



Leak Sensor
CLS100
User Manual

V1.0 May 2017

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1. Product introduction

WB-CLS100 leak sensor is specifically designed to monitor the leakage of oil and water in double-wall tanks and double-wall pipelines.

Once there is a leakage occurs in the interlayer, the liquid will trigger the sensor, and the sensor will send out a signal to the leak alarm controller, when the alarm controller receives signals from the sensor, will automatically determine leakage information and give a lighting display and sound light alarm.

According to the alarm, users can make a timely response and take measures to avoid the occurrence of potential safety hazard and environmental pollution.



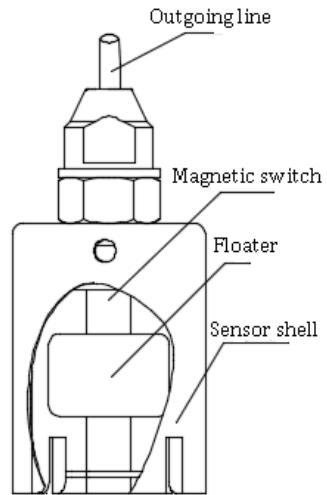
2. Product features

- **Safety:** Tested and approved by CQST, and the explosion-proof grade is ExiaIIAT4, can be used in zone 0 and Zone 1.
- **Sensitive:** Detection precision < 3mm, response time < 2S
- **Reliable:** Using float type principle, can adapt to complex scene environment, have strong anti-interference ability.
- **Convenient installation:** The leak signal will be transmitted directly to the leak alarm controller by 2 core cable.

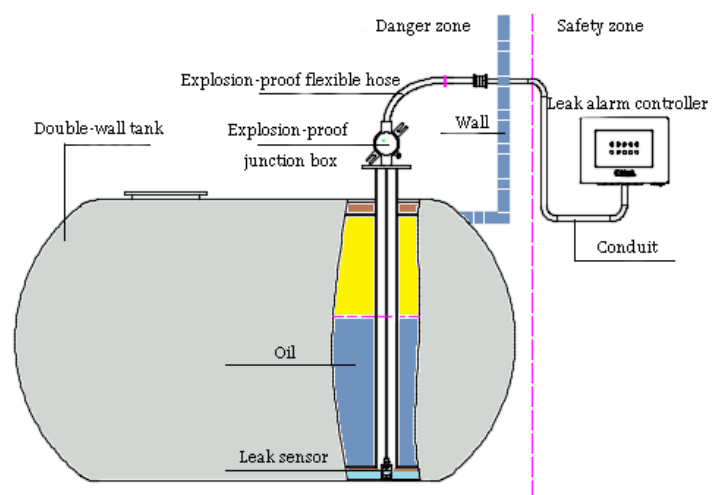
3. Technical parameters

- Detection accuracy: < 3mm
- Response time: < 2S
- Output signal: switching value
- Working temperature: -40°C ~ +60°C
- Explosion-proof grade: Exia IIAT4

4. Product structure

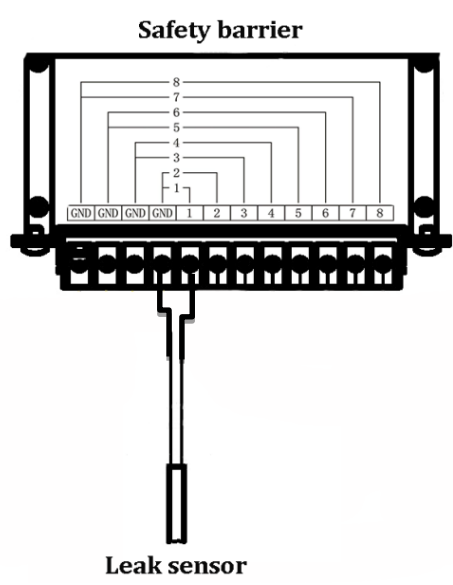


5. Installation diagram



6. Wiring diagram

6.1 Connect with Leak alarm controller



Notice of wiring:

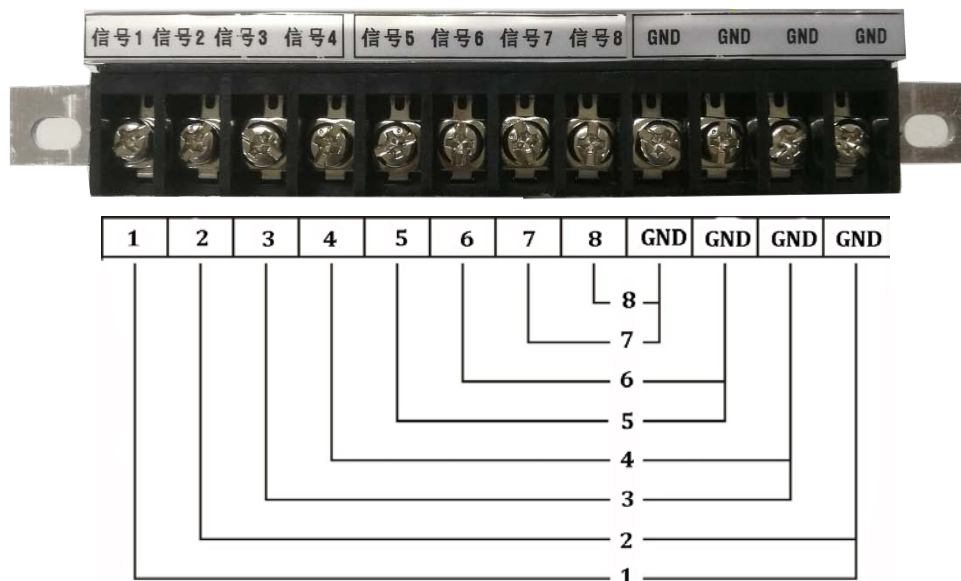
- One safety barrier can connect with 8 sensors.
- Do the wiring according to the numeric order, from 1 to 8, in sequence. 1 correspond to No. 1 sensor, 2 correspond to No. 2 sensor, 3 correspond to No. 4 sensor, ..., 8 correspond to No. 8 sensor.
- Two sensors share one GND.

eg:

If have 1 sensor, shall connect with 1 (only with 1, not 2 or 3 or 4...) and GND; if have 2 sensors, one sensor can connect with 1 and GND, the other shall connect with 2(only with 2, not 3, or 4, or 5...) and GND.

6.2 Connect with SS160plus console

- The console shall be provided with a safety barrier whose model is GSB05 and a ribbon cable whose model is 2.0*10P*230.
- The transfer board of the console shall be replaced by model WB-AQS-CL16 transfer board.



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7 Notes

- User shall not change the parts of the sensor, or will affect the explosion-proof performance of the product.
- Once product failure occurs, please contact with Windbell, and do not repair without authorization, to prevent the occurrence of safety accidents.
- The installation shall be done by the unit who has already obtained the qualification to install, use and maintain the explosion-proof electric equipment.
- The installation, use and maintenance of products shall strictly comply with the provisions of the product user manual and related standards, otherwise the consequences should be borne by themselves.

8 Warranty and maintenance

- The warranty of the product is 12 months since installation or 18 months since B/L date which occur earlier.
- The product failure under normal working condition is guaranty.
- Damages caused by artificial and natural disasters are not covered by the warranty.
- Once product failure occurs, please contact with Windbell, and do not repair without authorization, to prevent the occurrence of safety accidents.
- If you cannot troubleshoot the failure at site, please also contact Windbell for further procedures.

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ENVIRONMENT PROTECTION & SAFETY FOR PETROLEUM
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