

OXYGEN ANALYZER

MOD. E705 - LOW



This analyzer, based on an yttria stabilized zirconia cell, it has several operating features such as:

- The possibility to detect tiny amounts of O₂ (fractions of ppb)
- No interference with other gases thanks to the vacancy of O₂ in the cell structure. O₂ measurement depends only on the amount of O₂ in the gas to be analyzed.

The peculiar design of the analysis chambers ensures no affection from gas flow variation. Moreover, no periodic calibration is needed thanks to complete temperature compensation. Since it has no moving parts and the cell is not affected by wear, the whole instrument has a really long duration.

The electronic provides a wide range of O₂ measurement in volume and is equipped with analog, digital and serial outputs and a comprehensive self-diagnostics. It can optionally be equipped with Hart protocol.

This model E705 – LOW is expressly design to detect very low amounts of O₂. The materials in contact with the gas are carefully selected and ensure no influence on the very low quantity of O₂ to be detected.

This analyzer cannot be used for O₂ measurement in flammable gases because the cell is warmed at a temperature above the point of glow.

Technical specifications

Analyzed gas	Oxygen in gas phase
Measuring principle	Stabilized zirconia
Measuring range	1 ppb – 25% O ₂ by volume
Accuracy according to EN 14956	+/- 0.5% of theoretical value or 0.1% O ₂ whichever is the greater +/- 0.5% of full range in the ppm range (2000 ppm)
Response time (90%)	< 10 sec with 3 l/min flow
Response time ppm (90%)	Depending on the amount of O ₂
Sample gas flow	0.5 – 3 l/min
Flow adjusting	To be done upstream
Analog outputs	4 – 20 mA isolated, max load 500 ohm or 0 – 10 V, 10 mA linear on one of the following selectable ranges: 0 – 1 ppm; 0 – 10 ppm; 0 – 1999 ppm 0 – 5%; 0 – 10%; 0 – 25%. if the value is not valid the output is switched to 2 mA
Serial outputs	Mod Bus RTU on RS 485
Options	Hart protocol
Alarms	Potential free for: high O ₂ , low O ₂ , not valid measurement, service, lack of flow. For all: 250 V, 1 A max.
Dumper	Time constant selectable from 0 and 900 sec
Power supply	230 e 115 V AC +/- 10% 50/60 Hz 300 VA max
EMC	According to EN 50081 e 50082
Electrical safety	According to EN 61010 – 1
Temperature limits	0 – 40°C
Humidity	< 90% non-condensing
Storage temperature	- 40 / +80°C
Sample gas input and output	mm. 6x4 tubing
Test gas input	mm. 6x4 tubing
Housing	Rack 19" 3 units IP20
Dimensions	450x132 mm, depth 380 mm
Weight	9 Kg approx.
Pump	No suction pump

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