

Product Specification



- ◆ Acid and base liquid detection
- ◆ Accurate locating
- ◆ High reliability
- ◆ Anti-interference
- ◆ Prevent false alarm

Product Overview

XW2000 Locating acid sense cable can detect leaking points anywhere on the cable which suitable for all kinds of places where there is a risk of acid and base liquid leakage. It can be connected with XW non-locating leak detector to form a leak detection system with high detection sensitivity, rapid and reliable response. The sense cable is made of two light high-density polyethylene wires pressed around the central axis of the spiral. Compared with parallel structure wires, the spiral structure can reduce environmental electromagnetic interference and false alarm rate, and greatly improve the strength and service life of the cable. The sense cable has automatic recovery function and can be reused.

Application & Features

Application

- Panel factory
- Liquid pipeline
- Semiconductor plant
- Dangerous chemical factory
- Acid and base liquid storage tank

Features

- Flexible for installation in complex and bending pipelines

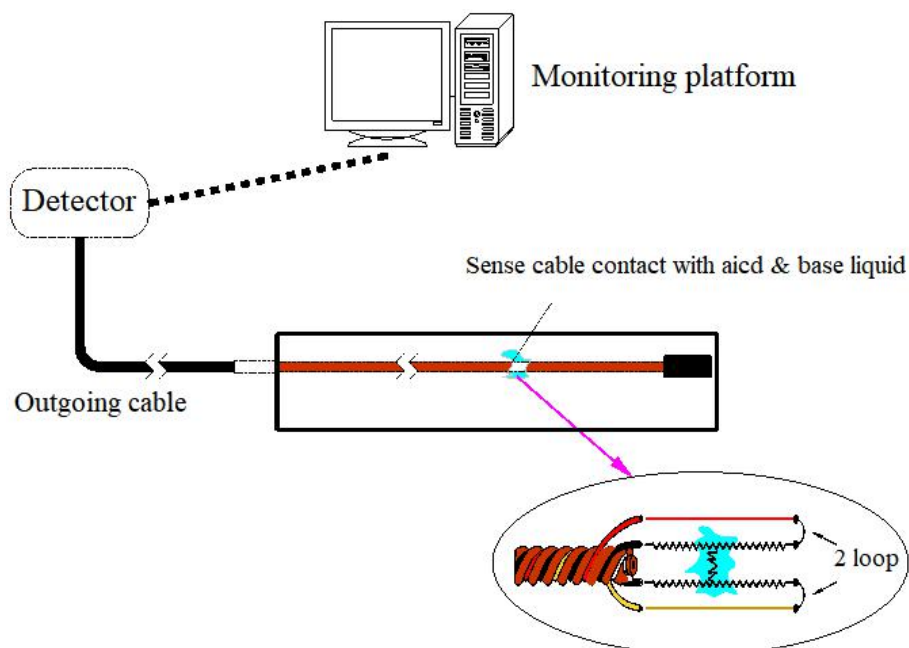
- The resistance is uniform and the error is within 1%. With high stability and accuracy of detection and locating for the leakage detection system which takes resistance as an important parameter.
- Waterproof structure of the plastic plug, convenient cascade and expand detection range. Variety of length meet the needs of detection ranges.
- Spiral structure not only reduce the environmental electromagnetic interference and false alarm, but also greatly improve the strength and service life.

Technical Data

Cable diameter	6.0mm
Sense cable	2*30AWG
Cable color(Central axis)	Brown
Wire core quantity	4pcs
Cable weight	500g/15m±10 g/15m
Cable resistance	13Ω/m
Abrasion performance	> 65 cycles
Tensile	≤72kg
Chemical resistance	Still in normal use after 7 days of exposure to chemicals at 25°C
Radiation resistance	Design lifetime of 30 years for cumulative radiation of 10 megarads of gamma rays
Operating temperature	-20°C~85°C
Detection object	Trichloroethylene (100%), sulfuric acid (98%), hydrochloric acid (37%), hexane (100%), methyl alcohol (100%), sodium hydroxide (10%), xylene (100%)
Alarm leakage (tap water)	Any position along the leakage sense cable: maximum 30mm

Operation Principle

When there is acid and base liquid in contact with sense cable, the inner core wires of the two sense wires are conductive in contact with liquid to form a loop resistance, so that the current changes. According to the proportional relationship between the resistance and the length of the conductor, alarm signal is issued through the rapid calculation of the detector, figuring out the specific leak location.



Schematic diagram of operation principle

Installation

- ◆ Each XW2000 sense cable needs outgoing cable for easy to connecting with the detector quickly and reliably.



Outgoing cable



Jumper cable



Terminal end

- ◆ Special installation adhesive tape is used to fix cables on the flat surface to ensure accurate and reliable cable detection.
- ◆ Installation accessories (terminal end and jumper cables, etc.) can connect multiple sense cable together to form a complete detection circuit.

Notices

- ◆ The area where the sense cable is laid should avoid electrostatic interference.
- ◆ Sense cables should be kept dry and clean during laying.
- ◆ Avoid contact with metal objects during laying sense cables.
- ◆ Sense cables should not be soaked in dirty water or other chemicals for a long time.
- ◆ Sense cables should be installed close to the ground to maximize contact with leaking fluids.
- ◆ Do not overlap or touch the sense cables in the laying area, otherwise false alarm may be caused.
- ◆ Sense cable should not be laid in the environment of high temperature, high humidity, vibration, corrosive gas and other electronic interference sources.
- ◆ During installation or use of sense cables, do not manually extrude and pressure, otherwise the sense cables may be damaged.
- ◆ Sense cable installation should avoid too much tension, the cable and plug connection may get looseness, poor connection and fracture.
- ◆ Pay attention to the pin sequence of male and female connectors when connecting the sense cable, align the holes and gently insert them, and then tighten the threaded ring clockwise (unlock in a counterclockwise direction).
- ◆ When conductive materials or water-repellent contaminants (wax, oil, etc.) are dissolved in the leakage liquid, it may not be reusable. In this case, the sense cable needs to be replaced.

Certificates



We recommend that you use this manual under the guidance of professional personnel. If the product is damaged by violation operation or a third party force majeure such as fire, flood, lightning and natural disaster, Xiangwei will not assume any responsibility.

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