45LUM Luminescence Photoelectric Sensor

Dectets the presence of invisible luminescence/fluorescent particles and materials

Features
• Detection of luminescence/fluorescent particles and materials which are invisible to the human eye
• Sensing up to 50 mm (2 in.)
• Response time of 1ms
• Operating temperature of -10…55°C (-14…131°F)
• External teach capability
• Easy setup of switch points using teach button
• IP67 enclosure
• Self-contained sensor
• Flexible, rotatable plug

Applications
• Clear label detection
• Invisible registration marks
• Sensing of detergents and oils
• Verification of tamper resistant seals and adhesives
• Product inspection

Rockwell Automation is pleased to introduce the Allen-Bradley 45LUM Luminescence Sensor, the latest addition to our photoelectric sensor portfolio. This advanced sensor detects the presence of luminescent/fluorescent particles that are inherent in glues, inks, clear labels, oils, greases, paints, detergents and chalks. By emitting ultraviolet light, this sensor detects visible light reflected from fluorescent/luminescent objects regardless of the background or surface. Luminophores or fluorescent materials can easily be added to the materials used in your process to ensure best sensor performance without affecting the finished product.

Equipped with a simple push button teach setup with the option to remote teach, the 45LUM Luminescence Sensor has up to a 50 mm (2 in.) operating distance and one discrete output which is light operate (L.O.). This self-contained sensor has a high-definition light spot for simple, accurate sensor alignment positioning and solves tough application challenges for the automotive, packaging, material handling and food and beverage industries. The 45LUM also features a rotatable QD connector and multiple mounting bracket options for installation flexibility.

Detects glues, inks, clear labels, oils, greases, paints, detergents, and chalks with luminescent properties which are invisible to the human eye
General Ordering Information

Product Selection

<table>
<thead>
<tr>
<th>Sensing Mode</th>
<th>Light Source</th>
<th>Sensing Distance</th>
<th>Spot Size</th>
<th>Operating Voltage</th>
<th>Connector</th>
<th>Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diffuse</td>
<td>Visible UV LED</td>
<td>5...50 mm (0.2...2.0 in.)</td>
<td>3 mm (0.1 in.) at a distance of 18 mm (0.7 in.)</td>
<td>12 to 28V DC</td>
<td>5-pin DC Micro</td>
<td>45LUM-D7JPT1-D5</td>
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</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Cat. No.</th>
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<tbody>
<tr>
<td>2 m (6.5ft) 5-pin DC Micro QD Cordset, Straight</td>
<td>889D-F5AC-2</td>
</tr>
<tr>
<td>2 m (6.5ft) 5-pin DC Micro QD Cordset, Right Angle</td>
<td>889D-RSAC-2</td>
</tr>
<tr>
<td>Mounting bracket</td>
<td>45BPD-BKT1</td>
</tr>
<tr>
<td>Protective mounting bracket</td>
<td>45BPD-BKT2</td>
</tr>
</tbody>
</table>

Verification of tamper resistant seals

Glue detection sensing

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