Oxygen trace analyser Oxystem S



- Oxygen analyser with largest range possible
- Completely self-monitoring
- Maintenance-free
- Fully automatic operation

Application Monitors inert gas atmospheres for absence of oxygen in order to avoid oxidation. Measurement of residual oxygen concentration in the production of noble gases and nitrogen.

Oxygen measurement without cooling (hot measurement); the system can directly process gas with temperatures of up to 350 °C.

Description

The analyser is designed as a 19" rack housing 3 U, 84 HP. All components are integrated in a single housing. The electronic system is operated via keypad and display. The ranges % by volume, ppm and e xx % by volume O2 are fully automatically switched over on the display. The menu item "Error status" provides more detailed information on the self-monitoring functions. All status and alarm messages are indicated at the front plate (display with blinking exclamation marks) and output via a voltage-free contact. The sensor is based on the principle of solid electrolytes (zirconium dioxide). The free oxygen ion movement begins at temperatures of more than 500 °C (solid electrolyte potentiometric method). The sensor is heated. The oxygen concentration is calculated from the cell voltage and the temperature according to Nernst's law.

Technical specifications

Operating temperature range

5/100 °C Medium: Ambient: 5/45 °C

Four-line, alphanumerical LC display (temperature, oxygen concentration % by vol./ppm). Measuring range can be selected as required between 100 % by volume and 0.1 ppm O_2 via the software. Operation via keypad and menus.

Reference gas throughput

Gas throughput 5-10 l/h

Gas inlet/gas outlet

Swagelok pipe connector Ø 6 x 1 mm Compression fitting Ø 4 x 1 mm

Supply voltage

AC 230 V, 50-60 Hz

Power input

40 VA

Analogue output

0-20 mA or 4-20 mA (selectable)

Switching outputs

Relay contacts: 3 voltage-free changeover contacts

Contact rating: 0.5 A

Housing

19" rack housing, 3 U

 $W \times H \times D$: 470 x 134 x 315 mm

Weight:

Degree of protection

IP 10 (EN 60529)

| PG: 4 | Part no. | Price € |
|---------------------------------------|----------|---------|
| Oxygen trace analyser Oxystem S | 69551 | |
| Flow meter DFM OX-S with needle valve | 69552 | |
| Gas pump MGP OX-S, installed | 69553 | |
| 2 relays for limit values for Oxystem | 69454 | |
| Screw connection 6 mm Swagelok | 69554 | |

Blue part no. = in-stock items

