



# TSS XL sc TriClamp Suspended Solids Inline Sensor, XL weld-on Fitting, SS, without Wiper

Product #: LXV327.99.10002

ZAR Price: Contact Hach

Call for ship date

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

The TSS XL sc is a digital process probe for the extremely accurate in pipe measurement of turbidity and suspended solids. Measurement window is built of scratch resistant sapphire for easy cleaning. Measures both online suspended solids and turbidity in one instrument. Includes bubble and temperature compensation software for more accurate measurement. Connects directly to all Hach SC controllers for immediate use.

# **Unique Multi-Beam Pulsed Infrared Light System**

TSS sc probes have a double optical system with two pulsating infrared LEDs and four receivers. This combined multiple beam alternating light method with beam focusing facilitates accurate color independent measurement of turbidity from 0.001 to 4,000 FNU and suspended solids from 0.001 to 500 g/L.

#### Automatic Compensation for Air Bubbles and Temperature Swings for Accuracy

Special software enables the system to recognize gas bubbles or temperature swings for a more accurate suspended solids or turbidity measurement.

# **Standard Compliant and Precise - Ease of Calibration**

The turbidity measurement complies with the standard DIN EN 27027 (ISO 7027). Calibration is not necessary. If the probe is used to measure the solids content, a one-point calibration suffices. For special applications, curves can be defined using several calibration points.

## **Specifications**

Accuracy: Turbidity up to 1000 NTU:

< 5% of the measured value ±0.01 NTU

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

Application: TriClamp 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)

Includes: Turbidity & Suspended Solids sensor, user manual

Installation style: Weld On TriClamp Fitting

Length: TSS XL sc: 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 XL sc

Mounting Configurations: TriClamp

Operating temperature range: 0 - 80 °C

Repeatability: TSS content: < 4 %

Turbidity: < 3 %

Response time: 1 s < T90 < 300 s (adjustable)

Response Time T90: 1 - 300 s adjustable Special Notes: Installation note:

Distance sensor-wall

> 50 cm (Turbidity)

> 10 cm (TSS)

Warranty: 12 months
Weight: approx. 1.5 kg

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

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