Building on the success of the Allen Bradley RightSight photoelectric sensors, Rockwell Automation has introduced a new line of RightSight sensors with a visible laser light source, the 42EF LaserSight RightSight. Offering high-performance general purpose sensing in a compact, flexible package, this latest addition is available in diffuse, polarized retro-reflective and transmitted beam models.

Laser Applications

Laser based sensors are ideal for applications that require detection of small objects or in applications that require a narrow field of view. In most cases, laser sensors offer better operating margin and/or longer sensing distance than LED based sensors.

The higher margin allows for better detection of non-reflective targets and more reliable sensing in high contamination environments. Additionally, lasers that use a visible light source offer easier alignment than sensors that use an infrared light source.

The 42EF LaserSight RightSight diffuse sensor is ideal for general purpose applications in the packaging machinery and material handling industries. It is available with either a single turn sensitivity adjustment or teach push button.

The LaserSight RightSight Polarized Retro Reflective sensor is also well suited for general purpose applications and is available with a teach push button.

The pushbutton teach approach, as opposed to a manual adjustment knob for sensitivity level, allows the sensor to "learn" both the light and a dark conditions (background/target) presented to it, adjusting sensitivity to the optimal level for the application.

The LaserSight RightSight models use eye safe class 1 visible laser light and feature the same mounting options as the rest of the industry proven RightSight product line. Class 1 lasers require no additional safety or protective training or equipment and are safe for general purpose use. The multiple mounting options (threaded 18mm nose and base mount or thru-hole) -- allows for superior application flexibility in the most demanding industrial environments. For additional versatility, these new LaserSight RightSight models are available with 2m cable or micro quick disconnect pigtail connection options.

Application Examples

- Hole detection and parts alignment
- Detection thru narrowly spaced rollers
- Alignment over long distances
# Product Selection for Our Most Popular Models

<table>
<thead>
<tr>
<th>Sense Mode</th>
<th>Product Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Sense Mode Image" /></td>
<td>Laser Teachable Diffuse, Light Operate, pigtail micro</td>
<td>42EF-D8JBC-F4</td>
</tr>
<tr>
<td><img src="image" alt="Sense Mode Image" /></td>
<td>Laser Adjustable Diffuse, Light Operate, pigtail micro</td>
<td>42ED-D8JBA-F4</td>
</tr>
<tr>
<td><img src="image" alt="Sense Mode Image" /></td>
<td>Laser Teachable Polarized Retro Reflective, Dark Operate, pigtail micro</td>
<td>42EF-P8KBC-F4</td>
</tr>
<tr>
<td><img src="image" alt="Sense Mode Image" /></td>
<td>Transmitted Beam Receiver, Dark Operate, pigtail micro</td>
<td>42EF-R7KBB-F4</td>
</tr>
<tr>
<td><img src="image" alt="Sense Mode Image" /></td>
<td>Laser Transmitted Beam Source, pigtail micro</td>
<td>42EF-E8EZB-F4</td>
</tr>
</tbody>
</table>

**Note:** Other output configurations, and connection types available — Refer to catalog pages or www.ab.com/sensors for complete ordering information.

## Accessories

- **DC Micro QD cord set, 2m**
  - #889D-F4AC-2

## Diagrams

- **Reflector #92-18**
- **Reflector #92-39**