

# Oxygen Sensor OOM102-1

## Use the advantages:

- Compliant with European MDD (CE certification)
- Meets ISO 80601-2-55
- Designed and manufactured according to EN ISO 13485
- Accurate and reliable response
- Resistant to N<sub>2</sub>O
- Excellent signal stability
- High product quality
- Short delivery times
- Technical support
- Made in Germany
- FDA cleared



## 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 are intended as oxygen-sensing component of an oxygen analyzer that measures oxygen concentration in breathing gas mixtures in the following applications:

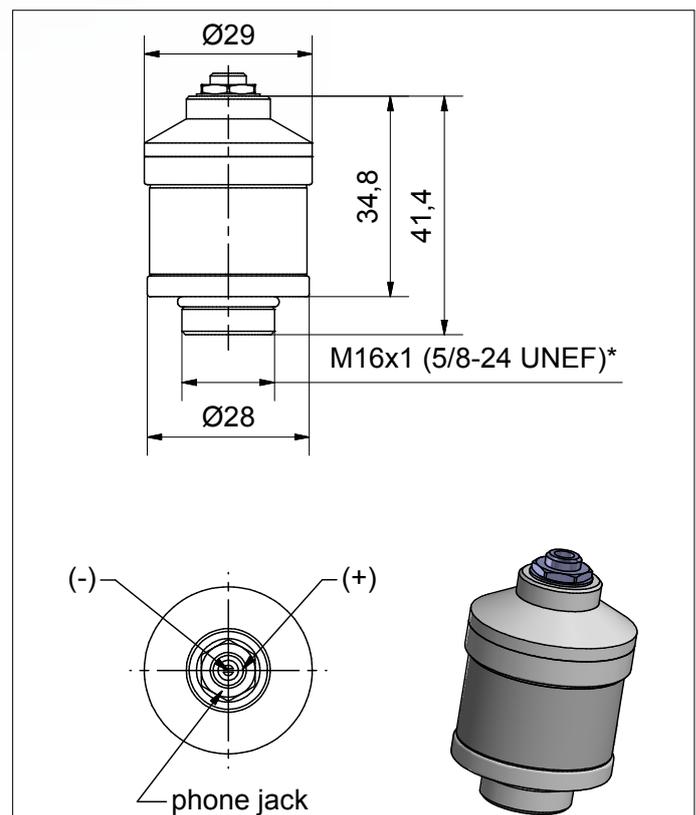
Sensing device for oxygen in

- control device of oxygen concentrators
- medical ventilators
- anaesthesia equipment
- incubators.

The use is limited to system monitoring. The sensors are not suited for breath by breath analysis of breath gases. Please refer to the Instructions for Use! If the sensor is intended to replace the original oxygen-sensing component of an oxygen analyzer, consult the EnviteC XRL Cross Reference List for selecting the appropriate sensor.



## Mechanical drawing (All dimension in mm)



General tolerances ISO 2768-c

\*Intermediate thread: Metric / Unified Extra Fine

## Additional information

The Instructions for Use as well as the EnviteC XRL Cross Reference List are available under [www.EnviteC.com](http://www.EnviteC.com) and in the Apple App Store under EnviteC XRL as free download.

## For more information please contact us!

**We look forward to assisting you either on the phone or in a personal talk.**

## Technical Specifications OOM102-1

Measurement range	0 % ... 100 % oxygen (at atmospheric pressure)
Nominal sensor lifetime	≥ 1 000 000 % volume oxygen hours
Output in ambient air	9 mV ... 14 mV
Electrical interface	3.5 mm mono phone Jack
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	< 12 s to 90 % of final value
Zero offset voltage	< 200 µV in 100 % nitrogen, applied for 5 min
Cross interference	meets ISO 80601-2-55 requirements
Influence of humidity	-0.03 % rel. per % RH at 25 °C
Pressure range	0.6 bar ... 2 bar (ppO <sub>2</sub> 0 ... 1250 mbar O <sub>2</sub> )
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 ... +50 °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 kOhms
Warm-up time	< 30 minutes, after replacement of sensor
Weight	approximately 28 grams
Part number	01-00-0020

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



For suitable accessories and sensors please refer to the EnviteC Cross Reference List under [www.EnviteC.com](http://www.EnviteC.com) and in the Apple App Store under EnviteC XRL as free download.

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