

## Data Sheet


### OXYSENS

The OXYSENS is an electrochemical oxygen sensor which is designed for applications in water, e.g. waste water treatment, swimming pools or fish farms. It is easy to maintain, because the membrane and the electrolyte don't need to be replaced. The response time of the OXYSENS is fast, it is almost independent of flow and insensitive to soiling.

#### Application Fields:

Water applications: Waste water treatment, swimming pools, fish farms; composting facilities

#### Specifications:

Serial Number:	Yes
Certificate:	Yes
Measuring Method:	Measurement of the electrical current affected by the partial pressure of oxygen
Range:	40 ppb ... 40 ppm of dissolved oxygen
Current in air at 25 °C:	40 ... 80 nA
Residual current in nitrogen:	< 0.5% (relative to current in air)
Response time $t_{98\%}$ :	Max. 60 s at 25 °C, from air to nitrogen
Oxygen consumption:	Ca. 20 ng/h in air at 25 °C
Required flow:	$\geq 0.03$ m/s
Drift at room temperature under constant conditions:	< 5% every 2 months at 25°C in water
Max. CO <sub>2</sub> partial pressure:	0.01 bar
Temperature sensor:	NTC 22 kOhm
Temperature response:	3.1%/K
Storage temperature:	-10 ... 60 °C
Working temperature:	0 ... 60 °C
Pressure range:	0 ... 4 bar
Pressure compensation:	Not required
Electrode system:	Silver platinum combination
Membrane:	OPTIFLOW
Shaft diameter:	12 mm
Mounting:	PG 13.5 thread
Electrical connector:	5 meter fixed cable
Wetted materials:	Stainless steel 1.4435, silicone, EPDM with FDA approval
Surface quality of steel:	0.4 $\mu$ m
Electrolyte:	OXYLYTE, alkaline
Polarization voltage:	$-670 \pm 50$ mV
Stabilisation time:	< 1 hours
Steam sterilizable:	No
Autoclavable:	No
CIP:	No
ATEX approval:	Yes, CE 0035  II 1/2 G Ex ia IIC T4/T5/T6



**Ordering Information:**

Part Number	Description	a-length
237150	OXYSENS 120	120 mm

**Dimensional drawing:**

