Datasheet

**WARNING:**
- Do not use this device for personnel protection
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

**Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Beams</th>
<th>Supply Current</th>
<th>Range (on 90% White Card)</th>
<th>Sensing Mode</th>
<th>Output</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAB-497AB1DS6-Q5E</td>
<td>6</td>
<td>150 mA</td>
<td>200 mm (8 in)</td>
<td>Diffuse, Infrared, 940 nm</td>
<td>Light Operate, Bipolar</td>
<td>150 mm (6 in) PVC cable with a 4-pin M12/Euro-style quick disconnect</td>
</tr>
<tr>
<td>SAB-998AB1DXL13-Q5E</td>
<td>13</td>
<td>325 mA</td>
<td>762 mm (30 in)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wiring Diagram**

![Wiring Diagram](image)

Key
- 1. Brown
- 2. White
- 3. Blue
- 4. Black

4-Pin Male Connector

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**Specifications**

**Supply Voltage**
10 V dc to 30 V dc (10% maximum ripple)

**Supply Protection Circuitry**
Protected against reverse polarity and transient voltages

**Output Configuration**
- Solid-state Bipolar: NPN and PNP
- Rating: 100 mA maximum each output at 25 °C
- Off-state leakage current:
  - NPN: less than 200 μA at 30 V dc
  - PNP: less than 10 μA at 30 V dc
- ON-state saturation voltage:
  - NPN: less than 1.6 V at 100 mA
  - PNP: less than 3.5 V at 100mA
- Protected against output short-circuit, continuous overload, and false pulse on power-up

**Wavelength**
Infrared LED, 940 nm

**Output Response**
3 ms on/off

**Operating Conditions**
-20 °C to +55 °C (−4 °F to +131°F)
95% at +50 °C maximum relative humidity (non-condensing)

**Environmental Rating**
IEC IP50

**Indicators**
- Green on: Power on
- Amber on: Output on
- Sensor Amber on: Light sensed

Original Document
205764 Rev. D
29 May 2019
Dimensions

<table>
<thead>
<tr>
<th>Length L1</th>
<th>First Beam L2</th>
<th>Beam to Beam L3</th>
</tr>
</thead>
<tbody>
<tr>
<td>496.3 mm (19.5 in)</td>
<td>42.0 mm (1.7 in)</td>
<td>82.6 mm (3.25 in)</td>
</tr>
<tr>
<td>998 mm (39.3 in)</td>
<td>42.0 mm (1.7 in)</td>
<td>76.2 mm (3.00 in)</td>
</tr>
</tbody>
</table>

Accessories

Brackets

SMBSAB-IN
- Mounting bracket facing in
- 12 gauge steel

SMBSAB-OUT
- Mounting bracket facing out
- 12 gauge steel

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