

Product Specification of:

O₂ - Automotive Sensor / Type A – 01



.: KEY FEATURE .:

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 and 1013 hPa.

Electrical Connector:	3-pin-Molex®
Measurement Range:	0 to 25 Vol.%
Accuracy:	< 2 Vol.% ± 0.1 % < 25 Vol.% ± 0.5 %
Sensor Lifetime:	< 3 years @ ambient air
Expected Operating Life:	~ 500,000 Vol.% h
Initial Output Signal:	8.0 to 14.0 mV @ dry ambient air
Response Time t_{90} :	< 5 s
Signal Response to N ₂ :	U _a /200 @ 100% N ₂ in < 40 s
Drift:	10 % / year
Operating Temperature:	0 to 50 °C
Pressure Range:	700 to 1750 hPa
Influence of Humidity:	-0.03 % rel. O ₂ reading per % RH
Recommended Load Resistor:	≥ 10 kOhm
Temperature Compensation:	NTC
Interferences:	< 0.1 % O ₂ response to: 15.0 % CO ₂ balanced N ₂ 3,000 ppm C ₃ H ₈ balanced N ₂ 10.0 % CO balanced N ₂ 500 ppm H ₂ S balanced N ₂ 3,000 ppm NO balanced N ₂ 500 ppm SO ₂ balanced N ₂ 1,000 ppm Benzene balanced N ₂
Weight:	approximately 25 g
Material in Contact with Media:	PA 12, PPS, PTFE, stainless steel



.: STORAGE CONDITIONS .:

Temperature Range:	recommended: 5 to 25 °C maximum: -20 to 50 °C
Ambient Pressure:	600 to 1750 hPa
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: 9.0 to 12.0 mV, Cap diameter: 30.2 mm
O ₂ - Sensor A-01ST	47 00 10	translucent	Initial Output Signal: 10.0 to 14.0 mV, Cap diameter: 31.6 mm

This data sheet is subject to change without prior notice. [A-01_Rev_012012.doc]

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