

TECHNICAL INFORMATION

APPLICATIONS

- refineries
- compressor stations
- petroleum products storage (gasoline, paint thinner etc.).
- warehouses paint
- paper products storage
- timber warehouses and silos
- chemical laboratories
- deposits of flammable gases

TECHNICAL ADVANTAGES

- installation easy
- speed of intervention
- infrequent and inexpensive maintenance
- ability to test remote operation
- high immunity to false alarms
- sensors UV / IR
- automatic and manual test from distance
- optical windows thermostated
- analog, digital and relay outputs
- explosion-proof ATEX certified

**ATEX
CERTIFIED**



The flame detector FL-50 is capable of detecting within a few seconds a flame produced by a fire within his field of vision. It finds particular application in the areas where it is presumed that a fire may develop quickly, such as in storage of oil products, paints, plastics, alcohols, etc.

The operating principle is based on the detection of infrared radiation (IR) and ultraviolet light emitted by a flame (UV).

The detector, depending on version, can be equipped with the following sensors:

- 3 IR infrared sensors with different spectral windows
- 1 UV ultraviolet sensor

The use of this multi-sensor technology and a microprocessor controlled circuitry and software with specific algorithms, make the detector very efficient and at the same time highly immune to false alarms products generally from natural disturbances or generated in the environment, such as lights, flashes produced by machines welding, hot objects, etc.

The detector is equipped with a special internal circuit for automatic periodic test or manual remote test. This test verifies also the cleaning and the efficiency of the optical windows.

An automatic temperature control of the optical windows (optional) allows the use of the detector even at very low temperatures.

The enclosure of the device is made of aluminum alloy in Ex-d ATEX certified and has remarkable qualities of robustness and practicality installation.

A special bracket with ball joint, allows the perfect optical orientation of the device.

FL50 with inox sunshield



TECHNICAL DATA

Electrical data

- power: 11-30 VDC
- consumption: 180 mA max.
- protection against reverse polarity

Performance

- detectors class: X (maximum distance of flame detection: 50m target flame 33x33 cm - height 5 cm)
- optical viewing angle: 120 degrees
- IR spectral response: 0.8 to 4.8 microns (depending on model)
- UV spectral response: 185 - 260 nm
- operating temperature: -25 to + 75 ° C
- relative humidity: 0-100% RH non-condensing
- optical windows automatic temperature control (optional)
- internal adjustment of sensitivity: 4 levels for IR and 4 levels for UV
- switching delay adjustment: 4-8-15-30 sec.
- microprocessor controlled electronic
- periodic internal automatic Test operation (optional)
- Test terminals for remote operation (optional)
- immunity to electromagnetic interference: in accordance with EN50130-4

Outputs

- alarm relay output: 1 A / 24 Vdc
- fault relays output: 1 A / 24 Vdc
- analog output: 0-5V
- analog output: 4-20mA (optional)
- RS485 serial port (optional)

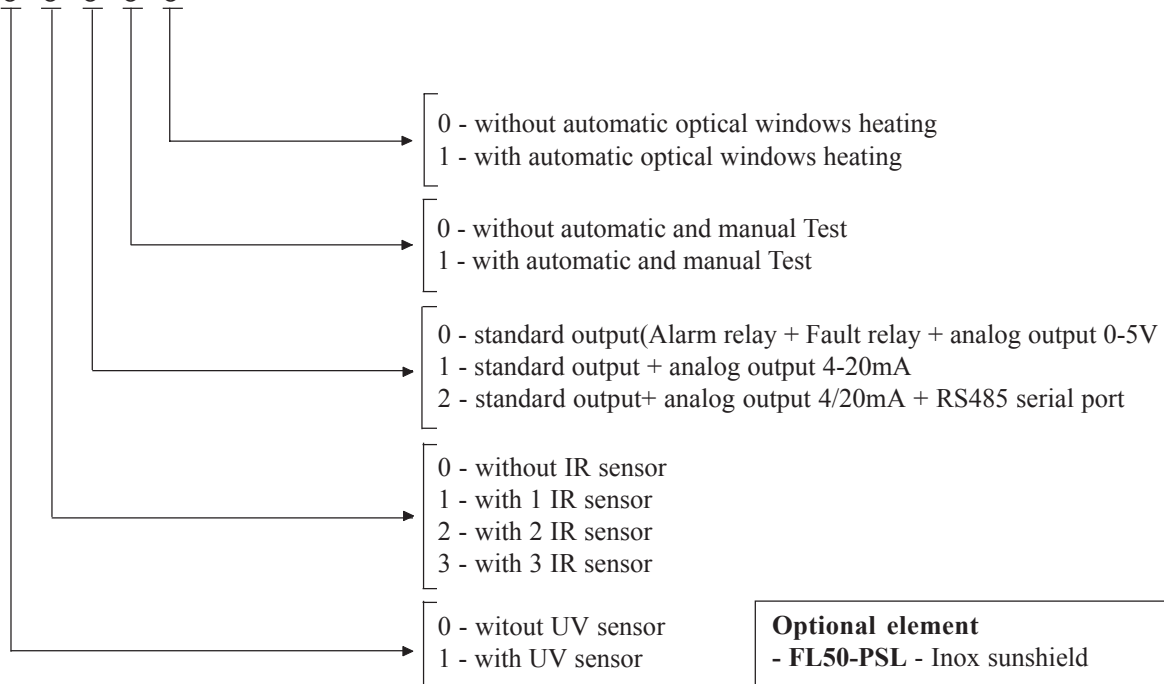
Mechanical Data

- enclosure: Aluminium light alloy
- execution: Ex-d IIC T6
- certification: **ATEX - CESI 11ATEX019X**
- IP 65 (IEC 529-144)
- cable outlet: 1/2 "gas UNI - NPT - ASME B1.20.1- hole
- areas of application: Zone 1 - Zone 2 - Zone 21 - Zone 22
- enclosure size with bracket: 130x185 mm
- weight: 3 Kg



FL 50 - AVAILABLE VERSIONS - ORDER CODES

FL50-0-0-0-0-0



Optional element
- FL50-PSL - Inox sunshield