

## Turbidity Immersion Sensor

90S631100 · 90S631130

90S731100 · 90S731130



The digital immersion sensor is used for optical turbidity measurement according to the 90° IR scattered light method in raw-, waste- and process waters up to 4000 NTU.

### Benefits

- Reliable concentration measurements by optical methods
- Pulsed infrared scattered light procedure
- No mechanically moving parts
- Digital reading
- Preprocessing in the sensor increases measurement sensitivity

### Applications

- Measurement of turbidity in drinking water, domestic water, circulating water

### Accessories

- Cable: Extension cables of 0.3 m, 2 m, 10 m, 25 m
- Controller: TriBox3, TriBox Mini, HS100

## Technical Specifications

### OPERATION AND SYSTEM CONFIGURATION

<b>Measurement principle</b>	90° scattered light method
<b>Measuring method</b>	Nephelometry

### AUXILIARY POWER

<b>Electrical connection</b>	8-pin M12 plug
<b>Power supply</b>	12...24 V
<b>Power consumption</b>	3 W

### INPUT PARAMETERS

<b>Measuring ranges</b>	0...40, 0...400, 0...1000, (0...4000 opt.) NTU
<b>Cable specification</b>	black PUR (halogen free), shielded, M12 plug
<b>Measurement wavelength</b>	880 nm

### OUTPUT SIZES

<b>Accuracy</b>	± 2 % FS
<b>Data interface</b>	RS-485, Modbus RTU

### PERFORMANCE CHARACTERISTICS

<b>Response time</b>	90 % of the value in 5 s
<b>Accuracy</b>	98 %
<b>Calibration method</b>	On controller, through analytical multipoint determination

### AMBIENT CONDITIONS

<b>Protection type</b>	IP68
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### PROCESS CONDITIONS

<b>Process temperature</b>	0...+60 °C
<b>Process pressure</b>	4 bar

### STRUCTURAL DESIGN

<b>Dimensions (Ø x L)</b>	42 mm x 207 mm
<b>Materials</b>	Black PVC or stainless steel body, special glass optics, Viton® O-rings
<b>Thread</b>	1" GAS