

Product Specification of:

Industrial O₂-Sensor I-01

Part. No.: 48 00 14

Key Features: sensor contains acid electrolyte to withstand high CO₂ concentrations,
high resistivity to acid gases, short response time

All characteristics are based on conditions at 25°C, 50% rel. H. and 1013 mBar

Electrical Connector:	3-pin Molex
Measurement Range:	0 to 35 Vol. %
Nominal Sensor Life:	more than 1 200 000 Vol. % h
Expected Operating Life:	6 years @ ambient air
Output Signal:	7 to 17 mV @ dry ambient air
Response Time t_{90} :	less than 5 sec
Linearity Error:	0 to 2 % oxygen: ± 0.1 % absolute 2.1 to 25 % oxygen: ± 0.5 % relative
Drift:	less than 3 % per month
Operating Temperature:	0 to 50°C
Pressure Range:	600 to 1750 hPa
Influence of Humidity:	corresponding to change in partial pressure change of O ₂
Recommended Load Resistor:	≥ 1 MOhm
Temperature Compensation:	NTC
Interferences	less than 20 ppm O ₂ response to: 100 Vol. % CO 100 Vol. % CO ₂ 3000 ppm NO, balance N ₂ 1000 ppm H ₂ , balance N ₂ 100 Vol. % C ₃ H ₈ 2000 ppm H ₂ S, balance N ₂ 2000 ppm SO ₂ , balance N ₂ 1000 ppm Benzene, balance N ₂

Storage Conditions

Temperature Range:	recommended: 5 to 25°C maximum: - 15 to 60°C
Ambient Pressure:	600 to 1750 hPa
Humidity:	up to 100 % R. H.
Material in Contact with Media:	PA 12, PPS, Stainless Steel, PTFE
Shelf Life:	less than 6 months recommended
Weight:	approximately 25 g
Warranty Period:	15 months
Colour:	white housing

[I-01 Rev. 01-03]

page 1 / 2

Industrial O₂-Sensor I-01

Part. No.: 48 00 14

Outline dimensions and pin configuration

(Dimension units are: mm)

