

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

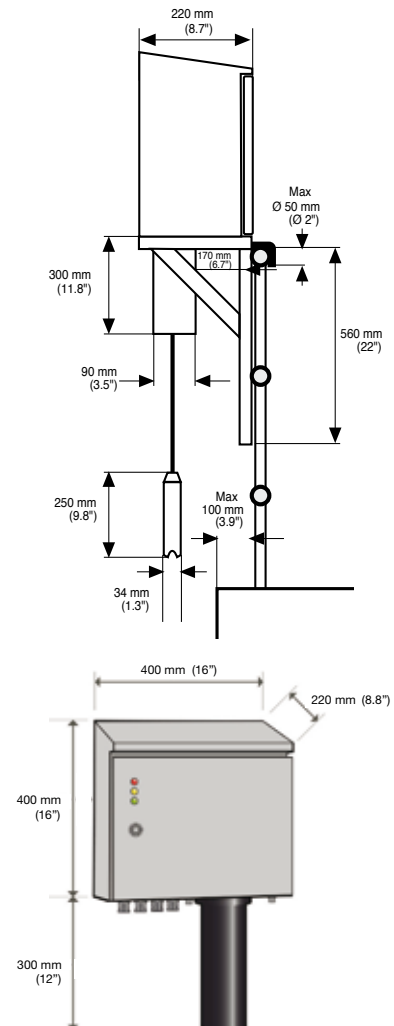
Sludge blanket meter for reliable, repeatable and accurate measurement of blanket depth in clarifiers and thickeners. Measuring depth is 0 - 10 m (0 - 33 ft). Total length of cable is 11 m (36 ft). Determination of sludge level in primary and secondary clarifiers will help avoid solids wash outs and 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) 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) (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.



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