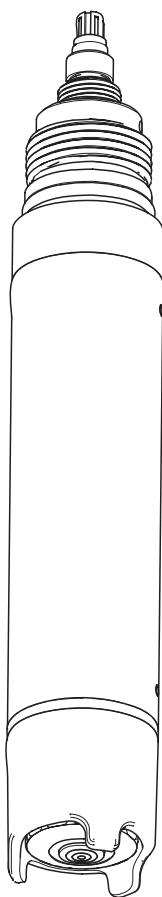


Operating Instructions

OOS31

Dissolved oxygen sensor



Brief overview

Here is how to use these Operating Instructions to commission your sensor quickly and safely:

Page 4 ff. Page 5	Safety instructions General safety instructions Explanation of the warning symbols You can find special instructions at the appropriate position in the chapter in question. The positions are indicated with the icons Warning ⚠, Caution ⚡ and Note 📝.
	▼
Page 7 ff. Page 10 ff.	Installation Here you can find installation conditions such as sensor dimensions and the angle of installation. Installation examples can be found here.
	▼
Page 14 ff.	Wiring Refer to these pages for sensor wiring.
	▼
Page 16 Page 17 ff. Page 17 ff.	Sensor design and measuring principle Here you can read about the sensor design. The measuring principle is explained on this page. Here you can find the possible calibration methods.
	▼
Page 20 ff.	Commissioning The sensor must be polarised before calibration. Please, read on the given page how to do it.
	▼
Page 22 ff. Page 23 ff. Page 28	Maintenance It is absolutely essential to carry out maintenance tasks on a regular basis. Individual parts are subject to normal wear and tear. Here you can find out how to replace such parts. Here you can find an overview of the spare parts which can be delivered as well as an overview of the system.
	▼
Page 26 ff.	Trouble-shooting If faults occur during operation, use the checklist to locate the cause.
	▼
Page 32 ff.	Index You can find important terms and keywords on the individual sections here. Use the keyword index to find the information you need quickly and efficiently.

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1 Safety instructions

1.1 Designated use

The oxygen sensor is suitable for continuous measurement of dissolved oxygen in water.

Typical applications are:

- Measuring oxygen content in activated sludge basins.
The measuring signal is used for monitoring and as a control parameter.
- Checking oxygen content in the outlet of a sewage treatment plant.
- Measuring and controlling the oxygen content in fish farming water.
- Oxygen enrichment in drinking water.

Any other use than the one described here compromises the safety of persons and the entire measuring system and is, therefore, not permitted.

The manufacturer is not liable for damage caused by improper or non-designated use.

1.2 Installation, commissioning and operation

Please note the following items:

- Installation, electrical connection, commissioning, operation and maintenance of the measuring system must only be carried out by trained technical personnel.
The technical personnel must be authorised for the specified activities by the system operator.
- Technical personnel must have read and understood these Operating Instructions and must adhere to them.
- Before commissioning the entire measuring point, check all the connections for correctness. Ensure that electrical cables and hose connections are not damaged.
- Do not operate damaged products and secure them against unintentional commissioning. Mark the damaged product as being defective.
- Measuring point faults may only be rectified by authorised and specially trained personnel.
- If faults can not be rectified, the products must be taken out of service and secured against unintentional commissioning.
- Repairs not described in these Operating Instructions may only be carried out at the manufacturer's or by the service organisation.

1.3 Operational safety

The sensor has been designed and tested according to the state of the art and left the factory in perfect functioning order.

Relevant regulations and European standards have been met.

As the user, you are responsible for complying with the following safety conditions:

- Installation instructions
- Local prevailing standards and regulations.

1.4 Return

If the device requires repair, please send it *cleaned* to the sales centre responsible. Please use the original packaging, if possible.

Please enclose the completed "Declaration of contamination" (copy the second last page of these Operating Instructions) with the packaging and the transportation documents.

No repair without completed "Declaration of contamination"!

1.5 Notes on safety icons and symbols



Warning!

This symbol alerts you to hazards. They can cause serious damage to the instrument or to persons if ignored.



Caution!

This symbol alerts you to possible faults which could arise from incorrect operation. They could cause damage to the instrument if ignored.



Note!

This symbol indicates important items of information.

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