JTY-HF-GST102E

Conventional Reflective Beam Detector

Description

JTY-HF-GST102E Conventional Reflective Beam Detector is a non-addressable smoke detector with infrared optical beam. With excellent built-in microprocessor, the detector can carry out system adjustment, drift compensation of ambient data, and judgment of fire and fault through fixed algorithm, indicate states through LEDs, provide signals by output relays. The sensitivity of the detector can be set through hand-held programmer in field, to suit different application conditions. With new and reasonable design, the detector is simple to install and align. What's more, it is very esthetically pleasing. The detector is suitable for various applications including large storage zones, shopping malls, fitness centers, gyms, exhibition halls, hotel lobbies, printing houses, garment factories, museums and prisons. It is also used for those areas with light smoke.

Features and Benefits

- Wide operating voltage range, large monitoring areas.
- Combination of the emitting and receiving part makes mounting easy and optical pathway accurate.
- Built-in microprocessor enables intelligent judgment about fire alarm and fault.
- The detector can calibrate easily, which ensures a single person complete adjustment in short time. It's also convenient to operate.
- Self-diagnostic function can monitor the internal fault.
- Drift compensation for factors changing, such as a certain of dust accumulation, positional excursion and ageing transmitter.
- Dry contact outputs for fire and fault signals.
- Three sensitivity levels can be set in field.
- Attractive and decent appearance.

Terminals and Installation Holes

The terminals of the detector are shown as below.

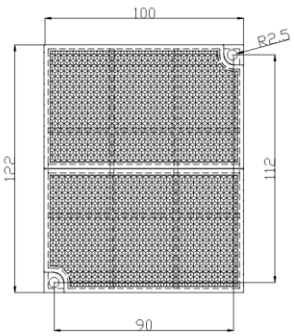
D1 & D2: 24VDC power supply, non-polarized

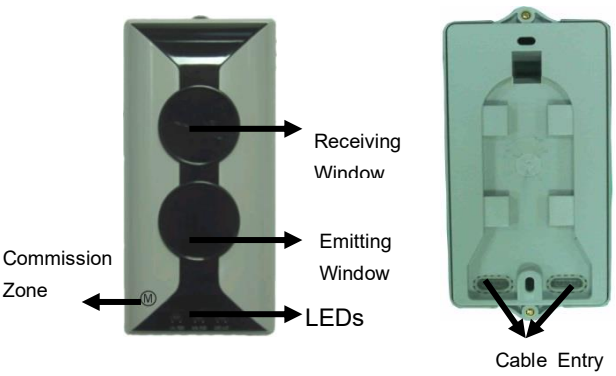
B1 & B2: Loop connection for programmer, non-polarized

K11 & K12: Alarm output, normally open in standby state, close in fire condition

K21 & K22: Fault Output, normally open in standby state, close in fault state

Below figures show the detector appearance.





Application

The detector must be used together with reflector(s). The quantity of reflector(s) to be used (1 or 4) depends on the distance from the detector to the reflectors.

Sealing the gaps by glue, the protection rate can reach IP66.

The bean length can be set by changing device type through programmer as per below table, to provide better performance.

Mounting Distance	Type
8 - 20m	51
20 - 40m	52
40 - 70m	53
70 - 100m	54

Recommended Cabling

1.0mm^2 above twisted pair connecting with K11, K12, K21 and K22.

1.5mm^2 above BV cable connecting with D1 and D2 of power line.

Technical Specification

Operating Voltage	Loop 24VDC (15V~28V)
Commission current	≤20mA
Standby current	≤12mA
Alarm current	≤22mA
Angle of Adjusting	-6° ~ +6°
Maximum angular misalignment	±0.5°
Sensitivity Level	Level 1: the highest sensitivity Level 2: middle sensitivity Level 3: low sensitivity
Operating Environment	Temperature: -10°C ~ +50°C Relative Humidity≤95%, non condensing
Length of Optical Pathway	8m~100m
Monitoring Area	Maximum monitoring area: 14 x100 =1400m^2 Maximum width: 14m
Material and Color of of Enclosure	ABS, Gray
Dimensions	206mm X 95mm X 95mm
Ingress Protection Rating	IP20 without glue-seal IP66 through glue-seal treatment
Weight	450g

Ordering Information and Compatible Products

Part No.	JTY-HF-GST102E
Device Name	Conventional Reflective Beam Detector

Accessories and Tools

Part No.: JTY-HM/F-GST102

Device name: Reflector