



C-9104

Conventional Ultraviolet Flame Detector

C-9104 Conventional Ultraviolet Flame Detector is non-addressable fire detection device. Together with an active end of line unit (AEOL), it can be connected with compatible control panels to build fire detection system. It shows fire alarm by LED indicators and transmits the fire signal to the control panel.

The C-9104 detects fire by analyzing ultraviolet radiation of material flaming. It's applicable to places where may have open fire, fire with intense flame radiation and fire without smoldering stage, as well as places where quick response to a fire is required.

Features

- Excellent UV sensor for high sensitivity flame detection
- Dust/ Corrosion/ Humidity resistant

Wiring

Fig. 1 shows the structure of the detector and Fig. 2 shows the common base. T

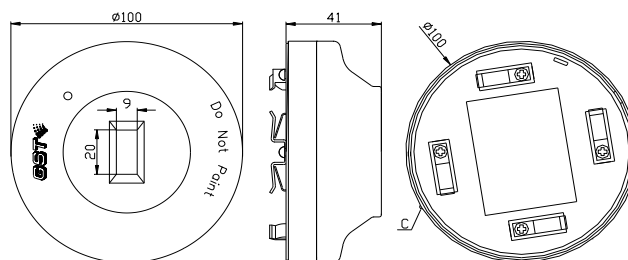


Fig. 1

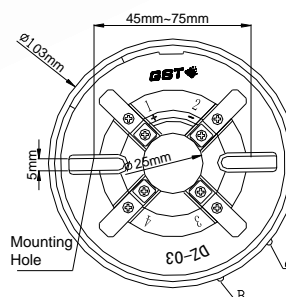


Fig. 2

There are four terminals with marks on the base.

- 1: Detection zone positive IN
- 2: Detection zone positive OUT
- 3: Detection zone negative IN and OUT
- 4: Detector fixing support

Recommended Cabling

1.0mm² or above fire cable, or subject to local codes

Cautions

The detector is not suitable for the following places.

- ✧ Where flameless fires are expected.
- ✧ Where thick smoke spreads before flames.
- ✧ Places where the "view" of the detector is easy to be obscured.
- ✧ Where the sunlight can directly or indirectly reach the detector sensor.
- ✧ Where there are strong ultraviolet light source, such as halogen and tungsten.
- ✧ Where there is open flame, welding operation, X rays and arc and spark etc.

Application

1. When the detector is connected with conventional fire alarm control panel or I-9319 addressable zone monitor unit, if a P-9907 AEOL is connected to the end of loop, a Diode (1N5819) should be connected to the detector base.

1) When used as the detector base, the AEOL has a conventional detector on it. The system connection is shown in Fig. 3.

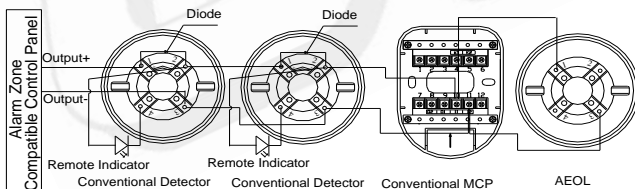


Fig. 3

2) When the AEOL is used alone, the system connection is shown in Fig. 4

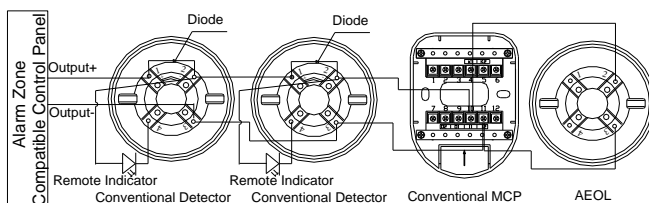


Fig. 4

2. When the detector is connected with conventional fire alarm control panel or I-9319 Addressable zone monitor unit with an end of line resistor at the end, an ordinary common detector base will be used. The system connection is shown in Fig.5.

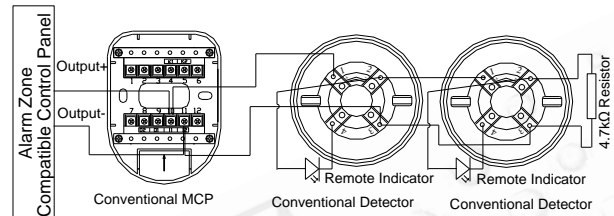


Fig.5

Specification

Operating Voltage	24VDC
Standby Current	≤1.2mA
Alarm Current	≤30mA
Sensitivity	3cm flame from 6 meters distance
Indicator	Red. Flash in standby condition. Illuminates steadily in alarm.
Detection Angle	≤80°
Monitoring Area	$S=(h \times \tan \alpha)^2 \pi = 2.21h^2$ h: Height from the detector to the ground. $\alpha=40^\circ$
Operating Temperature	-20°C ~ +50°C
Relative Humidity	≤95%, non condensing
Dimension	Diameter: 103mm Height: 53.5mm (with base)
Enclosure	ABS, white (RAL 9016)
Weight	About 112g
Mounting Hole Distance	45mm ~ 75mm

Accessories and Tools

Model	Name	Remark
DZ-03	Common Base	Order separately
DZ-03D	Diode Base	Order separately