Product Specification of:

NO | lead-free Automotive Sensor | Type A-21

.: 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.



Operating principle:	3-electrode potentiostatic driven cell (potentiostat integrated, battery buffered)		
Measurement Range:	1 … 5 000 ppm		
Sensitivity:	40 … 75 nA/ppm		
Response Time t_{90}:	≤ 5 s		
Zero Signal Offset:	≤ 5 ppm		
Linearity Error:	< ± 4 % at 0 … 4 000 ppm NO bal. N_2 < ± 12 % at 4 001 … 5 000 ppm NO bal. N_2		
Sensor Lifetime:	24 months, depending on application		
Electrical Connector:	4-Pin Molex ©		
Gas Connector:	fits for M16x1 DIN 13 or 5/8-24 UNEF		
Warm-up Time:	none		
Signal Drift:	≤ 10 % of signal per year, depending on application		
Operating Temperature Range:	0 … 45 °C		
Operating Humidity Range:	25 … 95 %rH (non-condensing)		
Temperature Compensation:	Signal not temperature compensated		
Interferences:	Lambda-Mix	[high, A1]:	< 20 ppm NO equivalents
	NO_2	[50 ppm]:	< 20 ppm NO equivalents
	SO_2	[250 ppm]:	< 20 ppm NO equivalents
	H_2S	[500 ppm]:	< 20 ppm NO equivalents
	CO	[250 ppm]:	< 0.1 % of NO response
	CO_2	[100 Vol.%]:	none
	H_2	[100 Vol.%]:	< 2 % of NO response
	O_2	[100 Vol.%]:	none
Weight:	≤ 26 g		
Material in Contact with Media:	PP, PPS, PTFE, Stainless Steel, NBR		

.: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE :.

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

IT Dr. Gambert GmbH .: Hinter dem Chor 21 .: 23966 Wismar .: Germany

Phone: +49 (0)3841 220 050 .: Fax: +49 (0)3841 220 052 2 .: E-Mail: sales@itg-wismar.de **www.itg-wismar.de**