#### **General Specifications**

#### **Medical Oxygen Sensors**



Measurement Range: Accuracy 0-7

and Repeatability: Zero Offset:

Linearity Error: Cross Interference:

**Output Drift:** 

0-100% oxygen

< 1 % vol.  $0_2$  when calibrated at 100 %  $0_2$ 

< 0,5 % vol.  $0_2$  in 100%  $N_2$ , applied 5 minutes

< 3 % relative

< 0.5 % vol.  $0_2$  response to: 10% C0<sub>2</sub> balance  $N_2$  80%  $N_2$ 0 balance  $N_2$ 

7.5% Halothane balance N<sub>2</sub>
7.5% Isoflurane balance N<sub>2</sub>
7.5% Enflurane balance N<sub>2</sub>
9% Sevoflurane balance N<sub>2</sub>
20% Desflurane balance N<sub>2</sub>

Influence of Humidity: 20% Desflurane balance  $N_2$  Influence of Pressure: -0.03 % rel. per % RH at 25°C

proportional to change in oxygen partial

Influence of Mechanical Shock: pressure

**Operating Temperature:** < 1% relative after a fall from 1 m

**Temperature Compensation:** 0 to 50°C

Effect of Temperature built-in NTC compensation (see below)

Compensation (steady state): between +5 °C and +25 °C: 3 % relative error

Operating Humidity: Long Term between 0 °C and +50 °C: 5 % relative error

0-99 % RH non-condensing < 1 % vol oxygen per month

**Storage Temperature:** typically < -15 % relative over lifetime

Recommended Storage: -20 to +50 °C
Recommended Load: +5to+15 °C >
Warm-UpTime: Weight: |OkOhms

< 30 minutes, after replacement of sensor

Warranty Period: approximately 28 grams

approximately 43 grams OOM107 series

15 months

All specifications are applicable at standard conditions: 1013 hPa, 25  $^{\circ}\text{C}$  dry ambient air

#### Use the advantages:

- Meet EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and

EN 13485:2003

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- · High product quality
- Short lead times
- Technical support

Oxygen Sensor	Output Signal in Air	Response Time [90%]	Nominal Sensor Lifetime	Electrical Interface
OOM101	46uA to 63uA no temperature compensation	<12 seconds	500.000 % volume oxygen hours	Gold plated slip rings
OOM102	9mVto 14mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3pin molex®
OOM102-1	9mVto 14mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3,5mm Mono Jack
OOM103	9mVto 13mV temperature compensation	< 5 seconds	500.000 % volume oxygen hours	3pin molex®
OOM103-1	9mVto 13mV temperature compensation	< 5 seconds	500.000 % volume oxygen hours	3,5mm Mono Jack
OOM103-1M	9mVto 13mV temperature compensation	< 5 seconds	500.000 % volume oxygen hours	Switchcraft® Mini Power Jack
OOM104	24uAto32uA no temperature compensation	<12 seconds	750.000 % volume oxygen hours	Gold plated slip rings
OOM105	Teledyne® TED range	< 5 seconds	500.000 % volume oxygen hours	molex® plug 4P4C
OOM106	9mVto 13mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3pin molex®
OOM107	170nAto230nA no temperature compensation	<12 seconds	250.000 % volume oxygen hours	Gold plated slip rings
OOM107-2	170nAto230nA no temperature compensation	<12 seconds	250.000 % volume oxygen hours	Gold plated slip rings
OOM110	9mVto 13mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	Modular Jack 6P4C
OOM111	9mVto 13mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3,5mm Stereo Jack
OOM201	24uA to 32uA (Dual Cathode) no temperature compensation	<12 seconds	500.000 % volume oxygen hours	Gold plated slip rings
OOM202	13mVto 16mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3pin molex®
OOM202-1	13mVto 16mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	3,5mm Mono Jack
OOM202-2	9mVto 13mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	flying leads with 3pin female molex® connector
OOM202-2S	9mVto11,5mV temperature compensation	<12 seconds	1.000.000 % volume oxygen hours	AMP MATE-N-LOK / 2 circuit
OOM204	9mV to 13,5mV (Dual Cathode) temperature compensation	<12 seconds	500.000 % volume oxygen hours	3pin molex®

## Oxygen Sensor 00MI01

ENVITEC by Honeywell

Measurement Range: Output in ambient air: Electrical Interface: Accuracy and Repeatability:

Linearity error: Response time: Zero

Offset Voltage:

Cross Interference: Influence of Humidity: Influence of

Pressure:

Influence of Mechanical Shock:
Operating Temperature:
Temperature Compensation:
Operating Humidity: Long Term
Output Drift:

Storage Temperature:
Recommended Storage:
Recommended Load: Warm-

**Up Time: Nominal Sensor** 

Lifetime: Weight: Part No.:

0-100% oxygen 14 to 20 mV, load 300 Ohms Gold plated slip rings

< 1 % vol. 0<sub>2</sub> when calibrated at 100 % Oxygen

< 3 % relative

< 12sec. to 90% of final value < 200 MV in 100% nitrogen

applied after 5 min

Meets EN ISO 21647 requirements - 0.03%rel.per%RHat25°C proportional to change in oxygen partial pressure < 1% relative after a fall from 1 m

0 to +50°C

No temperature compensation 0-99 % RH non-condensing < 1 % vol. oxygen per month

typically < -15 % relative over lifetime

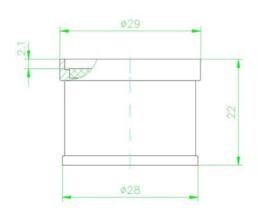
-20 to +50 °C +5to+15°C > IOkOhms

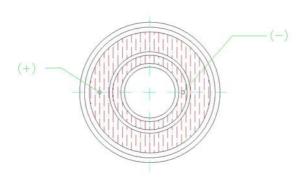
< 30 minutes, after replacement of sensor

> 500.000 % vol. oxygen hours approximately 28 grams

01-00-0013

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





- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- · High product guality
- Short lead times
- · Technical support



# Oxygen Sensor 00MI02 / 00MI 02-1



0-100% oxygen Measurement Range: 9 to 14mV Output in ambient air:

OOM102: 3pin (Molex 22-11-1031) **Electrical Interface:** 00M102-1:3,5mm Mono Jack

Accuracy and Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

Linearity error: < 3 % relative

Response time: Zero < 12sec. to 90% of final value Offset Voltage: < 200 MV in 100% nitrogen

applied after 5 min

**Cross Interference:** Meets EN ISO 21647 requirements -

Influence of Humidity: 0.03%rel.per%RHat25°C proportional to

Influence of Pressure: change in oxygen partial pressure < 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

**Operating Temperature:** built-in NTC compensation between +25°C **Temperature Compensation:** and +40°C: 3 % relative error between 0 °C **Effect of Temperature** and +50 °C: 8 % relative error 0-99 % RH

Compensation (steady state): non-condensing

**Operating Humidity: Long Term** < 1 % vol. oxygen per month

**Output Drift:** typically < -15 % relative over lifetime

-20 to +50 °C

Storage Temperature: +5to+15°C Recommended Storage: > IOkOhms

**Recommended Load:** < 30 minutes, after replacement of sensor

Warm-Up Time: Nominal > 1.000.000 % vol. oxygen hours

Sensor Lifetime: Weight: approximately 28 grams Part No.: 01-00-0019/OOM102

01-00-0020/OOM102-1

Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

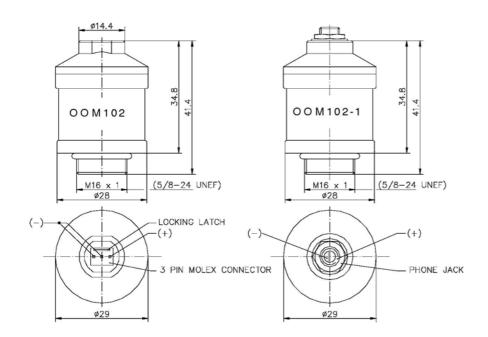
2003

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product guality
- Short lead times
- Technical support





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



# Oxygen Sensor OOM103/OOM103-1

Measurement Range:0-100% oxygenOutput in ambient air:9 to 13mV

Electrical Interface: OOM103: 3pin (Molex 22-11-1031)
OOM103-1: 3.5mm Mono Jack

Accuracy and Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

Linearity error: < 3 % relative Response time: Zero < 5 sec. to 90 % of final value Offset Voltage: < 100 yV in 100 % nitrogen

applied for 5 min

Cross Interference: Meets EN ISO 21647 requirements - 0.03 % rel. per % RH at 25-C

Influence of Pressure: proportional to change in oxygen partial

pressure

< 1% relative after a fall from 1m

Shock:

Influence of Mechanical

**Operating Temperature:** 0 to 50-0

**Temperature Compensation:** built-in NTC compensation **Effect of Temperature** between +25 "C and +40 <C: 3 %

Compensation (steady state): relative error

between 0 "C and +50 "0:8% relative

error

Operating Humidity: 0-99% RH non-condensing Long Term Output Drift: <1 % vol. oxygen per month

typically < -15 % relative over lifetime

Storage Temperature: -20 to +50 "C Recommended Storage: +5 to +15 < C Recommended Load: >10 kOhms

**Warm-Up Time:** < 30 minutes, after replacement of

sensor

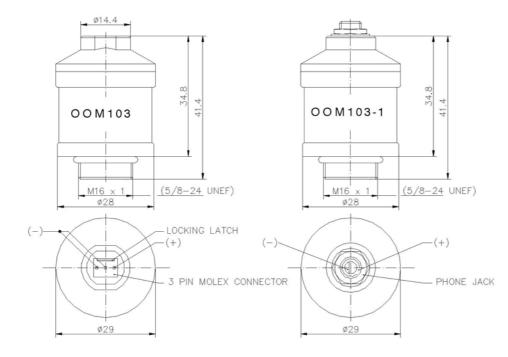
Nominal Sensor Lifetime: > 500.000 % vol. oxygen hours approximately 28 grams 01-00-

**Part No.:** 0015/OOM103 01-00-0016/OOM103-1

# **ENVITEC**

- Meet EN ISO 21647
- Designed and manufactured according to EN ISO 9001 and EN ISO 13485
- Accurate and reliable fast response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support







# Oxygen Sensor OOM103-1M



**Measurement Range:** 0-100% oxygen Output in ambient air: 10 to 13mV

**Electrical Interface:** Switchcraft® Mini Power Jack

Accuracy and Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

**Linearity error:** < 3 % relative

Response time: Zero < 5sec. to 90 % of final value

Offset Voltage: < 100/vV in 100 % nitrogen applied for 5

**Cross Interference:** Meets EN ISO 21647 requirements -Influence of Humidity: 0.03 % rel. per % RH at 25<C

Influence of Pressure: proportional to change in oxygen partial

Influence of Mechanical < 1% relative after a fall from 1m

Shock:

**Operating Temperature:** 0 to 50<C

**Temperature Compensation: Effect of Temperature** Compensation (steady

state):

**Operating Humidity: Long Term Output Drift:** 

**Storage Temperature: Recommended Storage:** Recommended Load: Warm-

**Up Time:** 

**Nominal Sensor Lifetime:** 

Weight: Part No.:

built-in NTC compensation

between +25 "C and +40 "0:3% relative

error

between 0 O and +50 "0:8% relative

error

0-99 % RH non-condensing < 1 % vol. oxygen per month

typically < -15 % relative over lifetime

-20 to +50 <C +510+15-0 >10 kOhms

< 30 minutes, after replacement of

sensor

> 500.000 % vol. oxygen hours approximately 28 grams 01-00-

0090

# 34 M16x1\* Ø28 \*usable with 5/8-24UNEF (-)MINI POWER JACK

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 and **EN ISO 13485**
- Accurate and reliable fast response
- Resistant to N<sub>2</sub>O
- Excellent signal stability
- High product quality
- Short lead times
- Technical support



## Oxygen Sensor 00MI04

Measurement Range: Output in ambient air: Electrical Interface: Accuracy and

Repeatability:

Linearity error:

Response time: Zero Offset Voltage:

Cross Interference: Influence of Humidity: Influence of Pressure:

Influence of Mechanical Shock:
Operating Temperature:
Temperature Compensation:
Operating Humidity: Long Term

**Output Drift:** 

Storage Temperature: Recommended Storage:

Recommended Load:

Warm-Up Time: Nominal Sensor Lifetime: Weight:

Part No.:

0-100% oxygen

14 to 20 mV, load 600 Ohms

Gold plated slip rings

< 1 % vol. 02 when calibrated at 100 %

Oxygen

< 3 % relative

< 12sec. to 90% of final value < 200 MV in 100% nitrogen

applied for 5 min

Meets EN ISO 21647 requirements - 0.03%rel.per%RHat25°C proportional to change in oxygen partial pressure

< 1% relative after a fall from 1 m

0 to 50°C

No temperature compensation 0-99 % RH non-condensing < 1 % vol. oxygen per month

typically < -15 % relative over lifetime

-20 to +50 °C

+5to+15°C > IOkOhms

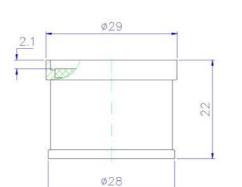
< 30 minutes, after replacement of sensor

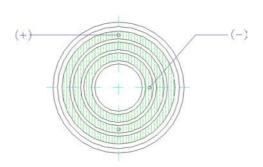
> 750.000 % vol. oxygen hours approximately 28 grams

01-00-0049

# by Honeywell

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- · Excellent signal stability
- High product guality
- Short lead times
- · Technical support







## Oxygen Sensor OOM105

Measurement Range: Output in 0-100% oxygen

ambient air: Electrical Compatible with Teledyne® T-7 sensor

Interface: Accuracy and Molexplug4P4C

Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

**Linearity** error: < 3 % relative

**Response time: Zero** < 5sec. to 90 % of final value **Offset Voltage:** < 100uVin 100% nitrogen

applied after 5 min

Cross Interference: Meets EN ISO 21647 requirements - 0.03
Influence of Humidity: % rel. per % RH at 25°C proportional to
Influence of Pressure: change in oxygen partial pressure

< 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

Operating Temperature: built-in NTC compensation between +25 °C Temperature Compensation: and +40 °C: 3 % relative error between 0 °C

Effect of Temperature

Compensation (steady state):

**Operating Humidity: Long Term** 

**Output Drift:** 

and +50 °C: 8 % relative error 0-99 % RH non-condensing

< 1 % vol oxygen per month

typically < -15 % relative over lifetime

-20 to +50 °C

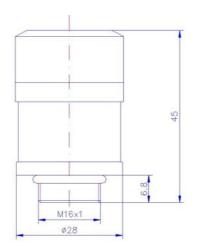
Storage Temperature: +5to+15°C

**Recommended Storage:** < 30 minutes, after replacement of sensor

Warm-Up Time: Nominal > 500.000 % vol oxygen hours
Sensor Lifetime: Weight: approximately 28 grams

Part No.: 01-00-0053

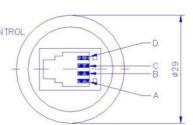
All specifications are applicable at standard conditions: 1013 hPa, 25°C dry ambient air





B: (+) C: (-)

D: TEMPERATURE CONTROL





- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable fast response
- Resistant to N<sub>2</sub>0
- · Excellent signal stability
- High product guality
- Short lead times
- Technical support



# **Oxygen Sensor OOM106**

ENVITEC by Honeywell

Measurement Range: Output in 0-100% oxygen ambient air: Electrical 9 to 13mV

Interface: Accuracy and 3pin (Molex 22-11-1031)

Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

**Linearity** error: < 3 % relative

Response time: Zero< 12sec. to 90 % of final value</th>Offset Voltage:<200uVin 100% nitrogen</th>

applied for 5 min

Cross Interference: Meets EN ISO 21647 requirements - 0.03
Influence of Humidity: % rel. per % RH at 25°C proportional to
Influence of Pressure: change in oxygen partial pressure
< 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

Operating Temperature: built-in NTC compensation between +25 °C Temperature Compensation: and +40 °C: 3 % relative error between 0 °C and +50 °C: 8 % relative error 0-99 % RH

Compensation (steady state): non-condensing

Operating Humidity: Long Term < 1 % vol. oxygen per month

Output Drift: typically < -15 % relative over lifetime -20 to +50 °C

Storage Temperature: +5to+15°C
Recommended Storage: > IOkOhms

**Recommended Load:** < 30 minutes, after replacement of sensor

Warm-Up Time: Nominal > 1.000.000 % vol. oxygen hours

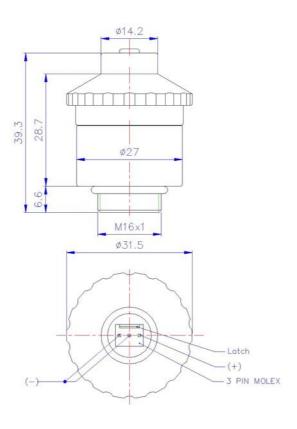
Sensor Lifetime: Weight: approximately 28 grams

Part No.: 01-00-0091

Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- · High product guality
- Short lead times
- Technical support

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





## Oxygen Sensor 00MI07 / 00MI 07-2

ENVITEC by Honeywell

Measurement Range: Output in ambient air: Electrical

170to230MA Gold plated slip rings

0-100% oxygen

Interface: Accuracy and Repeatability:

< 1 % vol. 02 when calibrated at 100 %

Oxygen

Linearity error: < 3 % relative

Response time: Zero Offset Voltage:

< 12sec. to 90% of final value < 200 MV in 100% nitrogen

applied for 5 min

**Cross Interference:** Influence of Humidity: Influence of Pressure: Meets EN ISO 21647 requirements -0.03%rel.per%RHat25°C proportional to change in oxygen partial pressure < 1% relative after a fall from 1 m

Influence of Mechanical Shock:

0 to 50°C

**Operating Temperature: Temperature Compensation: Operating Humidity: Long Term**  No temperature compensation 0-99 % RH non-condensing < 1 % vol. oxygen per month

**Output Drift:** 

typically < -15 % relative over lifetime

-20 to +50 °C +5to+15°C

Storage Temperature: **Recommended Storage:** 

> IOkOhms < 30 minutes, after replacement of sensor

**Recommended Load:** Warm-Up Time: Nominal Sensor Lifetime: Weight:

> 250.000 % vol. oxygen hours approximately 43 grams

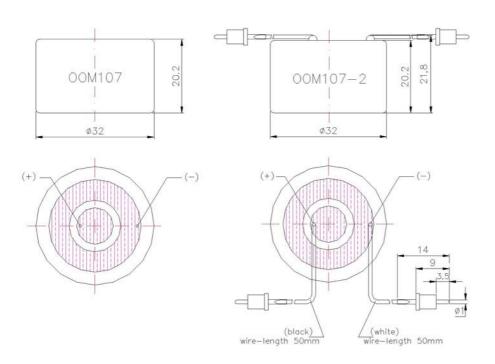
Part No.:

01-00-0058/OOM107 01-00-0080/OOM107-2

#### Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product guality
- Short lead times
- Technical support







## Oxygen Sensor 00MI09 / 00MI 09-LF2

ENVITEC by Honeywell

Measurement Range: Output in0-100% oxygenambient air: Electrical9 to 13mV

Interface: Accuracy and 3pin (Molex 22-11-1031)

**Repeatability:** < 1 % vol. 02 when calibrated at 100 %

Oxygen

**Linearity error**: < 3 % relative

**Response time: Zero** < 300msec. to 90 % of final value **Offset Voltage:** < 50 uV in 100 % nitrogen

applied for 5 min

Cross Interference:Meets EN ISO 21647 requirements -Influence of Humidity:0.03%rel.per%RHat25°C proportional toInfluence of Pressure:change in oxygen partial pressure

< 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

Operating Temperature: built-in NTC compensation

**Temperature Compensation:** between +25 °C and +40 °C: 3 % relative

Effect of Temperature err

**Storage Temperature:** 

**Recommended Storage:** 

Compensation (steady state): between 0 °C and +50 °C: 8 % relative error

0-99 % RH non-condensing

Operating Humidity: Long < 1 % vol. oxygen per month
Term Output Drift: typically < -15 % relative over life

typically < -15 % relative over lifetime

-20 to +50 °C +5to+15°C > IOkOhms

**Recommended Load:** < 30 minutes, after replacement of sensor

Warm-Up Time: Nominal > 200 000 % vol. oxygen hours
Sensor Lifetime: Weight: approximately 28 grams
Part No.: 01-00-0085/OOM109

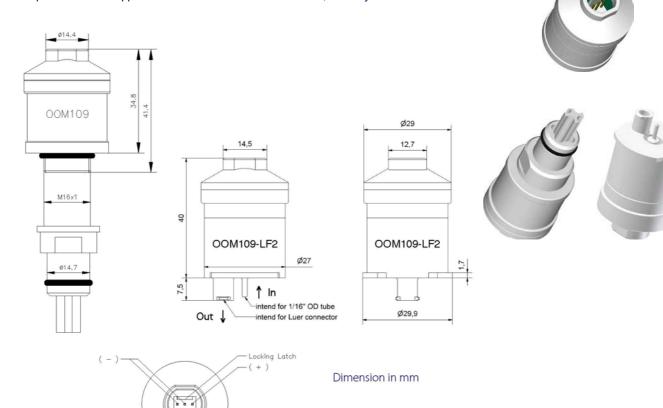
01-00-0116/OOM109-LF2

Fast Response Oxygen Sensor for Medical Breath by Breath Analysis

#### Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable ultra fast response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product guality
- OOM109: designed for main stream application
- OOM109-LF2: designed for side stream application
- Short lead times
- Technical support

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



3 PIN MOLEX CONNECTOR

# **Oxygen Sensor OOM110**

ENVITE() by Honeywell

Measurement Range: Output in ambient air: Electrical Interface: Accuracy and

Repeatability:

**Linearity error:** 

Response time: Zero Offset Voltage:

**Cross Interference:** Influence of Humidity:

Influence of Pressure:

Influence of Mechanical

Shock:

**Operating Temperature:** 

**Temperature Compensation: Effect of Temperature** 

Compensation (steady state):

**Operating Humidity: Long Term Output Drift:** 

**Storage Temperature:** -20 to +50 "C **Recommended Storage:** 

**Recommended Load:** Warm-Up Time:

**Nominal Sensor Lifetime:** 

Weight:

Part No.:

0-100% oxygen 10 to 12mV Modular Jack 6P4C

< 1 % vol. 02 when calibrated at 100 %

Oxygen < 3 % relative

< 12sec. to 90 % of final value < 200 £7V in 100 % nitrogen

applied after 5 min

Meets EN ISO 21647 requirements -0.03 % rel. per % RH at 25-C

proportional to change in oxygen partial

pressure

< 1% relative after a fall from 1m

0 to 50-0

built-in NTC compensation between +25 "C and +40 <C: 3 %

relative error

between 0 "C and +50 "0:8% relative

0-99% RH non-condensing < 1 % vol oxygen per month

typically < -15 % relative over lifetime

+5 to +15 <C >10 kOhms

< 30 minutes, after replacement of

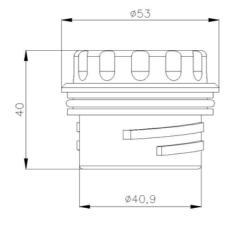
> 1.000.000 % vol oxygen hours approximately 50 grams 01-00-

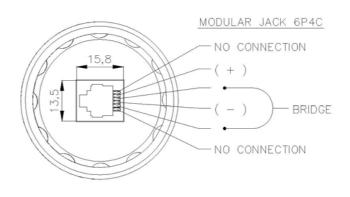
0098

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

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 and EN ISO 13485
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support







## Oxygen Sensor 00MI 11

ENVITEC by Honeywell

Measurement Range: Output in 0-100% oxygen ambient air: Electrical 11 to13mV

Interface: Accuracy and Stereo phone jack (3,5mm)

< 1 % vol. 02 when calibrated at 100 % Repeatability:

Oxvaen

Linearity error: < 3 % relative

Response time: Zero < 12sec. to 90% of final value Offset Voltage: < 200 MV in 100% nitrogen

applied after 5 min

**Cross Interference:** Meets EN ISO 21647 requirements -Influence of Humidity: 0.03%rel.per%RHat25°C proportional to Influence of Pressure:

change in oxygen partial pressure < 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

**Operating Temperature:** built-in NTC compensation between +25°C **Temperature Compensation:** and +40°C: 3 % relative error between 0 °C **Effect of Temperature** and +50 °C: 8 % relative error 0-99 % RH

Compensation (steady state): non-condensing

**Operating Humidity: Long Term** < 1 % vol oxygen per month

**Output Drift:** 

typically < -15 % relative over lifetime

-20 to +50 °C

**Storage Temperature:** +5to+15°C **Recommended Storage:** > IOkOhms

Recommended Load: < 30 minutes, after replacement of sensor

Warm-Up Time: Nominal > 1.000.000 % vol oxygen hours Sensor Lifetime: Weight: approximately 28 grams Sensor coding: Part No.: Built-in data memory chip

01-00-0114

Use the advantages:

Meets EN ISO 21647

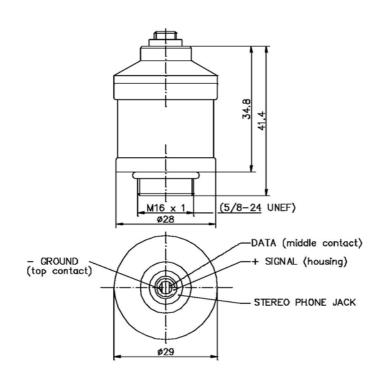
Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

2003

Sensor coding integrated Accurate and reliable response Resistant to N<sub>2</sub>0 Excellent signal stability High product quality

Short lead times Technical support

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





# Oxygen Sensor OOM112



Measurement Range: 0-100% oxygen Output in ambient air: 25 to 38 mV

**Electrical Interface:** Gold plated slip rings

**Accuracy and Repeatability:** < 1 % vol. 02 when calibrated at 100 %

**Linearity error:** < 3 % relative @ 70 % oxygen applied

for 5 minutes

Response time: Zero < 12sec. to 90 % of final value Offset Voltage: < 200 £7V in 100 % nitrogen

applied after 5 min

**Cross Interference:** Meets EN ISO 21647 requirements -Influence of Humidity:

0.03 % rel. per % RH at 25-C

proportional to change in oxygen partial

pressure

< 1% relative after a fall from 1m

**Influence of Mechanical** Shock:

Influence of Pressure:

**Operating Temperature:** 0 to +50<C

**Temperature Compensation:** Temperature compensation built-in **Operating Humidity:** 

0-99 % RH non-condensing **Long Term Output Drift:** < 1 % vol. oxygen per month

typically < -15 % relative over lifetime

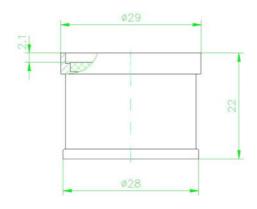
**Storage Temperature:** -20 to +50 "C **Recommended Storage:** +5 to +15 <C Recommended Load: Warm->10 kOhms

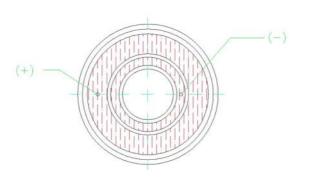
**Up Time:** < 30 minutes, after replacement of

**Nominal Sensor Lifetime:** > 500.000 % vol. oxygen hours Weight: approximately 28 grams 1001202

Part No.:

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





- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 and EN ISO 13485
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support



## Oxygen Sensor OOM201

**ENVITEC** by Honeywell

Measurement Range: Output in ambient air: Electrical Interface: Accuracy and

Repeatability:

Linearity error:

Response time: Zero Offset Voltage:

**Cross Interference:** 

Influence of Humidity: Influence of Pressure:

**Influence of Mechanical Shock: Operating Temperature: Temperature Compensation: Operating Humidity: Long Term Output Drift:** 

Storage Temperature: **Recommended Storage:** 

**Recommended Load:** Warm-Up Time: Nominal

Sensor Lifetime: Weight:

Part No.:

0-100% oxygen

14 to 20 mV (Dual Cathode), load 600 Ohms

Gold plated slip rings

< 1 % vol. 02 when calibrated at 100 %

Oxygen

< 3 % relative

< 12sec. to 90% of final value < 200 MV in 100% nitrogen

applied after 5 min

Meets EN ISO 21647 requirements -

0.03%rel.per%RHat25°C proportional to

change in oxygen partial pressure < 1% relative after a fall from 1 m

0 to 50°C

No temperature compensation 0-

99 % RH non-condensing < 1 % vol. oxygen per month

typically < -15 % relative over lifetime

-20 to +50 °C +5to+15°C

> IOkOhms

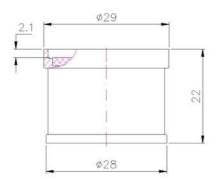
< 30 minutes, after replacement of sensor

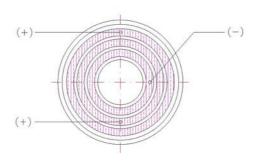
> 500.000 % vol. oxygen hours approximately 28 grams

01-00-0014

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product guality
- Short lead times
- Technical support







## Oxygen Sensor OOM202

ENVITE by Honeywell

Measurement Range: Output in ambient air: Electrical

**Influence of Mechanical Shock:** 

**Operating Humidity: Long Term** 

**Output Drift:** 

Part No.:

**Storage Temperature:** 

**Recommended Storage:** 

Interface: Accuracy and 3pin (Molex 22-11-1031)

Repeatability: < 1 % vol. 02 when calibrated at 100 %

> Oxygen < 2 % relative

Linearity error: Response time: Zero < 12 sec. to 90% of final value Offset Voltage: < 150 MV in 100% nitrogen

applied for 5 min

0-100% oxygen !3to16mV

**Cross Interference:** Meets EN ISO 21647 requirements -Influence of Humidity: 0.03%rel.per%RHat25°C proportional to Influence of Pressure: change in oxygen partial pressure < 1% relative after a fall from 1 m

0 to 50°C

**Operating Temperature:** built-in NTC compensation between +25°C **Temperature Compensation:** and +40°C: 3 % relative error between 0 °C **Effect of Temperature** and +50 °C: 8 % relative error 0-99 % RH Compensation (steady state):

non-condensing

< 1 % vol oxygen per month

typically < -15 % relative over lifetime

-20 to +50 °C +5to+15°C

> IOkOhms

Recommended Load: < 30 minutes, after replacement of sensor

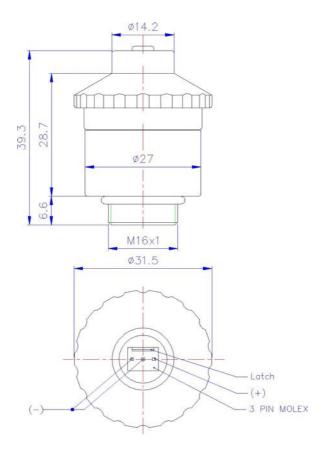
Warm-Up Time: Nominal > 1.000 000 % vol oxygen hours Sensor Lifetime: Weight: approximately 28 grams

01-00-0047

#### Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support





# Oxygen Sensor OOM202-1

ENVITE( by Honeywell

0-100% oxygen 13 Measurement Range: Output in ambient air: Electrical to 16mV 3,5mm Mono Jack Interface: Accuracy and

< 1 % vol. 02 when calibrated at 100 % Repeatability:

Oxygen

< 3 % relative Linearity error:

< 12 sec. to 90% of final value Response time: Zero <200uVin 100% nitrogen Offset Voltage:

applied for 5 min

Meets EN ISO 21647 requirements - 0.03 **Cross Interference:** Influence of Humidity: % rel. per % RH at 25°C proportional to change in oxygen partial pressure Influence of Pressure: < 1% relative after a fall from 1 m

Influence of Mechanical Shock: 0 to 50°C

built-in NTC compensation between +25 °C **Operating Temperature: Temperature Compensation:** and +40 °C: 3 % relative error between 0 °C and +50 °C: 8 % relative error 0-99% RH non-**Effect of Temperature** 

condensing Compensation (steady state):

< 1 % vol. oxygen per month **Operating Humidity: Long Term** 

**Output Drift:** 

typically < -15 % relative over lifetime

-20 to +50 °C

+5to+15°C Storage Temperature: > IOkOhms **Recommended Storage:** 

**Recommended Load:** < 30 minutes, after replacement of sensor

> 1.000 000 % vol. oxygen hours Warm-Up Time: Nominal

Sensor Lifetime: Weight: approximately 28 grams

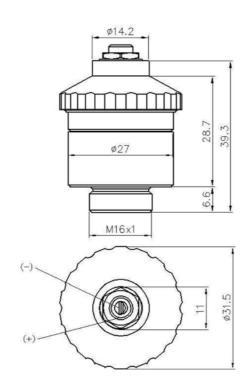
Part No.: 01-00-0021

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

#### Use the advantages:

- Meets DIN EN 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support



# Oxygen Sensor OOM202-2



Measurement Range: 0-100% oxygen
Output in ambient air: 9 to 13mV

Electrical Interface: Flying leads with 3pin female connector

(Molex 22-01-2037)

Accuracy and Repeatability: < 1 % vol. 02 when calibrated at 100 %

Oxygen

Linearity error: < 3 % relative

Response time: Zero < 12 sec. to 90 % of final value < 200 £7V in 100 % nitrogen

applied for 5 min

Cross Interference: Meets EN ISO 21647 requirements - 0.03% rel. per % RH at 250 proportional to change in

Influence of Pressure: oxygen partial pressure

< 1% relative af •

1 %

Influence of Mechanical Shock:  $_{0\ to\ 50 < C}$ 

Operating Temperature: built-in NTC compensation between +25 "C to Temperature Compensation: built-in NTC compensation between +25 "C to +40 "0:3% relative error between 0 O to +50

Effect of Temperature "0:8% relative error 0-99% RH non-

Compensation (steady state): condensing Operating Humidity: Long

Term Output Drift: vol oxygen per month

typically < -15 % relative over lifetime

Storage Temperature: -20 to +50 <C

Recommended Storage: +510+15 0 > 10

Recommended Storage: +510+15-0 >10 kOhms

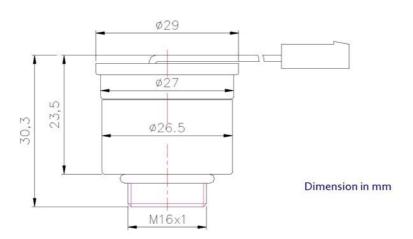
Warm-Up Time: Nominal < 30
Sensor Lifetime: Weight: minutes, after replacement of sensor > 1,000,000% yell exygen hours

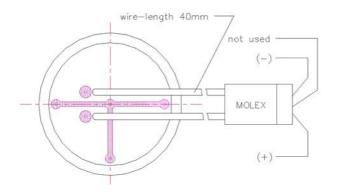
> 1,000,000% vol oxygen hours

approximately 28 grams

01-00-0068

All specifications are applicable at standard conditions: 1013 hPa, 25<sup>C</sup> dry ambient air





#### Use the advantages:

- Meet DIN EN 21647
- Designed and manufactured according to EN ISO 9001 and EN ISO 13485
- Accurate and reliable

response

Resistant to N<sub>2</sub>0

- Excellent signal stability
- High product quality
- Short lead times
- Technical support



# Oxygen Sensor OOM202-2S

ENVITEC

by Honeywell

Measurement Range: Output in 0-100% oxygen 9 ambient air: Electrical to 11.5mV AMP350777-1 Interface: Accuracy and

< 1 % vol. 02 when calibrated at 100 % Repeatability:

Oxygen

Linearity error: Response < 3 % relative

time: Zero Offset Voltage: < 12 sec. to 90% of final value

**Cross Interference:** < 200 uV in 100 % nitrogen applied for 5 min

Influence of Humidity: Meets EN ISO 21647 requirements

Influence of Pressure: - 0.03% rel. per%RHat25°C proportional to

change in oxygen partial pressure

**Influence of Mechanical Shock:** < 1% relative after a fall from 1 m

**Operating Temperature:** 0 to 50°C

**Temperature Compensation:** built-in NTC compensation between +25 °C **Effect of Temperature** and +40°C: 3 % relative error between 0 °C

Compensation (steady state): and +50 °C: 8 % relative error 0-99% RH

**Operating Humidity: Long Term** non-condensing

**Output Drift:** 

< 1 % vol oxygen per month

typically < -15 % relative over lifetime

**Storage Temperature:** -20 to +50 °C Recommended Storage: +5to+15°C **Recommended Load:** > IOkOhms

Warm-Up Time: Nominal < 30 minutes, after replacement of sensor

Sensor Lifetime: Weight: > 1.000 000 % vol oxygen hours

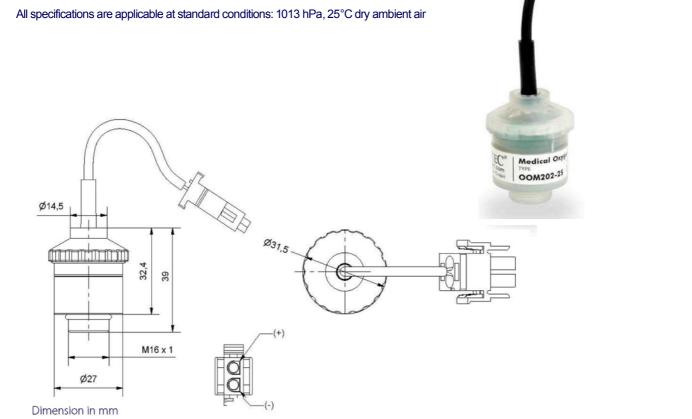
Part No.: approximately 30 grams

1000106

#### Use the advantages:

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485:

- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product guality
- Short lead times
- Technical support



## Oxygen Sensor OOM204

**ENVITEC** by Honeywell

Measurement Range: Output in ambient air: Output difference: **Electrical Interface: Accuracy** 

and Repeatability:

0-100% oxygen 9 to 13,5mV(each of two channels) 1,25mV (between the two channels) 3pin

(Molex 22-11-1031)

< 1 % vol. 02 when calibrated at 100 %

Linearity error: Oxygen < 3 % relative Response time: Zero

< 12sec. to 90 % of final value Offset Voltage: <200uVin 100% nitrogen

**Cross Interference:** applied after 5 min

Influence of Humidity: Meets EN ISO 21647 requirements -Influence of Pressure: 0.03% rel. per%RHat25°C proportional to change in oxygen partial pressure

Influence of Mechanical Shock: < 1% relative after a fall from 1 m

**Operating Temperature:** 0 to 50°C

**Temperature Compensation:** built-in NTC compensation between +25 °C

and +40 °C: 3 % relative error between 0 °C **Effect of Temperature** Compensation (steady state): and +50 °C: 8 % relative error 0-99% RH non-

**Operating Humidity: Long Term** condensing

< 1% vol. oxygen per month **Output Drift:** 

typically < -15 % relative over lifetime

-20 to +50 °C **Storage Temperature:** +5to+15°C Recommended Storage: Recommended Load: > IOkOhms

< 30 minutes, after replacement of sensor Warm-Up Time: Nominal

Sensor Lifetime: Weight: > 500.000 % vol. oxygen hours Part No.: approximately 28 grams

01-00-0097

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

- Meets EN ISO 21647
- Designed and manufactured according to EN ISO 9001 :2000 and EN ISO 13485: 2003
- Accurate and reliable response
- Resistant to N<sub>2</sub>0
- Excellent signal stability
- High product quality
- Short lead times
- Technical support



