

### TECHNICAL INFORMATION

#### Applications

- storehouses of oil, benzine, petroleum derivate etc
- storehouses of paint
- storehouses of paper
- storehouses of wood
- chemical laboratories
- storehouses of flammable gases

#### Technical Advantages

- easy installation
- fast response time
- little frequent and inexpensive maintenance
- possibility of remote Operational Test
- immunity to the false alarms
- immunity to the electrical interferences



The IR flame detector FL10 detects within few seconds a flame caused by a fire inside its field of vision.

This detector is specially suitable for applications where a fire can develop with quickly. The FL10 is particularly suitable for the protection of storehouses of oil, gasoline, benzine, paints, plastics, alcohol, etc.

The technical operation principle of FL10 is based on detection of the infrared radiation emitted by a flame.

The internal circuit and the advanced technology used, makes the apparatus easy to use, precise and very efficient. It has also high immunity to false alarms which are usually produced by natural phenomena or in the protected areas.

The FL10 box is made up of autoextinguishing polycarbonate plastic with IP50 protection that is very solid and easy to install.

#### Detector's Operations

The detector FL10 has a special optical head that controls the protected area and is particularly sensible to the infrared radiation.

Some optical filters are present to let the infrared beam pass through and to block all the other light radiation. The FL20A is not sensible to light of sun, lamplight, UV radiations, X and gamma rays.

When in the protected area a flame grows in the environment to be protected, it generates a powerful infrared radiation that is not constant but variable and pulsing.

The internal circuit is able to elaborate the width, frequency and time of radiation and if it is recognized like flame, then it automatically drives the output relay which can control suitable optical and acoustic alarm systems.

The FL10 has an internal circuit that permits the regulation of the sensibility and response time delay and it also contains a special circuit that simulates the flame action and permits to remotely perform a working TEST of the detector.

#### Technical Data

- Power supply: 12/24 V dc
- Current: 15mA
- Protection against the inversion of polarity
- Distance of flame detection: 20 m (gasoline fire 20x20 cm - height 20 cm)
- Optical angle of vision: 120 degrees
- Internal trimmer for the regulation of the sensibility
- Internal trimmer for regulation of time delay
- Output terminal blocks for electrical detector remote Functional Test
- Output alarm relay: 1/A/24 V dc
- Enclosure material: autoextinguishing polycarbonate plastic (class V0 - UL94 - IEC695 - IEC707)
- Protection: IP 50 (IEC 529-144)
- Dimensions: 162x62x63 mm
- Weight: 240 gr.

