Nitric Oxide Sensor

NO 3E 100

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FEATURES

Amperometric 3 electrode sensor cell selective good zero stability fast response short warm up time

TYPICAL APPLICATIONS

leakage detection portable & fixed point applications

PART NUMBER INFORMATION

MINI 1945-034-30009 4 series adaptation 1945-034-30049

NO 3E 100

TECHNICAL SPECIFICATIONS

 $\begin{array}{ll} \mbox{Measuring Range} & \mbox{0--100 ppm / 0-500 ppm} \\ \mbox{Sensitivity Range} & \mbox{45 nA/ppm \pm 15 nA/ ppm} \end{array}$

Zero Current at 20 °C < ± 30 nA after warm up time of at least 12 hrs

Resolution at $20\,^{\circ}\text{C}$ < 0.7 ppm Bias Potential 200 mV

Linearity < 5% full scale

Response Time at 20 ℃ with recommended load resistor of 100 Ohm

< 10 s calculated from 4 min. exposure time
 < 20 s calculated from 4 min. exposure time

Long Term Sensitivity Drift < 5% per month

Operation Conditions

Temperature Range -15°C to +40°C

Humidity Range 20–90% r.H., non–condensing

Effect of Humidity exposure in dry air will decrease the sensitivity

Sensor Life Expectancy > 24 months Warranty 12 months

Rev. 11/2011

Product Data Sheet

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CROSS SENSITIVITIES AT 20 ℃

Gas	Concentration	Reading [ppm]
Alcohols Carbon Dioxide Carbon Monoxide Chlorine Hydrocarbons Hydrogen Hydrogen Cyanide Hydrogen Sulfide Nitrogen	1000 ppm 5000 ppm 100 ppm 1 ppm 5 ppm 3000 ppm 20 ppm 10 ppm 100 %	0 0 0 0 0 0 5 yes; n/d 0
Nitrogen Dioxide Ozone Sulfur Dioxide unsat. Hydrocarbons	10 ppm 0.25 ppm 20 ppm	3.5 0 6 yes; n/d

Notes:

- 1. Interference factors may differ from sensor to sensor and with life time. It is not adviseable to calibrate with interference gases.
- 2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

Safety Note

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

Attention

Use of this range of sensors requires complete understanding of the instructions. Before using this range of sensors please carefully read 'Application Notes'.

For further assistance on sensor selection and use, please contact a member of the Technical Sales team.