RK510-04 Water leak Sensor



Type A



Type B

Overview

The RK510-04 water leak sensor operates on the principle of liquid electrical conductivity, utilizing electrode probes to detect the presence of water. The integrated transmitter converts the signal into either a switch contact or RS485 digital output. Users can select between a 316L stainless steel probe for single-point monitoring or a water-sensitive sensing cable for continuous multi-point detection. Featuring an internal isolated power supply for enhanced safety and real-time monitoring capabilities, the sensor allows adjustable sensitivity settings to accommodate diverse environments. It is ideally suited for any application requiring leak detection and alarm notification.

Features

- Freely set sensitivity according to different environments
- Operating principle: liquid conductivity
- Integrated fully sealed design
- Transient high voltage protection, power polarity protection, electrostatic protection, and 485 isolation protection
- Sealing: epoxy resin potting with silicone waterproof O-rings

Applications

- Communication base station
- Hotels
- libraries
- Monitoring room
- Warehouse alarm center
- Precision computer room

Technical Parameter

Item	Technical Specification
Type A	
Output signal	Relay(NO & NC),RS485
Sensitivity	Freely adjustable to suit different environments
Supply	12-24VDC
Static power consumption	<25mA
Alarm power consumption	<35mA
Alarm trigger water level	1–10 mm
Operating environment	-20–+80°C @ 20–95% RH (Non-condensing)
Relay contact capacity	≤500 mA (Maximum current up to 1 A available upon request)
Sealing method	Epoxy resin potting + silicone O-ring
Storage environment	-40–+65°C
Housing material	PC plastic, flame retardant V-1
Cable specification	AVVR 5×0.3 mm², length 800 mm
Dimensions	80×80×48 mm

RK510-04
Water leak Sensor

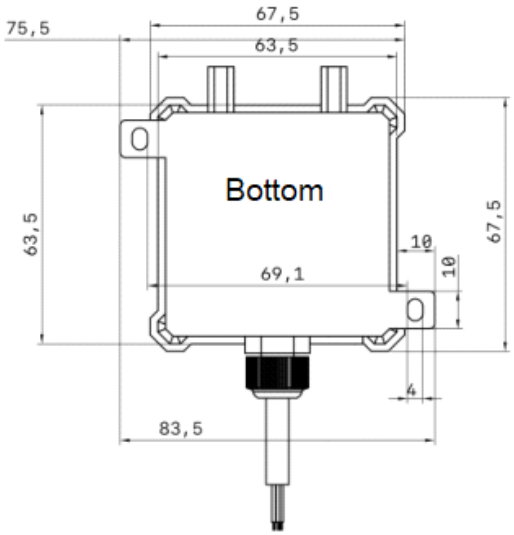
Technical Parameter

Item	Technical Specification
Type B	
Output signal	Relay(NO & NC)
Response time	<50ms
Supply	12 or 24VDC
Static power consumption	<10mA
Alarm power consumption	<30mA
Housing	Aluminum alloy
Operating environment	20%RH-100%RH
Ingress protection	IP68
Cable	1m(default), customizable
Storage environment	10-60℃@20%-90%RH

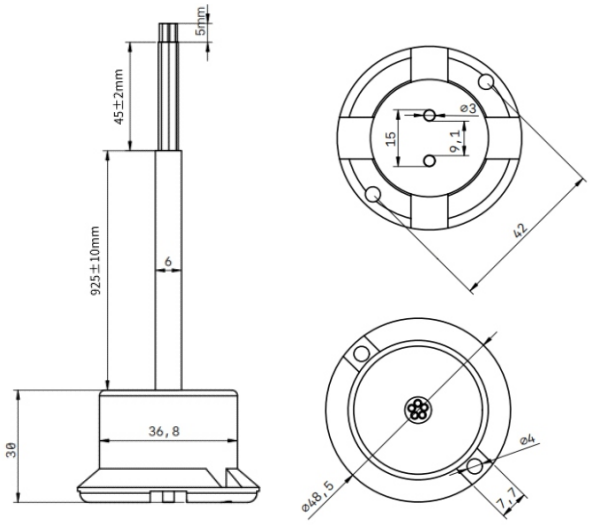
Dimension

Unit:mm

Type A:



Type B:



Revision time	Reviser	Current Version	Remarks
20260805	Echo	V5. 0	