

# Oxygen Sensor OOM103-1M

## 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 fast 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:

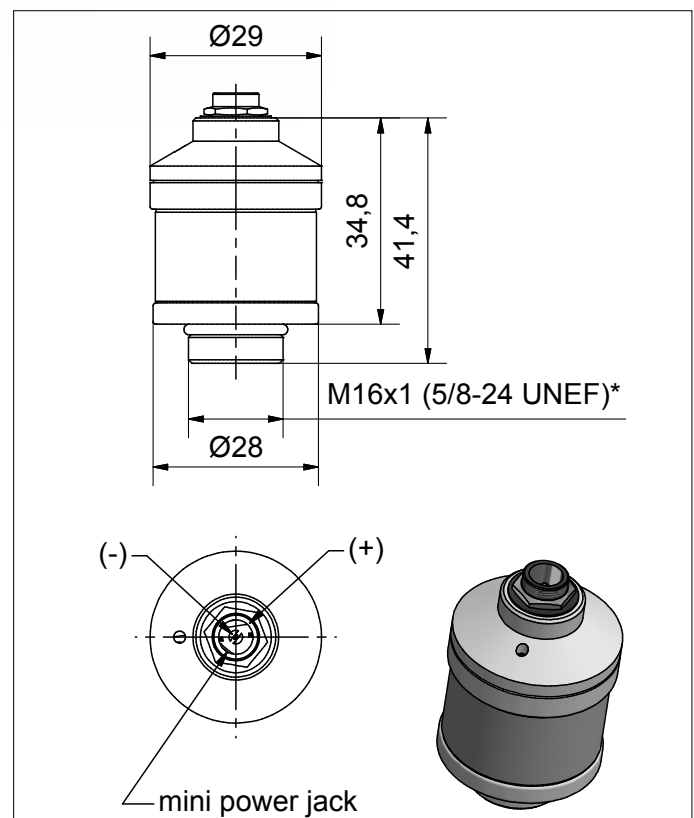
Sensing device for oxygen in

- 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 OOM103-1M

|   |  |
|---|--|
| Measurement range                                 | 0 % ... 100 % oxygen (at atmospheric pressure)   |
| Nominal sensor lifetime                           | ≥ 500 000 % volume oxygen hours  |
| Output in ambient air                             | 9 mV ... 13 mV   |
| Electrical interface                              | Switchcraft® mini power 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                                     | < 5 s to 90 % of final value   |
| Zero offset voltage                               | < 100 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<br>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<br>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                                       | 01-00-0090   |

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.

**EnviteC-Wismar GmbH**  
**a Honeywell Company**

Alter Holzhafen 18, 23966 Wismar, Germany

Phone: +49 (0)3841-360-1

Phone: +49 (0)3841-360-200

Fax: +49 (0)3841-360-222

Internet: [www.envitec.com](http://www.envitec.com)

Email: [info@envitec.com](mailto:info@envitec.com)

Doc. No. 001-33-Datasheet\_OOM103\_1M-0

March 2016

Technical information is subject  
to change without notice!

© 2016 Honeywell International Inc.

EnviteC by Honeywell reserves the  
right to make changes in product  
specifications and adjust its production  
at any time and without notice.

**ENVITEC**  
by Honeywell