

# Oxygen Sensor OOM109-LF2

## Use the advantages:

- Designed and manufactured according to EN ISO 13485
- Designed for side stream application
- Accurate and reliable ultra fast response
- Excellent signal stability
- High product quality
- Short delivery times
- Technical support
- Made in Germany



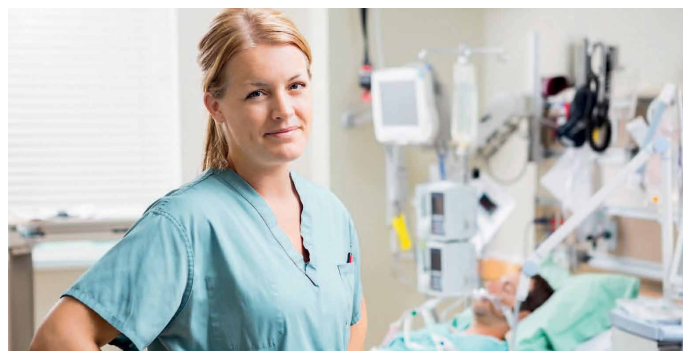
## From standard sensors to customized sensors

Experienced EnviteC engineers analyze customer requirements. This input is used for different standard and OEM applications, and ongoing support is provided right up to the final integrator in the solution.

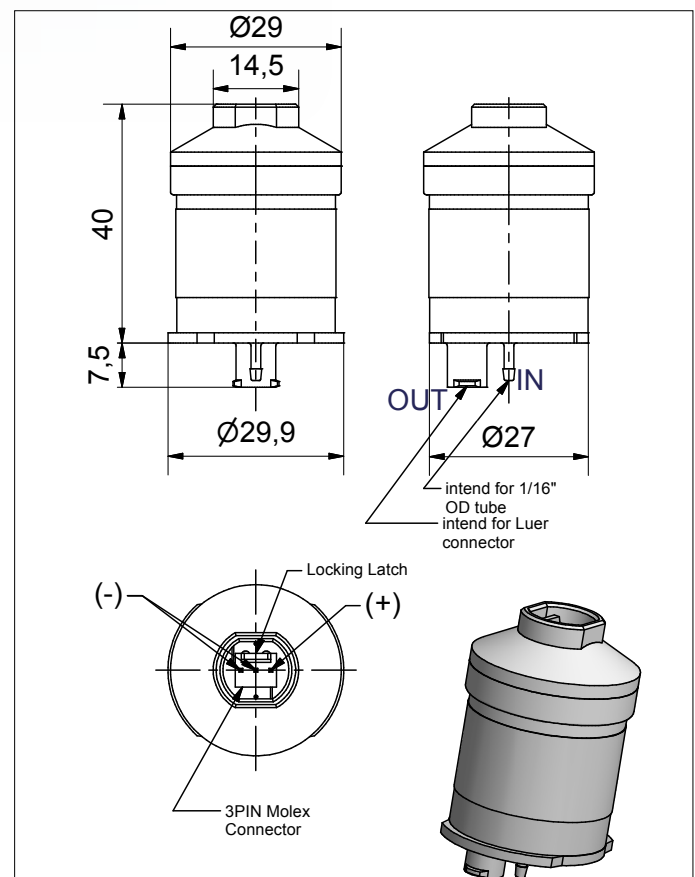
EnviteC designs customized sensors characterized by a maximum possible degree of precision, for example with different signal levels or temperature compensation elements.

## Intendend use

The EnviteC medical oxygen sensors of series OOM109 are intended as oxygen-sensing component of an oxygen analyzer that measures oxygen concentration in breathing gas mixtures or for breath by breath analysis of oxygen concentration in breath gases.\*



## Mechanical drawing (dimension in mm)



General tolerances ISO 2768-c

**For more information please contact us! We look forward to assisting you either on the phone or in a personal talk.**

## Technical Specifications OOM109-LF2

Measurement range	0 % ... 100 % oxygen (at atmospheric pressure)
Nominal sensor lifetime	≥ 200 000 % volume oxygen hours
Output in ambient air	9 mV ... 13 mV
Electrical interface	3 pin (Molex® 22-11-1031)
Accuracy	meets ISO 80601-2-55 requirements
Repeatability	< 1 % volume O <sub>2</sub> at constant temperature and pressure
Linearity error	< 3 % relative
Response time	< 360 ms to 90 % of final value (tested on EnviteC test fixture with 3 liter /min flow)
Zero offset voltage	< 50 µV in 100 % nitrogen, applied for 5 min
Cross interference	on request
Influence of humidity	-0.03 % rel. per % RH at 25 °C
Pressure range	0.7 bar ... 1.250 bar
Influence of pressure	proportional to change in oxygen partial pressure
Influence of mechanical shock	< 1 % relative after a fall from 1 m
Operating temperature	0 °C ... +45 °C
Temperature compensation	built-in NTC compensation
Effect of temperature compensation (steady state)	between +25 °C and +40 °C: 3 % relative error between 0 °C and +50 °C: 8 % relative error
Operating humidity	0 % ... 99 % RH non-condensing
Long term output drift	< 1 % volume oxygen per month typically < -15 % relative over lifetime
Storage temperature	-20 °C ... +50 °C
Recommended storage	+5 °C ... +15 °C
Recommended load	≥ 10 kOhm
Warm-up time	< 30 minutes, after replacement of sensor
Weight	approximately 28 grams
Warranty period	9 months
Part number	01-00-0116

\* The sensors are not designed to provide direct vital signs monitoring (measurement of parameters where erroneous results could result in immediate danger to the patient). The sensor cross-sensitivity against anesthetic agents has not been tested. Further information on request.

All specifications are applicable at standard conditions:  
1013 hPa, 25 °C dry ambient air

### Certified Quality Management

EnviteC is maintaining a quality management system, which meets the requirements of EN ISO 13485 for medical devices.



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