

XW1000B

High temperature resistant water sense cable

Product Specification



- **♦** Accurate locating
- **♦** High reliability
- **♦** High temperature resistant
- **♦** Anti-interference
- **♦** Prevent false alarm

Product Overview

XW1000B High temperature resistant water sense cable can detect leaking points anywhere on the cable. With high temperature resistance, can operate safely and stably in a high temperature environment of 100 °C. 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 cable is designed with fluoropolymer and woven protective cover, which makes the cable have strong mechanical properties, corrosion resistance and abrasion resistance. The sense cable has automatic recovery function and can be reused.

Application & Features

Application

- Heat-supply pipe network
- Hot-water pipeline
- Heating pipeline
- Intelligent Building
- Warehouse

Features

- Flexible for installation in complex and bending pipelines
- The sense wire core of sense cable is designed with a braided sheath, which can effectively prevent false alarms caused by electrostatic interference and dust.

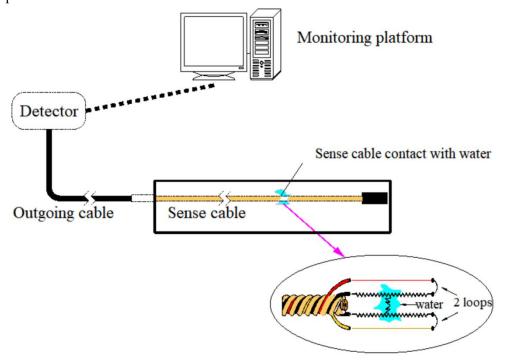
- Can operate safely and stably at a temperature of 100°C, it is the world's first ultra-high temperature resistant leak detection sense cable.
- The resistance is uniform and the error is within 1%. With high stability and accuracy of detection and locating for the leakage detection system which takes 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 with conductive fluoropolymer protective cover
Cable color(Central axis)	Yellow
Wire core quantity	4pcs
Cable weight	750g/15m±10 g/15m
Cable resistance	$13\Omega/m$
Abrasion performance	> 65 cycles
Tensile	≤90kg
Operating temperature	-20°C~105°C
Fire resistance	V0
Alarm leakage (tap water)	Any position along the leakage sense cable: maximum 30mm

Operation Principle

When there is 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 XW1000B 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.

Shenzhen Xiangwei Measurement and Control Technology Co., LTD

Web: www.xiangweileak.com

Tel +86 0755-83541693

xw@szxiangwei.net