

# For the lowest turbidity and the highest solids content: SOLITAX sc

- → Colour-independent measurement of solids
- → No calibration
- → Proven cleaning system
- → As in-tank or in-pipe probe
- → Combinable with probes for O₂, NO₃, pH, etc

## Wide field of application

The high-precision process probes of the SOLITAX sc family determine turbidity in ultraclear to strongly turbid liquids, and solids concentrations in activated, primary and digested sludges. The potential applications for SOLITAX sc therefore range from drinking and wastewater treatment to the monitoring of surface water and the treatment of sludge.

## **Economically efficient**

Time-consuming multipoint calibrations with dilution series are replaced by a single correction factor. The wide range from 0.001 FNU to 150 g/l covers the optimal solution for every application. The measurement data is displayed and processed with the help of the SC100 or SC1000 Controller. In short: Advantages that are long-lasting and economically efficient.



# Persuasive advantages: SOLITAX sc

## **Maximum time saving**

All SOLITAX sc probes are factory calibrated in conformity with DIN EN ISO 7027 for long-term calibration stability. A correction factor replaces the time-consuming multipoint on-site calibrations. The automatic wiper eliminates soiling of the measurement window as it occurs. The result: more stable measured values and lower maintenance costs.

## **Maximum variability**

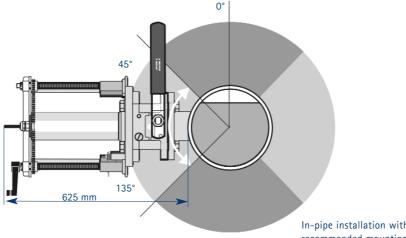
Turbidity and solids measurement, plastic or stainless steel housing, with or without wiper system - SOLITAX sc offers the right probe for every field of application.

This variability is also reflected in the fixing systems for the immersion and in-pipe probes.

#### **SOLITAX** sc variants

|                         | t-line sc | ts-line sc | inline sc | hs-line sc | highline sc                |
|-------------------------|-----------|------------|-----------|------------|----------------------------|
| TURBIDITY MEASUREMENT   |           |            |           |            |                            |
| Drinking water          | •         | •          | •         | •          | •                          |
| Wastewater              | •         | •          | •         | •          | •                          |
| SOLIDS MEASUREMENT      |           |            |           |            |                            |
| Primary sludge          |           |            |           | •          | •                          |
| Thickened sludge        |           |            |           | •          | •                          |
| Active sludge           |           | •          | •         | •          | •                          |
| Return sludge           |           | •          | •         | •          | •                          |
| Dewatered return sludge |           | •          | •         | •          | •                          |
| Digested sludge         |           |            |           | •          | •                          |
| Centrate                |           | •          | •         | •          | •                          |
| Lime sludge             |           | •          | •         | •          | •                          |
|                         |           |            |           |            | <ul><li>suitable</li></ul> |

## Installing SOLITAX sc as in-flow probe



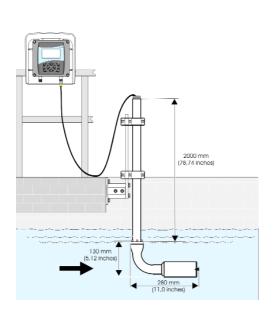
In-pipe installation with the help of safety fitting; recommended mounting angle 45° to 135°.

## **Technical data**

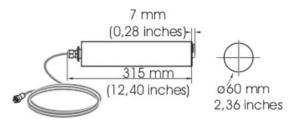
|                       | t-line sc  | ts-line sc               | inline sc       | hs-line sc            | highline sc     |  |  |
|-----------------------|--|--------------------------|-----------------|-----------------------|-----------------|--|--|
| Parameters            | Turbidity<br>-   | Turbidity<br>Solids      |                 |                       |                 |  |  |
| Measurement procedure | 90°IR dual scatter light   | 90°IR dual scatter light |                 |                       |                 |  |  |
| - turbidity           | DIN EN ISO 7027  | DIN EN ISO 7027          |                 |                       |                 |  |  |
| - solids              | -  | Equivalent to DIN 37414  |                 |                       |                 |  |  |
| Measuring range       |  |                          |                 |                       |                 |  |  |
| - turbidity*          | 0.001 - 4,000 FNU  | 0.001 - 4,000 FNU        |                 |                       |                 |  |  |
| - solids              | -  | 0.001 - 50 g/l           |                 | 0.001 - 150 g/l       |                 |  |  |
| Accuracy              |  |                          |                 |                       |                 |  |  |
| - turbidity           | <1 % or 0.001 FNU*   | <1 % or 0.001 FNU*       |                 |                       |                 |  |  |
| - solids              | -  |                          | <5 %            |                       |                 |  |  |
| Response time         | 1 - 300 sec  | 1 – 300 sec              |                 |                       |                 |  |  |
| Sample temperature    | 0 °C - 40 °C   | 0 °C - 40 °C             |                 |                       |                 |  |  |
| Flow rate             | 3 m/s  | 3 m/s                    |                 |                       |                 |  |  |
| Immersion depth       | 0.1 - 60 m   | 0.1 - 60 m               | -               | 0.1 - 60 m            | -               |  |  |
| Pressure range        | -  | -                        | 6 bar           | -                     | 6 bar           |  |  |
| Weight (PVC/steel)    | 520 g / -  | 520 g / 1400 g           | - / 2400 g      | 520 g / 1400 g        | - / 2400 g      |  |  |
| Dimensions (D x L)    | 60 mm x 200 mm   | 60 mm x 200 mm           | 60 mm x 315 mm  | 60 mm x 200 mm        | 60 mm x 315 mm  |  |  |
| Housing               | PVC  | PVC / Stainless steel    | Stainless steel | PVC / Stainless steel | Stainless steel |  |  |
| Cleaning              | With automatic wiper / without   |                          |                 |                       |                 |  |  |
| Cable length          | 10 m fixed, max. 100 m extension cable   |                          |                 |                       |                 |  |  |
| Type of fitting       | Immersion probe  | In-flow probe            | Immersion probe | In-flow probe         | Immersion probe |  |  |
| Display unit          | SC 100 controller (model LXV401) or<br>SC 1000 controller (model LXV400 and model LXV402 |                          |                 |                       |                 |  |  |

<sup>\*</sup> For user-specific offset and gradient correction

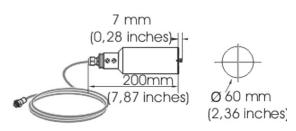
## **Installing SOLITAX sc as immersion probe**



## **SOLITAX** sc in-flow probe



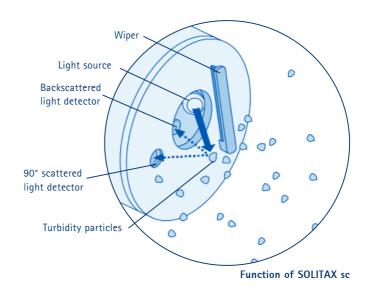
## **SOLITAX** sc immersion probe



## The SOLITAX sc principle

## Unique colour-independent measurement of solids

Primary and active sludges with different structures and colours, dark digested sludges and light lime sludges make the highest demands on the precise measurement of solids. Only SOLITAX sc solids probes with the patented dual scattered light method can satisfy these demands. The key principle: Parallel evaluation of different scattered light signals.





### SC 100 Controller

Up to two SC probes can be connected, e.g. SOLITAX sc with  ${\rm O_2}$ , pH,  ${\rm NO_3}$ , etc.



## SC 1000 Controller

Up to eight SC probes can be connected; optional expansion through networking.

#### **HACH LANGE Services**



Orders, information and consultation without delay: UK +44 (0)12 56 333 403 EU +49 (0)211 5288-0



Support on-site by expert sales team.

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## **Ordering information**

| oracing information   |                   |  |  |  |
|---|-------------------|--|--|--|
| DESCRIPTION   | ART. NO.          |  |  |  |
| SOLITAX sc, stainless steel, with wiper*                    |                   |  |  |  |
| - ts-line   | LXV423.99.00100   |  |  |  |
| - hs-line   | LXV423.99.00200   |  |  |  |
| - inline  | LXV424.99.00100   |  |  |  |
| - highline  | LXV424.99.00200   |  |  |  |
| SOLITAX sc, plastic (PVC), with wiper*                      |                   |  |  |  |
| - t-line  | LXV423.99.10000   |  |  |  |
| - ts-line   | LXV423.99.10100   |  |  |  |
| - hs-line   | LXV423.99.10200   |  |  |  |
| ACCESSORIES   |                   |  |  |  |
| Tank rim mounting   | LZX414.00.10000   |  |  |  |
| In-flow safety fitting, stainless steel                     | LZX337            |  |  |  |
| In-flow fitting, stainless steel                            | LZX461            |  |  |  |
| Weld-on flange, stainless steel                             | LZX660            |  |  |  |
| Extension cable   |                   |  |  |  |
| - 5 m   | LZX848            |  |  |  |
| - 10 m  | LZX849            |  |  |  |
| - 15 m  | LZX850            |  |  |  |
| - 20 m  | LZX851            |  |  |  |
| - 30 m  | LZX852            |  |  |  |
| - 50 m  | LZX853            |  |  |  |
| SC 100 Controller   | LXV401            |  |  |  |
| SC 1000 Controller  | LXV400 and LXV402 |  |  |  |
| SPARE PARTS AND CONSUMABLES                                 |                   |  |  |  |
| Wiper profiles, silicone (5 mm)                             | LZX050            |  |  |  |
| Wiper profiles, Viton (5 mm)                                | LZX578            |  |  |  |
| * All COLITAY as much as any also available without a wiser |                   |  |  |  |

\* All SOLITAX sc probes are also available without a wiper.

