

ZIROX Oxygen Measuring Module ZR5

Properties

For optimal quality and process control the avoidance of oxygen, even traces, is necessary in various technological applications. A constant monitoring and documentation of quality parameters becomes more important – not least because of the increasing introduction of quality assurance systems, e.g. ISO 9000.

The oxygen measuring module ZR5 is based on the approved zirconia technology. It serves the continuous measurement of oxygen concentration in industry and laboratory gases and the monitoring of protective gases. Deviations of the oxygen concentration from setpoints can be signalized, the procedure of special production processes under inert gas can be monitored by the ZR5 module.

Applications

- Protective gas monitoring in food processing, e.g. in packaging
- Protective gas monitoring in technological processes, e.g. soldering, welding
- Monitoring tasks in microelectronics
- Monitoring of protective and inert gases in surface treatment processes



Oxygen Measuring Module ZR5

Sensoren und Elektronik GmbH



Technical Data

Sensor	Potentiometric zirconia cell
Range	1 vol-ppm...100 vol%, 10^{-15} vol-ppm...20.6 vol% ¹⁾
Accuracy	Rel. error < 5 %
T ₉₀	T ₉₀ ≤ 1 s (measuring cell without tube)
Housing	19"-Slot (21 TE)
Gas connection	Input: Swagelok 3 mm, output: tube nipple 4 mm
Gas flow.....	8 ± 2 l/h, controlled via (can be turned off) internal pump
Signal output.....	Analog: 0/4...20 mA for O ₂ (digital: RS 232 as option)
Power supply	24 V DC (± 20 %)
Display.....	LED for failure display only
Protection degree.....	IP 20
Operating conditions	0...50 °C, max. 80 % rel. humidity
Storage conditions	-20...60 °C, max. 95 % rel. humidity
Dimensions (W x H x D)	100 mm × 105 mm × 170 mm
Warm-up	< 15 min
Power consumption.....	Approx. 20 W

¹ on request (for reducing gas mixtures)