

# Automatic Sludge Blanket Tracker



**True blanket depth using optical  
suspended solids technology**

Accurate & reliable measurement of blanket depth  
Precise optical sensor that sees the solids

**Optimize solids concentration from  
clarifiers and thickeners**

Maintain a constant sludge level  
Pump solids, not water

**Low maintenance**

Automatic flushing of cable and  
sensor after each cycle

**Easy to calibrate**

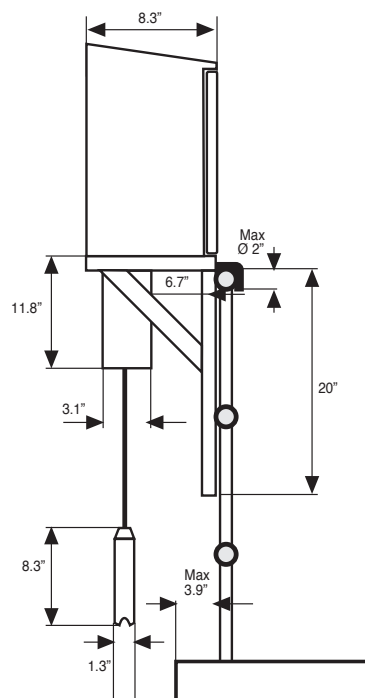
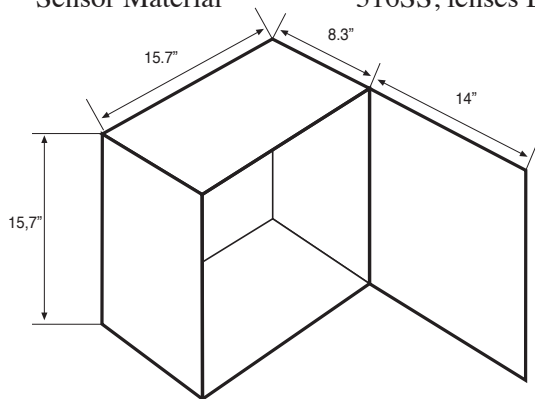
Self-instructing menu

Cerlic CBX is a sludge blanket meter for reliable, repeatable and accurate measurement of blanket depth in clarifiers and thickeners. Measuring range is 0 to 26 ft (0 to 8 m). Total length of cable is 36 ft (11m). 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. Up to four (4) CBX units may be connected to one BB2 control box for 4-20 mA or Profibus DP output signals.

### Technical specifications

Power Supply	115V / 60Hz (230V / 50Hz)
Power consumption	20VA during measuring cycle 10VA, stand-by 70VA with heater
Flush water supply	1/2" hose nipple
Flush water pressure	Min. 30 psi (2 bar) Max. 90 psi (6 bar)
Enclosure electronics	NEMA 4 (IP55)
Operating temp	-4...+122°F (-20...+50°C)
Weight	44lbs (20 kg) incl. mtg. brkt.
Dimensions w/housing	15.7" x 8.3" x 15.7" H x D x W (400 x 210 x 400 mm)
Outputs	4-20mA (20-4mA) RS485 serial communication Alarm contact (2A, closing)
Inputs, limit switch	Limit switch, N/O, (supplied by customer) (5 VDC voltage loop)
Measuring range	0-26 ft (8 m)
Cable	Shielded 4-wire polyurethane cable, length 36 ft (11 m)
Measuring principle	NIR optical sensor
Sensor Material	316SS, lenses BK7 glass



**BB2 Control Box** The BB2 will support all Cerlic X-type sensors. 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 4-20mA outputs as standard. It can support four sensors, measuring dissolved oxygen, suspended solids and fibre consistency simultaneously. Relay outputs in the BB2 are used for high and low alarms or to provide a pulse for automatic cleaning.



P.O. Box 5084 SE-141 05 Huddinge Sweden  
Phone +46 8 501 694 00 Fax +46 8 501 694 29  
www.cerlic.com e-mail sales@cerlic.se