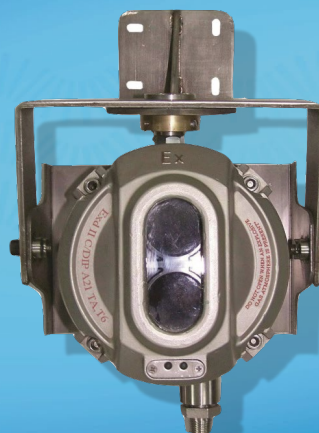


# D-9105RExd

## Digital Flame Proof

## Reflective Beam Detector



Ex 

### Description

D-9105RExd Digital Flame Proof Reflective Beam Detector is able to be used as addressable connecting in GST fire alarm loop, or non-addressable providing dry contact outputs for fire and fault conditions.

The detector is applicable to either commercial areas or hazardous industrial areas, such as Zone 1 and 2 of explosive gas areas and Zone 21 and 22 of combustible dust areas.

### Features and Benefits

- Large monitoring areas
- The detector's optical pathway is designed with strong anti-interference ability.
- Attractive and decent appearance.
- Integration of the emitting and receiving part enables easy installation and accurate optical pathway
- Built-in microprocessor enables intelligent judgment of fire alarm and fault
- Easy alignment ensures a single person installation
- Self-diagnostic
- Drift-compensation for factors weakness, such as dust contamination, positional excursion and component ageing
- Integrated functions for both addressable and conventional use

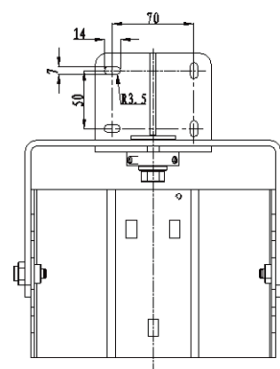
- Electrically address by handheld programmer
- Fire and fault volt-free contact output for Integration of the system
- 2 sensitivity levels can be set by programmer

### Terminals and Installation Holes

Below figures show the terminals of the detector.



- D1 & D2: 24VDC power supply, non-polarized  
 K11 & K12: Fire signal output, normally-open  
 K21 & K22: Fault signal output, normally-open  
 Z1 & Z2: Loop connection, non-polarized. Connecting with GST addressable panel in addressable mode, no-connection in conventional mode



IMPORTANT: This publication is a generic version in which product information is shown for informational purposes only and does not constitute a specific commitment or guarantee. We are constantly pursuing the improvement of product technology to improve product performance, for which we reserve the right to adjust the configuration and technical information of the related products without notice. In addition, the description of system performance in this publication applies only to the usual situation. As a result, there may be a variety of unpredictable special circumstances in the real world, so the realization of the relevant product performance will depend on the professional investigation and analysis and the design plan. Please contact us and we will be happy to provide you with professional advice.

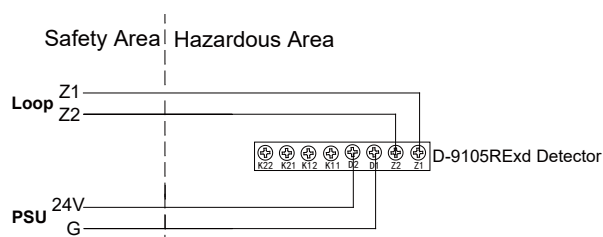
## Recommended Cabling

1.0mm<sup>2</sup> or above fire cable are recommended, but subject to local codes, outer diameter 8mm~10mm is required. The joint washer matches with the cable diameter.

When only one cable entry pipe is used, the spare pipe should be well sealed by end cap.

## Application

The typical connection of the detectors in addressable mode is shown below.



The detector should be installed by specialist engineer. Be sure that cable is well connected, detector house is well fastened and with good insulation conditions. Be sure all earth terminals inside and outside the housing are well connected.

### Cautions

Installation and maintenance should strictly comply with relative codes for explosive and hazardous areas. Never open the cover for maintenance in field.

- The enclosure must be earthed.
- The detector is not suitable for the following places.
- The height of the roof is over 40m or no roof
- The space is lower than 1.5m.
- There is a lot of dust, powder or vapor.
- Temperature is too high (over 50°C)
- The Mounting wall or fitting is greatly affected by mechanical vibration.
- There are fixed or moving objects within 1m from the detector's optical pathway.
- There is strong magnetic field.

## Certificates and Compliance

- Explosion-proof Mark: Ex d IIC T6 Gb/Ex tD A21 IP66 T85°C
- Certificate Number: CE16.1388X

## Technical Specification

Operating Voltage	24VDC (15VDC - 28VDC)
Operation Current	Loop: ≤ 2mA
	24VDC: Standby current ≤ 12mA Alarm current ≤ 22mA
Indicator	<b>Commission:</b> Green LED and yellow LED illuminates or flashes <b>Monitoring state:</b> Red LED flashes <b>Fire:</b> Red LED illuminates <b>Fault:</b> Yellow LED illuminates
Programming Mode	Electronically programming, 1 ~ 242
Beam width	14 meters
Beam Length	8-100 meters
Protection area	Maximum 1400m <sup>2</sup>
Sensitivity Levels	2
Output relay	2A/28VDC
Ingress Protection	IP66
Material and Color	Stainless steel, metallic gray
Ambient Temperature	-20°C ~ +55°C
Relative Humidity	≤95%RH, non-condensing
Dimensions	344mm(L)×240mm(W)×212mm(D)
Weight	Detector: 6kg Adjustment frame: 3.8kg

## Order Information

Part No.	D-9105RExd
Device Name	Digital Flame Proof Reflective Beam Detector
Product No.	10103171
Compatible Products	GST Intelligent Fire Alarm Control Panel

## Accessories and Tools



Part No.: P-9910B  
Device name: Handheld Programmer  
Product No.: 10104894