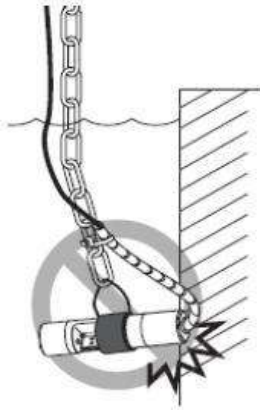


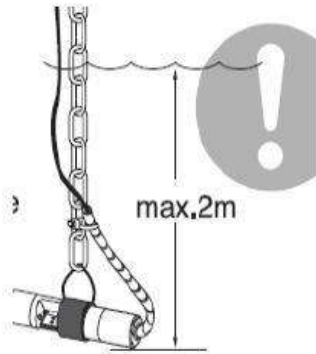
## Installation & Maintenance.

Distribute the cables before operation.

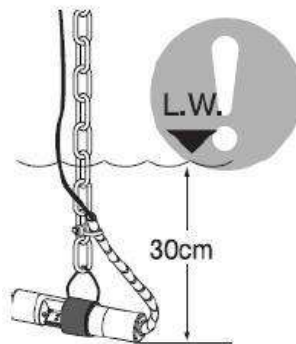
When hanging the sensor, avoid the sensor hitting the wall or other water conservancy facilities caused by water flow. If the current is very strong, fix the sensor



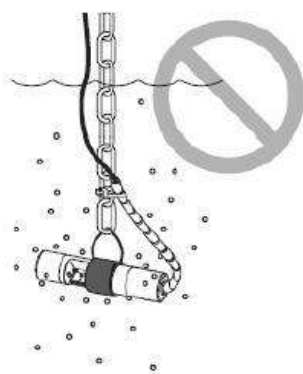
Install the sensor no more than 2 meters from the water surface.



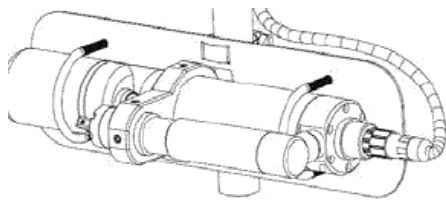
Taking into account the fluctuation of the water level, the sensor is submerged below the lowest possible water level 30CM.



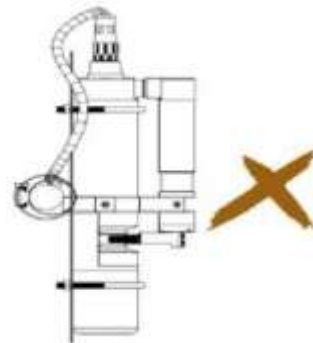
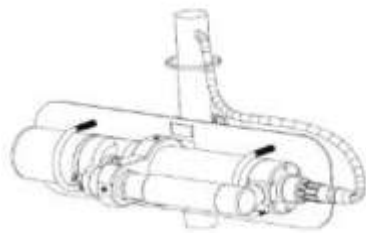
The sensor is placed where there are no bubbles in the water.



- 1, Install a cable protection sleeve outside the sensor cable.
- 2, Fix the sensor as shown below:



3, Fix the sensor horizontally.



#### Warning:

Please install the cable protection sleeve properly. Otherwise, it is easy to cause cable damage and water inlet during maintenance. Do not use the sensor cable to lift the sensor.

The lifting attachment should not cover the measuring surface.

## Maintenance methods and FAQ

### 1. Maintenance schedule

Although COD sensor is equipped with a self-cleaning brush as standard, bad working conditions will still cause the sensor to be contaminated. In order to ensure accurate measurement, cleaning is very important. Regular cleaning of the sensor is helpful to the stability of the data.

| Maintenance task  | Recommended maintenance frequency  |
|---|--|
| Clean the sensor  | It is recommended to clean every 4-8 weeks   |
| Calibrate the sensor (if required by the competent authority) | According to the maintenance schedule required by the competent authority            |
| Maintain and check the self-cleaning brush                    | Return to factory for testing and maintenance of self-cleaning brush every 18 months |

## 2. Maintenance methods

1. The outer surface of the sensor: clean the outer surface of the sensor with tap water. If there are still debris remaining, wipe it with a moist soft cloth. For some stubborn dirt, some household washing liquid can be added to the tap water for cleaning.
2. Check the cable of the sensor: The cable should not be tensioned during normal operation, otherwise the internal wire of the cable will easily break and the sensor will not work normally.
3. Check whether the measuring window of the sensor is dirty, whether the cleaning brush rotates normally and whether it is loose.
4. Check whether the cleaning brush of the sensor is damaged.
5. After continuous use for 18 months, it shall be returned to the factory to replace the dynamic sealing device.

## 3. Matters needing attention

- 1) The probe contains sensitive optical components and electronic components. Make sure that the probe is not subject to severe mechanical shocks. There are no parts inside the probe that need user maintenance.
- 2) The sensor self-cleaning brush has a geared motor inside. Under no circumstances should external force be used to rotate the cleaning brush or hinder the cleaning rotation. Large external force factors may cause damage to the geared motor.
- 3) After the sensor is fixedly installed, it is better to add a protective net or a protective sleeve to prevent the suspended matter from winding on the brush, because the brush rotates in a full circle, when installing the protective net, reserve space for the brush.
- 4) The sensor installation should avoid the position facing the water flow and more bubbles.

## 4. FAQ

| Error              | Probable cause  | Solution   |
|--------------------|---|--|
| No change in value | The brush is abnormal, the sensor cannot sense the brush Hall element | Turn on the power again and observe whether the brush rotates. If it fails, please contact us. |
|                    |   | Check if the brush is loose. If it is loose, tighten the cleaning brush.                       |
|                    |   | Check whether the brush is wound by foreign body,  |

|  |  |   |
|--|--|---|
|  |  | remove the foreign body, and observe whether the brush is normal. |
|  | The sensor window is attached to the external object | Clean sensor window   |
| The measured value is too high, too low or continuously unstable | The sensor window is attached to the external object | Clean sensor window   |
|  | Sensor self-cleaning damage                          | Replace the cleaning brush  |