NO₂ - Industrial Sensor / Type I-53



.: KEY FEATURE :.

Amperometric gas sensor with low interferences to nitric oxide and other gases, designed to detect low NO₂ concentrations.

All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa and gas flow 1 NL/min.

Operating Principle: 3-electrode potentiostatic driven cell (delivered with potentiostat)

Measurement Range:1 to 500 ppmMaximum Overload:up to 1500 ppmElectrical Connector:4-pin Molex®

Mechanical Mating Connector:fits for M16x1 DIN 13 or 5/8-24 UNEFSensor Lifetime:2 years, depending on application

Sensitivity: - 200 to - 450 nA/ppm

Response Time t₉₀: < 7s

Drift: < 10 % signal/year

Zero Offset: $<\pm 1$ ppm

Reproducibility: < 1.5% @ 500ppm NO₂ (180s test gas - 180s dry ambient air - 180s test

gas, constant environmental conditions)

Operating Temperature: 0 to 50 °C

Temperature Compensation: signal not temperature compensated

Pressure Range: 600 to 1250 hPa Humidity Range: 30 to 90 % RH

Interferences:Lambda-Mix[high, A1]:< 0.2 % of NO $_2$ responseNO[795ppm]:< 3% of NO $_2$ response

 $\begin{array}{lll} SO_2 & [1020ppm]: & -1.5\% < x < 0 \text{ of NO}_2 \text{ response} \\ H_2S & [504ppm]: & -12\% < x < 0 \text{ of NO}_2 \text{ response} \\ CO & [249ppm]: & <0.2\% \text{ of NO}_2 \text{ response} \end{array}$

Weight: approximately 24g

Material in Contact with Media: PP, PPS, PTFE, stainless steel

.: STORAGE CONDITIONS IN PACKAGE IN UNOPENED ORIGINAL PACKAGE

Temperature Range: recommended: 5 to 30 °C

maximum: -20 to 50 °C

Ambient Pressure: 600 to 1250 hPa

Humidity: 10 to 98 % RH (non-condensing)

.: RELATED PRODUCTS :.

Product Part-No. Housing Colour Remarks

 NO_2 - Sensor I-52 48 00 32 grey potentiostat not integrated NO_2 - Sensor I-53 48 00 46 grey potentiostat integrated

This data sheet is subject to change without prior notice. [I-53-Rev05_2019_0603.doc]