Data Sheet for Dissolved Oxygen Sensor

	OXYFERM VP (237400)
Intended Applications:	Biotechnology, pharmaceutical industry, fermentation
Measuring range:	10 ppb ... 40 ppm of dissolved oxygen
Current in air at 25°C:	40 ... 80 nA
Residual current in nitrogen	< 0.1 % (relative to current in air)
Response time t98%:	Max. 60 s at 25°C, from air to nitrogen
Oxygen consumption:	ca. 100 ng/h in air at 25°C
Required flow:	≥ 0.1 m/s
Drift at room temperature under constant conditions:	< 2 % per week
Max. CO2 partial pressure:	0.01 bar
Temperature sensor:	NTC 22 kOhm
Temperature response:	3.1 %/K
Storage temperature:	-10 ... 60°C
Working temperature:	0 ... 130°C
Pressure:	-1 ... 4 bar
Pressure compensation:	Not required
Electrode system:	silver-platinum combination
Membrane:	OPTIFLOW
Shaft diameter:	12 mm
Mounting:	PG 13.5 – thread
Connector head:	VP connector
Wetted materials on mounted sensor:	Stainless steel DIN 1.4435, silicone, EPDM with FDA approval
Surface quality of steel:	0.4 µm
Electrolyte:	OXYLYTE, alkaline
Polarization voltage:	-670 ± 50 mV
Stabilization time*:	< 2 hours, typically 30 min.
* for trace measurements or zero point calibration (if required) a longer stabilization time is recommended	