

GENERAL DESCRIPTION

The fire detector is designed for early warning of a fire condition responding to fixed threshold smoke concentration detected in the protected premises. The principle of functioning of the detector is based on infrared rays distraction caused by smoke particles entering the optic chamber. The smoke sensitivity is programmable from the Fire Control Panel IFS 7002 via the specialized data exchange protocol UniTALK. A built-in isolator for short circuit protection is provided in the detector. FD7130 is fitted on base 7100.

The fire detector (fig.1) consist of a printed circuit board and an optic chamber (pos.4) fixed in a plastic body (pos.5).

Both LED indicators (pos.3) allow range of visibility 360° and provide information for the status:

- **Duty mode** - both LEDs flash briefly every 16 s;
- **Alarm condition** - both LEDs produce continuous light;
- **Fault condition (activated isolator)** - both LEDs flash briefly with 1 Hz frequency;
- **Fault condition (short circuit in the remote indicator output or contaminated chamber)** - both LEDs flash briefly with 2 Hz frequency.

TECHNICAL DATA

Supply voltage	(15-30)V DC
Current consumption in Duty Mode	not more than 310 µA
Current consumption in Alarm Condition	(2±1) mA
Current in Alarm Condition from output RI/KL	(2±1) mA
Time to enter Duty mode after power supply is on	up to 40s
Reset time	5s
Time to enter Duty mode after reset	up to 40s
Smoke sensitivity	middle or 20% higher (complies with EN 54-7:2000+A1:2002) or 20% lower
Protected area	circle with diameter 15 m (comp.with EN 54-14)
Height of mounting	up to 11 m (comp.with EN 54-14)
Degree of protection	IP 43
Operational temperature range	minus 10°C - plus 55°C
Relative humidity resistance	(93±3)% at 40°C
Dimensions, base included	Ø100 mm, h 47 mm
Weight, base included	0,100 kg
Type of connecting line to the base	two-wire, a single-core or multi-core insulated, shielded wire
Cross section of the connecting wire	(0.8-2.5) mm ²

INSTALLATION

The fire detector operates with base type **7100**. It is delivered separately and fixed on the desired place in advance by means of pins and screws. The electrical connection of the components necessary for the installation is done according to the schematic diagram on **fig.2**. It is recommended cable shoes to be used. It is not necessary to take into consideration the conditional beginnings and ends of the loops.

The fire detector is placed on the base (fig. 1, pos. 1). It is rotated clockwise until reaching the guiding grooves (fig. 1, pos. 2). It is rotated until rest (fig. 3.1). The slots of the base and the box should match (fig.3.2).

Locking of the fire detector (fig.4). Before installation, the key (pos.3) is detached from the base and the rib (pos. 1) of the locking click (pos.2) is cut out.

Removing of a fire detector locked to the base. Insert the key into the slot (pos.4) push in as in the same time the fire detector is rotated anticlockwise. Remove the key and continue to rotate the fire detector in the same direction until it is released from the base.

TESTING

The fire detector is tested after installation as a part of the site's fire alarm system or with maintenance activities, following this order:

1. Voltage is supplied to the fire detector from the fire alarm loop of the Fire Control Panel IFS 7002.
2. After the fire detector is in Duty mode it is activated with a Smoke Detector Tester. Within 40s the fire detector should enter Alarm condition.
3. A reset command is sent from the Fire Control Panel to the tested fire detector. It should restore Duty mode and it is ready for a new activation within 40s.

SERVICE SCHEDULE

It is done by authorized personnel and includes the following activities:

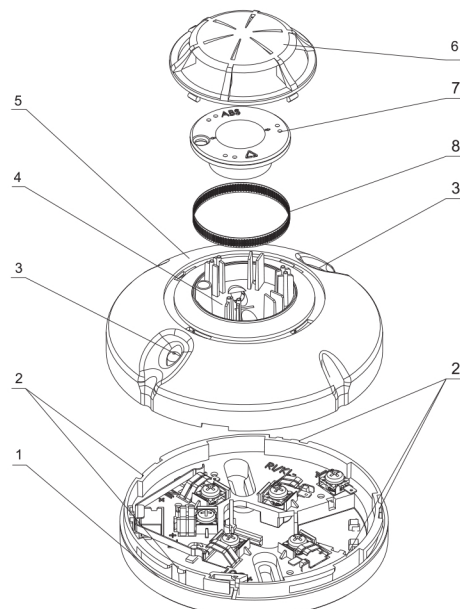
1. Inspection for visible physical damage - monthly
 2. Testing in real conditions - monthly
 3. *Preventive cleaning of the optic chamber - every 6 months
- *The fire detector is removed from the base. The body cover (fig.1, pos.6) is removed by rotating it to rest anticlockwise. The optic chamber cover (fig. 1, pos.7) and the screen (fig. 1, pos.8) are removed. For the optic chamber cover and the screen it is permitted washing liquid to be used. Then they should be rinsed out and dried. The optic chamber is dusted with a small brush. **The optic chamber is compulsory dusted when the fire detector enters Contaminated chamber Mode.** If it is not cleaned in due time it will get contaminated to such an extent that it would not allow the proper functioning of the fire detector which will be signaled as Alarm Condition.

WARRANTY

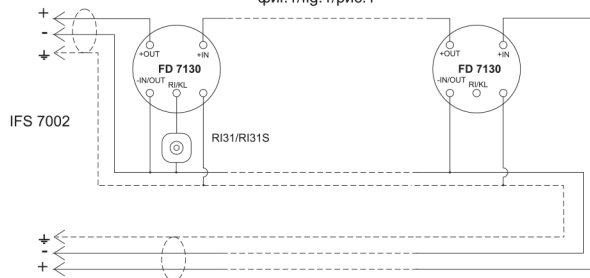
The warranty period is 36 months from the date of sale.

The manufacturer guarantees the normal operation of the fire detector providing that the requirements set herein have been observed.

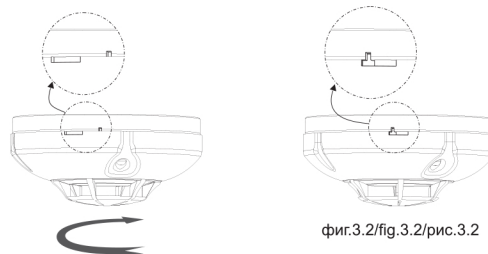
The manufacturer does not bear warranty liabilities for damages caused through accidental mechanical damage, misuse, adaptation or modification after production. The manufacturer bears warranty liabilities for damages in the fire detector caused through manufacturer's fault only.



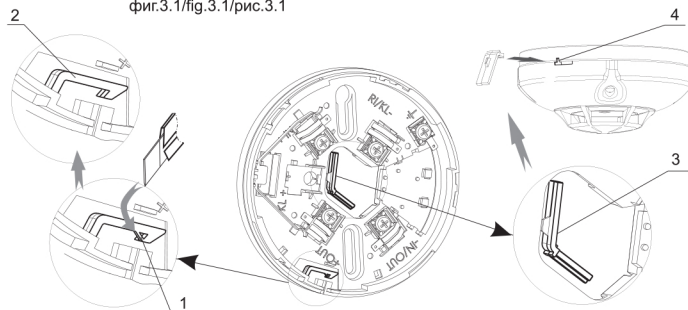
фиг.1/fig.1/рис.1



фиг.2/fig.2/рис.2



фиг.3.1/fig.3.1/рис.3.1



фиг.4/fig.4/рис.4