

# AUTOMATIC SLUDGE BLANKET METER

**Improved  
version**



- **New improved version:**
  - CBX plus with extended measuring range
  - CBX plus with higher resolution
- **Accurate & reliable measurement of blanket and fluff depths**
  - Optical suspended solids sensor determines blanket depths as a function of concentration
- **Low maintenance**
  - Automatic flushing of cable and sensor
- **Optimize solids concentration from clarifiers and thickeners**
  - Maintain a constant sludge level
  - Ensures pumping of solids rather than water
  - Prevent clarifier washouts
- **Easy to calibrate**
  - Self-instructing menu

## CERLIC CBX / CBX PLUS

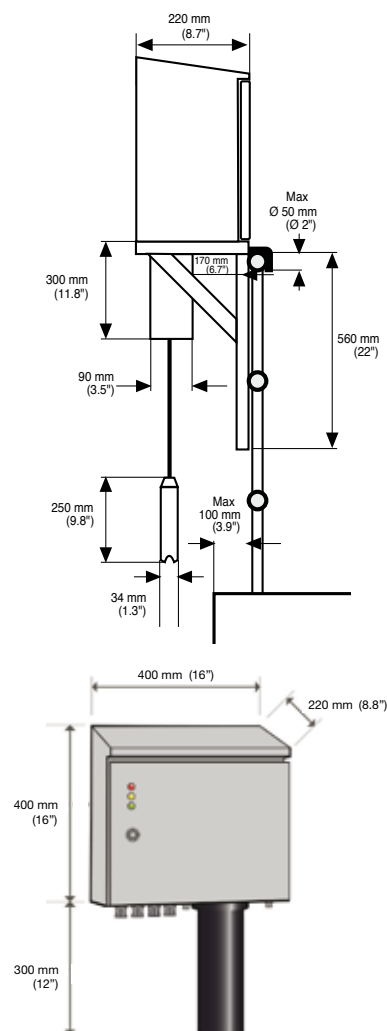
Sludge blanket meter for reliable, repeatable and accurate measurement of blanket depth in clarifiers and thickeners. Measuring depth is 0 - 10 m (0 - 33 ft). Total length of cable is 11 m (36 ft). Determination of sludge level in primary and secondary clarifiers will help avoid solids wash outs and allow for better solids inventory control. Blanket monitoring in a thickener is important in order to optimize the dry solids concentration, which means less water to the digester or dewatering equipment. Cerlic CBX detects the blanket by means of a near infrared

(NIR) suspended solids sensor, which travels through fluff layers until it finds the preset blanket solids concentration. CBX is supplied in a stainless steel housing with SS handrail mounting assembly for easy attachment to handrail. Automatic water flushing system of cable and sensor after each cycle. Built-in heater allows outdoor mounting even in cold climate. The CBX unit can be connected to a BB1 Control Box for 4 - 20 mA or Profibus DP output signals.

### TECHNICAL SPECIFICATIONS

|                       |                                                                          |
|-----------------------|--------------------------------------------------------------------------|
| Power Supply          | 230V/50Hz (115V/60Hz)                                                    |
| Power consumption     | Max 450 W, Max 10 W, stand-by                                            |
| Flush water supply    | ½" hose nipple                                                           |
| Flush water pressure  | Min. 2 bar (30 psi) Max. 6 bar (90 psi)                                  |
| Enclosure electronics | IP65 (NEMA 4)                                                            |
| Operating temp        | -5 - +50°C (23 - 122°F)<br>Option -20 - +50°C (-4 - +122°F) with jacket. |
| Weight                | Weight 25 kg (55 lbs) incl. mtg. brkt.                                   |
| Dimensions w/housing  | 400 x 220 x 400 mm H x D x W, (15.7" x 8.7" x 15.7")                     |
| Inputs, limit switch  | Limit switch, N/O, (supplied by customer)<br>(24 VDC voltage loop)       |
| Measuring dept        | 0 - 10 m (0-33 ft)                                                       |
| Measuring range CBX   | 0 - 20 000 mg/l *                                                        |
| CBX plus              | 0 - 50 000 mg/l *                                                        |
| Resolution CBX        | +/- 50 mg/l *                                                            |
| CBX plus              | +/- 1 mg/l *                                                             |
| Measuring principle   | NIR optical sensor                                                       |
| Sensor Material       | 316SS, lenses BK7 glass                                                  |

\* depending on type of sludge



### CBX / CBX PLUS

**BB1/BB2 Control Box** All our sensors in the X-series can be combined and connected to a Control Box; BB1/BB2. The BB1/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 BB1/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 BB1/BB2.

**Lana Sarrate**

P. Manuel Girona, 2 08034 Barcelona  
Tlf. 932 80 01 01 Fax 932 80 64 16

URL: [www.lanasarrate.es](http://www.lanasarrate.es)  
e-mail: [lanasarrate@lanasarrate.es](mailto:lanasarrate@lanasarrate.es)