Honeywell
Healthcare Solutions GmbH

OOA101

Oxygen Sensor

„We keep your devices operating at their best.“

Honeywell Healthcare Solutions GmbH formerly known as EnviteC-Wismar GmbH has been developing and manufacturing highly specialized products for medical applications and innovative products within the gas measurement technology for environmental, industrial and safety applcations.

The company trusts in the quality of advanced production methods and processes. The result are oxygen sensors for automotive emission gas analysers, which share the same extraordinary quality, excellent signal stability and reliable response for accurate readings. These sensors for measuring the partial pressure of oxygen in automotive exhaust gases are designed

to meet PTB and BAR standards.

Honeywell research and development activities are consistently aligned to customer and market needs – identification and optimization of sustainable product solutions are the main concerns of the company.

From standard sensors to customized sensors

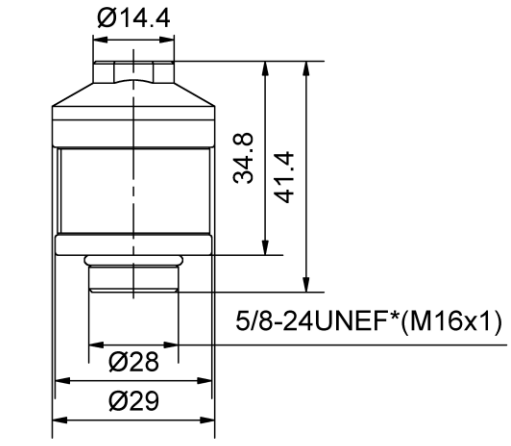
Experienced Honeywell engineers analyze customer requirements.This input is used for different standard and OEM applications, and ongoing support is provided right up to the final integraton in the solution. Honeywell designs customized sensors characterized by a maximum possible degree of precision.

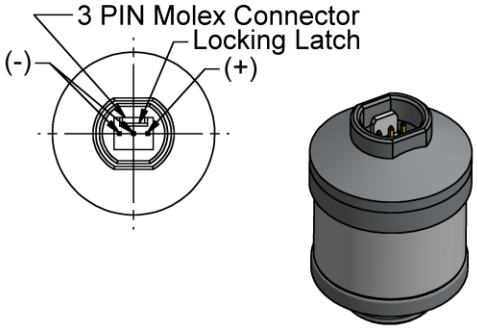
For more information please contact us!
We look forward to assisting you either on the phone or in a personal talk.

Use the advantages:

- Meets BAR and PTB requirements
- Certified quality management system
- Accurate and reliable response
- Excellent selectivity against CO2
- Excellent signal stability
- High product quality
- Short delivery times
- Technical support
- Made in Germany

Mechanical drawing (dimensions in mm)





General tolerances ISO 2768-c
*Intermediate thread: Metric / Unified Extra Fine

Oxygen Sensor OOA101 Technical Specification

CHARACTERISTIC	MEASURE
MEASUREMENT RANGE	0 % ... 100 % oxygen (at atmospheric pressure)
OUTPUT IN AMBIENT AIR	7 mV ... 13 mV
ELECTRICAL INTERFACE	3 pin (Molex® 22-04-1031)
ACCURACY	0 % … 3.3 % oxygen: ± 0.1 % absolute 3.4 % … 100 % oxygen: ± 3 % relative
LINEARITY ERROR	< 3 % relative
RESPONSE TIME	< 5 s to 90 % of final value; < 40 s fall time from 20.95 % to 0.1 % oxygen (when 100 % nitrogen applied)
ZERO OFFSET VOLTAGE	< 40 µV in 100 % nitrogen<
CROSS INTERFERENCE	< 0.1 % oxygen response to: 15 % CO2 balance N2; 10 % CO balance N2; 3000 ppm NO balance N2; 3000 ppm C3H8 balance N2; 500 ppm H2S balance N2; 500 ppm SO2 balance N2; 1000 ppm benzene balance N2
INFLUENCE OF HUMIDITY	-0.03 % rel. per % RH at 25 °C
PRESSURE RANGE	0.6 bar … 2 bar (ppO2 0 … 1250 mbar O2)
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 kOhm
WARM-UP TIME	< 30 minutes, after replacement of sensor
NOMINAL SENSOR LIFETIME	≥ 500 000 % volume oxygen hours
WEIGHT	approximately 28 grams
PART NUMBER	E01-00-0030

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

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages. While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer's sole responsibility to determine the suitability of the product in the application. Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Honeywell assumes no responsibility for its use.

Honeywell Healthcare Solutions GmbH
Alter Holzhafen 18, 23966 Wismar, Germany
Phone: +49 (0)3841 360 1
Phone: +49 (0)3841 360 200
Fax: +49 (0)3841 360 222

info@envitec.com
www.envitec.com

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