

XW1100C

Antiflaming Liquid-cooled sense cable

Product Specification



- ◆ High sensitivity
- ◆ High reliability
- ◆ Good flexibility
- ◆ Small diameter
- ◆ high temperature resistant

Product Overview

XW1100C Antiflaming Liquid-cooled sense cable adopt woven cover design, with the characteristics of dustproof, preventing false alarm, high reliability and sensitive, and automatic recovery function, can be reusable. Suitable for liquid-cooled servers, high-precision equipment and other places with high requirements on size and sensitivity.

Application & Features

Application

- IDC
- Data Centre
- Liquid-cooled server
- New energy vehicles
- Storage battery

Features

- woven cover design not only reduce the environmental electromagnetic interference and false alarm, but also greatly improve the strength and service life. The protective cover is made of environmentally friendly nylon fiber material with

high insulation and can be directly laid on the metal surface.

- Two core wires design based on the principle of short circuit which can be used with Xiangwei non-locating leak detectors as well as other brands.
- Adopt multi-strand core structure design, which increases the flexibility of the cable and effectively solves the problem that the sense cable can not be restored or even damaged during bending.
- Using the factory injection molding standard joint to connect the outgoing wire, which greatly increase the reliability and pretty appearance.

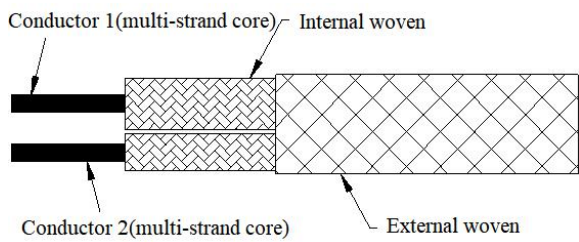
Technical Data

Cable diameter	2.2mm
Cable color	White
Material	Environmentally friendly nylon fiber
Sensing characteristics	Sensing ability: 0.1 ml: 375 kΩ; 0.2 ml: 302 kΩ; 0.3 ml: 246 kΩ; 0.4 ml: 207 kΩ; 0.5 ml: 162 kΩ; 0.6 ml: 141 kΩ; 0.7 ml: 126 kΩ; 0.8 ml: 103 kΩ; 0.9 ml: 82 kΩ; 1.0 ml: 81 kΩ Measurement environment: temperature 25, humidity 65%RH Measurement object: tap water (conductivity :147 S/cm)
Insulation characteristic	Resistance between 2 conductors: >100MΩ/10m
Working environment	Temperature: -20~100℃ Humidity: 0~95%RH (no condensation)
Reset characteristic	After water leak detection, it can be restored and by natural drying or artificial drying, and can be reused. But if there are other conductive pollutants in the water leakage, it can not be reused.
Maximum tension	10kgf
Minimum bending radius	R≥4mm (less than this bending radius may degrade the performance or even damage)
Maximum bending times	1000 times (more than 1000 times, may degrade the performance or even damage)
Cable weight	4.7 g/m±0.5g/m

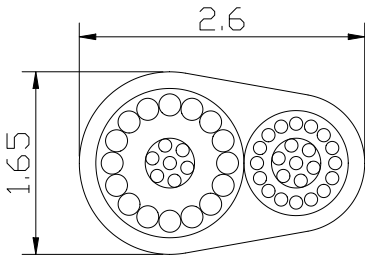
Product Structure

◆ Internal structure

Conductor: alloy material, Woven layer: environmentally friendly nylon fiber

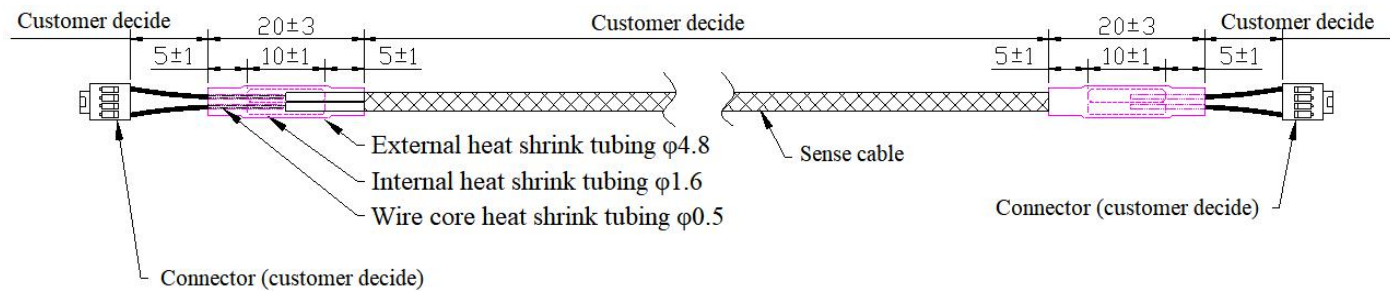


Sense cable structure diagram



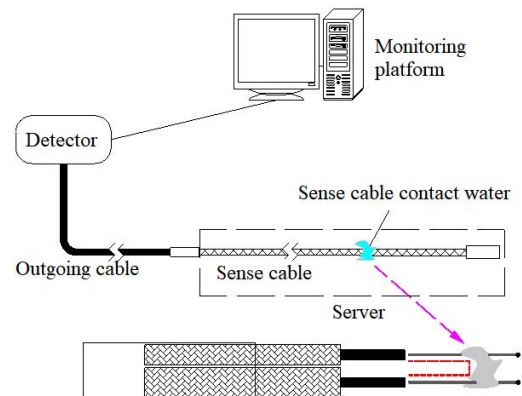
Sense cable cross section diagram

◆ Wire harness structure



Operation Principle

When the liquid contact with the sense cable, the inner core wires of two sense wires are conductive in contact with liquid, forming a circuit, leak detector detects the leakage, send an alarm signal.



Installation

- ◆ When installing the liquid cooling sense cable, lay it along or around the cooling tube of the server, or lay it inside the cabinet or machine where prone to water accumulation or seepage as required.
- ◆ Fix the sense cable and liquid cooling tube together by heat shrink tubing, and the two ends of the heat shrink tube can be wrapped with acetate tape, or all of them can be wrapped with acetate tape. It is recommended that the heat shrink tubing do not process heat shrink to reduce the force on the sense cable.

Notices

- ◆ Sense cable should be kept dry and clean during laying.
- ◆ Sense cable should be avoided to lay in places prone to condensation.
- ◆ Sense cable should not be laid in the environment of high temperature, high humidity, vibration, corrosive gas and other electronic interference sources.
- ◆ Ensure that the bending radius is less than 4mm. Otherwise, sense cable may be damaged.
- ◆ 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.
- ◆ When adopt Spiral winding laying, avoid winding radius less than 24mm, otherwise sense cable may be damaged.
- ◆ Do not overlap or touch the sense cables in the laying area, otherwise false alarm may be caused.
- ◆ 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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