

# Dissolved oxygen sensors

## IDS optical dissolved oxygen sensor-digital

Optical measurement is the most advanced method of determining dissolved oxygen. Using fluorescence quenching as described in DIN ISO 17289, the fluorescence signal of special dyes changes as a function of the oxygen concentration. This is measured, and converted to dissolved oxygen concentration. The method is described in DIN ISO 17289.

The optical dissolved oxygen sensor is only available in the IDS system, and is described in the multi-parameter measurement chapter.



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## Galvanic dissolved oxygen sensors – analogue

The electrochemical method is the second currently used method for measuring the dissolved oxygen. It measures oxygen proportional to the current signal of a polarographic or galvanic dissolved oxygen sensor according to DIN ISO 5814.

- **Universal application due to wide measuring range between 0 and 50 mg/l**
- **Easy handling through proven technology**
- **Sensors available for special applications (fish farming, BOD measurement)**
- **Simple calibration in water vapour saturated air (calibration vessel included)**

### Technical specifications: Galvanic dissolved oxygen sensors - analogue

		<b>CellOx® 325</b>	<b>DurOx® 325-3</b>	<b>StirrOx® G</b>
<b>Order no.</b>		201533	201570	2013425
<b>Method</b>		Electrochemical/galvanic	Electrochemical/galvanic	Electrochemical/galvanic
<b>Response time T99 (20 °C)</b>		< 60 s	< 125 s	< 45 s
<b>Measuring range</b>	<b>Concentration</b>	0 ... 50 mg/l	0 ... 50 mg/l	0 ... 50 mg/l
	<b>Saturation</b>	0 ... 600 %	0 ... 600 %	0 ... 600 %
	<b>Partial pressure</b>	0 ... 1250 hPa	0 ... 1250 hPa	0 ... 1250 hPa
<b>Temperature</b>		0 ... 50 °C	0 ... 50 °C	0 ... 50 °C
<b>Shaft material</b>		POM, stainless steel	POM, stainless steel	POM, stainless steel
<b>Shaft length</b>		145 mm	110 mm	49 (83) mm
<b>Diameter</b>		15.3 mm	17.5 mm	12 mm
<b>Cable length</b>		1.5 m (further cable lengths see price list)	3 m	2 m



CellOx® 325



DurOx® 325



StirrOx® G

### CellOx® 325

This universal galvanic dissolved oxygen sensor with IMT temperature compensation can be used both in the laboratory and in the field. It is available in versions with cable lengths up to 20 m.

### DurOx® 325

Thanks to a special membrane technology, this well-priced galvanic dissolved oxygen sensor is particularly insensitive to strongly fluctuating measured values, for example when testing stationary oxygen meters in the wastewater process. Also suitable for training purposes.

### StirrOx® G

Special dissolved oxygen sensor for the BOD (biochemical oxygen demand) measurement. With a motor-operated stirring paddle for mixing the samples and flow to the sensor. This probe features extremely low intrinsic oxygen consumption and built-in membrane monitoring.

## Order information: Accessories for analogue galvanic dissolved oxygen sensors

Model	Description	Order no.
<b>ZBK-D</b>	Accessories box with replacement and maintenance kit for DurOx® sensors.	201578
<b>ZBK 325</b>	Replacement and maintenance kit for dissolved oxygen sensors CellOx® 325	202706
<b>ZBK ST</b>	Accessories box with replacement and maintenance kit for dissolved oxygen sensors StirrOx® G.	202710
<b>WP 90/3</b>	3 changeable membrane heads suitable for all dissolved oxygen sensors, except StirrOx® G, DurOx® 325	202725
<b>WP3-ST</b>	3 changeable membrane heads for StirrOx® G	202738
<b>WP3-D</b>	3 changeable membrane heads for DurOx® sensors.	202740
<b>RL-G</b>	Cleaning solution for galvanic dissolved oxygen sensors StirrOx® G, CellOx® 325, DurOx® 325 and TA 197 Oxi, 1 bottle of 30 ml	205204
<b>ELY/G</b>	Electrolyte for galvanic dissolved oxygen sensors StirrOx® G, CellOx® 325, DurOx® 325	205217
<b>SC-FDO® 925</b>	Replacement membrane cap for optical dissolved oxygen sensor	201310
For additional products, see price list or <a href="http://www.WTW.com">www.WTW.com</a>		