

## Inline Suspended Solids Sensor



### ■ Easy to use

- Self instructing menu for calibration with lab test

### ■ Low maintenance

- Automatic cleaning system with built-in flushing nozzles
- No moving parts

### ■ Wide measuring range

- Min 0 - 100 mg/l
- Max 0 - 5 % TS depending on type of solids

### ■ Plug & Play

- Pre-calibrated for quick start-up

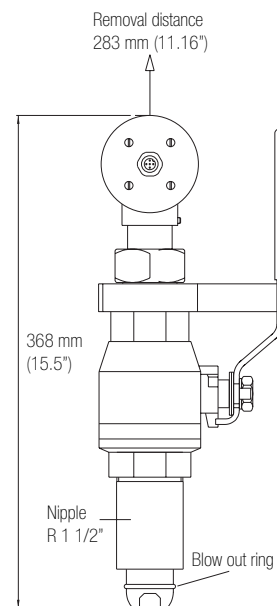
The **ITX-IL In-Line Suspended Solids Sensor** is the ultimate tool for effective process control supplied with 1 1/2" SS isolation valve. Designed for up to 6 bar applications with built-in mechanical stop. The sensor is used for continuous measurement of suspended solids in RAS, WAS, MLSS and Sand Filter. Backwash monitoring in industrial plants.

The measuring principle is a single beam of pulsed NIR-light. The LED light source pulses at 880 nm. In each installation the meter is calibrated using actual lab tests for up to five sample points.

An automatic cleaning system with built-in flushing nozzles ensures accurate measurements with little maintenance.

## Technical Specifications

|                            |                                                   |                                                                                                                                           |
|----------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Material</b>            | <b>2343 (316 SS)</b>                              | The sensor is manufactured in stainless steel which limits corrosion. The sensor is designed to achieve the highest self-cleaning effect. |
| <b>Weight</b>              | <b>2.8 Kg (6.1 lbs) 3 Kg (6.5 lbs)</b>            | Sensor<br>Valve Assm.                                                                                                                     |
| <b>Connection</b>          | <b>10 m (33 ft)<br/>Max run<br/>Flushing hose</b> | 5-pin M12-contact<br>100 m (300 ft) – 10 cables<br>Ø 6 mm (1/4" O.D)                                                                      |
| <b>Process connection</b>  | <b>1 1/2"<br/>Sealing</b>                         | Valve with weld end.<br>EPDM o-rings                                                                                                      |
| <b>Pressure rating</b>     | <b>6 bars<br/>10 bars</b>                         | With automatic cleaning.<br>Without cleaning.                                                                                             |
| <b>Enclosure</b>           | <b>IP65 (NEMA 4)</b>                              |                                                                                                                                           |
| <b>Process temp.</b>       | <b>0 - +60°C (32 - 140°F)</b>                     |                                                                                                                                           |
| <b>Interface</b>           | <b>RS485<br/>Fieldbus (option)</b>                | All data is stored in the intelligent sensor, this means that it can be pre-calibrated in the factory in Stockholm.                       |
| <b>Measuring principle</b> | <b>Straight transmission</b>                      | The detected measuring signal is inversely logarithmical proportional to the consistency or suspended solids.                             |
|                            | <b>15 mm measuring line</b>                       | Lens in BK7 glass.                                                                                                                        |
| <b>Measuring range</b>     | <b>Min 0 - 100 mg/l<br/>Max 0 - 5 % TS</b>        |                                                                                                                                           |
|                            | <b>GaAs, Diod</b>                                 | ITX-IL measures transmitted light which facilitates a zero-point calibration.                                                             |
|                            | <b>880 nm</b>                                     | At 800 nm no colours can be seen which eliminates a source of error.                                                                      |
| <b>Cleaning system</b>     | <b>Option</b>                                     | ITX-IL is prepared for cleaning with air or water.                                                                                        |
| <b>Accessories</b>         |                                                   | Solenoid valve for flushing 8 bars (120 psig).(2 bars (30 psig) over process pressure.) Signal cable 10 m (33 ft).                        |



## ITX-IL

**BB2 Control Box** All our sensors in the X-series can be combined and connected to a Control Box; BB2. The BB2 is equipped with the latest in communication protocols for compatibility with a wide array of automation systems. The control box comes with two 4 - 20 mA outputs as standard.

It can support up to four sensors for 4 - 20 mA or Profibus DP output signals. Relay outputs in the BB2 are used for high and low alarms or to provide a pulse for automatic cleaning for sensors with that function. Further information can be found in our leaflet for BB2.



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