

# NO | lead-free Automotive Sensor | Type A-22



## .: KEY FEATURES :.

**Amperometric gas sensor designed for use in automotive exhaust gas analyzers. Meets BAR-97 rev2017 requirements.**

*All characteristics are based on conditions at 25 °C, 50 %rH, 1013 hPa and a gas flow of > 2.5 NL/min.*

<b>Operating principle:</b>	3-electrode potentiostatic driven cell (potentiostat integrated, battery buffered)	
<b>Measurement Range:</b>	1 ... 5 000 ppm	
<b>Sensitivity:</b>	40 ... 75 nA/ppm	
<b>Response Time <math>t_{90}</math>:</b>	≤ 5 s	
<b>Zero Signal Offset:</b>	≤ 5 ppm	
<b>Linearity Error:</b>	< ± 4 % at 0 ... 4 000 ppm NO bal. N <sub>2</sub> < ± 12 % at 4 001 ... 5 000 ppm NO bal. N <sub>2</sub>	
<b>Sensor Lifetime:</b>	24 months, depending on application	
<b>Electrical Connector:</b>	4-Pin Molex <sup>®</sup>	
<b>Gas Connector:</b>	fits for M16x1 DIN 13 or 5/8-24 UNEF	
<b>Warm-up Time:</b>	none	
<b>Signal Drift:</b>	≤ 10 % of signal per year, depending on application	
<b>Operating Temperature Range:</b>	0 ... 45 °C	
<b>Operating Humidity Range:</b>	25 ... 95 %rH (non-condensing)	
<b>Temperature Compensation:</b>	Signal not temperature compensated	
<b>Interferences:</b>	Lambda-Mix	[high, A1]: < 20 ppm NO equivalents
	NO <sub>2</sub>	[50 ppm]: < 20 ppm NO equivalents
	SO <sub>2</sub>	[250 ppm]: < 20 ppm NO equivalents
	H <sub>2</sub> S	[500 ppm]: < 20 ppm NO equivalents
	CO	[250 ppm]: < 0.1 % of NO response
	CO <sub>2</sub>	[100 Vol.%]: none
	H <sub>2</sub>	[100 Vol.%]: < 2 % of NO response
	O <sub>2</sub>	[100 Vol.%]: none
<b>Weight:</b>	≤ 26 g	
<b>Material in Contact with Media:</b>	PP, PPS, PTFE, Stainless Steel, NBR	



## .: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE :.

<b>Temperature Range:</b>	5 to 30 °C	recommended
	-20 to 50 °C	maximum (< 72 hours)
<b>Pressure Range:</b>	600 to 1250 hPa	
<b>Humidity Range:</b>	10 to 98 %rH	(non-condensing)
<b>Shelf Life:</b>	< 3 months recommended	

## .: RELATED PRODUCTS :.

Product	Part-No.	Housing Colour	Other Specifics
NO-Sensor A-21	44 00 08	grey	With integrated potentiostat, connector cable
NO-Sensor A-22	44 00 05	grey	With integrated potentiostat
NO-Sensor A-22D	44 04 05	grey	With integrated potentiostat, digital signal
NO-Sensor A-23	44 00 01	grey	With integrated potentiostat, different pin-configuration