Features

✧ Photoelectric isolation technology for output signal, the interface is safe to use and can restrict the interference of industrial frequency.
✧ Electronic addressing, which can be modified in field.
✧ Microprocessor monitors running status.
✧ Built-in safety barrier, connecting with explosion proof devices directly.

Description

I-9332 Interface can match with explosion-proof devices, such as explosion-proof smoke detector, heat detector, combination smoke/heat detector or manual call point to form an intrinsically safe system.

Connection and Wiring

Cable Size

The 1.0mm^2 or above intrinsically safe cable is used to connect safety barrier and explosion proof device, the capacitance distributed among cables should not be over 0.083μF, and the inductance distributed should not be over 4mH. The color of cables should be different to distinct polarity.

1.0mm^2 or above copper core cable with OD φ 8mm～φ 10mm is for Z1, Z2, D1, and D2.

φ 8mm～φ 10mm cable should be adopted in the places requiring water-proof. If twisted pair or solid wire has to be used, twine thread seal tape around the cable going through the Cable Entry to φ 8mm～φ 10mm.

Terminals

In "Intrinsically Safe Area", there are two terminals 3(+) and 4(-) of safety barrier, anode of intrinsically safe device connects with 3(+), and its cathode with 4(-). Please note polarity.

Note: Mustn't connect the wire inversely, otherwise it won't alarm.

In "Non-intrinsically Safe Area", there are four terminals. Z1, Z2 connects with polarity-insensitive loop, and D1, D2 with 24VDC polarity-insensitive power line.

In addition, enclosure of the interface must connect to Ground, the bolt is as shown in Fig. 1.

Installation

Two mounting methods: One is mounted on the wall, and the other is mounted on the rack.

a) Wall mounted: Fix the mounting bracket on the back of the interface to the wall using two M6×60 expansion bolts, dimension is shown in Fig. 2.

b) Rack mounted: Remove the mounting bracket from the back of the interface, then install the interface to the rack using M4×10 bolts, see Fig. 3.

Warning: This interface should be mounted in safety area. The wire from "Non-intrinsically safety" and those from "Intrinsically safety" should be separated from each other and be kept a certain distance (at least 50mm).

Strictly follow the relative explosion-proof code when installing.
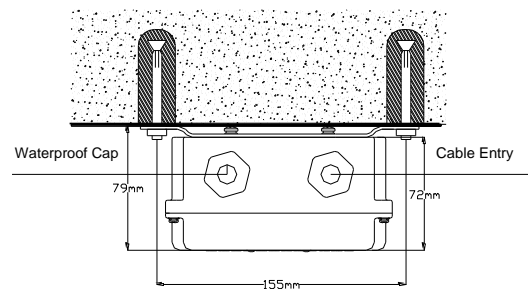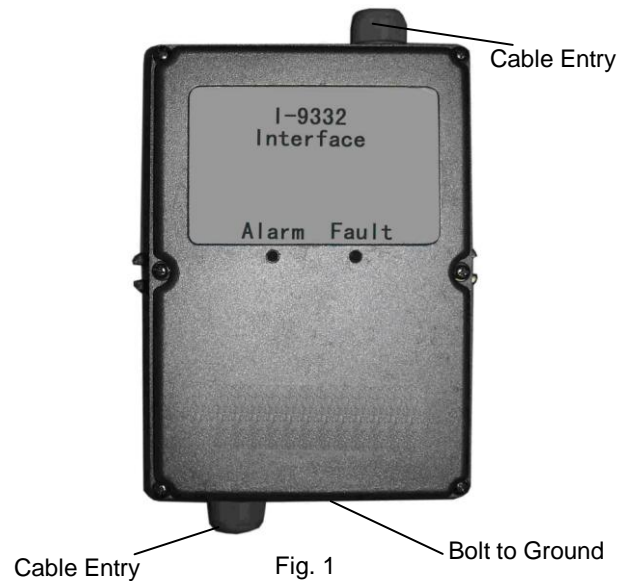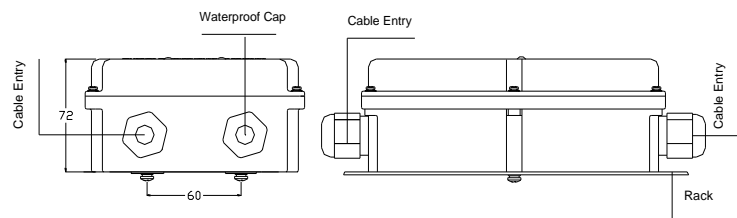

Fig. 1

Fig. 2

Fig. 3

Horizontal mounting and proper wiring will protect the interface against water.

Application

✧ The interface has to connect with a 4.7kΩ terminal resistor at the end of loop in the intrinsically safe system. The number of connected different devices cannot be over 10. The system composition is shown in Fig. 4.
✧ The interface should be addressed before installation. P-9910B programmer is available. Connecting P-9910B with Z1 and Z2 of the interface, the interface can be addressed.
✧ After wiring, switching on 24VDC power and fire alarm control panel after wiring, the control panel will register the interface. The interface will report fault when the 4.7kΩ resistor is broken or shorted. Simulation fire test to a detector, the interface reports fire alarm. Press *Clear* on the control panel, the system is back to normal state.
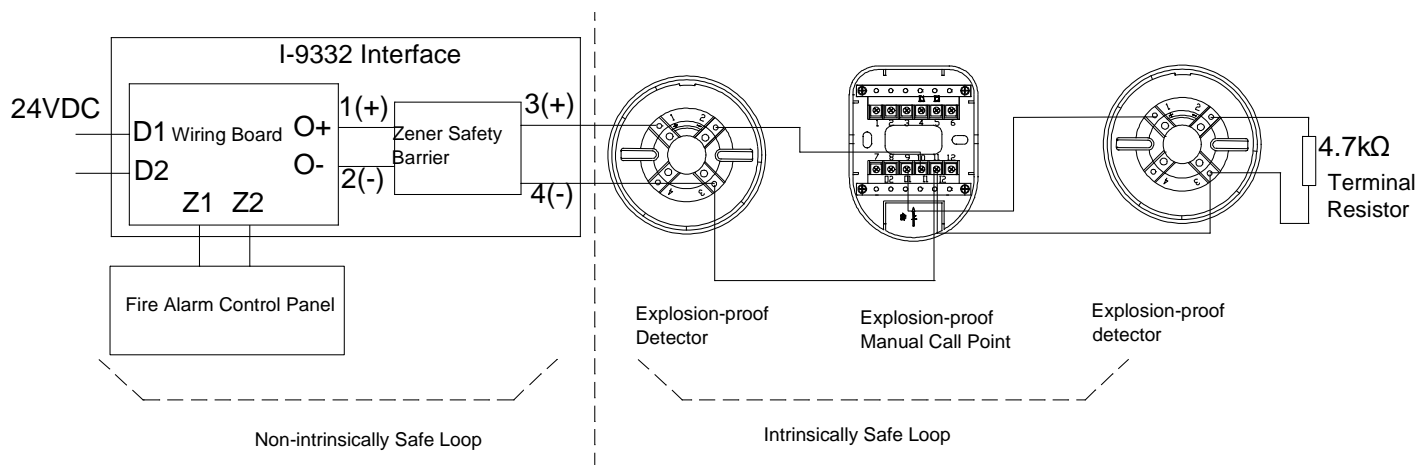
Fig. 4

Specification

Operating Voltage	Loop voltage: 24V Power voltage: 24VDC
Loop Current	Standby current≤0.5mA Alarm current≤5mA
Address Range	Occupying one address within 1～242
Ingress Protection Rating	IP65
Environmental Temperature	$-10°C \sim +50°C$
Relative Humidity	≤95%, non condensing
Dimensions	201 mm×172 mm×79 mm
Material and Color of Enclosure	Cast aluminum alloy, silver grey
Weight	1kg
Mounting Hole Spacing	155mm or 60mm
Internal safety barrier	U_0=28V, I_0=93mA, L_0=4mH, C_0=0.083μF
Wiring	Connecting with fire alarm control panel and 24VDC power line through polarity-insensitive loop; and with explosion-proof devices through polarity-sensitive loop.

Accessories and Tools

Model	QTY.	Remark
Resistor RT-0.25W-4.7kΩ ±5%	1	
P-9910B Hand Held Programmer	1	Supplied separately

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

This Data Sheet is subject to change without notice. Please contact GST for more information or questions.

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