# **PRODUCT INFORMATION**

PROCESS MEASUREMENT TECHNOLOGY SLUDGE LEVEL SONATAX SC



# Sludge level monitoring at its best: SONATAX sc

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→ Safe: Early warning system guards against sludge loss

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- → Precise: automatic temperature compensation
- → Low maintenance: optimised automatic wiper cleaning
- → Deep: for tank depths of up to 12 metres
- → Digital: up to 8 sensors with a single controller

### Universal ultrasonic measurement system

The SONATAX sc probe determines the sludge level in fluids with a solids content in the range from very low (clear) to very high. In the wastewater treatment sector, SONATAX sc is eminently suitable for monitoring the solid/ fluid boundary layer and for sludge management. The non-contact measurement method is based on the distance travelled by an ultrasonic signal, allowing for the influence of temperature. A seasonally dependent recalibration is not necessary.

# Reliable readings in all circumstances

To ensure the greatest possible accuracy at all times, the probe adjusts its sensitivity to match the varying solids concentrations and sludge profiles in the settlement tank.

Signals reflected from structures in the tank (pipes, rods, etc.) have no effect on the measurement; they can be blended out by the software. The probe is factory calibrated for long-term calibration stability.



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# **Simply efficient**

### Effective sludge management

In the primary treatment, thickener and clarifier stages, SONATAX sc helps to

- → optimise primary sludge removal,
  → control settling behaviour,
- → set the returned active sludge,

**Technical data** 

Measurement method

Measuring range Resolution

**Response time** 

Pressure range

Ambient temperature Temperature compensation

Maintenance requirement

Subject to change without notice.

Calibration

Flow rate

Weight

Dimensions

**Cable length** 

**Display unit** 

**Protection rating** 

Name

Art. no.

Accuracy

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→ reduce the risk of sludge loss.

SONATAX sc detects operational malfunctions and helps to prevent costly violations of threshold values. With a measuring range down to a tank depth of 12 metres, SONATAX sc is also suitable for use in SBR reactors and for special industrial applications.

SONATAX sc

LXV431.99.00001

0.03 m sludge level

10-600 s (adjustable)

130 mm x 185 mm (H x D)

Typically < 1 h/month

 $\leq$  0.3 bar or  $\leq$  3 m

> 0 °C to 50 °C

Automatic

Max. 3 m/s

IP 68 ( $\leq$  1 bar)

0.1 m

Self-cleaning ultrasonic probe

Once only, on instrument start-up; automatic

Approx. 3.5 kg (without mounting aids)

10 m, max. 100 m with extension cable

SC 1000 controller (model LXV 400 / LXV 402)

SC 100 controller (model LXV 401) or

Ultrasonic measurement 0.2-12 m tank depth

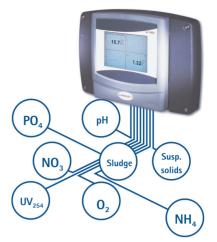
#### **Simple handling**

SONATAX sc has an automatic cleaning system which makes use of a magnetically connected wiper. Soil on the ultrasonic head is therefore removed before it can become established. The wiper functions without a shaft and can be replaced in a few easy steps without opening the probe housing. The instrument therefore requires virtually no maintenance.

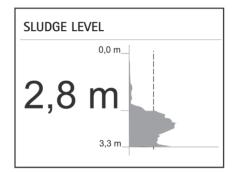
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#### **Cost-saving SC technology**

SONATAX sc can be combined with additional sensors through the SC controller. The SC 1000 in particular, with its large touchscreen, graphics function, enhanced data options and telemonitoring (GSM), offers numerous benefits.



The user-friendly SC 1000 controller communicates with up to eight sensors.



Typical profile of a sludge level measurement

## **HACH LANGE Services**



Contact us to place an order, request information or receive technical support.



Cost-saving process optimisation with the HACH LANGE trailer



Extended warranty with inspection contract

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