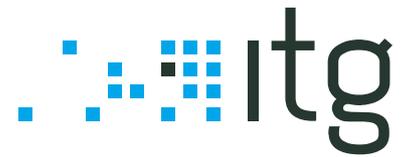


Product Specification of:

## O<sub>2</sub> - Automotive Sensor / Type A – 02



### :: KEY FEATURE ::

**Galvanic gas sensor designed for use in automotive exhaust gas analyzers, 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.*

<b>Electrical Connector:</b>	3.5 mm mono jack
<b>Measurement Range:</b>	0 to 25 Vol.%
<b>Accuracy:</b>	< 2 Vol.% ± 0.1% < 25 Vol.% ± 0.5%
<b>Sensor Lifetime:</b>	< 3 years @ ambient air
<b>Expected Operating Life:</b>	~ 500,000 Vol.% h
<b>Initial Output Signal:</b>	9.0 to 13.0 mV @ dry ambient air
<b>Response Time t<sub>90</sub>:</b>	< 5 s
<b>Signal Response to N<sub>2</sub>:</b>	U <sub>a</sub> /200 @ 100 % N <sub>2</sub> in < 40 s
<b>Drift:</b>	10 % / year
<b>Operating Temperature:</b>	0 to 50 °C
<b>Pressure Range:</b>	700 to 1750 hPa
<b>Influence of Humidity:</b>	- 0.03 % rel. O <sub>2</sub> reading per % RH
<b>Recommended Load Resistor:</b>	≥ 10 kOhm
<b>Temperature Compensation:</b>	NTC
<b>Interferences:</b>	< 0.1 % O <sub>2</sub> response to: 15.0 % CO <sub>2</sub> balanced N <sub>2</sub> 3,000 ppm C <sub>3</sub> H <sub>8</sub> balanced N <sub>2</sub> 10.0 % CO balanced N <sub>2</sub> 500 ppm H <sub>2</sub> S balanced N <sub>2</sub> 3,000 ppm NO balanced N <sub>2</sub> 500 ppm SO <sub>2</sub> balanced N <sub>2</sub> 1,000 ppm Benzene balanced N <sub>2</sub>
<b>Weight:</b>	approximately 25 g
<b>Material in Contact with Media:</b>	PA 12, PPS, PTFE, stainless steel



### :: STORAGE CONDITIONS ::

<b>Temperature Range:</b>	recommended: 5 to 25 °C maximum: -20 to 50 °C
<b>Ambient Pressure:</b>	600 to 1750 hPa
<b>Shelf Life:</b>	< 6 months recommended

### :: RELATED PRODUCTS ::

Product	Part-No.	Housing Colour	Other Specifics
O <sub>2</sub> - Sensor A-02T	47 00 11	translucent	Initial Output Signal: 9.0 to 12.5 mV, O-Ring: 14 x 1.78 mm
O <sub>2</sub> - Sensor A-02BT	47 00 20	translucent	Initial Output Signal: 10.0 to 12.0 mV, O-Ring: 14 x 2.5 mm
O <sub>2</sub> - Sensor A-02ST	47 00 14	translucent	Initial Output Signal: 10.0 to 13.0 mV, O-Ring: 14 x 1.78 mm

*This data sheet is subject to change without prior notice. [A-02\_Rev\_012012.doc]*

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