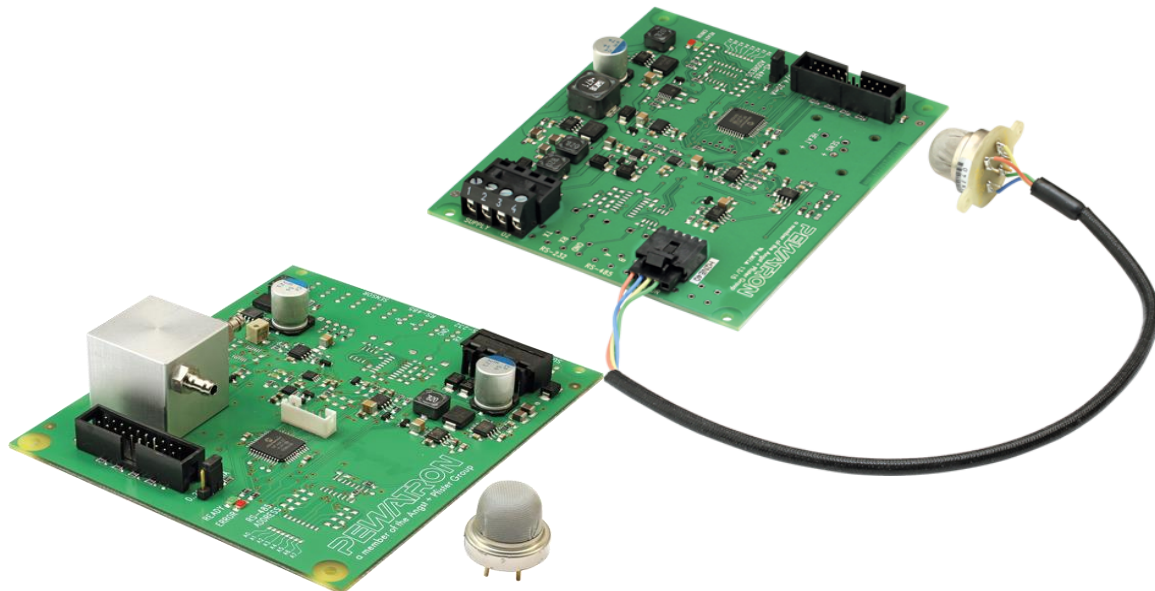


FCX-MC05-CH & FCX-MC05-Extern-CH

Sauerstoffmodul mit einem Zirkonoxidsensor

Oxygen module with a Zirconia Sensor



Der bekannte und verbreitete Sauerstoff-sensor FCX ist mit einem Mikrokontroller verheiratet, um eine genaue Steuerung und Präzises Auswertung des Signals zu bekommen. Der FCX Sensor ist entweder direkt auf der Platine, mit oder ohne Durchflussgehäuse, oder ist extern mit einem Kabel verbunden

The popular oxygen sensor FCX, a reference for all oxygen sensors for the last 25 years and longer, is electronically controlled via a state-of-the-art control board for the accurate concentration measurements of oxygen. The sensor is either mounted directly on the control board, with or without a flow housing, or remote from the control board via cables.

Merkmale

- 0 ...5%; Optional 0...1%, 0...25% O₂
 - Lebensdauer >30'000 Betriebsstunden*
 - ab Werk kalibriert
 - Ausgezeichnete Langzeitstabilität
 - Nachkalibrierung und justierung möglich
 - Kleine Leistungsaufnahme
 - Analog: 0/4...20mA, 0...10VDC linear
 - Digital: RS485/RS232
 - RoHS/Reach konform
 - Hergestellt in der Schweiz
- *bei Sauerstoffkonzentrationen < 5 %

Features

- 0 ...5%; optional 0...1%, 0...25% O₂
 - Lifetime >30'000 operation hours*
 - Factory calibrated
 - Excellent longtime stability
 - Adjustment and calibration by customer possible
 - Low power consumption
 - Analog: 0/4...20mA, 0 ...10VDC linear
 - Digital: RS485/RS232
 - RoHS/Reach conform
 - Made in Switzerland
- *at oxygen concentrations < 5%

Anwendungen

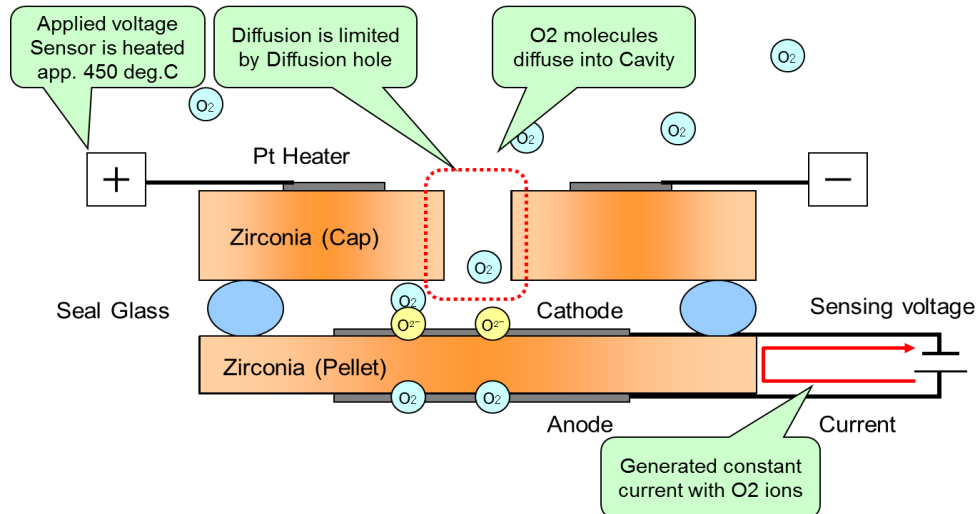
- Schutzatmosphäre/Prozessindustrie
- Lebensmittelindustrie
- Gewächshäuser
- Frucht- und Gemüselagern
- Gaswarnanlagen
- Medizinische Geräte
- Laborgeräte

Applications

- Controlled atmosphere/Processing industry
- Food industry
- Greenhouses
- Fruit & vegetable storages
- Gas security systems
- Medical units
- Laboratory equipment

Funktionsprinzip des Sensors

Zirkonoxid Sensor nach dem Strombegrenzungsprinzip



Principle of functionality for the sensor

Limiting current type of a Zirconia oxygen sensor

Spezifikationen

| | |
|-----------------------------|---|
| Messbereiche | 0...5 vol% O ₂ |
| Optionale Messbereichen | 0...1 vol% O ₂ , 0...25 vol% O ₂ |
| Genauigkeit | ±1% Full Scale (FS) |
| Stabilität | ±0,5% FS/year |
| Wiederholgenauigkeit | ±1% FS |
| Ansprechzeit (Diffusion) | < 30 seconds (T ₉₀) |
| Ansprechzeit (Durchfluss) | < 8 seconds (T ₉₀) |
| Betriebstemperatur (Modul) | -10...+50°C |
| Betriebstemperatur (Sensor) | -10...+250°C (External w. proper connector) |
| Feuchte | 0...98%RH, non-condensing |
| Aufwärmzeit | 3 min |
| Speisespannung | 9-28 VDC |
| Leistungsaufnahme | < 2 W |
| Ausgangssignal | 0/4...20 mA (standard) 0...10VDC (external shunt) option: 0...10VDC (internal shunt) RS232/RS485 |
| Sensorlebensdauer | < 30.000 hours (< 5% O ₂) |
| Durchflussrate | 0,1...3 slm/min |
| Abmessungen | 117,5 x 100 x 28 mm |
| Gewicht | 200g |

Specifications

| | |
|--------------------------------|---|
| Measurement ranges | 0...5 vol% O ₂ |
| Optional measurement ranges | 0...1 vol% O ₂ , 0...25 vol% O ₂ |
| Accuracy | ±1% Full Scale (FS) |
| Stability | ±0,5% FS/year |
| Repeatability | ±1% FS |
| Response time (diffusion) | < 30 seconds (T ₉₀) |
| Response time (flow) | < 8 seconds (T ₉₀) |
| Operating temperature (Module) | -10...+50°C |
| Operating temperature (Sensor) | -10...+250°C (External w. proper connector) |
| Humidity | 0...98%RH, non-condensing |
| Warm-up time | 3 min |
| Supply voltage | 9-28 VDC |
| Power consumption | < 2 W |
| Output signal | 0/4...20 mA (standard) 0...10VDC (external shunt) option: 0...10VDC (internal shunt) RS232/RS485 |
| Sensor lifetime | < 30.000 hours (< 5% O ₂) |
| Flow rate | 0,1...3 slm/min |
| Dimensions | 117,5 x 100 x 28 mm |
| Weight | 200g |

Die Angaben dieses Datenblattes enthalten die Spezifikationen der Produkte, nicht die Zusicherung von Eigenschaften. Technische Änderungen die dem Fortschritt dienen bleiben vorbehalten.

The declarations on this data sheet area according to the specifications of the products, not an assurance of their quality. We reserve the right to make technical modifications in order to improve the product.

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