




- ◆ The infrared flame detectors are used for detection of open flames and fires both of organic and inorganic materials.
- ◆ The detector has a complete self-monitoring, incl. visibility
- ◆ **Well suited for detecting:**
Flames with a temperature of > 800°C.
- ◆ **Typical Examples:**
The flame detectors are suitable for monitoring especially fire risk and/or potentially explosive objects, for example, painting cabins, powder spray cabins, hardening units, spark-eroding machines, mechanical machining centers and dust extraction systems in which high dust concentrations are expected and in which visibility monitoring of the flame detectors is required.
- ◆ **Ambient radiation:**
By setting various fire levels, the detectors can be adapted to different ambient radiation (brightness, illumination).

Technical data:

Infrared flame detectors with visibility monitoring IR-04 only suitable for four-line operation

Operating voltage	15...30 VDC	Dimensions:	
Operating current	<35mA	Basic housing	98 x 64 x 36mm
Switch-on suppression	approx. 10 s	Tubus	∅:48/60mm, h:69mm
Line resistance four-line technology	adaptable	Weight	510g
Alarm resistor two-line technology	adaptable		
Duration of alarm output	Fire duration /	Sensitivity: Detection distance / flame area	
Trigger delay	1ms / 10ms	Fire level 1: 6m / 45cm ²	
Spectral sensitivity	approx.	Fire level 2: 6m / 660cm ²	
Maximum spectral sensitivity	approx. 950nm	Fire level 3: 6m / 2600cm ²	
		Fire level 4: 6m / 6000cm ²	
Viewing angle	approx. 90°	Ambient radiation, brightness, illumination:	
Control module temperature range	-20...+70°C	BS1: Surroundings completely dark	
		BS2: Surroundings weakly illuminated, no daylight	
Housing safety class	IP65	BS3: Surroundings with daylight, without direct sunlight	
Purging air pressure	0.1 ... 1 Bar	BS4: Surroundings with direct sunlight, glass facades	

Special features

- ATEX Certification for Category 2D
-  II 2D Ex tb IIIC T90° Db IP65 X -20 =< ta =< +70°C
- Visibility monitoring with error messages
- Potential-free relay output for malfunction and alarm
- Internal monitoring of operating voltage, malfunction with Vb < 15.0VDC

