JUMO ecoLine NTU

Optical sensor for measuring turbidity with display unit / controller JUMO AQUIS 500 RS

Amazingly simple

- Durable sensor based on an infrared measurement (880 nm) according to the 90° scattered light principle
- Long-term stability, low maintenance
- Measuring range: 0 to 4000 NTU
- Calibration data and history saved in the sensor electronics
- Digital interface RS485
- Measurement according to DIN EN ISO 7027

NTU

Type 202569, Type 202670

Turbidity sensor JUMO ecoLine NTU

The turbidity measurement according to DIN EN ISO 7027 is a tried-and-tested method for monitoring water with low to medium levels of turbidity. The measuring principle is based on the infrared measurement according to the 90° scattered light method. Due to the light measurement in the wavelength of 880 nm and the wide measuring range of 0 to 4000 NTU the possible uses of the sensor include quality control and assessment of drinking water as well as wastewater control. The JUMO ecoLine NTU saves its calibration data and history directly into its sensor electronics. As a result, the device is quickly set up and ready for use everywhere, without requiring constant recalibration. The sensor design stands out due to its lean and durable construction. In addition, various immersion and flow fittings are available for installation.

Display unit JUMO AQUIS 500 RS

The JUMO ecoLine NTU is connected to the JUMO AQUIS 500 RS via the digital interface RS485 and can therefore be used on-site as a complete measuring unit. The JUMO AQUIS 500 RS has an integrated control function. It also features 2 analog and switching outputs which makes it ideal for connecting to higher-level systems. Plain text displays enable easy operation and the device's backlight allows users to read data even in adverse lighting conditions. The JUMO AQUIS 500 RS supplements the proven AQUIS 500 series, which already contains devices for measuring pH value, redox voltage, conductivity, as well as oxygen and ammonia concentration.

Technical data

JUMO ecoLine NTU – type 202670

Measuring principle	Infrared measurement (880 nm) according to the 90° scattered light principle (according to DIN EN ISO 7027)
Measuring ranges	4 measuring ranges: – 0 to 50 NTU – 0 to 200 NTU – 0 to 1000 NTU – 0 to 4000 NTU
Resolution	0.01 to 1 NTU (depending on the set measuring range)
Max. pressure	5 bar
Measuring error	< 5 % of the displayed measured value
Temperature sensor	Integrated NTC (Negative Temperature Coefficient)
Operating temperature	0 to 50 °C
Voltage supply	DC 5 to 12 V
Dimensions	Diameter: 27 mm Length: 170 mm
Material	PVC
Protection type	IP68

Application areas

Municipal and industrial sewage treatment plants, drinking water monitoring, protection of water bodies, fish farms, technical processing plants.

JUMO AQUIS 500 RS – type 202569

Display unit with integrated controller and 2 analog and 2 switching outputs