Detects, where others sweat
Piros Hot Metal Detector Protection Tube Systems

Piros Hot Metal Detector Protection Tube Systems transfer the heat radiation from hot objects to a separate electronic system. They can be used in applications where other sensors reach their limits because of high radiation or ambient temperatures. The compatible mounting fixture enables replacement of existing AEG protection tube systems.

The Hot Metal Detector Protection Tube System features an air purge connection for cooling and cleaning the optics and it may be mounted inside the conveyor track directly below the hot object that need to be detected. This results in extremely high detection accuracy and reproducibility. Available are systems with 1 to 3 optics, which transfer IR radiation via a fiber optic cable to an electronic evaluation system. This enables redundant monitoring of hot material on the conveyor track.

### Hot Metal Detector Protection Tube System

**OIL 001**
Three separated optic systems detect IR radiation

**OIL 004**
Two separated optic systems detect the IR radiation

**OIL 003**
One optic system detects the IR radiation

#### Piros Infrared Sensor OSE 3L48.38 GVK
The evaluation unit receives the IR radiation via three fiber optic cables, providing redundant monitoring via operating modes of either 3 of 3, 2 of 3 or 1 of 3.

#### Piros Infrared Sensor OSE 2L48.38 GVK
The evaluation unit receives the IR radiation via two fiber optic cables, providing single or double redundant monitoring.

#### Piros Infrared Sensor OSE 1L48.38 GVK
The optic evaluation unit receives infrared radiation via a single fiber optic cable and evaluates it.

<table>
<thead>
<tr>
<th>Type</th>
<th>Art.-No.</th>
<th>Optic Systems</th>
<th>Evaluation Sensor</th>
<th>Art.-no.</th>
<th>Operating Modes</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL 001</td>
<td>6437A</td>
<td>3</td>
<td>OSE 3L48.38 GVK</td>
<td>7540C</td>
<td>1 of 3, 2 of 3, 3 of 3</td>
<td>PNP n.o. PNP n.c.</td>
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<tr>
<td>OIL 004</td>
<td>6440A</td>
<td>2</td>
<td>OSE 2L48.38 GVK</td>
<td>7540D</td>
<td>1 of 2, 2 of 2</td>
<td>PNP n.o. PNP n.c.</td>
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<td>OIL 003</td>
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<td>1</td>
<td>OSE 1L48.38 GVK</td>
<td>7540E</td>
<td>1 of 1</td>
<td>PNP n.o. PNP n.c.</td>
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</tbody>
</table>

Ambient temperatures of -25 up to +290°C
Distance optic / material >170 mm
Response temperature >380°C
Fiber optic cable lengths approx. 3 m