-30°C~50°C
Humidity range	15%~90%RH (No dew)
Repeatability	< ±2 output signal
Long-term stability	< ±5 signal value per/ year
Linearity	Linearity, regression coefficient R*R= 0.999
Working pressure	90-110kPa



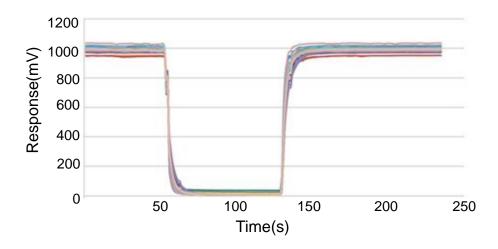
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2. Mechanical Dimension



3. Timing characteristics

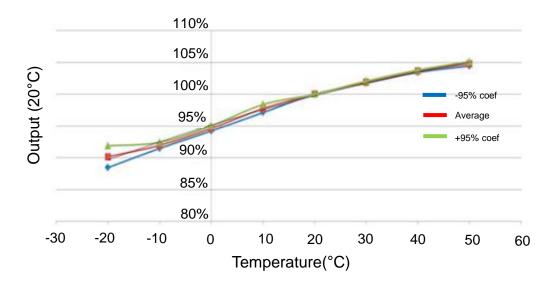
Sensor response recovery curve:





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4. Temperature dependence





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5. Precautions

- 1. The sensor pin must be connected through the PCB socket, soldering will damage the sensor, and the pin must not be bent;
- 2. The working electrode and the reference electrode should be in a short-circuit state when the sensor is stored;
- 3. The sensor should avoid contact with organic solvents, alcohol, paint, oil and high-concentration gases, including silica gel and other adhesives;
- 4. Electrochemical sensors with positive output currents (such as CO, H2S,SO2, NH3, etc.) require oxygen to participate in the reaction when working, and should be calibrated and tested with air as the background gas standard gas, otherwise it will destroy the performance of the sensor;
- 5. The sensor can not be used in an environment containing corrosive gas for a long time, corrosive gas will damage the sensor;
- 6. It is recommended to calibrate with the target gas; the cross-sensitivity will vary by +30%. If the cross-sensitivity gas is used for calibration, the accuracy of the calibration and measurement is not guaranted.