UV/IR & IR3 Optical flame detector

**Product description**

The FSL100 optical flame detectors can accurately and quickly detect lively flame fires that may occur in a wide range of industrial applications. These detectors rely on high quality sensors and a sophisticated signal analysis to quickly detect fire while rejecting false alarms. Especially designed to be used in difficult environments, indoors and outdoors, and in potentially explosive atmospheres (ATEX zones), these detectors are also compact and lightweight for easy installation.

**UV/IR flame detector FSL100-UV/IR**

- The double sensor technology allows easy and reliable detection of a large hydrocarbon or non-hydrocarbon fire range
- Detects flames from superior hydrocarbons (wood, paper, fuel) as well as hydrogen an inferior hydrocarbons like methanol and methane
- Good resistance to sunlight (direct or reflected), artificial light (fluorescent tubes and halogens), arch and electrical discharge, and electrical welding beam (over 3 meters from the optical flame detector)

**IR3 flame detector FSL100-IR3**

- Perfectly appropriate for liquid or soiled hydrocarbon fires
- Less affected by soiled window or fumes from the fire
- Detects flames from superior hydrocarbons (wood, paper, fuel) as well as hydrogen an inferior hydrocarbons like methanol and methane
- Good resistance to sunlight (direct or reflected), artificial light (fluorescent tubes and halogens), arch and electrical discharge, and electrical welding beam (over 3 meters from the optical flame detector)
- Ideal for fires producing a lot of fumes

**Technical specifications**

**Flame detector types:**
- FSL100-UVIR: UV sensor and IR sensor combination
- FSL100-IR3: 3 IR sensors combination

**Scope:** 35 m (IR3), 25 m (UV, UVIR) triggering alarms in less than 10 seconds for a 0,1m² n-heptane fire

**Cone of vision:** 90° minimum horizontal and vertical

**Power:** 10-28 Vdc (12-24 Vdc nominal)

**Operating LED:**
- Continuous green: normal operation
- Continuous yellow: auto-test default or failure
- Continuous red: alarm

**Current output:** 4–20 mA (stepped, sinking, non-isolated)

**Relay outputs:**
- Alarm relay: De-activated during normal operation (NO)
- Fault relay: Activated during normal operation (NF)
- Relay type: SPDT, 30 Vdc – 2 A, 60 W max.

**Automatic & manual self-test:** automatic sensor test (integrated self-test) and manual self-test

**Cable entry:** M20 – terminal for 0,5mm² (20 AWG) to 1,5 mm² (15 AWG) cable

**Housing:** Glass fiber reinforced polyester (PRV), UV-resistant, non-flammable V-0 (UL-94)

**PA66 rotating mount:** UV-resistant, stainless steel fixings

**Pressure compensation element:** the PCE (Pressure Compensating Element) avoids moisture accumulation created by air pressure changes

**Ingress protection:** IP65

**Operating temperature:** -40 °C to +70 °C

**Certifications:**
- ATEX/IECEx : Zones 2/22
- FM3611 : Non incendiary (spark-proof) Class 1, 2 & 3 Div 2

**Dimensions / Weight:** 125 x 80 x 57 mm / 465 grams

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV/IR flame detector</td>
<td>FSL100-UVIR</td>
</tr>
<tr>
<td>IR3 flame detector</td>
<td>FSL100-IR3</td>
</tr>
<tr>
<td>Swivel mount for FSL100</td>
<td>FSL100-SM21</td>
</tr>
<tr>
<td>Test lamp for FSL100 with universal charger and transport case; safe zones only</td>
<td>FSL100-TL</td>
</tr>
<tr>
<td>Test lamp for FSL100 with safe transport case; hazardous zones</td>
<td>FSL100-TLX</td>
</tr>
</tbody>
</table>