Product Specification of:

O_2 | Automotive Sensor | Type A-01

.: KEY FEATURES :.

Galvanic gas sensor designed for use in automotive exhaust gas analysers, released according to PTB 18.10, meets all OIML standards and BAR '02 requirements.

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



Measurement Range:	0 to 25 Vol.% O_2
Expected Operating Life:	< 3 years @ ambient air, depending on application
Nominal Sensor Life:	< 500.000 Vol.%h O_2
Electrical Connector:	3-Pin Molex
Initial Output Signal:	8 to 14 mV @ dry ambient air
Response Time t_{90}:	< 5 s
Signal Drift:	< 10 % / year, depending on application
Accuracy:	< 2 Vol.% O_2 ± 0.1 Vol.% O_2 < 25 Vol.%O_2 ± 0.5 Vol.% O_2
Zero Offset Voltage:	< U_a/200 @ 100 Vol.% N_2, applied for 40 s
Operating Temperature Range:	0 to 50 °C
Operating Pressure Range:	700 to 1750 hPa
Influence of Gas Humidity:	-0.03 % rel. O_2 reading per %rH
Recommended Load Resistor:	≥ 10 kOhm
Temperature Compensation:	NTC on Sensor PCB
Cross Sensitivities:	< 0.1 Vol.%O_2 response to: 15.0 Vol.% CO_2, balance N_2 — 3 000 ppm C_3H_8, balance N_2 10.0 Vol.% CO, balance N_2 — 500 ppm H_2S, balance N_2 3 000 ppm NO, balance N_2 — 500 ppm SO_2, balance N_2 1 000 ppm Benzene, balance N_2
Weight:	< 27 g
Material in Contact with Media:	PA12, PTFE, Stainless Steel, PPS, NBR

.: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE :.

Temperature Range:	5	to	25 °C	recommended
	-20	to	50 °C	maximum (< 72 hours)
Pressure Range:	600	to	1750 hPa	
Humidity Range:	10	to	98 %rH	(non-condensing)
Shelf Life:	< 6 months recommended			

.: RELATED PRODUCTS :.

Product	Part-No.	Housing Colour	Other Specifics
O_2-Sensor A-01M	44 01 01	white	Initial Output Signal: 8.0 to 12.5 mV, Cap diameter: 31.6 mm
O_2-Sensor A-01T	47 00 03	translucent	Initial Output Signal: 9.0 to 13.5 mV, Cap diameter: 31.6 mm
O_2-Sensor A-01AVLT	47 00 05	translucent	Initial Output Signal: 8.0 to 12.0 mV, Cap diameter: 30.2 mm
O_2-Sensor A-01ST	47 00 01	translucent	Initial Output Signal: 10.0 to 14.0 mV, Cap diameter: 31.6 mm

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