

GOLDKOOON

GLD5100 Explosion-proof Liquid leak controller

Product Intro



Explosion-proof certification, intrinsically safe design
Capable of monitoring up to 1000 meters with a sensing cable
Precise localization, error less than 2% of cable length
Break detection alerts, safe and reliable
Can monitor water, acid-base liquids, and oil leaks

Product Intro

The GLD5100 Explosion-proof Leak Detection Controller performs real-time monitoring of liquid leaks. Upon detecting liquid, the controller immediately issues an alarm and transmits leak position data via an RS485 communication interface while activating a relay output switch signal. This explosion-proof leak detector uses MODBUS-RTU protocol programming, facilitating integration with monitoring systems. The GLD5100 can monitor a sensing cable up to 1000 meters long and is widely used in hazardous areas such as factory workshops, electrolyte, battery slurry, pipelines, and cable tunnels for leak detection.

Technical Specifications

Power Supply Voltage	12VDC
Relay Load Capacity	12V/1A
Serial Interface	RS485 dual-wire network, MODBUS-RTU Baud rate (default 9600), Address (default 1)
Sensing Length	Maximum connectable sensing cable length: 1000 meters
Explosion-proof Mark	Ex ib IIC T4 Gb
Operating Environment	-30 to 60°C, 10-80% RH (non-condensing)
Enclosure Dimensions	128mm*80mm*40mm
Installation Method	Wall-mounted installation, 35mm DIN rail mounting

Product Certification



Shenzhen Goldkoon Automatic Control Equipment Co., Ltd. Phone: 0755-23776082 E-mail: gold@goldkoon.com www.goldkoon.com

For debugging software, user instructions, or communication protocols, please contact our sales staff.

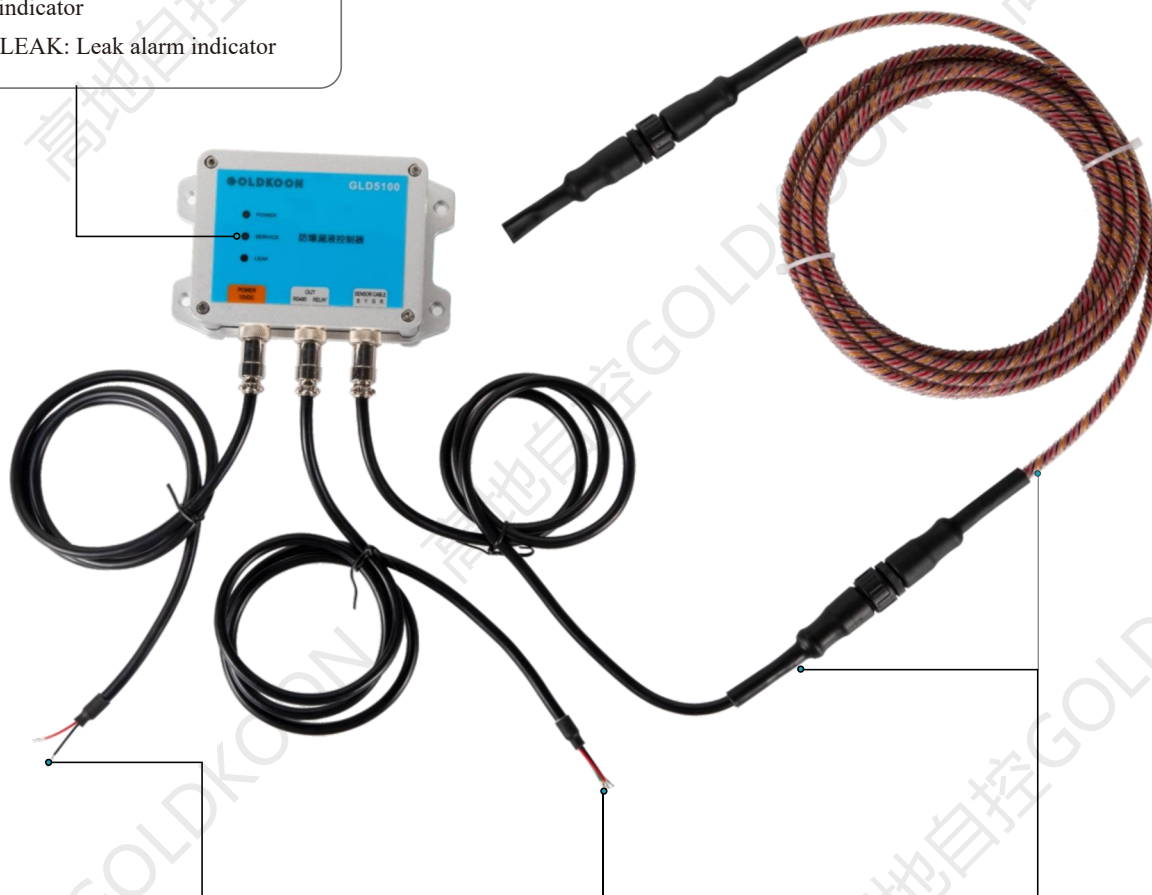
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Wiring Instructions

Indicator Lights

POWER: Power indicator
SERVICE: Disconnection
indicator
LEAK: Leak alarm indicator



Power Input (standard length 1 meter)

12VDC supply
Red - Positive power supply
Black - Negative power supply

Signal Output (standard length 1 meter)

Blue - Normally open, White - Common terminal
Green - Normally closed
Red RS485-A, Black RS485-B

Leak Sensing Cable

Black - Lead wire
Purple - Leak sensing wire

1. The explosion-proof leak detection controller can connect to sensing cables up to 1000 meters in length.
2. The position of explosion-proof leak detection is calculated based on the start of the sensing cable; the lead wire is not included in the length.
3. The explosion-proof leak detection controller is factory set to address 01, baud rate 9600, with normal sensitivity (parameters can be adjusted according to on-site requirements).

Caution:

Before powering up, please confirm the supply voltage. Connecting the power supply in reverse or exceeding the voltage limit may cause damage to the controller.;

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E-mail: gold@goldkoon.com

Phone: 0755-23776082

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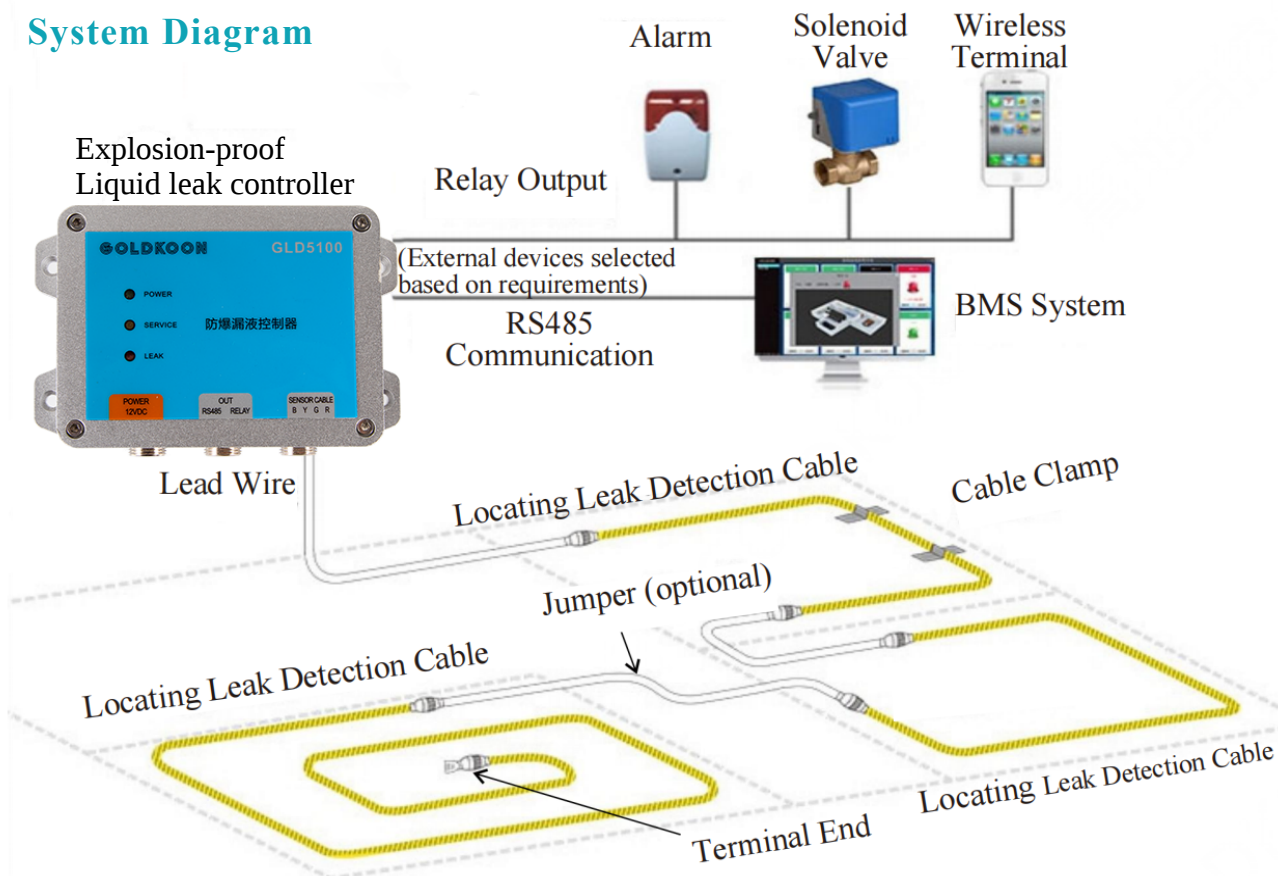
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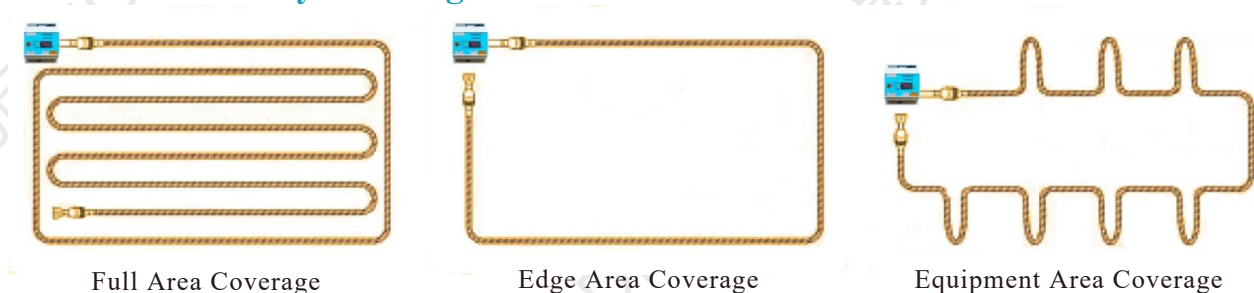
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Typical Applications

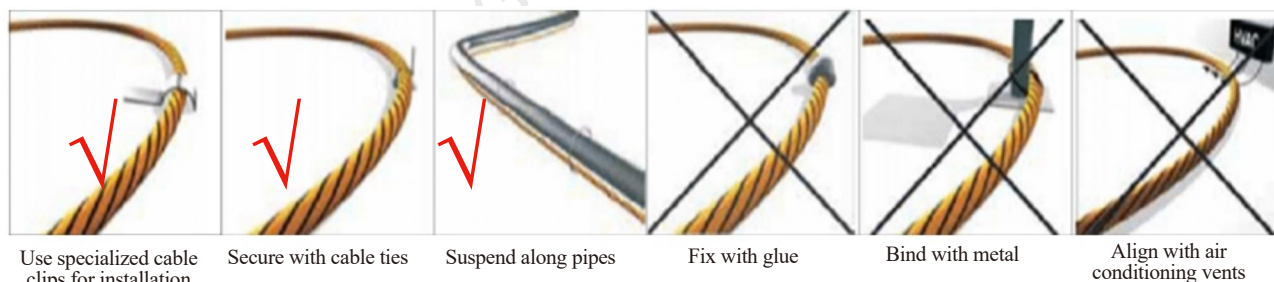
System Diagram



Sensor Cable Layout Diagram



Installation Tips for Sensor Cable



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