Spot Thermal Detector
(Fixed Temperature)

Features
- Approved by Factory Mutual Research Corporation (FMRC)
- Two temperature settings
- Self-restoring
- Contact material — gold plated silver
- Rugged construction
- Compact design
- Simplified installation — no special tools required

Description
The Spot Thermal Detector, as illustrated, contains a heat sensitive bimetal switch. The Spot Thermal Detector assembly consists of a thermostat fitted into a stainless steel insert housed in a PBT shell. The housing is filled with a hard-cast epoxy compound and completely sealed against water, oil, and other fluids.

When the thermostat temperature setting is reached, the bimetal switch closes, activating the detection and actuation system. When the detector cools, the thermostat switch contacts return to normal.

Applications
Spot Thermal Detectors are compatible for use with the CHECKFIRE 110/210 Detection and Actuation System. The detectors are designed for use on vehicles and equipment used in extreme environmental and physical conditions. Typical industries where Spot Thermal Detectors are used include:
- Mining
- Forestry
- Waste disposal
- Landfills
- Construction
- Public transportation
- Agriculture
- Aviation support equipment

Spacing and Temperature Rating
When used with a vehicle fire suppression system, two detectors are recommended in each hazard area. The temperature of the hazard area must not exceed the Maximum Continuous Use Temperature of the detector.

Approvals
When used with the CHECKFIRE 110/210 Detection and Actuation System, the total system is FM approved under approval number 3052042.

Technical Information
- Housing material – PBT
- Thermostat cover material – aluminum
- Detector head – stainless steel
- Internal seal – epoxy casting
- Contact material – gold plated silver
- Alarm current – 50 mA maximum
- Voltage – 5 VDC maximum
- Weight – 5.3 oz. (150 g)
- Height – 1.81 in. (73.8 mm)
- Width – 1.37 in. (34 mm)
**Mounting Guidelines**

Spot Thermal Detectors are designed for use in extreme environmental conditions. For a proper and approved installation, the detector must be installed using a mounting bracket and heat shield.

**Ordering Information**

<table>
<thead>
<tr>
<th>Detector Part No.</th>
<th>Description</th>
<th>Rated Operating Temperature °F (°C)</th>
<th>Maximum Continuous Use Temperature °F (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>438280</td>
<td>Spot Thermal Detector Blue</td>
<td>250 (121)</td>
<td>210 (99)</td>
</tr>
<tr>
<td>438281</td>
<td>Spot Thermal Detector Red</td>
<td>350 (177)</td>
<td>256 (125)</td>
</tr>
<tr>
<td>440905</td>
<td>Spot Thermal Detector Heat Shield</td>
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</tbody>
</table>

**Note:** The converted metric values in this document are provided for dimensional reference only and do not reflect an actual measurement. ANSUL and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.

**Retro-Fit Installation**

For a retro-fit installation, install spot thermal detector bracket directly onto existing style detector bracket (Part No. 416221).