

# INSTRUCTION MANUAL

## FLAME FIRE DETECTOR

### D9000FL



#### 1. INTRODUCTION

Flame fire detector D9000FL is designed to provide early warning of a fire condition responding to open flame. The fire detector reacts within the light spectrum of the flame and has maximum sensitivity of the infrared range. The operation principle is based on the reception of flame emissions with their typical flicker frequency within the whole spectrum range. The infrared sensor signal - amplified, filtered and shaped is being sent to the time delay circuit. If the flame impact has decreased during the time delay, the fire detector does not activate.

#### 2. TECHNICAL DATA

– Supply voltage	10-30 V DC
– Current consumption in Standby mode	≤ 270 μA
– Current consumption in Alarm condition	20 mA/ 24V DC
– Sensitivity	EN 54-10 class 2
– Angle of visibility	50°
– Time delay	4 s
– Time to enter standby mode after reset	up to 5s
– Reset time	2s
– Degree of protection	IP 43
– Type of the connecting line to the base	0,5÷1,5 mm <sup>2</sup> / two-wire
– Output in Alarm condition (term. 3)	limited to 2 kΩ, negative
– Operating temperature range	minus 10°C ÷ plus 50°C
– Humidity	(93 ± 3)% at 40°C
– Dimensions with base	Ø 100mm h ≤ 52mm
– Weight	≤ 100g

#### 3. INSTALLATION

- Choose the place (according to the plans of the project) for the installation of the detector;
- Mount the base with appropriate fixings;
- Connect the electrical cables according to the attached diagram (Figure 1);

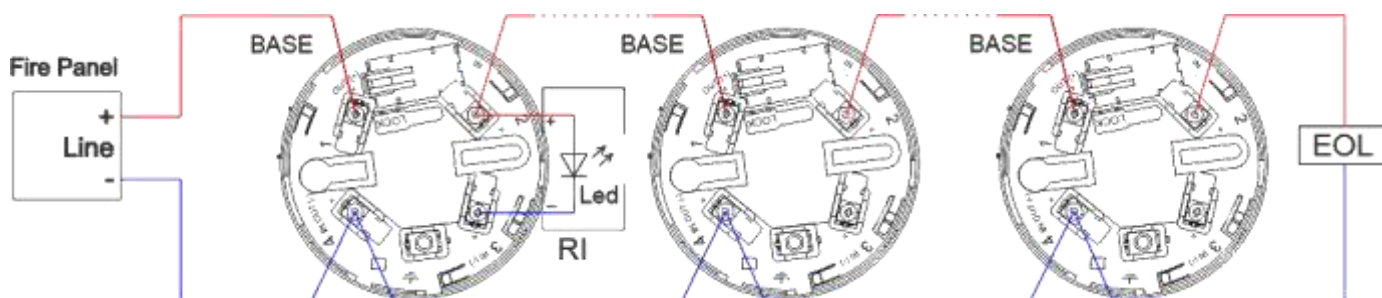


Fig.1

- Place the detector base and rotate clockwise till matching markers;
- If you want to lock detector:
  - Pre remove the key from the base (Figure 2).
  - Break the plastic at the specified location on the bottom of the sensor (Figure 3).

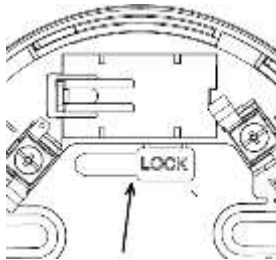


Fig.2

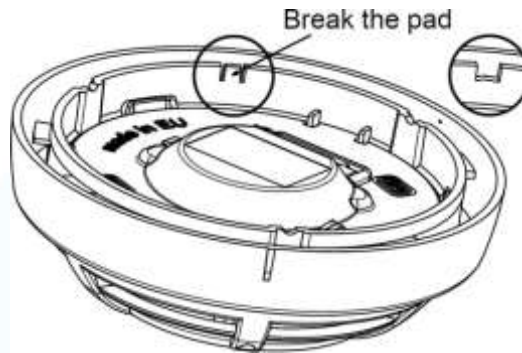


Fig.3

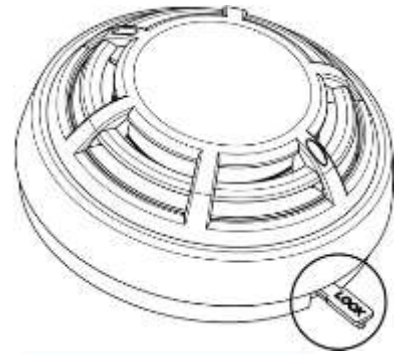


Fig.4

- Place the detector on the base and rotate it .
- If the detector is locked to the base, to unlock it, insert first the key to the specified location(Fig. 4) and rotate the detector counterclockwise;
- Test the detector to check the correct operation of the LED indication;

#### **4. TESTING AND SERVICE SCHEDULE**

The fire detector shall be tested after installation, as a part of the Fire Alarm System of the premise or after performing service schedule, in the following sequence:

- 1.Power supply the fire detector from the fire alarm line to which it is mounted. The supply voltage value is given in section Technical data of the instruction manual herein. Supply voltage can be provided by the Fire alarm panel or by an auxiliary source (12-30)V DC.
- 2.Use a tester for flame detectors. In 10 seconds the LEDs shall be illuminated (Fire condition).
- 3.Cut off the power supply of the detector for a while about 2 seconds or reset the fire panel. It should remain in duty mode.

The detectors are available with three types of bases:

- **B 9000** - Standard base;
- **B 9000D** - Standard base with mounted diode for fault detection - removed detector;
- **B 9000R** - Standard base with relay output 12V for security panels.

#### **5. Warranty obligations**

The warranty period is 36 months from the date of sale, provided that:

- the conditions of storage and transport have been followed;
- release is performed by authorized personnel;
- the requirements for operation stated in this instruction have been abode;
- defects are not caused by natural phenomena and accidents of the plug socket.



*DMTech wishes you pleasant work!*