



# TSS VARI sc Suspended solids probe, stainless steel, VARIVENT measuring tube

Product #: LXV326.99.10001

AED Price: Contact Hach

### Turbidity and suspended solids probe for use in Varivent piping systems

Digital process probe for turbidity and suspended solids measurements. For VARIVENT industrial systems.

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.

TSS sc probes have been specially developed for industrial applications

Measures both turbidity and suspended solids

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 NTU: < 5% of the measured value  $\pm 0.01$  NTU

Ambient temperature: 0 - 60 °C (briefly 80 °C)
Application: Varivent piping systems

Automatic wiper: No

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: Varivent Measuring tube

Length: 232 mm

Maintenance interval: 1 h/month

Material: Gasket: FKM; Wiper: PA (GF), TPV

Max Temperature: 80 °C

Measurement method: Combined multiple beam alternating light method with infrared diode system and beam focusing

Turbidity (TRB): 2-channel 90° scattered light measurement in accordance with DIN EN ISO

7027, wavelength = 860 nm

Solids (TS): 90° and 120° scattered light measurement, wavelength = 860 nm

Measuring range: Turbidity (TRB): 0.001 - 9999 NTU

Solids (TSS): 0.001 - 500 g/L

Model: TSS Vari sc

Mounting configurations: VARIVENT

Operating temperature range: 0 - 80 °C

Parameter: Turbidity, Suspended Solids

Pressure range: <16 bar or <160 m Repeatability: TSS content: <4 %

Turbidity: < 3 %

Response time: 1 - 300 s adjustable
Special notes: Installation note:

Distance sensor-wall

> 50 cm (Turbidity)

> 10 cm (TSS)

Warranty: 24 months
Weight: approx. 1.5 kg

What's included?: Turbidity & Suspended Solids sensor, user manual

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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)