ZIROX® Oxygen Measuring Module ZR5

Properties

For an optimal quality and process protection the avoidance of oxygen, also as traces, is necessary in many technological applications. Not least by progressive introduction of quality assurance systems, e.g. according to ISO 9000, a constant monitoring and documentation of quality parameters becomes more important.

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

Applications

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

Oxygen Measuring Module ZR5

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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}	$T_{90} \leq 1$ 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
Working 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)