



## **TSS EX1 sc Triclamp Suspended solids probe, stainless steel, ball valve fitting, ATEX**

**Product #:** LXV328.99.20001

**AED Price:** Contact Hach

### **Measurements in potentially explosive atmospheres (ATEX Zone 1): TSS EX1 sc**

Digital process probe for turbidity (0.0001 - 4000 FNU) and suspended solids (0.001 - 500 g/L) measurements, for use in potentially explosive atmospheres (ATEX Zone 1). Installation in tanks and closed vessels with a welded TRICLAMP branch piece.

The probe 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 EX1 sc probes have been designed and certified for measurement in hazardous locations.

**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 measurement value or ±0.01 NTU, whichever is greater
Ambient temperature:	0 - 50 °C
Application:	Hazardous locations
Automatic wiper:	No
Cable length:	10 m
Calibration:	Turbidity: Factory calibrated
	Suspended solids: 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:	48.5 mm
Flow:	Max. 3 m/s (the presence of air bubbles affects the measurement)
Installation style:	Weld On TriClamp Fitting
Length:	448 mm
Maintenance interval:	1 h/month
Material:	stainless steel 1.4571
Max Temperature:	50 °C
Measurement method:	Combined multiple beam alternating light method with infrared diode system and beam focusing
Measuring principle:	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
	Combined multiple beam alternating
	light method with infrared diode
	system and beam focussing
	Turbidity (TRB): 2-channel 90° scattered light measurement
Measuring range:	in accordance with DIN EN ISO 7027,
	wavelength = 860 nm
	Solids (TS): 120° scattered light measurement,
Model:	wavelength = 860 nm
	Turbidity (TRB): 0.001 - 9999 NTU
	Solids (TSS): 0.001 - 500 g/L
Mounting configurations:	TriClamp
Operating temperature range:	-10 - 50 °C
Parameter:	Turbidity, Suspended Solids
Pressure range:	<10 bar or <100 m
Repeatability:	TSS content: < 4 %
Response time:	Turbidity: < 3 %
	1 - 300 s adjustable
	with Triclamp
Special Features:	Installation note:
Special notes:	Distance sensor–wall
Warranty:	> 50 cm (Turbidity)
	> 10 cm (TSS)
	24 months
Weight:	approx. 2.7 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)