

O₂ Sensors Consumables and Accessories

O₂ sensors which you can rely on. Providing the organism with sufficient oxygen is the most important task when ventilating patients. Oxygen sensors clearly play a vital role here, as they continuously measure and monitor the oxygen content of the breathing gas, an essential respiratory parameter.



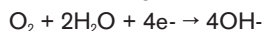
Benefits

O₂ sensors

The importance of this parameter can be measured by the number of guidelines and recommendations which have been issued. Dräger oxygen sensors comply with both national and international requirements. Furthermore, the sensors have been designed and tested comprehensively to function perfectly with Dräger devices and systems. This is of particular importance in the context of minimizing risks for patient and operator. Even NASA has been convinced by Dräger's many years of experience in sensor development and production, and the high quality of the sensors themselves. For several years now Dräger O₂ sensors have been used in the NASA space shuttle.

Design and functional principle

Dräger O₂ sensors are electrochemical systems intended for the measurement of O₂ partial pressure. The sensors work according to the galvanic cell principle. The gas mixture to be monitored diffuses through a plastic membrane into the sensor's liquid electrolyte. The electrolyte contains a working electrode (gold electrode) and a counter-electrode (lead electrode). The oxygen to be monitored is electrochemically reduced at the working electrode:



Simultaneously the counter electrode is oxidized:



A resulting electrical current is proportional to the O₂ partial pressure in the monitored gas mixture.

Dräger O₂ sensors offer a range of excellent benefits, including:

- 100% system compatibility with Dräger devices and systems
 - High measurement accuracy with above-average quality standards and comprehensive testing
 - Compliance with national and international requirements
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O₂ sensor capsule

The O₂ sensor capsule was introduced in 1977 as a means of measuring and monitoring the inspiratory O₂ concentration in anesthesia and intensive care devices. Since that time, more than 1,6 million* sensors have been manufactured and shipped worldwide. The sensor is used in devices such as the Fabius family, Evita family, Incubator 8000, Cicero A/B and Oxydig. The O₂ sensor capsule has a lifetime of more than 12 months.

* February 2009

Fast O₂ sensor

The fast O₂ sensor was launched into the market in 1994 as a means of measuring and monitoring with breath by breath resolution the inspiratory and expiratory O₂ concentrations. Since that time, more than 470,000 sensors have been shipped world wide. This sensor is used in devices such as the Primus, Julian, Cicero EM, Cato, PM8060, PM8050. The fast O₂ sensor has a lifetime of more than 6 months.

Technical Data

	O ₂ sensor capsule	Fast O ₂ sensor
Measuring range:	0 to 100 % by vol. oxygen	0 to 100 % by vol. oxygen
Response time T ₁₀₋₉₀	16 sec.	0.5 sec.
Operating temperature:	15 to 40 °C	15 to 40 °C
Storage temperature:	-20 to 40 °C	-20 to 40 °C
Dimensions	Ø 28 mm, height 22 mm	Ø 11 mm, height 13 mm

Ordering Information

O ₂ sensor capsule	68 50 645
Fast O ₂ sensor	68 50 930

Notes

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As of August 2015

Dräger Medical GmbH changes
to Drägerwerk AG & Co. KGaA

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The quality management system at Dräger Medical GmbH is certified according to ISO 13485, ISO 9001 and Annex II.3 of Directive 93/42/EEC (Medical devices).