CO000029 - O2 Analyzer

O2 analyzers were designed specifically for the wine industry. These enable precise, real-time monitoring of oxygen levels in fermentation tanks providing complete control of the production process.



ADVANTAGES

- Fast and consistent measures at all concentrations
- · High selectivity with minimal interferences
- Direct flow measurement capability
- Long-term precision and reliability
- · Low power consumption

TECHNICAL SPECIFICATIONS

GAS DETECTION: Oxygen (O2)

Principle	Infrared Luminescence
Measuring ranges	0 - 100%
Unit of measurement	%
Accuracy* 10°C - 40°C	+/-0.02% at 1%; +/-2% at 100%
Resolution	+/-0.1% at 1%; +/-0.5% at 100%
Detection limit (3τ)	0.01%
Drift**	<1% / year
Lifespan***	>5 years

ELECTRICAL CHARACTERISTICS

Supply voltage	5-15VDC (Typ. 5VDC)
Standby/Peak currents	8 mA / 40 mA
Communication interface	RS485 MODBUS 5v tolerant

SAMPLING CHARACTERISTICS

Response time (T63)	<2sec.
Operating Temperature	-10°C to +60°C
Operating Pressure	300 - 1100mbar

ENVIRONMENTAL CONDITIONS

Storage temperature	-40°C to +60°C
Max. absolute pressure	20bar
Max. diff. pressure	3bar
Humidity	No dew point on the membrane
Startup time	0°C to 50°C

MECHANICAL CHARACTERISTICS

Dimension	Refer to drawing
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 $^{^{\}ast}$ Data for factory calibration. Units of %O2 given for an ambient air pressure of 1013 mbar.



^{**} at 21% O2, 25°C, gas ambient pressure 1013 mbar, out of direct sunlight. Drift can be significantly increased after exposure to high temperature >60 °C or specific chemicals (such as Cl2 or NO2).
***at 21% O2, 25 °C, ambient gas pressure of 1013 mbar, out of direct sunlight.

INTERFACES

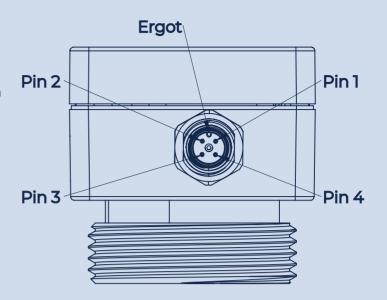
The interface is made using the M12 MALE 4-pin connector (Coding A):

Pin 1 : Vcc(+) = 5-15VDC (Typ. 5VDC)

Pin 2: RS485-B = 0-3.3VDC (5VDC tolerant)

Pin 3: GND (-) = Ground

Pin 4: RS485-A = 0-3.3VDC (5VDC tolerant)



MECHANICAL DRAWING

