

Flame Detection

SharpEye FLAME DETECTORS

- Different models designed for each fire type
- High immunity to false alarms
- SIL 2 according to IEC 61508
- Heated window
- 5-Year warranty and MTBF of 17 years



CERTIFICATIONS



The Gas Detection People

**INDUSTRIAL
SCIENTIFIC**

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Designed to comply with the world's most demanding standards

We are pleased to present our new flame detector range. SharpEye detectors are specifically designed for all fire types. Their capabilities to analyze spectrums give them a high level of reliability.

Operating

Optical technology enables SharpEye to sense radiation dispersed by flames and the by-products of combustion. Depending on the model, SharpEye can use one or several sensors, either in UV, in IR or a combination of both.



A new range offering brand new features:

- Compliant with European standard EN54-10
- SIL2 Approved by TUV according to IEC 61508
- Ex Approved for Zone 1 hazardous area location (ATEX, IECEx, FM, CSA)
- High false alarm immunity
- New compact, lighter design
- Multiple output options : mA, relays, RS 485 ModBus, Hart
- Automatic built-in test and dirty optics compensation
- Heated window-for operation in harsh weather conditions
- Lower power requirements

Our detectors

40/40L Model (UV-IR)

- This detector combines a UV sensor and an IR sensor for the detection of hydrocarbons, hydrogen and metal fire.
- High Speed response (150m/sec)



40/40I Model (IR3)

- Combines three infrared sensors for the detection of hydrocarbon fires up to a distance of 65 meters with a high immunity to false alarms.
- DNV approval



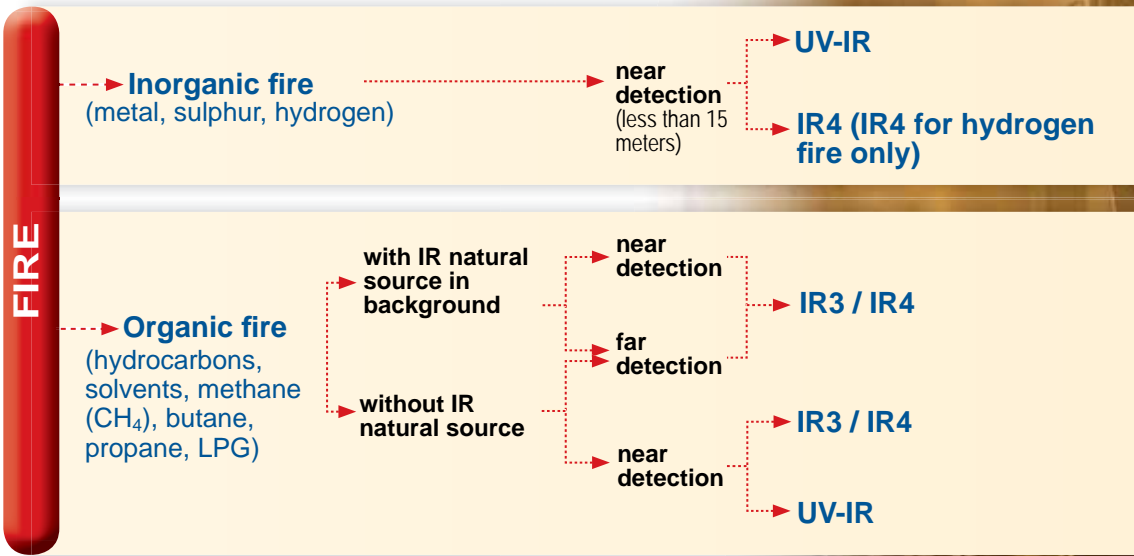
New: 40/40M Model (IR4)

- Combines four infrared sensors for the detection of hydrocarbon and hydrogen fires up to a distance of 65 meters with the highest immunity to false alarms



Simple IR, mini UV-IR and mini IR3 are also available and our detectors are supplied with tilt mount and weather protection.

How to choose the proper flame detectors?



FUEL	FIRE SIZE	DETECTION DISTANCE IN METERS			
		40 / 40 I (IR3)	40 / 40 UV-IR (MODEL L)	40 / 40 UV-IR (MODEL L4)	40 / 40 M (IR4)
Gasoline	0.1m ² pan fire	65	15	15	65
n-heptane		65	15	15	65
Diesel		45	11	11	45
JP5		45	11	11	45
Kerosene		45	11	11	45
Alcohol (ethanol)		40	7.5	7.5	40
IPA (isopropyl alcohol)		40	7.5	7.5	40
Methanol		35	7.5	7.5	35
Methane	0.5m plume fire	30	5	5	30
LPG (propane)		30	5	5	30
Hydrogen	0.2m ² pan fire	x	5	x	30
Polypropylene		5	5	5	5
Paper	0.1m ² pan fire	10	5	5	10

Accessoires

- Fire Simulator
- Tilt mount
- Weather Protection
- Pole mount

Model	40 / 40 I	40 / 40M	40 / 40L
Type	IR3	IR4	UV-IR
Materials	Stainless Steel		
Sensor	Pyroelectrical		
Field of View	Horizontal: 100°; Vertical: 95°		
Sensitivity range	Up to 65 m	Up to 65 m	Up to 15 m
BIT	Yes	Yes	Yes for 40/40 LB version
HART	Yes		
Power supply	18-32 VDC		
Consumption	Alarm: max 150 mA (200 mA with heated optics)		
Output relays	5 A / 30 VDC/250 VAC		
Operating temperature range	-50°C to +75°C (-55°C to +85°C optional)		
Heated window	Yes		
Approvals	ATEX and IECEx Ex II 2GD Ex de IIB+H2 T5 (-55°C +75°C) Ex de IIB+H2 T4 (-55°C +85°C) Ex tD A21 IP66/X7 T 95°C Ex tD A21 IP66/X7 T 105°C		
FM/CSA	Class I Div 1. Groups B,C &D Class II/III Div1, Groups E,F &G		
SIL	SIL2 par le TUV according to IEC61508		
Weight	2.5 kg (+1 kg for the tilt mount)		
Dimension	90 mm x 114 mm x 156 mm		
Warranty	5 Years		


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