



## **TSS W sc Triclamp Suspended solids probe, stainless steel, wiper, ball valve fitting**

**Product #:** LXV324.99.20001

**AED Price:** Contact Hach

### **From spring water to sludge - even under the most difficult conditions**

Digital process probe for turbidity and suspended solids measurements. With wiper to maintain accuracy. Installation in tanks and closed vessels with a welded TRICLAMP branch piece.

The TSS sc probes can measure both on-line suspended solids and turbidity in one instrument. This flexibility enables the measurement of both parameters under the same application.

They have a double optical system with two pulsating infrared LEDs and four receivers. As the transmitted light is scattered, the receivers pick up the incident light at 90° and 120° angles effectively doubling the accuracy of the instrument. This eight channel measurement system, with an integrated bubble and temperature compensating software, enables the instrument to have a wide measuring range that effectively covers most applications, from the darkest pre-treated water to the freshest of spring waters, with one instrument.

The probes are made of polished stainless steel with a scratch resistant and easy to clean sapphire window design to withstand harsh environments.

**TSS sc probes have been specially developed for industrial applications**

**Turbidity from 0.001 to 4,000 FNU and suspended solids from 0.001 to 500 g/L**

**8 measurement signals cover the total range and deliver measured values in conformity with the relevant standards**

**Excellent stability thanks to comprehensive compensation for interference factors**

**TSS sc has a unique compensation system to overcome the effects of air bubbles**

---

### **Specifications**

Accuracy: Turbidity Up to 1000 FNU/NTU: < 5 % of the measured value  $\pm 0.01$  NTU

Ambient temperature: 0 - 60 °C (briefly 80 °C)

Application: Standard

Automatic wiper: Yes

Cable length: 10 m (optional extension cables available)

Calibration: Turbidity (TRB): Factory calibrated

Solids (TS): To be calibrated by customer on site

Zero point: Permanently calibrated in the factory

Calibration method: Turbidity: Formazin or Stablcal Standard (at 800 NTU). Requires a calibration kit.

Suspended Solids: Sample specific, based on gravimetric analysis with a correction factor procedure.

|                              |   |
|------------------------------|---|
| Controller compatibility:    | SC200, SC1000, SC4500. All controllers sold separately  |
| Diameter:                    | 40 mm   |
| Flow:                        | Max. 3 m/s (the presence of air bubbles affects the measurement)  |
| Installation style:          | Weld On TriClamp Fitting  |
| Length:                      | 332 mm  |
| Maintenance interval:        | 1 h/month   |
| Material:                    | Gasket: FKM; Wiper: PA (GF), TPV  |
| Max Temperature:             | 50 °C   |
| Measurement method:          | Combined multiple beam alternating<br><br>light method with infrared diode<br><br>system and beam focussing<br><br>Turbidity (TRB): 2-channel 90° scattered light measurement<br><br>in accordance with DIN/EN 27027/ISO 7027,<br><br>wavelength = 860 nm<br><br>Solids (TSS): 120° scattered light measurement,<br><br>wavelength = 860 nm |
| Measuring principle:         | Combined multiple beam alternating<br><br>light method with infrared diode<br><br>system and beam focussing<br><br>Turbidity (TRB): 2-channel 90° scattered light measurement<br><br>in accordance with DIN/EN 27027/ISO 7027,<br><br>wavelength = 860 nm<br><br>Solids (TS): 120° scattered light measurement,<br><br>wavelength = 860 nm  |
| Measuring range:             | Turbidity (TRB): 0.001 - 9999 NTU<br><br>Solids (TSS): 0.001 - 500 g/L  |
| Model:                       | TSS W sc  |
| Mounting configurations:     | TriClamp  |
| Operating temperature range: | 0 - 50 °C   |
| Parameter:                   | Turbidity, Suspended Solids   |
| Pressure range:              | < 6 bar or < 60 m   |
| Repeatability:               | TSS content: < 4 %<br><br>Turbidity: < 3 %  |
| Response time:               | 1 - 300 s adjustable  |
| Special Features:            | With Wiper & Triclamp   |
| Special notes:               | Installation note:<br><br>Distance sensor–wall<br><br>> 50 cm (Turbidity)   |

|                   |  |
|-------------------|--|
|                   | > 10 cm (TSS)                                    |
| Warranty:         | 24 months  |
| Weight:           | Approx. 1.6 kg                                   |
| What's included?: | Turbidity & Suspended Solids sensor, user manual |

---

**What's included?**

Turbidity & Suspended Solids sensor, user manual

---

**Required Accessories**

- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)