More than sensors + automation

JUMO digiLine O-DO S10

Digital optical sensor for dissolved oxygen in aqueous solutions



digiLine

The features at a glance

- Precise measurement with long-term stability
- Suitable for fresh and salt water
- Immediately ready for use due to factory calibration
- No minimum inflow
- Easy connection to field devices and process control systems due to analog output (4 to 20 mA) and RS485 interface with Modbus RTU
- Plug and Play on the JUMO digiLine bus system
- Extremely easy to maintain due to robust and easily replaceable sensor cap
- Automatic error diagnosis
- Deployable up to a water depth of 50 m
- Simple and convenient calibration of the sensor on the PC



Type 202614

Brief overview

The latest optical technology in fluorescence quenching enables the precise and stable measurement of dissolved oxygen in aqueous solutions over the long-term. This makes the JUMO digiLine O-DO S10 ideal for fish breeding and sewage treatment plants as well as many other applications in water and wastewater technology. The analog output (4 to 20 mA) and the digital interface (RS485 with Modbus RTU) also allow easy connection to field devices and process control systems.

Advantages of JUMO digiLine electronic components

Use of digital interfaces ensures interference-free digital data transmission for optimum process monitoring. The JUMO digiLine system can be used for individual measuring points as well as for sensor networks. Plug and Play functionality when connected to transmitters from the JUMO AQUIS touch series facilitates the connection and exchange of sensors. The JUMO DSM (Digital Sensor Management) software tool enables simple, reliable sensor calibration as well as comprehensive measuring point management to be conveniently carried out on a PC.



JUMO AQUIS touch S/P
Modular multichannel measuring device with control and recording functions
(Type 202580, 202581)

JUMO digiLine O-DO S10
Digital optical sensor for dissolved oxygen in aqueous solutions
(Type 202614)

Technical data

Designation	JUMO digiLine O-DO S10
Data sheet	202614
Measuring range	0 to 20 mg/l or 0 to 200 % Sat
Operating temperature	-5 to +50 °C
Maximum pressure	0 to 5 bar (relative)
Temperature measurement	NTC (22 kΩ)
Temperature compensation	Automatic
Response time	t90 < 60 s
Diameter	Sensor shaft: 20 mm Threaded shaft: 30 mm
Materials in contact with the medium	PVC, PC
Resistances	CO_2, H_2S, SO_2, ethylene oxide and gamma sterilization
Process connection	Rp 1"
Output	Analog: 4 to 20 mA in two-wire technology Digital: RS485 with Modbus RTU
Features	Self-diagnostic function

Application areas

- Water and wastewater treatment (e.g. sewage treatment plants, fish breeding, aquaristics, and aquaponics
- Surface water
- Universities and teaching institutions

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