

Product Specification of:

## O<sub>2</sub> - Industrial Sensor / Type I-06



### :: KEY FEATURE ::

**Galvanic gas sensor specially designed for work in cold ambient conditions.**

*All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.*

<b>Measurement Range:</b>	0 to 100 Vol.%
<b>Expected Operating Life:</b>	~ 750,000 Vol.% h
<b>Sensor Lifetime:</b>	< 4 years @ ambient air
<b>Electrical Connector:</b>	3-pin Molex®
<b>Initial Output Signal:</b>	12.0 to 14.0 mV @ dry ambient air
<b>Response Time t<sub>90</sub>:</b>	-5 °C ≤ 12 s                      20 °C ≤ 4s 0 °C ≤ 10 s                      30 °C ≤ 2s 10 °C ≤ 8s
<b>Linearity Error:</b>	0 to 2 Vol.% O <sub>2</sub> : ± 0.1 % absolute 2.1 to 25 Vol.% O <sub>2</sub> : ± 0.5 % relative 25.1 to 100 Vol.% O <sub>2</sub> : ± 1.5 % relative
<b>Signal Response to N<sub>2</sub>:</b>	< [U <sub>a</sub> /200] in 100 % N <sub>2</sub> within 40 s
<b>Operating Temperature:</b>	0 to 30 °C (max. error of temp. compensation < 3 %) -10 to 50 °C (max. error of temp. compensation < 10 %)
<b>Pressure Range:</b>	700 to 1250 hPa
<b>Influence of Humidity:</b>	- 0.03 % rel. O <sub>2</sub> reading per % RH
<b>Temperature Compensation:</b>	NTC
<b>Recommended Load Resistor:</b>	≥ 10 kOhm
<b>Interferences:</b>	< 0.1 % O <sub>2</sub> response to: 10.0 Vol.% CO, balance N <sub>2</sub> 500 ppm H <sub>2</sub> S, balance N <sub>2</sub> 15.0 Vol.% CO <sub>2</sub> , balance N <sub>2</sub> 3,000 ppm NO, balance to N <sub>2</sub> 3,000 ppm C <sub>3</sub> H <sub>8</sub> , balance N <sub>2</sub> 500 ppm SO <sub>2</sub> , balance N <sub>2</sub> 1,000 ppm Benzene, balance 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: 0 to 30 °C maximum: - 20 to 50 °C
<b>Ambient Pressure:</b>	600 to 1750 hPa
<b>Humidity:</b>	up to 100 % RH
<b>Shelf Life:</b>	< 6 months recommended

### :: RELATED PRODUCTS ::

Product	Part-No.	Housing Colour
O <sub>2</sub> - Sensor I-06	47 00 06	black

*This data sheet is subject to change without prior notice. [I-06-Rev\_022012.doc]*

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